

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Enhancing Resilience and Absorption of Technology in the Caribbean through Stakeholder Engagement and Financing Mobilization
▪ TC Number:	RG-T3423
▪ Team Leader/Members:	Kamau, Musheer Olatunji (CCB/CJA) Team Leader; Baxter, Sasha Alexis (CCB/CJA); Bethel, Natalie Ariel (CCB/CBH); Carrera Marquis, Daniela (CCB/CBH); Dohnert De Lascurain, Sylvia Eva (IFD/CTI); Estevez, Alexis (CCB/CCB); Greco, Maria Sofia (LEG/SGO); Jordan, N. Maria (CCB/CCB); Lee Bruce, Golda Kezia (CCB/CCB); Masson, Malaika Ebony Anietia (INE/ENE); Navarro, Juan Carlos (IFD/CTI); Riobo Patino, Jairo Alexander (INE/TSP); Seabra, Juliano (KIC/ICD); Scotland, Gary; Segree, Terry-Ann Sharlene
▪ Taxonomy:	Research and Dissemination
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	20 May 2019.
▪ Beneficiary:	The Bahamas, Barbados, Guyana, Jamaica, Suriname, Trinidad and Tobago
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC Strategic Development Program for Infrastructure(INF); OC Strategic Development Program for Institutions(INS)
▪ IDB Funding Requested:	US\$200,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	December 16, 2019
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	CCB-Caribbean Group
▪ Unit of Disbursement Responsibility:	CCB/CJA-Country Office Jamaica
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation

II. Objective and Justification

- 2.1 The Caribbean remains vulnerable to natural and man-made hazards. Along with the slow pace of the adoption of technology and innovation, the lack of regional policies on SMART growth, and the disparate approach to development between the private and public sectors, the region is not reaching its potential to break into accelerated growth. This TC intends to harness national and regional capacity of Caribbean-based entities joining it with world-class technology, financing schemes and innovation to fast-track resilience-building and catalyze innovative partnerships.
- 2.2 The objective of Enhancing Resilience and Absorption of Technology in the Caribbean through Stakeholder Engagement and Financing Mobilization is to support development through stakeholder engagement in the generation of potential business innovation paths

in the areas of Digital Transformation, SMART Tourism, and SMART Energy, with the required talent pool and mobilizing capital to support it. The specific objectives are: (i) build potential paths of business innovation and its financing through stakeholder engagement and partnerships amongst public and private sector entities; (ii) sensitize the public and private sectors on how to “unlock” funding to support their growth strategies around the adoption of smart technologies and climate resilience in the region; (iii) foster the generation of talent via innovative ways to accompany the required investments (talent disruption) and (iv) raise awareness around the climate smart interventions.

- 2.3 To accomplish this, it is imperative to develop (i) a detailed road map for potential paths for business innovation and the adoption and use of disruptive technology, (ii) the corresponding financing approaches and talent pool that support this innovation and resilience, (iii) and a compelling engagement and communications campaign to mobilize the relevant regional, international, public and private stakeholders.

2.4 **Digital Transformation:**

The Caribbean has embraced the 4th Industrial Revolution and is undergoing a digital transformation, however progress is slow as more than 40 percent of the Caribbean population still lack access to the internet, and the region underperforms in the digitization of public and government services¹. While many countries have attempted to bridge the digital gap, the existing policies and infrastructure in the region remain deficient to support the transformation. This remains a critical gap for small countries building resilience and achieving exponential growth. Globally, mobile technologies and services, generated 4.6 percent of GDP in 2018, GDP per capital increased by 0.5 percent because of the doubling of mobile data created by 3G connections, and 5G will account for an estimated 15 percent of global mobile connections by 2020 helping to close the connectivity gap². The Caribbean's ability to adapt and leverage technologies to solve the developmental problems of the region, including various climate resilient technologies will be critical in the coming years. After the recent devastating hurricanes in 2017 and 2019, the importance of having uninterrupted communication and continuous connectivity has become paramount to the recovery and survival of our small islands. While governments are slowly implementing regulation to govern digital transactions and processes, the private sector remains behind as the institutional and infrastructure support is not available. Specifically, the private sector is left at an uncompetitive disadvantage with infrastructure and institutional policies that are not aligned with the existing technology, e.g. the ability to benefit from digital payments and mobile money on a large scale³. Entrepreneurs are operating in a low-tech high cost environment, which is constraining private sector growth potential and economic prosperity.

