



## **Preparation of Ghana's Fourth Biennial Update Report and Fifth National Communication under the UN Framework Convention on Climate Change (UNFCCC)**

### **Part I: Project Information**

#### **GEF ID**

10893

#### **Project Type**

EA

#### **Type of Trust Fund**

GET

#### **CBIT**

**CBIT No**

#### **Project Title**

Preparation of Ghana's Fourth Biennial Update Report and Fifth National Communication under the UN Framework Convention on Climate Change (UNFCCC)

#### **Countries**

Ghana

#### **Agency(ies)**

UNEP

#### **Other Executing Partner(s)**

Climate Change Unit, Environmental Protection Agency (EPA\_ of Ghana)

#### **Executing Partner Type**

Government

#### **GEF Focal Area**

Climate Change

#### **Taxonomy**

Focal Areas, Climate Change, United Nations Framework Convention on Climate Change, Enabling Activities, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Private Sector, Civil Society, Indigenous Peoples, Type of Engagement, Information Dissemination, Participation, Consultation, Local Communities, Awareness Raising, Communications, Gender Equality, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Knowledge Generation, Workshop, Training, Knowledge Exchange

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 2

**Climate Change Adaptation**

Climate Change Adaptation 1

<b>Type of Reports</b>	<b>Submission Date</b>	<b>Expected Implementation Start</b>	<b>Expected Completion Date</b>	<b>Expected Report Submission to Convention</b>
UNFCCC Biennial Update Report (BUR)	10/27/2021	1/1/2022	4/30/2025	6/30/2023
UNFCCC National Communications (NC)	10/27/2021	1/1/2022	4/30/2025	12/31/2024

**Duration**

40In Months

**Agency Fee(\$)**

80,940.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

<b>Objectives/Programs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
CCM-EA	GET	852,000.00	
		<b>Total Project Cost(\$)</b>	<b>852,000.00</b>
			<b>0.00</b>

## B. Project description summary

### Project Objective

To support Ghana to Prepare and submit its Fourth Biennial Update Report (BUR4) and Fifth National Communication (NC5) that comply with the United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements and responds to national development goals.

<b>Project Component</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>GEF Project Financing(\$)</b>	<b>Confirmed Co-Financing(\$)</b>
Preparation of Ghana's BUR4/NC5	1.1 Ghana updates tools and approach to meet its reporting requirements under the UNFCCC	1.1.1 BUR4 and NC5 prepared and submitted to UN Climate Change Secretariat by June 2023 and December 2024 respectively	754,550.00	
		1.1.2 Self-assessment and stocktaking exercise for preparation of the project proposal for subsequent reports under the UNFCCC completed	20,000.00	
		<b>Sub Total (\$)</b>	<b>774,550.00</b>	<b>0.00</b>
<b>Project Management Cost (PMC)</b>				
			77,450.00	

**Project Management Cost (PMC)**

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<b>Sub Total(\$)</b>	<b>77,450.00</b>	<b>0.00</b>
<b>Total Project Cost(\$)</b>	<b>852,000.00</b>	<b>0.00</b>

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**C. Source of Co-Financing for the Project by Name and by Type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
<b>Total Co-Financing(\$)</b>				

**Describe how any "Investment Mobilized" was identified**

N/A

**D. GEF Financing Resources Requested by Agency, Country and Programming of Funds**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
UNEP	GET	Ghana	Climate Change	CC Set-Aside	852,000	80,940	932,940.00
<b>Total Gef Resources(\$)</b>					<b>852,000.00</b>	<b>80,940.00</b>	<b>932,940.00</b>

## Part II. Enabling Activity Justification

### A. ENABLING ACTIVITY BACKGROUND AND CONTEXT

Provide brief information about projects implemented since a country became party to the convention and results achieved

#### 1.0 National Context : -

Ghana is a middle-income West Africa nation of 31 million people, with 53% living in urban areas. The country has a diverse geography and changing tropical climate influenced by the West Africa monsoon. Despite the consistent, steady economic growth, climate change impacts continue to threaten the prospects of doubling Ghana's GDP in the medium term. That is why the Government has outlined climate change as a priority area in the medium and long-term development policy documents, including the Ghana Beyond Charter[1]<sup>1</sup>; Ghana at 100[2]<sup>2</sup>; Coordinated Programme of Economic and Social Development Policies (2017-2024)[3]<sup>3</sup>; and the Medium-term Development Framework (2018-2021).[4]<sup>4</sup>

The Government's new COVID-19 recovery plan (dubbed CARES)[5]<sup>5</sup> also advocates for building back better to green goals. Besides, significant work has gone into laying out its climate policy framework in the last decade. Consequently, Ghana adopted the National Climate Change Policy (2015-2020)[6]<sup>6</sup> and is currently updating Nationally Determined Contributions (NDC) according to Article 4.9 of the Paris Agreement, which calls on countries to submit an update or revised NDC). The ministries of energy, transport, agriculture, land and natural resources, water and sanitation and local government have taken concrete steps to highlight climate change as a priority area of action. The ministries have incorporated climate change into their sector policy and plans and established structures to deliver the climate outcomes. Some are already implementing concrete programmes on the ground towards achieving sector goals.

The Ministry of Food and Agriculture has adopted the national climate-smart agriculture action plan and is already implementing planting for food and jobs to transform agriculture production to more resilient. Ministry of Energy is championing the decarbonization of electricity generation through a strategy to convert all thermal plants to dual fuel with natural gas as its primary fuel, transform single to combine cycle; build resilient electricity transmission infrastructure; promote utility-scale solar, wind and hydroelectricity. In the same vein, the Ministries of Transport and Land and Natural

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Resources, forest restoration and conservation and public transportation electrification support decarbonization.

The Ministry of Finance (MoF) and the National Development Planning Commission (NDPC) play facilitating roles with MESTI as the lead Ministry of climate change. While the NDPC sets the broad policy framework to incorporate climate change, MoFEP mobilizes climate finance, and MESTI coordinates climate policy. EPA's Climate Change Unit (CCU) oversee technical aspects of climate change in the country. As a result, the CCU host the UNFCCC and IPCC Focal Points and leads the preparation and submission of international climate change reports. On the international front, the country has been an active player in global climate change processes. It joined the UNFCCC in September 1995, ratified the Kyoto Protocol and the Doha amendment in 2005 and 2020, respectively. Ghana joined the Paris Agreement in 2015 and acceded to it in August 2016.

Following the accession to the Paris Agreement on 21<sup>st</sup> Sep 2016, Ghana has committed to the NDC, which seek to implement eleven adaptation and twenty mitigation actions in seven priority areas. The mitigation measures translate to unconditionally lower GHG emissions by 15 per cent relative to a Business-As-Usual (BAU) scenario emission of 73.95MtCO<sub>2e</sub> by 2030. An additional 30 per cent emission reduction is attainable because external support is made available to Ghana to cover the full cost of implementing the mitigation action (finance, technology transfer, capacity building). The culture of climate reporting has gained roots in Ghana. After barely a decade of introducing the Ghana climate ambitious reporting programme (G-CARP) as a domestic transparency arrangement, the country has chalked some significant achievements.

Having joined the UNFCCC, ratified its Kyoto Protocol and the Doha Amendment, and the Paris Agreement, Ghana has strived to prepare to the UNFCCC following the relevant COP decision in the Bali Action Plan (BAP) on the submission of National Communication (every four years) and the Biennial Update Reports (every two years). Therefore, with the technical and financial support through four GEF's enabling activities projects, Ghana has successfully prepared and submitted to the UNFCCC four national communications and three Biennial Update Reports between 2000 and 2021. The next section below provides information about the various projects that Ghana has implemented since it became a party to the convention, while the subsequent section, after that, provides information on results achieved.

## 1.1 Previous GEF Enabling Projects and Achievements

Ghana prepared and submitted the NC1 covered 1997 to 2000<sup>[7]</sup>. The NC submission packages were made of the NC document and a separate National Inventory Report (NIR). The NC1<sup>[8]</sup> document emerged from the implementation of the enabling activity project.

The EPA led the preparation of the NC1 with support ad-hoc inter-ministerial working groups. The preparation of the NC2 ensued after implementing GEF enabling activity project between 2008 to 2011. In 2011 Ghana submitted NC2 to the UNFCCC to satisfy the reporting requirements under Articles 4 and 12 of the UNFCCC (Table 1).

The third enabling activity project culminated in preparing and submitting NC3<sup>[9]</sup> to the UNFCCC between 2012 and 2015. Ghana also prepared its first Biennial Update Report accompanied by a

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standalone NIR in the third enabling activity project. The BUR1 was officially submitted to the UNFCCC in July 2015<sup>[10]</sup> and followed with the two-staged International Consultation and Analysis (ICA). The NC3 and BUR1 were compiled according to decisions 17/CP.8 on the guidelines for preparing national communications from Parties not included in Annex I to the Convention and annex III of decision 2/CP.17 on guidelines and Manuals for the Preparation of non-Annex I National Reports. Ghana has prepared all the NIRs consistent with revised 1996 and 2006 IPCC guidelines to prepare the national greenhouse gas inventories.

Compiling the NC3 and BUR1 contributed immensely to improving the functionality of the national system. It saw the introduction of institutional reforms and the establishment of Ghana's Climate Ambitious Reporting (G-CARP) as a domestic Monitoring Reporting and Verification (MRV) system. As part of the reforms, the MRV functions were decentralized from ad-hoc institutional arrangements to the line ministries to achieve long-term sustainability. As a result, the line ministries took over the primary MRV task in their sector and worked with the EPA. The NC3 was implemented by the EPA and presented new information covering between 2011 and 2014. It also provided updates on the information in the NC2. More than twenty experts from fifteen government institutions, CSO and the Universities were involved in preparation.

Subsequently, between 2016 and 2020, the EPA implemented the 4<sup>th</sup> GEF enabling activities to prepare and submit the fourth national communication and the second biennial update report. EPA completed the BUR2 and submitted it to the UNFCCC in October 2018 and followed up with the NC4 in August 2020. The 4<sup>th</sup> GEF enabling activity project covered the preparation of the BUR3 which was completed and submitted to the UNFCCC in August 2021. All reports were prepared with the involvement of the key stakeholders and national data providers, with the EPA playing a coordination role. After the two BUR submissions, Ghana has successfully participated in two ICAs. The recommendations and lessons learnt from the two ICAs are detailed in section 1.2 below.

Generally, the scope of the four NCs submitted covered a wide range of reporting elements. They focused on reporting updated information on the progress and achievements of implementing the UNFCCC in Ghana. The scope of NCs submitted were consistent with the reporting elements contained in Decision 17/CP.8 (Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention). The NCs covered the following elements:

- ? National circumstances
- ? National greenhouse gas inventory
- ? Greenhouse gas mitigation assessment
- ? Vulnerability, impacts and adaptation
- ? Other information
- ? Financial, technical, and capacity gaps

Similarly, the scope of the three BURs submitted were informed by elements in the guidelines contained in decision 2/CP.17 (decision 2/CP17). The BURs submitted included updated information on the following elements:

- ? National circumstances and institutional arrangement
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- ? Greenhouse gas inventory
- ? Mitigation actions and their effects
- ? Domestic monitoring reporting and verification
- ? Support needed and received

Following the provisions on the composition, modalities, and procedures of the TTE under ICA in the annex to decision 20/CP.19, Ghana underwent two technical analyses from 16 to 18 November 2015 and 25 February to 1 March 2019[11]<sup>11</sup>. The technical analysis is typically followed by the Facilitative Sharing of Views (FSV) workshop as the second stage of the ICA. Thus, Ghana participated in the first and second rounds of FSVs on 21 May 2016 and December 2019.[12]<sup>12</sup>

The quality of BUR and NC reports have improved over time as experts better understand the application of tools and methodologies as recommended by the Intergovernmental Panel on Climate Change (IPCC) and UNFCCC. The next sections provide information on results achieved by implementing climate change projects since Ghana became a party to the convention. The results achieved are in terms of improvement in quality of climate reports and reforms in the National Systems where section 1.2 provides details on improvements made through the identification of capacity-building needs and written questions through technical analysis and participation in Facilitative Sharing of views (FSVs) while section 1.3 provides information on improvements made through continuous training, reforms in the national system, and informal reviews.

**Table 1: Ghana's Achievement on climate reporting**

Items	UNFCCC Reporting			
Type of international reports	National Communication	National Greenhouse Gas Inventory	Biennial Update Report	REDD+ National Reference Forest Level
Frequency	Every four years	At least two years interval	Every two year	January in the submission year
Ghana's Achievements	First national communication (2001)	First National Greenhouse Inventory (covered 1990-1995 published in 2001)	First Biennial Update Report (2015)	First national REDD+ FRL submitted.
	Second national communication (2011)	Second National Greenhouse Inventory (covers 1990-2006 and published in 2011)	Second Biennial Update Report (2019)	Seconds national REDD+ FRL submitted.

