TECHNICAL COOPERATION DOCUMENT

I. Basic Information for TC

▪ Country/Region:	Caribbean
▪ TC Name:	Caribbean Climate Smart Islands Program
▪ TC Number:	RG-T2543
▪ Team Leader/Members:	Gerard Alleng (team leader); Sara Valero Freitag; Anaitee Mills; Emiliano Detta; Ana Rios; Mariana Hernández (INE/CCS); Sybille Nuenninghoff (RND/CBL); Cassandra Rogers (RND/CBA); Fernando Miralles (INE/WSA); Christiaan Gischler (INE/ENE), and Escarlata Baza (LEG/SGO)
▪ Taxonomy:	Client Support
▪ Date of TC Abstract authorization:	September 5, 2014
▪ Beneficiary:	Belize, Trinidad & Tobago and The Bahamas
▪ Executing Agency and contact name:	IDB, through its Climate Change and Sustainability Division (INE/CCS)
▪ Donors providing funding:	Sustainable Energy and Climate Change IDB Special Program (SCI)
▪ IDB Funding Requested:	US$992,000
▪ Local counterpart funding, if any:	US$248,000 in kind
▪ Disbursement period (execution):	28 months (24 months)
▪ Required start date:	January 2015
▪ Types of consultants:	Individuals and firms
▪ Prepared by Unit:	INE/CCS
▪ UDR:	INE
▪ TC Included in Country Strategy: ▪ TC included in CPD:	No No
▪ GCI-9 Sector Priority:	Protect the environment, respond to climate change and promote renewable energy and food security

II. OBJECTIVES AND JUSTIFICATION OF THE TC:

2.1 The vulnerability of Caribbean nations to the impacts of climate change is well known given their limited land masses, the concentration of socio-economic activities and critical infrastructure in narrow coastal zones, their dependence on tourism and the limited human and institutional capacity. Permanent shocks and changes from extreme climatic events are expected to result in a loss of livelihood, and the degradation of region's resource base with its economic and social infrastructure. It has been estimated that over the last three decades, the Caribbean region suffered direct losses of approximately US$3.2 billion due to natural disasters associated with extreme

weather events[1]. The region is also highly dependent on the imports of fossil fuels for energy needs which places a heavy burden on its economies as a result of the vagaries of global petroleum prices. So far, alternative energy sources have not been significantly utilized even though there is very good potential for solar, wind, hydro power and biomass exploitation. The Bahamas relies on tourism as the primary economic driver which represents up to 70% GDP together with the financial services sectors[2]. In the case of Belize, agriculture is the main sector although tourism has become the largest contributor to GDP currently generating about US$200 million in expenditures per year (about 17% GDP)[3]. In the case of Trinidad and Tobago, about 11% of the country's GDP is estimated to be generated by the tourism sector and Tobago has been identified as an emerging tourism destination on the Caribbean[4].

2.2 It is within this context that Caribbean nations are expected to adapt to the impacts of climate change while at the same time pursuing a low carbon pathway given growing international and public pressure for environmentally friendly development that reduces their "carbon footprint" and exposure to climate change and also increasing energy security. The implementation of adaptation and mitigation measures by small islands is not considered to be mutually exclusive but can be complementary in response to climate change. Co-benefit linkages can exist in sectors such as energy supply and demand, tourism infrastructure and ecosystems services and functions.[5]

2.3 The general objective of this technical cooperation (TC) is to demonstrate ways of transitioning to a low carbon and climate resilient development pathway utilizing as pilots the islands of Tobago (Trinidad & Tobago), Caye Caulker (Belize) and Harbour Island (The Bahamas). The selection of these pilot islands was based on their participation in the previous technical cooperation program "Caribbean Carbon Neutral Tourism project (RG-T1640)"; the proposed project will expand on the work done through RG-T1640 and add climate change adaptation consideration to the interventions. The TC will examine priority sectors in which low carbon and climate resilient measures can be implemented such as transport, infrastructure, energy, water, waste treatment and tourism. The identified measures will be analyzed from a cost-benefit and commercial potential perspective in order to prioritize them, highlighting cost recovery rates. Based on this analysis, mitigation and adaptation pilots will be carried out in the project sites.

2.4 The proposed TC will contribute to the following GCI-9 lending targets: (i) Support to Small and Vulnerable Countries (ii) Poverty Reduction and Equity Enhancement; (iii) Support Climate Change Initiatives, Sustainable Energy (Including Renewable Energies) and Environmental Sustainability; and (iv) Support Regional Cooperation and Integration. The TC is also aligned with the IDB's Integrated Strategy for

[1] IDB. 2004. Evaluation of the Bank's Policy& Operational Practice Related to Natural & Unexpected Disasters.

