GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND: Capacity Building Initiative for Transparency

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PART I: PROJECT INFORMATION

Project Title: Capacity Building for Peru's transparency system for climate change mitigation and adaptation			
Country(ies):	Peru	GEF Project ID:[1]	9872
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01603
Other Executing Partner(s):	Ministry of Environment	Re-submission Date:	March 05, 2019
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐		Corporate Program: SGP ☐
Name of Parent Program	[if applicable]	Agency Fee ($)	113,905

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Co-financing
CBIT	CBIT	CBIT	1,199,000	700,000
Total project costs			1,199,000	700,000

B. PROJECT DESCRIPTION SUMMARY

Project Objective: Develop Peru's institutional and human capacities to meet reporting requirements of the enhanced transparency framework of the Paris Agreement

Project Components/ Programs	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Climate Change Mitigation in Peru's transparency system	TA	1. Institutional and technical capacities for the formulation and use of sectoral long-term low greenhouse gas emissions development strategies are developed	1.1. Emission factors are developed for at least the agriculture sector 1.2. Capacities on GHG emission projections of GHG inventory teams working with Peru's INFOCARBONO are enhanced. 1.3. General guidelines and tools to ensure consistency and comparability of GHG emission	CBIT	460,000	330,000

[1] Project ID number remains the same as the assigned PIF number.
[2] When completing Table A, refer to the excerpts on GEF 6 Results Frameworks for GETF, LDCF and SCCF and CBIT programming directions.
[3] Financing type can be either investment or technical assistance.

			projections among sectors are developed. 1.4. Public servants are trained to integrate long-term strategies and GHG emissions projections into policy and decision-making.			
Component 2: Adaptation to Climate Change in Peru's transparency system	TA	2. Institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC[4] are established	2.1 An analysis of current monitoring and evaluation practices and gaps in the health sector is developed with a view to contribute to national level monitoring of adaptation action 2.2 Technical capacities on monitoring and evaluation of adaptation actions/measures are strengthened in the health sector in collaboration with Peruvian research institutions 2.3 The M&E[5] system of adaptation actions in the health sector is designed	CBIT	440,000	180,000
Component 3: Means of implementation in Peru's transparency system	TA	3. Institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC is strengthened	3.1 Public and private expenditures associated to the implementation of NDCs in Peru are identified and monitored. 3.2 Public servants are trained to identify financial needs and report expenditures related to NDCs based on output 3.1.	CBIT	190,000	120,000
			Subtotal		1,090,000	630,000
			Project Management Cost (PMC)[6]	CBIT	109,000	70,000
			Total project costs		1,199,00	700,000

[4] Nationally Determined Contribution

[5] Monitoring and Evaluation

[6] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount ($)
Recipient Government	Ministry of Environment	In- Kind	650,000
Academia	National Agrarian University La Molina - UNALM	In- Kind	50,000
Total Co-financing			700,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee(*) (b)	Total (c)=(a)+(b)
UNEP	CBIT	Government of Peru	Climate Change	(select as applicable)	1,199,000	113,905	1,312,905
Total Grant Resources					**1,199,000**	**113,905**	**1,312,905**

(*) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[7]

Update the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet (as used in GEF 7 Endorsement template – Annex E) and aggregating them in the table below. Progress in programming against these targets is updated at mid-term evaluation and at terminal evaluation. Achieved targets will be aggregated and reported any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCCF.

Project Core Indicators		Expected at CEO Endorsement
1	**Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares)	
2	**Marine protected areas** created or under improved management for conservation and sustainable use (Hectares)	
3	Area of **land restored (**Hectares)	
4	Area of **landscapes under improved practices** (excluding protected areas)(Hectares)	
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares)	
	Total area under improved management (Hectares)	
6	**Greenhouse Gas Emissions Mitigated** (metric tons of CO2e)	
7	**Number of shared water ecosystems** (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited **marine fisheries** moved to more sustainable levels (metric tons)	
9	**Reduction**, disposal/destruction, phase out, **elimination** and avoidance of **chemicals of global concern** and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of **POPs to air** from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	70 (35 women, 35 men)

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided.

F. PROJECT TAXONOMY

Please update the table below for the taxonomic information provided at PIF stage. Use the GEF Taxonomy Worksheet provided in Annex F to find the most relevant keywords/topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
Influencing Models	Transform policy and regulatory environments Strengthen institutional capacity/decision-making	(multiple selection)	(multiple selection)
Stakeholders	Private sector	Large corporations	(multiple selection)

[7] Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

	Civil society	Academia	
Capacity, Knowledge and Research	Knowledge Generation and Exchange	(multiple selection)	(multiple selection)
Gender Equality	Gender mainstreaming	(multiple selection)	(multiple selection)
Focal Area/Theme	United Nations Framework on Climate Change	Capacity Building Initiative for Transparency	(multiple selection)
Rio Markers	Climate Change Mitigation 1 Climate Change Adaptation 1		

PART II: PROJECT JUSTIFICATION

A.0. Describe any changes in alignment with the project design with the original PIF

No major changes have been made regarding the budget, total co-finance amounts or logical framework.

Regarding co-finance, and additional co-financier has been added to table C. The National Agrarian University La Molina will contribute with USD 50,000 for Component 1 and MINAM has then adjusted its co-finance to USD 650,000 instead of the initial USD700,000 indicated in the PIF.

Regarding the project design, based on the consultations and analysis carried out during the preparation phase, the wording of some Outputs and the design of the activities were changed, as per the following table and explanations for each Component.

Output at PIF stage	Current Output
1.1 Emission factors are developed for at least **one prioritized sector.**	1.1 Emission factors are developed for at least the **agriculture sector**
3.1 Public and private expenditures associated to the implementation of Peru's NDC are identified **and tracked in at least two sectors**.	3.1 Public and private expenditures associated to the implementation of **NDCs in Peru** are identified and **monitored**
3.2 Public servants **in at least two sectors** are trained to identify financial needs and report expenditures related to the NDC based on output 3.1.	3.2 Public servants are trained to identify financial needs and report expenditures related to NDCs based on output 3.1.

Component 1, Output 1.1 Emission factors are developed for at least the agriculture sector

In this output, the PIF proposed as prioritized sectors Land use, Land use Change and Forestry (LULUCF) and Energy, using as a criterion the volume of Greenhouse Gases (GHG) emissions, which accounted for 50.6% and 26.1% of the total national emissions[8], respectively.

However, upon detailed analysis of the existing capacities of the Energy sector, it was concluded that there is enough good quality information on activities from the National Energy Plan (2014-2025)[9] , and that the default emission factor is adequate for the aggregate level of the estimates made. There are also important indicators of progress in the capacities of the sector, namely 1) emissions projections have been calculated, 2) the "Guidelines for the design of the component Measuring, Reporting and Verification (MRV) for Nationally Appropriate Mitigation Actions (NAMAs) of the energy sector" [10] were developed, and 3) RAGEI 2016 was developed by the sectoral authorities without requiring external support. In light of these antecedents, it is clear that CBIT support would not be required for the estimation of local emission factors by the Energy sector in Peru.

[8] http://infocarbono.minam.gob.pe/wp-content/uploads/2016/03/2012.pdf

[9] This section analyzes the sectoral policy measures to be implemented, the investment projects that are related to the basic sectoral objectives, one of them is the development of energy projects with minimal environmental impact and low carbon emissions within a framework of sustainable development.

[10] These guidelines indicate that the Ministry of Energy and Mines (MEM for its acronym in Spanish), through its General Directorate of Energy Efficiency, is designing the NAMAS focused on: 1) Energy efficiency of appliances / devices, 2) Clean motorized transport (low emissions), 3) Promotion of energies non-renewable in unconnected areas, and 4) Development of renewable energies in the electrical matrix (Network).

In the case of the LULUCF sector, estimates are currently made applying default factors by the Intergovernmental Panel on Climate Change (IPCC) from 2003. The most relevant gap identified relates to the estimation of emissions from forest degradation (wood, firewood, disturbances). On the one hand, local and specific emission factors are not available, and on the other hand, the information on activities still presents a high level of uncertainty, [11] particularly regarding the use of firewood (domestic and industrial). Thus, considering the overall work needed for the development of emissions factors, it is too early for CBIT funding to make a significant impact.

For the selection of the sector that will be supported by the CBIT project, the following aspects were considered: the magnitude of the capacity gaps in the GHG estimates, the favorable conditions existing in the competent entities for the development of local emission factors, and the relative magnitude of the sector's contribution to the total GHG emissions of the country.

On this basis and through the analysis carried out by the competent entity of the sector, INFOCARBONO team and MINAM, the Agriculture sector was selected. Agriculture ranks third in the relative participation of emissions in the country (15.2% of the estimated emissions for 2012). Within this sector, the enteric fermentation category was selected, representing 41.2% of the total emissions within the Agriculture sector. The sectoral experts considered the emission factors currently used too raw, not reflecting the country's diversity of biogeographic areas, livestock populations and type of feed. To solve this gap, a gradual process of estimating local emission factors has been pursued in the sector, with the participation of research institutions and academia.

The following favorable conditions in this sector have contributed to the selection: the existence of 1) effective institutional coordination into sector, 2) experience in the estimation of local emission factors, and 3) technical and human capacities in research and academic institutions, as it is explained in the baseline projects.

Component 3, Output 3.1: Public and private expenditures associated to the implementation of NDCs in Peru are identified and monitored

During the preparation phase, local information of the advances of the private sector in climate finance aspects, including field interviews, was gathered. This information showed that that the information needed to undertake appropriate climate-relevant expenditure assessments from private sector stakeholders is not yet readily available in the country. In this regard, local stakeholders considered that the most effective strategy would be to support the involvement of the private sector in climate finance by improving their reporting of climate-relevant activities and associated costs to the Peruvian authorities. The most relevant initiative of the private sector in this regard in Peru is the Responsible Investment Program (*Programa de Inversión Responsable*), which promotes practices for incorporating the impacts of environmental, social and corporate variables, including carbon footprint and measures taken to reduce it. These practices are reported in the Corporate Sustainability Report issued annually by the companies registered in the Stock Market Exchange to the Stock Market Superintendence (SMV for its acronym in Spanish). An evaluation made to some of the 2017 reports, identified several deficiencies in the adequate record of information.

In short, while the PIF suggested a sectoral approach to this output ("in at least to sectors"), this output will instead support a better and gradual involvement of the private sector in the implementation of Peru´s Nationally Determined Contribution (NDC) compromises contributing also to improve the information requirements and completion by private sector on their climatic actions.

Output 3.2 Public servants are trained to identify financial needs and report expenditures related to NDCs based on output 3.1.

[11] In Phase II of the Joint Declaration of Intent (DCI for its acronym in Spanish) signed by the Governments of Germany, Norway and Peru is considered, among others, the evaluation of the impact of deforestation and forest degradation, in terms of area and emissions by activities that include wood extraction, mining, agriculture and infrastructure.

It is expected that output 3.1 will provide new data from private sector activities to the public sector officials and institutions. However, if they cannot understand it and manage it properly, this new data will become of little benefit to the public sector of Peru and the implementation of its NDC. Additionally, in the public sector side, there are some reporting systems in place in Peru that can be conveniently adapted to report expenses related to the NDC, like in the computer platforms of the Integrated Financial Administration System (SIAF after its name in Spanish) and the Investment Bank of the Invierte.pe System. For instance, in the Investment Bank, adjustments in the Registration Form of the projects to the typologies where some interventions are clearly related to adaptation or mitigation can be better identified.

In summary, similarly to the previous output, the suggested sectoral approach of the PIF has shifted to a focus on budget programs and functional classifiers selected by their relevance on adaptation and mitigation, and which do not necessarily correspond to specific sectors.

A.1. Project Description

1. Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

Climate change constitutes a great challenge for Peru, both in terms of mitigation and adaptation and resilience. The Andean Pact (CAN, for its acronym in Spanish) estimated that climate change will entail a loss of 4.4% on Peru's Gross Domestic Product (GDP) by 2025[12] and the Central Reserve Bank of Peru (BCRP after its name in Spanish) estimated such GDP loss at between 5.7 and 6.8% by 2030.[13] These economic impacts would disproportionately affect the poor and vulnerable. In general, ensuring low carbon and sustainable development is a complex undertaking for countries with scarce availability of reliable information, limited technological options for mitigation and adaptation, large gaps in public services and infrastructure, and large sectors of the population excluded and with few economic resources.

Peru and the Parties to the Paris Agreement are committed to undertake ambitious efforts not only in mitigation, adaptation and means of implementation, but also in the transparency and accuracy of information and measures. In addition, these efforts "will represent a progression over time" where countries will have to continuously increase the level of ambition of their efforts in all aspects of climate action and the MRV. In terms of mitigation and adaptation to climate change, the gradual implementation of measures implies certain internal capacities to measure and verify the efforts, and inform them to the international community. In addition, it requires that public administration has the best information and tools available to support decision-making and the planning of sustainable and low carbon development.

In relation to transparency, the Paris Agreement establishes in Article 4 that the progress of each country must be informed at least every two years using methodologies of good practices that ensure quality, compatibility and consistency. It also points out, among others, that: 1) All parties must provide the necessary information for the purpose of clarity, transparency and understanding; 2) Each party must communicate a determined contribution at national level every five years, and 3) When the parties present the accounts for their Nationally Determined Contributions should promote environmental integrity, transparency, accuracy, completeness, comparability and coherence, ensuring that double counting is avoided.

Since the ratification of the Paris Agreement, Peru is committed to improving its transparency system and, therefore, works to integrate the previous MRV experience of climate change actions, to serve as the basis for an integrated system of national transparency. Its design will be based on existing institutional arrangements and actions implemented by MINAM and other national entities with support from international cooperation projects. Peru still lacks a national system of integral transparency to: 1) inform on the implementation of mitigation and adaptation actions, and the means of their implementation, and 2) generate evidence and systematic use of information in planning and decision-making at the

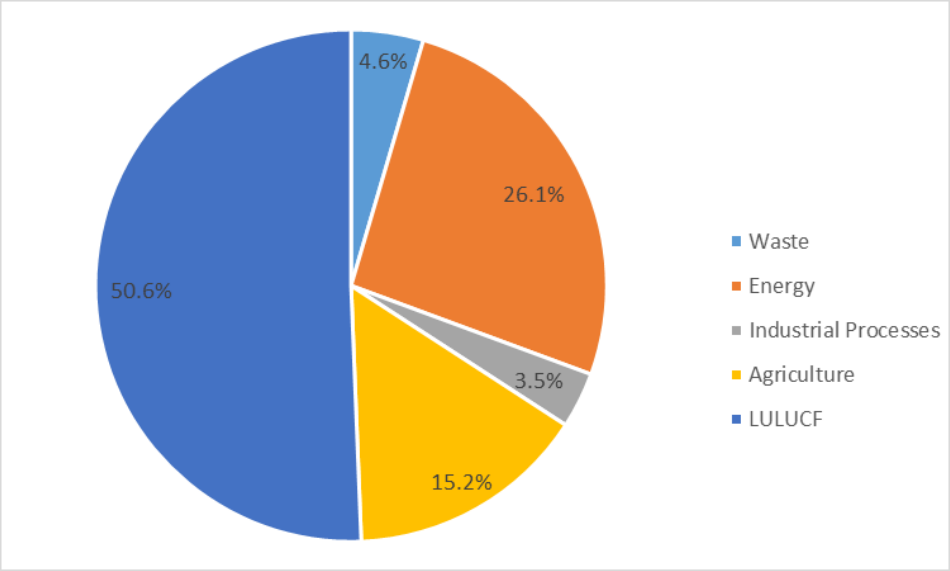
[12] General Secretariat of the Andean Community. Climate Change has no borders. Impact of Climate Change in the Andean Community. 2008.
[13] Central Reserve Bank of Peru. Moneda Magazine 143. Climate change and its effects in Peru. Daniel Barco and Paola Vargas. 2010

national, regional and local levels. There are well-functioning elements for climate change-relevant information management, but they are still insufficient, even to follow and revise Peru's NDC and to comply with the Paris Agreement. Therefore, Peru requires strengthened and new capacities to improve national planning and decision making, to track and revise Peru's NDCs and to meet the Enhanced Transparency Framework (ETF) of the Paris Agreement.

In the most important relevant regulatory instrument, the Framework Law on Climate Change (LMCC after its name in Spanish), approved in June 2018, the monitoring, evaluation and tracking of adaptation, mitigation and climate financing is addressed through the creation of a platform, which will be administered by MINAM. The main components of this platform will be: 1) MRV of mitigation measures, 2) Monitoring and Evaluation (M&E) of adaptation measures, and 3) Monitoring and Reporting climate financing.

The INGEI of 2012 estimates that a total of 171,310 $GgCO_2eq$ of net emissions were released that year at national level, a slight increase of the emissions calculated in the country for the year 2010 and overall approximately 0.1% of global CO_2eq emissions. The relative participation of the sectors in the total emissions is represented in Figure 1.

Figure 1. Relative participation of sectors in GHG emissions (Peru, 2012 data)



As shown in Figure 1, in 2012 LULUCF was the main source of emission (51%) mostly due to changes in land use in forests (deforestation) and grassland. The Energy sector accounted for a 26% of the share of GHG emissions, with the use of fuel in land transport representing the main source of sectorial emissions. Enteric fermentation and agricultural soils were the sources of 80% of GHG emissions in agriculture sector. Setting aside LULUCF net emissions, an increase of 41% between 2000 and 2012 of GHG emissions in the other sectors of the Inventory of Peru, indicates a direct relationship between economic growth and GHG emissions in the country.

In 2015, following previous decisions in the context of the UNFCCC, Peru submitted its Intended Nationally Determinate Contribution (iNDC) including a proposal for a 20% non-conditional GHG emissions reduction projected for 2030, under a Business as Usual (BAU) scenario. An additional 10% reduction was conditioned on the availability of international financing. Peru´s iNDC was ratified in 2016, and became the country's NDC in accordance with the provisions of the decisions associated with that Agreement.

The NDC established several requirements for its implementation. Among them, the need for a constant review and update of the information based on its tracking of progress, and corresponding feedback processes and improvement. As already mentioned, the Paris Agreement establishes the need to build a transparency system to manage and demonstrate

compliance with the NDCs in mitigation and adaptation. The system is based on counting with an appropriate MRV of GHG emissions, of adaptative and resilience capacity, and of received and required support as well as co-benefits of the measures.

Regarding adaptation and resilience, Peru is especially vulnerable to climate change due to its geography - an extensive coastline of the Pacific Ocean, extensive arid and high Andean areas fed by tropical glaciers and a territory exposed to so-called El Niño Coastal Phenomenon (FEN as it is known in Spanish)-, its socio-economic characteristics - subsistence agriculture, poverty, jobs based on the natural environment, dependence on fossil energy - and weak institutionality.

Based on its current and expected vulnerabilities and impacts, Peru's NDC prioritizes five thematic areas. Within those, health is deemed of particular importance for the country given its impact on vulnerable groups and development. In Peru, climate-related impacts are acting as a multiplier of existing public health threats, compounding many of the health issues communities already face and disproportionately affecting the health of the poor, exacerbating inequalities. The most important climate-related health impacts stem from extreme weather events (EWEs) such as heat waves, cold waves and storm surges, and their knock-on impacts (e.g. floods and landslides) on communities and health systems.

Of high relevance regarding EWEs, Peru has been recently hit by intense rains between December 2016 and March 2017 because of the FEN, triggering floods of large portions of the territory that affected various regions of the country, but particularly the northern regions, causing human and material losses. The departments affected were Tumbes, Piura, Lambayeque, Loreto, Ica, Ancash, Cajamarca, La Libertad, Huancavelica and provinces of Lima.

According to the report of the National Information System for Response and Rehabilitation (SINPAD for its acronym in Spanish),[14] to August 2017, 1,559,487 affected persons were reported (out of a national population of around 30 million), of whom 285,955 experienced direct damages, 500 were injured and 162 deceased. In the health sector, 1,044 health facilities (EE.SS as it is known in Spanish) were significantly affected and 64 health facilities were declared unfit for service nationwide. The effects on health facilities were caused mainly by deficiencies in the storm drainage systems or lack of these, by leaking water from the roofs, which caused damage to the infrastructure, and in some cases to the equipment; this situation has highlighted the vulnerability of health infrastructure. Regarding the recovery of health infrastructure, in the Integral Plan of Reconstruction with Changes, the estimated cost for the reconstruction and/or rehabilitation of prioritized health facilities is at over $US 407 million.

Apart from the damages that climatic events can generate in health infrastructure, floods in Peru affect the provision of basic services such as drinking water and sanitation, waste management, logistics and transportation, further compounding emergency health situations. Because of the Coastal FEN, the population suffered traumatisms, skin infections, food and waterborne diseases, acute diarrheal diseases, acute respiratory infections, outbreaks of vector-borne diseases, and mental health problems such as depression and post-traumatic stress. This situation exceeded the existing response capacities of health services in the affected regions, which had to receive assistance in terms of human resources, field hospitals, medicines, equipment and supplies for the control of vectors (larval control and fumigations) were mobilized. This evidences the low response capacity at regional levels and the need to improve the resilience of health services, as well as the need to improve health practices in the population and their preparedness to face health emergency situations.

Both in the areas of GHG mitigation and in adaptation and resilience, part of the challenges mentioned stem from a lack of evidence-based planning that integrates climate considerations from the inception. The lack of preemptive planning and retrofitting action on health systems resilience, in a country periodically affected by EWEs, is a clear example. Transparency based on timely and relevant availability of information and indicators in the actions carried out by Peru in mitigation of GHG and adaptation to climate change, as well as the support it receives for that purpose, is one key area in which the CBIT - Peru project will contribute.

[14] El Niño Phenomenon Piura Region, Peru. Actions, results and lessons learned. PAHO 2018.

2. Baseline scenario or any associated baseline projects

Peru has prepared three National Communications to the United Nations Framework Convention on Climate Change (UNFCCC) and two Biennial Reports. In the process of preparing them, studies have been carried out, information has been analyzed, instruments for planning and information management have been developed, and technical and institutional capacities for GHG inventories have been strengthened. In addition, gaps in the monitoring of GHG emissions, the tracking of effects and impacts of climate change, M&E of measures and the formulation of projections have been identified.

However, the lack of an integral transparency system has proven to be an impediment to informed decision-making and policy formulation. For example, the process of designing the first NDC was largely based on *ad hoc* arrangements and project work, using a variety of sources. Furthermore, contrary to expectations, there has only been a limited increase in internal capacities of government institutions due to a dependence on external experts during this process. This experience has made clear that Peru lacks adequate tools and capacities to support long-term policies, for example, macroeconomic or sectoral models to test different scenarios. Looking ahead to the preparation, implementation and follow-up of subsequent NDCs, a well-functioning national transparency system becomes even more imperative. It will be necessary not only to communicate progress to the international community to comply with Peru's commitments under the Paris Agreement, but also to design better policies and measures to frame mitigation and adaptation actions while ensuring the social and economic development of the country.

2.1. Normative and Institutional Framework for the management of the climatic change

Peru is committed to acting against the causes and consequences of climate change, with executive action grounded on a solid and well-developed regulatory framework. Based on the country's ratification of the Climate Change Convention in 1993, several processes were initiated in the country with the purpose of establishing a Peruvian institutional and legal framework for the climate change management.

National Strategy on Climate Change

Peru demonstrated its commitment to manage GHG emissions for the first time in 2003 with the publication of the National Strategy on Climate Change.[15] The National Environment Policy [16] in 2009 further developed this strategy with guidelines that consider mitigation measures and adaptation to climate change promotion. In 2015, the updated version of the National Strategy on Climate Change (ENCC after its name in Spanish) [17] was approved, which today serves as the main instrument for planning national actions to face climate change in Peru. The ENCC aims at generating awareness, alliances and ensure the public sector is strengthened and able to carry out climate change management, both in GHG emissions and adaptive capacity. This strategy includes two main objectives until 2021 (see table 1 below).

Table 1 Objectives and indicators of the ENCC

OBJECTIVES	INDICATORS
1) The awareness and adaptive capacity of the general population, the economic agents and the State is increased for action in the face of adverse effects and opportunities of climate change	• Increase the proportion of people who know what to do for risk management in a climate change context and for adaptation to climate change. • Increase in private investment and increase in the quality of public spending for adaptation to climate change. • Reduction of losses of human lives and livelihoods due to the occurrence of climate-related natural disasters.

[15] Approved with Supreme Decree 086-2003-PCM.
[16] Approved with Supreme Decree 012-2009-MINAM.
[17] Approved with Supreme Decree 011-2015-MINAM.

OBJECTIVES	INDICATORS
	• Increase in the production of scientific research and technological development as a basis and guide for risk management in a context of climate change and adaptation to climate change.
2) Population, economic agents and the State conserve carbon reserves and contribute to the reduction of GHG emissions.	• GHG emissions growth rate below the GDP growth rate. • GHG emissions reduction in all sectors, especially the highest emitters. • Increase carbon capture and net emissions reductions in forestry sector.

The National Environmental Action Agenda and other instruments of MINAM's policy and management, require concrete improvements and institutionalization of actions associated with mitigation and adaptation. As part of an extensive process of institutionalization and decentralization of national policy, there are currently 22 approved Regional Climate Change Strategies.

Gender and Climate Change Plan of Action

Since July 2016, Peru has a Plan of Action on Gender and Climate Change (PAGCC for its acronym in Spanish), constituting an important policy instrument that guides the design and implementation of actions that will enhance responses to climate change and greenhouse gases emissions reduction in eight priority areas: water, health and welfare, food security, forests, energy, solid waste, education and risk management. The plan considers international policies such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and its Facultative Protocol (1979), the UNFCCC[18] and the Sustainable Development Goals (SDG). At the national level, the PNGCC was based on the national policy on the promotion for equal opportunities without discrimination, the National Plan for Gender Equality (PLANIG for its acronym in Spanish) (2012-2017), and the ENCC.

The Specific Objectives of PAGCC are the following:

a. Information Management: Promote the production, access and use of differentiated information on the impacts of climate change on women and men.

b. Strengthening Capacities: (i) Strengthen the capacities of public servants to incorporate gender perspective into policies and management instruments; (ii) Promote equal access for women and men with spaces for dialogue, training and decision-making.

c. Management policies and instruments: Incorporate gender perspective into policies and management instruments related to climate change.

d. Adaptation and Mitigation Measures: Incorporate gender perspective into the design and implementation of projects and programs for the adaptation and management of GHG emissions.

This instrument is the basis for the definition of considerations of gender focus in the CBIT Project - Peru.

Nationally Determined Contribution

Peru's Nationally Determined Contribution is part of the Paris Agreement on climate change, ratified by Peru on July 22, 2016. [19] Peru formulated its NDC and supported it with a portfolio of referential initiatives that technically support the proposal, which are aligned with national economic development, the policy of poverty reduction and social inclusion.

[18] Specifically, Decisions 36 / CP.7, 23 / CP.18, 18 / CP.20.
[19] Supreme Decree N ° 058-2016-RE, published on July 22, 2016 in Diario Oficial El Peruano.

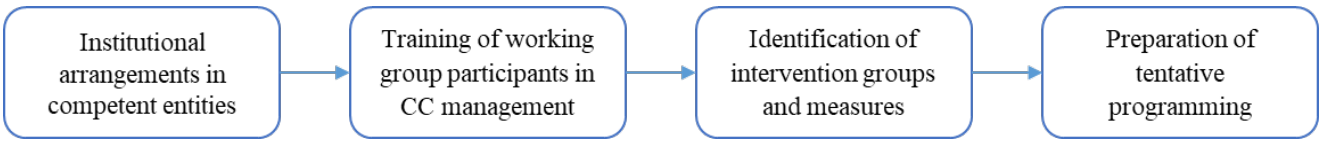
Peru's NDC has two components, one for Adaptation and other for Mitigation. The priority sectors for mitigation are Energy, Industrial Processes and Use of Products, Waste, Agriculture, LULUCF. In adaptation, rather than sectors, five thematic areas (some multi-sectoral) were prioritized: Water, Agriculture, Fishing, Forests, and Health. Its successful implementation requires that the ministries and authorities involved have personnel that can work on planning, implementation of mitigation actions and the corresponding M&E or MRV. Especially in the case of adaptation, besides strengthening capacity in the ministries, it is necessary to work with regional governments and municipalities, since these two levels of government are primarily responsible for planning and implementing the measures, as well as tracking progress, monitoring, and evaluating impacts and outcomes.