Items	UNFCCC Reporting			
	Third National Communication (2015)	Third National Greenhouse Inventory (covers 1990-2012 and published in 2015)	Third Biennial Update Report (2021)	
	Fourth National Communication (2020)	Third National Greenhouse Inventory (covers 1990-2016 and published in 2020)		

### 1.2 Improvements through the identification of capacity-building needs and written questions through the technical analysis and participation in Facilitative Sharing of Views

The continuous preparation of the national climate reports has contributed to increased quality and the national system's functionality. Through the technical analysis and FSVs of the NIR and BUR as part of the ICA, critical areas for improvement and capacity needs have been identified and compiled into improvement plans. When Ghana submitted the first BUR 1 in 2015 per decision 2/CP.17, the UN Climate Change Secretariat facilitated the two-stage ICA through the Technical Analysis (TA) and the FSV workshop. Ghana and the Technical Team of Experts (TTE), who reviewed the BUR1 and NIR3, jointly identified the capacity building needs and suggested improvement areas. The TTE and Ghana agreed on thirteen areas of capacity needs according to annex III to decision 2/CP.17 and to the participation in ICA according to annex IV to decision 2/CP.17, considering Article 4, paragraph 3, of the Convention. The capacity needs are summarized below:

- ? Use the 2006 IPCC Guidelines and Agriculture and Land Use (ALU) software for AFOLU GHG accounting.
- ? Improvement and strengthening of the GHG national system, particularly capacity-building on GHG data management and institutional arrangements
- ? Improvement of the GHG inventory report.
- ? Development of a marginal abatement cost curve.
- ? Improvement in mitigation baseline setting.
- ? Continuous training of GHG experts, especially new experts on GHGs at the international level.
- ? Development of mitigation scenarios for the non-energy sector, especially marginal abatement curves.
- ? Improvement of forestry-wide mitigation and ensure linkages with the REDD-plus forest reference level, including setting a common baseline with the REDD+ forest reference level.

? Capacity-building for technology transfer and diffusion, including improving the capacities of farmers, engineers, technicians, and artisans; creating awareness and knowledge exchange; and facilitating sharing of lessons learned from pilot technology adoption initiatives.

? Improvements in the institutional arrangements.

? Uncertainty assessment for activity data and emission factors;

? Improvements of completeness checks and methods for estimation of emissions from product use as a substitute to ozone-depleting substances;

? Assessment and monitoring of the effects of GHGs on the policy level mitigation.

The first cycle, Facilitative Sharing of Views (FSV), generated eleven written questions that bordered on transparency and the national system of the GHG and mitigation policies. Ghana addressed the written question to the secretariat and provided further clarification during the FSV workshop. Ghana participated in the second round of ICA2 after submitting the BUR2 and NIR4 in October 2018. In this round, the TTE and Ghana concluded on the eight capacity-building needs as part of the 2019 technical analysis as follows:

? Collection of AD on the consumption of F-gases, particularly SF<sub>6</sub>.

? Collection of AD and EFs to support the development of a tier 2 method for road transport.

? Support in expanding the current facility-level carbon accounting programme, considering lessons learned from the current voluntary carbon accounting programme by the public electricity utility.

? Development of solid waste and wastewater balances to better understand the flow of solid waste and wastewater from the point of generation to the end site (e.g. solid waste disposal sites in solid waste, or seas, rivers or lakes in the case of wastewater).

? Data collection to improve upon the current expert judgement in the allocation of manure into various manure management systems.

? Developing concrete category-level plans to collect the necessary uncertainty values for AD, EFs and parameters;

? Aggregating the project-level results of mitigation actions to sectoral and national totals.

? Performing an ex-ante assessment of non-mitigation benefits of mitigation actions.

While the overall quality of the BUR2/NIR4 was deemed to have improved compared to the BUR1 and NIR3, because of addressing the ICA recommendations, Ghana has continued to implement projects to fix the different aspects of the capacity-building needs. Table 2 presents the overview of Ghana's projects to address recommendations and capacity-building need through the ICA process.

**Table 2: Overview of effort to address the capacity-building need through the ICA process.**

<b>PROJECT NAME</b>	<b>DONOR/ PARTNER</b>	<b>AREA OF CAPACITY- BUILDING NEEDS BEING ADDRESSED</b>	<b>ICA STAGE</b>	<b>STATUS</b>
CBIT	GEF via UNEP	training on the use of the 2006 IPCC Guidelines and software	TA 1	Ongoing
		Improvement and strengthening of the GHG national system, particularly capacity-building on GHG data management and institutional arrangements.	TA 1	
		Continuous training of GHG experts, especially new experts on GHGs at the international level.	TA 1	
		improvements in the institutional arrangements	TA 1	
ICAT	BMU, (CIFF), the Italian Ministry for Environment, Land and Sea Protection, and Climate Works via  UNOP/DTU	Aggregating the project-level results of mitigation actions to sectoral and national totals.	TA 2	Ongoing
		Performing an ex-ante assessment of non-mitigation benefits of mitigation actions.	TA 2	
		Development of mitigation scenarios for the non-energy sector, especially marginal abatement curves	TA 1	
		Development of a marginal abatement cost curve.	TA 1	
		Assessment and monitoring of the effects of GHGs on the policy level mitigation actions.	TA 1	
		Improvement in mitigation baseline setting	TA 1	
NDC Support programme	UNDP	Support the expansion of the current facility-level carbon accounting programme, considering lessons learned from the current voluntary carbon accounting programme by the public electricity utility.	TA 2	Completed

### 1.3 Improvements through continuous training, reforms in the national system, and informal reviews

Since 2013, the EPA has introduced reforms that are aimed at making the G-CARP function better. The reforms covered the following areas:

- ? Data management (adoption of data collection template, climate data hub);
- ? Capacity and skills improvement (continuous training, UNFCCC expert review training);
- ? Tool development (adoption of national GHG manual and QA/QC guidance)
- ? Institutional arrangement (decentralization of tasks, memorandum of understanding).

Over the last two decades, the EPA has undertaken various reforms to institutionalize and improve the functionality of the G-CARP. However, the progress has not been widespread among the four GCARP system components. Through the reforms, the initial ad-hoc institutional arrangement was decentralized. EPA transferred the MRV tasks from the ad-hoc task groups, which were often put together to prepare climate reports to selected line ministries and agencies.<sup>[13]</sup><sup>13</sup> After the decentralization, the EPA has focused on institutionalizing the MRV tasks within the line ministries. As a result, the government institutions assumed the direct responsibility of planning and preparing sector climate reports while the EPA focused on the overall coordination to make the system work. For instance, as the coordination institution of the GCARP system, the EPA signed a Memorandum of Understanding (MOU) with lead government institutions to govern the smooth workflow of climate reporting among the actors.

The decentralization of the MRV tasks from an ad-hoc to a more permanent team in the line ministries had contributed to Ghana's relative success in the institutionalization of the domestic MRV system. With the reforms, the line ministries took over the primary MRV tasks in their sectors and worked with the EPA. Transferring the MRV duties to the line ministries was based on the understanding that if the ministries compile their sector climate reports, it will be an incentive for continuous reporting and influence policy within their respective sectors. It would also be the surest way to get their buy-in from the line ministries to adopt climate reporting to become part of their annual plans and budget.

Another area of the GCARP reforms is data management, covering a wide range of data generation and sharing issues, data quality, and data archiving. Regular access to good quality data for climate reporting is still a challenge. GCARP managers obtain data from multiple national and international sources. At the national level, public institutions supply both administrative and survey data at different frequencies. Industrial facilities or private companies provide data to relevant governmental bodies as part of the regulatory requirements. For instance, operators in manufacturing and the downstream petroleum market supply provide data on environmental performance and the consumption of petroleum products to the EPA and the National Petroleum Authority (NAP). All line ministries and district assemblies are also required by law to supply annual data to the National Development Planning Commission (NDPC) to prepare the annual progress report.

Additional data are from inter-governmental institutions such as the International Energy Agency, Africa Union, World Bank, FAO, ITTO, UNFCCC and UN STATS. Generally, the data platforms' establishment predates the GCARP system, so not all the data from the existing data platform are suitable for climate reporting (Table 1). Often, the data formats are not compatible, or it is a single data point, which makes it impossible to retrieve the time series trend. There are many data gaps or non-existing data, so the owners use proxies or expert judgement or outdated field survey data to fill the gap. For example, in the energy statistics, the Energy Commission has identified some challenges with

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the wood fuel supply and consumption data, and because of the lack of missing current data, they rely on the outdated survey. The Commission has already developed the programme to improve the quality of the wood fuel data in the statistics. The Commission is also working on improving on is the allocation of sectoral consumption data.

Various ministries and agencies are addressing similar data issues. In transport, the existing data on traffic circulation and disaggregated fuel consumption data do not cover the whole country and are outdated. Additionally, there is no arrangement on the ground to support the regular collection and supply of traffic and fuel consumption data for different transport modes. As a result, Ghana uses a mix of tier 1 and data projections based on 2006 survey data on traffic circulation and fuel consumption in the current climate reporting. Ghana established an online database<sup>[14]</sup><sup>14</sup> to host climate data and facilitate data harmonization, sharing and archiving. The hub has four portals; GHG inventory, climate policies and measures, mitigation project registry, the NDC and GCF project.

The database's current challenges are irregular content updates, high license and maintenance fees, and low visits to the hub. When the EPA established its rationale, it helped connect data from various data suppliers (administrative and survey data) managed on a single dashboard. The EPA had developed a mitigation action data template used to collect data regularly to prepare the greenhouse gas inventory estimates and mitigation actions. The issues on missing data, inaccurate data, analogue data format, and data generation costs are still unsolved.

Continuous training, skills improvements and development of tools and methods have also progressed relatively well since the G-CARP was established in 2012. The capacity development initiatives contributing to improving skills and knowledge in the MRV include training received from the UNFCCC, the Low Emission Capacity Building Project, Information Matters Project (IM Project), and the CD-REDD project. These different forms of training were conducted for national experts to enhance climate reporting in their institutions. Other reforms of the GCARP include the development of a GHG manual which specified the procedures for planning and managing Ghana's GHG Inventory for all sectors, namely; Energy, Industrial Processes and Other Product Use, Agriculture, Forestry and Other Land Use and Waste as captured by the IPCC and Ghana's National circumstances.

Another reformed area is the Quality Assurance/ Quality Control (QA/QC) and uncertainty management, which is the EPA's responsibility. Ghana has prepared and adopted the use of a new QA/QC plan that seeks to streamline and formalize existing QA/QC procedures and communicate with a clear set of objectives to the inventory team in line with the 2006 IPCC Guidelines. Although some reforms have been made, there are still persistent challenges in implementing Ghana's GCARP. These are but are not limited to:

- ? inadequate funding (funding gaps, donor-driven project, the low contribution from national budget)
- ? access to good quality data (non-existence or missing activity data)
- ? capacity gap (institutional and human gaps)
- ? general lack of awareness among the public and the stakeholders
- ? slow mainstreaming processes
- ? limited or no use of climate reports in decision making

The presence of these persistent challenges suggests the need for far-reaching strategies to address them eventually. Even though some progress has been made in the institutional governance for the GCARP, the EPA needs to strive hard to continue the efforts of sustaining the institutionalization

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process. The CBIT project is a programme brought on board to strengthen national institutions for transparency-related activities and address some of the GCARP challenges. One of the foundation activities for the CBIT project is the institutional assessment. The quality of the national climate reports has improved over time as experts understand the application of tools and methodologies recommended by the Intergovernmental Panel on Climate Change (IPCC) and UNFCCC.

Continuous capacity development is one of the strategies to mainstream GHG inventories. Ghana is implementing a three-prong capacity development strategy. The capacities and interests inform the approach of line ministries involved in climate reporting must be widespread, sustained and incentivize over time. So, the national experts who are already part of the climate reporting team undergo refresher training on advanced GHG inventory, mitigation, and adaptation topics to update their current trends. Usually, experts attend international and domestic training programmes. The experts have gained more insight and practical experience using various GHG inventory, mitigation, and vulnerability assessment tools. Another approach to capacity transfer and development is via learning-by-doing. New entrants to the inventory team get the opportunity to work closely with experts and learn on the job.

The new experts know of the climate reporting stages, including QA/QC plan procedure and reporting. For example, when the Forestry Commission took over the sector inventory, new experts joined the team who learnt on the job after working with experienced inventory experts who guided them on the inventory process. As the MRV team expands, the learning-by-doing approach would be the practical way to build new entrants' capacities and prepare them to take over the MRV work in the future.

The third leg of the approach is to nominate experts to join UNFCCC experts review training for Annex Parties annual GHG inventories. With this policy, Ghana has bagged more than ten qualified expert reviewers for the Agriculture, Energy, Industrial Process, LULUCF and the Waste sectors. Currently, Ghana has four lead reviewers who co-manage the review process and teams they join. The international training of experts helps to increase the knowledge of the national experts on the inventories and serves as a learning process for the national experts who get the chance to see how other countries approach the national inventories. It is also the surest way of building the confidence of the national experts as they are exposed to the international best practices in the inventory and work with world-class experts. In this regard, Ghana plans to develop a comprehensive MRV inventory capacity development plan responsive to future international and domestic climate change reporting needs.

Ghana is requesting funds from the GEF to develop its BUR4 and NC5. The BUR4 and NC5 project will take full consideration of the capacity-building needs, gaps, and constraints in various thematic areas as reported in the previous national communications and BURs, as well as a technical summary, reports from the International Consultation and Analysis (ICA) process, and lessons learnt during Facilitative Sharing of Views (FSV) of the ICA. The full amount of US\$ 852,000 requested for the BUR4/NC5 project will enable Ghana to, among others, address capacity building needs to be identified, the ICA recommendations and meeting its future transparency requirements under the Paris agreement. The current gaps mainly relate to the systematization of the existing data management system to ensure regular flow of credible data. Ghana's immediate plan is to submit its BUR4 in June 2023 and transition to BTR process in the same year and will ensure that both processes continue to strengthen data management for improved future reporting. In addition to the BUR and BTR processes the ongoing CBIT project is supporting data automation and integration. Considering that the BUR4 is expected to be completed by June 2023 at the time the Parties are expected to submit their initial BTRs in December 2024, the human and institutional capacity-built overtime, through the CBIT and

BUR4/NC5 processes and improvements made thereof, will contribute to improving the quality of the reporting process of the BTR.