[2] IDB Country Strategy with the Commonwealth of the Bahamas (2013-2017).

[3] Belize's Second National Communication to the UNFCCC, 2011.

[4] World Travel and Tourism Council, Travel&Tourism Economic Impact for the Caribbean report, 2010.

[5] Nurse, L.A., et al, 2014. Small Islands in Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1613-1654.

Climate Change Adaptation and Mitigation and Sustainable Renewable Energy (GN-2609-1) and Action Plan (GN-2609-3). The TC is also aligned with the Country Strategies for The Bahamas, Belize and Trinidad and Tobago (GN-2638, GN-2746, GN-2731) which have climate change either as a cross-sectorial theme or as a thematic area.

2.5 In the wider context of the Caribbean region, there are several initiatives related to the interventions proposed under this program and with which synergies will be sought: (i) "Regional Framework for Achieving Development Resilient to Climate Change" and associated Implementation Plan (IP) which was adopted by CARICOM countries. This Framework lists five strategic goals, all of which are linked directly to the development of a low carbon and climate resilient tourism sector; (ii) the Caribbean Carbon Neutral Tourism Program - CCNTP (RG-T1640) funded by the IDB and completed in late 2012 and which provides the basis for this proposed program by providing ways of transitioning the tourism sector within the Caribbean to a low carbon pathway (specifically in Bahamas and Belize), such as the evaluation of appropriate approaches and technologies to reduce the carbon footprint and the identification of financial mechanisms to establish carbon neutrality; (iii) the IDB funded Caribbean Hotel Energy Efficiency Action Program - CHENACT phase I (RG-T1431) developed in Barbados and completed in late 2012 as well as CHENACT phase II (RG-T2015) deployed in Jamaica and the Bahamas and expected to be completed in 2016, which will provide relevant information from the energy audits conducted in licensed hotels in Bahamas, as well as from the assessments of financing sources for hotel energy investment; (iv) the IDB funded program on "Support for Implementation of the Belize Tourism Master plan" (BL-T1054, BL-T1064 and BL-T1071); (v) the IDB funded program on "Transportation Master plan (BL-T1065)"; and (vi) The "Ten Islands Challenge" being implemented by the Carbon War Room (CWR) which supports island economies in transitioning off fossil fuels.

III. DESCRIPTION OF ACTIVITIES/COMPONENTS AND BUDGET:

3.1 **Component 1. Assessment of mitigation options to support the transition to low carbon pathways (US$350,000).** This component will undertake the following activities: (i) review and expand existing Greenhouse Gas (GHG) inventories for the selected pilot islands that were carried out as part of technical assistance RG-T1640 focusing on selected sectors;[6] (ii) identification of mitigation options for these sectors based on the GHG inventories, including the development of cost-benefit and multi-criteria analyses in order to prioritize such interventions, as well as the identification of financial instruments available for financing; [7] (iii) review and make recommendations for institutional and legal frameworks in order to implement similar larger-scale interventions, as well as identify the options for branding and/or

[6] These will be at least the transportation, infrastructure, energy, water resources, waste treatment and tourism sectors.

[7] Some of these options could be implemented through the CHENACT phase II in the case of the Bahamas.

certification for low carbon[8] destinations; and (iv) implementation of a pilot mitigation project in each of the selected pilot islands based on outputs from activities (i) - (iii) and available budget. The outputs of this component are: (i) a portfolio of prioritized mitigation options; (ii) identification of private/public sources of financing; and (iii) policy recommendations for enabling the framework to implementation. The overall outcome is a low-carbon pathway for energy security and development for small island economies.

3.2 **Component 2: Assessment of adaptation options to support the transition to climate resilient pathways (US$462,000).** The activities to be undertaken under this component are: (i) study on the Economics of the Impacts of Climate Change (ECC) and/or study on the Economics of Climate Adaptation (ECA) for the pilot islands in order to analyze, prioritize and quantify potential adaptation interventions. These studies will include vulnerability and risk assessments for key assets[9] to the impacts of climate change; (ii) determine the best implementation scheme for climate resilient interventions, including the use of public private partnerships (PPPs) and other financing options for implementation; (iii) review and make recommendations for institutional and legal frameworks in order to implement similar larger-scale interventions, as well as the options for branding and/or certification of climate resilient destinations; (v) implementation of an adaptation pilot in each of the selected pilot islands based on outputs from activities (i) - (v) and available budget. The outputs of this component are (i) a portfolio of prioritized adaptation options; (ii) identification of private/public sources of financing; and (iii) policy recommendations for enabling the framework to implementation. The overall outcome is improved resilience for the pilot areas which will improve protection of assets, livelihoods and ecosystems.