To promote coordinated climate management, institutional arrangements for NDC implementation were promoted. To this effect, the Multi-sector Work Group (GTM for its Spanish acronym)[20] was created, with the mandate to generate tools and technical information to facilitate the development of enabling conditions and the achievement of established goals. It is composed of 13 Ministries and the National Center for Strategic Planning (CEPLAN as it is known in Spanish). The MINAM, focal point of the UNFCCC, serves as GTM technical secretariat and thus ensures that appropriate coordination is carried out between sectors and concerned parties.

Among other tasks, the GTM defines the mitigation and adaptation measures that will be implemented in the coming years. To this effect, the group identifies the enabling conditions for each measure, the relevant actors, the necessary institutional arrangements, the information related to economic, social and environmental costs and benefits of the of the measures, the monitoring arrangements, the GHG emission reduction potential of each measure where relevant and an MRV and/or M&E proposals.

The process followed by the different working groups is summarized in the Figure 2.

Figure 2. Process followed in GTM



The GTM work has yielded important lessons on how to plan and implement mitigation and adaptation actions, and it is the most appropriate space to consolidate and strengthen efforts with medium-term objective of establishing a national transparency system that will serve to provide useful information for planning and implementation of mitigation and adaptation actions, as well as to meet the requirements of the Enhanced Transparency Framework for the action and support of the Paris Agreement.

Framework Law on Climate Change

The implementation of the National Strategy on Climate Change, and in general the diverse initiatives of mitigation and adaptation to climate change, were strengthened with the promulgation of the LMCC.[21] Its purpose is to establish the principles, approaches and general dispositions to coordinate, articulate, design, execute, report, monitor, evaluate and disseminate public policies for integral, participatory and transparent management of adaptation and mitigation measures to climate change, in order to reduce the country's vulnerability to climate change, take advantage of low-carbon growth opportunities and comply with the international commitments assumed by the country before the UNFCCC.

[20]Supreme Resolution No. 005-2016-MINAM. Its duration was established in 18 months that was completed in August 2018, have been extended for three more months.
[21] Law No. 30754, published on April 18, 2018 in Diario Oficial El Peruano.

The LMCC is governed by the principles of Law 28611, the Environment General Law; Law 28245, the National Environmental Management System Framework Law; the National Environmental Policy; the UNFCCC; and also establishes principles such as integration, transversality, subsidiarity, accountability, transparency, participation, climate governance, and prevention.

The law promotes the definition, prioritization and reporting on specific mitigation and adaptation actions by public entities. In addition, it encourages the inclusion of mitigation and adaptation elements in sectoral management, planning and investment instruments. The new law appoints MINAM as the national authority on climate policy, with a mandate to establish, guide, direct, facilitate, monitor and promote the management of climate change. Further, MINAM is designated as the national authority and the technical-normative authority in the matter, in charge of monitoring and evaluating climate change management in the three levels of government (national, regional and local). Ministries are designated in the law as competent sectoral authorities, and regional and local governments as regional and local authorities responsible for climate change.

In May 2018, a participatory process for LMCC Regulation development was initiated, which is still ongoing. This process involves the socialization of the Law and the proposal of the Regulation prepared by MINAM. To this end, MINAM has planned the development of workshops at the national level with different actors of society, such as public sector authorities, representatives of the private sector, academia and civil society, including organizations of indigenous peoples.

This Law serves as an important reference for the CBIT Peru project, and in turn its gradual implementation, particularly considering that the LMCC establishes in article 14 that the MINAM is responsible for the monitoring and evaluation of the Nationally Determined Contributions and informs about its implementation before the Secretariat of the UNFCCC. This defines the MINAM's role for the NDC monitoring, which is directly related to the implementation of the Transparency Framework under the Paris Agreement in the country. Thus, the monitoring of adaptation, mitigation and climate financing, will be supported by the activities considered in the project.

2.2. Mitigation framework for a transparency system

Currently in Peru there are three main processes related to MRV for GHG emissions and mitigation, and climate finance: a) accounting of emissions, b) estimation of changes in emissions levels, and c) identification and analysis of the support received and required. These processes consider the following elements: INFOCARBONO, the Mitigation Initiatives National Registry, the GHG Inventory Registry, and the Monitoring of Climate Financing. All these processes respond to ENCC objectives and, therefore, contribute to the implementation of the NDC of the country. The elements previously indicated have a different state of implementation and have received a variable degree of international support during the last years. Some of the projects, completed or in the process of implementation, are shown in Table 2.

Table 2. Projects supporting MRV processes

Process under MRV	Period	Project	Description of support
Accounting of Emissions	2014	Third National Communication Project	Elaboration of National GHG Inventory (NI) for 2010 included a capacity building process for public officers. Initial NAP (National Action Plan) assessment of energy, agriculture, USCUSS, forestry, waste and industrial processes sectors were undertaken for preparing this report
	2013-2014	First Biennial Update Report Project (FBUR)	Financial resources to elaborate the NI for years 2012 and 2015 included updates of the NI data for years 2010 and 2000 allowing for a better comparison of the results. The process of NI elaboration included capacity building

Process under MRV	Period	Project	Description of support
			sessions for public officers that participate in GHG emissions quantification on a regular basis. Moreover, as part of the project, an information platform to support the Peruvian inventory system (Called INFOCARBONO) was developed. This website will be the repository for NI results, as well as for technical guidelines aimed at strengthening transparency of the data.
	2014	Inter-American Development Bank (IDB) Project to Strengthen the National Agenda on Climate Change and Support the Conference of the Parties (COP) 20	As part of synergy with the FBUR project, the IDB supported research to elaborate a proposal of guidelines to the national entities that are part of INFOCARBONO.
	2015-2017	Inter-American Institute for Cooperation on Agriculture (IICA)/FONTAGRO Improvement of the animal production systems	Allowed measurement of the GHG emissions caused by cattle raising in the field (Three pilots in Peru).
	2014-2018	Low Emission Capacity Building	Supporting the design of three NAMA concept notes in the industry sector: production of bricks, iron and cement. This project has been extended into a third phase that focuses on creating the enabling conditions to implement the actions identified in the NAMA design phase, supporting the implementation of Peru´s NDC. This project also contributed to develop a pilot software good for assessing different emissions scenarios for the energy sector at different timescales (called "The 2050 Calculator"). This tool will provide projections according to a variety of possible mitigation actions in order to generate scenarios of emissions reductions, helping policy makers and stakeholders in the decision-making process.
	2018-2019	Initiative for Climate Action Transparency (ICAT). “Strengthening of capacities for the elaboration of the National Inventory of Greenhouse Gases and the generation of information for the	This project will support the migration of the established methodology GL1996 and OBP2003, which are currently used in Peru, to the GL2006 for the Waste, Agriculture sectors; and Land Use, Land Use Change and Forestry. Likewise, a virtual course will be held on the application of the IPCC Guidelines for the year 2006 (GL2006).

Process under MRV	Period	Project	Description of support
		design of the Registry of Support Received "	
Estimation of changes in emissions levels (Mitigation)	2012-2016 Phases I &II	MAPS Project in Peru (PlanCC)	The PlanCC project developed more than 70 mitigation options for different sectors and evaluated their overall economic impact by means of a general equilibrium model. It was implemented through a participatory process that included stakeholders from public and private entities. Results of these options were an important input for the Peruvian iNDC elaboration.
	2015-	JICA/IDB Solid Waste Management Program	Support to the implementation of Solid Waste NAMA
	2016-2017	Second Biennial Update Report	With this project a full-time consultant to design a NAMA registry was hired. His work also included other kind of mitigation actions in Peru, helping to improve national accountability. This registry will also host the REDD+ projects that are under implementation.
	2016-2019	NAMA Energy Project	This project is aimed at designing a NAMA that includes four aspects to contribute with emissions reduction from the energy sector. The project considers definition of actions for electric transportation.
	2016-2019	Partnership for Market Readiness Project (PMR Project)	This Project is focused on giving support to the enhancement of an institutional framework for emission reduction registration related to mitigation measures, and a future carbon market. The PMR project considers a "no-regret" approach, supporting the institutional aspects deemed as necessary to prepare the country for a carbon market. It will also serve to implement MRV requirements as the National Mitigation Measures Registry, included in Peru´s NDC.
	2018-2021	UN REDD+ Program	The UN REDD+ program aims to complement the efforts of Peru for the implementation of a REDD+ mechanism, considering also the implementation of Peru´s NDC. The program includes a component associated to the National Reference Level and how national projects will align to this. This process will have an impact on the GHG emission reduction related to forest activities and its quantification.
Identification and analysis of the support	2016	Deutsche *Gesellschaft für Internationale Zusammenarbeit* (GIZ) - Contribution to the Environmental	Assessment about current climate funding in Peru as a first step to identify gaps on climate investment in the country.

Process under MRV	Period	Project	Description of support
received and required		Goals of Peru (ProAmbiente)	
	2016-2018	Second Biennial Update Report	As part of the elaboration of the Second BUR necessities related to MRV about support received and required have been identified.
		Green Climate Fund (GCF) Readiness	This will allow to develop a study to identify and map the flows of climate finance in Peru linked to the implementation of the NDC and develop a tool to measure, monitor and verify resources from national and international sources for mitigation and adaptation actions related with Peru´s NDC.
		NAP	The government of Peru is seeking, with the support of GCF, to include the participation of subnational governments in planning and implementation of adaptation measures for the five thematic areas included in its NDC. The proposal aims to advance in four relevant topics, one of them includes the design and development of a system for monitoring and evaluating adaptation outcomes set in the NDC, as well as financial resources used for adaptation measures. The outcomes are: 1) Metrics used at subnational, national and international levels to measure adaptation measures are mapped; 2) Robust adaptation information to monitor activities and adaptation resources are planned; 3) A system for monitoring and evaluation adaptation results is designed and implemented; 4) M&E system for adaptation finance is developed and implemented; and 5) Capacities to implement the M&E system for adaptation results as well as adaptation finance are strengthened at the regional level.

The main mechanisms for transparency of mitigation information are described below:

- **Biennial Update Report (BUR).**

  It is a transparency instrument informing progress in the implementation of the mitigation agenda of the country to the UNFCCC. It contains information about the GHG emissions and removals of carbon sinks status, as well as actions taken to reduce emissions or increase removals. The report includes also information about the support required and received for the execution of the climate agenda of the country.

  The first Peru's BUR was presented in 2014, with information on estimated GHG emissions for 2010. The Second BUR contains the National GHG Inventory of 2014, as well as the main advances in mitigation since the presentation of the first report. The Second BUR is in the process of final approval before submission to the UNFCCC**.**

- **Peru's Third National Communication (CNCC3)**

It is another of the instruments for country reporting to the UNFCCC. It includes the main results of the country's efforts facing the climate change agenda, with a baseline of the situation by 2016.

In relation to GHG emissions and mitigation, it presents: 1) The results of the INGEI to 2012 and a reference to the BAU scenario of the Emissions Projections that were considered to prepare the NDC of Peru up to the year 2030. This work was prepared by national experts in coordination with the respective sectors, applying IPCC Guidelines and Good Practices, 2) The main challenges in the management of emissions by sector, which constitute a basis to raise and develop efforts in the reduction of emissions, as well as in the use of the information contained the for decision making.

The information indicated is also a starting point for the presentation of the actions to be carried out in the CBIT Project.

- **INFORCARBONO**

Article 4 of the UNFCCC establishes that all Parties, taking into account their common but differentiated responsibilities and the specific nature of their national and regional development priorities, objectives and circumstances, shall, among others, elaborate and update periodically publish and provide to the Conference of the Parties, national inventories of anthropogenic emissions by sources and absorption by sinks, of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies agreed upon by the Conference of the Parties.

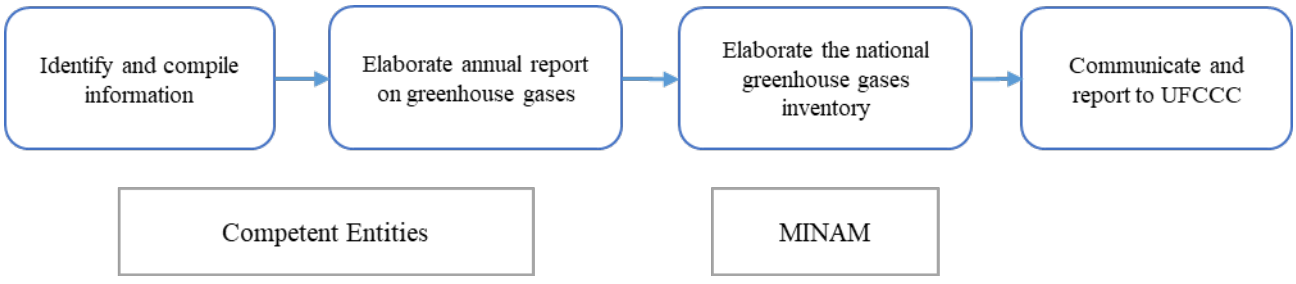
In this context, a supreme decree has established the elaboration of the National Greenhouse Gases Inventory (INFOCARBONO);[22] a set of actions aiming at the collection, evaluation and systematization of information related to emission and removal of GHG; and compliance with the commitments assumed by the country with the signature of the UNFCCC and the Kyoto Protocol.

In accordance with this legal basis, MINAM is responsible for the administration of INFOCARBONO and must provide support and develop capacities in other public entities to report periodically their GHG sectoral emissions. A continuous strengthening of the Peruvian system to monitor the GHG emissions progress and the NDC implementation and mitigation and adaptation measures, requires considering the need to cover the current existing gap in personnel and technical capacity in the relevant ministries.

In addition, MINAM has the responsibility of overseeing the methodological process as well as compiling the information provided by other sectors and preparing the National GHG Inventory (INGEI).

The stages established in INFOCARBONO are shown in Figure 3.

Figure 3. Stages of INFOCARBONO process for preparation of National GHG Inventories



[22] Supreme decree N° 013-2014-MINAM.

Table 3 below specifies the competent entities according to the sector and category established by the IPCC.

Table 3. Institutions at Ministerial level participating in INFOCARBONO

SECTOR IPCC	CATEGORIES	COMPETENT ENTITY
Energy	Stationary Combustion and Fugitive Emissions	Ministry of Energy and Mines.
	Mobile Combustion	Ministry of Transport and Communications.
Industrial Processes and Product Use	Minerals Industry, Chemical Industry and Metals Industry	Ministry of Production.
Waste Sector	Solid Waste Disposal	Ministry of the Environment.
	Treatment and Elimination of Domestic Wastewater	Ministry of Housing, Construction and Sanitation.
	Industrial Effluents	Ministry of Production.
Agriculture	Enteric Fermentation	Ministry of Agriculture.
	Manure Management	
	Rice Crops	
	Agricultural soils	
	Burning of Savannahs (pastures)	
	Burning of Agricultural Residues	
Land Use, Land Use Change and Forestry	Changes in Biomass and other Woody Stocks	Ministry of Environment in a collaborative manner with the Ministry of Agriculture and Irrigation.
	Conversion of Forests and Prairies	
	Fertilization of Cultivated Lands.	
	Emissions and Absorption in the Soil and others (non-CO2 gases)	
	Outreach of the National GHG Inventory	Ministry of Education Ministry of Culture Ministry of the Environment National Institute of Statistics and Informatics.

With the entry into force of the D.S. 013-2014 - MINAM (INFOCARBONO) the elaboration of the INGEI is carried out jointly by the competent entities. To this end, MINAM hires liaison professionals who work in these entities, promoting the creation of internal work groups within the units responsible for supplying the information related to the activities and preparing the RAGEI.

In the section corresponding to the INGEI included in the Third Communication (2016), the main gaps in generation, treatment and management of information were described, including measures to address them.[23] Table 4 below summarizes the main gaps.

Table 4. Main gaps identified in the development of INGEI

AREA	IDENTIFIED GAPS
Information availability	Imprecision in the data used on the activities.

[23] The gaps identified in the Third National Communication are presented prior to the approval of the Sectoral Guides for the preparation of the RAGEI.

AREA	IDENTIFIED GAPS
	Lack of definition of processes and procedures for the collection of information in the competent entities, as well as of the necessary institutional arrangements
	Limitations for the development of specialized studies that make available the missing required information.
Quality of the information	Lack of tools to facilitate the Quality Assurance/Quality Control (QA/QC) of the information collected.
Emission factors	Use of default emission factors, not reflecting local circumstances necessarily.
Treatment of uncertainty	Methodology for the analysis of uncertainty in the inventory, not suitable for the country circumstances.
Capabilities of specialists	Limitations in generating information required to prepare GHG inventories.
Systematization of experiences	Lack of a systematic registry of the data used and of the limitations found.
Outreach of information	Absence of a communication strategy that facilitates the dissemination of the results of the INGEI to various actors, to involve them in the management of climate change.

Source: CNCC3

These identified gaps serve to focus the efforts that need to be generated in the country to guarantee the reliability and level of quality of the information that is needed, to ensure the transparency, coherence, comparability, completeness and accuracy of future inventories. In this regard, activities proposed in the CBIT - Peru project, will greatly contribute to these efforts, in particular in the case of Component 1.

Peru's advances regarding GHG emissions management and climate action information system are summarized below:

- Institutionalization of INFOCARBONO and the GTM. This entails the development of the capacities of local experts involved in the elaboration of the INGEI.

- GHG inventories prepared at National and Facility level by Government institutions and the private sector (on a voluntary basis).[24]

- INFOCARBONO Web Platform[25] including GHG emissions reports, the sectoral guides and other information and tools required for the calculation of emissions.

- Sectoral Guides with the methodology for estimating GHG emissions, following the IPCC Guidelines and available information. Nine guides are available: for the Energy Sector (Stationary Combustion and Fugitive Emissions, and Mobile Combustion), Industrial Processes Sector, Waste Sector (Solid Waste Disposal, Domestic Wastewater Treatment, Industrial Effluents), Agriculture Sector (which includes the five categories Enteric Fermentation, Manure Management, Rice Cultivation, Agricultural Soils, Burning of Savannas and Burning of Agricultural Residues), LULUCF Sector and for the Dissemination of the results of the INGEI.

[24] There is no regulatory framework that regulates the GHG emissions of companies. Various entities voluntarily develop their inventory or carbon footprint.
[25] http://INFOCARBONO.minam.gob.pe.

- Local Emissions Factors have been developed by MEM to calculate emissions in the Energy sector and by MINAGRI to calculate carbon emissions in the Amazon forest. Gradually, new information is being generated at country level to estimate emissions more precisely through field investigations (GHG of cattle-raising origin, with support from IICA/FONTAGRO)

- Analysis of information on activities by sectors has been further developed, which has allowed for a better identification of gaps.

- Implementation and evaluation of a range of mitigation measures. Currently, Peru has a set of 14 NAMAs.

- Capacity building and strengthening of capacities at the level of Government officials and professionals in the country have been improved; even when the process is extended due to frequent staff rotation.

- Current exercises of projections of sectoral emissions have focused only in the Energy sector (alongside with the work under *PlanCC* for the preparation of the NDC). These existing projections are not linked to development of climate policies or instruments.

As part of the process aimed at reducing GHG and improving the implementation of MRV, gaps to be resolved have also been identified. The main ones are:

- Lack of accuracy. The emissions and GHG reduction calculations have been improving, but they are not robust enough. There is limited availability of information on local activities and emission factors.

- Instruments and registries of the various MRV are not linked and there is a lack of inter-institutional arrangements to facilitate the flow of information.

- Insufficient technical guidance on how to interpret guidelines and results, develop projections, ensure the quality of information, among others.

- Tracking progress of mitigation measures is not performed on a systematic basis. There is not a standard methodology with guidelines to apply on how to carry out an adequate tracking. There is a limited evaluation of associated costs and benefits of the measures.

- Pilot actions are developed, but without a proper MRV system or protocols in place that may standardize the evaluation and generation of information.

- Dissemination of information does not help to support decision making and development planning.

The need for a system to manage and integrate information from public and private sources related to climate action is still apparent, but even more it is necessary to link this climate information with instruments for the promotion of sustainable development. In the context of the Paris Agreement and its mandate of efforts to represent a progression over time, the need for an additional process has been identified: the development of emission projections as a tool to support long-term planning. As it will be reported in the Second BUR of Peru, the country lacks technical and institutional capacities to provide GHG emission projections. These projections constitute an important tool to track the progress of mitigation efforts in Peru and for the planning of mitigation policies. In addition, they could be used to help identifying support needed to implement mitigation efforts.

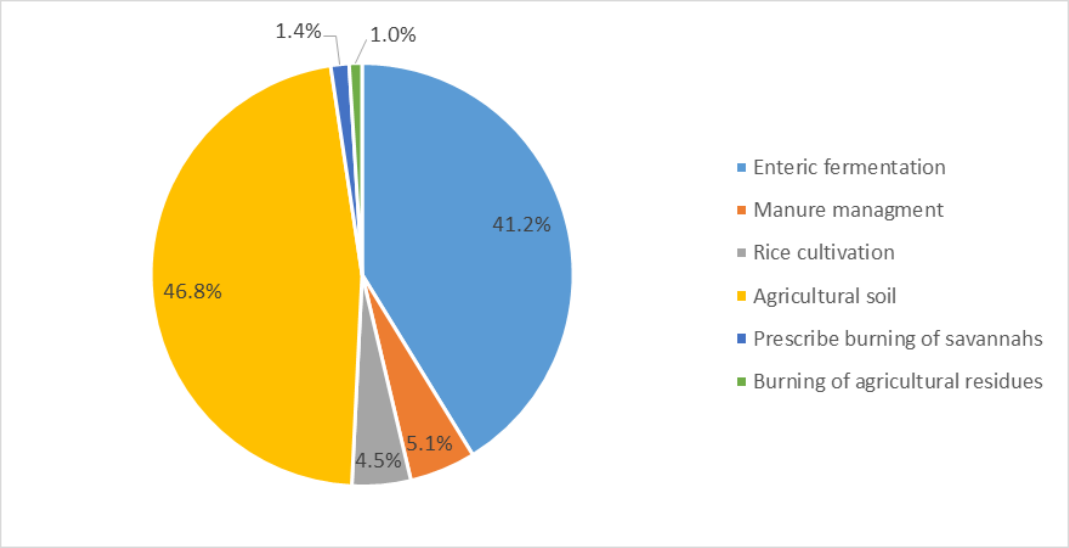
Most of the progress in MRV in Peru has so far been related to mitigation measures. This is the case of INFOCARBONO, which includes comprehensive Excel spreadsheets for calculations of GHG emissions and sectoral guidelines for preparing national inventories. In addition, work is in progress to develop a registry of mitigation actions (including NAMAs), which will include guidelines, methodologies, quality control and procedures for registering actions. Both tools

are considered part of the mitigation area in the transparency system and will generate important inputs to generate information and tools for long-term planning. Therefore, to strengthen the mitigation area in Peru's transparency system, there is a need to improve the quality of GHG inventories and lay the groundwork for the preparation and use of GHG projections. Ultimately, this will strengthen institutional and technical capacities for the formulation and use of sectoral long-term development strategies for low greenhouse gas emissions.

With these elements in mind, CBIT support will focus on capacity building of government entities and stakeholders with respect to emission projections and long-term planning as tools for reducing more effectively GHG emissions.

As mentioned, the Agriculture Sector, which has been selected as the focus of the CBIT Peru Project, represents 15.2% contribution to the total of emissions of the country. Within this sector, the enteric fermentation category (41.2% of the total emissions of the sector, as shown in the following figure 4) is labelled as a Key category.

Figure 4. Relative participation by categories in emissions in the Agriculture sector



For the elaboration of the RAGEI, the information coming from the statistical yearbooks of the MINAGRI is used, based on the IV National Agricultural Census from 2012 conducted by the National Institute of Statistics and Information. The emission factors used are mostly Level I emissions factors i.e. default values.

It is important to highlight the involvement of MINAGRI in the RAGEI. This Ministry established a specific institutional framework that articulates research and academia actors, as specified in the following table 5.

Table 5. Institutional Coordination for preparation of the RAGEI of the Agriculture Sector

TECHNICAL ORGAN	INFOCARBON WORKING GROUP
General Directorate of Agrarian Environmental Affairs - DGAAA	General Directorate of Livestock General Agricultural Directorate Directorate of Agricultural Statistics National Institute of Agrarian Innovation – INIA for its acronym in Spanish National Agrarian University La Molina - UNALM International Center for Research in Agroforestry - ICRAF.

The MINAM supported the elaboration of the RAGEI 2014 by providing a full-time consultant, who gave technical assistance to the sector permanently. Subsequently, the MINAGRI as a counterpart hired, with resources from its own ministerial budget, a consultant to complete the RAGEI. This experience has been replicated for the RAGEI 2016.

With the support of FONTAGRO, as a part of the project "Improvement of animal production systems with emphasis on dairy cattle in the Andean Region in the context of climate change", three pilot trials have been carried out for the measure of enteric methane in cattle, in different height levels (m.a.s.l), considering type of system (intensive and grazing) and different diet. International validation of the factors by the IPCC is a next step to apply in subsequent estimates, in order to systematize the use of these domestic emissions factors within the international community.

In relation to the articulation of GHG estimation processes with climate change management policies, the Technical Working Group on Food Safety and Climate Change (GTSACC)[26] is in charge of proposing the sectoral vision of climate change in the agricultural production systems of the country and recommend measures to guide institutional processes and actions and the intersectoral coordination for adaptation to climate change by reducing the vulnerability of agriculture, with the aim of contributing to Peru's food security.

The GTSACC is chaired by the Vice Minister of Agrarian Policies and the DGAAA acts as the technical secretariat. It is made up of the Public Bodies attached to MINAGRI (ANA- National Water Authority, INIA -National Institute of Agrarian Innovation, SENASA- National Service of Agrarian Health, SERFOR) and the General Directorates of the MINAGRI Line.

The "Sustainable Agrarian Development" Cooperation Group (GC - DAS) has also been created in June 2017, as a technical coordination space between cooperating entities, public entities and other actors linked to the development of the agrarian sector, for the promotion of an inclusive and innovative agriculture towards a sustainable agriculture, where MINAGRI, the Peruvian Agency for International Cooperation (APCI) and the FAO take part. The purpose is to promote the analysis and systematization of experiences and good practices developed at national and international level, promote synergies among actors to generate new information on priority issues and promote joint actions for the implementation of National Policies and the Sustainable Development Goals.

Key initiatives developed in the Agricultural sector in relation to climate change have been identified, and are highlighted in table 6 below.

Table 6. Projects related to climate change in agriculture

Project's name	Objective	Results
Improvement of animal production systems with emphasis on dairy cattle in the Andean Region within the context of climate change ". 2014-2018	Development of the technical capacity in measure of emissions of enteric methane and nitrous oxide, and the ability to formulate strategies to mitigate their effect on typical milk production systems in the countries of the Andean region (Bolivia, Colombia, Ecuador and Peru).	– Three trials for the measurement of enteric methane in cattle. – Physical and technical capacities at Agrarian National University La Molina (UNNALM, for its acronyms in Spanish)) and International Center for Tropical Agriculture (CIAT, for its acronyms in Spanish). – Technical tools for measuring and mitigating GHG emissions from livestock in the Andean Region.
"Grow more with less. Adaptation, validation and promotion of the System of Rice Intensification (SRI)	Contribute to reduce the vulnerability of rice producers to the biophysical and socio-economic impacts of	Installation of thirteen (13) validation smallholdings of the SRI, alliances

[26] Created with R.M. N ° 0647-2008-AG, modified with R. M. N ° 0127-2017-MINAGRI.