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[1] [http://osm.gov.gh/assets/downloads/ghana\\_beyond\\_aid\\_charter.pdf](http://osm.gov.gh/assets/downloads/ghana_beyond_aid_charter.pdf)

[2] [https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/IMAGES/2020/10/05/Ghana%20@100\\_layout\\_final%20\\_19%20Sept%202020.pdf](https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/IMAGES/2020/10/05/Ghana%20@100_layout_final%20_19%20Sept%202020.pdf)

[3] [https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/PUBLICATIONS/2018/04/11/Coordinate+Programme-Final+\(November+11,+2017\)+cover.pdf](https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/PUBLICATIONS/2018/04/11/Coordinate+Programme-Final+(November+11,+2017)+cover.pdf)

[4] <https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/PUBLICATIONS/2018/08/23/Medium-term+Policy+Framework-Final+June+2018.pdf>

[5] COVID-19 Alleviation and Revitalization of Enterprise Support - <https://www.mofep.gov.gh/sites/default/files/news/care-program.pdf>

[6] <https://www.weadapt.org/knowledge-base/national-adaptation-planning/ghana-national-climate-change-policy-action-programme>

[7] <https://www.thegef.org/project/preparation-initial-national-communication-implementation-unfccc>

[8] <https://unfccc.int/documents/77592>

[9] <https://unfccc.int/sites/default/files/resource/ghanc3.pdf>

[10] <https://unfccc.int/documents/180643>

[11] [https://unfccc.int/sites/default/files/resource/tasr2019\\_GHA.pdf](https://unfccc.int/sites/default/files/resource/tasr2019_GHA.pdf)

[12] [https://unfccc.int/sites/default/files/resource/FSVR%202\\_GHA\\_v5.pdf](https://unfccc.int/sites/default/files/resource/FSVR%202_GHA_v5.pdf)

[13] Including: Forestry Commission, Forestry Commission, Ministry of Food and Agriculture, EPA (Built Environment), EPA (Manufacturing Industry) and EPA (Petroleum)

[14] <http://climatedatahubgh.com/>

## **B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES**

The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as

applicable. Describe also how the gender equality and women's empowerment are considered in project design and implementation

## 2.1 OBJECTIVES AND PROJECT OUTCOME

The **immediate objective** of the project is to support Ghana to prepare its Fourth Biennial Update Report (BUR4) and Fifth National Communication (NC5) consistent with the guidelines for the preparation of BURs and NCs for Non-Annex 1 Parties, which is contained in Annex III to decision 2/COP.17 and submit the BUR4 and NC5 to the UNFCCC by June 2023 and by December 2024 respectively. The BUR4 and NC5 project proposal has been prepared in line with UNFCCC COP guidance on the provision of resources to Non-Annex I countries to prepare National Communications (NCs) and Biennial Update Reports (BURs) and conforms with Objective 3 of the GEF-7 Climate Change Focal Area Strategy (2018-2022) which focuses on fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies.

The **project** has one **outcome** as follows:

? Ghana updates tools and approaches to meet its BUR4 and NC5 reporting requirements under the UNFCCC and respond to national development goals.

The above outcome will be realized through two **project outputs** which are:

? BUR4 and NC5 prepared and submitted to UN Climate Change Secretariat by June 2023 and December 2024 respectively.

? A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent reports under the UNFCCC completed

## 2.2 Stakeholder Analysis, Institutional Arrangements and Participation for the BUR4 and NC5 Project Implementation

As part of the GCARP, Ghana established a national system that supports the continuous preparation of national communications and biennial update reports. The decentralized institutional structure has made the line ministries lead in compiling the sector climate reports while EPA focuses on cross-cutting issues, policy advice and coordination. Relevant stakeholders from key public organizations, CSOs, academia, education and research institutions, private sector and environmental NGOs will participate and contribute to the preparation process of BUR4 and NC5. The table below presents key stakeholders and a description of their engagement in preparing and implementing the BUR4/NC5 project.

**Table 3: Institutional involvement in the implementation of the BUR4/NC5 Project**

STAKEHOLDER TYPE	MINISTRIES, AGENCIES	DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL	ROLE IN THE BUR4/NC5 PROJECT

<b>STAKEHOLDER TYPE</b>	<b>MINISTRIES, AGENCIES</b>	<b>DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL</b>	<b>ROLE IN THE BUR4/NC5 PROJECT</b>
Public sector - Strategic level climate change institutions	Ministry of Environment, Science, Technology, and Innovation,  Office of Vice-President,  Finance, Lands and Natural Resources and, Development Partners.	To provide overall policy guidance and determines strategic directions on how climate change integration into a broad national development framework should be pursued. Ensure inter-ministry coordination of climate change and facilitate financial and technical resource mobilization to support climate change activities and provide political authority to mobilize efforts at the sectoral level to combat climate change.	Membership of project advisory board will be selected from strategic level institutions to provide oversight of the project progress and implementation of Outputs.

STAKEHOLDER TYPE	MINISTRIES, AGENCIES	DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL	ROLE IN THE BUR4/NC5 PROJECT
<p>Public sector ? Policy</p> <p>Planning, budgeting, and coordination institutions</p>	<p>National Development Planning Commission; Ministry of Finance, Ministry of Environment, Science, Technology, and Innovation</p>	<p>These institutions are responsible for developing, planning, coordinating, monitoring, evaluating and mainstreaming climate change; coordination of budget preparation; and formulating climate change policies.</p>	<p>Membership of project advisory board will be selected from strategic level institutions to provide oversight of the project progress and implementation of Outputs. <i>The National Development Planning Commission will be instrumental in Output 3, where climate change indicators are mainstreamed into the APR system. Ministry of Environment, Science, Technology and Innovation - Ensuring policy coordination and uptake of the BUR4/NC5 project results. Ministry of Finance will also join the Project Advisory Board</i></p>

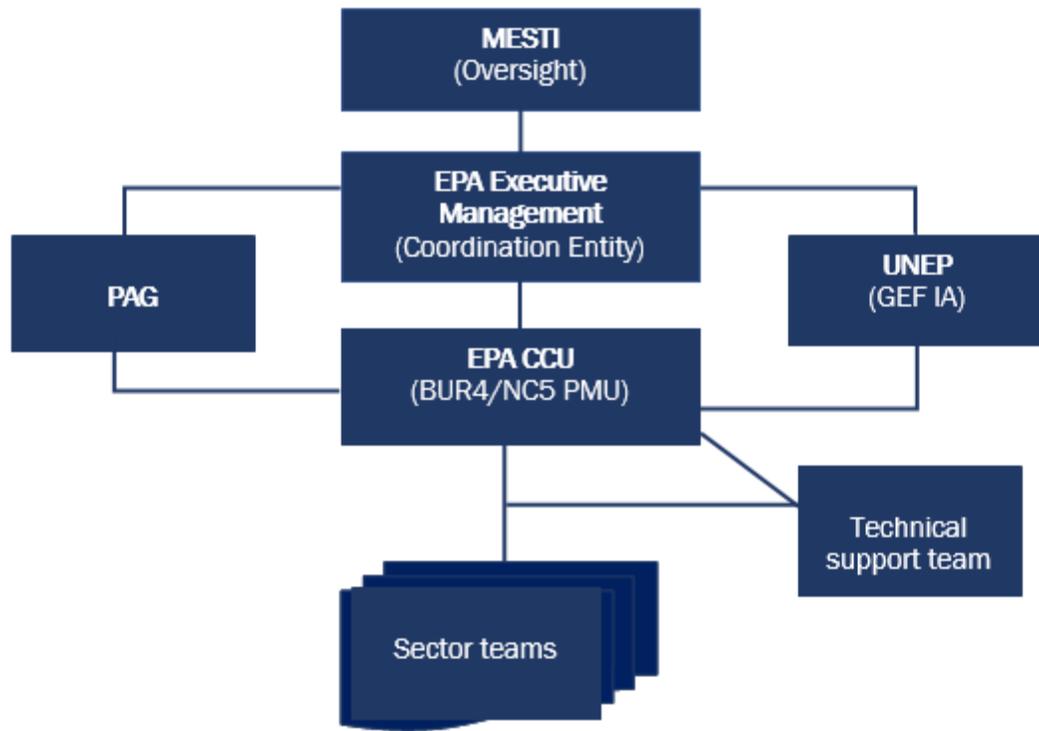
STAKEHOLDER TYPE	MINISTRIES, AGENCIES	DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL	ROLE IN THE BUR4/NC5 PROJECT
<p>Public sector - Implementing institutions</p> <p>Climate change implementation coordination institutions - constitutes the National Climate Change Committee (NCCC)</p>	<p>Parliament, Ministry of Energy, Ministry of Water Resources, Ministry of Food and Agriculture, Works and Housing, Ministry of Finance, Environmental Protection Agency, Energy Commission, Ministry of Transport, Forestry Commission, Water Resources Commission, Ghana Meteorological Agency, National Disaster Management Organization, Council for Scientific and Industrial Research, Friends of the Earth, Conservation Alliance, Institute for Statistical Social and Economic Affairs, Ministry of Foreign Affairs, Ministry of Lands and Natural Resources, National Development Planning Commission etc.</p>	<p>Evolve harmonized climate change programmes from all sectors, especially in the key sectors of finance and economic planning, forestry, agriculture, land and water, health, energy, and coastal zones management, to ensure coherence and building of synergies among these sectors.</p> <p>Source and utilize funding to implement climate change mitigation and adaptation activities, strengthen financial mechanisms for sustainable implementation, prepare a common Ghanaian position concerning the ongoing Climate Change negotiations. Such a position should as far as possible be consistent and feed adequately into the overall African position, and ultimately the Group of 77 and China but highlighting national areas of difference;</p> <p>Offer strong technical backstopping to the political leadership, Cabinet and Parliament in particular, to share the common African vision on efforts made to combat Climate Change in general and on the African climate platform.</p>	<p>Members of the inter-ministerial committee shall be drawn from this list of stakeholders. There will be three sub-committee on MRV Governance, Data Management, MRV &amp; M&amp;E Integration</p>

STAKEHOLDER TYPE	MINISTRIES, AGENCIES	DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL	ROLE IN THE BUR4/NC5 PROJECT
Public Sector  Monitoring and reporting Institutions	National Development Planning Commission (NDPC)	Monitoring and evaluation of the implementation of national development policies and programmes.	Instrumental in output three, where climate change indicators are to be mainstreamed into the APR system.
	Ministry of Environment Science, Technology, and Innovation (MESTI)/ Environmental Protection Agency (EPA)	Monitoring and evaluation of the implementation of national climate change policy. International reporting and review: National Communications; National GHG Inventory; Biennial Update Reports: International Consultation and Analysis.	Project Executing Agency
	Ministry of Finance	Tracking and reporting domestic and international climate finance.	MRV system for tracking finance and other support under Output 2 of the BUR4/NC5 project
CSOs	KASA (Speak out) Initiative ( <a href="http://www.kasaghana.org">www.kasaghana.org</a> ).	? Kasa has over 100 networks, coalitions, and partners working in 7 thematic areas, including environment and climate change. KASA's advantage is that it has a wide variety of members representing the different interests in the CSO advocacy and media community.	? Members of CSO will be selected to join the project advisory board and the inter-ministerial committee.

STAKEHOLDER TYPE	MINISTRIES, AGENCIES	DESCRIPTION OF ROLES AND FUNCTIONS AT THE NATIONAL LEVEL	ROLE IN THE BUR4/NC5 PROJECT
	Climate Action Network (CAN), Ghana	? CAN, Ghana is a representative of CAN International in Ghana. CAN-Ghana has some experience and insight into international climate negotiation processes and development policy advocacy at the national level.	
	Abantu for Development (www.abantu-rowa.org)	? Abantu is actively involved in advocating for the gender dimension of climate change and sustainable development at the international and national levels.	
	Ghana Alliance for clean stoves and fuels (GHACCO - www.cleancookstovesghana.org)	? GHACCO aims to influence policies and actions that contribute to the vibrant Cookstove industry and sustainable utilization of energy.	
Academia	University of Ghana,  University of Development Studies	? Under skills and capacity development relevant to climate change and sustainable development in general. They also research areas where data can be generated to support climate change planning.	Members of CSO will be selected to join the project advisory board and the inter-ministerial committee

The EPA has the mandate to prepare and submit international climate reports to the UNFCCC, with MESTI playing an oversight role. Hence, under the proposed BUR4/NC5 project, a Project Management Unit (PMU) oversees the daily implementation of the project activities and supports a Project Advisory Group (PAG) to policy direction the PMU and facilitate policy assimilation of the project findings. The PMU will also regularly report to MESTI and serve as the liaison between the EPA and UNEP as the GEF Implementing Agency. A Technical Support Team (TST) and six Sector Teams (STs) that will focus on each project component will assist the PMU in implementing the

project. Figure 1 below on Institutional arrangement for the preparation of Ghana's BUR4/NC5 to the UNFCCC explains the flow of functions/linkage among the project entities.