3.3 **Component 3. Marketing and Communications Plan (US$80,000).** The activities to be undertaken for this component are: (i) the design of a communications strategy, including workshops, to disseminate the results for each of the pilot islands tailored for the different audiences of the project (governments, private sector, tourists, etc.) as well as to build capacity and awareness especially among communities to ensure understanding and ownership of the proposed interventions; and (ii) the development and implementation of an action plan for the strategy in order to market the new product based on the mitigation and adaptation options identified, i.e. the low carbon and climate resilient tourism destinations. The output of this component is a communications strategy and marketing plan for each of the pilot islands and an improved understanding from the different stakeholders about the benefits of low-carbon climate-resilient pathways, hence an increased interest in replicating these kinds of efforts throughout the Caribbean.

Table 1. Indicative Results Matrix

Results Matrix

[8] Low carbon tourism/destinations are generally recognized as being green, based on low energy consumption and low pollution which advocates reducing the emission of CO2 and offsetting the carbon in tourism activities (Min, 2011. Low-carbon Tourism Development of Changdao Island in Low-carbon. Proceedings of the 2011 International Symposium-Technical Innovation of Industrial Transformation and Structural Adjustment.).

[9] Infrastructure, ecosystems, water resources and energy.

Component/Description	Unit	Baseline (2015)	Yr 1	Yr 2	Completion Date	Data Source
Component 1. Assessments of mitigation options for low carbon pathways						
Revised GHG inventories	Nº	0	3	0	2015	Project Report
CBAs of mitigation options	Nº	0	0	3	2015	CBA Reports
Reports on legal/institutional review and low carbon destination branding options	Nº	0	0	2	2015	Project Report
Mitigation pilots implemented	Nº	0	0	3	2016	Project Report
Component 2. Assessments of adaptation options for transitioning to a climate resilient pathway						
ECC/ECA studies	Nº	1	0	3	2015	Project Report
Reports on legal/institutional review and climate resilient destination branding options	Nº	0	0	2	2015	Project Report
Adaptation pilots implemented	Nº	0	0	3	2015	Project Report
Component 3. Marketing and communications plan						
Communications strategies developed	Nº	0	0	3	2016	Strategies
Communication action plan implemented	Nº	0	0	3	2016	Action Plan
Workshops undertaken	Nº	0	0	3	2016	Project Report

3.4 The total amount of financing for the operation is US$1,240,000 of which US$992,000 correspond to non-reimbursable resources from the Bank. The local counterpart in-kind contribution of US$248,000 will be provided by Carbon War Room (CWR) and the country beneficiaries. The Bank and CWR will jointly undertake activities (i)-(iii) under Component I for The Bahamas and Belize and collaborate in the development of Component III. CWR will also participate in the project steering committees, as their in kind contribution to the project. The beneficiary countries will provide their in kind contribution by at least: (i) assigning staff time to the project in the form of focal points for the program and designated representatives relevant for the steering committees; (ii) facilitating liaison with local/international partners; and (iii) collaborating with the project team in the undertaking of missions and implementation activities.

Table 2. Indicative Budget (US$)

Component	Description	IDB Funds	Counterpart	Total
Component 1. Assessment of mitigation options to support the transition to low carbon pathways	(i) Revision and update of existing GHG inventories	30,000	20,000	50,000
	(ii) Identification of mitigation options for selected sectors and undertake CBAs	20,000	20,000	40,000
	(iii) Revision of institutional and legal frameworks and recommendations; identify options for branding	30,000	10,000	40,000
	(iv) Implementation of pilot mitigation projects	270,000	45,000	315,000

Component 2. Assessment of adaptation options to support the transition to climate resilient pathway	(i) Undertake ECCS and/or ECAs for pilot islands	170,000	45,000	215,000
	(ii) Determination of best implementation schemes for climate resilient interventions	20,000	0	20,000
	(iii) Revision of institutional and legal frameworks and recommendations for scaling up interventions	35,000	0	35,000
	(iv) Implementation of adaptation pilots	237,000	66,000	303,000
Component 3. Marketing and Communications Plan	(i) Design of communication strategies and undertaking of associated workshops	40,000	42,000	82,000
	(ii) Development and implementation of action plans	40,000	0	40,000
Project Coordination	For the management of the project	30,000	0	30,000
Monitoring & Evaluation		30,000	0	30,000
	Sub-Total	952,000	248,000	1,200,000
Administrative Budget		40,000	0	40,000
	TOTAL	**992,000**	**248,000**	**1,240,000**

3.5 Technical and basic responsibility: INE/CCS will have technical and supervisory responsibility for the execution of the program. INE/CCS will cooperate with INE/RND, INE/WSA and INE/ENE on the implementation of the project. There will be coordination with the IDB Country Offices in The Bahamas (CBH), Trinidad and Tobago (CTT) and Belize (CBL) as it relates to basic administrative activities such as missions since the UDR remains in INE HQ. The main contacts in CBH, CTT and will be the assigned Operations Analysts and in CBL it will be the resident RND specialist.

