Strengthening Myanmar's institutional and technical capacities to comply with the Enhanced Transparency Framework of the Paris Agreement

Part I: Project Information

GEF ID
10380

Project Type
MSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **Yes**
NGI **No**

Project Title
Strengthening Myanmar's institutional and technical capacities to comply with the Enhanced Transparency Framework of the Paris Agreement

Countries
Myanmar

Agency(ies)
UNEP

Other Executing Partner(s)
Environment Conservation Department, Ministry of Natural Resources and Environmental Conservation

Executing Partner Type
Government

GEF Focal Area
Climate Change

Taxonomy

Focal Areas, Capacity, Knowledge and Research, Influencing models, Stakeholders, Gender Equality

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

5/31/2021

Expected Implementation Start

1/1/2022

Expected Completion Date

12/31/2024

Duration

36In Months

Agency Fee($)

134,753.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCM-1-1		GET	1,418,450.00	
		Total Project Cost($)	**1,418,450.00**	**0.00**

B. Project description summary

Project Objective

To strengthen Myanmar's institutional and technical capacity to meet the Enhanced Transparency Framework (ETF) of the Paris Agreement

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1. Technical support provided to strengthen institutional and human capacities for preparing GHG inventories on a regular basis in accordance with Paris Agreement requirements	Technical Assistance	1. Myanmar prepares and delivers high-quality reports according to Paris Agreement requirements and ETF standards	1.1. Formal institutional arrangements, including procedural and legal framework developed and ready for adoption 1.2 IT based National GHG Inventory System for preparing and reporting GHG Inventory and archiving data developed and made available to line ministries and agencies 1.3. Tools and protocols for GHG data collection and GHG Inventory preparation developed and adopted, and key staff trained on their utilization 1.4. Country-	GET	766,200.00	

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2. Technical support provided to strengthening institutional and human capacities to track and report transparently on implementation of its mitigation actions in National Determined Contributions and support received	Technical Assistance	2. Myanmar tracks its progress towards the achievement of its NDCs[1] and the related support received, and reports according to Paris Agreement ETF requirements;	2.1. Monitoring indicators and tools to track progress towards the energy goals defined in the NDC designed and made available to relevant ministries and agencies 2.2. Domestic system for tracking NDC Mitigation actions is designed and operationalized 2.3. Framework for tracking support received for implementing NDC designed and recommendations for implementation developed	GET	345,900.00	

[1] Nationally Determined Contribution

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3. Strengthening regional cooperation for knowledge and information sharing including cooperative research projects for developing emission factors	Technical Assistance	3. Myanmar cooperates, and shares knowledge related to ETF with other countries in the region	3.1. Regional cooperation and peer-peer exchange workshops organized	GET	140,400.00	
Monitoring and Evaluation	Technical Assistance		M&E	GET	37,000.00	
				Sub Total ($)	**1,289,500.00**	**0.00**

Project Management Cost (PMC)

GET	128,950.00		
Sub Total($)	**128,950.00**		**0.00**
Total Project Cost($)	**1,418,450.00**		**0.00**

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
			Total Co-Financing($)	

Describe how any "Investment Mobilized" was identified

The EA has not provided any written confirmation of the co-finance for the project. It will oversee the execution of project and host the project management unit (PMU). The EA will provide in-kind contribution through office space for the PMU, time of the national project director (full time staff of EA) who will supervise the PMU, and meeting space/room for project meetings. This will be captured in the project information reports (PIRs). The project will also re view other source of co-finance during the project implementation and capture them through the PIRs.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)
UNEP	GET	Myanmar	Climate Change	CBIT Set-Aside	1,418,450	134,753
				Total Grant Resources($)	**1,418,450.00**	**134,753.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

40,000

PPG Agency Fee ($)

3,800

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)
UNEP	GET	Myanmar	Climate Change	CBIT Set-Aside	40,000	3,800
				Total Project Costs($)	**40,000.00**	**3,800.00**

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Akula National Park	125689	SelectOthers				

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

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

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	75	75		
Male	75	75		
Total	150	150	0	0

Part II. Project Justification

1a. Project Description

1a. Changes in project design

Minor changes and adjustments were undertaken in complete project design regarding the project results framework, budget and co-finance amount based on UNEP Project Review Committee feedback as shown in table below.

Component, outcome, output	PIF	CEO ED
Output 1.1	Formal institutional arrangements established including procedural and legal framework	Formal institutional arrangements, including procedural and legal framework developed and ready for adoption
Output 1.3	Tools and protocols developed and adopted for GHG data collection and GHG Inventory preparation, and training provided to stakeholders;	Tools and protocols for GHG data collection and GHG Inventory preparation developed and adopted, and key staff trained on their utilization
Output 1.4	Country-specific emission factors developed for energy sector and agriculture and livestock sector	Country-applicable emission factors database developed for the energy, agriculture and livestock sectors
Output 2.1 (2.2 in PIF)	Monitoring indicators and tools to track progress towards the energy goals designed and made available;	Monitoring indicators and tools to track progress towards the energy goals defined in the NDC designed and made available to relevant ministries and agencies

While the project outcomes remain unaltered, their wording has been modified. The scope of Output 1.4 has been narrowed to developing a database of emission factors (EF) drawing on research on emission factors from across the region and from countries with similar conditions in lieu of developing country specific emission factor. The most important factor in improving GHG inventory is the uncertainty in the activity data. Thus, the resources are focused on improving the quality and accuracy of data and GHG data base management system. The IPCC defaults, though in some categories are based on regional characteristics, may not be applicable to the country. A number of countries in the neighboring region, which have capacities, are undertaking work on country specific emission factors. Also, a body of research publication on the emissions factors in the countries within the region is available. Using this more region specific emission factor data is a cost-effective step in reducing the uncertainties in GHG inventory due to IPCC default factors. Thus the GEF resources will be more effectively used in improving the data collection systems to reduce the large uncertainty compared to spending the same level of resources in developing country specific emission factor. Further, the capacities within the research institutes and universities is not at a level to undertake research on country specific emission factors. Output 1.4 will enable developing linkages with research institutes working on emission factor development and these linkages over time will help country develop necessary capacity to develop its own emission factors.

Budget allocation of components has slightly changed on two counts: in the PIF the cost of terminal evaluation was reflected in each of the component, which is now consolidated under M&E budget line; and, the cost of component 1 is slightly increased, and component 2 slightly decreased as the costs related to NDC registry is reflected in the cost of GHG database system to be developed, as both will be on the same platform.

1b. Project Description

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

Global environmental problem and localized impacts: Anthropogenic climate change is widely accepted as the most significant environmental challenge faced by the world in the 21st century. The Fifth Assessment Report[1][1] (AR5) (2014) and the Global Warming of 1.5 ?C (2018) special report[2][2] by the Intergovernmental Panel on Climate Change (IPCC) confirms that climate change will significantly impact the Republic of the Union of Myanmar (hereafter Myanmar), which is a least developed country (LDC) whose economy is highly dependent on natural resources. Several studies have been conducted highlighting Myanmar?s vulnerability to climate change. According to the Global Climate Risk Index 2021, between 2000-2019, Myanmar was one of the three most vulnerable countries affected by extreme weather events and exceptionally devastating events such as hurricanes (like Cyclone Nargis); as measured by having one of the highest fatality rates per 100,000 inhabitants. The World Bank[3][3] has identified an increasing frequency of severe droughts throughout the country; cyclones have made landfall along Myanmar?s coastline every year; and, an increase in extreme high temperatures and its effects on human health, among others. A 2017 report, Assessing Climate Risk in Myanmar,[4][4] applied climate risk information to various sectors such as biodiversity, coastal zones, health, water resources and other sectors. In addition to these vulnerabilities, the country, like other LDCs, faces developmental deficits across all sectors. For this reason, Myanmar will need to prioritize development objectives, and this will likely contribute directly or indirectly, to increase in its net greenhouse gas (GHG) emissions. As per its most updated GHG inventory, submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2005, Myanmar contributed to less than 0.75% of global emissions. Despite its miniscule contribution, the country will be making all efforts within its human, financial and technical capacity to limit the growth of GHG emissions.

Paris Agreement and Myanmar: The 21st Conference of the Parties (COP21) was a key milestone for the international climate negotiations in adopting the Paris Agreement (PA), which came into force in 2016. Myanmar signed and ratified the Agreement on 19 September 2017. One of the unique aspects of the PA is the contribution of both Annex 1 Parties and non-Annex 1 Parties in climate change mitigation efforts in the form of nationally determined contributions (NDCs). Article 13 of the PA outlines the transparency framework relating to the transparency of action and support. The main purpose of the ETF is to improve mutual accountability amongst the Parties in terms of their efforts for emissions reduction, adaptation efforts and support needed and received for addressing climate change.

Myanmar?s climate ambitions: Despite being a country with very limited emissions, the Myanmar is committed to support the temperature goal of the PA. Myanmar submitted a fair and ambitious Intended Nationally Determined Contribution (INDC) in September 2015 with mitigation and adaptation actions in a number of sectors. In its draft 2021 NDC currently being finalized, Myanmar aims to reduce its total emissions by an estimated 244 $MtCO_2e$ by 2030. The country has expanded the scope and scale of unconditional sectoral targets for GHG mitigation significantly beyond the initial focus on electricity generation and forestry. Subject to the availability of financial resources, technology transfer and capacity building, the country has also identified conditional targets that will allow it to reduce GHG emissions further by approximately 413 $MtCO_2e$. This updated NDC is under review by the Government and is expected to be submitted in the coming months.

Requirements emanating from the Paris Agreement reporting framework: Parties to the UNFCCC agreed on the Katowice Climate Package during the 24th Conference of the Parties (COP 24) held in December 2018. The Katowice Climate Package included eight guiding principles for the modalities, procedures and guidelines (MPGs) of the Enhanced Transparency Framework (ETF) under the PA. These include:

1) Building on, and enhancing the transparency arrangements under the Convention, recognizing the special circumstances of the LDCs and Small Island Developing States (SIDS), and implementing the transparency framework in a facilitative, non-intrusive, non-punitive manner, respecting national sovereignty, and avoiding placing undue burden on Parties;

2) The importance of facilitating improved reporting and transparency over time;

3) Providing flexibility to those developing country Parties that need it in the light of their capacities;

4) Promoting transparency, accuracy, completeness, consistency and comparability;

5) Avoiding duplication of work and undue burden on Parties and the secretariat;

6) Ensuring that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention;

7) Ensuring that double counting is avoided; and

8) Ensuring environmental integrity.

Challenges posted to Myanmar in meeting the requirements of ETF: The ETF requires all Parties to compile national GHG inventories (GHGI), and to report on the implementation of mitigation actions (tracking of NDC implementation) on a regular basis. Myanmar faces several challenges (technical and human capacity, and financial) in meeting its current reporting obligations as mentioned in the root causes and barriers analysis presented below. The enhanced reporting systems under the Paris Agreement only further add to these existing gaps. Nonetheless, the country has committed to make all efforts to meet its obligations under the ETF, using the flexibilities provided to LDCs till the in-country ETF mechanism is strengthened to enable Myanmar to address all the requirements.

Reports submitted by Myanmar to the UNFCCC and the Paris Agreement

Reports to the UNFCCC: As part of its obligations under the UNFCCC, Myanmar has to date submitted its initial national communication (INC) and is in the final stages of finalizing its second national communication (SNC) as well starting preparation on its first biennial update report (BUR1).

However, as an LDC with limited internal resources (technical, financial and human) and access to external climate finance, the country has faced challenges in gathering the required data and information. The country has reported one GHGI of its emissions and removals for the year 2000 in the INC it submitted in 2012. The INC also reported on a time-series of GHG emissions from the energy, industrial processes and product use (IPPU), agriculture and livestock sectors for the years 2000-2005. Myanmar could estimate methane emission projections for the waste sector for the years 2000-2020. The country continues to face challenges in continually monitoring its emissions and removals to create a complete time-series of GHGI.

Reports to the Paris Agreement: Myanmar launched itself on an ambitious journey to contribute to the global aim of reducing GHG emissions, to restrict the increase in global average temperature to less than 2?C and indeed pursue efforts to limit it to 1.5?C, by submitting its intended nationally determined contributions (INDC) in 2015, which has now been adopted as its nationally determined contributions (NDC) following its ratification and coming into effect of the Paris Agreement. The country has subsequently progressed on its updated NDC submission as well, which is in its final stages of approval. Thereby Myanmar will become one of the few LDCs to meet their reporting obligations under the Paris Agreement. This not only demonstrates the country?s commitment, but also its leadership in pursuing ambitious targets that are synchronized with its national development priorities.

Challenges in regular reporting: The country has been unable to meet its reporting obligations under the UNFCCC because of the key challenges and barriers, as identified in below paragraphs.

Key challenges in regularly reporting to the Convention

1) *Human capacities to address climate change:* There is limited availability of trained human resources and technical institutes in the country to assess the impacts of climate change, identify vulnerable communities / regions / sectors, and create appropriate mitigation and adaptation strategies and actions plans. Similarly, the country has limited human resources and institutes to develop GHG emissions projections over the medium to long term, to identify opportunities to reduce the emissions, to integrate these actions into development planning and processes, and to develop strategies and action plans. This impacts the identification and development of actions to collect data relevant for assessing GHG emissions, impacts of development actions on increase/decrease of GHG emissions, adaptation related data etc.

2) *Technical Capacity to prepare National Communications (NCs)/Biennial Update Reports (BURs)*: ECD is responsible for preparing and reporting to the UNFCCC. However, it lacks sufficient capacity in its staff to understand the requirements of reporting, data requirements, assessment, and analysis of data, etc., especially with the updated reporting requirements under the ETF. The INC and NDC and the newly revised draft NDC (2020) were prepared with the support from consultants or development partners. This lack of understanding of inventory preparation and assessing climate actions, including data requirements, extends to other government entities and other key stakeholders as well.

3) *Tools and templates for GHGI preparation:* To prepare the GHGI under the INC and SNC, ECD sent specific requests for data collection, creating the templates for each iteration. The entities responsible for providing the activity data and/or emission factors did not have this information readily available with them. ECD also had challenges in undertaking the quality checks and assurance of the data.

4) *Project based approach to preparing the UNFCCC reports:* The preparation of a report, such as the NC and BUR, is implemented as a discrete project rather than as a regular part of the mandate of the focal ministries and the related line ministries and agencies. This also relates to the fact that the NC and BUR reports are treated as reports to meet the (external) Convention/Protocol/Agreement requirements rather being used as a tool for monitoring by the country of its climate change related actions and challenges for its medium to long term development. This results in ad hoc approaches and

processes to deliver the required reports, with insufficient retention of capacities nor establishment of systems enabling future reporting.

5) *Mainstreaming of Climate actions:* Climate action is officially regarded as the responsibility of the ECD within Ministry of Natural Resources and Environmental Conservation (MONREC), which is the UNFCCC focal point for negotiations and reporting. The development of the NDC, NC as well as the Myanmar Climate Change Strategy, Policy and Action Plan (MCCSP & AP) were led by ECD and its development partners, and although these were prepared in a highly consultative manner with other government stakeholders, these efforts largely ended with completion of the relevant report/policy documents due to reliance on external funding. Consequently, climate change actions are not yet mainstreamed into the plans and responsibilities of all government departments and ministries. This has implications in terms of capacity within each government entity to understand the data requirements required for preparing reports. Moreover, while ECD is responsible for coordinating the work, the necessary data and information necessary for the work is collected and owned by other line ministries, which ECD can only request, rather than being a legal obligation of other line ministries to provide.

6) *Challenges in monitoring mitigation actions:* Myanmar lacks experience in tracking and reporting of mitigation actions. Myanmar will be producing its first report on progress and impacts of mitigation actions implemented till date in the BUR1. There is currently no capacity to undertake this process in a systemic manner that assists in linking these seamlessly into NDC implementation and update. The updated NDC, expected to be submitted to the UNFCCC soon, will have additional mitigation actions and the country needs to quickly update its capacity to measure progress on these activities.

Barriers preventing Myanmar from addressing these challenges

1) *Lack of permanent institutional arrangements for preparing reports to the Convention:* ECD has been mandated to lead the preparation of reports to the Convention. Most line ministries and other institutions that manage or report on activities that result in emissions (or removals) have no defined mandate to address climate change issues. Consequently, they have no obligation to collect data relevant to preparing a GHG inventory or measuring / estimating / calculating GHG emissions (or removals). Furthermore they have no obligation to share this information with the coordinating entity (ECD). ECD does establish project coordination committees and technical working groups (see baseline section) to engage relevant government entities in preparing reports to the UNFCCC or the Paris Agreement. The (primarily) government staff nominees who participate in these project institutional arrangements may have limited knowledge of, or no formally assigned responsibility for their agency in reporting on climate change, rather are nominated from the unit/department whose activities seems most relevant to the concerned ministry. Therefore, these responsibilities are assigned on an ad hoc basis, and are seen as additional responsibilities that are not part of their primary mandate. Moreover, there are no centrally defined processes for NC, BUR and GHGI preparation, no clear-cut roles and responsibility charts for line ministries or other departments (or private sector actors), for directives defining the protocols for regularly collecting, compiling, reviewing, reporting or maintain data. As previously mentioned, there are also no government directives (or official legal instrument) defining such a mandate. A Global Green Growth Institute (GGGI) assessment of the Energy Sector reporting systems observed that although ECD has the authority to request data from each ministry, given the lack of mandate for ministry on climate change there are no systems or personnel available in counterpart agencies to comply with these requests and to provide timely data. Consequently, the sourcing data can take a long time, delaying the preparation of reports.

2) *Absence of data sharing policy or mandate:* There is no clear policy or requirement on the part of Government entities that collect data to share it with ECD. In the absence of any formal process, all data that is collected by ECD through official requests and the speed of its availability is dictated by relationships and understanding of the assigned staff in the line ministry. For the SNC, the GHGI team relied on iterative use of three different means of communication (via email, through official

consultation meetings, and through official request letters) to collect data from 2005 to 2015. This is compounded by the fact that there is no centralized system for storing, archiving, and retrieving data and information for current collection of data either within or across departments and ministries. Generally, the data that is available is published in various locations in different formats and needs to be collected and collated on a needed basis. There is also no established data retention policy that will enable either the relevant ministry or department or the ECD to retrieve it on demand, and elaborate procedures frequently have to be redeployed to gather the same data.

3) *Lack of proper methods in data acquisition, analysis, and management:* As mentioned, the data for preparing NCs and BUR have been collected on an ad hoc basis to prepare the report. The SNC project has prepared data templates for GHG inventory based on the data requirements under the IPCC 2006 Guidelines and the UNFCCC Non-Annex I Inventory Software (NAIIS)[5][5]. There is no guideline or tool to define how to collect the required data, the methodologies for estimating and analysing the data to prepare GHG inventories or to assess impacts of climate actions. Further, there are no guidelines or systems for quality control of data collected, of the reported data, or the analyses performed to ensure the accuracy of the estimates. Further, there is no system for storing and managing the collected data and analysis within ECD.

4) Reluctance by the private sector in provision of their data: Since much of activity data directly relates to industries? production line data and rates, many private sector entities and stakeholders are hesitant to share this data with Government entities and consider them confidential. The private sector actors that are the most significant emitters of GHGs currently have no obligation nor demonstrate any voluntary interest in systematically collecting data of relevance for preparing a GHGI. Private sector capacity for such data collection and GHGI preparation and its other associated processes need to be assessed and enhanced.

