



**The Bahamas Environment Science and Technology (BEST) Commission
Ministry of the Environment and Housing**

**Terms of Reference for Climate Change Consultant
for National Circumstances, Integration of Climate Change into National Development
Priorities, Education, Training and Public Awareness,
Information and Networking, and Capacity-Building**

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, to address National Circumstances, Integration of Climate Change into National Development Priorities, Education, Training and Public Awareness, Information and Networking, and Capacity-Building in the context of the preparation of the Third National Communication (TNC) and First Biennial Update Report (BUR1) for The Bahamas, in fulfilment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period April 2020 to December 2022.

Any request for clarification must be by standard electronic communication to the email addresses indicated under the “Submission” paragraph (Section 7).

1. BACKGROUND

Through The Bahamas Environment Science and Technology (BEST) Commission, the Government of The Bahamas is currently conducting its Third National Communication (TNC) and First Biennial Update Report (BUR1) report to the United Nations Framework Convention on Climate Change (UNFCCC). This is in accordance with paragraph 1 of Article 4 of the UNFCCC.

By virtue of a Project Cooperation Agreement with the United Nations Environment Programme (UNEP) office in Nairobi, the BEST Commission will serve as the Executing Agency in undertaking activities towards the fulfilment of obligations as identified in the deliverables for the TNC/BUR1 project.

One of the main objectives of the TNC/BUR1 process is to build local, individual and institutional capacity to implement the Convention. The TNC/BUR will strengthen the national capacities and further raise general knowledge and promote awareness on climate change and its effects. It will



also strengthen the visibility of climate change issues on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process.

Decisions of COP 16 & 17 require developing countries to submit biennial update reports (BUR) containing updates of greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received. Preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC.

The BUR process also seeks to enhance general awareness and knowledge on climate change-related issues in The Bahamas; assist in the process of national planning and policy formulation, especially as it relates to reducing greenhouse gas emissions, mainstreaming data collection measures within the work programme of the various stakeholder agencies; and contribute to the social and economic development of the country by reducing vulnerability associated with climate change, or proposing options to do so.

2. INTRODUCTION

The BEST Commission's experience in regard to compilation and submission of reports under the UNFCCC is mainly limited to National Communications (NCs). As a party to the Convention The Bahamas is required to submit Biennial Update Reports (BURs) and National Communications (NCs) to the UNFCCC and Conference of Parties. The challenge of non-Annex 1 parties is: 1) to develop the institutional capacity, 2) improve data collection and data management processes and 3) further a transparent and accessible flow of information for international reporting and national decision making.

Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;
- iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the



policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;

v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;

vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

3. SCOPE OF WORK

The scope of work will build on the outputs of previous studies under the Second National Communication (SNC) project, in addition, preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC. This will be achieved by addressing data gaps, improving some studies and carrying out new studies where applicable and appropriate, and strengthening the capacity of the country, including at the institutional and policy levels. The consultant is required to work in close consultation with the BEST Commission, National Project Coordinator (NPC) and National Project Advisory Committee (NPAC) to undertake the following:

Output 1.1: Updated information on National Circumstances and institutional arrangements of the Commonwealth of The Bahamas for preparation of NCs and BURs is included in the Third National Communication (TNC) and First Biennial Update Report (BUR).

Activities:

- 1.1.1. Describe the institutional arrangements relevant to the preparation of the National Communications on a continuous basis, in compliance with the guidelines set by Decision 17CP/8, paragraph 5. The proposed institutional arrangements are outlined in Figures 1 and 2 under section b, paragraph 15.
- 1.1.2. Make recommendations on a new institutional structure for TNC/BUR processes based on stakeholders' recommendations during the stocktaking assessment;
- 1.1.3. Participate and support a national workshop launching TNC and BUR projects in collaboration with key stakeholders (as outlined in Table 1) and others identified by NCCC.

Output 1.2. Updated description of i) climate including recent hurricanes and other extreme events, ii) population including recent migrations due to extreme events, growth rates, distribution, density and other vital statistics, iii) economy and sector profiles including energy, transportation, industry, tourism, agriculture, livestock, fisheries, waste, health and services reflecting national priorities; iv) education including scientific and research institutions.



Activities:

- 1.2.1 Describe recent extreme events including Tropical Storms/Hurricanes Joaquin, Matthew, Maria, Irma, and Dorian and population displacement that occurred as a result of those events;
- 1.2.2 Collect, compile and use information from stock taking exercises and stakeholder consultations to develop the national circumstances, including updated population with estimated growth rates from Department of Statistics from 2015;
- 1.2.3 Validate any gaps of information identified in stakeholder exercise in light of recent national priorities identified in the draft National Development Plan;
- 1.2.4 Identify relevant sources of information, establish links to obtain relevant data, fill in data gaps and update and add new information on national circumstances, focusing in particular on updating impacts of climate change and in particular recent extreme events on economy including sector profiles which may affect ability of country to deal with mitigation, loss and damage and adaptation to climate change.
- 1.2.5 Update any educational and research initiatives on climate change since SNC.
- 1.2.6 Draft chapter in compliance with the guidelines set by decision 17/CP.8, paragraphs 3, 4 and 5, circulate for comments to relevant experts if required, and incorporate and finalize any comments received and finalize the chapter for inclusion in the TNC and BUR1.

Output 6.1: *A Plan and Strategy for the implementation of activities relating to the integration of climate change considerations into social, economic and environmental policies and actions developed.*

Activities:

- 6.1.1 Support awareness raising efforts aimed at national planners and policy makers, especially those in national planning authorities including the Office of the Prime Minister (i.e. PMDU) on climate change issues and policies to guide interventions.
- 6.1.2 Participate and support a training workshop for national planners and policy makers from all relevant ministries and government agencies;
- 6.1.3 Review existing national programmes on development;
- 6.1.4 Develop proposals to integrate climate change into sustainable development programmes and land management decision-making for various key socio-economic sectors;
- 6.1.5 Assess the feasibility of integrating climate change concerns into the national planning and education processes and draft a short report;
- 6.1.6 Participate and support workshops to discuss the climate change integration process;
- 6.1.7 Provide training on how to draft sectoral policies and action plans for key stakeholders that integrate climate change considerations into social, economic and environmental development;



- 6.1.8 Support efforts to adopt and implement the draft Integrated Coastal Zone Management (ICZM) Policy Framework as it addresses climate change and disaster risk reduction and mainstreaming them into decision-making and economic and development planning;
- 6.1.9 Develop a database of all climate change projects and financing opportunities;
- 6.1.10 Support the active engagement of the private sector in project activities.
- 6.1.11 Compile and analyse information on activities/tasks relating to the implementation of the New Delhi work program on Article 6 of the Convention
- 6.1.12 Prepare a draft National plan for implementation of Article 6 of the Convention

Output 10.1: *A plan and strategy for the implementation of activities relating to education, training and public awareness based on previous strategies and activities developed.*

Activities:

- 10.1.1. Assess the general level of awareness and understanding of climate change issues and policy toward climate change education, training and public awareness using secondary data;
- 10.1.2. Assess the national curriculum and efforts made by Government schools at the primary, secondary and tertiary levels;
- 10.1.3. Assess the available information on implemented or planned public campaigns and training programmes;
- 10.1.4. Assess institutional structure of climate change information;
- 10.1.5. Assess the available information on institutional and legal framework for public participation and access to information;
- 10.1.6. Assess the available information on the international cooperation to promote education, training and public awareness;
- 10.1.7. Assess the gaps, needs and priorities in climate change education, training and public awareness, including the efficacy of past initiatives of the PEO subcommittee.
- 10.1.8. Develop the chapter on Education, Training and Public Awareness, inclusive of issues and recommendation made in the above assessments for inclusion in the TNC.

