

JAMAICA

CAPACITY NEEDS AND GAPS ASSESSMENT OF INSTITUTIONAL ENABLING ENVIRONMENT FOR TRANSPARENCY RELATED ACTIVITIES

STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

TERMS OF REFERENCE

1. Background and Justification

- 1.1. Article 13 of the United Nations Framework Convention on Climate Change Paris Agreement provides for an enhanced transparency framework aiming to build mutual trust and the effective implementation of the actions identified under the Nationally Determined Contribution (NDC). Currently Jamaica is not sufficiently prepared to monitor, report and verify mitigation and adaptation actions, related policies and corresponding finance in a concise and robust manner, nor efficiently able to generate forecasting scenarios and strategic information for policy-makers (economic, investment, technological, etc.) needed to support transformational change.
- 1.2. As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), and as a Non-Annex I Party to the Convention, Jamaica has played a key role in international negotiations advocating for adequate funding to assist small island developing states (SIDS). Despite not being a major emitter of greenhouse gases (GHG), Jamaica is playing its part in reducing GHG emissions through "no regret" mitigation actions; as well as fulfilling the UNFCCC's requirements on transparency reporting by submitting several reports, including the first Biennial Update Report (BUR) from among the Latin American and Caribbean SIDS and by ratifying the Paris Agreement in April 2017 becoming a Party in May 2017. Jamaica also submitted its Third National Communications to the UNFCCC in January 2019. These submissions indicate the strong level of country commitment to establish long term arrangements to ensure a sustainable, accurate and reliable transparency framework
- 1.3. The outputs from the Jamaican National Communications, Biennial Update Reports and the National Determined Contributions, have identified the capacity constraints in Jamaica which include: (i) the current institutional arrangements are not formalized into long term agreements; (ii) there is a widely lack of reliable and accurate data; (iii) poor methodological sophistication; and (iv) limited local technical capacities and expertise.
- 1.4. Through the Global Environment Facility Jamaica has a project worth US\$1.3M approved to address capacity constraints as it relates to transparency reporting to the UNFCCC. The main objective of the project is to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification system for the effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities
- 1.5. One of the project's outcomes is to enhance the institutional capacity for long-term planning and timely reporting of transparency-related activities. There is thus a need to identify the capacity needs within the Ministry of Economic Growth and Job Creation, through its Climate Change Division to allow Jamaica to meet its

transparency related obligations under the UNFCCC.

- 1.6. The project is aligned with Jamaica's national priorities and development planning such as the Jamaican National Development Plan Vision 2020. The project is will contribute directly to Jamaican National Energy Policy, as it will help to build capacity and provide comprehensive data which can be used for energy planning and the development of renewable energy projects. The project will also be aligned to the current activities related to the development and formulation of sectoral adaptation strategies and action plans and, Jamaica's participation in phase III of the GEF financed UN Environment Technology Needs Assessment project

2. Objectives

- 2.1. The objective of this consultancy is to perform assessment of the institutional capacity for transparency-related activities, along with an assessment of on-going initiatives at the national, sub-national and sectoral levels to support transparency-related activities. The outputs of these assessments will be used to identify specific capacity building activities to improve the arrangements for transparency activities.

3. Scope of Services and Key Activities

- 3.1. The consultant will prepare a detailed comprehensive assessment of the gaps and needs of various governments institutions , as it relates to transparency activities. In addition, there will be a review of the on the going initiatives at the national, sub-national and sectoral levels to support transparency-related activities , and how the ongoing process could be improved.
- 3.2. Key Activities will include: (i) a review of the national communications and biennial update report processes, and identification of opportunities to improve these processes; (ii) identification of on-going initiatives at the national, sub-national and sectoral levels to support transparency-related activities conducted; (iii) an analysis of the gaps, needs and requirements of various government institutions; and (iv) identification of appropriate measures for the improvement of transparency related activities.

4. Deliverables

- 4.1. The expected deliverables will be a completed report on the review of the national communications and biennial update report processes and identification of possible improvements to the process. A detailed analysis on ongoing transparency initiatives and measures to improve transparency activities. A report on the necessary measures and activities which are required in government departments to improve transparency activities.
- 4.2. The specific deliverables include: (i) technical report on the national communications and biennial update report processes and recommendations for improvements; (ii) a report on measures to improve transparency related activities, which includes an analysis of ongoing transparency activities; and (iii) a report on the necessary capacity building activities which the Government of Jamaica needs to improve transparency activities.