5) Lack of systems for building capacity among various stakeholders: Even though Myanmar completed its first GHGI (for the year 2000), most of the GHG inventory stakeholders who participated in this exercise have already retired, and the next generation of government staff and university personnel involved did not receive the necessary capacity building for GHGI preparation for the SNC. In part this is due to the standard practice of civil servant assignment rotations between HQ departments and regional/state office postings, and promotions that create a high rate of staff turnover. Consequently, new staff members involved in GHGI preparation have insufficient technical knowledge or exposure to GHGI, requiring the SNC to conduct extensive preparatory activities to first develop this capacity internally before preparing the GHGI, thereby causing bottlenecks. The current SNC team has been established on an ad-hoc basis, and relies extensively on consultants, so the government staff members involved cannot expect to be tasked with preparing the next inventory. Without permanent assignments, any technical capacity transfer can be expected to be minimal without express interventions. Over the course of 2018-2020, ECD, working with GGGI and the Australian Volunteers Program, has established a Training-for-Trainers program providing overall introduction to concepts related to monitoring, reporting and verification (MRV) of Myanmar?s NDC. Significant further investments are needed to scale up and ensure annual delivery of this training for, and deepen the technical scope of the training to encompass the range of technical specifications needed in a GHGI for different departments and ministries

In summary, there is a need, therefore, for the Myanmar to:

? Establish a permanent institutional arrangement mandating GHG inventory compilation and tracking of NDC commitments;

? Develop a centralized climate data management system for GHG data, tracking of mitigation actions, adaptation actions, and support received and needed; and

? Develop tools and train experts to meet the enhanced transparency framework under the Paris Agreement.

b) Baseline scenario and any associated baseline projects

Myanmar ratified the UNFCCC on 11 June 1992, the Kyoto Protocol on 13 August 2003, and signed the Paris Agreement on 22 April 2016, ratifying it on 17 September 2017. This section provides the National Environmental Policy framework, including the climate change policies governing country?s climate change response and the elements related to: Institutional arrangements for coordination climate change policy implementation including GHG inventory preparation, GHG Inventory compilation system, Climate action tracking, and climate finance tracking.

National Planning and Environmental Policy Framework

Myanmar has developed a variety of sectoral policies and planning documents in pursuit of its national development goals. A summary of the strategies, plans, and policies that are relevant to this project proposal is provided in the table below.

Table 1: Current list of climate lawsand Policies in Myanmar

Title	**Relevance of Law/Strategy/ Plan/Policy to Project Proposal**
National	
Environmental Conservation Law, 2012	The proposed project fits into the long-term national environmental agenda and regulatory framework within Myanmar, which has a focus on *maintaining a comprehensive environmental conservation monitoring system*
National League for Democracy, 2015 Election Manifesto	State activities that will be undertaken to *reduce the current levels of pollution and environmental harm.*
National Environmental Policy of Myanmar, 2018	Enhance institutional capacities for climate change mitigation and adaptation. Identification of air quality monitoring methods and data analysis priorities.
Myanmar Climate Change Policy 2018	Prepare, communicate and maintain periodic Nationally Determined Contributions. Mandates the formulation and implementation of the current Strategy and Master Plan.

Myanmar Climate Change Strategy - and Myanmar Climate Change Master Plan, 2018 - 2030	Establish operational institutional arrangements and a coordination mechanism to monitor progress towards achieving objectives (e.g., Reducing Emissions from Deforestation and Degradation (REDD+) and NCs). Delivers the Myanmar National Climate Change Policy.
Intended Nationally Determined Contribution, 2015	States the mitigation and adaptation actions that will be implemented to attain the intended nationally determined contribution to GHG emission reductions.
National Comprehensive Development Plan, 2011 - 2030	Climate change is considered a main focus under the ?environmental pillar?.
Green Economy Policy Framework	Identification of capacity building priorities, including training relevant government departments on audits and data collection
Myanmar Action Plan on Disaster Risk Reduction 2009 ? 2015	Unified action plan for disaster risk reduction with prioritized interventions across Myanmar until 2020. The action plan identifies 32 priority actions under four pillars: risk information and awareness; risk governance; risk mitigation; and preparedness and response, rehabilitation and reconstruction. For each priority action, objectives, activities, outputs, duration, lead agencies, and supporting partners have been identified. The priority actions aim to strengthen the policy frameworks and systems for long-term risk reduction. Robust implementation, funding, as well as monitoring and evaluation mechanisms have been identified.
National Energy Efficiency and Conservation Policy 2016	This policy focuses on four main sectors: industrial, commercial, residential and public, and sets a number of energy reduction targets.
Myanmar?s National Adaptation Program of Action (NAPA) to Climate Change 2012	Myanmar?s NAPA specifies 32 priority activities (referred to as Priority Adaptation Projects) for effective climate change adaptation for eight main sectors/themes; agriculture, early warning systems, forest, public health, water resources, coastal zone, energy and industry, and biodiversity.

International	
Reporting to the UNFCCC	Myanmar?s INC and NAPA have been submitted to the UNFCCC in 2012. INDC in 2015 and FREL in 2018 are also in place. Updated INDC or NDC has been drafted with revised and additional targets of energy and LULUCF (particularly forestry) sectors. The country is preparing its SNC with UN Environment which is likely to be submitted to the UNFCCC as much as possible. The country is in the process of initiating preparation of its first BUR and NAP.
Myanmar Reducing emissions from deforestation and forest degradation (REDD+) Readiness Roadmap 2013	The Roadmap sets out how Myanmar will implement its REDD+ Readiness activities with emphasis on six components: REDD+ management, multi-stakeholder involvement, National REDD+ Strategy, national FREL, Safeguard Information System and Forest Monitoring System.

Myanmar National Climate Change Policy

The Myanmar Climate Change Policy[6][6] and the related Myanmar Climate Change Strategy and Master Plan (2018-2030) were adopted by the country in 2019. Basing it on the currently available scientific literature and evidence, the Policy set out a vision to the country a climate-resilient, low carbon society that is sustainable, prosperous and inclusive, for the wellbeing of present and future generations. This policy builds on the following: *?guiding principles of Sustainable Development, using a precautionary approach, with a view to taking anticipatory action to prevent or minimize environmental damage, ensuring the environmental integrity expressed through the promoting, protecting and conserving the natural environment and recognizing its complete and intrinsic value, emphasizing shared responsibility and cooperation; ensuring inclusiveness, good governance to achieve climate justice and equity through several measures that, among other things, can contribute to gender equality and women?s empowerment.?*

The Policy defined a number of sector-specific priorities and actions to be implemented, focused on:

? Food and water security,

? Healthy ecosystems,

? Low-carbon and resilient growth,

? Resilient urban and rural settlements,

? Human wellbeing, and

? Knowledge, awareness, and research.

Myanmar envisions that it will take the following overarching and cross-cutting measures to enable implementation of this Policy, namely by:

1) Amending existing or adopting new laws, regulations, strategies, action plans and policies;

2) Establishing or strengthening existing institutions;

3) All sectors assess the finance, budgets and investment required;

4) Continuing to build capacities;

5) Promoting research and technology, especially the collection, analysis and dissemination of real-time data and information on short-, medium- and long-term climate change impacts, trends and projections relating to all geographic regions;

6) Strengthening current partnerships and building new ones;

7) Ensuring transparency and accountability of all stakeholders; and

8) Continually monitoring, evaluating, reporting and learning.

Institutional setup for coordinating and oversight on climate action implementation

The National Environmental Conservation and Climate Change Central Committee (NECCCC) is the main inter-ministerial body responsible for coordinating the implementation the Myanmar Climate Change Policy and Myanmar?s NDC. This decision making and coordinating body comprises a total of twenty-three? members, with twenty representatives from across eighteen ministries, and one representative each from a CSO, NGO, and the private sector. Under this overarching body, the NECCCC assigned roles to focal agencies (Ministries) to advance activities under the respective sectoral outcomes, monitor progress, and report back to the NECCCCC on implementation of climate change policy on a yearly basis. MONREC acts as the secretariat for the NECCCC and operationalizes its functions through six permanent Working Committees. These are:

1) Policy, Law, Rules, and Quality Standard,

2) Industrial plans, urban and rural environment and waste management,

3) Natural resources, biodiversity and cultural heritage conservation,

4) Climate change adaptation and mitigation,

5) Environmental conservation, human development, education and awareness, and

6) Green economy and development.

The NECCCCC formally assigns the roles of coordination and monitoring to state- and regional-level environmental conservation and climate change committees in each of Myanmar?s seven states and seven regions as well as in the Nay Pyi Taw Union Territory. These committees in turn are required to assess progress in cooperation with district, township and city authorities and other partners, each of which will also have their own environmental conservation and climate change committees (E-5Cs). The state and region E-5Cs are to ensure that all programs, projects and activities implemented in the

state, region, district, city or township contribute to the progress of the NDC and are responsible for reporting to the NECCCCC.

Though the institutional arrangement is defined in the MCCA, it has not been operationalized. The supporting institutional structure to enable NECCCCC and E-C5s to perform their functions too have not been elaborated.

GHG Inventory Compilation process

As mentioned earlier, Myanmar has submitted only one NC and is in the process of finalizing its second NC and initiating work on first BUR. There is no formal defined process for initiating the GHG inventory process and it is tied to funding received from GEF under the convention. The Project Implementation Plan (PIP) lays out the work plan for preparing the GHG inventory and the report as well as defines the key partners to be engaged and the institutional arrangement created to coordinate preparation of report.

INC used The Intergovernmental Panel for Climate Change (IPCC) 2006 guidelines in preparing the GHG inventory, which are also used for preparation of the SNC and BUR GHG inventories. There are no country specific emission factors/default values available in Myanmar and therefore the emission factors and default values as described in IPCC 2006 Guidelines are used for preparing the GHG Inventory.

The SNC process has established a National Greenhouse Inventory and Mitigation Action Thematic Working Group to support preparing the inventory, and through Notification (90\2018) of MONREC (See figure 2 below). The Data has been requested to 13 members from respective departments and enterprises from MoEE for Energy Sector and Ministry of Transport and Communications (MoTC) for Transportation Sector. The activity data will be collated from various government publications as well as from international publications that include data relevant to Myanmar (International Energy Agencies (IEA), Food and Agriculture Organization (FAO), UN Statistics, etc.).

The SNC is working through several activities aimed at increasing the reliability of data available. The GHGI itself is being compiled as per the UNFCCC Inventory Software (v-132), while the data entry and estimate has been through the IPCC Inventory software (v 2.54). In addition to these, the Agriculture and land-use national GHGI software[7][7] is also being used. The SNC development team is relying on hard and soft copies of data, as well as a cloud-based data storage service.

Figure 2: Institutional setup for preparing snc

Transparency framework for tracking Mitigation Actions

Myanmar?s NDC has largely been informed by sectoral polices and plans developed through sectoral planning processes for both climate change adaptation and mitigation. It refers to and is based on national sectoral polities, including those indicated above in Table 1, whose constituent Ministries have

committed to meeting the NDC targets outlined in Table 2 below. Myanmar?s unconditional total emissions reduction contributions as set out in its draft NDC are 244 million tCO_{2e}, whereas the country is aiming to achieve a total of 413 million tCO_{2e} in emissions reductions as a conditional target by 2030, subject to the availability and provision of international finance and technical support.

Table 2: Current list of targets in the NDC (2020)

Sector	**Unconditional**	**Conditional**
Energy	Hydropower expansion reduced from a BAU of 38% (8896 MW) to 29% (5156MW) to meet greater social and environmental safeguard standards	
	Reduce reliance on coal from a BAU of 34% (7940 MW) to 20% (3620 MW) by 2030	Reduce reliance on coal to 12% (2120 MW) by 2030
	Expand renewable energy to 1440MW (8% of the total energy mix) by 2030	Expand renewable energy to 1440MW (8% of the total energy mix) by 2030
	Total emission reduction of around 2.74 MtCO2e by 2030 through switching from fuelwood to LPG	
		Improve energy efficiency by 2030 for the following sectors: 6.63% in the industrial sector; 4% in the commercial sector; 7.80% in the residential sector and 1.36% in other sectors - totaling to 20%; equivalent to emission reduction of 0.479 MtCO2e
Agriculture		Increase tree canopy cover across 275,000 ha of its agricultural lands with <10% tree canopy cover, yielding more than 10.4 million tCO2e by 2030
Forestry and Land Use (FOLU)	Reduce net emissions by 25% by 2030 against the 2005-2015 baseline of emissions and removals, with an intermediate target of 11% by 2025 and an expected annualized rate of net emission reduction from FOLU of 2.8% over the period 2021-2030	Net emission reduction of 50% by 2030 against the 2005 ? 2015 baseline of emissions and removals, with an intermediate target of 27% by 2025 and an expected annualized rate of net emission reductions FOLU of 6.9% over the period of 2021 - 2030

Myanmar is in the final stages of submitting its updated NDC, and the table above reflects the current draft version. However, the work of the project will be based on updated NDC, as it is expected to be officially submitted to the UNFCCC by then.

The country has no previous experience in tracking and reporting climate change mitigation actions. A first assessment will be carried out as part of the initial BUR. An MRV system for reporting mitigation

actions stipulated by the NDC is till date non?existent in the country. The SNC is only a one-time calculation and report of mitigation actions, and most planned mitigation actions under the NDC will occur after the SNC has been submitted. According to GGGI?s assessment of Energy, IPPU and Agriculture sectors? reporting systems, regular MRV activities in key these key NDC sectors are lacking currently. The only subsector that has an MRV system is that for Forestry (described below). Recognizing the greater requirements under the enhanced transparency framework of the Paris Agreement and that current MRV practices are ad-hoc, there are several gaps that need to be addressed for development of a full national MRV system. The analysis further observed that there are no existing laws, regulations and frameworks mandating reporting on the country?s NDC implementation. Although the Government is currently using available legal instruments such as Environmental Conservation Law, Environmental Conservation Rules, and Climate Change Policy, Strategy and Action Plan, to encourage Ministries and Departments to implement respective activities in the NDC, these are not specific to NDC or the climate change priorities of the country.

REDD+ updates

As a partner country of UN REDD Program, Myanmar is developing a National Forest Monitoring System (NFMS) that will assess and report on mitigation performance of REDD+ activities to the UNFCCC. This will partly meet the MRV requirements under the Paris Agreement.

Framework for tracking climate change support received

The Government has established a new Unit within the Ministry of Planning, Finance and Industry (MOPFI) called the ?Development Assistance Coordination Unit?, which considers and approves all development support exceeding USD 1 million. The Unit also hosts a web-based ?Aid Information Management System? to take stock of projects supported by international development aid. The system is designed to facilitate centralized approval of aid management rather than tracking the aid by sector/sub-sector and type of support. ECD plans to develop an internal registry to track all the international support and climate financing received to fund the different sectoral adaptation and mitigation projects through both government and non-government agencies. This will assist in the reporting requirements under the Transparency Mechanism. This will also help Myanmar review whether its aspirations for receiving climate financing across the multiple sectors for adaptation and mitigation are met or not. The information will be collected through existing ad-hoc coordination mechanisms within the government systems (i.e., one-to-one information exchange between line ministries and departments on a needs basis) and sending letters to development partners and stakeholders implementing climate change related projects in Myanmar.

Data Collection Systems

The Central Statistical Organization (CSO), housed within the MOPFI, collects socio-economic data nationally for planning purposes in coordination with relevant ministries and departments. The CSO, however, does not have required technical and human capacity to extend its data collection function to climate change mitigation and adaptation. Furthermore, the CSO is not mandated to share this data with other ministries, as the data ownership and usage remains under purview of the primary ministry. There is currently no centralized database management system serving the collection and retention of GHG and climate adaptation related data in Myanmar. Each line ministry in Myanmar has a dedicated statistics division, however capacities for data entry, quality control and analysis in these units vary greatly. The Ministries have no formal data retention policies. As a result, the line ministries and departments frequently refer to old hard copies of data recorded or re-initiate data collection whenever a request for specific climate change related data is made.

The Ministry of Electricity and Energy (MoEE) is the primary source of data for the energy sector including the transportation sector to estimate the emission for GHG inventory. Department of Agriculture (DoA), Ministry of Agriculture, Livestock and Irrigation (MoALI) is the principal agency providing data for emissions from enteric fermentation and manure management. For the IPPU sector,

several sources are providing the data, though Ministry of Industry (MoI), MoEE, and the Mining Enterprise provide lot of data.

There is a policy mandate to collect data and information on energy consumption from industry sector, commercial sector, residential sector and public sector, guided by the National Energy Policy (2015). MoTC, Mining Department, Custom and Ministry of Commerce, City Development Committee and Forest Department are providing other necessary data under their coverage. The ECD has data requesting authority from each ministry, but the response is usually delayed because of capacity constraints in requesting ministries along with unsystematic data collection, recording and management in those ministries.

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Table 3: Summary of information on project status, and capacity building and technology support received by Myanmar.

Project	Donor	Description of Activity	Climate Relevance	Status	Amount (US$)	Remarks
Preparation of the National Adaptation Program of Action	GEF Trust Fund	The project identified Priority Adaptation Projects as well as sectors.	National Reporting	Completed	200,000	
UN-REDD+	Government of Norway	It will enhance the capacities of Government departments, communities, and other actors to conserve forests and manage them in a sustainable manner and develop technical, and governance systems to support this.	National Reporting, Capacity Building	Under implementation	5,500,000	This funding phase will cease by 2020.

Project	Donor	Description of Activity	Climate Relevance	Status	Amount (US$)	Remarks
Myanmar Climate Change Alliance	European Commission	To strengthen the climate change related institutional and policy environment through sharing of technical knowledge and best practice, training and institutional support. To promote evidence-based planning and policy making through pilot integration of climate change into sub-national and local level developmen t planning initiatives.	Capacity Building	Completed	Euro 3,900,000	Component 2 of CBIT project will take into account the recommendation s of the Myanmar Climate Change Strategy, Policy and Action Plan (MCCS, P &AP)
Plan International Myanmar	BRACED project (consortium of partners, UK Department of International Development)	Improving access to climate risk information to inform community disaster preparedness and adaptation approaches. 2015-2018.	Capacity Building	Under implementatio n	GBP 5,000,000	

Project	Donor	Description of Activity	Climate Relevance	Status	Amount (US$)	Remarks
Addressing Climate Change Risks on Water Resources and Food Security in the Dry Zone of Myanmar[8] [8]	Adaptation Fund	4-year project which commenced in 2014 and ended in 2019.	Adaptation, Capacity Building	Completed	$7,909,026	
Adaptation planning support for Myanmar through UNEP	Green Climate Fund	To strengthen the institutional capacity in Myanmar to prepare the NAP	Adaptation	Under implementation	$2,959,429	

In summary:

? Myanmar currently is undertaking several actions to meet its reporting obligations under the UNFCCC;

? The SNC is still ongoing and has faced challenges in gathering the required activity data and move towards country-specific emission factors, though it has made substantial progress in establishing institutional arrangements for the SNC;

? The BUR1 project has begun and will rely on institutional arrangements formulated under the SNC, expanding and revising it based on the additional data requirements

? Myanmar has faced challenges in gathering data and information necessary to prepare the SNC and GHGI as the systems are not yet in place for continuous monitoring, collecting, and sharing of information;

c) Proposed alternative scenario with a description of project components, outcomes, outputs and activity/deliverables

As explained in the baseline section, the country faces a number of challenges and barriers in regularly preparing GHG inventories, national reports and to track and report climate change actions. There is limited experience with the national reporting with only an INC being submitted and the SNC and

BUR1 still under preparation. CBIT support is thus critical to address the identified challenges and implement the activities to create the necessary infrastructure and capacities to enable Myanmar to regularly compile GHG inventories, and track mitigation, adaptation actions and support.