Output 11.1: *A report on the progress of capacity building initiatives on climate change prepared*

Activities:

- 11.1.1 Collect, synthesize and provide information on progress of implementation of capacity building activities on climate change (relevant to the Capacity-building framework of the UNFCCC) to draft TNC chapter on Capacity-Building, including recommendations and follow up activities;



11.1.2 Develop a sub-section on capacity building for inclusion in the TNC.

Output 12.1: *A report on current and potential actions to promote networking and information sharing at the national level prepared.*

Activities:

- 12.1.1. Create a database of national experts who are participating in the preparation of the national communications;
- 12.1.2. Assess and catalogue all national institutions and agencies that promote, encourage and offer networking programmes;
- 12.1.3. Develop a programme and strategy for establishing and enhancing these networking activities;
- 12.1.4. Develop a report for inclusion in TNC.

Output 12.2: *A report on current and potential actions to promote networking and information sharing between The Bahamas and other regional countries*

Activities:

- 12.2.1. Assess regional and international institutions that offer information exchange and networking opportunities that The Bahamas may participate in, including those offered through CCCCC.
- 12.2.2. Develop a strategy for establishing information sharing and networking activities between The Bahamas and other regional and international institutions based on above assessment and capacities of NCCC.
- 12.2.3. Develop chapter on Information and Networking for inclusion in TNC

4. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:

- 4.1 An inception report and detailed schedule of activities in alignment with the approved workplan (present a workplan within 14 days after the contract is signed);
- 4.2. Participation and support training workshop for national planners and policy makers from all relevant ministries and government agencies, including preparation of workshop material, power point presentations and recommendation report after the workshop;
- 4.3 Participation and support workshops to discuss the climate change integration process; including preparation of workshop material, power point presentations and recommendation report after the workshop;



4.4. Provide training on how to draft sectoral policies and action plans for key stakeholders that integrate climate change considerations into social, economic and environmental development; including preparation of training material, power point presentations and recommendation report after the workshop;

4.5. Database developed of all climate change projects and financing opportunities;

4.6 Database developed of national experts who are participating in the preparation of the national communications;

4.7. A draft report on feasibility of integrating climate change concerns into the national planning and education processes; (and should make special considerations to the documentation of issues associated with gender), to be presented by the consultant for review and validation by BEST, NPC, and NPAC.

4.8. A draft of the following: (i) National Circumstances and Institutional Arrangements (ii) Integration of Climate Change Considerations into Social, Economic and Environmental Policies and Actions (iii) Education, Training and Public Awareness, (iv) Information and Networking, and (v) Capacity-Building.

These chapters should take into consideration the needs and priorities for climate change education, training and public awareness and capacity-building, as they relate to GHG inventory, vulnerability and adaptation assessment, mitigation, technology transfer, research and systematic observation and other emerging priorities (and should make special considerations to the documentation of issues associated with gender), to be presented by the consultant for review and validation by BEST, NPC, and NPAC.

4.9. Final draft of the above-mentioned documents and chapters, integrating comments from BEST, NPC, and the NPAC, for production of a final report for submission to the BEST Commission.

5. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

5.1 Liaise and consult with the various stakeholders under the TNC/BUR1 project and the National



Capacity Self-Assessment

5.2 Participate in coordinating meetings with BEST and NPC

5.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain property of the Government of The Bahamas

6. QUALIFICATIONS AND EXPERIENCE

Qualifications:

- A degree (at least BSc. or MSc.) in Environmental Policy or another related field, with at least eight years' experience in the field of climate change
- Working experience with Small Island Developing States (SIDS); experience in The Bahamas will be considered an asset
- Familiarity with national communications, biennial update reports and with international negotiations and processes under the UNFCCC
- Substantial experience in government and interdepartmental procedures
- Expert knowledge of and experience in the analysis of:
 - a) National development programmes and priorities.
 - b) The socio-economic circumstances of The Bahamas/SIDS
 - c) Current national, regional (Caribbean) and international policies, related to climate change
- Familiarity with computers and Microsoft office applications, such as Word Processing, Excel, PowerPoint and Access.
- Experience with United Nation's reporting mechanisms will be considered an asset.
- Fluency in English (both written and spoken)
- Strong oral and written communication skills.

7. SUBMISSION

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission
Ministry of the Environment and Housing



Ground Floor
Charlotte House
Charlotte and Shirley Streets
P.O. Box N-7132
Nassau, The Bahamas.

Re: Rochelle Newbold – Climate Consultancy Position (TNC/BUR1)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm ET.



The Bahamas Environment Science and Technology (BEST) Commission

Ministry of the Environment and Housing

Terms of Reference for Green House Gas Inventory Consultant

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, to enhance capacities of national experts in GHG Inventory and prepare the National Inventory Report (NIR) on Greenhouse Gas (GHG) in the context of the preparation of the Third National Communication (TNC) and First Biennial Update Report (BUR1) for The Bahamas, in fulfillment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period of April 2020 to June 2021.

Any request for clarification must be by standard electronic communication to the email addresses indicated under the “Submission” paragraph (Section 8).

BACKGROUND

Through The Bahamas Environment Science and Technology (BEST) Commission in the Ministry of the Environment and Housing, the Government of The Bahamas is currently engaging in activities pursuant to the preparation of its First Biennial Update Report (BUR1) and Third National Communication (TNC) to the United Nations Convention on Climate Change (UNFCCC). This is in accordance with paragraph 1 of Article 4 of the UNFCCC.

By virtue of a Project Cooperation Agreement with the United Nations Environment Programme (UNEP) office in Nairobi, the BEST Commission will serve as the Executing Agency in undertaking activities towards the fulfilment of obligations as identified in the deliverables for the TNC/BUR1 project.

One of the main objectives of the BUR and the TNC processes is to build local, individual and institutional capacity to implement the Convention. The TNC/BUR will strengthen the national capacities and further raise general knowledge and promote awareness on climate change and its



effects. It will also strengthen the visibility of climate change issues on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process.

Decisions of COP 16 & 17 require developing countries to submit biennial update reports (BUR) containing updates of greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received. Preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC.

In 2001, The Bahamas submitted to the UNFCCC its Initial National Communication (INC) along with a first inventory of the Greenhouse Gases (GHG). It submitted the Second National Communication (SNC) in 2015 along with a National Inventory Report (NIR) on GHG emissions and sinks with time series emission data for the period 1990-2000.

1. INTRODUCTION

The BEST Commission's experience in regard to compilation and submission of reports under the UNFCCC is mainly limited to National Communications (NCs). As a party to the Convention The Bahamas is required to submit Biennial Update Reports (BURs) and National Communications (NCs) to the UNFCCC and Conference of Parties. The challenge of non-Annex 1 parties is: 1) to develop the institutional capacity, 2) improve data collection and data management processes and 3) further a transparent and accessible flow of information for international reporting and national decision making. The Subsidiary Body for Implementation notes, the request of non-Annex 1 Parties for further technical support aimed at improving domestic capacities to facilitate continuity in meeting reporting requirements via national greenhouse gas inventory management systems and inter alia.

Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;



iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;

v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;

vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.

In regard to Green House Gas Inventory (GHGI), one of the main project components includes a National Inventory of GHG emissions/sinks which also requires the preparation of National Inventory Report for the period 1990 to 2018 for inclusion in both the TNC/BUR1. Therefore, the main purpose of the consultancy is to develop and strengthen capacities of relevant ministries and institutions, as well as, private sectors and NGOs so that, they can participate actively in the preparation of regular reports using the 2006 IPCC guidelines for Green House Gas Inventory (GHGI).

Several actions were proposed to improve subsequent GHG Inventory processes (following the submission of the Second National Communication). These included:

- Steps must be taken to allow for verification of data, using multiple sources, so as to permit the use of a “top-down” and “bottom-up” comparison.
- The compilation of statistical data and the nature of the reporting process needed to be addressed. A detailed examination of the transport sector, focusing on fuel usage in private and public vehicles, in marine transport, in domestic aircrafts, and in agriculture, should be undertaken.
- A national system for data collection, storage, archiving and retrieval also needs to be developed, and persons trained in its use.
- Land use, land use changes and forestry, will require special attention, as this initial national inventory relies heavily on data collected by a Land Resources Survey (Little et al., 1971 – 1976) completed some 25 years ago.
- A system for updating and reporting changes in land use needs to be developed so as to provide reliable data for future national inventories.
- The issue of carbon sequestration in the shallow waters of The Bahamas requires scientific study in order to verify the initial assessment, and to determine strategies for enhancing the capacity of the system to sequester carbon.



Additional and continuous capacity building to assist with the performance of future inventories and the establishment of memoranda of understanding between Climate Change Committee and various statistical databases for retrieval of inventory data. The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

2. SCOPE OF WORK

Output 2.1 *The National GHG Inventory Team (NIT) established and their technical capacity strengthened*

Activities

- 2.1.1 Identify the necessary support on technical capacity building and training of NIT on chosen tools, procedures and methodologies including, participation in international/regional and national workshops, trainings or meetings on GHG inventories and provide a report on the activities.
- 2.1.2 Assist the NPC in arrangement of the national review and lead training workshops on improving quality of the national GHG inventory.

Output 2.2 *Improved methodology for collecting, analyzing and storing GHG inventory data developed*

Activities

- 2.2.1 Review existing information in the Second National GHG Inventory for the 1990-2000 period. Identify gaps, evaluate the quality and sources of available data. and identify barriers to obtaining, storage and analyzing available data. Evaluate progress on the actions identified in the Second National GHG Inventory to improve subsequent inventories.
- 2.2.2 Describe and develop procedures and formulate arrangements necessary to collect existing GHG data under the current national framework and inventory system; and identify efforts to make this a robust continuous process, including information on the role of the institutions involved,
- 2.2.3 Make recommendations on the key categories for the national inventory.
- 2.2.4 Make recommendations on the selection and application of appropriate inventory methodologies.
- 2.2.5 Ensure data quality assistance and key source analysis, is consistent with the IPCC guidelines.
- 2.2.6 Provide recommendations on ways to improve the national GHG inventory process



- 2.2.7 Update QA/QC plan, describing specific QC procedures implemented during the inventory development process and the QA procedures conducted to establish quality objectives

Output 2.3 *Develop National GHG Inventory for baseline year 2018 and emissions trend for 2000-2018*

Activities:

- 2.3.1 Utilize IPCC 2006 Guidelines for National Greenhouse Gas Inventories to develop the national inventory for baseline year 2018 including technical annexes that detail the inventory procedures and calculations
- 2.3.2 Develop emissions trend for 2001-2018.
- 2.3.3 Identify shortcoming and gaps in data that affect inventory calculations
- 2.3.4 Provide recommendations on areas of targeted research and methodologies to improve future inventories
- 2.3.5 Recommend ways of improvement and technological needs of the national emission actors (data collection, storage and management).
- 2.3.6 Undertake tier 1 uncertainty assessment of the National Inventories of Greenhouse Gas Sources and Sinks, provide information on the level of uncertainty with inventory data and their underlying assumptions, and describe the methodologies used for estimating these uncertainties
- 2.3.7 Provide information on the methodologies used to estimate GHG emissions by sources and removals by sinks. This information would include identification of sources & use of emission factors, activity data and ways to improve future reporting.
- 2.3.8 Prepare National Inventory Report for 1990-2018 for inclusion in both BUR1 and TNC and circulate for internal review and validation by the NPAC (NCCC), and identify the follow-up activities.
- 2.3.9 Undertake technical peer reviews by independent national and international experts and/or organizations of (i) the NIR for BUR1 and TNC (covering the period 1990-2018).
- 2.3.10 Prepare a chapter of GHG Inventory for inclusion in BUR1 and TNC.
- 2.3.11 Finalize and publish the NIR for BUR1 and TNC
- 2.3.12 Archive activity data, emission factors and conversion factors used and describe the inventory preparation process, procedures and efforts taken to archive such data; develop a mechanism for the systematic collection and archiving of data in a continuous way (as a technical annex to the report).



3. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:

- 3.1 An inception report and detailed schedule of activities in alignment with the approved workplan (present a work plan within 14 days after the contract is signed).
- 3.2. Inception workshop for GHGI participants on a date to be decided with Project team, including training material and recommendation report after the training.
- 3.3 Lead the national experts GHGI training seminar, provide training material, produce power point presentations and provide recommendation in the form of a report after the training.
- 3.4 Developed emissions trend for 2001-2018
- 3.5 An updated QA/QC plan, describing specific QC procedures implemented during the inventory development process and the QA procedures conducted to establish quality objectives
- 3.6. Draft National Inventory Report for 1990-2018, for inclusion in both BUR1/TNC (making special considerations to the documentation of issues associated with gender) to be presented by the consultant for circulation, revision and internal validation by BEST, NPC, NIT and NPAC, and for external validation by independent national and international experts and/or organizations.
- 3.7. Draft chapter of GHG Inventory (making special considerations to the documentation of issues associated with gender) for inclusion in BUR1/TNC, for circulation, revision and internal validation by BEST, NPC, NIT and NPAC.
- 3.8 A presentation of findings at a validation workshop on a date to be determined.
- 3.9. Final draft of the NIR for BUR1/TNC, integrating comments from internal and external reviewers.
- 3.10. Final draft of GHG Inventory chapter, integrating comments from BEST, NPC, NIT, and NPAC, for inclusion in BUR1/TNC.
- 3.11. Archived activity data, inclusive of: emission factors, conversion factors used, the description of the inventory preparation process, procedures and efforts taken to archive such data; mechanisms for the systematic collection and archiving of data in a continuous way sector based GHG management reporting outline/template (as a technical annex to the report)



4. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

4.1 Liaise and consult with the various stakeholders under the TNC/BUR1 project, inclusive of the NIT and the National Capacity Self-Assessment

4.2 Participate in coordinating meetings with BEST, NPC, and NIT

4.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain property of the Government of The Bahamas

5. VENUE, OFFICE AND OTHER SUPPORT

The Consultant will be based at the BEST Commission.