5. Qualifications and Experience

- 5.1. The consultant should hold an advanced degree in Environmental Sciences,

Engineering, Climate Science, Economics or any field related to Environmental Management.

- 5.2. At least 10 years' experience with an in depth understanding on climate change , UNFCCC and transparency related activities.
- 5.3. Good written and verbal communication skills in English.

JAMAICA

ASSESSMENT OF INSTITUTIONAL ENABLING ENVIRONMENT FOR TRANSPARENCY RELATED ACTIVITIES ACROSS MINISTRIES

STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

TERMS OF REFERENCE

1. Background and Justification

- 1.1. Article 13 of the United Nations Framework Convention on Climate Change Paris Agreement provides for an enhanced transparency framework aiming to build mutual trust and the effective implementation of the actions identified under the Nationally Determined Contribution (NDC). Currently Jamaica is not sufficiently prepared to monitor, report and verify mitigation and adaptation actions, related policies and corresponding finance in a concise and robust manner, nor efficiently able to generate forecasting scenarios and strategic information for policy-makers (economic, investment, technological, etc.) needed to support transformational change.
- 1.2. As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), and as a Non-Annex I Party to the Convention, Jamaica has played a key role in international negotiations advocating for adequate funding to assist small island developing states (SIDS). Despite not being a major emitter of greenhouse gases (GHG), Jamaica is playing its part in reducing GHG emissions through "no regret" mitigation actions; as well as fulfilling the UNFCCC's requirements on transparency reporting by submitting several reports, including the first Biennial Update Report (BUR) from among the Latin American and Caribbean SIDS and by ratifying the Paris Agreement in April 2017 becoming a Party in May 2017. Jamaica also submitted its Third National Communications to the UNFCCC in January 2019. These submissions indicate the strong level of country commitment to establish long-term arrangements to ensure a sustainable, accurate and reliable transparency framework
- 1.3. The outputs from the Jamaican National Communications, Biennial Update Reports and the National Determined Contributions, have identified the capacity constraints in Jamaica which include: (i) the current institutional arrangements are not formalized into long term agreements; (ii) there is a widely lack of reliable and accurate data; (iii) poor methodological sophistication; and (iv) limited local technical capacities and expertise.
- 1.4. Through the Global Environment Facility Jamaica has a project worth US\$1.3M approved to address capacity constraints as it relates to transparency reporting to the UNFCCC. The main objective of the project is to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification system for the effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities
- 1.5. One of the project's outcomes is to enhance the institutional arrangements for long-term planning and timely reporting of transparency-related activities. There is thus a need to identify the institutional arrangements in government ministries and departments to allow Jamaica to meet its transparency related obligations under the UNFCCC.

- 1.6. The project is aligned with Jamaica's national priorities and development planning such as the Jamaican National Development Plan Vision 2020. The project is will contribute directly to Jamaican National Energy Policy, as it will help to build capacity and provide comprehensive data which can be used for energy planning and the development of renewable energy projects. The project will also be aligned to the current activities related to the development and formulation of sectoral adaptation strategies and action plans and, Jamaica's participation in phase III of the GEF financed UN Environment Technology Needs Assessment project

2. Objectives

- 2.1. The objective of this consultancy is to perform assessment of the institutional arrangements across ministries for transparency-related activities, along with an assessment of on-going initiatives at the national, sub-national and sectoral levels to support transparency-related activities. The outputs of these assessments will be used to identify specific capacity building activities to improve the arrangements for transparency activities.

3. Scope of Services and Key Activities

- 3.1. The consultant will prepare a detailed comprehensive assessment of the gaps and needs of various governments institutions , as it relates to transparency activities. In addition, there will be a review of the on the going initiatives at the national, sub-national and sectoral levels to support transparency-related activities , and how the ongoing process could be improved.
- 3.2. Key Activities will include:
 - a. A review of the national communications and biennial update report processes, and identification of opportunities to improve these processes.
 - b. Identification of on-going initiatives at the national, sub-national and sectoral levels to support transparency-related activities conducted.
 - c. An analysis of the gaps, needs and requirements of various government institutions.
 - d. Identification of appropriate measures for the improvement of transparency related activities.