**FIGURE 1: Institutional arrangement for the preparation of Ghana's BUR4/NC5 to the UNFCCC.**

### 2.2.1 BUR4/NC5 Project Management Unit

The Environmental Protection Agency's (EPA) will be the implementing entity of the BUR4/NC5 project. Within the EPA, the Climate Change Unit (CCU) will host the PMU and take the overall lead in the planning and implementing the project. The UNFCCC Focal Point will be the BUR4/NC5 project coordinator and will directly report to the Executive Director of EPA through the Deputy Executive Director in charge of technical services. The Executive Director, Deputy Executive Director (Technical Services) and the UNFCCC Focal Point shall form the PMU project team. The PMU shall handle the project's day-to-day operations (technical and administrative) and act as the interface between PAG and the STs. Administrative and financial assistants shall support the PMU. The PMU will be accountable to the PAG and regularly report to MESTI and the EPA's executive management on work, achievements, and challenges. The PMU shall also report financial and technical matters to the UNEP by the BUR4/NC5 project reporting requirements.

### 2.2.2 Project Advisory Group

The PAG will be the highest technical and policy decision-making body for the project and oversees its effective delivery. It will meet once a year to evaluate work progress and approve the annual work plan and budget. When necessary, the PAG will make a strategic decision for the project PMU to implement. The PAG will be made of eleven representatives of key public organizations, CSOs and academia. Members of the PAG will come from the following institutions:

- ? Ministry of Environment, Science, Technology, and Innovation (Co-chair).
- ? Environmental Protection Agency (Co-chair).
- ? Ministry of Energy.
- ? Ministry of Finance.
- ? Ghana Statistical Services.
- ? National Development Planning Commission.
- ? Ministry of Local Government, Rural Development and Decentralization.
- ? Ministry of Transport.
- ? Ministry of Lands and Natural Resources.
- ? Centre for Climate Change and sustainability studies, University of Ghana.
- ? Ministry of Food and Agriculture.
- ? Kasa Initiative Ghana.

The EPA Executive Director and the Director of Environment at MESTI will be the two co-chairs of the PAG and perform the following functions:

- ? Ensure that the implementation of the BUR4/NC5 project effectively delivers on time, on budget.
- ? Ensure that the BUR4/NC5 ultimately meets the requisite standards stipulated in the guidelines for preparing national communication and biennial update report.
- ? Serve as contact points to disseminate the processes for the preparation and findings of the BUR4/NC5 to the sectors or constituencies they represent.

### **2.2.3 Technical support team**

EPA has set up a technical support team of experienced experts in the NC and BURs to work with the sector teams by providing them with technical backstop throughout the preparation and reporting process. The TST will have the following tasks:

- ? Support to the sector team on data collection strategy, methodological choices and data documentation and archiving.
- ? Help to address specific recommendations from the ICA process and the planned improvement list.
- ? Facilitate policy discussions and dissemination of key findings from the work of the sector teams.
- ? Ensure internal consistency among the components of BUR4/NC5 components.
- ? Support preparation and participation in the fourth round of the ICA process after the submission of the BUR4 to the UNFCCC
- ? Help to document records of good practices and lessons learnt throughout the implementation of the project.
- ? Give guidance on the use of the IPCC methodological and UNFCCC reporting guidelines where appropriate.

#### **2.2.4 Sector teams**

The BUR4/NC5 project will have six sector teams recommended from the stocktaking exercise, which has informed this proposal. The members of the sector teams have diverse expertise and relevant experiences in their respective sectors. The project activities will be planned and implemented by the sector teams to support a technical support team. Each sector team will be responsible for one component, as described below:

##### **2.2.4.1 Cross-cutting issues team**

The mandate of the Cross-Cutting Issues Team (CCIT) will cover the (a) the revision and update of national circumstances chapter including a wide range of topics on socioeconomic status, policy and regulatory reforms and changes in the institutional arrangement and (b) Finance, Technology and Capacity (FTC) including support information received and needed as well as constraints and gaps, and related financial, technical, and capacity needs. The CCIT will be made of representatives from the following institutions:

- ? Institute of Statistical and Social Research (ISSER)
- ? National Development Planning Commission (NDPC)
- ? Environmental Protection Agency (EPA)
- ? Ministry of Finance and Economic Planning (MoFEP)
- ? Ghana Statistical Services (GSS)

##### **2.2.4.2 Other information team**

The Other Information team (OIT) focuses on the component of the BUR4/NC5 that will deal with the following topics:

- ? Technology development, transfer, and adoption under NC5
- ? Information on Action for Climate Empowerment (ACE) on Article 6 of the Convention and Article 12 of the Paris Agreement under NC5.
- ? Ghana's first summary of information on how safeguards for REDD+ are being addressed and respected under NC5
- ? Gender and Response measures under BUR4 and NC5
- ? Research and systematic observation under NC5
- ? Progress of carbon pricing policy including Article 6 pilots under BUR4

Members of the OIT will come from a variety of state and non-state institutions. The OIT will have the representatives from the following bodies as its members:

- ? HATOF Foundation (CSO Representative)
- ? Ghana Education Service
- ? University of Cape Coast
- ? Environmental Protection Agency (EPA)
- ? Ghana Media Commission

#### **2.2.4.3 National Greenhouse Gas Inventory team**

The National Greenhouse Gas Inventory team will be divided into five sub-teams. Each sub-team will support the inventory preparation in the (i) energy and transport; (ii) Agriculture, (iv) forestry, (v) industrial processes and (vi) waste sectors, as well as the general reporting aspects. The team members are as follows:

- ? Environmental Protection Agency
- ? Forestry Commission
- ? Energy Commission
- ? Ministry of Food and Agriculture
- ? The University of Ghana (Statistics Dept.)

? Kwame Nkrumah University of Science and Technology (KNUST) - Math Department

? Ghana Statistical Service.

The team will contribute to achieving the specific tasks below:

? Review and prioritize recommendations from the ICA process, informal technical assessments, and the list of improvement plans.

? Review and adopt the use of the new GHG inventory plan and QA/QC guidance.

? Review the inventory of the activities, timelines, and budgets.

? Expand the participation of data providers and facility operators in the inventory process.

? Plan and implement data collection, data processing and data archiving activities.

? Estimate new GHG estimates for five sectors using the 2006 IPCC guidelines and, where necessary, recalculate previous emissions.

? Identify research needs and undertake the required actions for developing national emission factors and country-specific methodologies if they are more accurate than the IPCC defaults.

? Compile information on general inventory issues such as uncertainty assessment and management, QA/QC, the status of implementation planned improvements, key category analysis, GHG inventory trends.

? Compile sector inventory report and summarize the BUR4 and the NC5 report and a standalone national inventory report.

The team will support the compilation of the summary GHG report as a chapter in the BUR4 and updated in the NC5; (b) standalone 6th National Inventory Report (NIR6)

#### **2.2.4.4 Adaptation team**

There will be an Adaptation Team (AT) that will support the adaptation chapter of the NC5. The AT and national adaptation planning options assessments for selected sectors and the processes for national adaptation planning. In this regard, the team will evaluate the progress of implementing adaptation actions, linkages with the NAP framework and discuss the modalities and road map for the future compilation of the national adaptation communication under the Paris Agreement.

The AT will be sub-divided into teams. Sub-team 1 will update climate projections, whereas sub-team 2 focuses on vulnerability and adaptation assessment. The projection results are expected to inform the vulnerability assessments. The AT will be contributing to implementing the task below:

? Review existing climate modelling results and, where possible, revise them with new datasets.

- ? Revise selected sectoral vulnerability and adaptation assessment.
- ? Review and evaluate sectoral strategies and measures and their contribution to adapting to climate change
- ? Document the past, present and pipeline adaptation programmes and interventions at the sectoral and district levels.
- ? Update the climate scenario to improve the uncertainties in the long-term climate scenario and visualize the results.
- ? Assess barriers and enablers, and factors facilitating adequate adaptation.
- ? Evaluate progress in implementing adaptation interventions throughout the country and use the result to inform as feedback for adaptation planning, including the ongoing NAP framework.
- ? Provide a review on adaptation communication and reporting and factors for facilitating adaptation communication;
- ? Provide an assessment of implementation and support needs for adaptation priorities, strategies, and policies.
- ? Compile the adaptation chapter of the NC5.

The AT will assist in compiling the V & A chapter of the NC5 and will be made up of the following members:

- ? Environmental Protection Agency
- ? Ghana Meteorological Agency;
- ? Geography and Resource Development Department. The University of Ghana,
- ? The Physics Department University of Ghana.
- ? Biological Science Department, Kwame Nkrumah University of Science and Technology
- ? Ghana Atomic Energy Commission (Remote Sensing and Climate Centre).
- ? Ghana Health Services
- ? Ministry of Food and Agriculture;
- ? Ghana Water Commission;
- ? University of Development Studies (Navrongo Campus)

? National Disaster Management Organization.

#### **2.2.4.5 Mitigation and MRV team**

This team will contribute to the three main aspects of mitigation in the BUR4 and the NC5. Firstly, they will update information on low carbon development planning and the steps taken towards its achievement. It will involve evaluating the contribution of policy and regulatory changes and adopting specific technology/practices to instigate the transition to a low carbon future. The information will be reported in the BUR4 and subsequently updated in the NC5.

The second task is on GHG mitigation assessments to bring out cost-effective emission reduction options to feed into low carbon planning. This information, particularly those on mitigation scenarios, will be reported in the NC5 and partly in the BUR4. It will involve the update of information on the overall mitigation potential on an economy-wide scale. In the previous NC4 report, major improvements were achieved on establishing an emission baseline, particularly for the energy sector. There is still room for improvement on the baseline projection for the non-energy sector.

Furthermore, this sub-task will also concentrate on collecting additional data on technology cost to beef up investment requirements of the mitigation options. The third part of this team's task is a compilation of individual or combined sectoral or economy-wide mitigation actions and their effects. Additional technical information such as methodologies and assumptions and implementation progress described per the reporting guidelines will be reported. The team members for this team are listed below:

? Energy Commission

? Energy Centre, KNUST

? Ministry of Environment Science, Technology and Innovation, Environmental Protection Agency

? Ministry of Transport

? Forestry Commission

? Economics Department, University of Ghana,

? Ministry of Energy

The team is responsible for the mitigation assessment chapter of the NC5 and the mitigation actions and their effects section of the BUR4. The team will also report information on the domestic Monitoring Verification Reporting (MRV) system's progress implementation.

Additional information on Terms and reference, tasks, qualifications, of groups/personnel described are further elaborated under **Annex A**

### **2.3 Gender Equality and women's empowerment in Project design and implementation**

Phase 2 of the new UNDP sponsored NDC Support Programme to have a dedicated programme on gender and NDC. The BUR4/NC5 project will, therefore, build on the past and current efforts of linking gender issues to climate change. Reference shall be made to the GEF Gender Equality Action Plan (GEAP), the 2017 ambitious GEF Policy on gender equality, the Gender work package in the NDC support programme, as well as UNEP's Gender Policy to ensure that gender perspectives are introduced into MRV as well as facilitate the involvement of gender actors.

In this regard, the gender-disaggregation principle will be adhered to during data collection, analysis, and reporting. Efforts will also be made to maintain an acceptable gender representation, aiming at least 35%, in project management structures (committees, institutional frameworks) and capacity building actions (training, workshops). The 35% gender representation will be guided by the recommendations in the UNDP Gender-responsive National Communication Toolkit[1]. The main focus is to ensure increased representation of gender across the entire delivery of the BUR4/NC5 project including:

#### Gender representation

? Gender balance in the steering committee (EPA will strongly recommend that nomination to the Steering Committee must give due consideration to gender)

? Gender balance in a project management team (EPA has already set aside five people to work on the BUR4/NC5. The team will be made of two female and three male)

? Gender representation in the national working group (EPA will strongly ensure that nomination to working groups must give due consideration on gender)

? Gender representation in selection consultants (EPA will publish a guide to encourage female consultants to participate in consultancy for the BUR4/NC5)

? Gender representation in workshop and meeting - EPA's selection of participants to attend the workshop and meeting will be given due consideration to gender representation.

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[1]

<https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDP%20Gender%20Responsive%20National%20Communications%20Toolkit.pdf>

### **C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION**

Discuss the work intended to be undertaken and the output expected from each activity as outlined in Table A

#### **3.1 Overview of the BUR4/NC5 Project**

**The project will support Ghana to Prepare and submit its Fourth Biennial Update Report (BUR4) and Fifth National Communication (NC5) that comply with the United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements and respond to national development goals. Thus, the project will have one component: Preparation of Ghana's Fourth Biennial Update Report (BUR4) and Fifth National Communication (NC5). The project's main outcome is Ghana update tools and approaches to meet its BUR4 and NC5 reporting requirements under the UNFCCC and respond to national development goals. The expected outputs under this outcome are as below:**

Output 1.1.1 BUR4 and NC5 prepared and submitted to UN Climate Change Secretariat by June 2023 and December 2024, respectively. Activities to be undertaken under this output will result in the preparation of the following chapters of the BUR4 and NC5 reports:

- ? National Circumstances and Institutional arrangement
- ? National GHG inventories
- ? Measures to facilitate adequate adaptation to climate change
- ? Measures to mitigate climate change
- ? Information on mitigation actions and their effects
- ? Constraints and gaps; related financial, technical, and capacity building needs, including support, needed and received to enable the preparation and submission of the Fourth Biennial Update Report
- ? Information on domestic measurement, reporting and verification (BUR4)
- ? Other relevant information (Integrating climate change considerations into social, economic, and environmental policies and actions, Development, and transfer of Environmentally Sound Technologies (ESTs), Climate change research and systematic observation, Climate Change Education Training and Public Awareness, Capacity building, Information and networking, gender, and climate change.