6. QUALIFICATION AND EXPERIENCE

The Consultant or Firm must include team members with:

- A post-graduate degree in Environmental Science/Management, Energy related Statistics or any other relevant qualification in related fields.
- Demonstrate prior experience (at least eight (8) years) in conducting Greenhouse Gas Inventories for National Communication and or Biennial Update Reports for Developing Country parties to the UNFCCC.
- Offer sector specific experts with experience in the preparation of GHGI for Developing Country Parties to the UNFCCC.
- Prior experience preparing GHGI in Small Island Developing States, particularly in the Caribbean will be considered an asset.
- Have conducted practical GHGI process training using the 2006 IPCC Guidelines, inventory spread sheets and IPCC software.



- Have participated and played a leading role in the preparation and review of National Communications, in particular on GHG Inventories;
- Have thorough knowledge and hands-on experience with the following:
 - User manual for guidelines for the preparation of the BUR1 for Non- Annex I Parties.
 - User manual for the Guidelines on the preparation of National Communication from Non-annex 1 Parties.
 - 2006 IPCC guidelines for GHG inventory
- Fluency in English (both written and spoken)

7. **SUBMISSION**

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission
Ministry of the Environment and Housing
Ground Floor
Charlotte House
Charlotte and Shirley Streets
P.O. Box N-7132
Nassau, The Bahamas.

Re: Rochelle Newbold – Consultant on GHG Inventory (TNC/BUR1 Project)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm ET.



The Bahamas Environment Science and Technology (BEST) Commission

Ministry of the Environment and Housing

Terms of Reference for Climate Change Consultant:

Environmentally Sound Technologies (EST) and Information on Research Programmes

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, to address Environmentally Sound Technologies (EST) and Information on Research Programmes, in the context of the preparation of the Third National Communication (TNC) for The Bahamas, in fulfilment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period of October 2021 to March 2022.

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1. BACKGROUND

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2. INTRODUCTION

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Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;
- iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;
- v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;
- vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.



In regard to Environmentally Sound Technologies, The Bahamas' Second National Communication (SNC) identified the need for a Technology Needs Assessment (TNA) to be developed that would assess available technology and the cost of transfer and adaptation of appropriate technologies. Technologies were identified as being needed for mitigation in energy and transportation; water conservation adaptation; agriculture and livestock production; prevention of malaria and upper respiratory diseases; and biodiversity management and conservation. The SNC stated that The Bahamas would pursue funding for a TNA through the GEF Enabling Activities fund.

The TNC will build upon the above activities, including the selection of priority technological needs, inclusive of cost-effectiveness, opportunities for application, and an established database for ESTs, for both mitigation and adaptation technologies.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

3. SCOPE OF WORK

Output 7.1: *Activities on Environmentally Sound Technologies (EST) Assessed*

Activities:

- 7.1.1 Assess the steps taken by the Government to promote, facilitate and finance EST transfer, as well as to support development and enhancement of indigenous capacities and technologies in accordance with the guidelines set by Decision 17/CP.8, paragraph 42.
- 7.1.2 Establish a database for ESTs, including recommendations for both mitigation and adaptation technologies.
- 7.1.3 Assist in arranging the national review and lead awareness raising workshops on ESTs (including recommendations for capacity building in national, sub-regional, regional and international trainings on ESTs).
- 7.1.4 Prepare a subsection on transfer of EST inclusive of: i) advice on the selection of priority technological needs, cost-effectiveness of the technologies and the opportunities for their application, further promotion of existing endogenous technologies within the context of national circumstances, (and follow up activities) for inclusion in the TNC to be validated by the NPAC (National Project Advisory Committee).

The Second National Communication (SNC) provided an overview of existing research programmes including PRECIS modeling by the Bahamas Meteorological Service, COSMIC programme funded by the National Science Foundation, and SLOSH modelling by the Bahamas Meteorological Service to develop vulnerability mapping for several islands.



Output 9.1: *Research programmes at national level to identify gaps, needs and constraints assessed*

Activities:

- 9.1.1. Conduct an in-depth assessment of research programmes relating to climate change to identify gaps, needs and constraints and develop the draft chapter.

The SNC assessed regional research that was being conducted that was relevant for The Bahamas. This included work by the Caribbean Community Climate Change Centre (CCCCC) and Oxford University Centre for Environment that focused on developing vulnerability assessments of the regional tourism sector and presenting adaptation/mitigation responses.

Output: 9.2: *Development of sub-section on regional climate change related research*

Activities:

- 9.2.1. Conduct an in-depth assessment of regional research programmes with relevance to The Bahamas pertaining to climate change. This should include an assessment of research from University of West Indies Climate Studies Group and Institute for Sustainable Development, CCCCC and other regional organizations.
- 9.2.2. Develop sub-section for inclusion in TNC summarizing findings.

4. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:

- 4.1 An inception report and detailed schedule of activities in alignment with the approved workplan (present a work plan within 14 days after the contract is signed).
- 4.2 Database established for ESTs, including both mitigation and adaptation technologies.
- 4.3. Conduct an assessment of research programmes relating to climate change (with relevance to The Bahamas), and identified gaps, needs and constraints.
- 4.3 A draft of the following chapters: (i) Development and Transfer of Environmentally Sound Technologies (EST) and (ii) Information on Research Programs.

These chapters should take into consideration the needs and priorities for the development and transfer of environmentally sound technologies (EST) and information on research programs, as they relate to climate change education, training and public awareness and capacity-building, GHG inventory, vulnerability and adaptation assessment, mitigation, systematic observation and



other emerging priorities (and should make special considerations to the documentation of issues associated with gender), to be presented by the consultant for review and validation by BEST, the National Project Coordinator (NPC), and NPAC.

4.4 Final draft of the above-mentioned chapters, integrating comments from BEST, NPC, and the NPAC, for production of a final report for submission to the BEST Commission.

5. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

5.1. Liaise and consult with the various stakeholders under the NC project.

5.2. Participate in coordinating meetings with BEST and NPC.

5.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain property of the Government of The Bahamas

6. QUALIFICATIONS AND EXPERIENCE

Qualifications:

- A degree (at least BSc. or MSc.) in Environmental Engineering/Natural Resource Management or another related field, with at least eight (8) years' experience in the field of climate change
- Comprehensive understanding and experience with Environmentally Sound Technologies specifically, mitigation and adaptation technologies, particularly within a small island developing state (SIDS) context (i.e. renewable energy, soft and hard coastal defense mechanisms)
- Experience in trade policy instruments (e.g. tariff reductions, elimination of subsidies, voluntary sustainability standards among others) that could serve as effective vehicles to the development and application of environmentally sound technologies would be



considered an asset

- Experience in the Caribbean will be considered an asset
- Familiarity with national communications, biennial update reports and with international negotiations and processes under the UNFCCC
- Substantial experience in government and interdepartmental procedures
- Good knowledge of and experience in the analysis of:
 - d) Environmentally Sound Technologies
 - e) National, regional and international climate change research programs
 - f) National development programmes and priorities.
 - g) The socio- economic circumstances of The Bahamas
 - h) Current national, regional and international policies, related to climate change
- Familiarity with computers and Microsoft office applications, such as Word Processing and Excel
- Experience with United Nation's reporting mechanisms will be considered an asset.
- Fluency in English (both written and spoken)
- Strong oral and written communication skills

7. SUBMISSION

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission
Ministry of the Environment and Housing
Ground Floor
Charlotte House
Charlotte and Shirley Streets
P.O. Box N-7132
Nassau, The Bahamas.