The requested support is in alignment with the Climate Change Focal Area Objective 3: Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies of GEF7 Replenishment Programming Directions and Paragraph 18 of the CBIT programming directions. This proposal is in line with UN Environment?s Climate Change sub-program Output 6: countries are expected to increasingly adopt and/or implement low greenhouse gas emission development strategies and invest in clean technologies; and hence achieve emissions reduction consistent with the 1.5/2 degrees? Celsius stabilization pathway.

This CBIT project aims to establish and enhance the Myanmar?s transparency system, in line with the ETF of the PA. To achieve this objective, the following efforts are needed:

? Strengthening the national institutions to lead, plan, coordinate, implement, monitor and evaluate policies, strategies and programs to enhance transparency of data and information required under the ETF of the Paris Agreement;

? Providing relevant tools, training and assistance to the national institutions, including government, non?government and private entities, to meet the provisions of the Article 13 of the Paris Agreement, and its modalities, procedures and guidelines; and

? Providing opportunities for knowledge-exchange across the region for developing and sharing best practices on establishing and enhancing transparency, building capacity, and on existing best practices.

The project includes three components:

? Component 1: Technical support provided to strengthen institutional and human capacities for preparing GHG inventories on a regular basis in accordance with the Paris Agreement requirements;

? Component 2: Technical support provided to strengthening institutional and human capacities to track and report transparently on implementation of its mitigation actions in National Determined Contributions and support received; and

? Component 3: Strengthening regional cooperation for knowledge and information sharing including cooperative research projects for developing emission factors.

Further, the Outputs of Component 1 will be road-tested in the preparation of the GHG inventory in the third national communication (TNC), which is expected to begin in 2023. Similarly, the outputs of Component 2 will be road-tested in supporting preparation of reporting on mitigation actions for BUR which is under implementation this year (2021).

Table 4 below describes the Modalities, Procedures and Guidelines (MPG) requirements and how the current proposed project will address the specific requirements under it.

Table 4. Gaps in capacity of the Myanmar to address requirements under the MPGs

BTR Elements	CBIT Project Elements	Specific MPG requirements/recommendations

I. National inventory report of anthropogenic emissions by sources and removals by sinks of GHGs *Mandatory*	O U T C O M E 1	Output: 1.1 & 1.2	Each Party should implement and maintain national inventory arrangements, including institutional, legal and procedural arrangements for the continued estimation, compilation and timely reporting of national inventory reports in accordance with these MPGs. (II, section B, para 18, p. 22)
		Output 1.3	Each Party shall use **methods** from the IPCC guidelines referred to in paragraph 20 above. Each Party should make every effort to use a recommended method (tier level) for key categories in accordance with those IPCC guidelines. (II, section C, para 21, p. 23) Each Party is encouraged to use country-specific and regional emission factors and **activity data**, where available, or to propose plans to develop them, in accordance with the good practice elaborated in the IPCC guidelines referred to in paragraph 20 above. (II, section C, para 24, p. 23)
		Output 1.4	Each Party is encouraged to use **country-specific** and regional **emission factors** and activity data, where available, or to propose plans to develop them, in accordance with the good practice elaborated in the IPCC guidelines referred to in paragraph 20 above. (II, section C, para 24, p. 23)
		Output 1.2	Each Party shall elaborate an inventory QA/QC plan in accordance with the IPCC guidelines referred to in paragraph 20 above [?]. (II, section C, para 34, p. 24)

II. Information necessary to track progress in implementing and achieving NDCs *Mandatory*	O U T C O M E 2	Output 2.1	Each Party shall provide information on the institutional arrangements in place to track progress made in implementing and achieving its NDC under Article 4, including those used for tracking internationally transferred mitigation outcomes, if applicable, along with any changes in institutional arrangements since its most recent biennial transparency report. (III, section A, para 61, p. 27) Each Party shall provide information on legal, institutional, administrative and procedural arrangements for domestic implementation, monitoring, reporting, archiving of information and stakeholder engagement related to the implementation and achievement of its NDC under Article 4.4 (III, section A, para 62, p. 28)
		Output 2.2	Each Party shall identify the indicator(s) that it has selected to track progress towards the implementation and achievement of its NDC under Article 4. Indicators shall be relevant to a Party?s NDC under Article 4 and may be either qualitative or quantitative. (III, section C, para 65, p. 28)
		Output 2.2	Each Party shall provide a description of each methodology and/or accounting approach used, as applicable for: (a) Key parameters, assumptions, definitions, data sources and models used; (b) IPCC guidelines used; (c) Metrics used; (d) Where applicable to its NDC, any sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, taking into account any relevant decision under the Convention, including as applicable: (III, section C, para 74, p. 29)
III. Information related to climate change impacts and adaptation *Voluntary*			This is being addressed through NAP Readiness project funded by GCF

IV. Information on financial, technology development and transfer and capacity-building support needed and received *Voluntary*	O U T C O M E 3	Output 2.3 (support received only)	Developing country Parties should provide information on national circumstances and institutional arrangements relevant to reporting on support needed and received, including: (a) A description of the systems and processes used to identify, track and report support needed and received, including a description of the challenges and limitations; (VI., section A, para 130, p. 41)
		Output 2.3 (support received only)	Developing country Parties should provide, in a common tabular format, information on financial support received, including, to the extent possible, and as available and as applicable: (a) Title (of activity, program or project); (b) Program/project description; (c) Channel; (d) Recipient entity; (e) Implementing entity; (f) Amount received (in domestic currency and in United States dollars); (g) Time frame; (h) Financial instrument (grant, concessional loan, non-concessional loan, equity, guarantee or other); (i) Status (committed or received); (j) Sector and subsector; (k) Type of support (mitigation, adaptation or cross-cutting); (l) Whether the activity has contributed to technology development and transfer and/or capacity-building; (m) Status of activity (planned, ongoing or completed); (n) Use, impact and estimated results.

CBIT project will result in the establishment of permanent institutional arrangements, with the requisite legal mandates and other appropriate data sharing arrangements such as memoranda of understanding (MoU) to collect the data and information necessary to prepare a GHG inventory as well as to assess the progress in implementing NDC, and to enable regular preparation of national communications and BTRs. The permanence comes from clearly defined responsibilities and mainstreaming them in the mandate of the key stakeholders. The institutional arrangement will be designed to allow for the flexibility to adapt to evolving needs and requirements. The permanent institutional arrangements will enhance the coordination between all the relevant stakeholders facilitating timeliness and quality of the reporting.

The project will result in enhancing the quality of the country?s GHG inventory as well as NDC tracking and reporting by strengthening the knowledge base among key stakeholders in the reporting process. This will enhance capacity in the stakeholders and availability of tools and guidance on methodologies for preparation of GHG inventories and tracking mitigation actions. The availability of data collection protocols, methodologies for estimating impacts, guidelines for estimating indicators, etc. will both improve the frequency and quality of data collected, as well as the capacity to prepare various elements of reporting. This will be complemented by the establishment of a database management system which will significantly improve the timeliness and quality of reporting. The project will aim at improving the GHG inventory collection systems for three sectors: Energy, agriculture and livestock.

Under the proposed alternative scenario, Myanmar will be able to clearly track the actions in the Energy sector to reduce GHG emissions and use the information in planning more ambitious future actions to achieve PA goals. The increased information flow and capacity among stakeholders will result in increased understanding of the connections between the project and programs they design and their impact on climate change. This enhanced knowledge and understanding will result in enhanced consideration of climate change impacts in the design of projects and programs to address climate change. Increased information flow will also enable better assessment of effectiveness of policies and programs to address climate change and enhance the design. The increased information flow and knowledge on climate change will also result in better opportunities for achieving sustainable development with low GHG impacts and in preparing enhanced and ambitious NDCs.

The Country will also be able better assess resource needs (technical, human and financial) for implementing both the conditional and unconditional targets indicated in the NDC and track international support for climate actions and better plan its natural resource allocations.

One of the principal ways this CBIT project is planning on improving these systems is through providing a learning opportunity for stakeholders in the region to exchange lessons learnt and implement best practices. By facilitating such an exchange, including focusing on emission factors, the project will reduce the burden on Myanmar to create country-specific emission factors for every relevant sector, thereby prioritizing its resources on key categories.

Component 1: Technical support provided to strengthen institutional and human capacities for preparing GHG inventories on a regular basis in accordance with the Paris Agreement requirements

Outcome 1: Myanmar prepares and delivers high-quality reports according to the Paris Agreement requirements and ETF standards

This component focuses on strengthening the institutional and human capacities within the Government of Myanmar to regularly prepare GHG inventories as per the MPGs adopted at COP 24 and any further refinements to it. This component aims to strengthen the GHG inventory process and improve the quality of the GHG inventory through the establishment of permanent institutional arrangements for data collection and GHG emission estimation by stakeholders, and the development of a GHG data archiving system. This component will also support the development of templates for data collection, guidance on data collection, and compiling from literature more country relevant specific emission factors. The component will empower ECD as the lead coordinating entity for reporting.

The component will significantly reduce the time taken in preparing and submitting the report to the UNFCCC compared to current time?frame of 4+ years. The systems and knowledge base will enable regular data and information collection to eventually move to bi-annual reporting as required under the ETF as well as achieve the goal of achieving a 2-year vintage for all GHG inventories. The component outcomes will also enable ?an improvement in the accuracy of inventories in the three sectors focused on within the project: Energy, Agriculture and Livestock sectors, at least one sub-sector will be brought to Tier-2 level.

The outcomes of this component will be achieved through the following outputs:

Output 1.1: Formal institutional arrangements, including procedural and legal framework developed and ready for adoption

An institutional mechanism for inter-ministerial cooperation to systemize data collection and processing will be developed. This will build upon the ad hoc institutional mechanism used for NC/BUR preparation and will support policy coordination by the NECCCC, which is the higher-level inter-ministerial body. This output will be based on a review of the mandates of government ministries and agencies, including those under environmental laws and regulations going beyond climate change,

the overlaps of their mandates for addressing climate change, any inherent mandates for data and information collection to be undertaken, as well as global good practices in organizing the GHG inventory preparation.

To formalize this institutional mechanism, a regulation will be developed to provide a clear definition of responsibilities and roles of line ministries, agencies and other relevant stakeholders (such as the private sector and civil society) involved in data collection. The regulation will be complemented by specific mandates and data-sharing agreements to further enhance and sustain collection of relevant data and its quality check. The requirements for frequency of data and information collection by the agencies and reporting to ECD will be specified in the arrangements. This will create the necessary infrastructure to facilitate the timely reporting of information to enable ECD to prepare the national inventory report as per the MPGs of the ETF. Other appropriate means of data sharing arrangements will also be explored for the sectors and the appropriate means of arrangements will be selected for relevant sectors / sub-sectors.

This mechanism will strengthen collaboration between relevant ministries and agencies, and thus facilitate learning and identification of synergies and overlaps in data collection processes and other data-related activities. Engagement and coordination with all stakeholder agencies and ministries to be involved in the implementation of the inventory process early on will build mutual trust and ensure overall buy-in for the process. which is key for building a perennial transparency system in the country. This work will be done through a series of smaller consultations with a range of stakeholders in addition to the three stakeholder workshops planned. This process is likely to be iterative and therefore may require several short, ad-hoc consultations with relevant agencies.

The output will also result in development of the GHG Inventory Development Process guidelines that will define the steps and the timelines for GHG Inventory preparation from the initiation through submission of the same to the UNFCCC. This will facilitate the standardization and regularization of the process, ensuring clarity among all actors and thus strengthening the timeliness and consistency of submissions.

It will also build on the initial work by the GGGI in identifying the data requirements, owners of data, and the various actors important in preparing the GHG inventory. The 2018 GGGI assessment covered the energy sector, while the 2019-2020 studies covered IPPU and the livestock sectors. The UN REDD+ project is working in parallel on forestry related inventory issues, so the project will closely coordinate with this project to ensure synergistic development and integration of institutional arrangements. The Government will formally adopt the institutional arrangements, to be verified by an official government notification. Where other forms of data sharing arrangements are required, they will be prepared and be made ready for adoption as well.

The output will also undertake the review of existing capacities across the national universities and research institutes to identify the role that these institutions could play as technical backstops to ministries and other agencies, as well as providing capacity building for existing and future cadres of stakeholders involved in data collection and reporting.

The institutional arrangement designed will guide the work under Output 1.2, as this will outline the requirements for the GHG database management system roles and responsibilities.

This Output directly addresses the barrier of temporary, insufficient and incompletely defined coordination and cooperation, as identified above, while reducing reliance on consultants and ad-hoc working groups.

Proposed activities

Activity 1.1.1: *Identify any potential gaps based on existing assessments and review of role, responsibilities, resources, personnel and data collection capacity of key line ministries.*

Activity 1.1.2: *Develop design options for the proposed institutional arrangements through a consultative process. The institutional arrangements will outline clear and detailed institutional roles, mandates and responsibilities of involved Ministries, agencies and external data providers for data production, collection and reporting. In addition, this will outline the human resource requirements and associated Terms of Reference (TOR) for these institutions.*

Activity 1.1.3: *Finalize the permanent institutional structures and processes in line with the roles and responsibilities of involved sectorial stakeholders for the GHG inventory system through stakeholder consultations.*

Activity 1.1.4: *Draft GHG Inventory Preparation Process guidelines including the roles and responsibility of line ministries, agencies and relevant stakeholders for GHG data collection, and process steps and timelines, for consideration and adoption by the Ministry of Environment.*

Activity 1.1.5: *Draft MOUs for line ministries, agencies and relevant stakeholders and initiate the process for its adoption.*

Activity 1.1.6: *Organize three (3) stakeholder workshops with all involved ministries to inform them of the inter-ministerial cooperation mechanism and the related roles and tasks.*

Deliverables

1. Gap assessment report,
2. Draft institutional arrangements,
3. Terms of References for institutions,
4. Draft legal instrument,
5. Draft MOUs, and
6. Stakeholder consultation and workshop reports.

Output 1.2: IT-based National GHG Inventory System for preparing and reporting GHG Inventory and archiving data is developed and made available to line ministries and agencies

The output will develop a data management system, defining the record keeping requirements, data access limitations as well as the required authorizations. It will also identify the producer, holder, or owner of data, files, and documents in the list of archiving materials to make the data and information gathered transparent and reproducible as per the requirements identified and defined by the stakeholders.

The output will deliver the requirements for a systematic, integrated and robust national GHG database management system to enable data collection from line ministries, harmonize GHG data collection by establishing a well-documented process for data collection, quality control, analysis, and storage as well as to facilitate future inventory processes, thus sustaining institutional capacity. The database system will enable identified entities and end-users to input data into the system, and the coordinating agency to review the data as well as a mechanism providing access to outside stakeholders for certain approved components of the data. A GHG database management system will make the GHG inventories transparent and replicable and facilitate the development of enhanced inventories in the future.

The scope of the GHG database management system (GHG DBMS) including the GHGs and sectors/ sub-sectors to be covered will be defined. At a minimum, the three GHGs of carbon dioxide, methane and nitrous oxide, will be covered. The sectors to be included are Energy, Agriculture and Livestock. Potential staggering of layers for implementation will be explored and embedded, i.e., initially rolling this out for few select sectors/sub-sectors and then expanding it to others. This activity will be linked to the stakeholder engagement carried out in previous steps and the Output 1.1.

The GHG database management system will also serve as a first step for Quality Assurance/Quality Control (QA/QC), by setting internal checks based the types and ranges for data and information inputs for each parameter. For example, the system will be designed to address rudimentary data input and transmission errors such as data types and enable the quality assurance activities by providing a consistent data set.

The functional requirements for the GHG DBMS, such as the types of data handled by the system, the types of users and their responsibilities, etc., will be developed based on the objectives of the DBMS. The software and hardware requirements for its operation will also be clearly identified. This activity will also define the use-cases, the data validation steps and associated issues such as, manual entry, database interface availability and any other features. Other important factors to be defined in this step include user control, data access, document management as well as other QA/QC features that could be embedded in this GHG DBMS. The performance requirements of the GHG DBMS will also be defined. This will include issues such as: data storage considerations, system architecture, hardware and security systems. The SNC process is using a variety of software, hardware and other online tools for preparation of the GHG inventory. The GHG DBMS will built on the current system and is guided by the IPCC 2006 guidelines. Existing similar GHG DBMS that have been developed in other countries will be used to benchmark this activity.

The database system definition will include its ability to serve the data measurement, reporting and verification requirements of the mitigation actions under the NDC, as well as any other qualitative information needed to meet the requirements of the MPG. All methodologies, guidelines and data collection tools and templates being developed for collection of this information will be developed to be compatible with this database management system.

A GHG DBMS may be custom built for the country or it may use an existing GHG inventory databased management system which will subsequently be customized to country requirements. The system development will aim to ensure sufficient flexibility to allow for subsequent modification and addition of modules, or to change existing modules based on evolving national needs. The GHG DBMS will be finalized through extensive stakeholder consultation to ensure end users? needs to are reflected and to ensure ownership.

Linking with other outputs, the design will embed the tools, templates and data collection documents that are the stakeholders are currently using, or those developed within this project.

The capacity-building modules for the different types of users will also be developed. In addition to protocols for data entry, these will also be established for data retention and retrieval, with safeguards put in place to protect against data tampering. Resource assessment needs, including human, financial and technical, for its development, continued usage and wide-spread adoption will be conducted.

In line with the development of the GHG DBMS itself, a training manual will be developed for its use, operation, maintenance, including any necessary troubleshooting. The various stakeholders will be trained on the use of the training manual, including associated case-studies and tests to enhance their overall capacity to use the system.

One of the important references defining this framework is the World Bank (WB) Technical Note[9][9] on building a GHG DBMS for corporate / facility-level reporting. While this document was developed for project-level reporting, the framework will be translated to country-level reporting, with the same flexibilities provided to entities and end-users.

Proposed activities

Activity 1.2.1: *Design the GHG database management system based on requirements of GHG Inventory requirements as per the BTR.*

Activity 1.2.2: *Set functional, software and hardware requirements for the GHG* DBMS.

Activity 1.2.3: *Develop and test the GHG DBMS.*

Activity 1.2.4: *Develop guidelines for use, operation and maintenance of the GHG DBMS.*

Activity 1.2.5: *Conduct four (4) training workshops on GHG inventory compilation and maintenance of the database management system for the staff involved in GHG inventory compilation.*

Deliverables:

1. GHG DBMS scoping report,
2. Technical and functional specifications of the GHG DBMS,
3. GHG DMBS system designed and operationalized,
4. GHG DBMS User Manual, and
5. Training and workshop reports.