Project's name	Objective	Results
in the Americas as a response to climate change " 2015-2018	climate changes (current and projected) by reducing the sensitivity of their production systems and improving the capacity for adaptation	established between UNALM and CIAT.
National Center for Agrarian Research on Climate Change.	Strengthening INIA capacities for simulation of climate change scenarios in corn and quinoa, carbon capture, and phenological phases.	Construction and equipment of a laboratory

In addition, other enabling factors in the Agriculture sector include:

- The existence of a consolidated team within the framework of INFOCARBONO, which articulates the organic units of information generation, emission estimation, policy formation, of MINAGRI.
- The articulation provided by MINAGRI with a network of research and academic institutions in the country and in other countries of the region.
- There is an initial record of development of emission factors related to the measure of enteric methane in cattle already available in the country. Tests for measurements of enteric methane in cattle, in an intensive system of bovines at sea level, testing two levels of unstructured carbohydrates (30 and 50% dry basis) in the diet have been undertaken. Also, studies including a trial with grazing cattle in the central highlands, in a traditional system (natural pastures) at 4,100 m.a.s.l. and a similar trial but with an improved system (alfalfa and oat pastures, and commercial concentrate feeds) at 3,200 m.a.s.l. have been conducted in the country. Nitrous oxide measurement tests were carried out in a traditional system (natural pastures) and improved (association rye Perennial Grass with white clover) at 4,100 m.a.s.l. [27]
- The implementation of projects supported by FONTAGRO through Peruvian universities and research centers has allowed the development of technical (equipment, guidelines and manuals) and human (researchers) capacities at the UNALM and the INIA.
- Flexibility in articulating with other projects to support initiatives with similar purposes.

In this context, the support of the CBIT Peru project will enable to enhance the availability of local emissions factors, through the replication of the studies conducted to measure enteric methane in cattle in other areas of the country, taking advantage of the capacities already installed. Likewise, this will also allow to advance decisively in the validation at international (IPCC) level of the domestic emission factors developed for its application in subsequent GHG estimates of the sector, improving the quality of these factors and positioning Peru as a leader at regional level in the generation of emissions factors for the Agriculture sector.

2.3. Adaptation framework for a transparency system

The vulnerability assessment of the country and of key sectors, carried out as part of the process of preparing the Second and Third National Communications of Peru, helped to identify the five priority sectors and to formulate the adaptation component in the NDC. Based on the results of the COP 20 in Lima, Peru decided to expand its initial focus on mitigation objectives to include adaptation. In the NDC, the Adaptation component target is to reduce levels of vulnerability, by increasing response capacity, adaptation and resilience. To this end, five thematic areas – health, water, agriculture, forests and fisheries – with their implementation supported by transversal approaches (see Table 7 below).

[27] Manual of gas collection procedures for the estimation of emissions of enteric methane and nitrous oxide of livestock origin. IICA. 2018.

Table 7. Intermediate objectives and transversal approaches of Adaptation in the NDC

	1. WATER	2. AGRICULTURE	3. FISHERIES	4. FORESTS	5. HEALTH
INTERMEDIATE OBJECTIVES	Promote actions and projects that increase the availability of water in the face of climate change.	Reduce the negative impact of climate change on agricultural activity.	Reduce the vulnerability of the fishing and aquaculture sector in the face of climate change.	Promote the integral management of the territory with a landscape approach aimed at increasing the resilience of forests in the face of climate change and reducing the vulnerability of local populations.	Reduce the vulnerability and increase the resilience of the population to the effects of climate change on health.
TRANSVERSAL APPROACHES	1. Disaster risk management.				
	2. Resilient public infrastructure – Climate-proofing of the National Public Investment System (SNIP).				
	3. Poverty and vulnerable populations approach - adjusting the design of programs and regulatory frameworks with adaptation criteria.				
	4. Gender and interculturality approach.				
	5. Promotion of private investment in adaptation - Evaluate the introduction of innovative mechanisms that encourage private investment which contributes to increasing the resilience of vulnerable systems.				

In the context of the GTM process (for details, please refer to 2.1. Normative and Institutional Framework for the management of the climatic change), work around these priority areas was organized into working groups and further into topic groups, which in turn evaluated categories of adaptation measures to Climate Change (see Table 8 below).

Table 8. Synthesis of the Adaptation Measures proposed by Thematic Areas

PRIORITY AREA	Working Groups	Adaptation Measure Categories
AGRICULTURE	Agricultural soils in areas vulnerable to climate change hazards	Soil fertilization practices, erosion control, protection of agricultural soils, recovery of degraded agricultural soils.
	Agricultural production systems of crops and livestock with greater vulnerability to climate change	Productive diversification, pest and disease management, grassland management, improvement, *in situ* conservation of agrobiodiversity.
	Value chains in areas vulnerable to hazards associated with CC	Agroclimatic information services, added value in value chains.
WATER	Water for agricultural use	Water transfers and reservoirs, natural infrastructure, protection of water systems for agricultural use.
	Water for energy use	Use of renewable energy, support for electricity potential planning

PRIORITY AREA	Working Groups	Adaptation Measure Categories
	Water for population use	Decrease in water losses, protection of sanitation systems, early warning systems
	Water - Multisector Management	Measurement of the collection and distribution of water in hydraulic infrastructure, granting water rights, comprehensive management of water resources.
FISHING AND AQUACULTURE	Industrial Fishing	Anchovy - technologies for fishing, traceability, fishing quotas.
	Artisanal fishing	Diversification, good practices for safety, selective fishing techniques.
	Aquaculture	Business management, good practices for safety
FORESTS	Ecosystems, restoration and monitoring of biodiversity	Ecosystems in the scope of SINANPE[28], forest ecosystems and wild vegetation, ecosystems in basins.
	Society and participation of communities	Control, surveillance and inspection, use of sustainable technologies, productive chains, forest services
HEALTH	Population	Risk management in a context of climate change in planning and investment, financing, epidemiological and public health surveillance systems and healthy practices in the population.
	Health service	Capacities and financing for public health care in situations of health emergency generated by disasters.
	Health infrastructure	Application of constructive technologies in health infrastructure vulnerable to CC, risk management in the context of climate change in regional and local public investment.

The thematic groups have advanced in the development of proposals of Tentative Programming for the adaptation to the climate change, in which products and indicators are identified, that will be the base for the M&E of the advances in each one of the prioritized thematic areas.

MINAM has been working on the design and implementation of a National M&E System for Adaptation to Climate Change, on the basis of a set of indicators that will be included in the NAP to Climate Change, with a focus on results and following the technical guidelines of the CEPLAN in terms of formulation and measurement of indicators and targets. In the monitoring, it will consider the Tentative Programming, the measurement of product indicators and adaptation measures that are being developed within the framework of the GMT and monitoring reports; in the case of Evaluation, it will consider aspects such as Theory of change, Matrix of evaluation, and Levels of evaluation, Temporality (intermediate, final, impact), and Evaluation reports. The basic timeline for the implementation of the National M&E System for Adaptation to Climate Change is ambitious. The revision and validation of proposed products, adaptation measures, indicators and goals are planned to be completed by the end of 2018, thereafter a roadmap would be developed until mid-2019, and the implementation would then be completed by the end of 2020.

According to a review of the evidence and relevant experiences in the design of Adaptation M&E systems by MINAM[29], the debate on M&E adaptation and most of the evidence and expert consensus are generated at the level of programs and projects, and less at the national, regional and international level where strategic issues need to be resolved. The referred document indicates a set of challenges to consider for the design of Adaptation M&E systems, including:

- The lack of measurement parameters and clear criteria to evaluate the "success" of the climate change adaptation.

[28] National System of Natural Areas Protected by the State - *Servicio Nacional de Áreas Naturales Protegidas*
[29] "State of the Art of Monitoring and Evaluation for Climate Change Adaptation", MINAM, 2017.

- The need to evaluate success in a context of changing and uncertain climatic conditions.
- The limitations for the attribution of the desired changes to a climate change adaptation intervention.
- Maladaptation, which leads to negative effects and is not always detected and analyzed.
- The lack of standards on how to measure climate change adaptation, largely due to the lack of a common operational definition of vulnerability, resilience, adaptability.
- The difficulty to establish baselines (and against factual) for the evaluation of impact, when the nature of the adaptation is changing and uncertain.
- The lack of data availability in the changes to be monitored when required, or that must be collected from different sources and at different levels.

This entails challenges for MINAM's efforts to design and implement an NDC M&E System in climate change adaptation at the national level. To strengthen the local evidence basis, MINAM is completing studies in relation to the economic analysis of adaptation measures to climate change in the five thematic areas and, based on this experience, has planned the development of methodological tools for the economic evaluation of Adaptation Measures for Climate Change (MACC for its acronym in Spanish). Likewise, it is promoting the preparation of guidelines for the incorporation of risk management in the context of climate change in health and agriculture. These efforts would reduce some of the limitations indicated, such as the operational definitions of vulnerability, resilience, adaptability, or measurement of the benefits of risk reduction measures. The CBIT Peru project will consider and built upon these enabling conditions for adaptation to climate change, and the current design of the National M&E System.

Moreover, all these activities are being supported by the process of the National Adaptation Plan (NAP) of Peru, a multisectoral effort that will guide adaptation actions and the associated M&E process. In turn, various processes and projects have been crucial to make the NAP process possible (See Table 9 below)

Table 9. Projects that have contributed to the NAP process

Project Name	Timeline	Support Description
Support for 3rd National Communication on Climate Change	2014	Initial NAP assessment undertaken for 3rd national communication del Peru.
Climate Change Adaptation Program (PACC) - Swiss Agency for Development and Cooperation (COSUDE for its name in Spanish)	2015 - 2016	Technical support to NAP for document design and leadership in the process of information collection and validation with stakeholder from public entities.
United States Agency for International Development (USAID) Technical Assistance Program (PAT USAID)	2015 - 2016	Technical support to develop a communication strategy for the NAP formulation process so that entities are involved in identifying and prioritizing actions related to adaptation to climate change in their sectors.
Climate Change and Environment Program for Latin America and the Caribbean (ARAUCLIMA) from European Union (EU)	2016	Financial support to hire a technical support team, studies in priority sectors and public consultation workshops for NAP elaboration.

Currently being carried out by the Technical Group of Adaptation (GTA), the NAP will function as a policy instrument to achieve the objective of adaptation of the ENCC and implement the NDC, considering the five priority sectors.

The NAP process has helped unify several actions and conduct background studies with the support of projects led by MINAM. Different types of support are committed for the next phase of the design and implementation of the National M&E System. Financial sources and support techniques are mentioned in the Table 10 below; of note, there are currently

no earmarked funds available to support the work in the Health Thematic Area, which has made progress through internal funds, and is the most advanced sector within the design of NAP.

Table 10. Financial support for the preparation of National Action Plan for Adaptation (NAP) and M&E system

Priority Sector	Funding Source
Fishing	International Climate Initiative (IKI) Ecosystem-based adaptation (EBA) Project for Marine Ecosystems
Water Resources	USAID Program for water and glaciers
Agriculture	COSUDE Projects
Forestry	National Program for Forest Conservation for Climate Change Mitigation
Health	Public Budget

Health is the only thematic area for which the "Tentative Programming", as a contribution to the NAP, has concluded its formulation of proposed objectives, goals and general indicators. It has carried out vulnerability studies focused on specific issues such as hospital vulnerability, which has been translated into the National Policy on Safe Hospitals from Disasters that contains the 2017-2021 Action Plan and the Multisectoral Commission of Safe Hospitals from Disasters is created.[30]

The Ministry of Health (MINSA for its Spanish Acronym) first tried to identify health adaptation measures in 2016, with a proposal for "Comprehensive Plan for Mitigation and Adaptation to the effects of Climate Change in Public Health 2015-2018". Albeit not approved, the plan served as a reference for the technical teams of the areas involved in the subject, and thereafter was used for the proposal of adaptation measures against Climate Change in correspondence with the NDC in the thematic area of Health, within the framework of the work agendas of the GTM.

Health has been identified as the object of intervention for the development of capacities in monitoring and evaluation with the support of the CBIT project, because it has shown greater progress in the framework of the GTM. In the thematic area of Health, adaptation measures consider three main areas of action: 1) Health infrastructure resilience to guarantee continuity in the provision of services, 2) health services, to respond to situations of health emergency generated by risk factors associated with disasters caused by climatic hazards, and 3) the population, which should adopt healthy and resilient practices that reduce their vulnerability to the effects of climate change. Likewise, it has elaborated the Tentative Programming where it defines products and indicators associated with the adaptation measures to climate change that are articulated with the objective of the NDC.

To guarantee the cost effectiveness of the actions and to promote the commitment of the relevant stakeholders, Peru's transparency system (especially the generation of information) must be based on existing processes, arrangements and practices. The Ministry of Health, through its Vice Ministry of Public Health, is currently in charge of developing strategic and policy interventions for areas such as environmental health, disease control and disaster risk management. In all these areas of work, information related to adaptation to climate change is being collected and activities are being planned. However, it has not yet been evaluated how this information can help to track progress in the intermediate objective of

[30] Approved with Supreme Decree 027-SA of September 19, 2017. This policy is mandatory compliance of public and private health facilities.

the Health area of Peru's NDC, which is " to reduce vulnerability and increase the population's resistance to the effects of climate change on health".

Specific reporting mechanisms have been identified on different aspects of health surveillance, which can be articulated with the Monitoring and Evaluation System whose design intends to support with the CBIT Peru Project. These include:

- The Health Situation Analysis (ASIS), an information mechanism that allows characterizing, measuring and explaining the health profile of the population, including key climate-sensitive diseases (such as Diarrhea, Acute Respiratory Infections and Vector-Borne Diseases), as well as basic determinants of health such as water and sanitation, waste management and food safety, among others; it provides input for strategic planning.
- The Epidemiological Surveillance System, aside from its core functions on outbreaks, disease reporting and trend analysis, also contributes to the monitoring of climate-sensitive Non-Communicable Diseases and Environmental Risks. This component is based on the development of studies and research on variables of precipitation and temperature, for which it works in close coordination with the National Service of Meteorology and Hydrology (SENAMHI), which provides information on the variables mentioned.
- The Health Situations Rooms is a virtual platform based on integrated health information inputs, presenting health situation overviews and trends of diseases. Other functionalities include overviews of the current situation of a significant health event, its magnitude and space distribution, in order to guide and prioritize health interventions, for the control of identified health problems.

There are several other repositories that could feed into a Health Adaptation M&E system, and which could benefit from it. In these interactions, interoperability, current use and access are critical elements to be addressed.

Moreover, although the thematic area of health has achieved the greatest progress in terms of developing climate change indicators for public policies, there is still a lack of M&E practices for adaptation actions implemented by the authorities at different levels of government (national, regional and local). For the proposed Health Adaptation M&E indicators to be effective, they must be operationalized, tested in the field and revised accordingly. An effective involvement of subnational health authorities and providers is crucial in the success of a National Health Adaptation M&E System. The proposed activities in Component 2 can support progress in the M&E adaptation actions in the health sector, thus contributing to the implementation of the overall national adaptation M&E system.

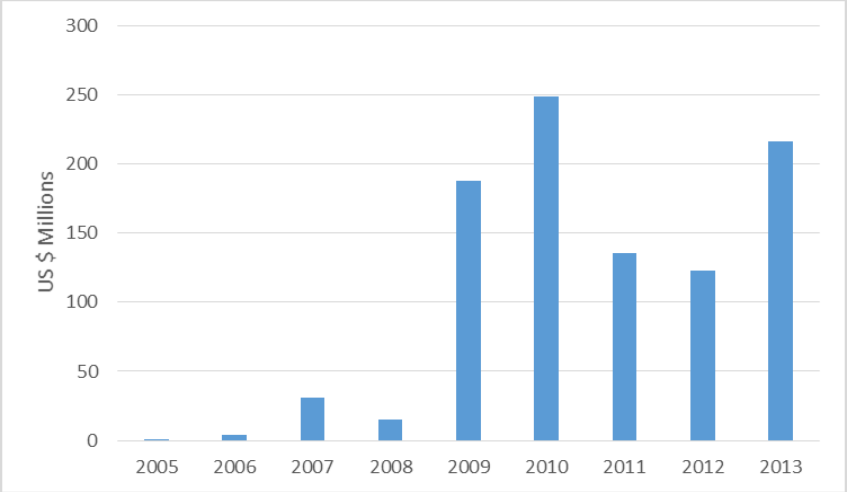
2.4. Needs and gaps in the estimation and reporting of climate-related financial data .

The analysis presented in the Third National Communication of Peru about the availability of financing for the management of climate change in the country shows the absence of a mechanism to systematically report and articulate the expenses of the different public and private actors in actions of mitigation and adaptation and the respective sources of financing.

A main source of information has been a study on climate finance[31], in which it was estimated that in 2005-2013 period $ 1,245 million from different sources were allocated to climate change management and 962 million of the funds were executed (77.3 %) in Peru. The following Figure 5 shows the evolution of expenditures in that period.

[31] Current status of climate financing. Galarza Contreras E and Ruiz Pérez J. 2015. Final report.

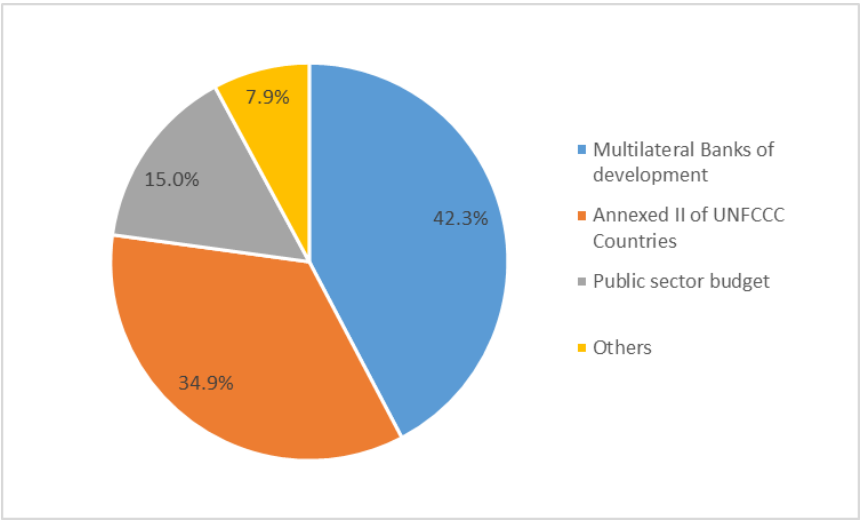
Figure 5. Annual execution of financing in the management of climate change



The financing flows for the management of climate change in 2009, 2010 and 2013, have been in function to the execution of large projects financed by loans destined to: 1) strengthen capacities for a new sustainable energy matrix ($ 150 million), 2) improve the Peruvian environmental management policy ($ 20 million) and 3) the solid waste management program ($ 125 million), which represent around 30% of the total climate financing executed between 2005 and 2013. The largest investment was in the management of GHG emissions (61%), only 19% ($ 239 million) was dedicated to climate change adaptation, mainly to disaster risk management (70%); 20% was for emissions projects and adaptation to climate change.

International cooperation was the main source of financing through public indebtedness operations and non-reimbursable donations. The following figure 6 shows the relative share of funding sources. The main Multilateral Banks are IDB, Andean Development Corporation (CAF for its acronym in Spanish) and the World Bank. The relevant action of the Multilateral Funds such as the GEF and the programs of the United Nations for the Environment (UN Environment) and for Development (UNDP) is emphasized.

Figure 6. Main sources of financing climate spending 2005-2013



There are national private funds that finance environmental management projects, such as the Fund of the Americas, FONDAM, National Environmental Fund (FONAM), Aquafondo, Peruvian Trust Fund for National Parks and Protected Areas (PROFONANPE). Accountability and monitoring of progress in spending and achievement of goals is done for each project or initiative and in different ways depending on the requirements or M&E system of the financial institution.

MEF, the governing entity of the National Public Budget System (SNPP by its initials in Spanish) and the National Multiannual Programming and Investment Management System (Invierte.pe), identifies climate change as a risk to economic stability and financial equilibrium. In the Investment Bank that allows to monitor investment amounts, in the period from 2005 to 2013 were identified, also assuming certain criteria, 527 projects financed with public funds oriented to the management of emissions (97 projects and $ 39 million) and the adaptation to the climate change (430 projects and $ 147 million).

The Peru´s Third National Communication (CNCC3, for its acronyms in Spanish) identifies the barriers and needs associated with financing for climate change management, among which the following stand out:

- Limited knowledge of funding sources for climate management.
- Little variety of financial instruments used.
- The inclusion of climate considerations in development policies is not entirely explicit or it is related to social aspects.
- Lack of adequate capacities to formulate and execute actions related to climate change, in the national government (regional governments and local governments).
- Limited investment in research, technological development and innovation.
- Limited capacity for the managing and monitoring the financing of climate change management and the execution of programs and projects related to climate change.

The CBIT Peru Project will carry out actions that will contribute to the reduction of the barriers mentioned, particularly within components 2 and 3.

According to the analysis carried out for the preparation of the Second Biennial Report, there is a pending agenda on the implementation of a monitoring system for investments related to mitigation and adaptation to climate change. Currently, the financial management system focuses on considering climate change from a disaster risk perspective and there is no tool to evaluate and aggregate public spending that is more broadly related to mitigation and adaptation to climate change, especially one that do not drive to count twice a spent amount. As for private spending, there is currently no way to evaluate the investments that contribute to mitigation and adaptation to climate change or respond to related policies. Consequently, Peru does not have formal means to evaluate the global or sectoral costs to face climate change and, more specifically, the implementation of its NDC. This knowledge is key, first to achieve the proposed objective and, at a later stage, to increase the goals. It is also important to support the design of policies and, eventually, their impact evaluation.

To promote efficient management of financial resources and identify specific gaps to achieve the objectives of the NCCS and prepare the implementation of NDC, Peru has identified the need to monitor investments related to climate change management, considering the sources of public, private and international financing. The monitoring and evaluation of said investment will also help to increase the quality of the information reported in BURs and National Communications.

The public budget is programmed and executed in three budgetary categories, one of which are the Budget Programs that constitute the instruments of the Budget by Results. Using the corresponding functional classifiers, public spending is programmed and executed; the interventions related to climate change are not yet visible given their transversal nature in

activities and investments. There is a Budget Program 068 Vulnerability Reduction and Disaster Emergency Response, which is more related to disaster risks.

CEPLAN is working on a pilot initiative to monitor the budget programmed and executed within a strategic objective on climate change.

The Ministry of Economy and Finance (MEF) works with the support of the GEF to identify functional classifiers where there is evidence of interventions related to climate change and whose reports would be worked through the Integrated Financial Management System (SIAF) or the platform of CEPLAN monitoring.

In the Investment Bank of the Invierte.pe System, investment projects are registered and there is a field in the record sheet where information related to risk management regarding climate change must be entered, including measures and costs, but the reports are not automated.

An initiative of the private sector has been the installation of the Responsible Investment Program platform, which promotes policies and practices that incorporate the impact of environmental, social and corporate variables, which was formalized in 2016 through the Association for the Promotion of Responsible and Sustainable Private Investment, which incorporates actors from the financial system.

Through the Stock Market Superintendence, the inclusion of a corporate sustainability report is approved in its Annual Report, in which the issuers listed in the stock exchange report information on the management of the impacts of their operations on the environmental, social and corporate governance. A study of the reports presented on the quality and transparency of the report reveals, among others, that there is an emerging knowledge of concepts and key tools for the management of sustainability, which is reflected in that only 26% (of a universe of 207 companies) responded correctly to the question related to emission estimate and the carbon footprint.

From the Stock Exchange of Lima there is interest in supporting companies in improving the reporting of their actions, standardizing measure techniques and methods and consequently improving their sustainability practices.

3. Proposed alternative scenario, GEF focal area[32] strategies, with a description of the objective, components, expected outcomes, outputs and activities of the project

Given the current lack of capacity in Peru to generate, manage and systematically use information related to climate change, the need for a comprehensive national system of climate change information transparency has been identified. This system will need to track and monitor the mitigation and adaptation actions, as well as the means of implementation, of the NDCs in Peru. This project aims to support the establishment of a national transparency system through the development of some key components. As currently designed, the national transparency system will address four areas: mitigation, adaptation, means of implementation and long-term planning information. This structure aims to facilitate access to information and its use for policy and decision making, and it will also be the basis for complying with the requirements of Article 13 of the Paris Agreement. The proposed CBIT project fits the broader picture of work in progress that is helping to build the national transparency system. The project is structured to provide inputs in all areas of the planned transparency system.

With the enactment of the LMCC, the process towards the national transparency system has been strengthened. As per the law, the Ministry of the Environment is responsible for the monitoring and evaluation of the NDC (article 14). Sectoral authorities are responsible for reporting to MINAM on the execution of national and sectoral public policies, sectoral strategies, and the sectoral share of the NDC , as well as the mitigation and adaptation measures incorporated into their planning instruments (section 7.3). Likewise, it assigns similar responsibilities to the regional and local Authorities (section 8.3). Competent authorities and public and private organizations that administer financial resources for mitigation

[32] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving..

and adaptation to climate change are mandated to designate a person or office responsible for compiling, systematizing and managing the information they generate or possess (section 20.2). Finally, competent authorities and public and private organizations that administer financial resources for mitigation of and adaptation to climate change must establish mechanisms for the exchange of information (paragraph 21.2).

The activities proposed are well aligned with the recommendations in the "Terminal Evaluation of Second National Communications to the UNFCCC"[33], in particular the "learning-by-doing" approach in training, a realistic approach to the integration of data and projections in policy, and the institutionalization of processes for routine climate-related information generation.

The CBIT Peru project will directly contribute to various elements of this transparency framework of climate action, as well as supporting compliance with the mandates of the LMCC and its Regulations, as indicated in the components described below.

3.1. Component 1: Climate change mitigation in Peru's transparency system

For a better adoption of policies and measures to mitigate GHG emissions, it is necessary to take into account: 1) accurate levels of emissions generated, the activities generating them and the emission factors, 2) good projections of emissions under different scenarios, and 3) a set of alternative mitigation actions to implement, supported by cost-benefit or cost-efficiency indicators. This information must be also be made available to decision makers in adequate formats, for a better development and implementation of climate policies.

The baseline of this component has shown barriers and gaps in the accuracy of information on emissions, the incipient development of capacities in the country for emission projections, and the lack of appropriate linkages between mitigation and development policies. To contribute decisively in overcoming these gaps, the following Outputs have been designed.

Output 1.1. Emission factors are developed for at least the Agriculture sector

Having a set of locally relevant emission factors that reflect more accurately how some activities producing GHG emissions are carried out in the country is key to improving the quality of the GHG inventories of Peru. As indicated in the Third National Communication, INFOCARBONO requires continuous improvement processes that allow for a greater transparency, accuracy, consistency, comparability and completeness of future inventories. In this regard, one of the aspects that will contribute to improving the accuracy of inventories will be the development of local emission factors.

A robust development of local emission factors requires research groups with specialized technical skills and experience, familiar with local conditions in the country, and able to properly interpret the results obtained. This will be achieved through the direct participation of Peruvian research institutions. Better emissions factors have a two-fold benefit, contributing not only to producing more accurate GHG inventories, but also providing more precise results associated with the estimation of emissions projections. In this context, CBIT will support the development of emission factors for Agriculture, specifically enteric fermentation in dairy cattle.