Re: Rochelle Newbold – Climate Consultancy Position – EST and Information on Research Programme (TNC/BUR1)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm E



The Bahamas Environment Science and Technology (BEST) Commission

Ministry of the Environment and Housing

Terms of Reference for Research and Systematic Observation Consultant

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, to address and enhance capacity related to Research and Systematic Observation, in the context of preparation of the Third National Communication (TNC) and First Biennial Update Report (BUR1) for The Bahamas, in fulfilment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period of April 2020 to June 2022.

Any request for clarification must be by standard electronic communication to the email addresses indicated under the “Submission” paragraph (Section 7).

1. BACKGROUND

Through The Bahamas Environment Science and Technology (BEST) Commission in the Ministry of the Environment and Housing, the Government of The Bahamas is currently engaging in activities pursuant to the preparation of its First Biennial Update Report (BUR1) and Third National Communication (TNC) to the United Nations Convention on Climate Change (UNFCCC). This is in accordance with paragraph 1 of Article 4 of the UNFCCC.

By virtue of a Project Cooperation Agreement with the United Nations Environment Programme (UNEP) office in Nairobi, the BEST Commission will serve as the Executing Agency in undertaking activities towards the fulfilment of obligations as identified in the deliverables for the TNC/BUR1 project.

One of the main objectives of the BUR and the TNC processes is to build local, individual and institutional capacity to implement the Convention. The TNC/BUR will strengthen the national capacities and further raise general knowledge and promote awareness on climate change and its effects. It will also strengthen the visibility of climate change issues on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process.

Decisions of COP 16 & 17 require developing countries to submit biennial update reports (BUR) containing updates of greenhouse gas inventories, including a national inventory report and



information on mitigation actions, needs and support received. Preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC.

2. INTRODUCTION

The BEST Commission's experience in regard to compilation and submission of reports under the UNFCCC is mainly limited to National Communications (NCs). As a party to the Convention The Bahamas is required to submit Biennial Update Reports (BURs) and National Communications (NCs) to the UNFCCC and Conference of Parties. The challenge of non-Annex 1 parties is: 1) to develop the institutional capacity, 2) improve data collection and data management processes and 3) further a transparent and accessible flow of information for international reporting and national decision making.

Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;
- iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;
- v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;
- vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.

The existing networks of the country consist of a network of observing stations on approximately 15 well inhabited islands. These stations provide continuous data to the Meteorology Department and the network forms part of the Global Climate Observing System (GCOS) and the Global Earth



Observation. A Doppler weather radar and satellite data from the National Oceanic Atmospheric Administration (NOAA) are also used as early warning tools. Sea level is monitored by three tidal gauges installed in Nassau Harbour, Lee Stocking Island and Inagua under the Caribbean Planning for Adaptation to Climate Change (CPACC) project (although some of these gauges are no longer operational – see the stakeholder report).

The Second National Communication (SNC) identifies the need to install more recorders as no long-term records exist for any individual site for sea level recordings. The SNC assessed national research that was being conducted including expansion of the SuomiNet GPS receivers to enable improved forecasts of hurricane track and intensity. The Bahamas Meteorological Service completed vulnerability mapping based on Sea Lake and Overland Surges from Hurricanes (SLOSH) model for New Providence, Eleuthera, South Berry Islands, the Exumas, Long Island, Cat Island, Rum Cay and San Salvador.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

3. SCOPE OF WORK

Based on the gaps identified in the Second National Communication:

Output 8.1: *Information on research and systematic observations assessed and described (based on gaps identified in the SNC)*

Activities:

- 8.1.1 Recommend capacity-building initiatives for enhancing systematic hydro-meteorological monitoring and climate modeling in the country.
- 8.1.2 Assess and develop recommendations for the general policy on funding of research and systematic observation.
- 8.1.3 Assess efforts made by Government departments and state institutions on climate process and climate system studies, modeling, and prediction, research on the impacts of climate change and response options, and research and development on mitigation and adaptation technologies, and provide recommendations & modalities for implementation, including follow-up activities.
- 8.1.4 Prepare a sub-section on research and systematic observations for inclusion in the TNC.

4. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:



- 4.1. An inception report and detailed schedule of activities in alignment with the approved workplan (present a work plan within 14 days after the contract is signed).
- 4.2. Guidance and recommendations provided on systematic hydro-meteorological monitoring and climate modelling training.
- 4.3. Assessment and recommendations provided on general policy on funding of research and systematic observation.
- 4.4. Recommendations, modalities for implementation and follow-up activities provided on Government departments and state institutions on climate process and climate system studies, modeling, and prediction, research on the impacts of climate change and response options, and research and development on mitigation and adaptation technologies.
- 4.5. A draft of the Climate Change Research and Systemic Observation chapter (this chapter should make special considerations to the documentation of issues associated with gender), to be presented by the consultant for review and validation by BEST, the National Project Coordinator (NPC), and NPAC.
- 4.6. Final draft of the above-mentioned chapter, integrating comments from BEST, NPC, and the NPAC, for production of a final report for submission to the BEST Commission.

5. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

- 5.1 Liaise and consult with the various stakeholders under the NC project.
- 5.2 Participate in coordinating meetings with BEST and NPC.
- 5.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain property of the Government of The Bahamas

6. QUALIFICATIONS AND EXPERIENCE

Qualifications:



- A post-graduate degree in Meteorology/Climatology/Environmental Sciences or a related field along with a minimum of eight (8) years' experience in an area relevant to climate change
- Comprehensive understanding and experience with appropriate climate modelling and IPCC scenarios, particularly within a small island developing state (SIDS) context
- Familiarity with the Global Climate Observing System (GCOS) and the Global Earth Observation System and the existing networks of the country.
- Experience in the Caribbean will be considered an asset
- Familiarity with national communications, biennial update reports and with international negotiations and processes under the UNFCCC
- Substantial experience in government and interdepartmental procedures
- Good knowledge of and experience in the analysis of:
 - National, regional and international climate change research programs
 - National development programmes and priorities
 - Current national, regional and international policies, related to climate change
- Familiarity with computers and Microsoft office applications, such as Word Processing and Excel
- Experience with United Nation's reporting mechanisms will be considered an asset.
- Fluency in English (both written and spoken)
- Strong oral and written communication skills

7. **SUBMISSION**

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission
Ministry of the Environment and Housing
Ground Floor
Charlotte House



Charlotte and Shirley Streets
P.O. Box N-7132
Nassau, The Bahamas.

Re: Rochelle Newbold – Research and Systematic Observation Consultant (TNC/BUR1 Project)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm ET.



The Bahamas Environment Science and Technology (BEST) Commission

Ministry of the Environment and Housing

Terms of Reference for Mitigation Analysis Consultant

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, for a Mitigation Assessment & Analysis Consultant in the context of the preparation of the Third National Communication (TNC) and First Biennial Update Report (BUR1) for The Bahamas, in fulfilment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period of April 2020 to December 2021

Any request for clarification must be by standard electronic communication to the email addresses indicated under the “Submission” paragraph (Section 7).

1. BACKGROUND

Through The Bahamas Environment Science and Technology (BEST) Commission in the Ministry of the Environment and Housing, the Government of The Bahamas is currently engaging in activities pursuant to the preparation of its First Biennial Update Report (BUR1) and Third National Communication (TNC) to the United Nations Convention on Climate Change (UNFCCC). This is in accordance with paragraph 1 of Article 4 of the UNFCCC.