2.5 **SMART Tourism:**

In the aftermath of a massive storm, the reconstruction costs, access to reliable energy and basic connectivity services are all vital to restoring an economy. This in turn has a negative impact on tourists⁴ arrivals. Tourists arrivals to the Caribbean fell 2.3 percent in 2018 following hurricane Irma and Maria, even as global growth in international trips increased

¹ Sayed and Habalian, World Bank 2019. Digitally transforming the Eastern Caribbean

² GSMA Intelligence. The Mobile Economy 2019

³ Bitt 2017. Digital Currency- Caribbean Competitive Landscape

⁴ Caribbean Tourism Performance Report 2018

by 5.6 percent¹. Recent climate activities have exposed the vulnerability of Caribbean islands to external shocks to its tourism industry. The lack of smart solutions to support digital transactions, the requisite infrastructure, and innovation in the sector have exposed weaknesses in the tourism product's ability to not only scale globally but also to respond adequately in the face of a new climate reality. Further there is limited capacity in the industry to adapt its product to the changing global landscape whereby it can access non-traditional markets⁵. This is primarily due to limited options for credit financing, lack of data driven analysis of the tourism market and the lack of a smart tourism policy framework that considers private sector vulnerabilities and needs in the face of an increasingly volatile climate. Small and medium sized tourism-based business that are driving innovation and changing the way the product is offered in the Caribbean face challenges with access to digital infrastructure, funding, technological solutions and access to global markets. In addition, innovative start-ups face challenges to expand beyond their niche market and attract a larger target market, or to connect with transformative partners to scale their product.

2.6 **SMART Energy:**

Energy is one of the most important sectors following a natural disaster. Climate change shocks like the recent hurricanes that have devastated the Caribbean, and energy security is threatened. Adding to the climate discussion is the emission of greenhouse gases by the transport sector, and the need for the Caribbean to reduce its dependence on fossil fuels. Energy efficiency (EE) and renewable energy (RE) are especially relevant to the Caribbean but the region remains highly dependent on fossil imports for its energy needs⁶. There is a need to reduce the dependence and growing demand for fossil fuels in the transport sector. Fossil fuel imports not only contribute to the climate crisis but also threatens the economic well-being of these small countries, with large import bills distorting the balance of payments. A dynamic electric mobility ecosystem provides an answer to replacing fuel combustion vehicles, with clean renewable energy fueled transportation and help fight climate change⁷. The Caribbean private sector has cited energy and electricity as one of the biggest obstacles to growth⁸. Investing in an electric mobility ecosystem that supports private sector development will directly contribute to economic growth and allow the Caribbean to diversify its energy matrix and achieve its renewable energy targets.

2.7 **Strategic Alignment:**

The TC is consistent with the Update to the Institutional Strategy 2010-2020 (AB-3008) and is aligned with the IADB Country Strategies for all the six CCB countries. The IADB support the development agenda with a focus on the key strategic area of increasing private sector productivity and growth, and the Country Strategies note that private firms have identified access and cost of finance as a binding constraint to growth. Furthermore, the cross-cutting areas of crime, climate resilience and gender, address challenges and offer synergies with the strategic areas. The IDB aims to help secure the economic future of the region by

⁵ The rapid growth in the Caribbean's main competitor, has partly originated from its connectivity to multiple travel routes and diversified customer base, attracting customers from countries like China, Australia, New Zealand, North America and Japan, while the Caribbean's main customers remains North American and European tourists (South Pacific Tourism Organisation 2017)

⁶ ECLAC Sub-regional Headquarters for the Caribbean: Sustainable Energy for All in the Caribbean

⁷ Electric Vehicles have 43 percent lower emissions than combustion engines and have lower lifetime climate impacts- Working Paper Sustainability and Innovation No. S 02/2019, Martin Wietschel, Matthias Kuhnback, David Rudiger

⁸ Ruprah and Sierra, IDB 2017. Engine of Growth? The Caribbean Private Sector Needs More than an Oil Change

supporting Governments in their country development strategies. However, climate-related shocks worsen economic performance and outcomes. As such the Bank is looking to support projects that will directly improve the energy and tourism sectors as well as other digital transformation projects that supports climate resilience.

- 2.8 The TC is aligned with the Strategic Programs for Institutions and Infrastructure financed with Ordinary Capital (GN-2819-1) and will promote the knowledge creation and dissemination of analytical work to generate innovative solutions to complex infrastructural challenges in the region and aims to leverage the Bank's convening power to bring together public and private sector agencies to develop new, innovative tools and to systemize and transmit lessons learned. Additionally, the TC aligns with the OC-SDP for Institutions by contributing to public policies and institutions that are more effective, efficient, open and citizen-centered; improving service delivery to citizens; and reducing constraints for business growth and productivity.