4. Deliverables

- 4.1. The expected deliverables will be a completed report on the review of the national communications and biennial update report processes and identification of possible improvements to the process. A detailed analysis on ongoing transparency initiatives and measures to improve transparency activities. A report on the necessary measures and activities which are required in government departments to improve transparency activities.
- 4.2. The specific deliverables include:
 - a. Technical report on the national communications and biennial update report processes and recommendations for improvements
 - b. A report on measures to improve transparency related activities, which includes an analysis of ongoing transparency activities

- c. A report on the necessary capacity building activities which the Government of Jamaica needs to improve transparency activities

5. Qualifications and Experience

- 5.1. The consultant should hold an advanced degree in Environmental Sciences, Engineering, Climate Science, Economics or any field related to Environmental Management
- 5.2. At least 10 years' experience with an in depth understanding on climate change , UNFCCC and transparency related activities
- 5.3. Good written and verbal communication skills in English.

JAMAICA

ASSESSMENT OF ENABLED TECHNOLOGIES FOR THE ESTABLISHMENT OF JAMAICA'S DOMESTIC MRV SYSTEM

STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

TERMS OF REFERENCE

1. Background and Justification

- 1.1. Article 12 of the United Nations Framework Convention on Climate Change (UNFCCC) obliges all Parties, to communicate to the Conference of the Parties (COP) the following elements of information: (a) a national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases (GHG) not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties; (b) a general description of steps taken or envisaged by the Party to implement the Convention; and (c) any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends. This allows parties to communicate to the Convention reliable, transparent and comprehensive information on emissions, actions and support, thereby forming an essential basis for understanding current emission levels, and the ambition of existing efforts, as well as progress on both the national and international scale.
- 1.2. **Measurement** for non-Annex I Parties applies both to efforts to address climate change and to the impacts of these efforts, including the level of GHG emissions by sources and removals by sinks, emission reductions and other co-benefits. Such measurement occurs at the national level. **Reporting** for non-Annex I Parties is implemented through the national communications and biennial update reports (BURs). Parties are required to report on their actions to address climate change in their national communications, which include information on the GHG inventories, adaptation, mitigation actions and their effects, constraints and gaps, support needed and received, and other information considered relevant to the achievement of the objective of the Convention. **Verification** is addressed at the international level through International Consultation and Analysis (ICA) of Biennial Update Reports (BURs), which is a process to increase the transparency of mitigation actions and their effects, and support needed and received.
- 1.3. As part of the Paris Agreement, Parties to the UNFCCC) agreed to establish a **Capacity-building Initiative for Transparency (CBIT)**. The goal of the CBIT is to strengthen the institutional and technical capacities of developing countries to meet the enhanced transparency requirements of the Paris Agreement. These enhanced transparency requirements are defined in Article 13 of the Paris Agreement.
- 1.4. On May 21, 2018 the GEF Secretariat approved the Project Identification Form (PIF) for a \$1,3M medium sized project to be implemented in Jamaica with funding from the CBIT¹. The main objective of the project is to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification (MRV) system for the

¹ See full PIF Document at; <https://www.thegef.org/project>.

effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities.

- 1.5. One of the project's outcomes is to establish a fully functional domestic MRV system within a **Centralized National Climate Knowledge Platform (CNCKP)** designed to monitor, evaluate, collect and store adaptation, mitigation, climate financing and capacity building information using the best technology available to assist in the digitalization of transparency processes. For the purpose, the Climate Change Division at the Inter-American Development Bank is looking to engage with a consultancy firm to analyze how and which technology can potentially enhance each process, based on existing infrastructure and identify the best implementation approach for the system and platform.

2. Objectives

- 2.1 The objective of this assessment is to explore the application of enabled technologies, including but not limited to Distributed Ledger Technologies (DLT) to support the different aspects of a domestic MRV system. The assessment will set the groundwork for the technological architecture of the system under the umbrella of a Centralized National Climate Knowledge Platform (CNCKP) and the adoption of innovative technological tools that will support the establishment a fully functional system.²
- 2.2 The assessment will also help the Jamaica identify with the key stakeholders who will participate in creating and enhancing MRV related processes, making sure it aligns with the ICT Sector Plan – Vision 20303 and other national initiatives (i.e. UNDP, PIMSEC, EGov, etc.) and establish the roadmap for implementation of the CNCKP platform. The MRV system and CNCKP platform are complementary initiatives, which together are key to achieving the wider objectives of digitalizing climate transparency processes, collect and store climate related data (GHG inventories, BURs, NatComs, etc.), provide training source materials for national capacity building and serve as the national one-stop-shop for everything related to climate change in Jamaica.