Output 1.1.2. A self-assessment and stocktaking exercise for preparing the project proposal for subsequent reports under the UNFCCC was completed.

Within four months after completion of BUR4 and NC5 reports, this output will be undertaken to facilitate a seamless transition to subsequent reports, in this case, transition to Ghana's NC6 and Biennial Transparency Report. The detailed information under each output is provided in the below section: -

**Output 1.1.1: BUR4 and NC5 prepared and submitted to UN Climate Change Secretariat by June 2023 and December 2024, respectively.**

This section presents activities to be undertaken under project output 1.1.1, resulting in the compilation of the various chapters of the BUR4 and NC5 reports. The activities to be undertaken, expected chapter outputs, and indicators for different chapters of the BUR4 and NC5 reports are as follows: -

### Information on National Circumstances, Institutional arrangement, and FTC

The CCIT will oversee the section on information on National Circumstances, Institutional arrangements and FTC. It will cover three broad areas involving the update of information on (a) national circumstances, (b) institutional arrangement and (c) FTC tracking. On the update of national circumstances, the project will seek to revise the current information on the country's socioeconomic development, future developments prospects, and linkages with climate actions up to 2019 in the BUR4 and update to 2021 in the NC5. The updating will require either revising or adding new information on socioeconomic indicators, policy changes, regulatory reforms, and futures projections. The project will seek to collect, process, and incorporate new datasets on economic activities in energy generation, transportation, cocoa production, timber, waste generation, agricultural production, industrial production and consumption pattern, and oil and gas exploitation.

Data will be obtained from key national institutions that host the datasets on the socioeconomic indicators of the country. Some of the reports the project will look forward to review include Ghana Living Surveys published by the Ghana Statistical Service, ISSER's annual state of the Economy Report, National Budgets, State of the Nation (SONA), National medium-term development planning document, Annual progress reports, State of the Environment report etc. Updated data on population and poverty distribution in urban and rural areas will be investigated to understand the implication of various climate change interventions on society.

Updating information on the institutional arrangement will focus on key changes to the institutional roles, participation, and legal arrangement for the climate change in general and regular preparation of the national communication and biennial update report. The strategy will be to consult the key stakeholders in climate change at the national and sub-national levels to find major changes in their roles, experts' participation, mainstreaming efforts, and legal mandate. The consultation will also evaluate the challenges and the strategy they have adopted to address. Information on FTC is addressed in a separate section below.

The EPA will organize a project kick-off workshop to launch the BUR4 and NC5 Project in Ghana. The kick-off meeting will be held in the first quarter of the commencement of the project. During the project kick-off meeting, EPA will present the following to the participants for their input and approval:

- ? Information on the stocktaking exercise of the previous BURs and NCs and how the findings have been incorporated into the BUR4/NC5 project.
- ? Content and structure of the BUR4 and NC5 report, tools, methodologies, and guidance materials for BUR4 and NC5 preparation;
- ? Institutional arrangement for the BUR4/NC5 report preparation, with clearly defined roles and responsibilities of stakeholders involved in the BUR4/NC5 project.

The kick-off meeting report will be prepared as one of the project's main deliverables.

**Table 4: Activities, expected outputs and indicators under national circumstances**

ACTIVITIES	OUTPUTS	INDICATORS
1.1 Organize kick-off workshop for the BUR4/NC5 project.	Kick-off meeting organized.	Kick-off meeting report.
1.2 Review prioritize and address recommendations from the ICA which relate to national circumstances.	Recommendation of ICA on national circumstances reviewed and prioritized.	List of priority and addressed ICA recommendations on national circumstances
1.3 Review and update the information on geography, demography, natural resources utilization, economy, regulatory reforms, and development policies relevant to climate change for BUR4 and update for NC5.	Information on Ghana's socioeconomic status, policy, and regulatory reforms relevant to climate change revised and updated.	Updated 2019-2020/2021 report on the socioeconomic status of Ghana produced.
1.4 Review and report any major changes to strengthen the existing institutional arrangement for continuous preparation of national communication and biennial update Report.	Project entities established, and their working arrangements developed. Major changes and the functional relationships of the national institutional arrangements to prepare national communications and BUR are described.	Project entities are set up and working.  Information on Institutional arrangement for BUR4/NC5 produced.
1.5 Compile chapter on National Circumstance and Institutional Arrangement relevant for climate change of the BUR4 and NC5	The chapter on national circumstances and institutional arrangement for BUR4 and NC5 compiled	National Circumstances and Institutional arrangement chapter

National inventory of anthropogenic emissions by sources and removal by sinks of all greenhouse gases not controlled by the Montreal Protocol, including a national inventory report

This section has three parts that address the following aspects of the national greenhouse gas inventory: (a) improvements in the national arrangements for sustainable preparation of national greenhouses inventory; (b) capacity strengthening and the enhancement of governance framework for the national inventory and (c) inventory preparation and management. The inventory activities have been set out to achieve three broad goals. First, some activities will contribute to further entrench the national system into the governmental system. Secondly, the inventory will strengthen the knowledge of the national experts in the UNFCCC and IPCC reporting guidelines through experience gathering and exchanges of best practices.

The national team will be trained in emerging topics on transparency climate action and support on Article 13 of the Paris Agreement and elaborated in the Modalities Procedures and Guidelines (MPG) (Decision 18/CM1). The third aspect relates to updating the national GHG emission figures up to the year 2020. In this regard, the project will prioritize the following areas:

- ? Train existing and new national experts.
- ? Make sure national experts dedicate additional time to the inventory process.
- ? Improve the functionality of the online GHG database.
- ? Use the GHG inventory manual of procedures when selecting methods, data collection (activity data and emission factor).
- ? Implement the documentation and archiving protocols as of QA/QC.
- ? Quality Assurance/Quality Control.

The GHG inventory will be conducted using the IPCC 2006 guidelines covering 1990-2021. For the BUR4, the inventory years will cover the 1990-2020 years, whereas NC5 will be updated to 1990-2021. Ghana will use both tiers 1 and 2 across the inventory. Tier 1 is mainly used for the energy and agriculture sectors inventory while tier 2 is used for specific categories under LULUCF, Waste and IPPU. As much as possible, the existing GHG inventory database covering the IPCC sectors (energy, industrial processes, solvents, and other product use, AFOLU and waste) will be reviewed and updated with new data (activity data and emission factors). This will ensure that estimates are produced using methodologies and datasets that are transparent, robust, and consistent with IPCC guidelines.

**Table 5: Activities, expected outputs, and indicators under the GHG/NIR section**

ACTIVITIES	OUTPUTS	INDICATORS
2.1 Review, describe the roles of and collaboration between the EPA and the institutions involved in preparing the inventory and institutional, legal, and procedural arrangements to prepare greenhouse gas inventories.	Roles and responsibilities for the preparation of the inventory revised.	List roles and responsibilities of stakeholders

ACTIVITIES	OUTPUTS	INDICATORS
2.2 Support the ongoing effort to mainstream the national GHG inventory into the sectors by revising the timelines and negotiation to transfer more sector-specific tasks to inventory institutions.	Inventory cycle revised	Updated inventory cycle
2.3 Revise the steps for allocating specific responsibilities in the inventory planning, preparation, and documentation processes, including choosing methods, data collection and choice of data, particularly activity data and emission factors from various data providers, processing and archiving, QA/QC.	Inventory cycle revised	Updated inventory cycle
2.4 Organize training workshop on basic and advanced topics on GHG inventories.	Sixty-five people trained on GHG inventories.	Training workshop report.
2.5 Review the key category analysis results and the planned improvements list from the previous inventory and the recommendations from the second round of the ICA and develop the priority activities in the current inventory.	Priority inventory activities or areas needing special attention are compiled and used in inventory planning.	List of prioritized inventory activities.
2.6 Identify categories or sub-categories in the sectors for recalculations, especially in the AFOLU sector, and recalculate the estimates for applicable years.	Categories or sub-categories for recalculation are listed.  Emissions in categories or sub-categories in the selected years recalculated.	List of categories or sub-categories for recalculation.  Recalculated emissions for categories or sub-categories.
2.7 Identify data sources, process new Activity Data (AD) and Emissions Factors (EF), and revise the existing AD and EF dataset.	List of data sources identified.  Existing AD and EF reviewed and updated.	AD and EF sources.  Update existing AD and EF
2.8 Design and conduct surveys to collect activity data, identify research needs for developing national emission factors and country-specific methodologies.	New AD and EF collected and processed.  Research needs for country-specific (CS) EF identified.	Matrix of newly processed AD and EF  List of research need for CS EF

ACTIVITIES	OUTPUTS	INDICATORS
2.9 Estimate the national inventory of greenhouse gas sources and sinks for the period 1990-2020 for BUR4 and 1990-2021 in the NC5.	Emission estimates updated for the period 1990-2020 under BUR4.  Emission estimates updated from 1990-2021 under NC5 updated.	Updated GHG estimates for 1990-2020 for BUR4.  Updated GHG estimates for 1990-2021 under NC5
2.10 Document information on methodologies used in the inventory and provide brief explanations of emission factors and activity data sources.	Choice of methodologies, use of AD and EF described.	Documentation on methodological and data choice.
2.11 Update the QA/QC toolbox, describing specific QC procedures implemented during the inventory planning, preparation, and management processes, facilitating the overall QA procedures, and establishing quality objectives.	Inventory and sector-specific QA/QC measures reported.	Documentation on QA/QC.
2.12 Undertake tier 1 uncertainty assessment of the greenhouse gas sources and sinks, provide information on the uncertainty level with inventory data and their underlying assumptions, and describe the methodologies used for estimating these uncertainties.	Inventory uncertainty assessment conducted.	Documentation on uncertainty assessment for the inventory.
2.13 Prepare the National Inventory Report: 1990-2020 for BUR4 and update to 1990-2021 for NC5 and circulate the reports for internal review.	NIR covering 1990-2020 prepared for BUR4 and updated to cover 1990-2021 under NC5.	2020 NIR and 2021 NIR
2.14 Conduct technical peer review of NIRs by independent experts and organizations.	Technical peer reviews of NIRs conducted.	List of technical review comments.
2.15 Incorporate comments received from the peer review and finalize the NIRs; compile the Chapters on the 'National Greenhouse Gas Inventory' of the BUR4 and NC5.	Technical review comments incorporated into draft NIRs.	Final 2020 and 2021 NIR
2.16 Archive AD, EFs and conversion factors used in the inventory and describe in the NIR the procedures and arrangement used to archive data to prepare the national GHG inventory and the institutions' role uploads on the online database.	AD, EF, and conversion factors archived.  Procedures and arrangements for archiving described in the NIR. Archived data upload on an online data server	List of archived AD, EF, and conversion factors.  Description of procedures and arrangements for archiving. Archived information published online.

### General description of steps to facilitate adaptation to Climate Change

There are three parts under this section. These are (a) climate projections, (b) sectoral vulnerability, impacts and adaptation assessment and (c) adaptation planning and actions. Under the climate projections, the project will seek to increase rigor and predictive power GCM/RCMs by localizing the future emission trajectories along the IPCC's AR5 RCPs. The time scale for the projections will range between 2040 and 2080 for key climate variables and extreme events.

Regarding vulnerability and adaptation assessment, the project will build on the sectoral assessments from the NAP project and conduct a fresh assessment on sectors that have been covered in the previous national communications, such as tourism, road, telecommunication, and energy infrastructure. For the sectors that have been previously assessed, such as water resources, agriculture, poverty, fisheries, the project will review, and update reported information. The project is not able to conduct such a wide-scale impact assessment because of limited funds. This is because the existing sectoral impact assessment studies are outdated.

The project will aim to compile information on the progress, barriers, and strategies of adaptation planning and actions on adaptation planning and actions across the country. In this regard, data will be collected on several adaptation planning initiatives and on specific actions across all the various sectors at the community levels and how they contribute to building resilience. Therefore, the NC5 project will emphasize collecting secondary data on individual sectoral impact assessment studies and compile them into a single report. CGE Training materials for national communications preparation for non-Annex 1 Parties (update training materials on vulnerability and adaptation assessment), UNEP handbook on climate change methods impact assessment and adaptation; Ghana's adaptation mainstreaming tool are some of the literature resources that will be used in this section.