An additional gap that has been identified in the same area (development of local emissions factors) is the limited availability of information associated with the processes for the international validation of these factors by the IPCC.

The proposed Output is linked to the activity of the GEF Programming Directorate (f) on the specific emission factors of the country. This Output will also cross-support planned work towards the design of a mechanism to collect information on the use of firewood, through periodic national surveys; the support is considered part of the activities of the expert in

[33] https://wedocs.unep.org/bitstream/handle/20.500.11822/210/Terminal_Evaluation_of_the_UNFCCC_National_Communication_Programme.pdf?sequence=1&isAllowed=y

estimation and projections of GHG emissions; in addition, this sector will also benefit from the execution of Outputs 1.2, 1.3 and 1.4.

1.1.1 Elaborate case studies for Local Emissions Factors in enteric fermentation for dairy cattle.

Two (2) types of case studies will be developed for the definition of local enteric emission factors for dairy cattle specific to the country in prevalent production systems: one in the high-Andean zone (Puno and Cajamarca) and another in the tropical zone (San Martín and Amazonas).

In the case study covering the high-Andean area, it is expected to cover both the quantification of enteric methane emissions by dairy cattle and the definition of emission factors for dairy cattle. Enteric methane emission quantification experiments would be carried out under the SF_6 tracer gas technique in local dairy cattle grazing in two prevalent high-Andean systems: Cajamarca based on *"kikuyo"* / rye grass and Puno with dormant alfalfa, allowing to generate more accurate emissions factors than those of the IPCC Tier 1.

The objective of the case in the tropical zone is to define the emission factors of dairy cattle. Information required by Tier II methodology will be obtained in predominant areas of dairy production in the tropical zone (*Silvopastoral* and pasture) to obtain more precise emission factors.

The UNALM will be responsible for carrying out the studies. This University has obtained partial funding for performing these types of activities from FONDECYT and actively collaborates with experts from the University of Hohenheim (Germany) and includes the participation of the Peruvian National Institute of Agrarian Innovation. It should be noted that the development of the study cases indicated will include participation of MINAGRI professionals, helping to expand and strengthen capacities in the process. Likewise, the advances and results will also be made available to relevant actors at regional level, with the purpose of motivating the improvement in the information registration efforts at the subnational level, which will require the production of material that facilitates its dissemination.

Also within this activity is the systematization of local and other countries' experiences regarding the estimation and measurement of GHG emissions of methane and nitrogen in at least two categories of the agriculture sector.[34]

For the development of this activity, the participation of an International Expert in Emissions and Emissions Factors is required. The Expert will provide technical support during the whole process.

1.1.2 Prepare a guide for the validation by the IPCC of Emission Factors.

To facilitate the international validation of the local emission factors following the IPCC process (defined within the framework of the Emissions Factor Database of the IPCC), local researchers need a better understanding of the procedures and requirements established by the IPCC.

This activity includes the preparation of guidance materials for the appropriate presentation of country-specific information to the IPCC Emission Factor Database Board, including requirements, information needed and preparation and publication of research papers to be considered in the review. It also includes the preparation of guidance materials describing the results of the research already carried out to generate local emission factors of enteric fermentation in dairy cattle, and thus validate the materials produced.

It is expected that the guidance materials will be used later in the validation of other local emission factors for other sectors and/or categories.Moreover, the lessons learnt in this process of preparing local emissions factors can serve as a basis for cooperation actions with other countries in the region within the framework of the CBIT projects.

[34] This systematization will be carried out with the support of the Emissions Expert of the CBIT Peru project.

Output 1.2. Capacities on GHG emission projections of GHG inventory teams working with Peru's INFOCARBONO are enhanced.

One of the limitations identified as a part of the work related with INFOCARBONO is the lack of operational guidelines for a correct application of methodologies for developing and interpreting GHG emission projections. This includes not only an adequate use of the software, but also other elements such as QA/QC of the data inputs needed to load the models; a correct definition of mitigation measures to assess; inclusion of economic data within the overall analysis of mitigation actions; and adequate interpretation of results, to name a few. These aspects are crucial to ensure that a national transparency system provides adequate information for policy and decision-making, particularly in terms of tracking implementation of actions identified in its NDC. It is also important to bear in mind that part of the data and information for the assessment of mitigation actions must be generated and provided by the competent sectors of INFOCARBONO, which in some cases rely on sectorial or sub-national sources.

Strengthening the capacities of the officials in charge of preparing, interpreting o providing data for building emissions projections is an effective way to improve the transparency of the overall system. Particularly useful is the training of experts involved in sectoral GHG inventories, who will be closely involved in the preparation of GHG emissions projections. This activity also includes the exchange of experiences with other countries about the efforts made in this area.

The proposed output is linked to the Programming Direction activity of (e) in the country-specific training on emission projections.

1.2.1 Conduct a training on emission projections for the INFOCARBONO teams and professionals of the Direction of Greenhouse Gases Mitigation (DMGEI)

This activitywill consist of a training workshop , including the preparation of materials, to promote the capacity of sectorial and national teams of INFOCARBONO in the projections of greenhouse gas emissions. Contents should include: 1) Definition and selection of methodologies to carry out projections of GHG emissions at different relevant timescales in different sectors and categories (prioritized in activities 1.3) and also including links with the national GHG inventories; 2) Identification and assessment of mitigation measures defined in the MTG for the NDC; 3) Selection and use of datasets to carry out the projections of GHG emissions, including a specific module on the use of macroeconomic projections; 4) Definition of baselines and scenarios; and 5) Practical work on models used for projections of GHG emissions.

To give sustainability to the development of capacities, by replicating periodically the training activities, written materials and virtual modules will be prepared for the training, which will be hosted in the INFOCARBONO platform.

Output 1.3. General guidelines and tools to ensure consistency and comparability of GHG emission projections among sectors are developed.

Currently, there is a variety of GHG emissions projection models available globally. However, questions remain about the suitability of some of them for its implementation in Peru. In this regard, it has been considered useful to analyze the different existing models to carry out GHG emission projections and identify which of them are the most appropriate according to the national circumstances of Peru, considering its suitability for different emissions sectors. Elements to consider include access to these different models and the inputs they need, their applicability into different sectors; level of complexity in handling the information required; and potential for performing comparisons of sectoral results. Existing experiences in Peru in the use of these models, particularly in the energy and transport sectors will be important. Appropriate coordination with local research institutions with experience in the implementation of these models will be encouraged, in order to build local capacities.

The development of a set of guidelines to ensure that GHG projections are prepared in a comparable manner will also include the participation of the Ministry of Economy and Finance, in order to include macroeconomic analyses within the projections.

The proposed output is linked to the activity of the GEF Programming Directorate (d) related to development tools and guidelines.

1.3.1 Prepare a proposal of tools to be used in emissions projections by sector and category.

This activity will consist in the development of a review report of best practices and tools at national and international level for performing projections of GHG emissions at sectoral level, ensuring consistency and comparability between sectors. The report will include 1) a review of software tools available by sector or category, 2) an analysis on complexity in its application, data needs and local availability 3) local experiences in application of software and the comparability and coherence of the results found, and 4) the information needed for the definition of mitigation measures in the framework of the implementation of the NDC and the work of the GTM. It should also include an analysis in the use of macroeconomic projections and provide recommendations for specific tools to apply in the country in each sector or category.

1.3.2 Prepare operational tools to carry out emission projections.

Once a suite of software tools has been selected as part of activity 1.3.1, two of them will be tested in the field with real local data in different sectors or categories. MINAM will define the criteria for selection of these two types of software and the conditions for performing these tests.

The results of this activity will also serve as the basis for the preparation of didactic material that will be used for conducting the training workshop of activity 1.2.1

Output 1.4. Public servants are trained to integrate long-term strategies and GHG emissions projections into policy and decision-making.

A weak articulation between the data and assumptions used to prepare scenarios for projections of GHG emissions and the data and assumptions used to assess long-term development strategies and policies at country level has been detected. Several explanations can be provided for this, including lack of information at different timescales, technological discrepancies or differing sectoral viewpoints on the implementation of mitigation actions in coming years.

In order to expand the number of public servants able to properly integrate long-term development strategies and policies with scenarios for projections of GHG emissions, training will be provided for them, particularly for those working at sectoral level and in sub-national governments. This training should include elements such as how the long-term perspective may help to identify the benefits of the transformation towards a low-emission climate-resilient economy. Several examples of sectorial potential integrations can be cited, including for instance the Agriculture sector with the existing Food Safety & Climate Change Working Group.

The proposed output is linked to the activity of the GEF Programming Directorate (b) on the integration of knowledge of transparency initiatives in decision-making, as well as on the activity (e) on training in specific transparency activities of each country.

1.4.1 Train public servants involved in the preparation of proposals for long-term development policies that include gender perspective

The proposal for this activity is a workshop using the INFOCARBONO platform aimed at strengthening the capacities of officials at the national and subnational levels involved in the formulation of long-term policies. In addition, civil servants involved in the process of defining measures in the framework of the GTM will be considered, as well as the planning and budget areas of each entity involved.

The objective of the workshop is to provide guidance on how to better integrate the projections of greenhouse gas emissions into development planning. A specific sectoral module of this workshop will be dedicated to the agriculture sector, particularly to the implementation and adoption of intelligent climate technologies, including gender strategies; counting for it with a professional that guides and verifies its suitable incorporation.

Within the materials for the training, guidelines will be developed on the presentation of the results of emissions projections and the scenarios considered and their implications in the development policies, so that they are useful for the decision makers. Some scope of the costs and benefits associated with the proposed scenarios and the adoption of policies should be considered.

The training will be carried out in virtual and face-to-face formats, in the last year of the CBIT project implementation, including lessons learned in the execution of other activities considered in the project.

3.2. Component 2: Adaptation to climate change in Peru's transparency system

Peru has included an adaptation component in its NDC, which includes five priority thematic areas: water, agriculture, fisheries, forests and health. There are currently no institutional mechanisms to systematize the information for the implementation of the adaptation component of the NDC and to follow the progress in achieving the intermediate objectives identified, albeit a substantial effort is in progress. The CBIT Peru project intends to contribute to closing this gap through a gradual approach in the priority area of health. The health sector has been identified as the focus of capacity development under CBIT because it is the most advanced in terms of defining specific objectives and indicators related to the NDC objective. It will thus serve as a pilot to develop best practices and lessons on monitoring and evaluation (M&E) of adaptation in the context of the NDC that can then be applied to the other prioritized sectors and help to develop a proposal for a national registry of adaptation actions. Furthermore, the prioritization of the thematic are of health within CBIT should help build the case for cross-sectoral collaboration, since the prevention of much of the burden of disease from climate change will depend largely on activities within other areas, like agriculture and food security, improving livelihoods and poverty reduction, safe water and adequate sanitation, among others. This process will consider the work of the Multi-sector Working Group (GTM) and progress in the adaptation framework and the definition of adaptation measures for the NDC.

Output 2.1. An analysis of current monitoring and evaluation practices and gaps in the health sector is developed with a view to contribute to national level monitoring of adaptation action.

This technical analysis will help avoid duplication of efforts and identify the gaps that must be addressed to operationalize the M&E of progress towards the objective of the current NDC in health. It will include the identification of existing approaches, tools, data sources and indicators that are already being collected with work of the GTM, and that are relevant to demonstrating the progress and results of adaptation. The analysis will be based on the applicable M&E approaches that are being implemented at relevant levels (e.g. local, regional, national). It will include the identification of technical and institutional gaps throughout the country.

The proposed output is linked to the activity of GEF Programming Direction (j) on the evaluation of capacity needs (k) on the introduction and maintenance of progress monitoring tools.

2.1.1 Prepare a study of existing monitoring and evaluation systems in the thematic area of health.

This activity will consist in the development of a report on existing monitoring and evaluation practices in the health systems under the jurisdiction of MINSA in general as related to climate vulnerability and resilience, and specifically on climate-sensitive exposures and health outcomes. It will specifically focus on areas relevant to the priorities of the Tentative Programming including resilience and the adaptability of health services and the population, and the reduction of infrastructure vulnerability to the effects of climate change. The study will:

1. Identify enabling factors in the existing systems for the monitoring and evaluation of the implementation of adaptation measures, at the national and subnational levels (health networks and the Regional Health Directorates).
2. Evaluate the potential of existing M&E systems and procedures to be integrated into or feed into other information platforms, in the context of the integration of health adaptation M&E information in the national adaptation M&E system, as well as the ability to obtain relevant information about climate-sensitive determinants of population health directly from the available databases.
3. Identify capacity gaps in the generation, reporting and use of information at the subnational level, which is the instance where most planned adaptation measures are planned and implemented.
4. Identify no-regrets actions on M&E of health adaptation-relevant measures and activities at all levels.

Output 2.2. Technical capacities on monitoring and evaluation of adaptation actions/measures are strengthened in the health sector in collaboration with Peruvian research institutions.

Within the framework of the GTM, in the thematic area of health, the tentative programming of the NDC in Adaptation has been elaborated, with defined products and adaptation measures. Indicators for monitoring and follow-up of the measures were defined and progress has been made in the preparation of a proposal for the development of the baseline of the indicators. To continue with the process, the preparation of Operational Technical Data Sheets for the collection of information to measure the progress of indicators has been identified as an important gap, this will be addressed in activity 2.2.1.

Another crucial gap identified in the implementation of the CC Health Adaptation and M&E proposed in the tentative programming of the NDC is the limited access to funding sources. In this regard, increasing capacities of health systems for adaptation funding, hitherto untapped by the health sector, can support the sustainability of planned efforts. This gap is addressed in activity 2.2.2.

The proposed output is linked to the activity of the GEF Programming Directorate (a) on the support to national institutions to monitor and evaluate policies, strategies and programs to improve transparency and activity (e) in country-specific training on M&E of adaptation.

2.2.1 Prepare Operational Data Sheets for indicators of health adaptation measures, incorporating the gender perspective.

The work carried out in the thematic area of health in the framework of the GTM for the NDC has allowed to define: 1) Fourteen adaptation measures, 2) Products, indicators and enabling conditions, within the Tentative Programming; and 3) Technical datasheets for the baseline of the proposed indicators tentatively, which are related to the products, measures and intermediate objectives.

This activity will include the revision and, where appropriate, improvement of the proposed indicators and the development of the operational technical datasheets of the indicators of the adaptation measures proposed in the Tentative Programming of the Health thematic area. The technical data sheets will be designed to collect quality information, facilitating its application and use by subnational entities (Regional Health Directions - DIRESAS), ultimately responsible

for the application of health adaptation actions in the sector, as well as to generate actual measures of progress on the ground.

The technical sheets will be discussed and collaboratively adapted with subnational networks through workshops and fieldwork, and validated with practical case studies covering all key activities. These case studies will be summarized and packaged as training materials in the relevant formats.

As appropriate, gender perspectives will be incorporated in accordance with the National Plan on Gender and Climate Change, considering specific gender vulnerabilities and roles in adaptation. An illustrative example is the importance of gender and cultural patterns in the differences of exposure and sensitivity in various scenarios (domestic, community, social) to diseases transmitted by vectors. This gender mainstreaming will be supported by an expert in gender and climate change.

2.2.2 Develop capacities in access to financing to strengthen Health Adaptation M&E

This activity will have two phases. In the first one, the project will prepare a practical guide of conceptual and operative orientations to adequately support and formalize financing requests and applications for funding for health adaptation and resilience to relevant funds, including international adaptation funds, by health institutions. The guide will include practical examples and case studies that will serve as material for the capacity building of health administrators and managers. The guidance will build upon the work carried out within the framework of the GTM in the definition of measures, products and indicators in the health sector. In the second phase, a blended online and face-to-face training will be conducted, targeting staff within the units responsible for planning and investments in the health sector, including the formulating units of the Invierte.pe system.

Output 2.3. The M&E system of adaptation actions in the health sector is designed.

The preliminary design of the adaptation component of the national transparency system considers a register of actions and adaptation efforts. This will include a basic set of guidelines for M&E of adaptation actions for each priority subject area, procedures for quality control and procedures on how adaptation actions will be specifically recorded. The idea behind the registry is to have a flexible system that can be applied to different sectors and certain evolving activities. However, this initial design requires validation and must be contrasted with the ongoing work on adaptation in health issues in the public and private sectors. In consideration of the information currently generated in the sector and how it relates to specific adaptation actions, the concept of registration for adaptation action will be tested and, ultimately, this will help to design the M&E system for the health sector. Considerations on operating costs will be important during the design of the potential registry to ensure the sustainability of the efforts.

Likewise, the technical and institutional gaps identified in the technical analysis (activity 2.1.1.) considered in Output 2.1 will help identify and specify capacity building activities in the public servants of the Ministry of Health in M&E practices, with a special focus on evaluation of results. These capacity building activities will be carried out after the Health Adaptation M&E system is established, in cooperation with Peruvian research institutions, to guarantee continuous improvement and, finally, improve the implementation and sustainability of the M&E system.

This work will require an M&E expert to accompany the entire process . This expert will be part of the project team in Component 2.

The proposed output is linked to the activity of the GEF Programming Directorate (d) on the use of improved methodologies and guidelines, as well as activity (k) on introducing and maintaining progress tracking tools.

2.3.1 Design of the M&E system for adaptation to climate change in health.

This activity will consist in the design of the M&E system for adaptation to climate change in health, based on all background work, as well as outputs 2.1 and 2.2. The design process will include four main steps: 1) The identification

and design of the processes and tools, 2) the design of the logical model, 3) the design of the virtual platform of an application software for information services, and 4) the preparation of the manual of the application software.

The design will consider interoperability with existing systems, such as the mentioned databases on health status, surveillance and determinants of health. It will also define its integration into relevant proposed platforms, particularly the national M&E system for adaptation in the context of the NDC and the work of the GTM, as well as its alignment with the LMCC and its Regulations that currently is in the process of consultation.

It is not realistic that CBIT funding could cover the costs of implementing the virtual platform and software architecture required to operationalize the system, in particular since it is not entirely clear yet what platform/s or architectures the broader national adaptation M&E system will use. However, this activity can complete all the planning work needed, as well as the definition of specifications. On this basis and with the newly acquired competencies on accessing adaptation funding, MINSA could lead an application to fund the implementation for an international adaptation fund.

3.3. Component 3: Means of implementation in Peru's transparency system

Output 3.1 Public and private expenditures associated to the implementation of NDCs in Peru are identified and monitored.

Gathering local information of the advances of the private sector in climate finance aspects and field interviews with local stakeholders allowed to identify that information useful for undertaking appropriate assessments associated with expenditures from private sector stakeholders was not yet ready in the country, and was a cause of concern. In this regard, it was considered more appropriate by local stakeholders to support the involvement of the private sector in climate finance by improving their reporting of climate data of their actions and associated costs to the Peruvian authorities. One of the more relevant initiatives of the private sector in Peru is the Responsible Investment Program which promotes practices for incorporating the impacts of environmental, social and corporate variables, among them: its carbon footprint, and the measures that are implemented to its reduction. These practices are reported in the Corporate Sustainability Report issued annually by the companies registered in the Stock Market Exchange to the Stock Market Superintendence (SMV for its acronym in Spanish); which incorporates specific questions regarding these issues. An evaluation made to some of the 2017 reports, identified several deficiencies in the adequate record of information.

This output will support a better and gradual involvement of the private sector in the implementation of Peru´s NDC contributing also to improve the information requirements and completeness by private sector on their climatic actions.

The proposed output is linked to the activity of the GEF Programming Directorate (i) to quantify and report on the support provided and received, as well as activities (j) on the evaluation of capacity needs and (k) on the introduction and maintenance of progress monitoring tools.

3.1.1 Improve the format of the Corporate Sustainability Report of the private sector.

The corporate sustainability report, presented by private companies to the SMV, includes a limited section devoted to climate change matters. A template with standardized information requirements will be prepared in order to be added in the section related to climate change, in particular adding information on carbon footprint initiatives, mitigation and adaptation measures taken. The detail of the information to be requested in the report must minimize the complexity in the preparation of the reports and the cost of generating the information. This activity constitutes an advance towards the knowledge of investments in the subject.

The establishment of mechanisms to verify the quality of the reported information should also be considered.

3.1.2 Strengthen the capacities of companies to report on climate change issues in the format of the sustainability report.

A joint training of civil servants in charge of reviewing the reports, and of private sector representatives in charge of preparing these reports within their companies was considered. Materials prepared in activity 3.1.1 will be tested for their adequate filling by users and reviewers. The benefits of improving the information reported will be raised.

In this activity, guidelines on standardized carbon footprint measurement techniques will also be developed and the use of the carbon footprint platform developed by MINAM as the official information platform will be promoted.

3.1.3 Design mechanisms that facilitate the reporting of public spending (investment and activities) on climate change.

With the support of the CBIT Project, the efforts that are being made to identify the spending on climate change will be complemented, considering the measures in the framework of the GTM and the implementation of the NDC and other initiatives related to climate change through:

1. The labeling of functional classifiers of public expenditure in which there is evidence of the inclusion of measures to mitigate GHG emissions and of adaptation to climate change, and analysis of the causes of problems, conceptual model, product definition and other aspects in budgetary programs more vulnerable to the effects of climate change or mitigation or more adaptation potential.
2. Development of the algorithm that will be incorporated in the computerized platform of the Integrated System of Financial Administration (SIAF) for the recognition of the labeling.
3. Strengthening of capacities for the elaboration of the Greenhouse Gases Inventory and the generation of information for the Support Received Registry, Initiative for the Implementation of the National Adaptation Plan in Peru, Preparatory actions of the Green Climate Fund.
4. Reports designs in the SIAF platform.

In the case of investments in adaptation measures, reports will be designed on the platform of Invierte.pe system with regards to risk management in climate change context, in types of projects that are more vulnerable to the effects of climate change or with potential for mitigation of emissions. In this case the activity will include:

1. The adequacy of the Investment Projects Record, so that interventions related to mitigation or adaptation to climate change can be identified with greater precision, as well as the corresponding expenditures. This will be done within the field referred to climate change risk management that the file currently has.
2. The elaboration of the algorithm that will be incorporated in the Invierte.pe System's software platform to recognize the information registered in the field that will be adapted.
3. The design of the reports that will be generated in the platform of the Invierte.pe System.

The possibility of including incentives for the implementation of the measures will be analyzed, in existing mechanisms, such as the Municipal Incentive Programs or the Promotion Fund for Regional and Local Public Investment (FONIPREL, for its acronym in Spanish).

Output 3.2. Public servants are trained to identify financial needs and report expenditures related to NDCs based on output 3.1

It is expected that output 3.1 will provide new data from private sector activities to the public sector officials and institutions. However, if they cannot understand it and manage it properly, this new data will become of little benefit to the public sector of Peru and the implementation of its NDC. Additionally, in the public sector side, there are some reporting systems in place in Peru that can be conveniently adapted to report expenses related to the NDC, like in the computer platforms of the Integrated Financial Administration System and the Investment Bank of the Invierte.pe System. For instance, in the Investment Bank, adjustments in the Registration Form of the projects to the typologies where some interventions are clearly related to adaptation or mitigation can be better identified. In the training workshops public

officials and private sector representatives will be able to familiarize with the different tools of reporting and learn how to make a better use of them in terms of climate finance opportunities.

Currently in Peru, public servants are not trained to consider climate change in their daily work and do not identify properly the concept of NDC, since this is a very recent issue and therefore has not yet penetrated at all the government levels. Therefore, once the result 3.1 above has been completed, the public servants will receive training to implement the proposal.

The proposed output is linked to the activity of the GEF Programming Directorate (b) on how to integrate the knowledge of transparency in the national policy, as well as the activity (e) on the specific training of the country.

3.2.1 Develop training in the application of mechanisms for reporting public spending on climate change.

Once the reports considered in activity 3.1.3 above have been prepared, training will be conducted for public servants, in the identification of expenditures on climate change, recording of expense information and analysis of reports. Similar experiences in other countries of the region, in the framework of their own CBIT projects and through the Global Coordination Platform, will be shared.

In the public sector, in the three levels of government (national, regional and local), there are organic units responsible for the programming and execution of the budget and investments, whom would be the target audience of the training, together with MINAM officials.

4. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing

The CBIT program is designed to improve the mandatory reporting of the signatories of the UNFCCC, eligible activities have been described in the GEF document Programming instructions for the Capacity Building Initiative for Transparency (GEF/C.50/06). This project is financed based on the total agreed cost.

The activities of this project are consistent with the scope of the programming directions, as briefly summarized below. Co-financing is not a necessary requirement for this project; however, given that climate change management in Peru is based on the work of the Ministry of the Environment, there is a set of activities that are considered part of the co-financing and their related costs have been included in the table of section C.

The project will be based on and will complement the efforts underway by the Ministry of the Environment, in relation to the strengthening of INFOCARBONO, through the execution of projects, among them: Improvement of the Information Service of Greenhouse Gases in the Ministry of Environment , Enhancing capacities for the development of the National Greenhouse Gases Inventory and the generation of information for the design of the Received Support Registry, which are detailed in subsection A.6.

As described in previous sections, the MINAM, designated national authority on climate change under the LMCCC, promotes a complementary approach for the management of resources aimed at mitigating and adapting to climate change, considering the support of international cooperation (via debt or donations), financing with the public budget (through budgetary programs and execution of public investments), to address the implementation of the NDC and achieve the national objectives related to sustainable development . There is currently a portfolio of projects (within the framework of the National Multiannual Programming and Investment Management System) either at the design phase or ready to begin execution, financed with resources provided by multilateral organizations such as the IDB, CAF, the World Bank, GEF and bilateral sources such as the governments of Nordic countries, Germany, and Switzerland.

5. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The global environmental impacts generated by this project are directly related to the implementation of the commitments made by Peru´s NDC, and have important benefits in the areas of mitigation, adaptation, capacity building and finance. The CBIT - Peru project considers a wide range of actions for the integral management of climate change drivers and impacts, specifically on the transparency of mitigation, adaptation and the support received (identification of needs and spending). As such, it will help Peru meet its first and subsequent NDC and will contribute to strengthening the global response to the threat of climate change.

On one hand, the national MRV for mitigation will be enhanced with: 1) improvements in the accuracy of the GHG emissions estimates based on the calculation of local emission factors, replication of developed cases that will make possible to take advantage of installed capabilities in the agricultural sector, as well as the generation of capacities to manage the validation of the emission factors in the IPCC, and 2) the creation of capabilities in the competent entities of INFOCARBONO in the development of reliable and comparable emissions projections, that provide adequate tools to national planning in order to incorporate low-carbon development strategies.

In relation to adaptation, the project focuses on the implementation of the NDC, specifically supporting implementation in the thematic area of health through the M&E of adaptation measures. With the support of the project, the actions that have been carried out within the framework of the GTM will continue, allowing effective progress in the implementation of the Tentative Programming of health adaptation measures. The project will strengthen the capacities for the monitoring and evaluation of adaptation actions, laying the foundations based on the design of the M&E system, the preparation of operational sheets for the monitoring of the indicators and guidelines for accessing climate financing sources. The participation of the decentralized levels of health services (Regional Health Directorates) and the incorporation of gender perspective will be central to this process.

Another aspect that will be crucial for implementing Peru's NDC in coming years is the monitoring of the financial resources available and the ones used for the management of climate change in the country, in order to make consistent use of resources to avoid duplication of expenses. This aspect will be supported by the CBIT, through the improvement of expense reports in existing mechanisms such as the Integrated Financial Management System (SIAF) and the Investment bank; during the process, relevant civil servants will be trained to identify the financial needs for climate change actions in order to report on this in Biennial Reports and National Communications. In addition, within the framework of a gradual process of the reports from the private sector, capacities will be generated in a group of private sector companies to report the actions carried out in relation to climate change mitigation.