3. Scope of Services and Key Activities

- 3.1 The selected consultancy firm will prepare a comprehensive technology assessment, recommend technology architecture (including technical specifications for the design of a the MRV system and CNCKP) and provide an implementation roadmap for the CNCKP platform, incorporating the following:
- 3.2 **Data Collection:** This aspect of the consultancy will focus on the enhancement of the current GHG inventory data collection process and climate finance tracking module of the CNCKP platform, including the activities as follows:
 - a. Review existing processes in the collection and input of data for 6 key sectors (energy, transport, agriculture, industries, waste and forestry). This should include the methodological and visual description of technical guidelines, data formats and processes involved in the GHG inventory process, description of timeframes for each process flow and identification of entities/individuals

² An infrastructure needs assessment developed by the National Spatial Data Division of the MEGJC will be made available for analysis.

³ <https://www.mset.gov.jm>.

responsible for providing the data for each relevant sector.

- b. Identify datasets and collect best available information on the provision and receipt of climate finance support (concessional and non-concessional) towards adaptation and mitigation efforts in collaboration with the Ministry of Finance and the Public Service, the Planning Institute of Jamaica and the Climate Change Division at the MEGJC. The review should include a description on types of financial flows (public bilateral and multilateral).

3.3 Data Reporting/Emission Calculation: This aspect of the consultancy will focus on the enhancement of the current GHG inventory process and the establishment of a climate finance tracking virtual module/feature within CNCKP platform, including the activities as follows:

- a. Review and assess the functionality of the current GHG Inventory Database Management System⁴ and recommend steps for the enhancement and technical migration of such system into the proposed CNCKP platform and recommended technological architecture, including automation approaches to data collection and input.
- b. Recommend levels of climate finance detail that should be feasible/acceptable for the CNCKP platform and best technology to develop such tracking module/system feature.
- c. Recommend best technology to host-link the finance tracking module/system feature to a GIS based map for tracking such investments island-wide⁵.
- d. Recommend technical approach for the national investment tracking systems (i.e. PYMSec), if in place, to be linked-harmonized with the CNCKP platform.
- e. This section of the assessment must include a comparative analysis of technologies available in the market and potential costs.

3.4 Data Verification: This aspect of the consultancy will focus on the verification dimension of the MRV system, including the activities as follows:

- a. Recommend technologies to automate data verification process flow.
- b. Recommend system routine digital tools to measure and control Quality Control and Quality Assurance.
- c. Identify climate related data storage units/departments within government and recommend a data management solution including storage modalities and registry functionality.
- d. Recommend data security protocols in accordance with best international standards and practices.

3.5 Capacity Building Virtual Module

3.6 This aspect of the consultancy will focus on the capacity building and knowledge sharing aspect of the CNCKP platform, including the activities as follows:

- a. Recommend infrastructural technology to house a virtual capacity building center within the CNCKP platform to host training modules, web-based seminars, store

⁴ Slash Roots technical reports and user guides will be made available for assessment.

⁵ The mapping operations relating to the Climate Change Division's activities are currently undertaken by the University of the West Indies Mona Geoinformatics.

course materials and video lectures, etc.

4. Expected Outcome and Deliverables

- 4.1 Based on the assessment undertaken, the expected outcome would be to gain full understanding of the opportunities for digitalization of the different aspects and stages of the MRV system, compare the different technologies available to implement such and the costs associated with the recommended technology architecture. Specific deliverables include:
- 4.2 Deliverable 1: Technical proposal and inception report with results from the data collection and input assessment.
- 4.3 Deliverable 2: Report on data reporting assessment and recommendations for the enhancement of the GHG Inventory Data Management System.
- 4.4 Deliverable 3: Final Report including data verification and technology infrastructure recommendations ; including (costing) and a roadmap for the implementation of the CNCKP platform.