**Table 6: Activities, expected outputs, and indicators in Adaptation**

ACTIVITIES	OUTPUTS	INDICATORS
3.1 Prepare an adaptation registry containing data on programmes and interventions at the sub-national level. The registry will also include sectoral strategies and measures, barriers and enablers, and factors facilitating adequate adaptation.	Adaptation registry developed	Adaptation Database.
3.2 Organize one training workshop on climate information about Ghana.	Training workshop on climate information about Ghana organized.	Climate information training report.
3.3 Review existing past climate model data to detect changes, determine current trends and identify methodological gaps to be addressed.	Existing climate modelling initiatives reviewed, and changes, trends and gaps identified.	Gaps, trends and changes in existing climate models.
3.4 Test and use the latest GCMs and RCMs to project climate scenarios for different time horizons up to 2080.	Projected climate scenario up to 2080 generated.	Project climate scenario up to 2080

ACTIVITIES	OUTPUTS	INDICATORS
3.5 Describe the possible climate change scenarios for three 20-year-time scales in the future, centered on the 2040s, the 2060s and 2080s, relative to the climatological baseline period, inclusive of air temperature precipitation, and extreme events.	Results of three time-sliced climate scenarios for 2040, 2060 and 2080 described.	Description of climate scenarios for 2040, 2060 and 2080
3.6 Prepare risk assessments and vulnerability indices for most probable climatic risks and extremes using relevant socioeconomic and climate data.	Climate risk and vulnerability indices prepared.	Climate risk and vulnerability indices.
3.7 Identify and describe vulnerability (both socioeconomic conditions and climate) through identifying key vulnerable groups; identify exposure to climate risk (using socioeconomic indicators); assessing current vulnerability (the conjunction of climate hazards and socioeconomic conditions).		
3.8 Generate spatial vulnerability map at a distinct sub-national scale based on the vulnerability indices.	Spatial vulnerability maps at the sub-national scale generated.	Sub-national vulnerability maps
3.9 Compile adaptation assessments initiatives ongoing in the water resources; infrastructure and settlements; transport; energy; Migration and tourism sectors or any other areas of the economy such studies have been made.	Sectoral adaptation assessment studies compiled.	Compilation of adaptation assessment studies
3.10 Evaluate adaptation experiences and adaptive capacity through scoping and synthesis of information on existing policies and measures relevant to adaptation in the priority systems	Adaptation experience and adaptive capacity nation-wide documented	Adaptation experience and adaptive capacity report.
3.11 Compile and synthesize ongoing adaptation planning and adaptation efforts across the country.	Adaptation planning and adaptation efforts compiled into a matrix.	Matrix of adaptation planning and adaption efforts.
3.12 Review the national arrangement to prepare adaptation communication and recommend a road map for preparing the first adaptation communication.	National Arrangement for preparing Adaptation Communication reviewed.	Adaptation communication road map
3.13 Organize workshop on adaptation planning and impacts assessment.	Workshop on national and sub-national adaptation planning and impacts assessment.	Workshop report.

ACTIVITIES	OUTPUTS	INDICATORS
3.14 Compile Chapter on vulnerability, impacts and adaptation	The chapter on vulnerability, impacts and adaptation compiled.	Vulnerability and adaptation assessment chapter

#### Strategies to mitigate climate change

This section is divided into (a) mitigation assessment, (b) mitigation actions and their effects, integration of mitigation options into low emissions development planning and (d) progress of low emission development plans.

*The mitigation assessment aspects* will emphasize updating the information on the overall outlook of GHG mitigation opportunities, barriers for mitigation options, and identifying a new set of mitigation options consistent with the new Government policy direction. In doing so, data on macro-economic forecast, demographic and social conditions, technology penetration and barriers, and reforms in national development policies will be used to generate a model that depicts three plausible future development pathways [Business-as-usual (BAU), Low-to-Medium Growth (LMG) and High Growth (HG)]. With these development pathways, three associated emission scenarios for the business-as-usual (BAU) scenario (through default, without mitigation measures); With Measures (WM) and with additional Measures (WAM), will be generated for 2010 (base year) and 2050 (last year).

The mitigation assessment results will be reported at the national scale, on the sector-by-sector, gas-by-gas basis and with and without the AFOLU sector's contributions. Energy and non-energy activities will be treated separately in the analysis since different factors drive the emissions trends. However, with the advent of robust emission modelling tools, bringing all the individual sectoral model results in a common analytical framework. Although the analysis boundary is the entire economy, specific emphasis will be given to high GHG emitting energy, transport, agriculture, land-use change, forestry, and waste. LEAP will be used to study options that have specific sectoral and technological implications. The model will be applied mostly in the energy, transport, industry, waste, agriculture and building sectors. The assessment for some non-energy sectors will be conducted using the IPCC software and sectorial planning and strategies for the future.

**Table 7: Activities, expected outputs, and indicators on Mitigation Assessment**

ACTIVITIES	OUTPUTS	INDICATORS
4.1 Assess the status, barriers, and capacity needs for the planned, adopted, and mitigation policies and measures that significantly affect GHG emissions and removal.	Status of adoption and implementation of mitigation PAMs	Status of PAMs report.

4.2 Identify and screen mitigation actions and use them to update the BAU scenarios for selected sectors (energy, transport, building, industry, agriculture, AFOLU and waste) by using available software (i.e., EX-ACT LEAP, IPCC tools)	Sectoral mitigation actions identified, screened and used to update BAU emission scenarios.	Updated BAU emission scenarios
4.3 Update mitigation scenarios (WM ? with measures and WAM ? with additional measures) using available software.	Mitigation scenarios for different economic growth options revised.	Updated Mitigation scenarios
4.4 Quantitatively analyze the development and climate impacts of considered mitigation scenarios.	Development and climate benefits of mitigation actions analyzed	Development and climate benefits of mitigation options.
4.5 Update mitigation options selected in sectors for which their implementation will align to the low carbon pathway.	Mitigation options, strategies for implementation and linkage with the low carbon development strategy described.	Mitigation options and implementation strategies.
4.6 Prepare information on the status of mainstreaming low development planning into development.	Information on the status of mainstreaming low carbon development planning prepared.	Mainstreaming of low carbon development planning report.
4.7 Organize a training workshop on emission projections and methodologies for the assessment of the effects of mitigation actions	The national teams trained on emission projection and methodologies for assessment of effects on mitigation policy actions.	Training report.
4.8 Compile the chapter on the "programme to mitigate climate change" into the NC5.	Programme to mitigate climate change chapter of the NC5 compiled	Programme to mitigate climate change chapter.

Information on mitigation actions and their effects described.

Regarding mitigation actions and their effects, the common reporting template prepared during BUR3 will be revised and used in BUR4. The revised template will be completed for each set of mitigation actions in all the sectors. The information on the mitigation actions submitted in the BUR3 is updated with additional new information on the progress of implementation, challenges and steps planned to be taken within the project and sector where it is reported. New mitigation actions planned or being implemented after 2019 will also be covered in the BUR4.

The template has been designed to capture the following specific information: name; a short description, the methodologies, assumptions, objectives of actions and steps taken or envisaged to achieve that action and coverage (i.e., sectors and technologies); the scale; estimated outcomes, emission reduction potential and already achieved GHG emissions reductions; implementation period and information on the progress of implementation; responsible institutions for implementation; the needs, type and level of support required / funding obtained. After each institution fills the template, it will be processed and synthesized into broad clusters of mitigation actions in tabular format and be linked to a particular mitigation policy in the sector. The new completed template will be attached to the BUR4 as an annex. *The last two aspects are dedicated to low emission planning and the progress of low emission development strategies.* Here, the emphasis will be on reporting new information on low emission development planning in Ghana and the achievement level in selected sectors. It will also highlight how less-carbon intensive considerations are incorporated into development decision making in Ghana. This is important because it helps to develop progress to align development policies to the low carbon pathway.

**Table 8: Activities, expected outputs, and indicators under mitigation actions and their effects**

ACTIVITIES	OUTPUTS	INDICATORS
5.1 Review recommendations from the ICA 2 on mitigation actions and effects and address them to the extent possible.	ICA recommendations reviewed	ICA recommendations addressed
5.2 Assess the status, barriers, and capacity needs for the planned, adopted and mitigation policies and measures that have the most significant impact in affecting GHG emissions and removal.	Status of adoption and implementation of mitigation PAMs	Status of PAMs report.

5.3 Collect information on implementing mitigation actions/NAMAs and compile in a tabular format.	Information on the progress of the implementation of sectoral mitigation actions/NAMAs collected.	Progress of implementation of sectoral mitigation actions
5.4 Prepare a status report on Ghana's participation in the international carbon market.	Status on carbon trading in Ghana prepared.	Carbon trading status report
5.5 Populate the online database with results from the assessment of mitigation action/NAMAs and their effects	Update information on mitigation actions and their effects uploaded on an online database.	Mitigation action and its effect published online.
5.6 Compile the chapter on mitigation actions and their effects into the BUR4.	Mitigation actions and their effects chapter of the BUR4 compiled	Mitigation actions and their effects chapter.

Constraints and Gap, and related financial, technical, and capacity needs; and support needed and received

Information on constraints and gaps and related financial, technical, and capacity needs for climate reporting and climate change issues, in general, will be reported in both BUR4 and NC5. For the BUR4, although information on constraints, gaps and needs will be reported, the focus will be on specific constraints, gaps and needs for the compilation of BURs and implementation of actions contained in the BURs. The information reported in the BUR will be updated later in the NC5. This component has three main sections. The first section will deal with the constraints and gaps in preparing climate change reports, the implementation of climate actions, and how they are addressed. The second part will focus on the financial, technical, technology, and capacity needs to effectively report climate change and facilitate climate actions. The last section will be a compilation of major climate change project proposals seeking funding.

**Table 9: Activities, expected outputs, and indicators on Constraints and Gaps**

ACTIVITIES	OUTPUTS	INDICATORS
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6.1 Survey key stakeholders on the key constraints, gaps, and needs in compiling climate reports and implementing climate actions.	Reported on constraints, gaps, and capacity needs (financial, technological, and capacity) to compile climate reports and implement actions prepared.	Constraints, gaps and needs report
6.2 Update information on constraints, gaps and needs report after two years.	Updated Constraints, gaps and needs reports	Revised Constraints, gaps and needs report
6.3 Prepare four proposals for list project seeking financing	Four climate change project proposals compiled.	Four Project proposals
6.4 Track and update information on international and domestic financial, technology and capacity (FTC) inflows and describe the system for tracking FTC (support received and needed).	Information on levels and system for tracking FTC inflows and support needed reported.	Matrix on the tracking of FTC inflows and support needs.
6.5 Compile BUR4 and NC5 chapters on Constraints and Gaps and related financial, technical, and capacity needs; and support needed and received	The chapter on constraints and gaps, and related financial, technical, and capacity needs; and support needed and received prepared	The chapter on constraints and gaps, related financial, technical, and capacity needs, and support needed and received prepared and included in the BUR4 and NC5.

#### Information on Domestic Monitoring Reporting and Verification arrangements (BUR)

In this section, the information will be provided on the setting up and operationalizing of domestic MRV system to track and verify "support" and "mitigation actions" and "effects" on emission reduction and sustainable development benefits. The domestic MRV system information will include; a description of the MRV processes, their architecture, operational procedures, and indicators for the continuous monitoring of the effect on emissions/removals, mitigation measures, and the mechanisms for review and verification. The final output of this component will be the establishment of a domestic MRV system and information on the protocols and operational procedures of the domestic MRV system.

**Table 10: Activities, expected outputs, and indicators on Monitoring Reporting and Verification arrangements (BUR)**

ACTIVITIES	OUTPUTS	INDICATORS
7.1 Review the recommendations from the second round of the ICA process on Domestic MRV and address them as much as possible.	ICA recommendations on domestic MRVs reviewed and addressed.	List of ICA recommendations on domestic MRVs.
7.2 Continue with the mainstreaming of the GCARP as the domestic MRV system	Sectoral MRV set-up continued	Operation of sectoral MRVs

7.3 Describe the system for regular tracking of GHG emissions from all economic sectors, the process of developing the national and sectoral emission scenarios, the financial and human resources involved and/or available and the quality assurance process	System for tracking GHG emission and steps for developing emission scenario described.	Report emission tracking and emission scenario development.
7.4 Provide information on the measures Ghana has put in place to improve upon the MRV system following the key recommendations from International Consultation and Analysis (ICA)	Information on steps taken to implement ICA recommendations on improvement of domestic MRV system.	List steps to improve the functionality of domestic MRV.
7.5 Conduct MRV for selected climate actions and support and document the process for reporting.	Results from MRV of selection climate actions and support prepared.	MRV result of climate action and support.
7.6 Compile the Chapter on 'Domestic measurement reporting and verification of BUR4.	The chapter on Domestic measurement reporting and verification of BUR4 compiled.	Domestic measurement reporting and verification chapter.

Other information relevant to the achievement of the objective of the Convention including information on gender and climate change.

The section on 'other information includes climate change areas that have not been addressed in the previous chapters. It will highlight the progress and challenges for implementing strategies for achieving the objectives of the UNFCCC in Ghana. Among the critical issues covered under this sub-component include:

- ? Progress on the integration of climate change into relevant social, economic, and environmental policies and measures.
- ? Technology development and transfer.
- ? Climate change research.
- ? Education, training, and public awareness.
- ? Information on capacity building and networking.
- ? Gender and climate change

Furthermore, additional information on how "support" received helps unlock sustainable development opportunities, especially in sectors with a priority to build resilience and reduce emissions. For instance, information on how "supported actions" facilitate and stimulate technology transfer, local innovations and research, education training and public awareness, market improvement and barriers are being addressed. The summary of the impact of implementing response measures will be incorporated in the section: 'Other information relevant to achieving the Convention's objectives.

