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MULTILATERAL INVESTMENT FUND

TRINIDAD AND TOBAGO

SHAPING THE FUTURE OF INNOVATION

(TT-T1094)

DONORS MEMORANDUM

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PROJECT SUMMARY
TRINIDAD AND TOBAGO
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Trinidad and Tobago (T&T) is, and has traditionally been, heavily reliant on the exploitation of oil and gas reserves to fuel economic performance. Within the past five years, the fall in global energy prices and the contraction of the country's energy reserves has resulted in an economic downturn. Current research using firm level data indicates that T&T's private sector demonstrates relatively low levels of innovation, and the country is experiencing contraction in non-energy exports,¹ a disturbing trend in the context of rapid acceleration of the 4th Industrial Revolution and its impact on the competitiveness of enterprises, sectors, and countries across the globe. To effect a change in the economic fortunes of T&T, shifting away from reliance on energy commodities requires an intervention to strengthen innovation in the country's non-energy sector. In this context, IDB Lab in partnership with the European Union (EU) Delegation in T&T has developed a project to support innovation-based growth and development of Small and Medium Enterprises (SMEs) in the country's non-energy sector.

The project seeks to support a more diversified and innovation driven economy. The specific objective of the project is to catalyze innovation activity, as a key driver of business led economic growth and jobs. The intervention is structured to include three key inter related components that will be implemented concurrently: (i) an innovation challenge facility that will award funding and technical support on a competitive basis to SMEs/other organizations operating in non-extractive industries; (ii) a pilot program to demonstrate the value of closer applied collaboration between universities and firms seeking to innovate; and (iii) building coordination and capacity of the local innovation ecosystem. The proposed solution is innovative in the context of T&T in that (i) it presents a multi-faceted approach to catalyze business driven innovation activity and strengthening the innovation ecosystem, (ii) it demonstrates the role of IDB Lab as a technical and knowledge partner, (iii) facilitates mobilization of significant resources in co-financing from the European Union (EU), and (iv) develops a systematic and sustainable intervention to jump start and scale innovation.

At the impact level, the project is targeting a positive movement in T&T's scores and ranking in the Global Innovation Index (GII), and in the Innovation Capability pillar of the Global Competitiveness Index (GCI). Key targeted outcomes include innovation support to at least 1,500 SMEs and innovators, provision of innovation funding to at least 75 organizations, with at least 10,000 persons or 2,000 households benefitting from innovations that are centered on inclusion of more vulnerable/low income groups within the national population. In addition, at least 35 firms will host internships in applied research and development (R&D) for a minimum of 50 graduate students of national universities. The project will also pilot a collaborative model to build a more efficient and impactful national innovation ecosystem, which is a critical factor in building sustainability.

¹ Jeetendra Khadan, "Are Oil and Gas Smothering the Private Sector in Trinidad and Tobago", IDB 2016.

The project is a direct fit with the objectives of IDB Lab in supporting innovation and innovation ecosystems and contributes to IDB Lab's programming commitments for Small and Island Economies. The intervention will provide the IDB Group with an excellent window into T&T's innovation and entrepreneurial ecosystem, helping the IDB Group in the identification of key players, trends and needs, which in turn, can inform and support pipeline development. The project design builds on previous research and analytical work on innovation undertaken by the IDB Group's Competitiveness Technology and Innovation (CTI)² division in T&T, and is also directly aligned with the IDB's Country Strategy with Trinidad and Tobago 2016-2020, which defines the promotion of private sector development as one of three overarching strategic priorities.

² In 2015-2016, the CTI division conducted research and analytical work on innovation in T&T in developing loan operation TT-L1043. The results of this research have directly informed design of this IDB Lab operation.

ANNEXES

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Proposed resolution

**AVAILABLE IN THE TECHNICAL DOCUMENTS SECTION OF IDB LAB
PROJECT INFORMATION SYSTEM**

Annex IV	Detailed Budget
Annex V	Diagnostic of Needs of the Executing Agency (DNA) [includes Integrity Due Diligence Analysis]
Annex VI	Reporting Requirements and Compliance with Milestones and Fiduciary Arrangements
Annex VII	Procurement Plan
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Annex IX	Detailed budget with draft estimates for Annual EU drawdowns

ACRONYMS AND ABBREVIATIONS

CARIRI	Caribbean Industrial Research Institute
CTI	Competitiveness Technology and Innovation
DNA	Diagnostic of Executing Agency Needs
DTI	Danish Technological Institute
EA	Executing Agency
EDF	European Development Fund
EU	European Union
EUD	European Union Delegation
FAA	Framework Administrative Agreement
GCI	Global Competitiveness Index
GII	Global Innovation Index
IAS	Innovation Advisory Support
ICT	Information and Communications Technology
IDB Invest	Inter-American Investment Corporation
IDB Lab	Innovation Lab of the IDB Group (formerly Multilateral Investment Fund (MIF))
IDB/IDB Group	Inter-American Development Bank/Group
iGAP	Innovation Gap Analysis
KE	Knowledge Economy
LAC	Latin America and the Caribbean
MPD	Ministry of Planning and Development
OJ	Office Journal
PSR	Project Status Report
R&D	Research and Development
SMEs	Small and Medium Enterprises
T&T	Trinidad and Tobago
UTT	University of Trinidad and Tobago
UWI	University of the West Indies
VC	Venture Capital
WAITRO	World Association of Industrial and Technology Research Organizations