By virtue of a Project Cooperation Agreement with the United Nations Environment Programme (UNEP) office in Nairobi, the BEST Commission will serve as the Executing Agency in undertaking activities towards the fulfilment of obligations as identified in the deliverables for the TNC/BUR1 project.

One of the main objectives of the BUR and the TNC processes is to build local, individual and institutional capacity to implement the Convention. The TNC/BUR will strengthen the national capacities and further raise general knowledge and promote awareness on climate change and its effects. It will also strengthen the visibility of climate change issues on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process.

Decisions of COP 16 & 17 require developing countries to submit biennial update reports (BUR) containing updates of greenhouse gas inventories, including a national inventory report and



information on mitigation actions, needs and support received. Preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC.

2. INTRODUCTION

The BEST Commission's experience in regard to compilation and submission of reports under the UNFCCC is mainly limited to National Communications (NCs). As a party to the Convention The Bahamas is required to submit Biennial Update Reports (BURs) and National Communications (NCs) to the UNFCCC and Conference of Parties.

The challenge of non-Annex 1 parties is: 1) to develop the institutional capacity, 2) improve data collection and data management processes and 3) further a transparent and accessible flow of information for international reporting and national decision making. The Subsidiary Body for Implementation notes, the request of non-Annex 1 Parties for further technical support aimed at improving domestic capacities to facilitate continuity in meeting reporting requirements via national greenhouse gas inventory management systems and inter alia.

Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;
- iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;
- v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;
- vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.



The Climate Change Mitigation Assessment is intended to communicate to the Conference of Parties (COP) on the leading sources of anthropogenic GHG emissions in The Bahamas and identify effective measures to reduce them. It entails national and/or regional analyses of the potential costs and impacts of various technologies and practices to mitigate climate change. The information should be relevant for sustainable development and useful to policy makers to help formulate and prioritize mitigation programmes.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

3. SCOPE OF WORK

Output 4.1 *National mitigation action strengthened and report on potential for integration of GHG mitigation considerations into social, economic and environmental policies and actions developed.*

Activities

- 4.1.1. Consider the Second GHG Inventory and identify national agencies whose policies and actions would contribute to GHG emissions reductions.
- 4.1.2. Assess policies and actions of these agencies to determine whether and how mitigation is addressed
- 4.1.3. Identify potential policies and actions that agencies may consider in order to contribute to mitigation, along with any barriers or challenges to implementation, taking into account national socio-economic and sustainable development priorities and national commitments under the UNFCCC.
- 4.1.4. Lead the first national workshop on Climate Change Mitigation with the aim of determining mitigation actions or programmes that have been implemented or are being developed and providing training and awareness raising on mitigation measures to sectors with mitigation potential. The workshop should also facilitate collection of the information needed for Activity 5.1.2
- 4.1.5. Recommend and support on technical capacity building and training on chosen tools and methodologies, including participation in international/regional/national workshops/meetings/training on mitigation analysis and applying macro-economic models
- 4.1.6. Compile NAMAs which includes mitigation actions, policies or programmes that have been implemented or are being developed. Provide a detailed description of the mitigation or group of mitigation actions, including the name, sector, coverage, goals, objectives, methodologies, inputs and outputs.
- 4.1.7. Develop report based on above activities and include in TNC
- 4.1.8. Present to NCCC (NPAC) for input and approval



Output 4.2 *Baseline and mitigation scenarios at sectoral level developed*

Activities

- 4.2.1. Develop baseline (Business As Usual) scenario for energy and transportation sectors for the 2018-2040 time frame using LEAP or other appropriate model, in compliance with the guidelines set by Decision 17CP/8.
- 4.2.2. Review and update mitigation options for selected and future scenarios, which contribute to the medium-long term low emission development objectives
- 4.2.3. Review and update Mitigation scenario WM (with measures) and WAM (with additional measures) for selected sectors by using available software, (i.e., COMAP, LEAP, IPCC software, etc.) This must include proposed mitigation policies and measures for energy and transportation sectors
- 4.2.4. Advise on selection of macro-economic models for evaluating mitigation options and measures for GHG emission reduction
- 4.2.5. Provide quantification of how energy demand and supply, GHG emissions and costs would change with the implementation of different mitigation policies and measures as compared to baseline scenario
- 4.2.6. Identify barriers to implementation of mitigation policies and measures for energy and transportation sectors

Output 4.3 *Chapter on 'National Mitigation Assessment' for the Third National Communication developed.*

Activities

- 4.3.1 Develop chapter in compliance with the guidelines set by Decision 17CP/8. The Chapter must include information on planned and implemented mitigation policies and measures organized by sector; LEAP or other model-based assessment of baseline and mitigation scenarios for energy and transportation; identification of barriers to implementation of mitigation policies and measures for energy and transportation.
- 4.3.2 Finalize the Climate Change mitigation analysis chapter to be submitted as a part of the TNC with the NCCC (NPAC).

As this is the first BUR for The Bahamas, there have been no related previous activities

Output 5.1 *Mitigation actions and their effects investigated and documented*

Activities

- 5.1.1. Prepare a template for reporting mitigation actions for selected IPCC emission sectors.



- 5.1.2. Compile NAMAs which includes mitigation actions, policies or programmes that have been implemented or are being developed. Provide a detailed description of the mitigation or group of mitigation actions, including the name, sector, coverage, goals, objectives, methodologies, inputs and outputs. Note that this information will be collected as part of Activity 4.1.4 First national workshop on Mitigation
- 5.1.3. Overview and select measures to mitigate climate change and identify the follow-up activities
- 5.1.4. Identify the effects of implemented NAMAs in reducing GHG emissions, dependent upon availability of data
- 5.1.5. Develop The Bahamas NAMA registry on the UNFCCC NAMA Registry site and register the identified mitigation actions
- 5.1.6. Develop process for continued updating of the NAMA registry including roles and responsibilities of key agencies and Non-Motorized Transport (NMT)
- 5.1.7. Provide information and recommendations for The Bahamas' consideration for participation in international carbon market mechanisms.
- 5.1.8. Develop the draft chapter on National Mitigation actions and their effects of the BUR1
- 5.1.9. Finalize the climate change mitigation actions and their effects chapter to be submitted as a part of the BUR1 with the NCCC (NPAC).

4. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:

- 4.1 An inception report and detailed schedule of activities in alignment with the approved workplan (present a work plan within 14 days after the contract is signed).
- 4.2 Inception workshop for local participants (on Climate Change Mitigation) on a date to be decided with Project team.
- 4.3 Template for reporting mitigation actions for selected IPCC emission sectors.
- 4.4 Draft NAMA report, for inclusion in both BUR1/TNC, to be presented by the consultant for circulation, revision and validation by BEST, NPC, NIT and NPAC.
- 4.5 Draft chapter of National Mitigation Assessment, in compliance with the guidelines set by Decision 17CP/8 (Activity 4.31.), for inclusion in BUR1/TNC, for circulation, revision and internal validation by BEST, NPC, NIT and NPAC.



4.6 Draft chapter of National Mitigation Actions and the effects, for inclusion in BUR1/TNC, for circulation, revision and internal validation by BEST, NPC, NIT and NPAC.