JAMAICA

EXPERT TO MANAGE THE IMPLEMENTATION OF THE MRV SYSTEM - STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

TERMS OF REFERENCE

1. Background and Justification

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- 1.3 The outputs from the Jamaican National Communications, Biennial Update Reports and the National Determined Contributions, have identified the capacity constraints in Jamaica which include: (i) the current institutional arrangements are not formalized into long term agreements, (ii) there is a widely lack of reliable and accurate data (iii) poor methodological sophistication, and (iv) limited local technical capacities and expertise.
- 1.4 Through the Global Environment Facility Jamaica has a project worth US\$ 1.3M approved to address capacity constraints as it relates to transparency reporting to the UNFCCC. The main objective of the project is to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification system for the effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities.
- 1.5 The project is aligned with Jamaica's national priorities and development planning such as the Jamaican National Development Plan Vision 2020. The project is will contribute directly to Jamaican National Energy Policy, as it will help to build capacity

and provide comprehensive data which can be used for energy planning and the development of renewable energy projects. The project will also be aligned to the current activities related to the development and formulation of sectoral adaptation strategies and action plans and, Jamaica's participation in phase III of the GEF financed UN Environment Technology Needs Assessment project.

2. Project Manager- Duties and Responsibilities.

- 2.1 The project manager will coordinate the delivery of all the project activities and act as liaison between the project stakeholders. The project manager will be responsible for the implementation of the project, including mobilization of all project inputs, supervision of project staff, consultants and oversight of sub-contractors. The project manager will also be responsible for monitoring progress against the implementation plan, budgeting and reporting and act as secretary of the Project Steering Committee. The project manager will liaise with the Climate Change Division, relevant government departments, stakeholders involved in the project and the Inter-American Development.
- 2.2 The PM duties and responsibilities specifically include:
 - a. Overall project management,
 - b. Working with project stakeholders to ensure that the project delivers as planned in the Technical Cooperation Document,
 - c. Ensure technical coordination of the project with other relevant international and national projects,
 - d. Prepare and finalize, where appropriate, the Terms of Reference for the consultants and subcontractors and to undertake the necessary procedures for recruitment, procurement and contracting,
 - e. To supervise and coordinate, where appropriate, the activities of project staff, consultants and sub-contractors,
 - f. Ensure proper management of funds, consistent with IDB and GEF requirements, as well as budget planning and control,
 - g. To prepare and ensure timely submission of relevant reports as required by the Climate Change Division, IDB and the GEF
 - h. To undertake any activities that may be assigned by Climate Change Division.

3. Qualifications and Experience

- 3.1 The project manager should have the following qualifications and experience:
 - a. A post graduate degree in Environmental science, Climate Change Science, Engineering, Economics or other discipline related to the technical and environmental dimensions of climate change, and professional experience of at least five years in the area of climate change interinstitutional actions or policies.
 - b. Experience and technical ability to manage projects and a good technical knowledge in the fields related to climate change mitigation and adaptation actions.
 - c. A comprehensive understanding of UNFCCC process and issues, including the Paris Agreement, national determined contributions, national communications, biennial update reports, MRV systems and the obligations of developing

countries under the UNFCCC and the Paris Agreement.

- d. Knowledge of the IPCC GHG software and guidelines, and on greenhouse gases emission sources and methodologies for sectoral or national emission inventories.
- e. Effective interpersonal and negotiation skills proven through interactions with project stakeholder groups, including senior government officials, private sector, non-governmental organizations, and other technical groups.
- f. The ability to effectively coordinate a complex, multi-stakeholder project and to lead, manage and motivate to achieve results.
- g. Good capacities for strategic thinking, planning and management and excellent communication skills both in English are essential.
- h. Knowledge of IDB project implementation procedures, including procurement, disbursements, and reporting and monitoring along with experience in the implementation of gender action plans.

4. Reporting

- 4.1 The Project Manager will be under the overall guidance and report to the Director of the Climate Change Division under the Ministry of Economic Growth and Job Creation. The Project Manager will work in the Climate Change Division.