3.6 Monitoring and evaluation: The work of the consultants and their compliance with the Terms of Reference (TORs) for this project will be monitored by INE/CCS. This project will be evaluated on the basis of deliverables as listed in the TORs, which will detail the contents expected in the reports.

3.7 Auditing, Financial management of the resources and reporting: Standard Bank procedures for Bank executed projects will be followed with respect to auditing, financial management of the resources and reporting.

IV. EXECUTING AGENCY AND EXECUTION STRUCTURE

4.1 Executing agency: This operation will be executed and supervised by the Bank through its Climate Change and Sustainability Division (INE/CCS) since no regional entity with legal capacity was identified and having this TC executed by the Bank will ensure sustainability of the project. Also the beneficiary countries have concurred with the program, it is a regional program that will require a high level of coordination and the activities proposed are consistent with the Bank's strategies in The Bahamas, Belize and Trinidad and Tobago[10]. INE/CCS will receive technical support from the Carbon War Room (CWR) in the design and implementation of the program, as it

[10] This is in accordance with the Annex 10 of the TC's Operational Guidelines for Technical Cooperation.

relates to the mitigation analysis and interventions in The Bahamas and Belize. Three Steering Committees (one per country)[11] will be set up to help in the guidance and implementation of the program and will be comprised of at least: (i) For Trinidad and Tobago –the Tobago House of Assembly and Ministry of Environment and Water Resources; (ii) For the Bahamas –BEST Commission and Ministry of Tourism; and (iii) For Belize –Ministry of Forestry, Fisheries and Sustainable Development and Ministry of Tourism, Culture and Civil Aviation (Belize). Carbon War Room (CWR) and INE/CCS (IDB) will be part of all three Steering Committees.

4.2 Executing structure: The consulting services will be carried out by a consulting firm or individual consultants depending on the nature of the work required. INE/CCS will be responsible for hiring the consulting services and monitoring of the TC. In the case of the Bahamas the project team will coordinate actions with the CHENACT phase II in order to avoid duplication and support collaboration between these projects. In the case of Belize the project team will coordinate actions with the Belize Tourism Master Plan in order to ensure consistency of Bank efforts.

4.3 The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with current Bank procurement policies and procedures.

V. MAJOR ISSUES:

5.1 The main risks for this operation are (i) difficulty among inter-agency collaboration as there are various partners involved. This will be mitigated by having the Bank as the overall oversight body of the project and by setting up Steering Committees to help guide implementation; and (ii) low interest/participation of stakeholders which could delay the implementation and threaten the achievement of the results under the program during the set execution period. This will be mitigated by undertaking various awareness campaigns and workshops to engage these actors, create ownership and ensure the fulfillment of the expected results of the program.

VI. EXCEPTIONS TO BANK POLICY

6.1 No exceptions to Bank's policies are foreseen.

VII. ENVIRONMENTAL AND SOCIAL STRATEGY

7.1 It is not anticipated that the activities to be financed in this TC will have negative direct social or environmental impacts. The project has been classified as category "C" per the Environment and Safeguards Compliance Policy (OP-703) (see the Safeguard Screening Report and the Safeguard Policy Filter).

VIII. REQUIRED ANNEXES:

- Annex I: Letters of Request - Bahamas, Belize, Trinidad and Tobago
- Annex II: Terms of Reference
- Annex III: Procurement Plan

[11] Terms of Reference for these Steering Committees can be found as a TC annex.

CARIBBEAN CLIMATE SMART ISLANDS PROGRAM

RG-T2543

CERTIFICATION

I hereby certify that this operation was approved for financing under the Sustainable Energy and Climate Change Initiative (SECCI-SCI) through a communication dated September 5, 2013 and signed by Gerhard Lair (ORP/GCM). Also, I certify that resources from said fund are available for up to **US$992,000** in order to finance the activities described and budgeted in this document. This certification reserves resources for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

"Original signed"	12/12/14
Sonia M. Rivera Chief Grants and Cofinancing Management Unit ORP/GCM	Date

APPROVAL

Approved:

"Original signed"	12/15/14
Nestor Roa, a.i. Manager Infrastructure and Environment Sector INE/INE	Date