III. Description of Activities and Outputs

- 3.1 **Component 1: Awareness, Dialogue and Framing the Discussion (US\$160,000):** The objective of this component is to (i) engage with key stakeholders participants to identify potential paths of innovation in the Region in the identified themes, and assess key points of intervention by the public sector to unblock the innovative solutions, the required new sources of talent and their required financing structures; and (ii) in collaboration with key external stakeholders, conduct pre-conference and follow-up workshops post-conference to build on the identified 2-3 potential paths for business innovation. The objective will encompass designing and hosting a two (2) day conference which seeks to promote dialogue on the generation of potential paths to business innovation in the region, talent pool and financing structures, and the infrastructure backbone that is needed to develop Digital Transformation, SMART Tourism, Energy and Climate Resiliency.
- 3.2 **Component 2: Prepare a Caribbean roadmap for the adoption of potential paths for business and technology innovation and Dissemination (\$40,000).** The objective of this component is to build on the findings of Component 1 and provide a road map (Road-mapping) that generates data and identify best practices on how large international successful firms were able to use innovative techniques and technology to grow and generate potential paths to business innovation in the Region. Smart technologies have become ubiquitous and many firms have taken advantage of available platforms to establish and expand. The analysis will focus on the three main themes identified above, and how international businesses were able to either innovate or to use existing technology to establish successful entities. This component will use data generated at the international and local firm level.

IV. Budget

Activity/Component	INF Funding	INS Funding	Total Funding
Component 1: Awareness, Dialogue and Framing the Discussion	\$ 80,000.00	\$ 80,000.00	\$ 160,000.00
Component 2: Prepare a Caribbean roadmap for the adoption of potential paths for business and technology innovation and Dissemination	\$ 20,000.00	\$ 20,000.00	\$ 40,000.00
Total	\$100,000	\$100,000	\$200,000

V. Executing Agency and Execution Structure

- 5.1 Given the regional nature of this TC that requires multi-country coordination and regional dialogue experience, the coordination and execution of this technical cooperation will be carried out by the Bank through the CCB department and the UDR will be CCB/CBH. The IDB will conduct the procurement of consulting services required for TC implementation, according to the Bank's policies and procedures.
- 5.2 The Caribbean department has extensive institutional experience in regional dialogue and technical knowledge specifically on these themes, given the department's strategy. The coordination team within the IDB will include the private sector and sector experts, including IDB Lab, IDB-Invest and Compete Caribbean. The team has extensive experience working with regional organizations and private sector entities that have the knowledge, network and capacity to execute this TC. The Bank will host the conference and will coordinate the pre and post workshop components, stakeholder engagement and dissemination materials, etc. Finally, progress reporting will follow standard GCM requirements.
- 5.3 All procurement of consulting and non-consulting services will be in accordance with the policies and procedures for Bank-executed operations (GN-2303-2, GN-2765-1 and AM-650). There is one single source selection to be made based on GN-2765-1. The firm, EEC International which is to prepare the Roadmap, will be selected following GN-2765-1 section 4 paragraph 3 (a) based on previous and existing work being conducted with the Bank in firm level surveys, PROTEqIN and IFPG. Their knowledge of the key players in the private sector, access to a proprietary data base of innovative entrepreneurs, years of global experience in statistics, economics and innovation, and an existing working knowledge of the Bank will be key in developing the roadmap for business innovation in the Caribbean.

VI. Project Risks and Issues

- 6.1 The success of the TC will depend on an adequate level of participation of the key stakeholders (both from the Caribbean and selected international "potential role models")

in the activities of the TC. This risk will be mitigated by engaging early on with key participants (government officials; private sector; experts, etc.) to maximize the participation of the key stakeholders; (ii) extensive dissemination and promotion during all stages of project implementation through traditional communication channels as well as innovative strategies of communication. The sensitization of stakeholder engagement will be the thrust of the pre-sensitization strategy with the necessary Post Conference follow up.

VII. Environmental and Social Classification

- 7.1 There are no environmental or social risks associated with the activities outlined in this TC, therefore its environmental classification is "C". See [EZSHARE-1815052714-5](#) and [EZSHARE-1815052714-3](#).

Required Annexes:

[Results Matrix_73480.pdf](#)

[Terms of Reference_39720.pdf](#)

[Procurement Plan_7265.pdf](#)