JAMAICA

DESIGN OF A NATIONAL TRAINING PROGRAMME ON INTERGOVERNMENTAL PANEL CLIMATE CHANGE GREENHOUSE GAS SOFTWARE AND GUIDELINES AND CARBON ACCOUNTING

STRENGTHENING JAMAICA'S CAPACITY TO MEET TRANSPARENCY REQUIREMENTS UNDER THE PARIS AGREEMENT

TERMS OF REFERENCE

1. Background and Justification

- 1.1 Article 13 of the United Nations Framework Convention on Climate Change (UNFCCC), Paris Agreement provides for an enhanced transparency framework aiming to build mutual trust and the effective implementation of the actions identified under the Nationally Determined Contribution (NDC). Currently Jamaica is not sufficiently prepared to measure, report and verify mitigation and adaptation actions, related policies and corresponding finance in a concise and robust manner, nor efficiently able to generate forecasting scenarios and strategic information for policy-makers (economic, investment, technological, etc.) needed to support transformational change.
- 1.2 Measurement for non-Annex I Parties applies both to efforts to address climate change and to the impacts of these efforts, including the level of GHG emissions by sources and removals by sinks, emission reductions and other co-benefits. Such measurement occurs at the national level. Reporting for non-Annex I Parties is implemented through the national communications and BURs. Parties are required to report on their actions to address climate change in their national communications, which include information on the GHG inventories, adaptation, mitigation actions and their effects, constraints and gaps, support needed and received, and other information considered relevant to the achievement of the objective of the Convention. Verification is addressed at the international level through International Consultation and Analysis (ICA) of Biennial Update Reports (BURs), which is a process to increase the transparency of mitigation actions and their effects, and support needed and received.
- 1.3 The outputs from the Jamaican National Communications, Biennial Update Reports and the National Determined Contributions, have identified the capacity constraints in Jamaica which include: (i) the current institutional arrangements are not formalized into long term agreements, (ii) there is a widely lack of reliable and accurate data (iii) poor methodological sophistication, and (iv) limited local technical capacities and expertise
- 1.4 The Global Environment Facility (GEF) has approved a project for Jamaica worth, US\$1,3M medium to address transparency capacity concerns in Jamaica. The main objective of the project is to strengthen Jamaica's transparency framework through the design and implementation of a fully functional and harmonized domestic Measuring, Reporting and Verification (MRV) system for the effective implementation of the country's Nationally Determined Contribution (NDC) and other transparency-related activities.
- 1.5 During stakeholder consultations for the preparation of the project, key capacity constraint identified was the ability of many stakeholder in Jamaica to utilize the IPCC Greenhouse gas software and guidelines. In addition, many stakeholders

identified the need to have training in carbon accounting.

2. Objective

- 2.1 The objective of this consultancy is to design a national training program on the IPCC greenhouse gas software and guidelines, and carbon accounting. The training will enhance the capacity of Jamaica to systematically and routinely prepare reports to the UNFCCC and effectively implement actions identified in the NDC.

3. Scope of Services

- 3.1 There will be two components to the services which will be provided by the selected firm. In the first component the selected firm will work with a local university/tertiary institution and design and establish a course on the IPCC GHG software and guidelines, and carbon accounting. This course will then be taught by the local university/tertiary institution. The selected firm will train staff, lectures and personnel.
- 3.2 In the second component the selected firm will also train government personnel, private sector representatives and non-governmental organizations on the IPCC GHG software and guidelines so that Jamaica will be in a more effective position to comply with the transparency requirement of the Paris Agreement, and prepare the required reports for the UNFCCC.

4. Key Training Activities

- 4.1 The selected firm will perform an assessment of the specific capacity needs at the key government institutions, private sector organizations and non-governmental organizations, that are involved in compiling the relevant data to prepare the greenhouse gas inventories for UNFCCC reporting. This needs assessment will be used to guide the delivery of the training at the key institutions and to make recommendations for the GHG Inventory Data Management System.
- 4.2 The consulting firm will be required to design a course and provide specific training in the following specific areas:
- a. Introduction to MRV Systems and Transparency;
 - b. Introduction to Carbon Accounting and GHG Inventory Management Systems;
 - c. Carbon Accounting Methodologies and the basics of GHG accounting;
 - d. Basics of project-level GHG accounting;
 - e. GHG Accounting for Forest Inventories;
 - f. GHG Accounting for Forest and Other Land Use Projects;
 - g. GHG Accounting for Energy Efficiency Projects;
 - h. GHG Accounting for Renewable Energy Projects;
 - i. IPCC Guidelines Introduction, GHG Software and Cross Cutting Issues;
 - j. IPCC 2006 Guidelines – Energy Sector;
 - k. IPCC 2006 Guidelines – Industrial Processes and Other Product Use;
 - l. IPCC 2006 Guidelines – Agriculture;
 - m. IPCC 2006 Guidelines – Forestry and Other Land Uses