These activities supported by the CBIT, among other sources, are part of the generation of an information base towards the achievement of a sustained and sustainable development process promoted by the Peruvian authorities, as well as complying with the NDC's targets in the mitigation component, adaptation priorities, and obtain other associated benefits. Moreover, they are fully coherent not only with the Article 13 of the PA related to transparency, but also with the NDC implementation and its evaluation described in article 4.

The project will report against Indicator 3 of the GEF CBIT Tracking Tool regarding MRV systems for emissions reductions in place and reporting verified data, of the CBIT results framework. The quality of MRV systems tracking results related to low-GHG development and GHG emissions mitigation is essential for ensuring transparency, accuracy and comparability of information with regard to climate change. This CBIT project will monitor an additional indicator regarding institutional capacities for transparency-related activities: Indicator 5 of the GEF CBIT Tracking tool "Qualitative assessment of institutional capacity built for transparency-related activities". The baseline and the targets are indicated in Annex L. In addition, this project will also track the number of direct beneficiaries, as per GEF-7 core indicator 11, and the target is to train 35 women and 35 men.

6. Innovativeness, sustainability and potential for scaling up

Innovativeness

Various aspects of this project proposal hold innovation value, particularly in the Peruvian context. The refinement and formalization of locally generated emissions factors, as opposed to adapting external ones, represents a qualitative improvement in this area, as does the fact that most of the work will be done by local research and academic institutions. The notion of training civil servants to effectively and systematically integrating long-term GHG emissions projections into strategic policy is far from widespread in Latin America and most low and middle-income countries.

Regarding Component 2, the development of a fully-fledged sector-specific health adaptation M&E system is highly innovative in the Latin American context and beyond. In a recent Pan American Health Organization (PAHO) sub-regional workshop for South America on health in NAPs, only Brazil had such a system[35]. In the roll-out process of Component 2, key questions for health adaptation research and practice will have to be addressed. For instance, regarding the aggregability of local metrics for health adaptation into national levels; health-based synthetic indicators of resilience; and whether capacity building in health systems can increase access to innovative sources of financing for climate resilience.

Component 3 is also innovative in general, and particularly in the context of Latin America. In the absence of standardized, internationally agreed guidelines on the types of privately-funded activities that count towards comprehensive national climate finance tracking systems, national-level activities like those of Component 3 can provide valuable lessons. Moreover, private-public collaboration in this area is bound to result in pragmatic proposed approaches and solutions that can facilitate further private sector engagement.

Sustainability

Since the project is complementary to ongoing work and funding efforts, its sustainability is fairly guaranteed in terms of how the products will be used after the project ends.

In Component 1, the capacities in the estimation of local emission factors can be replicated, and the development of capacities for their validation by the IPCC will allow the application in future GHG estimates and projections. In relation to the development of capacities in projections emissions of public servants linked to the formulation of long-term development strategies, the generated materials and systematization of experiences will be in a virtual platform for future use. The engagement of local Academia ensures greater sustainability of local capacity, reducing the need for hiring external consultants, to prevent and reduce risks related to the loss of information or capacities built with public resources.

In Component 2, the Ministry of Health has shown progress in the process of generating capacities for compliance with the NDC, with resources from its budget and personnel from the institution, highlighting the institutional commitment to put in place the M&E System that will be designed, articulating this with other existing monitoring mechanisms. Moreover, on the basis of the designed Health adaptation M&E system and with the newly acquired capacities to apply for climate adaptation funding, the Ministry of Health will be in a solid position to lead an application to obtain adaptation funding for the implementation of the system.

In Component 3, the actions that are proposed to have financing and expenditure reports in the management of climate change are based on existing platforms, which ensures the sustainability of these once the project is completed. For this

[35] Taller Subregional Salud en Planes Nacionales de Adaptación al Cambio Climático: Sudamérica (PAHO, 2018)

purpose, the participation of the Ministry of Economy and Finance is considered, as well as the Responsible Investment Program platform that has ongoing actions and includes representatives of the private sector.

Moreover, the legally binding framework of the LMCC guarantees institutional efforts towards the reporting by the sectoral, regional and local authorities on the implementation of the NDC, as well as mitigation and adaptation measures to climate change, incorporated in their instruments of planning. Similarly, in relation to transparency and access to public information, it establishes that the competent authorities and public and private organizations that administer financial resources for mitigation and adaptation to climate change must have a person or office responsible for ordering, systematizing and manage the information they generate or possess. In this context, considering that the CBIT - Peru project will contribute to the implementation of the national transparency system, this law clearly reinforces the sustainability of the actions.

In addition, the CBIT project will be executed by the Ministry of the Environment, which is responsible for ensuring that Peru monitors and reports progress in its NDC implementation. Thus, the components of the CBIT project are fully aligned with MINAM's mandate and agenda in the area. The strengthening of collaboration agreements with Peruvian research institutions serves to expand the group of experts available in the country and, therefore, encourage the recruitment of adequate personnel by sector to generate information for the ETF.

Potential for scaling up

The interventions considered in the project have good potential to be replicated in the country and in other countries. The systematization of experiences in the measurement of Emission Factors for enteric fermentation, which is considered within the functions of the Expert in Emissions, will serve as a reference for other production areas in the country as in other countries. The guidelines formulated for the management of the validation of Emission factors will serve for other sectors in the country and others, as will the operational tools for the use of ad hoc methodologies in GHG projections, as well as the incorporation of results in the formulation of sustainable development policies.

Several aspects of the design of the M&E System of health adaptation actions can be replicated in the other thematic areas, including lessons learnt in the process of operationalization with subnational authorities. Eventually, CBIT efforts will thus scale up to all adaptation priority areas.

Regarding the tracking and reporting of climate change financial information, the reports and materials generated via CBIT Peru can help other countries globally, through the CBIT Global Coordination Platform, and more specifically in the region through, for instance, the strong CBIT regional network of the UN Environment Regional Office for Latin America and the Caribbean.

A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

Not Applicable

A.3. Stakeholders.

To achieve the objectives of the Project and implement the activities of the proposal, there must be a strong participation of several actors from public and private sectors, as well as civil society and academia. The variety of stakeholders responds to the complexity of activities related to climate change in Peru. In addition to the ministries, the project will focus on capacity development of research institutions, as well as the private sector. The key stakeholders and brief description of their engagement in the project design and preparation is provided in the Table below

Stakeholders	Role in the project
Ministry of the Environment - Vice ministry of Strategic Development of Natural Resources - General Directorate of Climate Change and Desertification.	It will be in charge of directing and coordinating the project, and ensuring effective communication among the different actors.
Ministry of the Environment - Vice ministry of Strategic Development of Natural Resources - General Directorate of Climate Change and Desertification - Direction of Greenhouse Gases Mitigation	It will be responsible for coordinating and supporting the implementation of project actions within Components 1 and 3
Ministry of the Environment - Vice Ministry of Strategic Development of Natural Resources - General Directorate of Climate Change and Desertification - Directorate of Adaptation to Climate Change and Desertification.	It will be responsible for coordinating and supporting the implementation of project actions within Components 2 and 3.
Ministry of Women and Vulnerable Populations.	This ministry will play an important role in components 1 and 2, in which the gender perspective will be incorporated transversally.
Ministry of Health - Vice Ministry of Public Health - Directorate for Disaster Risk Management and Civil Defense	It will participate in the coordination of actions related to the implementation of Component 2 within the Ministry of Health; likewise, it will provide information related to climate change adaptation measures in relation to services.
Ministry of Health - General Secretariat - Office of Multiannual Programming of Investments	It will participate in the implementation of Component 2, providing information related to the measures of adaptation to climate change in relation to infrastructure.
Ministry of Health - Vice Ministry of Health Benefits and Insurance - National Program of Investments in Health	It will participate in the implementation of Component 2, providing information related to the measures of adaptation to climate change in relation to infrastructure.
Ministry of Health - Vice Ministry of Public Health - General Directorate of Environmental Health	Will participate in the implementation of Component 2, providing information related to the measures of adaptation to climate change pertaining the population.
National Institute of Health	Will participate in the implementation of Component 2, providing information related to the measures of adaptation to climate change pertaining the population.
Ministry of Agriculture - Vice Ministry of Development and Agricultural Infrastructure and Risk - General Directorate of Agrarian Environmental Affairs	It will participate in the implementation of Component 1, together with the INFOCARBONO work team, as well as facilitating the coordination with the corresponding instances.
National Agrarian University La Molina - Faculty of Zootechnics	It will participate in the implementation of Component 1, carrying out the research actions corresponding to measurement and emission factors in coordination with other actors of Agriculture and MINAM.
National Institute of Agrarian Research	It will participate in the implementation of Component 1, carrying out research actions together with the UNALM with regards to measurement and emission factors in coordination with MINAGRI and MINAM.
Ministry of Economy and Finance (MEF) – Vice Ministry of Economy - General Directorate of International Economy, Competition and Productivity Affairs	The MEF will play an important role in Component 3, referring to public financing, establishing synergies to achieve the expected results.
Responsible Investment Program	The PIR is a platform that articulates and empowers the key players of the private and public financial system. This program will play an important role in the Component 3 referred in the corresponding to private financing, facilitating the expected participation of the companies.

Stakeholders	Role in the project
FOVIDA – Promotion of Life	It will participate in the activities directed to the incorporation of the gender, focus in the project in coordination with the MINAM and the MIMP.
Center for Peruvian Women *Flora Tristán*	It will participate in the activities directed to the incorporation of the gender focus in the project in coordination with the MINAM and the MIMP
Cayetano Heredia Peruvian University	It will participate in the activities related to the implementation of Component 2, providing information related to the measures of adaptation to climate in relation to research,
Project Public Investment and Adaptation to Climate Change. IPAAC - GIZ	It will participate in the activities related to the implementation of Component 2, providing information related to the measures of adaptation pertaining management instruments for investment in Health,
Pan American Health Organization (PAHO)	It will participate in the activities related to the implementation of Component 2, providing information related to the measures of adaptation to climate with research, and experience to share for improve the process of M&E.
Other civil society organization/s, especially in the area of Agriculture	Currently in the process of identification and engagement by MINAM

Line ministries will be members of the Project Steering Committee and will meet twice per year. Information to other key stakeholders (private sector, NGOs, academia) will be disseminated through organized trainings and workshops during the implementation of the project.

Communication with private sector, especially for component 3, will be facilitated by the work with the existent Responsible Investmern Program described in the previous table.

Select what role civil society will play in the project:
☐Consulted only;
☐Member of Advisory Body; contractor;
☒Co-financier;
☐Member of project steering committee or equivalent decision-making body;
☐Executor or co-executor;
☒Other (Please explain)

Academia will have an active role in the project, as mentioned in the stakeholders table.

UNALM will provide co-finance and actively participate in Component 1, carrying out the research actions corresponding to measurement and emission factors in coordination with other actors of Agriculture and MINAM.

Cayetano Heredia Peruvian University, will participate in the activities related to the implementation of Component 2, providing information related to the measures of adaptation to climate in relation to research.

A.4. Gender Equality and Women's Empowerment.

Gender inequality is still an important concern in Peru, for instance when considering the Human Development Index adjusted for inequality, this development index is reduced from 0.737 to 0.562, the country is aware of the existing gaps and is making efforts towards closing these gaps.

As part of these efforts, Peru has a National Plan for Gender and Climate Change (PNGCC) since 2016, which guides the design and implementation of actions that will enhance gender-sensitive responses to climate change impacts and its drivers in eight priority areas: water, health and well-being, food security, forests, energy, solid waste, education and risk management.

This Plan has resulted in several area-specific activities which are generating a wealth of baseline information on gender-sensitive mitigation and adaptation options in Peru. This information will be taken into consideration (as is mandated by the PNGCC itself) in the design of the training activities considered in the project; appropriate consideration of the gender perspective will be ensured with the participation of an expert who will support the definition of the strategy to be followed in the execution, follow up and finally evaluate the results.

In Component 1, the gender perspective will be included in the design and implementation of training modules for public servants with the purpose of incorporating it into the definition of long-term strategies together with the estimated GHG emission projections. In the case of Component 2, the focus will be considered in design operations sheets of the indicators, since 1) several climate-sensitive health impacts show gendered differentials health problems and 2) the impact of the adaptation actions in health sector may vary according to the needs and roles of women and men. Moreover, proposed indicators under the Tentative Programming have built upon PNGCC indicators, and some materials for workshops under PNGCC will be featured in the relevant activities of Component 2.

The involvement of relevant institutions as stakeholders, or via consultation will further strengthen the gender focus. These will include the Ministry of Women and Vulnerable Populations the gender focal point for the convention on climate change, civil society organizations such as FOVIDA and Center for Peruvian Women *Flora Tristán*, as well as research institutions and partners of/on development that work in the gender and climate change fields.

A.5 Risk.

The identified risks can be grouped into 3 categories: 1. institutional, 2. technical and 3. policy, as presented in the table below. A short explanation and proposed measures that address these risks at the time of project implementation are also included in the table.

Risk	Rating	Proposed measure
Institutional		
Institutional arrangements do not materialize or delay	Low	The functioning of the Multisectoral Working Group for the NDCs has demonstrated the commitment of competent entities to advance in the fulfillment of commitments. To foster engagement, all key actors to be involved in implementation were involved in the process of formulating the CEO Endorsement request, which they have contributed to and validated.

Risk	Rating	Proposed measure
Weak institutional coordination	Low	During the last 18 months, the institutions involved in the GTM have established a good articulation within the framework of the sectoral groups. It is expected that progress will be enhanced with the enactment of the Framework Law on Climate Change.
High turnover of personnel	High	Most of the personnel currently involved in the preparation of GHG inventories in Peru and adaptation M&E are hired based on consultancies and, therefore, there is a risk pertaining the loss of institutional memory and capacities. This will be addressed through good knowledge management. Eventually, the project will help identify sectors where they need to establish permanent capacities.
Technical		
The lack of unequal skills and abilities in different public entities	Medium	This will be addressed through the development of specific capacity building approaches for different sectors and for different sets of skills. There will also be a focus on knowledge transfer and peer learning
Lack of access to information or data available	Medium	To address this risk, the project will use the current data generation infrastructure and will collaborate with the competent entities in INFOCARBONO and within the framework of the LMCC. The execution of the investment project "Improvement of the Greenhouse Gas Information Service in the Ministry of Environment" will contribute to this effort.
Political		
Lack of political acceptance about the importance of transparency and long-term planning tools	Medium	The enactment of the Framework Law on Climate Change evidences the political commitment in the integral management of climate change. The extensive participatory process in the preparation of its regulatory development that is currently being carried out will strengthen the political acceptance of transparency and the consideration of climate change in development strategies.
Lack of political acceptance of spending to allocate budget for transparency	Medium	The Framework Law on Climate Change establishes the responsibility for the competent authorities to designate a person or organic unit that will be responsible for the transparency of information on mitigation and adaptation actions. It is assumed that resources will be gradually available for transparency. Trainings under this CBIT project will contribute to understand the importance and benefits of transparency.

A.6. Institutional Arrangement and Coordination.

The Executing Agency of the project is the Ministry of Environment who will receive support from the UN Environment Regional Office for Latin America and the Caribbean (ROLAC) as per the country's request. ROLAC will receive and manage the funds (this includes being in charge of procurement and hiring processes) following the instructions from the Ministry of Environment of Peru.

The Implementing GEF Agency will be UN Environment, through its GEF Climate Mitigation Unit, with whom the Ministry of Environment and ROLAC will coordinate permanently. The project will establish a Steering Committee that will meet twice a year, ensuring a coordination across different initiatives occurring in parallel. The initiative will follow the institutional structure described in Annex J. Project Implementation Arrangements.

Since 2014, the Ministry of Environment is coordinating all the international projects with a group of professionals who periodically are checking the quality of the activities and ensuring synergies among the projects. This strategy of work with the projects has allowed a better alignment with MINAM's management instruments, and a comprehensive share of lessons learned. Moreover, since the implementation of the Climate Change Framework Law, MINAM has a strongest role among sectors to work in mitigation and adaptation climate change which has the potential to enhance the results obtained.

Some of the projects, which are strongly related with the objectives of this proposal, are:

1 Improvement of the Greenhouse Gas Information Service in the Ministry of the Environment INFOCARBONO-MINAM, financed with public resources. This is considered, among others, the improvement of the Information Technology software of the MINAM-INFOCARBONO Data Center, the implementation of informatic tools for the processing of information related to the issuance of the INGEI, training for those responsible for the preparation of the RAGEI and INGEI, and dissemination and communication activities to promote knowledge, use of tools and information services. The information and training materials generated in the CBIT Peru project will be stored in this improved platform.

2 Enhancing of capacities for the elaboration of the National Greenhouse Gases Inventory and the generation of information for the design of the Support received Registry. Financed by the Initiative for Climate Action Transparency (ICAT). The objective of the Project is to strengthen the technical capacities for the elaboration of the National Greenhouse Gases Inventory within the framework of the INFOCARBONO and to contribute to the conceptualization of the design of the Financing Registry.

   It considers the migration of the methodology established in GL1996 and OBP2003, which are currently used in Peru, to the GL2006 for the Waste sectors, Agriculture sectors; and Use and Change of Land Use and Forestry (LULUCF) respectively, as well as training to the competent entities on the application of the IPCC Guidelines from 2006 (GL2006), efforts that will complement the actions for the improvement in the measure of GHG in Agriculture, in addition to the generation of capacities in projection of emissions foreseen in the project for the 5 sectors. The alignment and complementary of this initial work with activities led under Component 1 will be ensured during the CBIT project.

   Regarding financing, ICAT project includes the mapping and analysis of international experiences on methodologies for the monitoring and reporting of private sector investment in climate change and the development of a methodology for monitoring the financial flow of the private sector on climate change in the country. The CBIT project can build on elements from this aspect of the ICAT project in a more specific work under component 3.

3 Country Support Program for the Implementation of the National Adaptation Plan in Peru, with USAID resources, in which the development of the capacities of national actors interested in monitoring evaluating and learning about progress of the impact achieved in the country's adaptation to climate change is promoted. In this program MINAM has been working on the national monitoring and evaluation system for adaptation to climate change, which will be complementary since the project will allow progress in a particular way in the health M&E system that will respond to what was anticipated in the national framework system indicated.

4 Initiative for the National Adaptation Plan in Peru, to be financed by the Green Climate Fund, whose objectives include monitoring and evaluating financial resources at the subnational level; and that will contribute to follow up on public financing from the planning processes conducted by CEPLAN.

5 Preparatory actions of the Green Climate Fund, with the support of GIZ, have planned to develop a study to identify and map the flows of climate finance in Peru linked to the implementation of the NDC and develop a tool to measure, monitor and verify resources from national and international sources for mitigation and adaptation actions to climate change and that are related to the NDC; these actions are complementary to what was planned as part of Output 3.1. while the CBIT project will work specifically on previously prioritized mechanisms such as National Bank of the Investment System, Invierte.pe and the SIAF of the National Budget System, in which will generate concrete reports.

6 Although focused in different sectors, the project will also create synergies with the current UN REDD+ program for which transparency and MRV are vital elements. Coordination will be simplified by the fact that ROLAC is also involved in the project.

Finally, at an international level, this project will be totally aligned with the GEF CBIT programming directions as well as the UNFCCC Enhanced Transparency Framework and will contribute with the Global Coordination Platform, looking for synergies with the Sustainable Development Goals.

CBIT Programming Directions

As part of the Paris Agreement, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have agreed to establish a Capacity-building Initiative for Transparency (CBIT). The CBIT aims to strengthen the institutional and technical capacities of developing countries to meet the enhanced transparency requirements in the Paris Agreement, leading up to 2020 and beyond. The Paris Agreement requested the GEF to support the establishment of the CBIT through voluntary contributions during GEF-6 and future replenishment cycles. The CBIT programming directions provide the overall implementation guidelines for national projects and the indicators that will be applied in the mid-term and terminal evaluation. UNFCCC Enhanced Transparency Framework

Transparency of action and support is crucial to the effectiveness of the Paris Agreement. However, the Agreement leaves many key questions to further negotiations, including how to put “built-in flexibility” into practice, how to transition from existing reporting and review systems, and how the Agreement’s transparency framework relates to the global stock take and the implementation and compliance mechanism. To support the countries, it was decided to develop a “rulebook” during the Marrakech Climate Change Conference that will govern the implementation of the Paris Agreement, including its enhanced transparency framework. The "rulebook" will once published provide more specific guidelines on how to comply with the UNFCCC enhanced transparency framework and therefore also guide implementation of each component of this CBIT project in Peru.

CBIT Global Coordination Platform

The CBIT Global Coordination Platform is funded by the Global Environment Facility (GEF) and co-organized by United Nations Development Program (UNDP), UN Environment and UNEP DTU Partnership, with the support of the Global Support Program for National Communications and Biennial Update Reports (GSP). This new platform will facilitate knowledge exchange from CBIT projects among countries, maximize learning opportunities, and enhance coordination among transparency practitioners. Peru will participate in the CBIT global coordination platform sharing national CBIT information, lessons learned and experiences updating the global coordination platform; and contribute to seek the outcomes of Peru’s CBIT project.

Sustainable Development Goals

Peru is strongly committed to the 2030 Agenda and the CBIT project is an opportunity to continue working to seek SDG. In that sense, CBIT project in Peru will permit progress in particular related to climate change (SDG 13), health and

wellness (SDG 3) which is particularly important due to its impact in human life, gender equity (SDG 5), and responsible production and consumption (SDG 12) specifically through the capacity building in public sectors to use information in decision making. The information generated through the CBIT-supported work will be included in the relevant reports of progress in SDGs.

A.7 Benefits.

The project will contribute to enhanced reporting and assessments in the areas of GHG mitigation, and adaptation to climate impacts.

Specifically, the outputs and activities in Component 1 will improve the knowledge base, information and capacities on estimates of GHG emissions factors, contribute to the development of technical capabilities in emission projections, and supporting research and more resilient institutional capacities through the involvement of Academia. In addition, it will build the locally relevant knowledge base on GHG emissions projections and the capacities of planners to integrate those projections in public policies, strategies and development plans, in alignment with SDG target 13.2 (integrate climate change measures into national policies, strategies, and planning)

The process towards the design of the M&E system of adaptation in the thematic area of health, considered in Component 2, will strengthen the knowledge base on existing M&E practices of relevance for health adaptation, informing policy development. It will also enable a solid engagement of subnational health authorities and providers in a gender-sensitive adaptation implementation and progress tracking, essential for an effective reduction of health vulnerability to climate impacts. Increased capacities in the identification of innovative sources of funding for health systems resilience and vulnerability reduction will contribute to the implementation of planned adaptation. The design of the Health Adaptation M&E system will serve as a pilot for the development of similar systems in the rest of the NDC priority adaptation areas, and eventually the general national system for Adaptation M&E. This component is expected to contribute to various targets within SDGs 3 (particularly on climate-sensitive illnesses, as well as target 3.d), SDG5 (target 5.c), SDG 9 (9.a) and SDG 11 (11.a).

Component 3 will improve the quality of information required by the PA Enhanced Transparency Framework regarding support received. In the process, Peruvian authorities will gain a better understanding of climate-related flows of finance in the public and private sectors in the country, as well as of private sector investment on actions related to climate change management in the companies listed on the Stock Exchange.

The expected results of the CBIT Peru project will improve the BUR, the communications to the UNFCCC, and will contribute to the implementation of the Peruvian national framework climate change law (LMCC), particularly on the integration of measures of adaptation and mitigation to climate change into policies, strategies, plans, programs and investment projects of the three levels of government, within the framework of their competencies and functions.

A.8 Knowledge Management.

In accordance with its role as the authority responsible for coordinating climate change actions in Peru, the Ministry of the Environment will have the task of managing project information and implementing and managing the national transparency system. As such, it will have a special focus on making the capacity-building material that emerges from this project available to the population. As stated, Peru is already engaging in extensive public consultation regarding the regulatory development of the LMCC, an experience that will inform the effective dissemination of audience-relevant information to the population.

During the design and consolidation of a national transparency system, it will be necessary to consider methodologies and previous experiences on the monitoring of information, especially economic and environmental. The sectors involved

will be asked to cooperate in knowledge management by providing relevant information and ensuring that it is accessible to their employees. Regular updates on the project will be provided to all public institutions involved.

Knowledge management under CBIT will capitalize on and be integrated into the existing multi-sectoral coordination platforms, in particular INFOCARBONO and the GTM. The INFOCARBONO platform will be used to store capacity building materials, thus ensuring access by relevant users who are familiar with this gateway. The GTM will ensure distribution of CBIT-generated products to relevant audiences through their sectoral networks. Due to the components of the project, generated information will be useful for several ministries such as the Ministry of Health; Ministry of Agriculture and Irrigation, including the National Forestry Service; the Ministry of Energy and Mining; Ministry of Economy and Finance; and Ministry of Environment. It is expected that the information and tools generated by the project will increase the capacities of the ministries and other entities involved to include relevant aspects of climate change in public policies and in the decision-making process to achieve the objectives of the NDC.

In addition, Peru will participate in the CBIT Global Coordination Platform of and other relevant platforms and networks, providing and receiving inputs. The Chief Technical Advisor will be responsible of sharing and updating national information in the Global Coordination Platform. Sharing the lessons learned and experiences under the platform will ensure the alignment of Peru's CBIT project with other national, regional and global transparency initiatives

B. Description of the Consistency of the Project with National Priorities

The project is consistent with the objectives established in the National Climate Change Strategy, which includes adaptation (specifically increasing the population's adaptive capacity) and mitigation (preserving carbon stocks and contributing to the reduction of GHG emissions).

The needs addressed in this project are aligned with those identified in the first BUR of Peru and its third National Communication to the UNFCC, as well as those that will be communicated in the second BUR. The identification of needs such as the generation of information for the quantification of emissions has been based especially on the process of Consultation and International Analysis, which helped the development of National Inventories of GHG. The nature of the project ensures its full alignment with those reports, as well as with its Nationally Determined Contribution since it seeks to build capacity to track its implementation as mentioned in the project description section.

The interest of Peru in CBIT partly stems from the NAP process, which has been the basis for developing the second component of this project. In addition, the proposed project has been designed to fit into the larger picture of work in progress that is helping to build the national transparency system and to fill the identified gaps and avoid duplication. Most importantly, the proposed CBIT activities are designed to support the roll-out and implementation of the LMCC, specifically its provisions for the monitoring of climate adaptation, mitigation and financing, through the creation of a platform, which will be administered by MINAM. The components of this platform are: 1) MRV of the mitigation measures, 2) M&E of the adaptation measures, and 3) Monitoring and Reporting of the climate financing. The CBIT project in its conceptualization is in line with this approach.

In turn, the LMCC is governed by the principles of Law 28611, General Law of the Environment; Law 28245, National Framework Law on Environmental Management System; the National Environmental Policy; the UNFCCC; and establishes principles such as integration, transversality, subsidiarity, accountability, transparency, participation, climate governance, and prevention. The approach of the actions to be implemented in the CBIT Peru project, in particular in Component 3, supports accountability of the public and private sector on climate change finance flows, transparency in make available all public information related to climate change, reducing information asymmetries, and a timely and effective participation, considering intercultural and gender perspective.

The project is aligned with the Peruvian United Nations Development Assistance Framework (UNDAF) for the period 2017-2021, especially with Programmatic principle 2.1.2 *Environmental sustainability, risk disaster reduction, tackling climate change and increasing resilience*. In addition, the CBIT project contributes to Direct Effect 3 – *Efficient public*

management and trust into institutions which targets that in 2021 public management will be more efficient, effective, transparent, inclusive and equal, increasing the trust in persons and institutions.