Output 1.3: Tools and protocols for GHG data collection and GHG Inventory preparation developed and adopted, and key staff trained on their utilization

The Output will further improve the knowledge and tools required for preparing GHG Inventory. It will build on the sector-specific sheets being used for the SNC and BUR1 that are based on IPCC 2006 Guidelines. The output will review the activity and emission factor data required for preparation of the GHG inventory for sectors corresponding to each IPCC Tier level. These data requirements will be then assessed against the current data available , the suitability of using existing data for estimation of activity data and emission factors and identify the data gaps for reporting each Tier of the IPCC methodology. Based on the key category analysis of emissions (be undertaken in BUR1 project) and the data gap assessment under this project, a decision will made as to which Tier methodology will be used for each sector/sub-sector. The three largest sectors for emissions in Myanmar are land-use and land-use-change (LULUC), Agriculture and Energy.

The primary focus of the CBIT project is to strengthen the GHG Inventory process of key emission categories and 3 primary gases. Efforts will be undertaken to assess the additional BTR requirements that can be addressed by the project based on the level of contribution of required data, the desired levels of accuracy of the GHGI, and the category?s contribution to overall emissions. With regards to

the emissions of additional four gases added to the BTR, a quick estimate will be undertaken and a decision to include them will be made based on the contribution of these gases to total emissions and the ease of data collection.

The outputs based on the above analyses will update the existing IPCC 2006 spreadsheets for data requirements to prepare the GHG Inventory. The outputs will also help to update any additional technical protocols and provide case-study documentation for those using these spreadsheets and data and information collection tools and templates.

In order to address the key needs for preparation of the GHG inventory - specific data collection, regularity of collection and quality of data - the output will prepare data collection protocols for each sector/sub-sector, and for the line ministries and agencies that are identified in the institutional arrangements as responsible entities for data collection. The protocols will also include the steps for QA/QC of data. This will enable the respective agencies to integrate the data collection process for the GHG inventory into their regular data collection arrangements thus enabling a better quality and more regular data availability.

The deliverables will be prepared in close consultation with the key stakeholders who will be responsible for contributing to GHG Inventory preparation. The purpose is to tailor the development as per the specific needs of the stakeholder and also use this as a basis of creating a better understanding of the requirements thereby building the capacity of the participants. Specific training sessions will be held to both build capacity in GHG Inventory preparation among the key stakeholders and to train them in QA/QC requirements for data collection.

Training for the technical staff in line ministries and agencies involved in inventory compilation as well as other relevant practitioners in the specific sectors on the sectorial templates and guidelines will be conducted based on the sectoral templates, guidelines and tools prepared. The training will enable the relevant stakeholders to collect the data and information, conduct necessary quality control measures, and to report to ECD in the prescribed formats to thereby facilitating thee GHG inventory preparation. The timeframes as per the formulated institutional arrangements from Output 1.1 will also be included in the design so that the country can compile the GHG inventory to meet the requirements of the MPGs of the ETF.

In order to retain the knowledge within country and offer continued training, a curriculum for training in GHG Inventory as a short-term course to staff of line ministries and agencies will be developed. This will build on the Training-of-Trainers for MRV curriculum developed by ECD in partnership with GGGI and the Australian Volunteer program. Based on an assessment of capacities in Universities and Research Institutes of the country, an appropriate entity will be identified to house the short-term course. The Gender expert will work with the team in developing training programs that take into account the gender specific needs to ensure equal access to training and capacity building.

These spreadsheets and data collection protocols will be developed in collaboration with sectoral experts to reflect the unique needs and characteristics of these sectors in Myanmar and will build on IPCC software.

These spreadsheets and data protocols will be integrated with the GHGI DBMS.

Proposed activities

Activity 1.3.1: *Report assessing data gaps and applicable level of Tier for preparing GHG Inventory based on review of data requirement for preparing GHG Inventory as per MPGs, data availability and significance of GHG emission source.*

Activity 1.3.2: *Update Sector Specific Spreadsheets for preparation of the GHG inventory, based on activity 1.3.1, including QA/QC steps for quality control and manuals for use of the spreadsheets.*

Activity 1.3.3: *Develop data collection protocols, including procedures for QA/QC for data and guidelines for support data collection and application of QA/QC procedures.*

Activity 1.3.4: *Develop gender sensitive training material, including a short-term course, and undertake training workshops (3) of stakeholders on use of spreadsheets and data collection.*

Deliverables

1. Data Gap assessment report, including benchmarking on the Tier of IPCC 2006 methodology for each sector/sub-sector,
2. Sector-specific spreadsheets, tools and templates for GHG inventory preparation,
3. QA/QC manuals for select sectors,
4. Data collection protocols, guidelines, including QA/QC for data quality, and
5. Training material and workshop reports.

Output 1.4: Country-applicable emission factor database developed for the energy, agriculture and livestock sectors

The key uncertainty in the GHG estimations in the country stems from uncertainty in the actual activity data, and the primary focus of CBIT project is to address this. In addition, the project will identify where the emissions factors used can be made more specific to country conditions. Currently default IPCC emission factors are being used. As mentioned, the key GHG emitting sectors are LULUC, Agriculture and Energy. Under this output, based on the decision made in Output 1.1 on the Tier level for reporting in each sector/sub-sector, an assessment will be undertaken on the need for more relevant emission factors to reduce uncertainty. This assessment will identify sectors/sub-sectors where emissions factors from neighboring countries/regions could be used and where country specific emissions factors would be more relevant and adequate. The evaluation will consider underlying causes that result in variation of emission factors. The focus will be on Agriculture, Livestock and Energy sectors, as the forestry sector is covered under the UNREDD+ project.

The analysis will be finalized in consultation with sector experts and stakeholders. The analysis will result in the development of a roadmap for strengthening the emission factor database. The roadmap will include an assessment of national university/research centers that could be developed as centers for development of country specific emission factors, and/or the identification of regional institutes that could partner the country in supporting development of country specific emission factors. The project will also use the roadmap to seek cooperation from other partner countries/organizations in financing development of country specific emission factors.

Based on the above analysis, a literature review will be undertaken to identify specific studies on emission factors undertaken in the regional/neighboring countries, and to prepare a database of

emissions factors that could be used to improve upon the current IPCC default values used by Myanmar. The review will also include consultations with the neighboring country GHG Inventory teams, to seek information as well as linkages with research centers identified in the roadmap on strengthening emission factors.

This work will be conducted in collaboration with researchers from the Universities and research organizations in Myanmar, thus strengthening national inventory capacity.

Proposed activities

Activity 1.4.1: *Undertake analysis of key emissions factors required to improve the accuracy of GHG Inventory, emissions factors that could be based on regional/neighboring country studies, and those that need to be Myanmar specific.*

Activity 1.4.2: *Develop a roadmap for strengthening country emission factor information, including identification of national and regional research centers.*

Activity 1.4.3: *Conduct a Literature review and regional consultation to develop an emission factor database based on regional/neighboring country studies/research.*

Deliverables:

1. Analysis report on emission factors,
2. Roadmap for country-specific emission factors, and
3. Regional workshop reports.

Component 2: Strengthening institutional and human capacities to track and report transparently on implementation of its mitigation actions in National Determined Contributions and support received

Outcome 2: Myanmar tracks its progress towards the achievement of its NDCs and the related support received, and reports according to the Paris Agreement ETF requirements;

The country is updating its NDC. This component will strengthen the systems and capacities of Myanmar to track and assess impacts of mitigation actions included in the NDC and track support received for mitigation actions. The output will **not** focus on adaptation action tracking as the country has started implemented a NAP Readiness proposal with funding from GCF, which will cover the Monitoring and Evaluation (M&E) of vulnerability and adaptation. The focus of this component will be to support the NDC actions in Energy sector. Forestry sector will not be covered as the REDD+ program is supporting the MRV system to track NDC actions.

As discussed in the Baseline scenario, Myanmar currently does not have a system of tracking implementation of climate actions and is using a project-based approaches to collect data and assess impacts in preparing the BUR1. There is an overall government program monitoring system, which is more focused on fund dispersal and in some cases, targets achieved. The system is not designed to

assess the GHG reduction impacts of the mitigation actions. Further, the country lacks methodologies and capacities to undertake assessment of necessary climate finance.

Thus, this component of the current CBIT proposal is aimed at establishing systems for tracking progress on implementing mitigation and adaptation actions and support received to achieve the NDC goals. The work of this component will be undertaken in close connection with the work under component 1, so as to ensure there is one institutional framework and avoid overlaps or contradictions.

The NECCCCC is the highest-level body for the implementation of NDC. Under the NECCCCC, Climate Change Adaptation and Mitigation Working Committee (CCAM-WC) is directly responsible of overseeing implementation of climate actions at the senior Policy level. The component will build on this institutional structure and the technical level support group for mitigation will be developed to support the CCAM-WC. The institutional arrangements will be synergistic with the institutional structure developed for GHG Inventory. Though reflected in different component, the work will be developed in parallel.

This component will also review the existing systems to track external support received by the country and recommend design options for tracking support received to implement its NDC. It will be integrated within the existing aid tracking system. The different means and methods in which the country is receiving support will be identified and classified and paired with the gaps and barriers these various forms of support are addressing. The assessment will include technical and financial support being received by the country.

The outputs under this Component will provide the country with the necessary tools and templates, in time for reporting against its progress under its first BTR and provide key data inputs to the revision of the NDC at the next iteration, expected to be submitted by 2025.

Output 2.1: Monitoring indicators and tools to track progress towards the energy goals defined in the NDC designed and made available to relevant ministries and agencies

This output will deliver monitoring indicators and an information matrix to track progress of energy related mitigation actions for energy defined in the NDC, including methodologies and tools for collecting data and estimating the indicators, as well as providing training to staff from the agencies implementing these actions.

Under this output, an information matrix and monitoring indicators will be developed to track progress towards the implementation of and achievement of NDC related mitigation actions in energy. The NDC implementation plan is currently being updated may include additional actions. This will form the basis for developing the indicators. Training programs will be developed for officials from relevant sectors, lead agencies and actors. This output will also address the procedure to archive data from actors involved in collecting, assessing, and reporting GHG mitigation impact of mitigation impacts. A central web-based platform will be developed to monitor, collect, store, evaluate, document and report on such data.

This output will also develop reporting formats, guidance on monitoring procedures for data collection, and a system of validating the data and the estimation of the indicators.

Data sources and outputs of the GHG inventory and NDC tracking will be relevant and, in some cases, overlapping with the data needed for effective mitigation tracking. As such, it will be important to develop an integrated data management system. Given that different actors may be involved in the GHG inventory preparation and mitigation action tracking, the system will need a flexible approach to administration and access. However, it is anticipated that the development of an integrated system will reduce duplication of effort and increase efficiency and the chance of long-term use for the system.

All the data sharing platforms to be established under the CBIT support will be linked and hosted by the ECD to ensure consistency of approach and efficient use of resources. The design and development of the platform will be undertaken through a participatory process where all key agencies and stakeholders will be involved.

This output will also undertake assessment of data needed to track gender benefits of NDC actions and approaches to collect gender disaggregated data.

Two capacity building workshops will be conducted to enhance the technical capacity of relevant Ministries, agencies, and other stakeholders for using the tools, methodologies, and online data management system to be developed under this output.

Proposed activities

Activity 2.1.1: *Develop action specific indicators with support of sectorial experts and stakeholders for tracking of the NDC mitigation actions.*

Activity 2.1.2: *Develop tools and methodologies for estimating indicator values including sex-disaggregated data on benefits of NDC actions , and protocols for collecting data needed for estimating and monitoring key indicator values.*

Activity 2.1.3: *Develop guidance on approaches for data measurement, collection, reporting requirements and periodicity of reporting*

Activity 2.1.4: *Develop training modules, guidelines and provide training for staff in relevant agencies on the use of, and the reporting on the specific indicators, including at least one Training-of-Trainers? session.*

Activity 2.1.5: *Define and implement validation process for reported data and indicators.*

Deliverables:

1. NDC tracking indicators, methodologies, tools, and guidelines,

2. Guidance document on data and information monitoring and reporting templates for NDC actions, including sex disaggregated data on benefits of actions,

3. Training material. and

4. Validation reports for NDC actions? data and indicators.

Output 2.2: Domestic system for tracking NDC Mitigation actions is designed and operationalized

This output will design the institutional mechanism and legal framework to systemizing data collection and processing of climate mitigation actions defined in the NDC. This will cover renewable energy and energy efficiency related actions in Energy sector and mitigation measures in Agriculture sector.

This output will design institutional arrangements for the tracking of mitigation actions in support of the current arrangement for NDC coordination and implementation through NECCCCC and CCAM-WC chaired by the Permanent Secretary of MONREC.

Building on the work under Output 2.1 on data needed to estimate the indicators to track progress in the implementation and achievement of NDC, the output will identify the key line ministries and agencies that are mandated to implement the actions and collect the data. This will include the private sector, especially the energy efficiency measures identified in the industry sector. The design will be based on

existing mandates of ministries of agencies, including any existing institutional arrangements for data and information sharing. An assessment of the existing legal arrangements for sharing data required for estimating indicators will be conducted and identification of bottlenecks for the flow of relevant data. For instance, Guidelines will be developed on specific reporting processes to remove existing bottlenecks. This may include data sharing agreements and would ensure permanent arrangements for inter-ministerial coordination, and engagement of the private sector. The institutional arrangements will work within the mandate of line ministries as well as the linkages with the private sector that are within the oversight mandate of the line ministries. The institutional arrangements assessment will cover the existing legal arrangements and frameworks under which this information is either being currently collected, or that need to be developed. The legal instruments, such as any draft agreements necessary to operationalize the system, will also be developed. Any associated resource requirements (human and financial) will also be included.

The output will also assess the overlap of institutions and data requirements for preparing GHG Inventory and build upon it rather than duplicating or creating a parallel structure. Work under this output will also coordinate closely with the REDD+ project and NAP to ensure synergies.

The output will also develop operating guidelines covering rules, responsibilities and timelines for the process of collecting data and finalizing the estimates of GHG emissions reductions, procedures etc. in accordance with the Paris rule book.

Periodic and extensive stakeholder consultations, synchronized with other outputs and activities, will be part of this activity.

The arrangements will be developed through close consultations with the key stakeholders to ensure ownership.

The NDC update is under preparation. At the inception workshop the project will review the scope of work in light of the updated NDC status, to ensure that it covers all actions that are in NDC and not covered/supported by other initiatives.

Proposed activities

Activity 2.2.1: *Develop Institutional framework options based on the identified list of Mitigation Actions.*

Activity 2.2.2: *Conduct 3 consultation workshops to finalize the Institutional arrangements for tracking NDC Mitigation actions.*

Activity 2.2.3: *Develop Operational Guidelines including rules, responsibility, and timelines for preparing inputs on NDC tracking for BTR/NC.*

Activity 2.2.4: *Establish a linked online data management system to collect, aggregate and archive mitigation data, integrated and coordinated with the GHG inventory and support. Make it available to ministries and decision-makers, including training of data provider representatives on the system operation.*

Deliverables

1. Institutional framework for tracking NDC actions,
2. Workshop reports,
3. Operational guidelines for NDC tracking, and
4. Database management system guidelines.

Output 2.3: Framework for tracking support received for implementing NDC designed and recommendations for implementation developed

This output will complement existing national systems and protocols to measure and track the financial flows and identify the institutional arrangements for the existing donor procedures/guidelines for tracking, reporting and verifying the support received, with a focus on climate change mitigation and having placeholders for adaptation. Recently Myanmar instituted a new Unit within the MOPFI called ?Development Assistance Coordination Unit (DACU)? whose approval is needed for any development support in excess of USD 1 million.

The output will take stock of current institutional arrangements for international support tracking and reporting, including procedures and processes of involved agencies and ministries. This stock taking exercise will be used to identify gaps, especially regarding the flow of information and inter-ministerial communication. As there is no country-specific definition of ?climate support?, this step will identify the various forms of finance and support Myanmar is receiving and link them to climate change mitigation and adaptation activities, thereby creating a country-framework. This step will therefore include the identification of stakeholders, the type of data they collect and provide linkages to climate change activities, and an evaluation of their monitoring of the information. This gap assessment will look at whether the support is tagged by the sector/sub-sector to help identify where the support is flowing and what are the gap areas for financing.

Once a framework for climate support has been developed, this activity will focus on developing, designing and finalizing the systems to track support received. Undertaking extensive stakeholder consultations in outlining the reporting responsibilities, types of information to be reported (such as international climate finance received by the country, multilateral funding sources, bilateral funds, domestic channels, loans, carbon markets, green bonds, results-based climate finance, etc.) and process of reporting, this step will also entail the development of tools and templates for tracking climate support. This step will also cover the necessary institutional arrangements and data flow systems necessary to consolidate the support the country is receiving from various sources, thereby helping it report on these to the UNFCCC.

After defining the framework for categorizing and tracking ?climate support?, and developing the tools and templates for tracking it, this activity will focus on enhancing the capacity of key stakeholders on using the framework through at least three stakeholder consultation workshops. Collaborating again extensively with the stakeholders, this activity will involve first the development of the training modules, and then the training of relevant stakeholders on their usage. To ensure this knowledge and understanding are retained within the country, knowledge repositories and roster of experts will be created for this output as well.

Building upon these existing guidelines and any updates that are agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA), this output will be achieved through the delivery of the following activities:

Proposed activities

Activity 2.3.1: *Take stock of present institutional arrangements to track supports received and assess the systems capacity to track support received for implementing climate change actions.*

Activity 2.3.2: *Develop measures to strengthen the institutional arrangement, outlining the responsibilities of ministries and agencies to deliver the necessary data and information to track progress and developing required mandates for data sharing procedures and outlining reporting responsibilities.*

Activity 2.3.3: *Development of methodology, data reporting protocols and templates for collating climate change support.*

Activity 2.3.4: *Development of training material and training of stakeholders on indicators and tools to track climate support.*

Deliverables

1. Gap assessment report on tracking support,

2. Terms of references document and roles and responsibilities chart for the stakeholders involved in climate finance tracking,

3. Methodology, data reporting protocols and templates for collating climate change support,

4. Training material on indicators and tools to track climate support.

Component 3: Strengthening regional cooperation for knowledge and information sharing including cooperative research projects for developing emission factors

Outcome 3: Myanmar cooperates, and shares knowledge related to ETF with other countries in the region

The outcome will result in a closer interaction of country?s ETF team with the countries in the region to exchange knowledge, best practices and have regular exchanges with regional peers to continuously learn and strengthen the ETF. Furthermore, a knowledge sharing platform will be developed at the start of the project and will be an avenue to share the reports and technical material developed under the project for the general public and other relevant stakeholders of the CBIT project. This knowledge sharing platform will also provide a link to the GHG inventory, climate action and support data management system proposed under this project.

Output 3.1: Regional cooperation and peer-peer exchange workshops organized

This Output will support the coordination and cooperation with sub-regional and regional transparency efforts and peer-exchange programs to facilitate learning and sharing of lessons-learned. Other countries in the ASEAN, and especially countries in the Mekong sub-region, have similar economic and social structures. All countries are required to advance their national transparency systems to comply with the ETF and face similar challenges and barriers. Stronger regional cooperation and knowledge sharing of transparency efforts can strengthen national transparency activities in overcoming barriers and avoiding challenges. The ASEAN Working Group on Climate Change

(AWGCC) under the ASEAN Ministerial Meeting on Environment, has the objective to "enhance cooperation to improve ASEAN's collective capacity to address climate change ". The framework of the AWGCC will be used for sharing knowledge among the ten ASEAN member states and advancing transparency efforts in the region, and even explore the opportunity of a harmonized regional MRV system.