**Table 11: Activities, expected outputs, and indicators on Any other relevant Information**

ACTIVITIES	OUTPUTS	INDICATORS
8.1 In respect of BUR4, collect and present any other information relevant to the achievement of the objective of the Convention, including information on gender and climate change (i.e., roles and responsibilities of women and men; opportunities for women to share knowledge with climate change specialists; sector specific programs on women's resilience and long-term adaptation to climate change effects; gender representation in project management committees and institutional frameworks and capacity building actions; capacity weaknesses in climate change gender mainstreaming, etc.).	Any other information relevant to the achievement of the objective of the Convention included in the BUR4	BUR4 Chapter on any other information relevant to the achievement of the objective of the Convention
8.2 Collect and collate information on national processes of integration of climate change into relevant social, economic, and environmental policies and actions and key achievements.	Information on the national process to integrate climate change into national policies updated.	Updates of climate change integration process.
8.3 Collect information on the progress of development, transfer, and adoption of Environmentally Sound Technologies (EST)	Information on the progress of development, transfer and adoption EST prepared.	Report on development, transfer, and adoption of EST.
8.4 Compile information on how gender and response measures have been included in integrating climate change into national and sectoral development for inclusion in the NC5	Information on how gender and response measures are featured in climate change mainstreaming compiled.	Gender and response measures perspectives of climate and development planning.
8.5 Organize three annual Gender- specific workshops in relation to climate change issues	Gender specific workshop organized	3 workshop report
8.6 Identify Research and Systematic Observation (RSO) needs and assess the status of RSO initiatives in Ghana.	Status report on collaboration for RSO activities reported	RSO report

ACTIVITIES	OUTPUTS	INDICATORS
8.7 Assess progress of implementation Article 6 (under the Convention) activities including; formal and informal awareness creation; status to integrate climate change issues in school curricula; Conduct a sociological survey to assess the level of awareness of different segments of the population on climate change and target specific educational programme to influence their behavioral choices.	Progress of implementation of Article 6 activities in Ghana reported.  Progress report on the integration of climate change topics in school curricula prepared.	Article 6 progress report.  Integration of climate change in school curricula report.
8.8 Prepare a report on the progress of the implementation of capacity building activities on climate change.	Progress report on capacity building initiatives compiled.	Capacity building initiatives report.
8.9 Compile an updated report on climate change research in the country, including research on developing country-specific emission factors.	Report on climate change research, including the development of country-specific emission factors prepared.	Climate change research
8.10 Develop four outreach programmes to support the dissemination of the findings of BUR4 and NC5	Four outreach programmes organized	Four reports on the outreach programmes on BUR4 and NC5 findings
8.11 Compile the BUR4 and NC5 chapters on other relevant information.	BUR4 and NC5 chapters compiled.	Relevant BUR4 and NC5 chapters included.

### Technical Assistance

International/regional consultant(s) will be invited, as appropriate by EPA to train or provide support to national teams responsible for the preparation of the BUR4 and NC5 in specific approaches, tools, and methods to be used for the planned activities under the GHG Inventories, mitigation actions and their effects and domestic MRV.

### Proposed Activities: -

9.1 Engage international/regional consultant(s) as appropriate to train or provide support to the national teams responsible for the preparation of the BUR4 and NC5 in specific approaches, tools, and methods to be used for the planned activities under the GHG Inventories, mitigation actions and their effects and domestic MRV.

### **Compilation and Production of Ghana's BUR4 and NC5**

After preparing the various sections as discussed above, the BUR4 and NC5 will be compiled, reviewed, finalized, published, and submitted to the UNFCCC, and the BUR4 will be subjected to the ICA process. There will be two submission dates. The first submission package will be in June 2023 and the second submission will be in December 2024. The second submission package includes the following reports: NC5 and the updated NIR5. This submission package will include these three reports BUR4, NIR6 and GHG national system. After the first submission, the preparation and participation in the ICA process will be also be supported.

**Table 12: Activities, expected outputs, and indicators on Compilation and Production of Ghana's BUR4 and NC5**

<b>ACTIVITIES</b>	<b>OUTPUTS</b>	<b>INDICATORS</b>
10.1 Compile BUR4, NIR6 and, update the GHG national system and circulate for review and comments.	BUR4, NIR6 and GHG national system report prepared.	BUR4, NIR6 and GHG national reports.
10.2 Compile NC5 and updated NIR6 and circulate for review and comments.	NC5 and Updated NIR prepared	NC5 reports and Updated NIR.
10.3 Organize national validation workshop for stakeholders, including NGOs, academia for BUR4 and NIR6.	National validation workshop for BUR4 and NIR6 organized	Workshop report for BUR4 and NIR6.
10.4 Organize a national validation workshop for stakeholders, including NGOs, academia, to discuss the NC5 report.	National validation workshop for NC5 and updated NIR6 organized.	Workshop report for NC5 and updated NIR6.

10.5 Publish BUR4, NC5, NIR6 and report on GHG national system in soft and hard copy versions.	Soft and hard copies of BUR4, NC5, NIR6 and GHG national system reports published.	Soft and hard copies of BUR4, NC5, NIR6 and GHG national system reports.
10.6 Submissions of BUR4, NC5 and NIR6 in soft and hard copies to UNFCCC and soft copies to UNEP.	BUR4, NC5, NIR6 and GHG national system reports submitted to UNFCCC in 2023 and 2024	Submitted BUR4, NC5, NIR6 and GHG national system reports
10.7 Support Ghana's preparation and participation in the second ICA (technical analysis and facilitate sharing of views workshop) after official submission of BUR4 to UNFCCC	Preparation and participation in the ICA process supported in 2022/2023	Support for Ghana's ICA process.

### **The proposed structure of the BUR4 and NC5:**

*The proposed outline of Ghana's BUR4 will be as shown below:*

Executive Summary (Not more than ten pages)

Introduction and Reporting Context

Chapter 1: National Circumstances and institutional arrangement

Chapter 2: National Greenhouse Gas Inventory

Chapter 3: Information on Mitigation Actions and their Effects

Chapter 4: Constraints and gaps and related financial, technical, and capacity needs, including information on support needed and received for the preparation of the BUR4

Chapter 5: Information on Domestic MRV System

Chapter 6: Other information relevant to the achievement of the convention's objective, including information on gender and climate change.

Chapter 7: Conclusions and Recommendations

Annexes

*The proposed outline of Ghana's NC5 will be as shown below:*

Executive summary (not more than ten pages)

Introduction and reporting context

Chapter 1: National circumstances and institutional arrangement

Chapter 2: National greenhouse gas inventory

Chapter 3: Programmes containing measures to facilitate adequate adaptation to climate change

Chapter 4: Programmes containing measures to mitigate climate change

Chapter 5: Other Information Relevant to the Convention

Chapter 5.1: Integration of climate change concerns into national development priorities

Chapter 5.2: Development and transfer of environmentally sound technologies

Chapter 5.3: Climate Change Research and Systematic Observation

Chapter 5.4: Education, Training and Public Awareness

Chapter 5.5: Capacity-Building

Chapter 5.6: Information on Research Programmes

Chapter 5.7: Information and Networking

Chapter 5.8: Gender and climate change relevant to NC5 preparation

Chapter 5.9: Ghana's experience in implementing response measures Chapter

Chapter 6: Constraints and Gaps, and Related Financial Technical and Capacity Needs

Chapter 7: Conclusions and Recommendations

Annexes:

**Output 1.1.2: A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent reports under the UNFCCC completed**

The exercise will provide a final qualitative rating of Ghana's institutional arrangements and recommendation for the appropriate time for Ghana to transition to its Initial Biennial Transparency Reporting (BTR) preparation under the Paris Agreement, as will be guided by the COP Decisions and

GEF funding processes. The stocktaking assessment for preparation of subsequent reports aims to allow for a seamless transition to subsequent reports, in this case, transition to Ghana's BTR and NC6. The activities to be implemented under this output will be undertaken within four months after completing BUR4 and NC5 reports.

A summary of activities and results achieved under the BUR4 and NC5 project will be prepared to ensure that the PIP for NC6 and BTR project is built upon what has been achieved to avoid duplication of work and propose strategies for increasing synergies with related programmes and institutions. The following activities will be undertaken:

? Conduct self-assessment and stocktaking exercise, review ICA recommendations and prepare a summary of activities and results achieved upon completion and submission of the BUR4 to the UNFCCC

? Conduct self-assessment and stocktaking exercise, prepare a summary of activities and results achieved and undertake a qualitative assessment of the state of institutional arrangement capacity for preparation of NCs and BTRs upon completion and submission of the NC5 to the UNFCCC

### **Project Management**

The climate Change Unit will manage the BUR4 and NC5 project within the Environmental Protection Agency. The UNFCCC Focal Point will be the BUR4/NC5 project coordinator and will directly report to the Executive Director of EPA through the Deputy Executive Director in charge of technical services. The project coordinator will be responsible for all the project management, administrative and financial matters related to the project. The terms of reference of the Project Coordinator is set out in annex A. The Project Coordinator shall be supported by an administrative and financial assistant to be contracted. The terms of references are also provided in annex A. The project coordinator will also be responsible for annual and final financial audits of the project. Respective budgets have been set to meet standard project management costs.

#### **Project Management related activities:**

11.1 Project Coordinator

11.2 Contract an Administrative and Financial Assistant

11.3 Office facilities; equipment, consumables; communications; hospitality costs; insurance of maintenance costs (electricity, heat, water)

11.4 Bank Commission

11.5 Cover costs for travel (Upon UNEP's Approval)

11.6 Cover communication expenses.

11.7 Conduct 3 independent annual audits of the BUR4/NC5 project.

#### **D. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT**

This project has been prepared in line with UNFCCC COP guidance on the provision of resources to Non-Annex I countries to prepare National Communications (NCs) and Biennial Update Reports (BURs) and conforms with Objective 3 of the GEF-7 Climate Mitigation Strategy, which focuses on fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies. As per convention guidance, this project is implemented on an agreed full cost basis requiring only in-kind contribution by GEF-eligible countries. The full cost for preparation of the Fourth Biennial Update Report (BUR) earmarked is US\$ 352,000, and for the preparation of the Fifth National Communication (NC) is earmarked for US\$500,000, totaling to an amount of \$ 852,000 and is within the GEF provision. To ensure cost-effective delivery, synergies across the various project activities will be exploited, and where possible, project activities will be streamlined. Since the support for the preparation of BUR4 and NC5 is to be met at an agreed full cost basis.

This project does not have confirmed co-financing, but the Government of Ghana, through the Environmental Protection Agency (EPA) has indicated its interest to make an in-kind contribution of up to US\$ 92,000 through its support on recurrent expenses and contribution of technical inputs in the preparation of the BUR4 and NC5. This in-kind/voluntary contribution from EPA towards the project will be reported annually to UNEP when realized.

EPA will be the lead project executing agency of the project to ensure continuity of teams/structures established and used for the preparation of previous NCs and BURs, considering that EPA has been the lead executing agency in the previous NCs and BURs. Continuous preparation of these reports using established institutions, pools of experts and stakeholders that are actively involved will increase country ownership and the uptake of project findings at all levels. This will result in the formulation of national climate policy & plans that are aligned to the Country's priority sectors and its Nationally Determined Contributions (NDCs) under the Paris Agreement. The second project output has been included to support the continuous engagement of climate change structures/units in EA and stakeholders interested in climate change enabling activities after completing and submitting reports to the UNFCCC. The output will also allow Ghana to assess its readiness to initiate its Initial Biennial Transparency Reports, expected to be submitted to the UNFCCC by 2024.

#### **E. DESCRIBE, DESCRIBE THE BUDGETED M & E PLAN**

The project will be monitored through the following M&E activities:

- ? A Project Inception Workshop at the national level will be held within 2 months of start of BUR4/NC5 project, after the establishment of the Project Management Unit. This will involve all key stakeholders identified during the national consultation process. An Inception Workshop report will be prepared and shared with participants to formalize various arrangements agreed upon during the meeting.

- ? Monitoring BUR4 and NC5 technical progress against expenditures: The Project Coordinator will prepare quarterly progress reports and expenditure statements. Technical progress and financial reports shall be reviewed by the UNEP Task Manager and Fund Management Officer.
- ? Report to the GEF and COP of UNFCCC: As part of annual reporting routine, UNEP will continue to prepare and submit to the GEF annual report on UNEPs support for the preparation of NCs and BURs which will include the status of implementation of the BUR4 and NC5 project.
- ? Project Implementation Review (PIR) report: The BUR4 and NC5 project progress will be reported through PIR reports which is conducted annually as part of reporting routine.
- ? Project Annual and final financial audit will be undertaken to assess probity (i.e. correctness, integrity etc.) of expenditure and transactions.
- ? **Co-financing report: the in-kind/voluntary contribution towards the BUR4 and NC5 project will be reported annually to UNEP when realized.**
- ? Annual Inventory of Non-expendable equipment: The Executing Agency shall maintain complete and accurate records of non-expendable equipment purchased with GEF project funds and shall provide UNEP annually with the inventory of such non-expendable equipment as at 31 December, to be submitted within 2 months.