C. Description of the budgeted M&E Plan:

The project will be reviewed yearly through the Project Implementation Review (PIR). Its purpose is to assess project performance, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. It is the responsibility of the UN Environment Task Manager to monitor whether the agreed recommendations are being implemented.

In-line with UN Environment Evaluation Policy and the GEF's Monitoring and Evaluation Policy the project will be subject to a Terminal Evaluation commissioned by the Evaluation Office.

The Evaluation Office (EO) of UN Environment will be responsible for the TE and liaise with the UN Environment Task Manager throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes:

i. to provide evidence of results to meet accountability requirements, and

ii. to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment and executing partners.

The direct costs of the evaluation will be charged against the project evaluation budget. The Terminal Evaluation will be initiated no earlier than six months prior to the operational completion of project activities and, if a follow-on phase of the project is envisaged, should be completed prior to completion of the project and the submission of the follow-on proposal. Terminal Evaluations must be initiated no later than six months after operational completion.

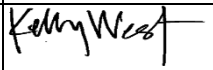
The draft Terminal Evaluation report will be sent by the Evaluation Office to project stakeholders for comments. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalised and further reviewed by the GEF Independent Evaluation Office upon submission. The evaluation report will be publicly disclosed and may be followed by a recommendation compliance process.

A summary of M&E activities envisaged is provided in Annex I. The GEF contribution for M&E activities, including the Inception Workshop is USD 32,000.

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[36] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Kelly West, Senior Program Manager & Global Environment Facility Coordinator Corporate Services Division		09/21/2018	Geordie Colville Climate Change Mitigation Portfolio Manager	+254-207623257	Geordie.Colville@un.org

[36] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK.

Project objective: Develop Peru's institutional and human capacities to meet reporting requirements of the enhanced transparency framework of the Paris Agreement					
	Indicators	**Baseline**	**Targets at the end of the project**	**Source of verification**	**Risks and Assumptions**
Project objective: Develop human and institutional capacities of Peru to comply with the information requirements of the reinforced Transparency framework of the Paris Agreement	A. Number of Sectoral Authorities that have strengthened their capacities to report information of the implementation for NDC.	One	4 (Sectoral authorities Agriculture, Health, Economy and Finance, Environment)	Reports from the General Directorate of Climate Change and Desertification (DGCCD) of MINAM. RAGEI – Agriculture (Enteric Fermentation: Tier I to Tier II) INGEI BUR (Emission Projection) National Communications NDC Reports	Low level of risk; the Ministries that participate in the project have shown interest in developing capacities within the framework of the ETF. The approval of the Framework Law on Climate Change and the upcoming approval of its Regulation help reduce the risk.
	B. Percentage of persons trained that are women	Not known	50%	Attendees lists for all trainings	Low level of risk; it is assumed that in many of the selected sectors there is currently an important presence of women.
Outcome 1: Institutional and technical capacities for the formulation and use of sectoral long-term low greenhouse gas	C. Number of Competent Entities from INFOCARBONO that use information	Zero	At least 4 Competent Entities	Project monitoring reports.	Low level of risk, the Framework Law on Climate Change establishes that Sectoral Authorities should incorporate measures of mitigation and adaptation to climate change, among others, in its Sectorial

Project objective: Develop Peru's institutional and human capacities to meet reporting requirements of the enhanced transparency framework of the Paris Agreement					
	Indicators	**Baseline**	**Targets at the end of the project**	**Source of verification**	**Risks and Assumptions**
emissions development strategies are developed *Outputs:* *1.1 Emission factors are developed for at least the agriculture sector.* *1.2 Capacities on GHG emission projections of GHG inventory teams working with Peru's INFOCARBONO are enhanced* *1.3 General guidelines and tools to ensure consistency and comparability of GHG emission projections among sectors are developed.* *1.4 Public servants are trained to integrate long-term strategies and GHG emissions projections into policy and decision-making.*	on GHG emissions to prioritize measures for the NDC (out of the following ministries: Agriculture, Energy, Transport, Environment).			Interview to competent entities at the end of the project. Systematization reports of executed activities	Strategic Plan, Budgetary Programs and Management Instruments.
Outcome 2: Institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC are established. *Outputs: 2.1 An analysis of current monitoring and evaluation practices*	D. Number of thematic areas with technical capabilities in systematizing information to implement the NDC in the component of adaptation	Zero	1 thematic area with capabilities.	Project monitoring reports. Systematization reports of executed activities.	Low. The selected thematic area (Health) has already made significant progress, and solid institutional arrangements are in place.

Project objective: Develop Peru's institutional and human capacities to meet reporting requirements of the enhanced transparency framework of the Paris Agreement					
	Indicators	**Baseline**	**Targets at the end of the project**	**Source of verification**	**Risks and Assumptions**
and gaps in the health sector is developed with a view to contribute to national level monitoring of adaptation action *2.2 Technical capacities on monitoring and evaluation of adaptation actions/measures are strengthened in the health sector in collaboration with Peruvian research institutions* *2.3 The M&E system of adaptation actions in the health sector is designed*	E. Percentage of indicators with operational Technical Sheets elaborated	Zero	At least 80% of the defined indicators (i.e. 20 out of 25 proposed) will have forms	Document with elaborated forms	
Outcome 3. Institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC is strengthened *Outputs: 3.1 Public and private expenditures associated to the implementation of NDCs in Peru are identified and monitored.* *3.2 Public servants are trained to identify financial needs and report expenditures related to NDCs based on output 3.1*	F. Number of Sectoral and Regional Authorities with information for reporting on public expenses in adaptation and mitigation	Zero	4 Sectoral Authorities (Agriculture, Economy and Finance, Health, Environment) and 2 Regional Authorities	Reports from the General Directorate of Climate Change and Desertification (DGCCD) of MINAM BUR NDC Reports	Low risk due to the mandates of the LMCC in relation to the transparency of the information.

ANNEX B: RESPONSES TO PROJECT REVIEWS

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

There were no comments at the PIF stage that needed to be addressed. Please see below the responses to the comments to the CEO Endorsement request submission:

2. Is the project structure/ design appropriate to achieve the expected outcomes and outputs?

Secretariat Comment at CEO Endorsement

MGV/JDS, October 4, 2018: Yes, the project design is appropriate and well rooted in Peru's needs.

We note that under Innovativeness, sustainability and potential for scaling up, it may be appropriate to also highlight the focus of Component 3, in particular the work with the private sector, which we consider to be innovative and also to have potential for replication in other countries.

MGV/JDS, January 25, 2018: Thank you. Comment cleared.

Response to Secretariat comments

January 10, 2019: Thank you. We have stressed out the innovation aspect of Component 3 in section A.1.6. Please refer to page 43.

3. Is the financing adequate and does the project demonstrate a cost-effective approach to meet the project objective?

Secretariat Comment at CEO Endorsement

MGV/JDS, October 4, 2018: We noted that in the Budget and Terms of Reference for key personnel, there is a description for an Administrative Assistant to be based in Panama. While we noted the request from the Government to utilize the support of the UNEP Regional Office for Latin America and the Caribbean (ROLAC) to handle the funds and procurement processes, we do not believe it would be appropriate to fund a personnel in the ROLAC office, particularly as the person's key role would be to support the Program Manager who will be based in Lima.

MGV/JDS, January 25, 2018: Per the GEF Guidelines on the Project and Program Cycle Policy, staffing costs and project executing activities are to be supported by the Project Management Costs (PMC) and represent the actual costs associated with the unit executing the project on the ground. Table B in page 42 of the guidelines specifies the staffing costs that can be finance by GEF resources under the PMC and include Project manager; Project assistant technical specialist(s); Procurement specialist; and/or Financial specialist.Thus, we ask that the Project Manager be removed from the Project Components in the budget and be solely supported by the PMC budget, along with the administrative assistant, which in this case will be supporting execution functions.

We also note per the guidelines and the GEF policy on minimum fiduciary standards that in this exceptional case where UNEP is carrying out implementation and execution functions, it must separate its project implementation and execution duties and establish each of the following:

(a) A satisfactory institutional arrangement for the separation of implementation and executing functions in different departments of the GEF Agency; and

(b) Clear lines of responsibility, reporting and accountability within the GEF Agency between the project implementation and execution functions.

This separation helps ensure the financial management segregation of duties where incompatible. Related duties are subject to a regular review by management; response is required when discrepancies and exceptions are noted; and segregation of duties is maintained between: settlement processing; procurement processing; risk management/reconciliations; and accounting.

Response to Secretariat comments

January 10, 2019: While the assistant will have close and frequent communication with the Project Manager, his/her main role will be to provide the execution support requested, and this includes manage the funds, support HR hiring processes, handle administrative and financial transactions and procurement processes through the regional office and this is why it is needed that this person is based in Panama. The Terms of Reference of the Administrative Assistant have been removed from Annex E, since these activities will be carried out by the regional office staff who are familiar with UN Environment rules and procedures and have access to the UN Environment management system (UMOJA).

February 20, 2019:

This project has USD 100,000 in Project Management Cost which does not cover the costs of a Project Manager for 3 years. It is important to have a full-time person in this position to maintain an overview of the project history and manage the momentum of project implementation. To manage this, we are looking for a technical advisor profile, who can undertake both technical activities and management activities. In this way part of his or her salary is covered by project management costs and part from project activities. Some of the admin burden is placed in Panama, and this frees up time of the national technical advisor / manager in charge of the project for substance and technical aspects. The name of the position has been then changed to Chief Technical Advisor, and its Terms of Reference have been revised to make more visible the technical side of this person.

UN Environment is aware of the importance of the financial management segregation. The GEF Climate Mitigation unit of UN Environment acts as the Implementing Agency and The Regional Office for Latin America and the Caribbean will provide execution support to the Ministry of Environment of Peru. These are two totally separated units within UN Environment and there is no connection on the reporting lines between them.

The GEF Climate Mitigation unit reports to the Head of the Energy and Climate Branch who reports to the Director of the Economy Division who reports to the Executive Director, having a sectoral approach. While ROLAC, on a regional approach, will report to the Regional Director and then directly to the Executive Director. This is illustrated in the powerpoint "UN Environment different roles" uploaded to the GEF portal.

12. Is CEO endorsement recommended?

Secretariat Comment at CEO Endorsement

MGV/JDS, October 4, 2018: Not yet. Thank you for this very clearly written and developed proposal. Please address comments above.

MGV/JDS, January 25, 2018: Not yet. Please address comments above. Also, we note that the project duration is written in years instead of months. Please change.

In addition, we suggest that the project submits an expected target of Core Indicator 11 Number of direct beneficiaries disaggregated by gender, which seems to already be outlined in the Project's Results Framework. This would enhance the comparability of results and tracking of indicators for this project to other CBIT projects.

Response to Secretariat comments

January 10, 2019: Thank you, we have addressed comments 2 and 3.

February 20, 2019: Please see above response to comment 2.

In addition, Indicator 11 has been estimated, the project aims to train at least 70 people. This has been included in the Indicators section of the portal. Unfortunately, it seems to be a bug in the portal regarding the duration, and this cannot be amended.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[37]

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

PPG Grant Approved at PIF: USD 50,000			
Project Preparation Activities Implemented	***GEFTF/LDCF/SCCF/CBIT Amount ($)***		
	Budgeted Amount	***Amount Spent to date***	***Amount Committed***
Senior Local Consultant Peru	21,200	21,200	0
Junior Local Consultant Peru	10,800	10,800	0
Consultant UNEP DTU Partnership	14,000	14,000	0
Mission to Peru (17-24 July 2018)	4,000	4,000	0
Total	50,000	50,000	0

[37] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: CALENDAR OF EXPECTED REFLOWS

(if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

Not Applicable

ANNEX E: GEF 7 CORE INDICATOR WORKSHEET

Use this Worksheet to compute those indicator values as required in Part I, Table E to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Target		Number Achieved	
				CEO Endorsement	MTR	TE
			Female	35		
			Male	35		
			Total	*70*		

ANNEX F: GEF PROJECT TAXONOMY WORKSHEET

Use this Worksheet to list down the taxonomic information required under Part I, item F by ticking the most relevant keywords/ topics/themes that best describe this project.

Level 1	Level 2	Level 3	Level 4
☒**Influencing models**			
	☒**Transform policy and regulatory environments**		
	☒**Strengthen institutional capacity and decision-making**		
	☐**Convene multi-stakeholder alliances**		
	☐**Demonstrate innovative approaches**		
	☐**Deploy innovative financial instruments**		
☒**Stakeholders**			
	☐**Indigenous Peoples**		
	☒**Private Sector**		
		☐Capital providers	
		☐Financial intermediaries and market facilitators	
		☒Large corporations	
		☐SMEs	
		☐Individuals/Entrepreneurs	
		☐Non-Grant Pilot	
		☐Project Reflow	
	☐**Beneficiaries**		
	☐**Local Communities**		
	☒**Civil Society**		
		☐Community Based Organization	
		☒Non-Governmental Organization	
		☒Academia	
		☐Trade Unions and Workers Unions	
	☒**Type of Engagement**		
		☐Information Dissemination	

		☐Partnership	
		☒Consultation	
		☒Participation	
	☐**Communications**		
		☐Awareness Raising	
		☐Education	
		☐Public Campaigns	
		☐Behavior Change	
☒**Capacity, Knowledge and Research**			
	☐**Enabling Activities**		
	☒**Capacity Development**		
	☒**Knowledge Generation and Exchange**		
	☐**Targeted Research**		
	☐**Learning**		
		☐Theory of Change	
		☐Adaptive Management	
		☐Indicators to Measure Change	
	☐**Innovation**		
	☐**Knowledge and Learning**		
		☐Knowledge Management	
		☐Innovation	
		☐Capacity Development	
		☐Learning	
	☐**Stakeholder Engagement Plan**		
☒**Gender Equality**			
	☒**Gender Mainstreaming**		
		☒Beneficiaries	
		☐Women groups	
		☒Sex-disaggregated indicators	
		☐Gender-sensitive indicators	
	☐**Gender results areas**		
		☐Access and control over natural resources	
		☐Participation and leadership	

		☐Access to benefits and services	
		☐Capacity development	
		☐Awareness raising	
		☐Knowledge generation	
☒**Focal Areas/Theme**			
	☐**Climate Change**		
		☐**Climate Change Adaptation**	
			☐Climate Finance
			☐Least Developed Countries
			☐Small Island Developing States
			☐Disaster Risk Management
			☐Sea-level rise
			☐Climate Resilience
			☐Climate information
			☐Ecosystem-based Adaptation
			☐Adaptation Tech Transfer
			☐National Adaptation Programme of Action
			☐National Adaptation Plan
			☐Mainstreaming Adaptation
			☐Private Sector
			☐Innovation
			☐Complementarity
			☐Community-based Adaptation
			☐Livelihoods
		☐**Climate Change Mitigation**	
			☐Agriculture, Forestry, and other Land Use
			☐Energy Efficiency
			☐Sustainable Urban Systems and Transport
			☐Technology Transfer
			☐Renewable Energy
			☐Financing
			☐Enabling Activities

		☒**United Nations Framework on Climate Change**	
			☒Capacity Building Initiative for Transparency
		☒**Climate Finance (Rio Markers)**	☐Paris Agreement ☐Sustainable Development Goals ☒Climate Change Mitigation 1 ☐Climate Change Mitigation 2 ☒Climate Change Adaptation 1 ☐Climate Change Adaptation 2

ANNEX G: TERMS OF REFERENCE FOR KEY PERSONNEL

KEY PERSONNEL # 1101

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Chief Technical Advisor
Duration: Three years (full-time)
Date Required: Jan 2019
Duty station: Lima

Background:
The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed activities:

- Take responsibility for day to day oversight of project execution;
- Ensure that the project meets its objectives and achieves expected outcomes;
- Prepare annual work plans in consultation with project partners
- Manage and coordinate the day-to-day activities
- Provide technical inputs to the implementation of the activities
- Review and improve technical deliverables from national and international experts
- Support the development of capacity building materials for all components
- Participate in the preparation of TORs for consultants and participate in the process of interviewing the candidates
- Prepare Project Steering Committee meetings
- Prepare progress reports
- Ensure coordination with relevant national institutions and government ministries to ensure that project activities are distinct and fully complementary to other national initiatives
- Define the procedures of approval for recommendations related to the design and implementation of the NDC tracking system
- Develop policy impact forecasts and substantive policy options for the improvement of climate change policymaking across sectors
- Be responsible for the quality of the activities and the coordination of experts
- Take responsibility for day to day project financial operations;
- Prepare all annual/year-end project revisions;
- Attend inception workshops and national steering committee meetings;
- Monitor risk management plan;
- Periodic reporting to UN Environment and the Project Steering Committee for allocation of the GEF grant according to the quarterly and annual work plans and budgets in coordination with UN Environment and the National Project Director (NDP);

- Notify UN Environment and the PSC in writing if there is need for modification to the agreed implementation plan and budget, and to seek approval;
- Address and rectify any issues or inconsistencies raised by the Executing Agency;
- Support compilation and submission of progress and financial reporting to the Executing Agency;
- Provide accurate and up-to-date technical advice and guidance on issues related to the implementation of the project activities;
- Day-to-day project operations
- Liaise with national stakeholders
- Provide national and local insights for all experts involved
- Co-draft all products assigned to local experts
- Engage with local climate change involved entities
- Leading actively in the CBIT Global Coordination Platform by attending meetings, but also preparing materials to be shared through the platform
- Ensure the gender guidelines are followed and targets are met
- Produce a lessons learnt document to promote knowledge sharing

Reporting structure:

The Chief Technical Advisor will report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment in Peru.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to climate change, environment and national development
- Excellent understanding of global climate change issues in particular related to transparency and MRV as well as Peru´s climate targets in the NDC.
- A minimum of 7 years of professional experience in managing projects in the areas of climate change mitigation or adaptation, especially on National Communications, Inventories and Transparency.
- A minimum of 3 years of professional experience providing technical advice in the areas of climate change mitigation or adaptation, especially on National Communications, Inventories and Transparency.
- Language(s): Spanish and English

KEY PERSONNEL # 1201

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Emission Expert
Duration: Two years and a half (full-time)
Date Required: March 2019
Duty station: Lima

Background:

The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed consultancy activities:

- Coordinate the necessary actions that facilitate the measure of emission factors for enteric fermentation.
- Systematize information on all national and international studies regarding GHG estimation in at least two categories of the Agriculture sector, considering the identification of emission factors used for methane and nitrogen and making a comparative table between international studies and what is found in Peru.
- Carry out the socialization of the elaboration of processes of emission factors cases and validation before the IPCC with the teams of the Ministry of Agriculture and other relevant institutions.
- Evaluate, propose and manage with the corresponding institutions the actions for the improvement in the measure of the firewood activity level at the national level.
- Provide technical support and supervise the actions related to the identification of models of emission projections in all sectors and their application.
- Organize and supervise the development of activities aimed to generate capacities in technical teams and public servants of the Ministries involved in the measure and emission projections.
- Record and prepare the necessary information for the monitoring and evaluation of activities related to emissions.
-

Reporting structure:

The Emission Expert will be under the overall guidance of the Chief Technical Advisor and report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment. The Consultant will work from the Ministry of Environment.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to mitigation to climate change,
- Good understanding of global and national climate change issues in particular related to GHG accounting and MRV.
- A minimum of 5 years of professional experience
- Language(s): Spanish and English

KEY PERSONNEL # 1202

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: M&E expert
Duration: Two years and a half (full-time)
Date Required: March 2019
Duty station: Lima

Background:

The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the

technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed consultancy activities:

- Organize and supervise activities aimed at facilitating the design of an M&E system of health adaptation measures.
- Coordinate the actions aimed at having the technical indicators sheets for the M&E system of health adaptation measures.
- Carry out a study of vulnerability analysis to climate change in health, based on the available Technical Health Note that allows to have the information available to be used to focus the monitoring and evaluation plan.
- Prepare a plan for monitoring and evaluating health adaptation measures in a participatory and concerted manner.
- Review and evaluate the mapping of the processes developed in the framework of the design of the M&E system.
- Coordinate and supervise the actions of capacity building for the implementation of the M&E system.
- Record and prepare the necessary information for the monitoring and evaluation of activities related to M&E of health adaptation measures.

Reporting structure:

The M&E Expert will be under the overall guidance of the Chief Technical Advisor and report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment. The Consultant will work from the Ministry of Environment.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to adaptation to climate change,
- Good understanding of Peru´s health vulnerability to climate change.
- A minimum of 5 years professional experience in areas related to M&E, and process mapping
- Language(s): Spanish and English

KEY PERSONNEL # 1203

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Gender and Climate Change Expert
Duration: 170 days
Date Required: March 2019, March 2020, March 2021
Duty station: Lima

Background:

The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the

technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed consultancy activities:

- Design the implementation of gender perspective in the processes of enhancing capacities for the incorporation of emission projections in the definition of long-term strategies.
- Incorporate the gender perspective in the processes of developing indicators sheets for the M&E of adaptation to climate change in health.
- Define strategies that facilitate the adequate incorporation of the gender perspective as well as sustainability in its consideration.
- Conduct the follow-up and evaluation of the incorporation of the gender perspective in the corresponding activities of the project.

Reporting structure:

The Gender and Climate Change Expert will be under the overall guidance of the Chief Technical Advisor and report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment. The Consultant will work from the Ministry of Environment.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to climate change,
- Good understanding of Peru´s gender situation.
- A minimum of 5 years professional experience in areas related to gender.
- Language(s): Spanish and English

KEY PERSONNEL # 1204

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Climate finance in private sector expert
Duration: three years (part time)
Date Required: March 2019
Duty station: Lima

Background:

The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well

as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed consultancy activities:

- Review and propose adjustments to the Corporate Sustainability Report format aimed at improving the availability of information for financial monitoring on climate change.
- Coordinate with the relevant actors for the objectives of the activities linked to the monitoring of climate change financing in the private sector.
- Review, provide, and ensure alignment with NDC monitoring.
- Identify with other private actors the possibility of continuing to improve the identification of climate change financing.
- Organize and supervise activities to monitor climate change financing in the private sector.
- Record and prepare the necessary information for the M&E of activities related to climate finance in the private sector.

Reporting structure:

The Climate finance in private sector Expert will be under the overall guidance of the Chief Technical Advisor and report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment. The Consultant will work from the Ministry of Environment.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to climate change,
- Good understanding of Peru´s private finance to climate change.
- A minimum of 5 years professional experience in areas related to private finance.
- Language(s): Spanish and English

KEY PERSONNEL # 1205

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Climate finance in public sector expert
Duration: Three years (part-time)
Date Required: March 2019
Duty station: Lima

Background:

The Paris Agreement, in its Article 13, raises the need to have an enhanced transparency framework that allows information to be available to assess if the necessary is being done in relation to compliance with the commitments assumed to face climate change. This is a major challenge, especially for developing countries, which implies having the technical and institutional capacities to meet the reporting requirements, and the strategic planning of de-carbonization with resilience.

In this regard, the Capacity Building Initiative for Transparency Fund (CBIT), administered by the GEF, supports the Peruvian government in improving its capacities to track and evaluate mitigation and adaptation within its NDCs, as well

as financial resources that are used to work on these issues, contributing to improve decision-making processes related to climate change.

Detailed consultancy activities:

- Evaluate and identify the sectors for monitoring climate financing in the public sector.
- Articulate the activities of climate finance monitoring with other related projects.
- Coordinate and organize the necessary activities with the MEF for the necessary modifications in the SIAF application.
- Review, provide, and ensure alignment with NDC monitoring.
- Organize and supervise activities to monitor climate change financing in the public sector.
- Record and prepare the necessary information for the M&E of activities related to climate financing in the public sector.

Reporting structure:

The Climate finance in public sector Expert will be under the overall guidance of the Chief Technical Advisor and report to the head of the General Directorate of Climate Change and Desertification under the Ministry of Environment. The Consultant will work from the Ministry of Environment.

Qualifications:

- Advanced degree or higher (Master or higher) in areas relevant to climate change,
- Good understanding of Peru´s public finance to climate change.
- A minimum of 5 years professional experience in areas related to public finance.
- Language(s): Spanish and English

KEY PERSONNEL # 1281

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: Emissions factors international expert
Duration: One year (part-time)
Date Required: March 2020
Duty station: home based

Background:

The UNFCCC enhanced transparency framework demands substantial and immediate progress in the countries' domestic Monitoring Reporting and Verification (MRV) systems and strategic de-carbonization planning. The success of the Paris Agreement hinges on enhanced transparency of action and support, as a critical foundation to making its bottom-up, country-led approach work, as well as building mutual trust and confidence amongst Parties.

One of CBIT's contributions will occur through the creation of capacities for the strengthening of local emissions factors, including their formalization for submission to the IPCC. The emissions factors international expert will provide strategic advice to local institutions carrying out the work.

Detailed consultancy activities:

- Provide strategic technical advice to local Emissions Expert and teams gathering emission factors information
- Guide local Emissions Expert in the development of locally relevant guidance on emissions factors strengthening
- In collaboration with local Emissions Expert, check guidance materials for completeness and rigour to international standards
- Provide step by step guidance to local Emissions Expert on formatting of emission factors related information for submission to IPCC evaluation
- Quality control of draft submission of emission factors materials to IPCC

Reporting structure:

The Emissions factors international expert will report to the Chief Technical Advisor. The expert will be home based.

Qualifications:

- Advanced degree or higher (Master's or higher) in areas relevant to climate change,
- Excellent understanding of and extensive work experience on the science and process for the development of emissions factors in agriculture
- A minimum of 10 years of professional experience in relevant areas.
- Language(s): English a must; Spanish desirable

KEY PERSONNEL # 1282

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: International advisor on GHG emissions projections methods
Duration: One year (part-time)
Date Required: March 2020
Duty station: home based

Background:

The UNFCCC enhanced transparency framework demands substantial and immediate progress in the countries' domestic Monitoring Reporting and Verification (MRV) systems and strategic de-carbonization planning. The success of the Paris Agreement hinges on enhanced transparency of action and support, as a critical foundation to making its bottom-up, country-led approach work, as well as building mutual trust and confidence amongst Parties.

One of CBIT's contributions will occur through the creation of capacities of the sectoral teams of INFOCARBONO on GHG emission projections including methodologies to conduct GHG emission projections and linkages with GHG National Inventories. The International advisor on GHG emissions projections methods will support local staff in the relevant related activities.

Detailed consultancy activities:

- Provide strategic technical advice to local staff on criteria for the design of capacity building materials on methods for GHG emissions projections
- Support local staff during the capacity building workshop, addressing technical questions and providing the regional and international perspective
- In collaboration with local staff, check capacity building materials for completeness and rigour to international standards

Reporting structure:

The International advisor on GHG emissions projections methods will report to the Chief Technical Advisor. The expert will be home based, with one mission to Lima.

Qualifications:

- Advanced degree or higher (Master's or higher) in areas relevant to climate change,
- Excellent understanding of GHG emissions projections methodologies
- Extensive experience in the application of GHG emissions projections methodologies to policy design and planning
- Extensive experience with GHG emissions inventories and MRV
- A minimum of 10 years of professional experience in relevant areas.
- Language(s): Spanish and English

KEY PERSONNEL # 1283

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: International expert on GHG modelling
Duration: One year (part-time)
Date Required: March 2019
Duty station: home based

Background:

The UNFCCC enhanced transparency framework demands substantial and immediate progress in the countries' domestic Monitoring Reporting and Verification (MRV) systems and strategic de-carbonization planning. The success of the Paris Agreement hinges on enhanced transparency of action and support, as a critical foundation to making its bottom-up, country-led approach work, as well as building mutual trust and confidence amongst Parties.

One of CBIT's contributions will occur through the development of general guidelines and tools to ensure consistency and comparability of GHG emission projections among sectors. The International expert on GHG modelling will ensure that such guidelines adhere to the relevant international standards.