Other countries in the region such as Cambodia, Lao PDR, Viet Nam and Thailand are also implementing CBIT activities and collaboration with those countries can harvest synergies and lessons learnt. The CBIT Global Coordination Platform will be used for exchanging information with peers. Other networks such as Green Growth Knowledge Platform, Climate and Development Knowledge Network and the NDC Partnership will also be leveraged for this exchange.

This output will support the country in participating in regional workshops and organizing at least one annual regional peer exchange workshop on transparency activities, challenges and lessons-learned. Synchronizing it with other outputs and activities, the topics of each workshop will be selected based on the stage the project has reached. Exercise will be undertaken to map all the regional/sub-regional events and initiatives on strengthening ETF and develop a strategy for interaction. This activity will also explore opportunities to collaborate with other countries in the region through the CBIT Global Coordination Platform and related avenues.

The output will also establish a knowledge portal to share the outputs of the project with wider national, regional and international stakeholders. The portal will also link with the CBIT global Platform.

Proposed activities

Activity 3.1.1: *Review and document regional/sub-regional events and initiatives to strengthen ETF and develop and engagement plan.*

Activity 3.1.2: *Design and conduct annual peer-exchange regional workshop.*

Activity 3.1.3: *Establish a portal at MONREC website to enable access to the workshop reports and training materials developed under the CBIT project.*

Deliverables

1. Peer-exchange regional workshop reports
2. Website and webpages for CBIT project

d) Alignment with GEF Focal Area and/or Impact Program strategies

This CBIT project addresses the GEF Focal Area Climate Mitigation 3-8 ?*Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency*?.

The GEF-7 Climate Change Focal Area Strategy aims to support developing countries in undertaking transformational changes towards low-emission and climate-resilient development pathways. The

Capacity-Building Initiative for Transparency, as per COP decision[10][10] of the 21st session of the COP, complies with this Focal Area Strategy by:

? Strengthening national institutions for transparency-related activities in line with national priorities;

? Providing relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement; and

? Assisting in the improvement of transparency over time.

The project addresses the need for enabling conditions to mainstream climate change concerns into the national planning and development agenda through its support for enabling activities, including obligations of the Convention and the Capacity-Building Initiative for Transparency through sound data, analysis, and policy frameworks.

This project is well aligned with the transparency-related activities of the Proposed Programming Priorities specified under paragraph 18 (national level) in the CBIT Programming Directions (GEF/C50/06)[11][11].

1. Output 1.1 and Output 1.2

? 18 (a) strengthen national institutions for transparency-related activities: (j) Activities to assist with improvement of transparency over time.

2. Output 1.3

? 18 (d), (e) Activities to provide relevant tools, training, and assistance for meeting the provision stipulated in Article 13.

3. Output 1.4

? 18 (f), Activities to provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13.

4. Output 2.1

? Activities to strengthen national institutions for transparency-related activities in line with national priorities: (a) Support to national institutions to lead, plan, coordinate, implement, monitor, and evaluate policies, strategies, and programs to enhance transparency, including identification and dissemination of best/good practices for institutional strengthening and national network of practitioners; (c) Assistance with deployment and enhancement of information and knowledge management structure to meet Article 13 needs.

5. Output 2.2

? Activities to provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13: (g) Assistance in quantifying and reporting impact of policy measures.

6. Output 2.3

? Activities to strengthen national institutions for transparency-related activities in line with national priorities: (a) Support to national institutions to lead, plan, coordinate, implement, monitor, and evaluate policies, strategies, and programs to enhance transparency, including identification and dissemination of best/good practices for institutional strengthening and national network of practitioners; (c) Assistance with deployment and enhancement of information and knowledge management structure to meet Article 13 needs;

? Activities to assist with improvement of transparency over time: (j) Capacity needs assessment for transparency, in particular to assess institutional arrangements for data collection, analysis, and reporting: the assessment supports mapping of current baseline and planned reporting and related activities, including associated institutions, tools, methodologies, MRV systems, associated data systems.

7. Output 3.1

? 18 (e) Country-specific training and peer exchange programs on transparency activities

e) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Myanmar places great importance on the global efforts towards addressing climate change and will continue to play a constructive role in the UNFCCC process. Myanmar has very limited experience in reporting to the UNFCCC, it is still in the process of preparing its SNC and BUR. The newly established ETF poses a great challenge to countries requiring significant enhancement to the existing transparency systems. This project will thus support creation of much needed formalized and permanent institutional arrangements for GHG data collection and reporting, as well as tracking of mitigation actions, and will provide the necessary methodologies and tools to improve data collection and quality.

The CBIT project is targeted towards strengthening capacities and systems from the ground up. Myanmar?s INC was prepared by consultants several years ago, and the country is now in the process of preparing its SNC and first BUR. SNC is the first exercise based on involvement of ministerial staff and the systems and processes for GHG inventory are still being understood and built. There is a lack of understanding of data needed, sources of data and data collected is not designed for GHG inventory or tracking climate action. There is a very rudimentary system for tracking government implementation and none for climate change actions.

The outputs of the project will allow Myanmar to develop and enhance its transparency system in line with the requirements of the ETF. Enhancing data quality and strengthening capacities to monitor progress are preconditions for the effective implementation of climate actions outlined in Myanmar's NDC and related NDC Roadmap, and ultimately to enhance NDC ambition. In addition, relevant agencies in various sectors are now in the process of formulating specific sectoral plans to address climate change, including concrete mitigation and adaptation activities which can be supported by establishing an improved transparency system in the country.

Without this CBIT project, Myanmar's technical and institutional capacities will remain insufficient to fulfill the transparency provisions of the Paris Agreement. The GEF CBIT program is designed to improve mandatory reporting of signatories of the UNFCCC. As such, this project is financed on fully agreed cost basis and co-financing is not a necessary requirement for this project. In the case of this program, eligible activities have been described in the GEF document Programming directions for the Capacity Building Initiative for Transparency (GEF/C.50/06). The activities of this project are consistent with the scope of the programming directions.

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

Global environmental benefits from this project are directly related to supporting Myanmar in the implementation of its first NDC as well as enhancing ambitions for future rounds of NDC submissions. This project will establish permanent institutional arrangements for transparency and will enhance the quality and accuracy of Myanmar's GHG inventory, as well as GHG database management systems

including a system for QA/QC. The implementation of climate actions in Myanmar?s NDC will not only result in GHG emissions reduction but will also bring about a variety of environmental and social co-benefits, not the least being a decrease in air pollution.

The project will further provide monitoring indicators and methodologies to track progress of climate actions and will thereby strengthen institutional and technical capacities to track progress of its mitigation actions. Monitoring of climate actions is a precondition to make necessary adjustments and enhance ambition and will enable the country to comply with the requirements of Art.4 of the Paris Agreement stating that each Party's consecutive NDC will represent a progression of its current NDC and reflect its highest possible ambition. Tracking progress in the implementation of the country?s NDC will also inform the Global Stock take with a view to enhance the global response to climate change in line with the long-term temperature goals of the agreement.

g) Innovativeness, sustainability and potential for scaling up

Innovativeness

The innovation potential of this project lies in the three fronts the project will be addressing. First by formalizing and making permanent Myanmar?s institutional arrangements for transparency, as well as in elaborating data-sharing agreements and institutional mandates, the project will greatly enhance the capacity of relevant Government and nongovernment entities. With permanent institutional arrangements, legal mandates and appropriately tailored data and information sharing arrangements, all the relevant stakeholders will be able to plan ahead for monitoring and measuring the relevant information necessary for GHGI preparation and ensure that QA/QC procedures are applied. With a GHG database management system, which was hitherto non-existent, the CBIT project will enable data archival systems that will not only enable future retrieval of relevant data, but also facilitate updating and revisions due to any newly available evidence and knowledge necessary for potential necessary re-calculations. This will improve communication and coordination with different agencies and ensure greater involvement of the sectors in transparency work and NDC implementation.

Secondly, by providing the appropriate tools, templates and guidance on methodologies and data collection protocols, the project will address the critical technical and information gaps in the country. The innovative element of these interventions is in that the relevant stakeholders will be able to transparently monitor/measure and report on the necessary data and information. The availability and ability of existing and/or bespoke e-solutions will be explored.

One of the innovations is to have an international expert embedded in the climate change division of ECD for continuous capacity building. The project will also systematize the engagement of academic/research institutes in the country to back-stop government capacities. It will enable partnership between the government and research/academic institutes so that these institutes can both provide technical backstopping to the ministries as well as provide capacity building support to the ministries.

Further, MRV systems developed will be based on the best practices adopted by other countries both in terms of the systems/approaches and IT based technologies. The guiding principle will be to reduce the level of effort and cost in collecting and reporting data to minimize the cost implications for the country and prepare the reports in cost effective manner. The approaches adopted will ensure that there is no duplication of data collection by linking wherever available sector specific data, using systems that exists for data collection. IT based systems will also be used to ensure that the data and reported information is robust, sustainable, replicable and user-friendly.

The project will build upon the experience and work already undertaken by countries in the region and build on the specificities of Myanmar. Further, it will also use the latest guidelines on reporting and

IPCC methodologies in developing standardized templates, guidelines and tools for GHG inventory preparation. The project will also use the outputs of the project to implement the Third National Communication project, which is expected to start in 2021. This will provide an opportunity to test the systems.

Sustainability

The project will ensure sustainability of the outcomes through the following measures taken by the project.

(i) Formalizing the institutional arrangements by defining the roles and responsibilities of the line ministries in preparing the GHG Inventory and tracking NDC actions, and mainstreaming the functions in each ministry and entity that will be part of the institutional arrangement. Further, this institutional arrangement will be anchored in the NECCCCCC created by the Government of to coordinate NDC implementation and GHG inventory preparation.

(ii) Developing linkages with technical institutes to provide technical backstopping on GHG Inventory preparation, NDC tracking and data collection process and embedding these linkages in the institutional arrangements.

(iii) Developing standardized and BTR ready templates, guidelines, and tools for line agencies and for line ministries to collect data.

(iv) Creation of IT-based GHG database management system and NDC Registry.

(v) Establishing the knowledge hub for providing all the training material created in the project that would enable ECD and other stakeholders to have continuous access to training material. This will enable training new staff and address the issue of staff turnover.

(vi) Formalizing linkages with peers in the region to enable continuous exchange and learning.

Potential for scaling-up

The experience and capacity created in the project will enable further deepen the ETF through following:

(i) Over time upgrade the data collection to estimate GHG Inventory based on Tier II and Tier III methodologies for various sectors.

(ii) Expand the NDC tracking framework to sectors other Energy sector, which is currently the only sector covered under the NDC.

(iii) Expand the coverage of data collection on entity level GHG emissions to private sector entities in sectors other energy sector.

(iv) Expand the institutional framework to provincial level and replicate the GHG Inventory preparation process at provincial level.

(v) Experience from Myanmar and the best practices will be used to provide capacity building in similar country in the region.

[1] https://www.ipcc.ch/report/ar5/syr/

[2] https://www.ipcc.ch/sr15/

[3] https://climateknowledgeportal.worldbank.org/country/myanmar-burma/vulnerability

[4] https://unhabitat.org/sites/default/files/2019/10/assessing-climate-risk-in-myanmar_technical-report.pdf

[5] https://unfccc.int/greenhouse-gas-inventory-software-for-non-annex-i-parties-naiis

[6] https://unhabitat.org.mm/wp-content/uploads/2019/06/MCCP_2019.pdf

[7] https://www.nrel.colostate.edu/projects/alusoftware/download-software.php

[8] https://www.adaptation-fund.org/project/addressing-climate-change-risks-on-water-and-food-security-in-the-dry-zone-of-myanmar/

[9] https://openknowledge.worldbank.org/bitstream/handle/10986/23741/K8658.pdf?sequence=5&isAllowed=y

[10] FCCC/CP/2015/L.9/Rev.1, para 85, available at https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf

[11] Available at: https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.50.06_CBIT_Programming_Directions_0.pdf ah

1b. Project Map and Coordinates

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

The project will take place within the boundary of the Myanmar and seeks to achieve positive impacts in the entire country. None of the project activities will be implemented in an area which is a disputed territory with neighboring country.

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

During the project preparation phase, detailed stakeholder consultations were organized. The stakeholder were given a series of self-evaluating

questions and the responses were analyzed. Over half of the stakeholders demonstrated knowledge and understanding of MRV and M&E concepts. About half of these departments had participated in the INC and SNC, though the level of involvement differed between the two reports. A similar half of the stakeholders polled indicated participation in the Government of Myanmar?s Sustainable Development Plan (MSDP) National Indicator Framework (NIF) being implemented by the Central Statistical Organization, which is the national statistical authority. There is congruence between the long-term goals of the GEF Project and MSDP NIF project as both include SDG indicators and are aimed at improving the country?s long-term capacity to monitor them.

While again about half of the departments indicated that they had some form of on-going data sharing agreements with MONREC/ECD, the level of data sharing arrangements were relatively limited. This indicates the importance of permanent data sharing arrangements required for effective operation of the proposed MRV system being designed through the GEF project.

A similar half of the stakeholders indicated similar data sharing arrangements with the CSO for environmental cluster. Hence, the ability of CSO to serve as a data and information repository should be further explored during project implementation. However, the type of information being currently shared with ECD and CSO needs to be further explored during project implementation.

When polled on established data and information collection systems (tools and templates) relevant to greenhouse gas emissions / emission reductions, less than half of the stakeholders indicated some level of systems being in place, though a further half of them indicated well-established data and information collection systems, which need to be further explored during project implementation. A similar less than half of the stakeholders polled indicated they provided either directly or indirectly activity data, and slightly more than half of them indicated they provided emission factors data. The kind of activity data and emission factors these departments were monitoring, and their

data and information flow systems need to be further explored during project implementation.

Half of the stakeholders indicated that they had some level of capacity to provide relevant data and information necessary for preparing GHG inventory, though only less than 20% indicated self-sufficiency. These have to be further explored with the added responsibilities under the ETF of the Pairs Agreement and increased frequency of reporting the country have to do under both the UNFCCC and Paris Agreement. A question on the level of human/technical/financial support they receive from international Governments or agencies on climate-change related activities received, half of the stakeholders indicated that they did receive such support. Nearly one-third of all the stakeholders indicated that they were tracking the support provided/received on climate-change related activities in the country.

Stakeholder involvement (of this selected cohort of stakeholders) in the INDC and NDC processes indicated a similar trend. Slightly more than half of the departments polled indicated involvement in both these activities.

Key institutions involved in the project and their respective roles are as summarized in the table below.

Table 5: Stakeholder List

Institution	Role	Responsibilities

Government, Myanmar		
Ministry of Natural Resources and Environmental Conservation ? MONREC	Executing Agency	The Environmental Conservation Department (ECD) under the MONREC is the executing organization for climate change activities in Myanmar and will have the primary coordination responsibility for developing and implementing the MRV system. As the Nationally Designated Authority (NDA) for the UNFCCC, ECD is also responsible for engaging all other Ministries and Departments to report GHG emissions and sinks. ECD will co-lead in development of this project preparation and all aspects of implementation.
Other Ministries and local governments	Primary Data Provider	Other Ministries are primary sources of data provision used within the MRV system. These stakeholders will be involved in all components of the project, both, as participants in designing the system and receiving trainings.
Ministry of Planning and Finance	Secondary Data Provider and Support Provider	The Central Statistics Organization within this Ministry is a secondary source of data used for preparation of NC and BUR reports. Key stakeholder to implement, support and align their data collection to the MRV institutional framework. This stakeholder will be involved in project activities related to data collection for both GHG inventory and tracking NDC implementation.
Department of Social Welfare, Ministry of Social Welfare, Relief and Resettlement.	Focal point for Gender Equality and Women Empowerment.	The Department will be engaged in consultations on designing institutions and systems for ETF to integrate gender aspects.
Universities and Research organizations	Provide technical expertise and collaboration on long-term capacity building	Several universities and research organizations are already involved as part of the TWG of BUR. Involvement of these organizations will continue in order to provide technical expertise and also help with the emission factor development. Possibility of long-term training structure will be explored with these organizations.

Climate Change NGOs and Private Sector	Climate Change NGOs: Partners in creating future capacity to support ETF in the country. Private Sector: A source of data for assessing GHG Inventory and impacts of Climate Change Actions	The Climate Change NGOs and Private sector will be invited to capacity building activities to enhance their knowledge and understanding of the ETF as well as the future role they will play in strengthening the ETF. The private sector will be engaged in the development of the MRV system to seek their inputs and suggestions on private sector roles in NDC tracking. They will be invited to participate in the capacity building activities to increase their understanding of the climate change reporting.
International		
Global Environmental Facility (GEF)	Funding Partner	GEF is a primary funder for this project, providing overall technical guidance in development of the project proposal.
UN Environment (UNEP)	GEF Agency	UNEP is a GEF Agency and co-lead organization will oversee project preparation and implementation.
Global Green Growth Institute (GGGI)	Development Partner	GGGI is supporting the government in strengthening its MRV system. The project will build upon the work undertaken by GGGI and will closely coordinate with it. .
United Nations Program on Reducing Emissions from Deforestation and Forest Degradation (UN-REDD+)	Secondary Data Provider	UN-REDD+ Program is a secondary source of data provision used within the MRV system. The REDD+ team are technical advisors to the Forestry Department and Forestry Research Institute and are a critical partner in building capacities for data collection. This stakeholder will be involved in project implementation.
Myanmar Climate Change Alliance (MMCA)	Secondary Data Provider	MMCA will play an active facilitatory role within the institutions. MCCA are a critical national partner for policy initiatives. This stakeholder will be involved in project implementation.

UN Resident Coordinator and other donors	International support agencies providing funds for climate activities	The UN RC office and donors will be fully informed of the project activities and outputs. This will enable ensuring synergies with other similar efforts and identifying opportunities for further support based on project outputs.

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Level of engagement during project implementation

The level of engagement of each stakeholder was determined based on a combination of their responses to questionnaire, their participation in the INC, SNC, NDC, Technology Needs Assessment (TNA) and other activities in Myanmar related to climate change mitigation and adaptation. While the focus of the analysis was not on adaptation, however this exercise also included those stakeholders who provided or could provide information on gender and adaptation issues. The level of engagement was calculated based on their levels of participation in the preceding list of activities, the role/potential role they could play in future MRV and NDC activities as well as the PESTEL analysis. The results of the analysis are presented in annexes to this report.

The following analysis follows the methodology outlined in ICAT Stakeholder Participation Guidance, Second Draft[1]. While the stakeholders are classified between their expected power and influence over the project outcomes, there is a bit of wider spectrum of stakeholder participation. They intersect and interact on a spectrum of engagement:

1. Inform: Provide the stakeholder with balanced and objective information to assist them in understanding the problem, alternatives and solutions

2. Consult: Obtain stakeholder input on analysis, alternatives or decisions. They need to be involved in the stakeholder consultation workshops, but they are not involved in project implementation.

3. Involve: Work directly with stakeholders throughout the process to ensure that stakeholder concerns and aspirations are consistently understood and considered.

4. Collaborate: Partner with stakeholders in each aspect of decision-making including the development of alternatives and the identification of preferred solutions. They would constitute a project steering committee. They will also be consulted on a more detailed level during the one-on-one bilateral consultations.