Within two months of project completion, the national project management unit will prepare a final report. The final report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

**Table 13: Detailed monitoring and evaluation workplan.**

TYPE OF M&E ACTIVITY	RESPONSIBLE PARTIES	TIME FRAME
Project Inception Workshop (PIW)	National Project Management Unit, Technical Expert Groups and UNEP Task Manager to raise awareness, build stakeholder engagement and detailed work planning	Within two months of project start-up and establishment of the project management unit
Project Inception Report	Project Coordinator & UNEP Task Manager	Not more than one month after the Project Inception Workshop

Technical progress reports & expenditure statements	National Project Management Unit, Task Manager, Funds Management Officer	Four (4) quarterly expenditure and technical progress reports for any given year, submitted by January 31, April 30, July 31 and October 31 (latest) and at the end of the project implementation
Project Implementation Review (PIR) report	Executing Agency (Project Manager) and UNEP (Task Manager)	Annually, part of reporting routine
Report to the GEF and COP of UNFCCC	Executing Agency (Project Manager) and UNEP (Task Manager)	Annually, part of reporting routine
Co-financing report	Executing Agency (Project Manager) and co-finance partners	Annually, on or before 31 July
Annual Inventory of Non-expendable equipment	Executing Agency (Project Manager) and co-finance partners	Annually, as at 31 December of each year, to be submitted within 2 months
UNEP Final Report	Executing Agency (Project Manager)	Within 2 months of the project completion date

The project result framework is presented in **Table G** below, where performance and impact indicators for project implementation and their corresponding means of verification are detailed.

#### **G. Project Result Framework**

	<b>Indicators</b>	<b>Baseline/End of Project Targets</b>	<b>Means of Verification</b>	<b>Assumptions and Risks</b>

	Indicators	Baseline/End of Project Targets	Means of Verification	Assumptions and Risks
<p><b>Project Objective:</b></p> <p>To support Ghana to Prepare and submit its Fourth Biennial Update Report (BUR4) and Fifth National Communication (NC5) that comply with the United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements and responds to national development goals.</p>	<p>Ghana prepares and submits BUR4 and NC5 that comply with the UNFCCC reporting requirements and responds to national development goals.</p>	<p><u>Baseline:</u> 0</p> <p><u>BUR Target:</u></p> <p>? BUR4 completed by June 30, 2023</p> <p><u>NC Target:</u></p> <p>? NC5 completed by December 31, 2024</p>	<ul style="list-style-type: none"> <li>- BUR4 and NC5 posted on the UNFCCC website</li> <li>- UNFCCC reporting requirements</li> <li>- Strengthened National system for climate reporting</li> <li>- National Development and climate planning Strategies</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate political commitment and institutional support for NC/BUR preparation exist</li> </ul>
<p><b>Project Component 1: Preparation of Ghana's BUR4 &amp; NC5</b></p>				

	Indicators	Baseline/End of Project Targets	Means of Verification	Assumptions and Risks
<p><b>Outcome 1:</b> Ghana update tools and approaches to meet its BUR4 and NC5 reporting requirements under the UNFCCC and respond to national development goals</p>	<p>BUR4, which meet the Convention's reporting requirements prepared and submitted to the UNFCCC</p>	<p><u>Baseline:</u> 0</p> <p><u>End Term Targets:</u></p> <ul style="list-style-type: none"> <li>- BUR4 completed by June 30, 2023</li> <li>- NC5 completed by December 31, 2024</li> </ul>	<ul style="list-style-type: none"> <li>- Annual reporting to UNEP.</li> <li>- Annual reports to the COP on the preparation of reports.</li> <li>- BUR4 report posted on the UNFCCC website.</li> <li>- NC5 report posted on the UNFCCC website.</li> <li>- Annual progress reporting by Ghana to UNEP</li> <li>- Final evaluation</li> <li>- Guidelines for NC/BTR stocktaking and self-assessment report preparation.</li> <li>- 1 NC self-assessment report completed by the time of</li> </ul>	<ul style="list-style-type: none"> <li>- NC/BUR preparation is considered a priority in the participating country</li> <li>- Strong political or institutional commitment to the NC/BUR process</li> <li>- There will be no delays in the national political endorsement processes after the technical completion of these reports to guarantee timely submission of reports to the UNFCCC</li> <li>- The strong commitment of the national team to engage stakeholders of high competence and expertise</li> <li>- Stakeholders willingness to participate in the NC/BUR process</li> <li>- Adequate political support to strengthen and/or establish an appropriate institutional arrangement for</li> </ul>
	<p>Ghana undertakes stocktaking assessment and institutional arrangement for preparation of subsequent reports under the UNFCCC</p>	<p><u>Baseline:</u> 0</p> <p><u>End Term Target:</u></p> <ul style="list-style-type: none"> <li>- The Republic of Ghana completes the self-assessment report by the time of project closure.</li> <li>- The Republic of Ghana submit stocktaking assessment and institutional arrangement report for the subsequent reports by the</li> </ul>	<ul style="list-style-type: none"> <li>- Annual progress reporting by Ghana to UNEP</li> <li>- Final evaluation</li> <li>- Guidelines for NC/BTR stocktaking and self-assessment report preparation.</li> <li>- 1 NC self-assessment report completed by the time of</li> </ul>	<ul style="list-style-type: none"> <li>- The strong commitment of the national team to engage stakeholders of high competence and expertise</li> <li>- Stakeholders willingness to participate in the NC/BUR process</li> <li>- Adequate political support to strengthen and/or establish an appropriate institutional arrangement for</li> </ul>

**F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE)**

Not Applicable to the preparation of the BUR4/NC5 project

**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)**

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

<b>Focal Point Name</b>	<b>Focal Point Title</b>	<b>Ministry</b>	<b>Signed Date</b>
Mr Isaac Charles Acquah Jnr.	GEF Operational Focal Point	Environmental Protection Agency of Ghana	11/22/2021

**B. Convention Participation**

<b>Convention</b>	<b>Date of Ratification/Accession</b>	<b>National Focal Point</b>
UNFCCC	6/9/1995	Dr. Daniel Tutu Benefoh

**ANNEX A: Project Budget Table**

Please attach a project budget table.

<b>Expenditure Category</b>	<b>Detailed Description</b>	<b>Component (USD)</b>					<b>Total (USD)</b>	<b>Responsible Entity (Executing Entity receiving funds from the GEF Agency)</b>
		<b>Component 1</b>		<b>Sub-Total</b>	<b>M&amp;E</b>	<b>P M C</b>		
		<b>Output 1</b>	<b>Output 2</b>					
<b>Equipment</b>	IT equipment and software to support mainstreaming of Ghana Climate Ambition Reporting Program (GCARP) system and maintenance of online database for NAMAs.	20,000	-	20,000	-	-	20,000	Climate Change Unit, Environmental Protection Agency (EPA of Ghana)
<b>Contractual Services ?sector teams</b>	Contractual Services to five sector teams that will contribute to the planning and implementation of activities and review of draft reports submitted by consultants on assigned thematic areas including (i) GHG inventories, (ii) Adaptation, (iii) mitigation and MRV, (iv) other relevant information and (V) cross cutting issues. (Annex A section C)	150,000	-	150,000	-	-	150,000	Climate Change Unit, Environmental Protection Agency (EPA of Ghana)

<b>Contractual Services</b> <b>?Individual</b>	Salary costs of the Project coordinator (Annex A section A)	-	-	-	-	68,450	68,450	Climate Change Unit, Environmental Protection Agency (EPA_ of Ghana)
<b>International Consultants</b>	International/regional Consultants: To train or provide support to the national teams responsible for the preparation of the BUR4 and NC5 in specific approaches, tools, and methods to be used for the planned activities under the GHG Inventories, mitigation actions and their effects and domestic MRV.	27,000	-	27,000	-	-	27,000	Climate Change Unit, Environmental Protection Agency (EPA_ of Ghana)

<p><b>Local Consultants</b></p>	<p>National consultants leading the preparation and compilation of :  (i)National Circumstances (NC5/BUR4); (ii) National GHG Inventory (NC5/BUR4); (iii) Measures to facilitate adequate adaptation to climate change (NC5); (iv) Measures to mitigate climate change (NC5); (v) Information on mitigation actions and their effects (BUR4); (vi) Constraints and gaps; (NC5/BUR4); (vii) Information on domestic MRV (BUR4); (viii) Other relevant Information (NC5/BUR4) and Compilation of BUR4 and NC5.  <i>The consultants will be selected through public procurement akin to the EPA procedures and will work closely with the sector teams and PMU.</i></p>	<p>432,550</p>	<p>-</p>	<p>432,550</p>	<p>-</p>	<p>-</p>	<p>432,550</p>	<p>Climate Change Unit, Environmental Protection Agency (EPA_ of Ghana)</p>
<p><b>Local Consultants</b></p>	<p>National consultants supporting stocktaking assessment and institutional arrangements for subsequent reports (BTR/NC) preparation.</p>	<p>-</p>	<p>20,000</p>	<p>20,000</p>	<p>-</p>	<p>-</p>	<p>20,000</p>	<p>Climate Change Unit, Environmental Protection Agency (EPA_ of Ghana)</p>

<b>Trainings, Workshops, Meetings</b>	Costs related to Knowledge management activities (e.g. organizing trainings, capacity building workshops, public meetings, awareness raising and education of different groups of peoples etc.) relevant to NC5/BUR4 project and specific thematic areas such as GHG inventory, V& A, Mitigation Analysis, cross cutting issues including gender etc.	45,000	-	45,000	-	-	45,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)
<b>Trainings, Workshops, Meetings</b>	Project launch and validation workshops for the NC5, BUR4 and NIR6	17,000	-	17,000	-	-	17,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)
<b>Travel</b>	Travel expenses related to implementation of project activities	30,000	-	30,000	-	-	30,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)
<b>Office Supplies</b>	Supply costs for various office expenses related to project implementation (e.g.: stationery)	15,000	-	15,000	-	-	15,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)
<b>Other Operating Costs</b>	Design, publication and printing of the NC5, BUR4, NIR6 and other communication materials to support knowledge management	12,000	-	12,000	-	-	12,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)
<b>Other Operating Costs</b>	Costs related to outreach programmes to support the dissemination of the findings of NC5 and BUR4	6,000	-	6,000	-	-	6,000	Climate Change Unit, Environmental Protection Agency (EPA_of Ghana)

<b>Other Operating Costs</b>	Financial audits	-	-	-	-	9,000	9,000	Climate Change Unit, Environmental Protection Agency (EPA_ of Ghana)
<b>Grand Total</b>		<b>754,550</b>	<b>20,000</b>	<b>774,550</b>	<b>-</b>	<b>77,450</b>	<b>852,000</b>	

**ANNEX C: SAFEGUARD RISK IDENTIFICATION FORM (SRIF)**

**Safeguards Risk Summary**

**A. Summary of the Safeguards Risk Triggered**

<b>Safeguard Standards Triggered by the Project</b>	<b>Impact of Risk<sup>16</sup> (1-5)</b>	<b>Probability of Risk (1-5)</b>	<b>Significance of Risk (L, M, H)</b> <i>Please refer to the matrix below</i>
SS 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management	1	1	L
SS 2: Climate Change and Disaster Risks	1	1	L
SS 3: Pollution Prevention and Resource Efficiency	1	1	L
SS 4: Community Health, Safety and Security	1	1	L
SS 5: Cultural Heritage	1	1	L
SS 6: Displacement and Involuntary Resettlement	1	1	L
SS 7: Indigenous Peoples	1	1	L
SS 8: Labor and working conditions	1	1	L

**B. ESS Risk Level<sup>17</sup> -**

Refer to the UNEP ESSF (Chapter IV) and the UNEP's ESSF Guidelines.

- Low risk
- Moderate risk
- High risk
- Additional information required

Impact	5	H	H	H	H	H
	4	M	M	H	H	H
	3	L	M	M	M	M
	2	L	L	M	M	M
	1	L	L	L	L	L
#		1	2	3	4	5
		Probability				

### C. Development of ESS Review Note and Screening Decision

<sup>16</sup> Refer to UNEP Environmental and Social Sustainability Framework (ESSF): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).]

<sup>17</sup> **Low risk:** Negative impacts minimal or negligible: no further study or impact management required.

**Moderate risk:** Potential negative impacts, but limited in scale, not unprecedented or irreversible and generally limited to programme/project area; impacts amenable to management using standard mitigation measures; limited environmental or social analysis may be required to develop an Environmental and Social Management Plan (ESMP). Straightforward application of good practice may be sufficient without additional study.

**High risk:** Potential for significant negative impacts (e.g. irreversible, unprecedented, cumulative, significant stakeholder concerns); Environmental and Social Impact Assessment (ESIA) (or Strategic Environmental and Social Assessment (SESA)) including a full impact assessment may be required, followed by an effective comprehensive safeguard management plan.

#### Prepared by

Name: Suzanne Lekoyiet Date: 07/10/2021

#### Screening review by

Name: Yunae Yi Date: 15 Oct. 2021

Cleared<sup>18</sup>



### D. Safeguard Review Summary (by the safeguard team)

This is a low risk project. However, guiding principles-human rights, accountability, resilience and sustainability and leave no one behind-are still applicable to this project.

**E. Safeguard Recommendations** (by the safeguard team)

- No specific safeguard action required
- Take Good Practice approach<sup>19</sup>
- Carry out further assessments (e.g., site visits, experts' inputs, consult affected communities, etc.)
- Carry out impact assessments (by relevant experts) in the risk areas and develop management framework/plan
- Consult Safeguards Advisor early during the full project development phase
- Other \_\_\_\_\_

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<sup>18</sup> This is signed only for the full projects latest by the PRC time.

<sup>19</sup> Good practice approach: For most low-moderate risk projects, good practice approach may be sufficient. In that case, no separate management plan is necessary. Instead, the project document demonstrates safeguard management approach in the project activities, budget, risks management, stakeholder engagement or/and monitoring segments of the project document to avoid or minimize the identified potential risks without preparing a separate safeguard management plan.