**TRINIDAD AND TOBAGO
SHAPING THE FUTURE OF INNOVATION
(TT-T1094)**

PROJECT INFORMATION

Country and geographic location:	Trinidad and Tobago		
Executing agency:	The Caribbean Industrial Research Institute (CARIRI)		
Focus area:	Knowledge Economy		
Coordination with other donors/Bank operations:	<p>The project is being co-financed by the European Union (11th EDF: Support for a Competitive and Innovative Economy in Trinidad and Tobago) TT-G1002</p> <p>TT-1073 Bridging the Gap to Commercial Application of Innovation</p>		
Project beneficiaries:	<p>Direct project beneficiaries will include 1,500 enterprises/organizations receiving technical support for development of an innovation, at least 75 SMEs/other organizations that receive innovation funding, and at least 50 students supporting R&D/Innovation projects in 35 host firms. Indirect project beneficiaries include last mile and lower income individuals that benefit from innovations developed and funded under “Innovation for Inclusion” calls for proposals. The number of last mile beneficiaries to benefit under the program is conservatively estimated at 10,000 persons/2,000 households.</p>		
Financing:	Technical cooperation:	US\$ 580,000	6%
	Equity:		
	Loan:		
	Other (explain):		
	Total IDB Lab funding:	US\$ 580,000	
	Counterpart	US\$ 638,800	6%
	Co-financing from the European Union: TT-G1002	US\$ 8,792,000 ³	88%
	Estimated Fee from the European Union 5.8% ⁴	US\$ 508,718	

³ Co-Financing from the European Union is 7,850,000 Euros. The exchange rate used for purposes of the Donors Memorandum is 1 Euro = US\$1.12.

	Total estimated European Union Funding⁵	US\$ 9,300,718	
	Total Project Budget	US\$ 10,519,518	
Execution and disbursement period:	Execution period: 48 months Disbursement period ⁶ : 54 months		
Special contractual conditions:	Special conditions precedent to first or subsequent disbursement will be: <ul style="list-style-type: none"> i. IDB Lab approval of the Terms of Reference for a Project Steering Committee and formal inauguration of the Project Steering Committee. ii. IDB Lab acceptance of Terms of Reference for procurement of a firm to manage the Innovation Challenge Facility. iii. IDB Lab acceptance of the Regulations for the Innovation Challenge Facility. 		
Exceptions to IDB Policy	Partial exceptions to IDB's current Policy for the Procurement of Goods and Works financed by the IDB (GN 2349 9) and Policy for Selecting Consultants financed by the IDB (GN-2350-9) are requested for approval by the IDB Board of Executive Directors, so that a procurement selection method not included in said policy may apply, and to recognize the EU's restrictive measures.		
Environmental and social impact review:	This operation was screened and classified as required by the IDB's safeguard policy (OP-703) on May 16, 2019. Given the limited impacts and risks, the proposed category for the project is C.		

⁴ Project Fee: Subject to negotiation with the European Union in the context of a Contribution Delegation Agreement, up to 5.8 % of the EU project co-financing amount (less allocations for contingencies) may be reserved as a fee to cover expenses of the IDB related to EU requirements and project administration. Such fee may be reserved from the project budget (reducing project funding), or may be added to the EU portion of the project budget; if the EU provides the maximum amount be added to the EU co-financing. , the total EU financing amount translated to USD would be approximately US\$8,792,000 + \$508,718 maximum fee = US\$9,300,718 in EU support. The fee estimate is calculated as 454,213 euros converted at the exchange rate used in the project budget (1 Euro = US \$1.12). Management will report the fee amount in the context of project reporting.

⁵ Includes the Investment Grant (TT-G1002) in the sum of USD equivalent of 7,850,000 euros and an estimated fee to the IDB calculated at 5.8% of total European Union co-financing less the amount allocated to contingencies

⁶ The implementation period for the project as specified by the European Union (EU) will be 48 months. As per the EU document entitled "Practical Guidelines" commonly referred to as PRAG, the implementation period is the period from the signature, or alternative date if specified in the special conditions (of the contract), until the provisional acceptance of the works (W) or until the provisional acceptance for the last lot has been issued (Supplies) or until all tasks have been carried out (Services) or until all project activities have been carried out (Grants). The EU implementation period is therefore equivalent to the IDB's project execution period of 48 months.