Table 7: Stakeholder engagement for Project Implementation

Level of Engagement	Number of stakeholders
Collaborate	16
Involve	49
Consult	20

Inform	49

It identified a cohort of sixteen (16) key stakeholders who will be **Collaborated** with during project implementation. This includes inclusion as members of a Steering Committee, technical working groups, and direct lead some of the project work. These are entities and departments who will either be directly contributing to data and information critical to the preparation of future GHG inventories, such as activity data and/or emission factors, or for the NDC, either as implementors or contributors to future revisions. This also includes entities who could play a pivotal role in creating the necessary enabling environment for MRV system operation.

Further, a list of forty-nine (49) stakeholders were identified who would be **Involved**, which means that they will have an impact, or will be impacted by the MRV system being designed. This includes stakeholders who need to expand their existing human, technical and financial capacities to respond to the changing requirements under the ETF reporting systems being developed. This also includes activity data and emission factor providers, as well as those who could be involved in determining the projections of GHG emissions and removals.

A list of forty-nine (49) stakeholders was identified which again included stakeholders who need to be **Consulted**, organizations that could potentially provide data and information to either improve the overall quality of the MRV system, or even directly provide activity data and/or emission factors. However, during project implementation these roles and responsibilities have to be further discussed and analyzed and these entities could change to those that need to be involved.

Finally, a large number of stakeholders were identified who needed to be informed, as they had potential interest in the MRV systems and/or NDC information.

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[1] https://climateactiontransparency.org/wp-content/uploads/2020/01/Draft-2018-version-of-the-Stakeholder-Participation-Guide.pdf

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Stakeholder Engagement Plan

Strong stakeholder participation of both public and private sector actors is critical for the achievement of the project objectives and implementation of the project activities. In that sense, there are both public and private entities that must work with the project to implement a strong transparency system for adaptation and mitigation; not just for establishing monitoring procedures but for generating quality information to inform policy processes and decision making.

The stakeholders will be involved and consulted during the project execution through activities under all outputs. Stakeholder consultation and buy-in is of utmost importance for the sustainability of the project and engagement will be done both formally and informally at all levels of project implementation and decision-making. When drafting the technical guidelines under the activity 1.1.2, which defines the roles and responsibilities of line ministries, agencies, and relevant stakeholders all the stakeholders will be consulted in a meaningful manner. The draft MOUs to be developed under the activity 1.1.5 will be elaborated in close collaboration with the private sector stakeholders as well as the government stakeholders.

The stakeholder?s participation will be ensured through Project Steering Committee (PSC) meetings. The PSC will consist of stakeholders from key ministries, agencies and NGO representatives which will be decided in the inception workshop. Stakeholders will be involved in providing technical inputs through two technical working groups established under the outputs for guiding and finalizing the project outputs. These technical working groups are already established for BUR1 and SNC. CBIT project will utilize the same technical working groups to ensure effective stakeholder participation.

The stakeholder participation will be ensured by conducting consultative workshops under the activities 1.1.6, 1.2.5, 1.3.4, 2.1.4, 2.2.2, and 2.3.4, . The project team will ensure a gender balance and prioritize participation of the women. The Training of Trainers (TOT) approach will be followed to maximize the participation of the stakeholders. The training to be conducted will ensure capacity building of the stakeholders via TOT approach where possible.

The web-portal which will be hosted in the MoE website will ensure that all the technical reports, training materials and guidelines developed under the CBIT support will readily available for all the stakeholders as well as general public. In addition, coordination and information sharing will be done with the global CBIT project platform.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Gender analysis

Myanmar ranks 114 of 153 countries in World Economic Forum 2020 Global Gender Gap Report[1], with main gaps identified in women?s political empowerment, economic participation and opportunity, and education attainment. The UNDP Human Development Report of 2020 reports a Gender Development Index (GDI) of 0.954, falling into group 2 of 5 groups, and with the Gender Inequality Index (GII) of 0.478 it is ranked 118th out of 162 countries. Women constitute 10% of all members of

both Houses of Parliament, and they also suffer all forms of violence with poor access to justice.[2] The National Plan for the Advancement of Women (2013-2022), structured around the 12 priority areas of the Beijing Platform for Action 1995, created a gender agenda for a gender-neutral reform platform. The 2018 National Sustainable Development Plan (NSDP) has mainstreamed gender into the three pillars and aligned its goals with SDG indicators. This shows improved government commitment to incorporate gender equality considerations into public policy.

There is a significant gap in men and women participation in the labor market. Although the role of women in the public sector is gradually increasing, according to census data, the labor force participation of persons aged 15 and older is 63.4% (81.7% for men and 47.1% for women).[3] This under-representation of women is not matched by a gender gap in education enrollment and signals a lost opportunity for household economy and welfare, and the overall national development drive. Under-employment is also more prevalent among women than men, and women are over-represented in the informal sector, which raises concerns over job quality, meaningful economic empowerment, gender stereotyping in employment and sustainability among others. Men?s work tends to be perceived as more valuable and superior to that of women in terms of income and status, which results in a pay gap and women being listed as dependents on family registration cards.[4] The ratio of women to men for hourly wages in industry is 90%. A significant gender segregation in industry occupation and differences in human capital and productivity may account for these wage differentials.[5] Gender-responsive policies are required to create more decent jobs for women, including focus on education and vocational training for women.[6] Myanmar is at a critical juncture for harnessing the forces of economic growth in a way that ensures that everyone can benefit and that can be achieved when gender equality and women?s empowerment is placed at the center of national development plans[7]

Department of Social Welfare, Ministry of Social Welfare, Relief and Resettlement is the government focal point for gender equality and women?s empowerment, and civil society actors concerned with gender equality. The key document for addressing gender in Myanmar is National strategic plan for the Advancement of Women (2013 - 2022). Gender Equality is also addressed strategically in Myanmar?s National Climate Change Master Plan (NCCMP, 2018-2030). Gender is specifically incorporated into the Results Framework of the NCCMP, and across five of the six identified Action Areas:

? Action Area 1: Mainstreaming of gender into Climate Change related policies on agriculture, fisheries, livestock and irrigation sectors.

? Action Area 2: Conduct gender analysis and development of capacity to integrate gender perspectives into Climate Change responses to agriculture.

? Action Area 3: Incorporate gender perspectives based on analysis of financial mechanisms for climate action in Dry Zone and Delta areas.

? Action Area 4: Apply a gender perspective to trainings of farmers and fisherfolk on climate-smart approaches and based on gender analysis; and, apply gender analysis to identify gender-responsive approaches to low-emission farming technology and practices.

? Action Area 5: Develop farmer-friendly, gender-sensitive training and awareness raising materials on CC; and apply a gender analysis on training on improved water, soil nutrient, pest and disease management practices.

Further, MONREC, is currently in the process of preparing a discussion paper on NDC alignment and alignment with the GoM plans on gender equality, poverty, and social inclusion.

The gender analysis for this document has found three areas where the project could influence gender considerations:

? Formalisation of roles and responsibilities within the legal framework and institutional arrangements could emphasize and cement lack of consideration for gender issues and gender disparity itself if gender related ministries and CSOs are not incorporated into the final arrangements.
? The data collected and data collection systems for climate action tracking could perpetuate gender-blind approaches to climate change if sex disaggregated data is not collected and incorporated in the database design. This also includes the development of gender sensitive indicators and gender sensitive communication of the data within the data management platform.
? Training and capacity building could influence availability of technical expertise across both genders equally in the future if the project ensures to provide training to a group of stakeholders with an equal gender split, where possible. Not only access to training however, training must also be delivered in a gender sensitive manner.

There are no legal, cultural or religious restraints on women?s participation in the project.

Gender Action Plan:

The key issues identified in gender inclusive sustainable economic growth are:

(i) Equal participation in decision making,

(ii) Equal access to formal employment opportunities, and

(iii) Lack of sex-disaggregated data to enable better policy and programme design to ensure equal benefits to women and men from sustainable development.

The key purpose of the ETF is to enhance the capacity, institutional and human, for collecting accurate and reliable data in transparent manner to estimate the national GHG Inventory and the impact of various climate actions on GHG emissions reductions. The data required for these two aspects is irrespective of the economic growth benefits accruing to women or men. Thus, gender disaggregated data is irrelevant for estimating GHG inventory and GHG impacts of NDC actions. In case of adaptation, gender-disaggregated data on impacts of climate actions on reducing vulnerability is useful in designing actions that provide equal benefits to women and men. In this project the focus is only on mitigation action.

Equal participation of women in decision making does influence the design and development of actions. Thus, it is important that institutional design of systems that enable government decision making provide equal participation opportunity to women in decision making.

Countries face challenge in providing equal access to women and men in skill development. The skill development opportunity under the project should ensure that women get an equal opportunity to participate and the training approaches and material don?t promote gender bias.

The CBIT project will be designed to be gender-responsive and be inclusive of targets in the NCCMP and NSDP. The review mentioned above will also inform the gender related work of the project. The project will be guided by the CBIT Programming Directions and the GEF Policy on Gender Mainstreaming and its Gender Equality Action Plan, as well as UNEP Gender policy. The project will liaise with the Global CBIT program in its efforts to incorporate UNFCC gender action plan in the reporting process.

The project will undertake the following to integrate gender consideration in the project.

? Participation in steering committees and decision-making bodies

The Department of Social Welfare, Ministry of Social Welfare, Relief and Resettlement will be represented in the Project Steering Committee (PSC). Further, representatives from the ministry will be included in the technical working groups (TWGs) specifically focused on data collection for the GHG Inventory and NDC Action tracking. This will include, for example, ensuring that formalization of the institutional arrangements includes roles and responsibilities for gender expertise and consideration.

? Gender Monitoring Framework for Project

The project will develop a Gender Monitoring Framework. The Gender Monitoring Framework will introduce measures and KPIs that can be tracked throughout the project to ensure gender issues are being considered and addressed. A session during the inception workshop will included to discuss how to ensure a gender balanced project implementation. The Project manager will be responsible for monitoring the gender action plan using the gender monitoring framework.

? Gender Expert

Project will hire a Gender Expert, a part-time role, to develop the Gender Monitoring Framework. The gender expert will also support the PMU in implementing the Gender Action Plan and guidelines on how to monitor the indicators included in the Gender Monitoring Framework. The Gender expert will also provides its inputs to the development of institutional design to ensure equal representation as well as the component on NDC tracking to identify sex-disaggregated data for tracking benefits of NDCs actin.

? Equal access to Training

The project will also aim to ensure equal opportunities of men and women to engage in project activities, and access training and capacity building opportunities. The project aims to enhance the capacity of the government to conduct their GHG inventory in a transparent, accurate, complete, comparable and consistent manner. Project will support increasing the capacity of women to participate in the GHG inventory preparation and the NDC tracking processes. During the capacity-building activities that will be undertaken during project implementation, gender-disaggregated data will be collected to track effectiveness of the project in engaging all genders. The stakeholder consultations during the project preparation phase had collected this information and is informing the overall process. A similar gender-disaggregated participatory data will be collected for all stakeholder consultations organized during the project implementation.

? Integrating Gender in Project Component and Outputs

? The institutional design carried out under output 1.1 will address the issue of equal women and men representation.

? The training material designed for Outputs 1.1, 1.2., 1.3, 2.1, 2.2, and 2.3 will ensure that it doesn?t use any typical gender stereotyping and is gender sensitive.

? NDC tracking data collection will include gender ? disaggregated data for benefits of NDC actions. This is not required for an MRV system, but will help design better NDC actions by the country.

Gender indicators: The project result framework includes two indicators, one at the objective level and another at the outcome level, as follows:

? Number of persons trained disaggregated by women and men ? this indicator captures the aspects of ensuring women and men have equal access to developing skills that enables equal employment opportunities.

? NDC tracking indicators, including sex-disaggregated benefit indicator ? this allows tracking system to provide better information for policy makers to design more gender inclusive actions.

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[1] World Economic Forum. 2021. *The Global Gender Gap Report 2021*. The World Economic Forum: Geneva.

[2] World Bank - https://www.worldbank.org/en/news/feature/2013/09/19/Myanmar-Gender-Equality-and-Development

[3] See Department of Population. 2015. Myanmar Census 2014. Nay Pyi Taw: Ministry of Immigration and Population quoted in Asian Development Bank, United Nations Development Program, United Nations Population Fund, and the United Nations Entity for Gender Equality and the Empowerment of Women. 2016. Gender Equality and Women?s Rights in Myanmar: A Situation Analysis. Footnote 130. P. 40.

[4] The Gender Equality Network (2015). ?Raising the Curtain: Cultural Norms, Social Practices and Gender Equality in Myanmar.?

[5] Asian Development Bank, UNDP, UN Population Fund, and UN Women (2016). *Gender Equality and Women?s Rights in Myanmar: A Situation Analysis.* P. 46.

[6] ADB. 2016. *Gender Equality and Women?s Rights in Myanmar: A Situation Analysis*.

[7] World Bank - https://www.worldbank.org/en/news/feature/2013/09/19/Myanmar-Gender-Equality-and-Development

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

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

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The private sector will be engaged in the project both for consultation as well as capacity building related to both GHG inventory preparation and NDC tracking. The project will identify private sector entities who are relevant for providing data to enable reporting. Data-sharing agreements with the private sector will be developed as part of the project considering the need to ensure security of entity specific data.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Table 8: Risk description

Risk description	Main category	Risk level rating	Risk mitigation Strategy and Safeguards	By Whom / When?
Lack of cooperation on data and information sharing among stakeholders	Institutional	Medium	Cooperation between line ministries will be ensured through a project steering committee constituted by critical stakeholders and ensuring they meet regularly during project implementation addressing key issues. Cooperation with private sector will be ensured through thorough stakeholder engagement, addressing key critical private sector issues, such as confidentiality of data, data and information flow arrangements and avoiding adding undue burden on them	National Project Director (NPD)/ throughout the project implementation
Professional and staff turnover	Organizational	Medium	Development of guidelines and training manual to be integrated in a knowledge management system to ensure continuity of the pool of knowledge and skills. Training modules will be developed and established in institutions to provide access for training to new staff. Institution linkages with Universities and Research institutions will be developed to provide long term technical backstopping.	NPD and Project Manager (PM)

Risk description	Main category	Risk level rating	Risk mitigation Strategy and Safeguards	By Whom / When?
Lack of participation of key institutions	Institutional	Low	The on-going SNC and BUR1 projects are laying down the groundwork of involving the key ministries and institutes in GHG inventory preparation process. As these are recent projects, there is still institutional memory retained and the project will take active advantage. This existing information on technical working groups and further awareness raising will provide strong emphasis on training needs for staff and identify focal points of relevant agencies.	NPD and Project Manager (PM)
Duplicity of activities among other related projects including other CBIT projects that invented the wheel before	Organizational	Low	There are two interventions on MRV support, and these are both located in MONREC, one within ECD. Further, the first output of the CBIT project will undertake mapping of ongoing activities and will identify any further projects that might be developed during project implementation. As the principal coordinating entity within Myanmar for all climate-change reporting related activities, ECD will further coordinate with all relevant agencies on a regular basis. Donor coordination group will be formed which will form the basis of regular update to ensure no duplications occur.	NPD and Project Manager (PM)

Risk description	Main category	Risk level rating	Risk mitigation Strategy and Safeguards	By Whom / When?
Lack of political willingness to support the project activities	Political	Low	Myanmar, being the second most exposed and vulnerable country in the world to the negative effects of climate change, the government has recently adopted the Myanmar Climate Change Strategy and Action Plan, indicating its commitment to addressing climate change. Myanmar has also submitted its INDC and is in the process of refining the document to be submitted as NDC. It has already ratified the Paris Agreement.	NPD and Project Manager (PM)
Government not able to secure funding for ETF related activities beyond the end of the project to sustain project results.	Political	Low	The work of CBIT will help regular preparation of BTR and NCs, which will be funded due to Myanmar?s developing country status. The project will also undertake assessment of staffing and financing of the institutional arrangements. It will further make recommendations for integrating this work in a mandate to the Ministries, thus creating sustainable finance through budgetary allocations.	NPD and Project Manager (PM)
Impacts of COVID-19 on Project Implementation	Health/Financial	Low/Medium	A detailed assessment of the situation and risk mitigation measures are listed below the table.	Task Manager (TM) and NPD
Climate Risk (Short-term) Myanmar is vulnerable to climate-related hazards.	Environmental	Low Risk	The key risk to the project will be to the databases and servers for maintaining the data. The project will take into account the likelihood of risk to the systems and accordingly design safety measures.	ECD

COVID-19 Risk assessment

Does the intervention have a plan in place to manage a possible reinstatement of COVID-19 containment measures?

The country has gone through several layers of responses to COVID-19 pandemic, including partial working hours for Government staff and restrictions on number of people who can gather. The initial phases which coincided with the PPG phase of this project and severely impacted the development of proposal. Over time the systems were strengthened to adapt to the situation, and this has improved the operations. The current project has considered these changes and, as with the stakeholder consultation processes carried out during the PPG, the planned engagements can be organized on-line as well as in-person. The Government staff involved, and other stakeholders have demonstrated resilience by taking up other means of interaction instead of face-to-face meetings, and while restrictions are being eased in the country, should they be reinstated the project can shift to these interactions.

Impact on Government capacity as human resources are mobilized elsewhere:

The project is expected to start implementation in January 2022. It is expected that the ongoing global and national effort at Vaccination will slow the spread and limit the impact of any future episodes. Thus, the impact of any future wave on the government capacity impacted due to mobilization are likely to be small. From the experience of the past one year, the mobilization was more at city and province level of the governments, whereas, at the central government level only the health and disaster related departments were mobilized.

Change in capacity of other executing entities and the effectiveness of the overall project implementation arrangement:

As mentioned above the key ministries and stakeholder involved are at the central level government and there is no engagement with the health and disaster management departments. Thus impact of future COVID infection episodes is likely to be limited on other executing entities and the effectiveness of overall project implementation arrangements.

Limited capacity and experience for remote work and online interactions as well as limited remote data and information access and processing capacities that projects will need to strengthen:

The country Government staff, and other stakeholders have adopted online means of communication and remote working. While the impact has been that in-person meetings could not be conducted, the online sessions have been effective. These stakeholders have enhanced their capacity to respond to these demands and have provided data and information. The first stages of project outputs are focused on understanding current practices, and thereby address any gaps in gathering data and information and the response measures will enhance these capacities. Further, one of the main aims of the project is to create systems whereby remote access of data and information is easily available to all relevant stakeholders.

Changes in project implementation timelines:

The project is expected to be delivered over a period of three years, and during the PPG phase, the expected timelines for these outputs was assessed, taking into account the expected impacts of COVID-19.

Changes in baseline (both ongoing and forthcoming projects):

COVID-19 has indeed impacted the ongoing baseline projects, the SNC and BUR1. However, while the project builds on the institutional arrangements built by these two projects, its results are not dependent on them. The CBIT project aims are different from those of these two projects and are more future oriented and therefore are not linked to the outcomes of the SNC and BUR1, which are focused on created these two reports.

Change in conditions of beneficiaries:

The ultimate beneficiaries of the project are stakeholders and their enhanced capacities to better understand the requirements of the MPGs of Article 13 and other reporting requirements under the PA. While the economic activities of the country have been impacted, the requirement to assess these impacts will continue to be in place, which will be addressed by the project. These requirements of the beneficiaries are not expected to change due to COVID-19, and on the other hand, are expected to increase; therefore the project and its outputs will be in greater demand.