4.7 A presentation of findings at a validation workshop;

4.8 Final draft of NAMA report, National Mitigation Assessment Chapter, National Mitigation Actions and their Effects chapter, integrating comments from internal reviewers.

5. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

5.1 Liaise and consult with the various stakeholders under the NC project, inclusive of the NIT and the National Capacity Self-Assessment

5.2 Participate in coordinating meetings with BEST, NPC, and NIT

5.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain the property of the Government of The Bahamas

6. QUALIFICATIONS AND EXPERIENCE

Qualifications

- A post-graduate degree in Environmental Science/Management or another field relevant to the project;
- Have at least eight (8) years' experience in Environmental Studies, Development Economics or related fields in developing country Parties to the UNFCCC;
- Demonstrate prior experience and expertise in conducting Climate Change Mitigation Assessments, National Mitigation Actions and their effects (NAMAs) and review of National Communications and Biennial Update Reports for developing country Parties to the UNFCCC.
- Demonstrate experience in developing baselines scenarios for selected IPCC sectors (energy and transportation among others) using appropriate models, e.g LEAP.



- Demonstrate experience in updating mitigation scenarios, evaluating mitigation measures and their impact in energy demand and supply as well as the reduction of GHG emissions among others
- Prior experience preparing Climate Change Mitigation Assessments in Small Island Developing States, particularly in the Caribbean will be considered an asset.
- Fluency in English (both written and spoken)
- Strong oral and written communication skills.

Successful applicants must also demonstrate a thorough knowledge/ hands-on experience with the following:

1. Decision Adopted by the COP Decision 2/CP.17: Guidelines for the Preparation of Biennial Update Reports from Parties not Included in Annex 1 to the Convention Adopted by the Conference of the Parties;
2. Methodological approaches in addressing anthropogenic emissions by source and removal by sinks of GHG gases not controlled by the Montreal Protocol;
3. Report of the Conference of the Parties (COP) at its Seventeenth Session, Held at Durban;
4. User Manual for the Guidelines on the Preparation of Biennial Update Reports from Non-Annex 1 Parties.
5. NAMA registry process.
6. Different available software to update mitigate scenarios.

7. **SUBMISSION**

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission
Ministry of the Environment and Housing
Ground Floor



Charlotte House
Charlotte and Shirley Streets
P.O. Box N-7132
Nassau, The Bahamas.

Re: Rochelle Newbold – Mitigation Analysis Consultant (TNC/BUR1 Project)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm ET.



The Bahamas Environment Science and Technology (BEST) Commission

Ministry of the Environment and Housing

Terms of Reference for Vulnerability and Adaptation Consultant

Country: The Bahamas

Project Name: “Preparation of The Bahamas Third National Communication (TNC) and the Preparation of The Bahamas First Biennial Update Report (BUR1) to the UNFCCC”

Description of the assignment/services: The Services of a Consultant or Firm will be hired, as appropriate, to enhance local capacity and support in vulnerability and adaptation initiatives, in the context of preparation of the Third National Communication (TNC) for The Bahamas, in fulfilment of the reporting requirement under the United Nations Framework Convention on Climate Change (UNFCCC).

Project Deliverables/Period of Engagement: The Consultant or Firm will be paid on a deliverable basis and can be expected to be engaged between the period of July 2020 to December 2021.

Any request for clarification must be by standard electronic communication to the email addresses indicated under the “Submission” paragraph (Section 7).

1. BACKGROUND

Through The Bahamas Environment Science and Technology (BEST) Commission, the Government of The Bahamas is currently conducting its Third National Communication (TNC) and First Biennial Update Report (BUR1) report to the United Nations Framework Convention on Climate Change (UNFCCC). This is in accordance with paragraph 1 of Article 4 of the UNFCCC.

By virtue of a Project Cooperation Agreement with the United Nations Environment Programme (UNEP) office in Nairobi, the BEST Commission will serve as the Executing Agency in undertaking activities towards the fulfilment of obligations as identified in the deliverables for the TNC/BUR1 project.

One of the main objectives of the TNC/BUR1 process is to build local, individual and institutional capacity to implement the Convention. The TNC/BUR will strengthen the national capacities and further raise general knowledge and promote awareness on climate change and its effects. It will also strengthen the visibility of climate change issues on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process.



Decisions of COP 16 & 17 require developing countries to submit biennial update reports (BUR) containing updates of greenhouse gas inventories, including a national inventory report and information on mitigation actions, needs and support received. Preparation of the BUR1 will fulfill the obligations of The Bahamas under the UNFCCC.

2. INTRODUCTION

The BEST Commission's experience in regard to compilation and submission of reports under the UNFCCC is mainly limited to National Communications (NCs). As a party to the Convention The Bahamas is required to submit Biennial Update Reports (BURs) and National Communications (NCs) to the UNFCCC and Conference of Parties. The challenge of non-Annex 1 parties is: 1) to develop the institutional capacity, 2) improve data collection and data management processes and 3) further a transparent and accessible flow of information for international reporting and national decision making.

Successful implementation of the TNC/ BUR1 project will:

- i) provide a comprehensive assessment of the vulnerability and adaptive capacity of various socioeconomic sectors, using improved methodologies and for integrated assessment, and implement the national adaptation strategy;
- ii) include in the vulnerability awareness of incidents of loss and damage and climate-induced displacement and update implementation of the national adaptation strategy to take these into account;
- iii) further enhance public awareness on climate change issues, including loss and damage and displacement;
- iv) facilitate the integration of climate change concerns into national socio-economic planning processes, with particular emphasis on enhancing the understanding of the policy and decision makers on the importance of the integration of climate change and sustainable development, including enhancing the capacity of members of the NCCC;
- v) facilitate the assessment of existing policies measures for addressing climate change issues, any gaps as well as assessing their implementation;
- vi) identify existing constraints and gaps related to financial, technical, and capacity needs in order to facilitate further action.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.



In regard to the Vulnerability and Adaption Assessment, some of the main project components will include (but is not limited to): selection of appropriate methodologies to assess vulnerability and adaptation, development of climatic scenarios, support the development of the National Strategy on Adaptation to Climate Change and identify the follow-up activities. These activities will support sustainable development and prove useful to policy makers to help formulate, prioritize, and strengthen adaptation initiatives for The Bahamas.

The outputs below will be submitted as part of The Bahamas' TNC/BUR1 to the UNFCCC.

3. SCOPE OF WORK

Output 3.1: *A national vulnerability and adaptation assessment team established, and their technical capacity strengthened.*

Activities:

- 3.1.1 The Consultant will serve as team leader and provide expertise as well as carry out activities enumerated below. The Consultant, in consultation with the Vulnerability and Adaptation Assessment Working Group (VAAWG) will prepare the V&A report and ensure that workshops are carried out throughout the process in order to raise awareness and provide training and constraints will be identified and highlighted.
- 3.1.2 Organize the first national workshop on Vulnerability and Adaptation Assessment Team (VAAT) in the early phase of TNC implementation phase with the purpose to choose VAAT team members, consult relevant stakeholders and assess and choose an appropriate approach, tool and methodologies for conducting the V&A assessment;
- 3.1.3 Recommend and support on technical capacity building and training on chosen tools and methodologies, including training in climate risk assessment and modelling, assessing loss and damage and in developing nature-based solutions, including participation in international/regional/national workshops/meetings/training on V&A.