n. IPCC 2006 Guidelines - Waste

5. Expected Outcome and Deliverables

- 5.1 Based on the assessment undertaken, the expected outcome would be to gain full understanding of the opportunities for digitalization of the different aspects and stages of the MRV system, compare the different technologies available to implement such and the costs associated with the recommended technology architecture. Specific deliverables include:
- a. Deliverable 1: Training of staff at tertiary institution and development of draft course outline
 - b. Deliverable 2: Report on an assessment of specific training requirements in key government offices, the private sector and non-governmental organizations and recommendations for the enhancement of the GHG Inventory Data Management System.
 - c. Deliverable 3: Finalization of the course at the tertiary institution, and training of representatives of representatives from government offices, the private sector and non-governmental organizations in IPCC GHG software and guidelines.

6. Project Schedule and Milestones

- 6.1 The project is expected to begin June 1st, 2020 and to be completed 12 months thereafter. Traveling and workshop costs are included in the consulting firm's budget. The schedule and milestones will be defined by the firm in agreement with the IDB and captured by the first deliverable (the workplan).

7. Reporting Requirements

- 7.1 Every report must be submitted to the Bank in an electronic file. The report should include cover, main document, and all annexes. Zip files will not be accepted as final reports, due to Records Management Section regulations.
- 7.2 In addition to the deliverables outlined in Section 5, the consulting firm will also provide the IDB with monthly progress updates in relation to the approved workplan.

8. Acceptance Criteria

- 8.1 Reports will be reviewed by the Team Leader and the Climate Change Department of the Ministry of Economic Growth and Job Creation (MEGJC). Acceptance of deliverables are contingent on addressing any comments provided by these parties within revised versions of the submissions.
- 8.2 Additionally, the consulting firm is required to participate in technical meetings (by video/teleconferencing) as necessary to discuss any matter considered important for the timely implementation of the project. The meetings will be determined as needed.

9. Other Requirements

- 9.1 Candidates will be provided with data and documentation to assist in the achievement of the objectives outlined in Section 2.

10. Supervision and Reporting

- 10.1 The consultancy will be supervised by Gerard Alleng, Climate Change Senior

Specialist, of the Climate Change Division, Inter-American Development Bank, and coordinated by MEGJC.

11. Schedule of Payments & Qualifications

11.1 Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

Payment Schedule	
Deliverable	%
1. Workplan	10%
2. Training of staff at tertiary institution and development of draft course outline	30%
3. Report on an assessment of specific training requirements in key government offices, the private sector and non-governmental organizations and recommendations for the enhancement of the GHG Inventory Data Management System	20%
4. Finalization of the course at the tertiary institution, and training of representatives of representatives from government offices, the private sector and non-governmental organizations in IPCC GHG software and guidelines	40%
Total	100%

12. Qualifications of Team Members

12.1 Contractual teams should have specific expertise and knowledge in the below areas, but this is not meant to restrict team compositions to exact roles described below.

- a. The consulting team should have experts with: (i) advance degrees in environmental science and physical sciences; (ii) skills in developing and implementing a GHG Inventory Data Management System; and (iii) at least 10 years' experience in carbon accounting.
- b. Team Leader should be an Expert in the GHG inventory development and implementation, with expertise in project management.
- c. Carbon Accounting Expert with experience in IPCC software and guidelines.
- d. GHG Training Course Developer with evidence of implementation of capacity development programs for public and sector entities.
- e. Experience working in the Caribbean region would be an asset.

13. Other Skills

- Project Management.
- Excellent and proven track record of previous works with governments and/or multilaterals.
- Change management/capacity building.
- Fluency in English.
- Strong interpersonal, verbal and written communication skills.
- Proven ability to advise and train users in the use of complex systems/applications and related matters and effectively prepare specifications and other written reports/documentation in a clear and concise style. Ability to communicate with various levels of technical experience.