Climate Risk Assessment

The following climate risk assessment was conducted based on the GEF Scientific and Technical Advisory Panel (STAP) guidance tool[1].

Future climate change impacts

1. Range of future expected temperature, precipitation, sea-level rise, flood/droughts heatwaves, etc.?

As referred previously, a detailed climate risk assessment[1] was conducted in 2017, resulting in a technical report. The report provided the following projections for changes in temperature, precipitation and sea-level rise in the country.

Table 9: Projections for mean annual and seasonal precipitation change

	Model baseline* (1980 to 2006)	Precipitation range 2011-2040	Precipitation range 2041-2070
Annual	2000 mm	+1% to +11%	+6% to +23%
Hot Season	300 mm	-11% to +12%	-7% to +19%
Wet Season	1700 mm	+2% to +12%	+6% to +27%
Cool Season	100 mm	-23% to +11%	-12% to +11%

* The NASA NEX baseline data reflects model values averaged over a .25 degree (25km). For this and other reasons, the actual observed station temperatures may differ from the model baseline shown here.

Table 10: Middle range projections of sea level rise above 2000-2004 base period

Timeslice	Middle range of future sea level rise
2020s	5 cm to 13 cm
2050s	20 cm to 41cm
2080s	37 cm to 83 cm

Note: The middle range refers to the 25th to 75th percentile of model-based outcomes for sea level rise projections.

The climate change impacts over the medium to long term on the project would be on the data collection and data storage system. The likelihood of the climate impacts affecting the project implementation are minimal.

2. Changes to natural resources of interest from climate change?

The outputs and outcomes of the CBIT project are related to establishing institutional arrangements, strengthening transparency activities, training relevant stakeholders and overall capacity building. Thus the project doesn?t address directly any natural resources.

3. Changes to communities, lifestyles, economies from climate change?

Potential future impacts of Climate change may alter the way communities in Myanmar respond with changes in its economic and livelihood activities, such as agricultural practices, forest management, coastal structures etc. Therefore, it is imperative that the country has a clear understanding of its current situation on several fronts and can consistently do this assessment over years. The proposed CBIT project will address one of the principal barriers, technical capacity and information to design better policies to address the future climate disturbances.

4. Is climate contributing to problem being addressed?

The Climate change is not contributing the problem being addressed. The problem being addressed though will help address the climate change better.

5. What might exacerbate future climate risks?

The core barriers and challenges are not a result of or impacted by climate risks. Though the lack of information and analysis of climate data, which this project addresses, is most likely to exacerbate the climate risks.

Risk to Project outcomes?

1. How will climate change affect projects? component goals by sector?

The project is expected to be delivered over three years and is principally focused on enhancing the technical capacity in the country and in forming permanent institutional arrangements, and therefore, the impacts of climate change on project outcomes are assessed to be negligible.

2. Will planned interventions reduce vulnerability to climate change?

The project will reduce vulnerability to climate change by enabling the country to consistently conduct its GHGI, prepare NC/BTRs and formulate its NDCs.

3. What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?

Given the small size of project and the only physical infrastructure it creates is embedded in larger IT structure of the government, there no additional capacities and information needed then those required by country to address the climate risks and design resilience measures for its infrastructure project. These requirements are identified in DRR Policy mentioned above.

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[1] https://unhabitat.org/sites/default/files/2019/10/assessing-climate-risk-in-myanmar_technical-report.pdf

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[1] https://stapgef.org/sites/default/files/2020-02/GEF%20Agency%20Retreat%20guidance%20on%20climate%20risk%20screening%20of%20GEF%20projects%20Mar-Apr%202020.pdf?null=

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

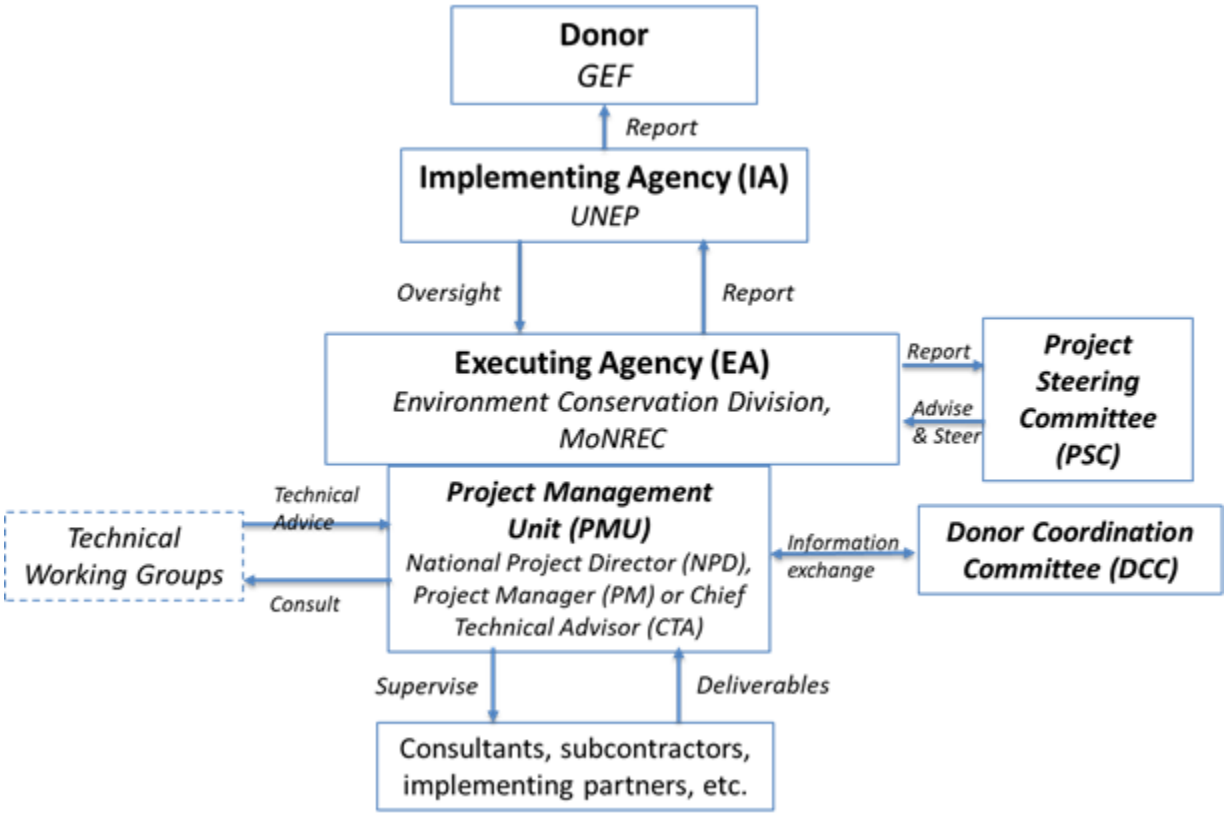
Institutional arrangements

UN Environment has the role of the GEF Implementing Agency. ECD will act as the Executing Agency (EA) of this project. ECD as a coordinating institution for climate change projects in the country is also participating in all other GEF projects as coordinator or counterpart, therefore ECD will ensure that there is constant check of the activities and the synergies that can be created among initiatives.

The ECD will lead and coordinate the implementation of this project. They will coordinate the establishment of institutional arrangements for a robust national system for tracking progress of NDC implementation, GHG inventories and tracking support. Project Management Unit (PMU) based in ECD, under the supervision of National Project Director (full time staff of the Government), will run the day-to-day implementation, administration, and monitoring. The ECD will also hold meetings, communications and information flow among partner institutions and other stakeholders. ECD will also coordinate implementing partners including government institutions and departments, and research institutions and universities who will participate in data collection and information sharing to feed into the MRV system. Each of the priority sectors will also have a focal point for data collection and will have periodic coordination meeting with ECD for the smooth moving of the process forward.

The NECCCCC will act as the Project Steering Committee (PSC) and provide transparency and guidance, ensure high-level support and sustainability of the project results and have decision-making power over all aspects of the project implementation. TWG established, utilizing where relevant those set up under the current BUR, will bring together technical representation from the key stakeholders to enable consultation and collective development of project outputs. This strategy will ensure that the experience and understanding of the existing TWG members are utilized effectively and lessons learned, and knowledge

gained from BUR are transferred to the CBIT project. Also, this strategy will ensure CBIT is built on existing efforts rather than duplicating them.



Coordination with other initiatives:

ECD is the Executing Agency for all the projects related to climate change reporting and transparency, including BUR, TNC, REDD+, etc. This project will build on the outcomes of other transparency-related initiatives, especially the work carried out to support the development of SNC and its BUR also led by ECD.

ECD will also set up a Donor Coordination Committee (DCC) to coordinate with all the donors on various initiatives being supported on strengthening the ETF. At the beginning of the project, the Project Manager (PM) will map all the key donors providing support on climate change issues and develop a list of invitees to the DCC. In consultation with all donors in the country, PM will prepare update the donor supported initiatives mention in this document and regularly update them using the DCC meetings. The PM will be responsible for organizing the meeting in conjunction with the PSC, and at least twice a year. DCC will also be the opportunity to share any additional requirements for strengthening ETF and seek support. UN Resident Coordinator will be invited to DCC to represent the UN system and UN support to related activities.

The project will also work closely with the NDC-Partnership to support efforts for coordination with other countries in the region to foster knowledge-sharing and synergies (output 1.3). These workshops will also explore how knowledge and lessons-learned can be effectively shared beyond the CBIT Global Coordination Platform. This will especially benefit those countries whose projects are under preparation.

Myanmar will be part of the international CBIT community through the CBIT Global Coordination Platform, which facilitates coordination of peer-to-peer learning with CBIT projects in other countries. Moreover, the IA, UN Environment, is supporting over 70 countries with their national reporting, and more than 18 countries with CBIT projects, being the GEF Agency leading this type of initiative.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

•*Alignment with national priorities:* This project is strongly aligned with Myanmar?s Climate Change Strategy and Action Plan (MCCSAP) 2016?2030. The Strategy emphasizes ?Establish operational institutional arrangements and a coordination mechanism to monitor progress against achieving objectives and enable an inclusive approach to implementing climate-smart investments in key sectors?. The expressed need for building national capacities in government agencies and technical institutions is addressed through this project by putting a strong emphasis on training to enhance institutional capacities. MCCSAP identifies key actions to implement the Climate Change Strategy, including mitigation, adaptation, capacity-building (technical and institutional) as well as education and public awareness raising activities. The action plan covers activities within the sectors of agriculture, forestry, water, energy, transport and health. The CBIT project is consistent with the MCCSAP as it will provide capacity-building for line ministries and agencies and facilitate a more effective implementation of mitigation actions through an enhanced MRV system.

Knowledge from other on-going projects: This project will build on the experience of SNC and the BUR1, which has just initiated. The project addresses the constraints, gaps and support needs identified in the process of developing the SNC, e.g. poor database to support inventory activities. It is expected that the project will also provide enhanced capacity for implementing TNC, which is expected to be initiated in 2021.

Alignment with NDC process: The project components are strongly aligned with Myanmar?s first NDC that states capacity-building and MRV for tracking progress as two key elements for an effective implementation of its NDC. An enhanced transparency system will further facilitate a more cost-effective implementation and progress-tracking of priority actions identified in the NDC.

Linkages to NAPA: The CBIT project further builds on Myanmar?s NAPA, submitted in 2012, which focuses on the agriculture, forestry, water and health sectors and identifies 32 priority activities (referred to as Priority Adaptation Projects) for effective climate change adaptation for eight main sectors/themes. In

the NAPA, the lack of data, systematic monitoring and coordination among sectors is pointed out, as well as the need for strengthened institutions. The CBIT project will include placeholders in the national MRV system so that information and data collected under the NAPA feeds into the climate reporting being undertaken by the country.

Linkage to TNA: The CBIT project can further enhance Myanmar?s TNA process which is under implementation and will be identifying priority sectors and technologies for mitigation and adaptation. CBIT can enhance the ineffective coordination among stakeholders including public and international organizations, especially in regard to information sharing, joint resources mobilization, and monitoring and evaluation that were also identified during the TNA.

National strategic plan for the Advancement of Women (2013 - 2022) and Gender Equality aspects included Myanmar?s National Climate Change Master Plan (2018-2030) will be considered in addressing gender aspects in the project outputs.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Proposed processes to capture, assess and document info, lessons, best practice & expertise generated during implementation.

1. The project will develop a knowledge sharing platform on the website of MONRE (Activity 3.1.3) which will be developed in the first year of the project. This is aimed to provide a platform to share the technical reports and training materials developed under the project activities with all the stakeholders and public. This platform will share database reports from GHG inventory, tracking of mitigation action and adaptation databases.

2. CBIT project will support knowledge management in GHG inventory compilation, NDC tracking, and tagging climate finance through establishment of online data base management system. These databases will be archived in cloud storages and as well as dedicated servers housed in MONRE. Staffs will be trained for utilization and maintenance of these databases and on data management.

3. All the trainings and workshops conducted under the CBIT project will be well documented in the form of video recordings and workshop reports. Due to the COVID19 pandemic situation, most of the trainings will be held online. These online trainings and webinars will be recorded, and reports will be developed and published in the knowledge sharing portal.

4. CBIT project will support peer-peer sharing of knowledge and experience through participation in the regional training workshop of ETF of PA. The CBIT project will partner with CBIT global coordination platform via regular updating of the CBIT Project webpage.

5. In addition, knowledge gained from implementation of the project activities will be properly documented and integrated into the relevant capacity building programs for local government agencies/authorities and private sector stakeholders. Training session outcomes will be reviewed by the

PMU periodically and key lessons shared with the PSC. Sharing of knowledge will also be undertaken through regular meetings organized by the PMU for the PSC, TWGs and other stakeholders.

6. On-going collaborative meetings will be conducted with other PMUs implementing similar in-line projects such as SNC and BUR1.

Deliverables linked to knowledge management:

The table below includes proposed knowledge outputs to be produced and shared with stakeholders

Table 11: knowledge outputs of the project

Project Output	**Knowledge Outputs which will be shared with stakeholders via the portal**
Component 1: Technical support provided to strengthen institutional and human capacities for preparing GHG inventories on a regular basis in accordance with the Paris Agreement requirements.	
Output 1.1. Formal institutional arrangements, including procedural and legal framework developed and ready for adoption	Deliverables 1. Gap assessment report, 2. Draft institutional arrangements, 3. Terms of References for institutions, 6. Stakeholder consultation and workshop reports.
Output 1.2. IT-based National GHG Inventory System for preparing and reporting GHG Inventory and archiving data is developed and made available to line ministries and agencies	Deliverable 4. GHG DBMS User Manual, and 5. Training and workshop reports.

Output 1.3. Tools and protocols for GHG data collection and GHG Inventory preparation developed and adopted, and key staff trained on their utilization	Deliverable 1. Data Gap assessment report, including benchmarking on the Tier of IPCC 2006 methodology for each sector/sub-sector, 2. Sector-specific spreadsheets, tools and templates for GHG inventory preparation, 3. QA/QC manuals for select sectors, 4. Data collection protocols, guidelines, including QA/QC for data quality, and 5. Training material and workshop reports.
Output 1.4. Country-applicable emission factor database developed for the energy, agriculture and livestock sectors	Deliverable 1. Analysis report on emission factors applicable to Myanmar, 2. Roadmap for developing country-specific emission factors, and
Component 2: Strengthening institutional and human capacities to track and report transparently on implementation of its mitigation actions in National Determined Contributions and support received	
Output 2.1. Monitoring indicators and tools to track progress towards the energy goals defined in the NDC designed and made available to relevant ministries and agencies	Deliverable 1. NDC tracking indicators, methodologies, tools, and guidelines, 2. Guidance document on data and information monitoring and reporting templates for NDC actions, including sex disaggregated data on benefits of actions, 3. Training material. and

Output 2.2. Domestic system for tracking NDC Mitigation actions is designed and operationalized	Deliverable 1. Institutional framework for tracking NDC actions, 2. Workshop reports, 3. Operational guidelines for NDC tracking, and 4. Database management system guidelines.
Output 2.3. Framework for tracking support received for implementing NDC designed and recommendations for implementation developed	Deliverable 1. Gap assessment report on tracking support, 2. Terms of references document and roles and responsibilities chart for the stakeholders involved in climate finance tracking, 3. Methodology, data reporting protocols and templates for collating climate change support, 4. Training material on indicators and tools to track climate support.
Component 3: Strengthening regional cooperation for knowledge and information sharing including cooperative research projects for developing emission factors	
Output 3.1. Regional cooperation and peer-peer exchange workshops organized	Deliverable 1. Peer-exchange regional workshop reports

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Contribution of Knowledge and learning to overall project/program impact and sustainability

Knowledge and learning in the proposed project will be the results of project activities integrated into all the project components, and the abovementioned knowledge outputs will collectively deliver the overall project impact. Knowledge and learning also play an important role in sustaining the project impact as all knowledge outputs will be owned and managed by project partners and stakeholders who will directly contribute and enhance the impacts beyond the project period. For example, training and capacity building programs such as training on energy modelling software will create future trainers within the stakeholder institutions. These trainers will ensure that knowledge is passed to their co-workers who will be working in tracking of NDC implementation, thus ensuring project sustainability beyond the implementation stage.

Strategic Communication Plan

The project will contribute towards development of a strategic communication plan for the CCD of MoE. This will include the following activities to communicate and inform the stakeholder out the outputs of CBIT project as well as other con-current projects such as NC3, ICAT and NAPs.

1. Presentation of the results and findings of the project implementation and technical deliverables as part of side events in Conference of Parties (COP);

2. Presentation of the main findings of the project outputs to inline ministries and other stakeholders such as private sector and civil society organizations;

3. Public awareness campaigns to promote the government?s leadership on climate action.

Sectoral and sub-sectoral peer exchanges: Involved sectoral and sub-sectoral institutions will be further engaged in knowledge exchange of the project by collecting and providing relevant information to its staff and other agencies and ministries, as part of the coordination mechanism to be put in place. Data, information and tools produced throughout the project will support strengthening capacities of all ministries and agencies in mainstreaming climate change and tracking progress towards NDC goals.

CBIT Coordination Platform: Furthermore, this national project will allow the country to participate in the CBIT global coordination platform, providing and receiving inputs. The project proposal will therefore define how national CBIT information shall be shared and updated on the global coordination platform. Sharing lessons-learned and experiences under the platform, will ensure alignment of this CBIT project with other national, regional and global transparency initiatives.

Other platforms: Other mediums of knowledge sharing, such as Green Growth Knowledge Platform, NDC Partnership and others where available, will be used to share the lessons learnt from this project.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Monitoring and Evaluation (M&E) activities and related costs are presented in the costed M&E Plan (Annex J) and are fully integrated in the overall project budget. The project will comply with UNEP standard monitoring, reporting and evaluation procedures. Reporting requirements and templates are an integral part of the legal instrument to be signed by the Executing Agency and the Implementing Agency

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome as well as end-of-project targets. These indicators along with the key deliverables and benchmarks included in Annex L will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification to track the indicators are summarized in Annex A.

The project will develop a Gender Monitoring Framework. The Gender Monitoring Framework will introduce measures and KPIs that can be tracked throughout the project to ensure gender issues are being considered and addressed. A session during the inception workshop will be included to discuss how to ensure a gender balanced project implementation. The Project manager will be responsible for monitoring the gender action plan using the gender monitoring framework.