Detailed consultancy activities:

- Provide strategic technical advice to local staff on criteria to review best practices on consistency and comparability of GHG emission projections among sectors
- Quality control of draft guidelines
- Strategic advice on the design of a workshop to build capacity on the guidelines

Reporting structure:

The International expert on GHG modelling will report to the Chief Technical Advisor. The expert will be home based.

Qualifications:

- Advanced degree or higher (Master's or higher) in areas relevant to climate change,

- Excellent understanding of and extensive work experience on the development of tools and methodologies for the modelling of GHG emissions projections
- A minimum of 10 years of professional experience in relevant areas.
- Language(s): English and Spanish

KEY PERSONNEL # 1284

Project: Capacity Building for Peru's transparency system for climate change mitigation and adaptation
Post title: International climate and health adaptation expert
Duration: Three years (part-time)
Date Required: March 2019
Duty station: Home based

Background:

The UNFCCC enhanced transparency framework demands substantial and immediate progress in the countries' reporting on implementation of NDCs. The success of the Paris Agreement hinges on enhanced transparency of action and support, as a critical foundation to making its bottom-up, country-led approach work, as well as building mutual trust and confidence amongst Parties.

One of CBIT's contributions will occur through the establishment of institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC in the thematic area of Health. The International climate and health adaptation expert will ensure that proposed mechanisms, systems and indicators are fully founded on the best available evidence at the global level, as well as informed by relevant global and regional experiences.

Detailed consultancy activities:

- Assist local M&E expert and Ministry of Health focal points in:
    - Designing the analysis of existing monitoring and evaluation practices in health systems as related to climate vulnerability and resilience, as well as how to gather and organize the relevant information, include relevant international comparisons;
    - Provide quality control of final report on analysis of existing M&E practices and gaps in light of the best available evidence and practices in the field
    - Developing operational technical sheets of indicators for use at the subnational level
    - Assist local M&E expert and Ministry of Health focal points in the discussions and capacity building of subnational authorities on M&E of health adaptation
    - Development of capacity building materials for health administrators to support their applications for adaptation funding

Reporting structure:

The International climate and health adaptation expert will report to the Chief Technical Advisor. The expert will be home based, with one or two missions to Lima

Qualifications:

- Advanced degree or higher (Master's or higher) Public Health or Climate Change, with health-specific training

- Excellent understanding of and extensive work experience on health impacts of climate change, health systems, health adaptation, building the resilience of health systems and M&E for adaptation.
- A minimum of 10 years of professional experience in relevant areas.

Language(s): English a must; Spanish desirable

ANNEX H1: DETAILED GEF BUDGET (GEF FUNDS ONLY, US$)

Tot	Class		Description	Year 1	Year 2	Year 3	Total
			COMPONENT 1				
C1	010		Staff & Personnel (Including Consultants)				
C1		1101	Chief Technical Advisor	15 936	15 936	15 936	47 808
C1		1201	Expert in emission projections	27 600	27 600	13 800	69 000
C1		1281	Emissions factors international expert		11 700		11 700
C1		1282	International advisor on GHG emissions projection methods		6 300		6 300
C1		1283	International expert on GHG modelling	3 600			3 600
C1			*Subtotal*	*47 136*	*61 536*	*29 736*	***138 408***
C1	120		Contract Services				
C1		2301	Consultancy to obtain information and definition of emission factors in enteric fermentation for dairy cattle in Puno, Cajamarca and jungle area	100 000	100 000		200 000
C1		2303	Evaluation and identification of the ideal model for emissions projection by sector and category, and preparation of guidelines for its application.	12 500	12 500		25 000
C1		3201	Design of modules and training for the application of selected emission projections models		20 000		20 000
C1		3202	Design of modules and training for the incorporation of emission projections in long-term policy proposals.			15 000	15 000
C1		3301	Project Inception Workshop	500			500
C1		3302	Annual National Events to present the progress of the Project, including civil society actors	333	333	333	1 000
C1		3303	Project finalization workshop			500	500
C1		5301	Translation	333	333	333	1 000
C1		5501	Terminal evaluation			10 000	10 000
C1			*Subtotal*	*113 667*	*133 167*	*26 167*	***273 000***
C1	125		Operating & Other Costs				
C1		5201	Communication and publicity	2 500	2 500	2 592	7 592
C1			*Subtotal*	*2 500*	*2 500*	*2 592*	***7 592***
C1	135		Equipment, Vehicles & Furniture				
C1		4201	2 Lap tops, 1 projector	4 000			4 000
C1		4202	Miscellaneous	667	667	667	2 000
C1			*Subtotal*	*4 667*	*667*	*667*	***6 000***
C1	160		Travel				
C1		1601	Travel for Workshops and International Meetings	13 000	13 500	6 500	33 000
C1		1681	Travel for international experts		2 000		2 000
C1			*Subtotal*	*13 000*	*15 500*	*6 500*	35 000
Component 1 Total			**Institutional and technical capacities for the formulation and use of sectoral long-term low greenhouse gas emissions development strategies are developed**	**180 969**	**213 369**	**65 661**	**460 000**

			COMPONENT 2				
C2	010		Staff & Personnel (Including Consultants)				
C2		1101	Chief Technical Advisor	11 952	11 952	11 952	35 856
C2		1202	Expert in M&E systems	27 600	27600	13800	69 000
C2		1203	Expert in gender and climate change	5 000	3000	5 000	13 000
C2		1284	International expert climate and health adaptation	7 200	9900	6300	23 400
C2			*Subtotal*	*44 552*	*42 552*	*30 752*	***141 256***
C2	120		Contract Services				
C2		2304	Analysis of existing monitoring and evaluation systems in the health sector that favor the implementation of a monitoring and evaluation measurements system to adapt to climate change	10 000	10 000		20 000
C2		2305	Elaboration and validation of indicators sheets for the M&E system of the health sector.	25 000	37 500		62 500
C2		2306	M&E system design of health adaptation measures.		110 000		110 000
C2		3203	Design of modules and training for access to financing for M&E system for adaptation measures in health (Infrastructure, services, population).	10 000	15 000		25 000
C2		3301	Project Inception Workshop	1 000			1 000
C2		3302	Annual National Events to present the progress of the Project, including civil society actors	3 333	3 333	3 333	10 000
C2		3303	Project finalization workshop			1 000	1 000
C2		5301	Translation	1 333	1 333	1 333	4 000
C2		5501	Terminal evaluation			10 000	10 000
C2			*Subtotal*	*50 667*	*177 167*	*15 667*	***243 500***
C2	125		Operating & Other Costs				
C2		5201	Communication and publicity	6 000	9 000	7 344	22 344
C2			*Subtotal*	*6 000*	*9 000*	*7 344*	***22 344***
C2	135		Equipment, Vehicles & Furniture				
C2		4201	Computers	5 000			5 000
C2		4202	Miscellaneous	667	667	667	2 000
C2			*Subtotal*	*5 667*	*667*	*667*	***7 000***
C2	160		Travel				
C2		1601	Travels for Workshops and International Meetings	6 500	14 000	3 100	23 600
C2		1682	Travel for international experts	2 300			2 300
C2			*Subtotal*	*8 800*	*14 000*	*3 100*	***25 900***
Component 2 Total			**Institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC are established**	**115 685**	**243 385**	**57 529**	**440 000**
			COMPONENT 3				
C3	010		Staff & Personnel (Including Consultants)				
C3		1101	Chief Technical Advisor	7 968	7 968	7 968	23 904
C3		1204	Expert in climate finance in the private sector	6 000	6 000	6 000	18 000

C3		1205	Expert in climate finance in the public sector	6 000	6 000	6 000	18 000
C3			*Subtotal*	*19 968*	*19 968*	*19 968*	***59 904***
C3	120		Contract Services				
C3		2303	Design of mechanisms that facilitate the reporting of public spending (investment and activities) on climate change	20 000	24 200		44 200
C3		3204	Design of modules and training for entrepreneurs for the application of Corporate Sustainability Report.	7 000	7 000	7 000	21 000
C3		3205	Design of modules and training for public servants for the implementation of mechanisms for monitoring public spending.		17 000		17 000
C3		3301	Project Inception Workshop	500			500
C3		3302	Annual National Events to present the progress of the Project, including civil society actors	2 333	2 333	2 333	7 000
C3		3303	Project finalization workshop			1 000	1 000
C3		5301	Translation	750	500	750	2 000
C3		5501	Terminal evaluation			10 000	10 000
C3			*Subtotal*	*30 583*	*51 033*	*21 083*	***102 700***
C3	125		Operating & Other Costs				
C3		5201	Communication and publicity	4 000	5 000	3 000	12 000
C3			*Subtotal*	*4 000*	*5 000*	*3 000*	***12 000***
C3	135		Equipment, Vehicles & Furniture				
C3		4201	Computers	5 000			5 000
C3		4202	Miscellaneous	400	400	496	1 296
C3			*Subtotal*	*5 400*	*400*	*496*	***6 296***
C3	160		Travel				
C3		1601	Travels for Workshops and International Meetings	3 100	6 000		9 100
C3			*Subtotal*	*3 100*	*6 000*	*-*	***9 100***
Component 3 Total			**Institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC is strengthened**	**63 051**	**82 401**	**44 547**	**190 000**
			PROJECT MANAGEMENT COSTS (PMC)				
PMC	010		Staff & Personnel (Including Consultants)				
PMC		1101	Chief Technical Advisor	18 167	18 167	18 167	54 500
PMC		1301	Administrative Assistant (ROLAC)	18 167	18 167	18 167	54 500
PMC			*Subtotal*	*36 333*	*36 333*	*36 333*	***109 000***
GRAND TOTAL			**GRAND TOTAL**	**396 039**	**575 489**	**204 071**	**1 199 000**

ANNEX H2: DETAILED COFINANCE BUDGET (US$)

			GEF	Ministry of Environment	UNALM	Total	
	Code	Description	Cash	In-kind	In-kind	Cash	In-kind
		COMPONENT 1					
C1	010	Staff & Personnel (Including Consultants)					
C1	1101	Chief Technical Advisor	47 808			47 808	-
C1	1201	Expert in emission projections	69 000			69 000	-
C1	1281	Emissions factors international expert	11 700			11 700	-
C1	1282	International advisor on GHG emissions projection methods	6 300			6 300	-
C1	1283	International expert on GHG modelling	3 600			3 600	-
C1		*Subtotal*	***138 408***			***138 408***	**-**
C1	120	Contract Services	-			-	-
C1	2301	Consultancy to obtain information and definition of emission factors in enteric fermentation for dairy cattle in Puno, Cajamarca and jungle area	200 000			200 000	-
C1	2303	Evaluation and identification of the ideal model for emissions projection by sector and category, and preparation of guidelines for its application.	25 000			25 000	-
C1	3201	Design of modules and training for the application of selected emission projections models	20 000			20 000	-
C1	3202	Design of modules and training for the incorporation of emission projections in long-term policy proposals.	15 000			15 000	-
C1	3301	Project Inception Workshop	500			500	-
C1	3302	Annual National Events to present the progress of the Project, including civil society actors	1 000			1 000	-
C1	3303	Project finalization workshop	500			500	-
C1	5301	Translation	1 000			1 000	-
C1	5501	Terminal evaluation	10 000			10 000	-
C1		*Subtotal*	***273 000***			***273 000***	**-**
C1	125	Operating & Other Costs	-			**-**	**-**
C1	5201	Communication and publicity	7 592			7 592	-
C1	6101	MINAM - UNDP -WB project "System for the accreditation of mitigation actions with potential in the carbon market"	-	200 000		-	200 000
C1	6102	MINAM - UNEP-DTU project "Initiative for Climate Action Transparency"	-	50 000		-	50 000
C1	6103	MINAM - In kind co-finance	-	30 000		-	30 000
C1	6104	National Agrarian University - La Molina	-		50 000	-	50 000
C1		*Subtotal*	***7 592***	***280 000***	***50 000***	***7 592***	***330 000***
C1	135	Equipment, Vehicles & Furniture	-			-	-
C1	4201	2 Lap tops, 1 projector	4 000			4 000	-
C1	4202	Miscellaneous	2 000			2 000	-
C1		*Subtotal*	***6 000***			***6 000***	**-**

C1	160	Travel	-			-	-
C1	1601	Travel for Workshops and International Meetings	33 000			33 000	-
C1	1681	Travel for international experts	2 000			2 000	-
C1		*Subtotal*	***35 000***			***35 000***	-
Component 1 Total		**Institutional and technical capacities for the formulation and use of sectoral long-term low greenhouse gas emissions development strategies are developed**	**460 000**	**280 000**	**50 000**	**460 000**	**330 000**
		COMPONENT 2					
C2	010	Staff & Personnel (Including Consultants)				-	-
C2	1101	Chief Technical Advisor	35 856			35 856	-
C2	1202	Expert in M&E systems	69 000			69 000	-
C2	1203	Expert in gender and climate change	13 000			13 000	-
C2	1284	International expert climate and health adaptation	23 400			23 400	-
C2		*Subtotal*	***141 256***			***141 256***	-
C2	120	Contract Services	-			-	-
C2	2304	Analysis of existing monitoring and evaluation systems in the health sector that favor the implementation of a monitoring and evaluation measurements system to adapt to climate change	20 000			20 000	-
C2	2305	Elaboration and validation of indicators sheets for the M&E system of the health sector.	62 500			62 500	-
C2	2306	M&E system design of health adaptation measures.	110 000			110 000	-
C2	3203	Design of modules and training for access to financing for M&E system for adaptation measures in health (Infrastructure, services, population).	25 000			25 000	-
C2	3301	Project Inception Workshop	1 000			1 000	-
C2	3302	Annual National Events to present the progress of the Project, including civil society actors	10 000			10 000	-
C2	3303	Project finalization workshop	1 000			1 000	-
C2	5301	Translation	4 000			4 000	-
C2	5501	Terminal evaluation	10 000			10 000	-
C2		*Subtotal*	***243 500***			***243 500***	-
C2	125	Operating & Other Costs	-			-	-
C2	5201	Communication and publicity	22 344			22 344	-
C2	6103	MINAM - In kind co-finance	2 000	180 000		2 000	180 000
C2		***Subtotal***	***22 344***	**180 000**	**-**	***22 344***	***180 000***
C2	135	Equipment, Vehicles & Furniture	-			-	-
C2	4201	Computers	5 000			5 000	-
C2	4202	Miscellaneous	2 000			2 000	-
C2		*Subtotal*	***7 000***			***7 000***	-
C2	160	Travel	-			-	-
C2	1601	Travels for Workshops and International Meetings	23 600			23 600	-

C2	1682	Travel for international experts	2 300			2 300	-
C2		*Subtotal*	***25 900***			***25 900***	**-**
Component 2 Total		**Institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC are established**	**440 000**	**180 000**	**-**	**440 000**	**180 000**
		COMPONENT 3					
C3	010	Staff & Personnel (Including Consultants)	-			-	-
C3	1101	Chief Technical Advisor	23 904			23 904	-
C3	1204	Expert in climate finance in the private sector	18 000			18 000	-
C3	1205	Expert in climate finance in the public sector	18 000			18 000	-
C3		*Subtotal*	***59 904***			***59 904***	**-**
C3	120	Contract Services	-			-	-
C3	2303	Design of mechanisms that facilitate the reporting of public spending (investment and activities) on climate change	44 200			44 200	-
C3	3204	Design of modules and training for entrepreneurs for the application of Corporate Sustainability Report.	21 000			21 000	-
C3	3205	Design of modules and training for public servants for the implementation of mechanisms for monitoring public spending.	17 000			17 000	-
C3	3301	Project Inception Workshop	500			500	-
C3	3302	Annual National Events to present the progress of the Project, including civil society actors	7 000			7 000	-
C3	3303	Project finalization workshop	1 000			1 000	-
C3	5301	Translation	2 000			2 000	-
C3	5501	Terminal evaluation	10 000			10 000	-
C3		*Subtotal*	***102 700***			***102 700***	**-**
C3	125	Operating & Other Costs	-			-	-
C3	5201	Communication and publicity	12 000			12 000	-
C3	6102	MINAM - UNEP-DTU project "Initiative for Climate Action Transparency"	1 296	75 000		1 296	75 000
C3	6103	MINAM - In kind co-finance	1 296	45 000		1 296	45 000
C3		*Subtotal*	***12 000***	**120 000**	**-**	***12 000***	***120 000***
C3	135	Equipment, Vehicles & Furniture	-				
C3	4201	Computers	5 000			5 000	-
C3	4202	Miscellaneous	1 296			1 296	-
C3		*Subtotal*	***6 296***			***6 296***	**-**
C3	160	Travel	-			-	-

C3	1601	Travels for Workshops and International Meetings	9 100			9 100	
C3		*Subtotal*	***9 100***			***9 100***	-
Component 3 Total		**Institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC is strengthened**	**190 000**	**120 000**	**-**	**190 000**	**-** **120 000**
		PROJECT MANAGEMENT COSTS (PMC)				-	
PMC	010	Staff & Personnel (Including Consultants)	-			-	-
PMC	1101	Chief Technical Advisor	54 500			54 500	-
PMC	1301	Administrative Assistant (ROLAC)	54 500			54 500	-
PMC	6103	MINAM co-finance on PMC		70 000		-	- 70 000
PMC		*Subtotal*	***109 000***	***70 000***	***-***	***109 000***	***70 000***
GRAND TOTAL		**GRAND TOTAL**	**1 199 000**	**650 000**	**50 000**	**1 199 000**	**700 000**

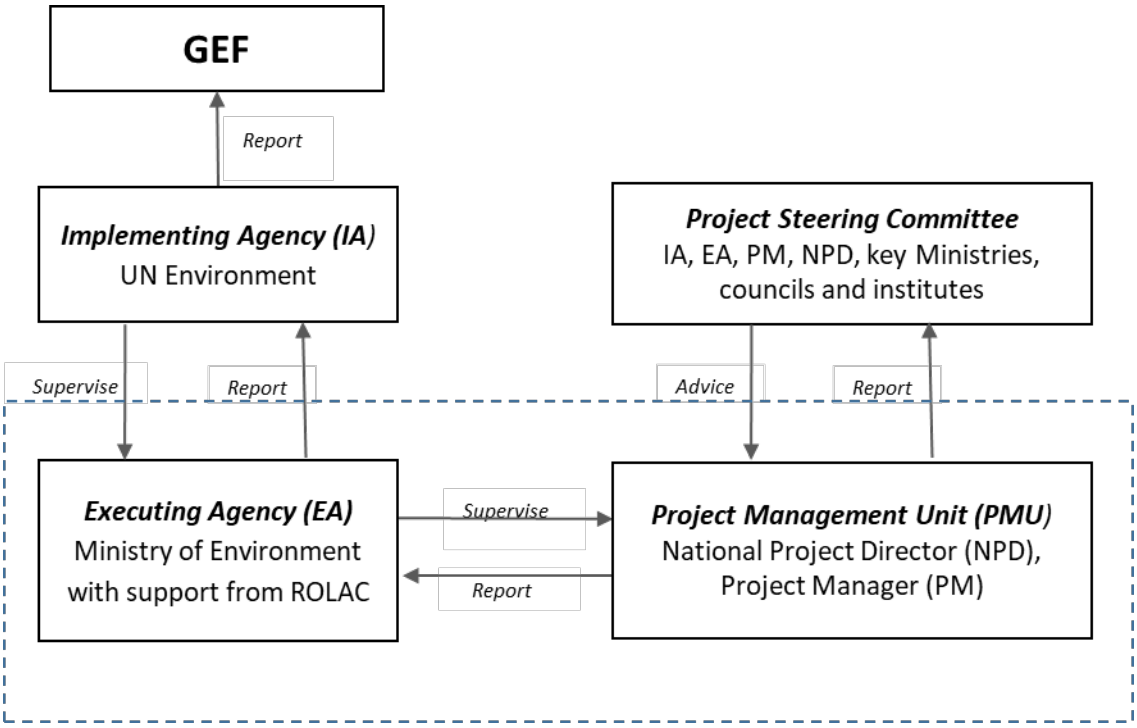
ANNEX I: MONITORING AND EVALUATION FRAMEWORK BUDGET AND WORK PLAN

M&E Activity	Description	Responsible Parties	Timeframe	Indicative budget (USD)
Inception Workshop (IW) and Report	Report prepared immediately following the IW; it includes: - Review of Workplan and budget for Year 1 - Description of M&E plan - Description of Roles and responsibilities and coordination mechanisms (MINAM, UN Environment, others)	Execution: Chief Technical Advisor	Immediately following, within 2 months of project start-up	GEF: 2,000 Cofinance:1,000
Half-yearly progress report; Half-yearly financial reports;	Part of UN Environment procedures for project monitoring. Half Yearly progress report: - Analyses project performance over the reporting period UN Environment; Describes constraints experienced in the progress towards results and the reasons - Describes Work Plan for the next period in an Annex and the detailed budget divided per output and inputs (budget lines) Half-yearly financial: Detailed financial reports (in Excel), with justification of any change;	Execution: Chief Technical Advisor	Two (2) bi-annual reports for any given year (July 31 and January 31); Quarterly financial reports Last progress & financial Reports within 60 days of project closure of operations	Part of Chief Technical Advisor tasks Co finance: 3,000
Project Implementation Review (PIR)	Analyses project performance over the reporting period UN Environment; Describes constraints experienced in the progress towards results and the reasons Draws lessons and makes clear recommendations for future orientation in addressing the key problems in the lack of progress. The PIR is discussed at PSC meetings	Execution: Chief Technical Advisor	Yearly, by 31 July latest	Part of Chief Technical Advisors tasks
Final Report	The project team will draft and submit a Final Report, with other documents (such as the last PIR), at least two weeks before the PSC meeting for their review and comments; this meeting decides whether any action is needed to achieve the sustainability of project results; and draws lessons to be captured into other projects.	Execution: Chief Technical Advisor	Final report at least two-three months of the project completion date;	Part of Chief Technical Advisors tasks

M&E Activity	Description	Responsible Parties	Timeframe	Indicative budget (USD)
	Comprehensive report summarizing all activities, achievements, lessons learned, objectives met or not achieved structures and systems implemented, etc. Lays out recommendations for any further steps that may need to be taken to ensure the sustainability and replication of project activities.			
Terminal Evaluation	Looks at the impacts and sustainability of the results, including the contribution to capacity development and the achievement of global environmental goals.	Execution: Independent consultants Support: UN Environment and Government counterparts Commission the TE: Evaluation Office	Not before 6 months prior to and no later than 6 months after the project's operational completion	GEF: 30,000
TOTAL indicative COST **(Excluding project team staff time and UN Environment staff and travel expenses)**			**GEF Grant for M&E: USD 32,000** **Cofinance: USD 4,000**	

ANNEX J: PROJECT IMPLEMENTATION ARRANGEMENTS

Project is funded by the Global Environment Facility (GEF) with the United Nations Environment Programme (UN Environment) acting as the GEF Implementing Agency. The Ministry of Environment (MINAM) is the Executing Agency with execution support from the Regional Office for Latin America and the Caribbean (ROLAC). The structure is illustrated in the diagram below and roles and responsibilities of each bodies are detailed in the following table.



Project Governance Structure

Body	Composition	Role and description	Frequency of meetings
Project Steering Committee (PSC)	- National Project Director (NPD) - Chief Technical Advisor (CTA) - UN Environment - Ministry of Environment - Ministry of Agriculture - Ministry of Health - Ministry of Economy and Finance	• Oversight of the project progress and implementation of Outputs; • Approve annual work plans and budget; • Approve management decisions to ensure timely delivery of quality outputs; • Provide overall guidance and strategic direction; • Involve national stakeholders to support project implementation, as well as provide synergies with other complementing initiatives and ongoing projects; • Address logistical issues, e.g. through organization of meetings and provision of relevant facilities; • Provide insight on national policy barriers and proposed stages of national policy development.	Twice a year
Implementing Agency (IA)	UN Environment Climate Mitigation Unit	• Ensure timely disbursement/sub-allotment to executing agency through ROLAC, based on agreed legal document and in accordance with UN Environment and GEF fiduciary standards; • Follow-up with Executing agency for progress, equipment, financial and audit reports; • Provide consistent and regular oversight on project execution and conduct project supervisory missions as per Supervision Plans and in doing so ensures that all UN Environment and GEF criteria, rules and regulations are adhered to by project partners; • Technically assess and oversee quality of project outputs, products and deliverables – including formal publications; • Provide no-objection to main TORs and subcontracts issued by the project, including selection of Chief Technical Advisor or equivalent; • Attend and facilitate inception workshops, field visits where relevant, and selected steering committee meetings; • Asses project risks, and monitor and enforce a risk management plan; • Regularly monitor project progress and performance and rate progress towards meeting project objectives, project execution progress, quality of project monitoring and evaluation, and risk; • Monitor reporting by project executing partners and provide prompt feedback on the contents of the report; • Promptly inform the management of any significant risks or project problems and take action and follow up on decisions made; • Apply adaptive management principles to the supervision of the project; • Review of reporting, checking for consistency between execution activities and expenditures, ensuring that it respects GEF rules;	Periodic meetings with PMU and EA

Body	Composition	Role and description	Frequency of meetings
		• Clear cash requests, and authorization of disbursements once reporting found to be complete; • Approve budget revision, certify fund availability and transfer funds; • Ensure that GEF and UN Environment quality standards are applied consistently to all projects, including branding and safeguards; • Certify project operational completion; • Link the project partners to any events organized by GEF and UN Environment to disseminate information on project results and lessons; • Manage relations with GEF.	
Executing Agency (EA)	Ministry of Environment (MINAM) with execution support from the UN Environment Regional Office for Latin America and the Caribbean (ROLAC)	• Ensure that the project meets its objectives and achieves expected outcomes; • Ensure technical execution according to the execution plan laid out in the project document; • Ensure technical quality of products, outputs and deliverables; • Ensure compilation and submission of progress, financial and audit reporting to IA; • Submit budget revisions to IA for approval; • Address and propose solutions to any problem or inconsistency raised by the IA; • Bring issues raised by or associated with clients to the IA for resolution; • Facilitate meetings of Steering Committees and other oversight bodies of the project; • Day to day oversight of project execution; • Submit all technical reports and completion reports to IA (realized outputs, inventories, verification of co-finance, terminal reporting, etc.); • Monitoring and evaluation of the project outputs and outcomes; • Effective use of both international and national resources allocated to ROLAC as responsible of funds administration; • Timely availability of financing to support project execution; • Proper coordination among all project stakeholders; in particular national parties; • Timely submission of all project reports, including work plans and financial reports, whit ROLAC support as a responsible of funds administration; • Follow-up with, or progress, procurement, financial and audit reports.	Internal quarterly meetings with CTA and NPD
Project Management Unit (PMU)	National Project Director (NPD)	• Will be represented by an officer from the Executing Agency; • Act as member of the PSC; • Report to and receive advice from the PSC;	Regular meetings with CTA

Body	Composition	Role and description	Frequency of meetings
		• Identify and secure partner support for the implementation of project activities; • Advise on hiring process.	
	Chief Technical Advisor (CTA)	The CTA will be paid with GEF funds, will be hosted by Climate Change and Desertification General Directorate at MINAM in Peru, and will be responsible for: • Take responsibility for day-to-day project operations; • Take responsibility for the execution of the project in accordance with the project objectives, activities and budget; • Deliver the outputs and demonstrate its best efforts in achieving the project outcomes; • Provide technical advise for all components; • Coordinate project execution and liaison with national counterparts (relevant ministries, electric utilities, private sector, NGOs etc.); • Undertake field visits; • Manage financial resources and processing all financial transaction relating to sub-allotments; • Prepare all annual/year-end project revisions; • Attend and facilitate inception workshops and national steering committee meetings; • Assess project risks in the field, monitor risk management plan; • Ensure technical quality of products, outputs and deliverables; • Coordinate the project work team; • Coordinate with strategic taskforces; • Act as secretary of the PSC; • Plan and host/chair the PSC annual meetings; • Periodic reporting to UN Environment and the PSC for allocation of the GEF grant according to the quarterly and annual work plans and budgets in coordination with UN Environment and NPD; • Notify UN Environment and the PSC in writing if there is need for modification to the agreed implementation plan and budget, and to seek approval; • Address and rectify any issues or inconsistencies raised by the Executing Agency; • Support compilation and submission of progress, financial and audit reporting to the Executing Agency; • Prepare, at the end of the project, the project Final Report.	Regular meetings with NPD (at least twice per month)