Output 3.2: *The approaches, tools and methods to be used under the V&A assessment updated and validated.*

Activities:

- 3.2.1 Identify pertinent data and information available and decide on approaches, tools and methods to be used for V&A assessment in compliance with guidelines in Decision 17/CP.8, paragraphs 30-31;



- 3.2.2 Update IPCC scenarios and projections using representative concentration pathways (RCPs) and latest assessment reports and guidelines.

Output 3.3: *Current vulnerability assessed, adaptation experience and adaptive capacity explored.*

Activities:

- 3.3.1 Identify and describe climate risks and potential impacts including 1) climate variability, extreme events and hazards, 2) assess impacts including loss and damage and climate-induced displacement 3) develop risk assessment criteria and vulnerability indices 4) assess current climate risks;
- 3.3.2 Identify and describe vulnerability (to both socio-economic conditions and climate) including identifying key vulnerable groups (using a priority system), identify incidents of loss and damage (including non-economic loss and damage) and climate-induced displacement, and assessing current vulnerability.
- 3.3.3 Explore adaptation experiences and adaptive capacity including by 1) scoping and synthesis of information on existing policies and measures relevant to adaptation 2) assess the current system's capacity to adapt to current climate hazards.

Output 3.4 *future climate risks assessed, potential scenarios developed, and future vulnerability outlined.*

Activities:

- 3.4.1 Describe potential future climate trends, risks and opportunities, including through 1) clarifying system sensitivities to climate change 2) identify appropriate planning horizons 3) developing climate scenarios 4) linking scenarios to impact models, 5) undertaking risk analyses (these may be sector specific).
- 3.4.2 Develop and describe prospective natural resource management conditions and environment trends according to the priority ranking system developed and impacts on socio-economic conditions;
- 3.4.3 Identify national decision-making processes that either pose potential barriers to incorporating adaptation into development planning, or that provide important opportunities to build adaptive capacity, evaluate policies and programs related to the priority ranking system for their potential support to national adaptation efforts in the context of sustainable development.

Output 3.5 *Vulnerability assessment for key area(s) to be performed. Climate risks and vulnerabilities identified and assessed.*

Activities:

- 3.5.1



- 3.5.2 Analyze current vulnerability of key area(s) identified by VAAT according to the priority ranking system;
- 3.5.3 Describe potential future vulnerability of the key area(s), including analysis of pathways that link the present vulnerability to future risks;
- 3.5.4 Identification for options for interventions which can lead to the development of adaptation responses, in compliance with guidelines of Decision 17/CP.8, paragraph 36 (taking in to account existing national initiatives such as the Ministry of Environment and Housing survey on ideas for adaptation priorities for access to the GCF simplified adaptation portal).

Output 3.6 *Adaptation measures assessed and described in the context of mainstreaming concerns into national development plans and decision-making*

Activities:

- 3.6.1 Assess to what extent climate change is taken into account in national and sectoral policies and plans and evaluate measures and barriers for adapting to climate change in key areas, including those highest ranking in the ranking system developed;
- 3.6.2 Assess synergies between climate risks, adaptation and mainstreaming;
- 3.6.3 Recommend, select and prioritise adaptation options for policies and measures including description, costs, impact and barriers to implementation and cross-check results with stakeholders.

Output 3.7 *Vulnerability Assessment, Climate Change Impacts and Adaptation Measures of TNC compiled and validated*

Activities:

- 3.7.1 Compile the vulnerability assessment, climate change impacts and adaptation measures report for TNC;
- 3.7.2 Circulate the draft chapter for internal and external review;
- 3.7.3 Organize a stakeholder workshop to present draft chapter;
- 3.7.4 Incorporate comments received from the review and finalize the chapter on Vulnerability and Adaptation for inclusion in the TNC.

4. DELIVERABLES

The Consultant shall provide the deliverables associated with the Scope of Works, inclusive of the following:

- 4.1 An inception report and detailed schedule of activities in alignment with the approved workplan (present a work plan within 14 days after the contract is signed).



4.2. Lead the first national workshop on vulnerability and adaptation assessment as referenced in SOW 3.1.2 including preparation of workshop material, power point presentations and recommendation report after the workshop .

4.3. Selection and application of appropriate methodologies to assess V&A, and climatic scenarios developed

4.4. Developed the national strategy on adaptation to climate change (making special considerations to the documentation of issues associated with gender) in consultation with the VAAWG, and identified follow-up activities

4.5. Recommendations provided on capacity building in the sub regional, regional and international trainings on integrated assessment modeling.

4.6. Draft the V&A Chapter (making special considerations to the documentation of issues associated with gender) to be presented by the consultant for circulation, revision and internal validation by BEST, NPC, VAAT and NPAC

4.7 A presentation of findings at a validation workshop on a date to be determined.

4.8. Final draft of the V&A Chapter integrating comments from BEST, NPC, VAAT and NPAC, for inclusion in the TNC.

5. REPORTING

The Consultant shall report to the Director of the BEST Commission and work in coordination with the National Project Coordinator (NPC).

The Consultant is expected to:

5.1 Liaise and consult with the various stakeholders under the NC project, inclusive of the VAAT, and VAAWG

5.2 Participate in coordinating meetings with BEST, NPC, VAAT and VAAWG

5.3 Submit progress reports and final reports to BEST and NPC – inclusive of anticipated and completed activities & expenditure – as guided by the approved project workplan (all reports should be sensitive to the issue of gender throughout the execution of each activity).

Note: All data collected and compiled by the Consultant shall remain property of the Government of The Bahamas

6. QUALIFICATIONS AND EXPERIENCE

Qualifications:



- A post-graduate degree in Climatology/Environmental Sciences/Environmental Engineering/Natural Resources Management/Social Sciences or a related field along with a minimum of eight (8) years' experience in an area relevant to climate change.
- Experience in the preparation of at least two (2) National Communications to the UNFCCC;
- Comprehensive understanding of climate change, its impacts to society (for example: loss and damage, displacement, etc), particularly small island developing states (SIDS) and their sustainable development issues (national development programmes and priorities, and socio-economic circumstances).
- Experience in the Caribbean will be considered an asset.
- Demonstrate knowledge of and experience in the analysis of: current national, regional and international policies, related to climate change adaptation
- Demonstrable knowledge of key V&A assessment methodologies, guidelines and tools (e.g., IPCC guidelines, NAPA guidelines, adaptation tools, priority ranking system), particularly in consideration of the constraints of SIDS;
- Previous experience in conducting V&A assessments;
- Experience in leading a team of experts to conduct the various sector assessments;
- Experience with the application of sectoral impact models and outputs from climate models;
- Strong proven ability to analyze corresponding socio-economic impacts of V&A assessments;
- Experience in working with multi-stakeholder groups including, government and non-governmental organizations, and vulnerable groups, is also desirable;
- Extensive experience in technical report writing and presentation;
- Excellent oral and written communication skills in English.

7. SUBMISSION

The Consultant should submit CVs via email to careers@best.gov.bs and CC: chamilton@best.gov.bs; or deliver in hard copy (in a sealed envelope) to:

BEST Commission

Ministry of the Environment and Housing

Ground Floor



Charlotte House

Charlotte and Shirley Streets

P.O. Box N-7132

Nassau, The Bahamas.

Re: Rochelle Newbold – Vulnerability and Adaptation Consultant (TNC/BUR1 Project)

Applications for this position will be accepted until June 22nd, 2020 at 4:59pm ET.