M&E plan will be reviewed and revised as necessary during the project Inception Workshop (IW) to ensure project stakeholders understand their roles and responsibilities vis-?-vis project monitoring and

evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. General project monitoring is the responsibility of the Project Management Unit (PMU), but other project partners could have responsibilities in collecting specific information to track the indicators. It is the responsibility of the Project Manager to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

The project Steering Committee (PSC) will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E Plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility of the UNEP Task Manager. The UNEP Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The UNEP Task Manager will develop a project Supervision Plan at the inception of the project, which will be communicated to the Project Management Unit and the project partners during the Inception Workshop. The emphasis of the Task Manager?s supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring.

Progress vis-?-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by the Project Management Unit, the project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The PIR will be completed by the Project Manager and ratings will be provided by UNEP?s Task Manager. The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. UNEP?s Task Manager will have the responsibility of verifying the PIR and submitting it to the GEF. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

Since this is a Medium-Size Project (MSP) of less than 4 years of duration, no Mid-Term Evaluation (MTE) will be undertaken. However, if the project is rated as being at risk or if deemed needed by the Task Manager, he/she may decide to conduct a Mid-Term Review (MTR). This review will include all parameters recommended by the GEF Evaluation Office for Terminal Evaluations (TE) and will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified during the stakeholder analysis (see section 2 above). Members of the project Steering Committee could be interviewed as part of the MTR process and the Project Manager will develop a management response to the review recommendations along with an implementation plan. Results of the MTR will be presented to the Project Steering Committee. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

In-line with the GEF Evaluation requirements, the project will be subject to an independent Terminal Evaluation (TE). 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. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation will be charged against the project evaluation budget. The TE will typically be initiated after the project?s operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office to feed into the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The final determination of project ratings will be made by the Evaluation Office when the report is finalized.

The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the project manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalization of the Recommendations Implementation Plan.

The GEF Core Indicator Worksheet is attached as Annex F. It will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above, the MTR/MTE and TE will verify the information of the tracking tool.

A summary of the planned M&E activities is provided in Annex J. The total GEF contribution for M&E activities (including the Inception Workshop, and the Terminal Evaluation) is US$ 37,000 (See Table B above and GEF Budget in Annex I-1).

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project is primarily focused on enhancing the technical capacities of the country to better monitor the GHG emissions and removals through preparing its GHG inventory consistently, accurately in a transparent manner, enabling the country identify trends in emissions to better prioritize the GHG mitigation opportunities and actions it needs to undertake. This will expectedly result in the country submitting more ambitious NDCs. The project will also support Myanmar in institutionalizing a climate finance methodology in the country that it can apply to quantify the human and financial support it requires to achieve its mitigation aims. The socio-economic benefits expected from these interventions is at multiple levels:

1. Better inter-ministerial coordination: this will facilitate the exchange of data and information between the relevant ministries and extended key stakeholders.

2. Latest and consistent information is available all across the board: As climate change is not an independent problem and has its roots in the socio?economic activities of the country, a better coordination between key stakeholders with the same latest information on data will make it easy for them to make informed decisions of the policies they intend to implement.

3. Measure and monitor support needs: By institutionalizing a consistent methodology on climate finance, rooted on existing practices within the country, the project will enable these various stakeholders standardize capacity need assessments.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

This is a low-risk project. However, UNEP ESSF guiding principles-- resilience and sustainability; human rights, gender equality and women empowerment, accountability and leave no one behind--are still applicable for low-risk projects.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
SRIF Myanmar CBIT	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Objective	Objective level Indicators	Baseline	End of project Target	Means of Verification	Assumptions & Risks	UN Environment MTS reference
To strengthen Myanmar's institutional and technical capacity to meet the Enhanced Transparency Framework (ETF) of the Paris Agreement	**Indicator A:** Quality of reporting and transparency mechanisms under the Paris Agreement (1. Low; 2. Medium; 3. High)	**Baseline A:** Low	**End-of-project target A:** Medium	Reports/evaluations from the UNFCCC/ 3rd Parties on reports submitted to UNFCCC	Assumptions: 1. Availability of data and information 2. Cooperation on data and information sharing among stakeholders Risks: 1. Political willingness to support the project activities 2. Turnover of staff at partner institutions 3. Duplication of efforts from other activities	UNEP MTS 2018-2021 Climate Change Objective: Countries increasingly transition to low-emission economic development and enhance their adaptation and resilience to climate change

	Indicator B: Indicator B: Qualitative assessment of institutional capacity for transparency-related activities (as per CBIT programming directions, Annex IV)	**Baseline B: 1**	**End-of-project target B: 2**	Assessment undertaken as part of the Terminal Evaluation Report using the CBIT programming direction assessment criteria.	Assumptions: 1. Technical capacity in sectors and in governmental agencies in understanding the needs of GHG Inventory preparation and tracking NDC actions, as well as capacities to use the tools. Risks: 1. Failure of establishment of inter-governmental coordination mechanism for the transparency framework	
	Indicator C: C1. Number of additional persons trained, and C2. percentage of persons trained that are women	Baseline C: C1 = 0; C2 = 0.	End-of-project target C: C1 = 150 C2 = 50%	Participants lists in all training and capacity building workshops	Assumptions: 1. Government securing funding for ETF related activities beyond the end of the project to sustain project results.	
Project Outcomes	**Outcome level Indicators**	**Baseline**	**End of project Target**	**Means of Verification**	**Assumptions & Risks**	**MTS Expected Accomplishment**

Outcome 1: Institutional and human capacities strengthened for preparing GHG inventories	**Indicator 1.1:** Qualitative rating of the GHG Inventory system to report regularly, transparently and accurately Based on the GEF 1-10 rating scale, outlined in Annex III of the CBIT?s Programming Directions	**Baseline 1.1: 1**	**End-of-project target 1.1: 5 (+4)**	BUR/BTR Technical assessment as part of the UNFCCC review process	Assumptions: 1. Availability of data and information 2. Cooperation on data and information sharing among stakeholders Risks: 1. Political willingness to support the project activities 2. Turnover of staff at partner institutions 3. Duplication of efforts from other activities	Expected Accomplishment (b): Countries increasingly adopt and/or implement low greenhouse gas emission development strategies and invest in clean technologies

	Indicator 1.2: Number of sectors for which data quality and collection process improved and regularized to enhance the quality of GHG inventory	**Baseline 1.2: 0**	**End-of-project target 1.2: 3** (Energy, Rice cultivation, and Livestock)	End of project assessment report and final report of the project.	Assumptions: 1. Technical capacity in sectors and in governmental agencies in understanding the needs of GHG Inventory preparation and tracking NDC actions, as well as capacities to use the tools. Risks: 1. Failure of establishment of inter-governmental coordination mechanism for the transparency framework	
	Indicator 1.3: Number of sectors/sub-using country relevant emission factors to estimate GHG emissions	**Baseline 1.3:** 0	**End-of-project target 1.3:** 5	Emission Factor Database created through project activity	Assumptions: 1. Government securing funding for ETF related activities beyond the end of the project to sustain project results.	

Outcome 2: Myanmar tracks its progress towards the achievement of its NDCs and the related support received, and reports according to the Paris Agreement ETF requirements;	**Indicator 2.1:** Qualitative rating of the MRV system in its ability to track mitigation, adaptation and support. Based on the GEF 1-10 rating scale, outlined in Annex III of the CBIT?s Programming Directions	**Baseline 2.1:** 1	**End-of-project target 2.1:** 4(+3)	BUR/BTR Technical assessment as part of the UNFCCC review process	Assumptions: 1. Availability of data and information 2. Cooperation on data and information sharing among stakeholders Risks: 1. Political willingness to support the project activities 2. Turnover of staff at partner institutions 3. Duplication of efforts from other activities	

	Indicator 2.2: Number of climate change mitigation indicators and methodologies fully elaborated, and monitoring systems implemented, including sex-disaggregated data to be tracked for climate actions.	**Baseline 2.2:** 0	**End-of-project target 2.2:** 3	End of the Project Report	Assumptions: 1. Technical capacity in sectors and in governmental agencies in understanding the needs of GHG Inventory preparation and tracking NDC actions, as well as capacities to use the tools. Risks: 1. Failure of establishment of inter-governmental coordination mechanism for the transparency framework	
Outcome 3: Myanmar cooperates, and shares knowledge related to ETF with other countries in the region	**Indicator 3.1:** Number of formal exchange arrangements End of established with MRV related national institutes in the country and in the region	**Baseline 3.1:** 0	**End-of-project target 3.1:** at least 5	Institutional network databased created through project activity	Assumptions: 1. Government securing funding for ETF related activities beyond the end of the project to sustain project results.	

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).

The following comments were provided at the PIF stages to be addressed in Project development. Table below explains how these were addressed:

Comments by GEF Sec at PIF stage (See PIF Review Sheet)	How the issues were address at project stage
1. CBIT projects are usually implemented in conjunction with the government?s own activities and in-kind contribution. Please review co-financing portfolio in the preparation phase, as appropriate.	The CBIT project will be conjunction with the SNC and BUR1. There are some other initiatives. Another related initiative was to be started this year by World Bank to strengthening entity level reporting which has been on hold due to the COVID and changed internal circumstances. The ECD will be the EA and will be providing in-kind co-finance in form of office space, time of its senior staff that will oversee the execution, etc. These discussions could not be concluded due to changed circumstances and the related co-finance will be captured when the project starts in-country execution.
2. Please further elaborate expected improvements of GHG inventory systems including frequency, time gaps, methodologies for each sector and sectoral coverage. Please also elaborate regional emissions factors and their benefits.	The CBIT project will support the country in strengthening its reporting under the PA through BTR and NCs. Table 4 provides the details of various outputs contributing to the strengthening systems to meet the PA requirements. This will include establishing GHG inventory systems (Output 1.1 and 1.2), the sector coverage and gases will be assessed and identified (output 1.3) and based on the low baseline capacity define which key categories to address in the initial transformation phase. The frequency of reporting will increase as the project will create systems for regular data collection to enable reporting as well as technologies to reduce the delays in collating and preparing reports. Currently the country has submitted only one NC and in process of finalization of SNC and preparing BUR. The CBIT will start with ensuring the current time in preparing and reporting can be reduced. The CBIT project will also help establish MRV framework, which doesn?t exist currently, to enable tracking and reporting on NDC implementation.
3. It is expected that the enhanced transparency framework including improved MRV systems will allow the country to submit BTRs in line with the MPGs of Article 13. Please elaborate the BTR preparation in the CEOER.	
4. With gender analysis provided, gender action plan should describe how the plan will incorporate and execute gender actions in relevant components and responsive measures with indicators and targets (including gender-disaggregated).	A detailed gender action plan, gender indicators are included in the CEO ER. A Gender expert is provisioned for to support and ensure gender action plant is implemented.

5. Innovation, sustainability and potential for scaling up: In terms of innovation, please elaborate MRV systems to be developed utilize technologies/approaches to increase cost-effectiveness and accuracy in data collection, calculation, and verification, and linkage with sector-specific data, which are robust, sustainable, replicable, and user-friendly. Sustainability and relevant risks need to be elaborated, including on continuous enhancement of MRV system after the project cycle and turnover of staff. Please elaborate regional and local level capacity-building in scaling up.	This has been addressed in the relevant section.
6. Stakeholder engagement should be further elaborated in non-governmental stakeholders and means and timing of engagement. Coordination should be also further defined.	Stakeholder engagement plan including for non-governmental stakeholders is included in the relevant sections.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **US$**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount (US$)***		
	Budgeted Amount	***Amount Spent to date***	***Amount Committed***
Preparation of Full CEO document	40,000	30,000	10,000
-			
-			
-			
Total	**40,000**	**30,000**	10,000

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

ANNEX E: Project Budget Table

Please attach a project budget table.

Project Components	Project Outputs	Budget line description	Budget allocation per Year				
			Year 1	Year 2	Year 3	Year 4	Total
Component 1: Technical support provided to strengthen institutional and human capacities for preparing GHG inventories on a regular basis in accordance with Paris Agreement requirements	Output 1.1: Formal institutional arrangements, including procedural and legal framework developed and ready for adoption	International MRV Expert (IE-1)	16,000	8,000	-	-	24,000
		National GHG InventoryExpert (NE-1))	12,000	6,000	-	-	18,000
		National Legal Expert (NE-2)	3,600	3,600	-	-	7,200
		International Institutional design expert (IE-2)	12,000	-	-	-	12,000
		Consultation meeting	1,000	2,000	-	-	3,000
		Training Workshops	4,000	4,000	-	-	8,000
		Report Preparation and Publications, including Translations	5,000	5,000	-	-	10,000
		Travel	5,000	5,000	-	-	10,000
			-	-	-	-	-
		Sub-total Output 1.1	*58,600*	*33,600*	-	-	*92,200*
	Output 1.2: IT based National GHG Inventory System for preparing and reporting GHG inventory and archiving data developed and made available to line ministries and agencies	International MRV Expert (IE-1)	12,000	14,000	10,000	-	36,000
		National GHG InventoryExpert (NE-1))	12,000	10,000	10,000	-	32,000
		Software expert - GHG DBMS Development (IE-3)	32,000	48,000	16,000	-	96,000
		Consultation meeting	1,500	2,500	1,000	-	5,000
		Training Workshops	2,000	8,000	4,000	-	14,000
		Report Preparation and Publications, including Translations	5,000	5,000	5,000	-	15,000
		IT Software and related systems	-	310,000	-	-	310,000
			-	-	-	-	-
		Sub-total Output 1.2	*64,500*	*397,500*	*46,000*	-	*508,000*
	Output 1.3: Tools and protocols for GHG data collection and GHG inventory preparation developed and adopted, and key staff trained on their utilization	International MRV Expert (IE-1)	4,000	16,000	10,000	-	30,000
		National GHG InventoryExpert (NE-1))	4,000	8,000	7,000	-	19,000
		Data Collection Expert - (NE-3)	3,000	9,000	4,000	-	16,000
		National Expert - Agriculture sector (NE-5)	20,000	12,000	-	-	32,000
		Gender Specialist (to be hired)	8,000	4,000	-	-	12,000
		Consultation meeting	-	2,000	1,000	-	3,000
		Training Workshops	4,000	4,000	4,000	-	12,000
		Report Preparation and Publications, including Translations	3,000	3,000	3,000	-	9,000
			-	-	-	-	-
		Sub-total Output 1.3	*46,000*	*58,000*	*29,000*	-	*133,000*
	Output 1.4. Country-applicable emission factors database developed for the energy, agriculture and livestock sectors	International GHG Emission Factor Expert (IE-3)	-	12,000	8,000	-	20,000
		National GHG InventoryExpert (NE-1))	-	3,000	1,000	-	4,000
		Travel	-	6,000	-		6,000
		Report Preparation and Publications, including Translations	-	3,000	-		3,000
			-	-	-	-	-
		Sub-total Output 1.4	-	*24,000*	*9,000*	-	*33,000*
				-	-	-	-
		Sub-total General / Evaluations	-	-	-	-	-
		Total Component 1	**188,100**	**513,100**	**84,000**	-	**786,200**
Component 2: Technical support provided to strengthen institutional and human capacities to track and report transparently on implementation of its National Determined Contributions and support received	Output 2.1: Monitoring indicators and tools to track progress towards the energy goals defined in the NDC designed and made available to relevant ministries and agencies	International MRV Expert (IE-1)	16,000	8,000	8,000	-	32,000
		National MRV Expert (NE-4)	5,000	4,000	4,000	-	13,000
		Gender Specialist (to be hired)	6,000	8,000	-	-	14,000
		National expert - EnergySector (NE-6)	10,000	10,000	10,000	-	30,000
		Consultation meeting	500	1,000	1,000	-	2,500
		Training Workshops	4,000	4,000	4,000	-	12,000
		Report Preparation and Publications, including Translations	3,000	3,000	3,000	-	9,000
		Travel	3,333	3,333	3,333	-	10,000
			-	-	-	-	-
			-	-	-	-	-
		Sub-total Output 2.1	*47,833*	*41,333*	*33,333*	-	*122,500*
	Output 2.2: Domestic system for tracking NDC Mitigation actions is designed and operationalized	International MRV Expert (IE-1)	10,000	8,000	8,000	-	26,000
		National MRV Expert (NE-4)	5,000	5,000	4,000	-	14,000
		International Institutional Design Expert (IE-2)	-	8,000	-	-	8,000
		Software expert - GHG DBMS Development (IE-3)	8,000	24,000	16,000	-	48,000
		Consultation meeting	500	1,000	1,000	-	2,500
		Training Workshops	4,000	-	4,000	-	8,000
		Report Preparation and Publications, including Translations	3,000	3,000	3,000	-	9,000
			-	-	-	-	-
		[add/remove lines as needed]	-	-	-	-	-
		Sub-total Output 2.2	*30,500*	*49,000*	*36,000*	-	*115,500*
	Output 2.3: Framework for tracking support received for implementing NDC designed and recommendations for implementation developed	International MRV Expert (IE-1)	2,000	10,000	8,000	-	20,000
		National MRV Expert (NE-4)	2,000	6,000	8,000	-	16,000
		Climate Finance Expert (IE-4)	2,000	28,400	28,000	-	58,400
		Consultation meeting	-	2,500	1,000	-	3,500
		Training Workshops	-		4,000	-	4,000
		Report Preparation and Publications, including Translations	-	3,000	3,000	-	6,000
			-	-	-	-	-
			-	-	-	-	-
		Sub-total Output 2.3	*6,000*	*49,900*	*52,000*	-	*107,900*
		Total Component 2	**84,333**	**140,233**	**121,333**	-	**345,900**

Component 3: Strengthening regional cooperation for knowledge and information sharing including cooperative research projects for developing emission factors	Output 3.1: Regional cooperation and peer-peer exchange workshops organized	International MRV Expert (IE-1)	4,400	-	-	-	4,400
		Regional workshop	-	30,000	-	-	30,000
		Report Preparation and Publications, including Translations	-	3,000	3,000	-	6,000
		Website development expert	6,000	5,000	5,000	-	16,000
		Webhosting service	1,000	1,000	1,000	-	3,000
		Contract with Universities	17,000	17,000	17,000	-	51,000
		Travel to participate in international workshops	18,000	-	12,000	-	30,000
		[add/remove lines as needed]	-	-	-	-	-
		Sub-total Output 3.1	*46,400*	*56,000*	*38,000*	-	*140,400*
		Total Component 3	46,400	56,000	38,000	-	140,400
Monitoring and Evaluation (M&E)	Monitoring and Evaluation (M&E)	Gender Specialist (to be hired)	4,000	-	-	-	4,000
		Terminal Evaluation	-	-	33,000	-	33,000
			-	-	-	-	-
			-	-	-	-	-
		Total PMC	4,000	-	33,000	-	37,000
Project Management Costs (PMC)	Project Management Costs (PMC)	Project Manager	26,400	26,400	26,400	-	79,200
		National Project Assistant (to be hired)	12,000	12,000	12,000	-	36,000
		Independent yearly financial audits	3,000	3,000	3,000	-	9,000
		Report Preparation and Publications, including Translations	1,600	1,600	1,550	-	4,750
			-	-	-	-	-
			-	-	-	-	-
		Total PMC	43,000	43,000	42,950	-	128,950
		Project Grand Total	342,833	762,333	288,283	-	1,418,450

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

N/A

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

N/A

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

N/A