ANNEX K: PROJECT WORKPLAN AND DELIVERABLES

OUTPUTS		PROJECT YEAR 1												PROJECT YEAR 2												PROJECT YEAR 3											
		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36
1. Component 1 (or Outcome 1) Institutional and technical capacities for the formulation and use of sectoral long-term low greenhouse gas emissions development strategies are developed																																					
Output 1.1 Emission factors are developed for at least the agriculture sector.	Activity 1.1.1 Elaborate case studies for Local Emissions Factors in enteric fermentation for dairy cattle																																				
	Activity 1.1.2 Prepare a guide for the validation by the IPCC of Emission Factors.																																				
	Deliverable(s) for Output 1.1 Emission factors estimated and presented to the IPCC																																				
Output 1.2 Capacities on GHG emission projections of GHG inventory teams working with Peru's INFOCARBONO are enhanced.	Activity 1.2.1 Conduct a training on emission projections for the INFOCARBONO teams and professionals of the Direction of Greenhouse Gases Mitigation (DMGEI)																																				
	Deliverable(s) for Output 1.2 Training design and materials provided																																				
Output 1.3 General guidelines and tools to ensure consistency and comparability of GHG emission projections among sectors are developed. (taking into account what was worked on in 1.3.2)	Activity 1.3.1 Prepare a proposal of tools to be used in emissions projections by sector and category.																																				
	Activity 1.3.2 Prepare operational tools to carry out emission projections																																				
	Deliverable(s) for Output 1.3 Instruments and operational tools developed.																																				
Output 1.4 Public servants are trained to integrate long-term strategies and GHG emissions projections into policies and decision-making.	Activity 1.4.1 Train public servants involved in the preparation of proposals for long-term development policies that include gender perspective																																				
	Deliverable(s) for Output 1.4 Public servants trained and materials provided.																																				
2. Component 2 (or Outcome 2): Institutional arrangements and technical capacities to systematize information for the implementation of the adaptation component of the NDC are established																																					
Output 2.1 An analysis of current monitoring and evaluation practices and gaps in the health sector is developed with a view to contribute to national level monitoring of adaptation action	Activity 2.1.1 Prepare a study of existing monitoring and evaluation systems in the thematic area of health.																																				
	Deliverable(s) for Output 2.1 Study of existing M&E systems in health eleaborated .																																				
Output 2.2 Technical capacities on monitoring and evaluation of adaptation actions/measures are strengthened in the health sector in collaboration with Peruvian research institutions	Activity 2.2.1 Prepare Operational Data Sheets of indicators of health adaptation measures incorporating the gender perspective.																																				
	Activity 2.2.2 Develop capacities in access to financing to strengthen Health Adaptation M&E																																				
	Deliverable(s) for Output 2.2 Operational technical formats elaborated.																																				
Output 2.3 The M&E system adaptation actions in the health sector is designed	Activity 2.3.1 Design of the M&E system for adaptation to climate change in health.																																				
	Deliverable(s) for Output 2.3 Design of M&E elaborated																																				
3. Component 3 (or Outcome 3) : Institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC is strengthened																																					
Output 3.1 Public and private expenditures associated to the implementation of NDCs in Peru are identified and monitored.	Activity 3.1.1 Improve the format of the Corporate Sustainability Report of the private sector.																																				
	Activity 3.1.2 Strengthen the capacities of companies to report on climate change issues in the format of the sustainability report.																																				
	Activity 3.1.3 Design mechanisms that facilitate the reporting of public spending (investment and activities) on climate change.																																				
	Deliverable(s) for Output 3.1 Standard report template for tracking spending on climate change designed																																				
Output 3.2 Public servants are trained to identify financial needs and report expenditures related to the NDC based on output 3.1.	Activity 3.2.1 Develop training in the application of mechanisms for reporting public spending on climate change.																																				
	Deliverable(s) for Output 3.2 Public servants trained and materials provided																																				

ANNEX L: TRACKING TOOL FOR GEF 6 CAPACITY-BUILDING INITIATIVE FOR TRANSPARENCY PROJECTS

Section A. General Data			
	At CEO Endorsement		
Project Title	Capacity Building for Peru's transparency system for climate change mitigation and adaptation		
GEF ID	9872		
GEF Agency	UN Environment		
Agency Project ID	01603		
Country	Peru		
Region	LCR		
Date of Council/CEO Approval			Month DD, YYYY (e.g., May 13, 2014)
GEF Grant (US$)	1 199 000		
Date of submission of the tracking tool			Month DD, YYYY (e.g., May 13, 2014)
Is the project consistent with the priorities identified in National Communications, Technology Needs Assessment, or other Enabling Activities (such as Technology Action Plans, Nationally Appropriate Mitigation Actions (NAMA) under the UNFCCC?	1		Yes = 1, No = 0

Section B. Quantitative Outcome Indicators	Target At CEO Endorsement	
Indicator 1: Total Lifetime Direct and Indirect GHG Emissions Avoided (Tons CO2eq)		**Indentify Sectors, Sources andTechnologies. Provide disaggregated information if possible. see Special Notes above**
Lifetime direct GHG emissions avoided		
Lifetime indirect GHG emissions avoided		
Indicator 2: Volume of investment mobilized and leveraged by GEF for low GHG development (co-financing and additional financing) of which		**Expected additional resources implies resources beyond co-financing committed at CEO endorsement.**
Public	700 000	
Private		
Domestic		
External		

Section C. Qualitative Outcome Indicators			
Indicator 3: Quality of MRV Systems	**Baseline Rating (1-10)**	**Target Rating (1-10)**	**Provide details of coverage of MRV systems - area, type of activity for which MRV is done, and of Reporting and Verification processes. Baseline indicates current status (pre-project), Target is the rating level that is expected to be achieved due to project support. For guidance for qualitative ratings (in comment) move cursor over box or right click to show comment.**
Inventory of agriculture related GHG emissions	4	7	See specific table in the CEO endorsement letter
Information of GHG emissions projections	2	5	Projections are mande basically to define mitigation NDC, and BAU.
M&E adaptation mesures	1	4	A set of measurements are being proposed in the thematic area of health, but their indicators are not clearly define yet.
MRV of Finance	2	5	
Indicator 4: Number of countries meeting Convention reporting requirements and including mitigation contributions			**Please specify the dates of submission for each report (for a multiple country project, please specify reports by country)**
National Communications			NC 1: june, 2001. NC 2: june 2010, NC 3: april 2016.
Biennial Update Reports			BUR 1: December 2014.
NDC			July 22th, 2016
Other			
Indicator 5: Qualitative assessment of institutional capacity for transparency-related activities	**Baseline Rating (1-4)**	**Target Rating (1-4)**	**CBIT projects will monitor an additional indicator for qualitative assessment of institutional capacity built for transparency-related activities under Article 13 of the Paris Agreement. Baseline indicates current status (pre-project), Target is the rating level that is expected to be achieved due to project support. For guidance for qualitative ratings (in comment) move cursor over box or right click to show comment.**
	2	3	MINAM through its DGCCD its the authority to coordinate transparency activities under Article 13 of the Paris Agreement. The planning and implementation of transparency activities are worked with INFOCARBONO staff, and it is also formally recognized as a mechanism for coordination with different sectors. However the instituional capacities regarding the adaptation and expenditures aspects are more limited.

ANNEX M: GEF OPERATIONAL FOCAL POINT ENDORSEMENT LETTER

PERÚ | Ministerio del Ambiente | Secretaría General | Oficina General de Planeamiento y Presupuesto

"Año del Buen Servicio al Ciudadano"

Lima, August 11, 2017

Carta Nº 015 -2017-MINAM/SG/OGPP/OCAI

Ms. Kelly West
GEF Coordinator
United Nations Environment Programme (UN ENVIRONMENT)

Subject: Endorsement for Project *"Capacity Building for Peru's transparency system for climate change mitigation and adaptation"*

Dear Ms. West,

In my capacity as GEF Operational Focal Point for Peru, I confirm that the above regional project proposal (a) is in accordance with the government's national priorities and the conmitments made by Peru under the relevant global environmental conventions and (b) has been discussed with relevant stakeholders, including the global environmental convention focal points, in accordance with GEF's policy on public involvement.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the suport of UN ENVIRONMENT as GEF implementing agency. If approved, the proposal will be prepared and implemented by the Ministry of Environment. Further, I request UNEP to provide a copy of the project document for information of this office before it is submitted to the GEF Secretariat for CEO endorsement.

I understand that the total GEF financing being requested for this project is US $ 1 367 655, including the project preparation grant (PPG), if any, and the Agency fee for project cycle management services associated with this project. The financing requested for the project is detailed in the table below:

Source of Funds	GEF Agency	Focal Area	Amount (in US$)			
			Project Preparation	Project	Fee	Total
CBIT	UNEP	Climate Change	50 000	1 199 000	118,665	1,367,655
Total CBIT Resources			50 000	1 199 000	118,655	1,367,655

We confirm our understanding that this project is not financed from STAR financing

Sincerely,

José Antonio González Norris
Perú GEF Operational Focal Point

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ANNEX N: CO-FINANCE LETTERS FROM PROJECT PARTNERS

Ministry of Environment

PERÚ | Ministerio del Ambiente | Viceministerio de Desarrollo Estratégico de los Recursos Naturales | Dirección General de Cambio Climático y Desertificación

"Decenio de la Igualdad de Oportunidades para mujeres y hombres"
"Año del Diálogo y la Reconciliación Nacional"

Lima, 20 SET. 2018

CARTA N° 91 -2018-MINAM/VMDERN/DGCCD

Señora
Kelly West,
Corporative Services Division
UN Environment
30552-00100
Nairobi, Kenya.-

Asunto: Detalle de la contrapartida para el Proyecto "Desarrollo de capacidades para el sistema de transparencia de Perú para la mitigación y adaptación al cambio climático (Proyecto CBIT)"

Tengo el agrado de dirigirme a usted en relación a la implementación del Proyecto "Desarrollo de capacidades para el sistema de transparencia de Perú para la mitigación y adaptación al cambio climático (Proyecto CBIT)", a cargo del Fondo para el Medio Ambiente Mundial, y que tendrá a cargo el Ministerio del Ambiente (MINAM) a través de la Dirección General de Cambio Climático y Desertificación (DGCCD).

Al respecto, el proyecto mencionado contribuye a la implementación del Acuerdo de París en el Perú y de las Contribuciones Nacionalmente Determinadas (NDC, por sus siglas en inglés). En tal sentido, de acuerdo a la Ley Marco sobre Cambio Climático (Ley Nº 30754) el MINAM es la Autoridad Nacional en materia de cambio climático y la autoridad técnico-normativa a nivel nacional en dicha materia en el marco de sus competencias.

Asimismo, conforme al Reglamento de Organización y Funciones del MINAM, la DGCCD tiene la función de coordinar la implementación de las NDC y su reporte periódico según lo establezca la Convención Marco de Naciones Unidas sobre Cambio Climático (CMNUCC).

Actualmente, la DGCCD viene llevando a cabo diversas iniciativas que contribuyen a la implementación de las NDC; así se cuenta con el Proyecto "Sistema para la acreditación de acciones de mitigación con potencial en el mercado de carbono" de la Alianza de Preparación para los Mercado de Carbono (PMR, por sus siglas en inglés) que cuenta con la asistencia del Programa de las Naciones Unidas para el Desarrollo (PNUD) y el Banco Mundial (BM); y la Iniciativa para la Transparencia de en la Acción Climática en Perú (ICAT, por sus siglas en inglés) que cuenta la administración de UNEP-DTU.

Las iniciativas mencionadas contribuirán a la implementación del Proyecto CBIT con actividades que están relacionadas al desarrollo del Marco de Transparencia derivado del Acuerdo de París en el país. Asimismo, el MINAM a través de su Oficina General de Administración (OGA) ha estimado una contrapartida en especies como aporte para llevar a cabo la implementación del Proyecto CBIT. A continuación se presenta una breve descripción de los recursos asociados a los componentes mencionados a fin de que puedan ser reconocidos por el Fondo para el Medio Ambiente Mundial (GEF, por sus siglas en inglés) como contrapartidas locales del Proyecto CBIT.

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10 años MINAM | EL PERÚ PRIMERO

Contrapartida CBIT (USD)	
Proyecto "Sistema para la acreditación de acciones de mitigación con potencial en el mercado de carbono"	200,000.00
Proyecto en el marco de la Iniciativa para la Transparencia de en la Acción Climática en Perú (ICAT)	125,000.00
Ministerio del Ambiente en especies, de acuerdo a las categorías presentadas por la Oficina General de Administración	325,000.00
TOTAL	650,000.00

En tal sentido, señalar que el Proyecto CBIT contribuye a las acciones que viene realizando el MINAM para la implementación de las NDC en el país y se complementa con las metas nacionales y las diversas iniciativas relacionadas a cambio climático en curso.

Es propicia la ocasión para expresarles los sentimientos de mi consideración.

Atentamente,

Rosa Morales Saravia

Directora General de Cambio Climático y Desertificación

Ministry of Environment – Translation

Lima, 20 September

CARTA N° 91-2018-MINAM/VMDERN/DGCCD

Ms.
Kelly West,
Corporative Services Division
UN Environment
30552-00100
Nairobi, Kenya.-

Subject: Detail of the Co-financing for the Project " Capacity Building for Peru's Transparency System for Climate Change Mitigation and Adaptation (Project CBIT)"

I have the pleasure of writing to you in relation to the implementation of the Project " Capacity Building for Peru's Transparency System for Climate Change Mitigation and Adaptation (Project CBIT)", funded by the Global Environment Facility, that will be in charge of the Ministry of Environment (MINAM) through the General Directorate of Climate Change and Desertification (DGCCD).

In this regard, the aforementioned project contributes to the implementation of the Paris Agreement in Peru and the Nationally Determined Contributions (NDC). In this regard, according to the Framework Law on Climate Change (Law No. 30754), MINAM is the National Authority on climate change and the technical-regulatory authority at the national level in that area within the framework of its competencies.

Also, in accordance with the Organization and Functions Regulation of the MINAM, the DGCCD has the function of coordinating the implementation of the NDC and its periodic report as established by the United Nations Framework Convention on Climate Change (UNFCCC).

Currently, the DGCCD is carrying out various initiatives that contribute to the implementation of the NDC; thus, the Project "System for the accreditation of mitigation actions with potential in the carbon market" of the Carbon Market Readiness Alliance (PMR), which receives the support of the the United Nations Development Program (UNDP) and the World Bank (WB); and the Initiative for Transparency in Climate Action in Peru (ICAT) executed by UNEP-DTU.

The aforementioned initiatives will contribute to the implementation of the CBIT Project with activities that are related to the development of the Transparency Framework derived from the Paris Agreement in the country. Likewise, the MINAM through its General Office of Administration (OGA) has estimated its in kind co-finance as a contribution to carry out the implementation of the CBIT Project. Below is a brief description of the resources associated with the aforementioned components so that they can be recognized by the Global Environment Facility as local counterparts of the CBIT Project.

Cofinance CBIT (USD)	
Project " System for the accreditation of mitigation actions with potential in the carbon market "	200,000.00
Initiative for Transparency in Climate Action in Peru (ICAT)	125,000.00
In-kind from MINAM, according to categories presented by the General Office of Administration	325,000.00
TOTAL	650,000.00

In this regard, note that the CBIT Project contributes to the actions being carried out by MINAM for the implementation of the NDC in the country and is complementary to the national goals and the various initiatives related to climate change in progress.

It is an opportunity to express my best regards.

Sincerely,

Rosa Morales Saravia

Director General of Climate Change and Desertification

National Agrarian University - La Molina

UNIVERSIDAD NACIONAL AGRARIA LA MOLINA

GRUPO DE INVESTIGACIÓN EN CAMBIO CLIMÁTICO Y GANADERÍA
FACULTAD DE ZOOTECNIA

"Año del Diálogo y Reconciliación Nacional"

Setiembre 18, 2018

Sra.
Roxana Orrego
Dirección General de Asuntos Ambientales Agrarios
MINAGRI

De mi consideración:

Felicitamos interés de avanzar en evaluaciones de emisiones de ganadería y estrategias de adaptación en su dirección.

La presente es para confirmar el interés del Centro Cambio climático y ganadería, Facultad de Zootecnia de la Universidad Nacional Agraria La Molina en participar de la implementación del Proyecto "Desarrollo de capacidades para el sistema de transparencia de Perú para la mitigación y adaptación al cambio climático (Proyecto CBIT)" que cuenta con financiamiento del Fondo para el Medio Ambiente Mundial (GEF).

Al respecto, manifestamos que como parte del fondo de becas de excelencia para estudiantes de Maestría en Nutrición Animal UNA La Molina: Tema cambio climático y ganadería; se considerará el trabajo de estudiantes que contribuirán a los objetivos del Proyecto CBIT referidos a la estimación de emisiones de GEI en el sector de ganado vacuno. Así, con la contribución de dicho fondo de excelencia se proyecta un aporte aproximado correspondiente a USD 50,000.00 que puede ser considerado como contrapartida para el Proyecto CBIT.

Agradecemos se considere e incluya entre los mecanismos propios del GEF el aporte antes mencionado y pueda comunicarlo al Ministerio del Ambiente como encargado del citado Proyecto.

Atentamente,

Carlos A. Gómez, PhD
Profesor Principal
Director del Centro Cambio climático y ganadería
Facultad de Zootecnia
Universidad Nacional Agraria La Molina

National Agrarian University - La Molina - Translation

RESEARCH GROUP ON CLIMATE CHANGE AND LIVESTOCK
FACULTY OF ZOOTECHNICS
"Year of National Dialogue and Reconciliation"

September 18, 2018

Mrs.
Roxana Orrego
General Directorate of Agrarian Environmental Affairs
MINAGRI

From my consideration:

We congratulate the interest to advance in evaluations of livestock emissions and Adaptation strategies in your direction.

This is to confirm the interest of the Climate Change and Livestock Center, Faculty of Zootechnics of the National Agrarian University La Molina to participate in the implementation of the Project "Capacity Building for Peru's Transparency System for Climate Change Mitigation and Adaptation (Project CBIT)" that funded by the Global Environment Facility (GEF).

In this regard, we state that as part of the scholarship fund of excellence for students of Masters in Animal Nutrition UNA La Molina: Subject climate change and cattle raising; the work of students who will contribute to the objectives of the Project CBIT referred to the estimation of GHG emissions in the bovine livestock sector will be considered. Thus, with the contribution of said fund of excellence, a support of approcimately USD 50,000.00 is projected, which can be considered as counterpart for the CBIT Project.

We appreciate this is taken into consideration and, following the GEF's own mechanisms, the aforementioned contribution is included and can be communicated to the Ministry of the Environment as the institution in charge of the aforementioned Project.

Sincerely,

Carlos A. Gómez, PhD

Main professor
Director of the Center Climate change and livestock
Faculty of Zootechnics
National Agrarian University La Molina

ANNEX O: ENVIRONMENTAL AND SOCIAL SAFEGUARDS CHECKLIST

UNEP Environmental, Social and Economic Review Note (ESERN)

I. Project Overview

Identification	*01588*
Project Title	*Project Preparation proposal for "Capacity Building for Peru's transparency system for climate change mitigation and adaptation"*
Managing Division	*Economy Division*
Type/Location	*National*
Region	*Latin America Caribbean*
List Countries	*Peru*
Project Description	*Given the lack of capacity in Peru to systematically generate, manage and use information related to climate change, the need for a comprehensive national transparency system has been identified. This system will need to address mitigation and adaptation actions as well as means of implementation, in order to track Peru's Nationally Determined Contributions.* *Under Component 1, "Climate change mitigation in Peru's transparency system" the project will aim to improve the quality of GHG inventories and to set the basis for the preparation and use of GHG projections. This will ultimately strengthen institutional and technical capacities for the formulation and use of sectorial long-term low greenhouse gas emissions development strategies.* *Under Component 2, "Adaptation to climate change in Peru's transparency system", the project intends to solve the lack of institutional arrangements in place to systematize information for the implementation of the adaptation component of the NDC and to track progress in the identified intermediate objectives. with a step by step approach, using the health sector as a pilot.* *Under Component 3, "Means of implementation in Peru's transparency system", the project will build institutional capacity for quantifying and reporting national public and private investments for the implementation of Peru's NDC.*
Estimated duration of project:	*36 months.*
Estimated cost of the project :	*USD 1,199,000*

II. Environmental Social and Economic Screening Determination

A. Summary of the Safeguard Risks Triggered

Safeguard Standard Triggered by the Project	Impact of Risk[38] (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M,
SS 1: Biodiversity, natural habitat and Sustainable Management of Living Resources	1	1	L
SS 2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes	1	1	L
SS 3: Safety of Dams	1	1	L
SS 4: Involuntary resettlement	1	1	L
SS 5: Indigenous peoples	1	1	L
SS 6: Labor and working conditions	1	1	L
SS 7: Cultural Heritage	1	1	L
SS 8: Gender equity	1	1	L
SS 9: Economic Sustainability	1	1	L
Additional Safeguard questions for projects seeking GCF-funding (Section IV)			

B. ESE Screening Decision[39] (Refer to the UNEP ESES Framework (Chapter 2) and the UNEP's ESES Guidelines.)

[38] Refer to UNEP Environment, Social and Economic Sustainability (ESES): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).

[39] Low risk: Negative impacts negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but less significant; few if any impacts irreversible; impact amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop a ESEMP. Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts, possibly irreversible, ESEA including a full impact assessment may be required, followed by an effective safeguard management plan.

Low risk ☒ Moderate risk ☐ High risk ☐ Additional information requir ☐
C. Development of ESE Review Note and Screening Decision:
Prepared by: Name: _Tania Daccarett ___ Date: 02 September 2018
Safeguard Advisor: Name: Yunae Yi_____ Date: _13 September 2018_____
Project Manager: Name: _____ Date: _____
D. Recommended further action from the Safeguard Advisor:

ANNEX P: ACRONYMS AND ABBREVIATIONS

APCI	:	*Agencia Peruana de Cooperación Internacional* – Peruvian Agency of International Cooperation
BaU	:	*Escenario base o inercial* - Business as Usual
BCRP	:	*Banco Central de Reserva del Perú* - Central Reserve Bank of Peru
BUR	:	Biennial Update Report
CAF	:	*Corporación Andina de Fomento* – Andean Development Corporation
CIAT	:	*Centro Internacional para la Agricultura Tropical* - International Center for Tropical Agriculture
CBIT	:	Capacity-Building Initiative for Transparency
CEDAW	:	Convention on the Elimination of all forms of Discrimination Against Women
CEPLAN	:	*Centro nacional de Planeamiento estratégico* - National Center for Strategic Planning
CNCC3:	:	*Tercera Comunicación Nacional de Cambio Climático* - Peru's Third National Communication
COP	:	Conference of the Parties
CTA	:	Chief Technical Advisor
DGAAA		General Directorate of Agrarian Environmental Affairs
DGCCD	:	*Dirección General de Cambio Climático y Desertificación del MINAM* - General Directorate of Climate Change and Land Degradation
DIRESAS	:	Regional Health Directions
DMGEI		Direction of Greenhouse Gases Mitigation
ENCC:	:	*Estrategia Nacional ante el Cambio Climático* - National Strategy for Climate Change
ETF	:	Enhanced Transparency Framework
FAO	:	Food and Agriculture Organization
FEN	:	*Fenómeno El Niño* - El NiÑo Phenomenon
FONAM:	:	*Fondo Nacional del Ambiente* – National Fund for Environment
FONDAM	:	*Fondo de las Américas* – America´s Fund
FONDECYT	:	*Fondo Nacional de Desarrollo Científico, e Innovación Tecnológica* – National Fund of Scientific Develpment,
FONIPREL	:	*Fondo de Promoción a la Inversión Pública Regional y Local* – Fund for Promoting Regional and Local Public Investment.
FONTAGRO	:	*Fondo Regional de Tecnologia Agropecuaria* - Regional Fund for Agricultural Technology
GDP	:	Gross Domestic Product
GEF	:	Global Environment Facility
GHG	:	Greenhouse Gases
GIZ	:	*Gusellschaft für Internationale Zusammenarbeit* – German International Cooperation for Development
GTM	:	*Grupo de Técnico Multisectorial* - Multisectorial Working Group
GTSACC		*Grupo Técnico de Trabajo en Seguridad Alimenticia y Cambio Climático* - Technical Working Group on Food Safety and CC
ICAT	:	Initiative for Climate Action Transparency
iNDC	:	Intended Nationally Determined Contributions
INEI	:	*Instituto Nacional de Estadística e Informática* - Statistics and Informatics National Institute
INGEI	:	*Inventario Nacional de Gases de Efecto Invernadero* – National GHG Inventory
INIA	:	*Instituto Nacional de Innovación Agraria* - National Institute of Agrarian Innovation
IPCC	:	Intergovernmental Panel on Climate Change
LMCC	:	*Ley Marco de Cambio Climático* - Framework Law on Climate Change
LULUCF	:	Land Use, Land Use Change and Forestry
MACC	:	*Medidas de Adaptación al Cambio Climático* - Climate change adaptation actions
M&E	:	Monitoring and Evaluation
MEF	:	Ministry of Economy and Finance
MEM	:	Ministry of Energy and Mines
MINAGRI	:	Ministry of Agriculture and Irrigation
MINAM	:	*Ministerio del Ambiente* - Ministry of Environment
MINSA	:	Ministerio de Salud – Ministry of Health
MRV	:	Mesurable, Reportable and Verificable
NDC	:	Nationally Determined Contribution

NAMA	:	National Appropriate Mitigation Actions
NAP	:	National Adaptation Plan
PAHO	:	Pan American Health Organization
PlanCC	:	*Proyecto Planificación ante el Cambio Climático* – Planification Project for Climate Change
PLANIG	:	*Plan Nacional de Igualdad de Género* - National Plan for Gender Equality
PNCBMCC	:	*Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático* - Forests Conservation National Program for the Mitigation of Climate Change
PNGCC	:	*Plan Nacional para Género y Cambio Climático* - National Plan on Gender and Climate Change
PRODUCE	:	*Ministerio de la Producción* - Ministry of Prodution
PROFONANPE	:	*Fondo de Promoción de las Áreas Naturales del Perú* – Peruvian Trust Fund for National Parks and Protected Areas
RAGEI	:	*Reporte Anual de Gases de Efecto Invernadero* – Annual GHG Report
SDG	:	Sustainable Development Goals
SINANPE	:	*Servicio Nacional de Áreas Naturales Protegidas* - National System of Natural Areas Protected by the State
SENAMHI	:	*Servicio Nacional de Meteorología e Hidrología del Perú* - National Service of Meteorology and Hydrology
SERFOR	:	*Servicio Nacional Forestal y de Fauna Silvestre* - Forestry and Wildlife National Service
SIAF	:	Integrated System of Financial Administration
SMV	:	*Superintendencia del Mercado de Valores* - Stock Market superintendence
UNALM	:	*Universidad Nacional Agraria La Molina* - National Agrarian University La Molina
UNFCCC		United Nations Framework Convention on Cimate Change

ANNEX Q: TABLE OF CONTENT