Unit responsible for disbursement:	IDB Trinidad and Tobago Country Office (CCB/CTT)
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I. THE PROBLEM

A. Problem description

- 1.1 Trinidad and Tobago (T&T) currently is and has traditionally been heavily reliant on the exploitation of oil and gas reserves to fuel economic performance. Within the past five years, the fall in global energy prices and the contraction of the country's oil and gas production and reserves has proven challenging for this energy based economy. In 2018, 86% of total exports continued to be concentrated in the energy sector, indicating that diversification and internationalization of the non-energy sector is lagging with non-energy exports accounting for only 14% of total export earnings.⁷ During periods of buoyant energy exports, the phenomenon of Dutch Disease⁸ has contributed to the crowding out of growth in the non-energy sector and has negatively affected private sector innovation. Current research using firm level data indicates that Trinidad and Tobago's private sector demonstrates relatively low levels of innovation and is experiencing contraction in non-energy exports.⁹ Globalization and increased competition from extra regional imports create further challenges in domestic and nearby regional markets on which T&T firms rely.
- 1.2 For firms and countries, innovation is at the center of sustainable competitive advantage, increased productivity, social and economic progress.¹⁰ To effect a change in the social and economic fortunes of T&T, shifting away from reliance on energy commodities requires a large-scale intervention to strengthen innovation in the country's non-energy sector. The World Economic Forum's Global Competitiveness Report (GCI)¹¹ has classified T&T as being in transition from an efficiency-driven to an innovation-driven economy, but T&T's actual performance, in both the GCI and Global Innovation Index (GII)¹² rankings for innovation is low and comparable to that of factor-driven economies/primary commodity producers. In the 2019 Global Innovation Index, Trinidad and Tobago was ranked as 91 out of 129 participating countries and is reported as underperforming in innovation relative to its status as a high-income country. Key issues contributing to low levels of innovation in T&T include: (i) the nascent and uncoordinated national innovation ecosystem and (ii) low levels of investment or financing for innovation from the public or private sector.¹³

⁷ Marla Dukharan, "Q&A Why it's harder to get FX in T&T than anywhere else in the Caribbean", September 5, 2019.

⁸ Dutch disease is the apparent causal relationship between the increase in the economic development of a specific sector (for example natural resources) and a decline in other sectors (like the manufacturing sector or agriculture). The logic is that as revenues/foreign inflows increase in the high growth sector, the receiving nation's currency appreciates which can result in the nation's other exports becoming more expensive for other countries to buy, and imports becoming cheaper, making those sectors less competitive.

⁹ Jeetendra Khadan, "Are Oil and Gas Smothering the Private Sector in Trinidad and Tobago", IDB 2016.

¹⁰ Juan Carlos Navarro, Jose Miguel Benavente and Gustavo Crespi, The New Imperative of Innovation, IDB 2016.

¹¹ Global Competitiveness Report 2018.

¹² Global Innovation Index 2018 and Global Innovation Index 2019.

¹³ Guinet (2014) "Assessment of the National Innovation Ecosystem of Trinidad and Tobago".

- 1.3 In T&T, approximately 0.05% of GDP is spent on research and development (R&D), compared with an average of 1.2% for other small commodity dependent economies,¹⁴ and at the firm level, R&D averages 0.95% of sales revenue compared with the Caribbean average of 4.7%.¹⁵ Several recent studies have identified a number of additional impediments that are constraining innovation, these include: (i) insufficient capacity for R&D, specifically applied Science and Technology, which has not expanded outside academia and into the business sector, (ii) major sectors of economic activity in T&T have demonstrated low levels of product innovation with greater focus on process innovation, where investments in machinery, equipment or software are targeted for improvements in efficiency rather than growth,¹⁶ (iii) an underdeveloped system of financial services for innovative activities, and (iv) lack of an integrated and supportive innovation ecosystem.
- 1.4 Economies that consistently rank highly in competitiveness indices are those that are able to develop, attract and retain talent, generate cutting-edge scientific output, conduct market-driven R&D for the creation of new technologies, and consistently introduce new higher value-added products and services into the global market¹⁷. It is essential that T&T develop such practices, as innovation is an imperative for growth of the country's non-energy sector.
- 1.5 In terms of direct project beneficiaries, the project will seek to provide technical advisory support to at least 1,500 SMEs/other organizations in developing an innovation proposal, and will support at least 75 SMEs and Civil Society/Other Organizations that are registered and operating in T&T, via the award of innovation funding for the commercial delivery and scaling of an innovation. In addition, at least 50 graduate students educated in T&T will be placed in 35 or more local firms/organizations to work on a specific research and development or innovation projects. The project will include at least two calls for "inclusive innovation" solutions over the life of the project. Innovation solutions financed via these calls are expected to deliver value to at least 10,000 last mile/lower income citizens or 2,000 households. A gender and social inclusion strategy will be implemented to ensure that information on, and support for qualified organizations seeking access to innovation financing, as well as participating graduate students, includes specific measures to encourage equitable participation and opportunities for all beneficiaries in terms of gender, urban/rural location, organization size and socio economic bracket (for graduate students).

II. THE INNOVATION PROPOSAL

A. Project description

- 2.1 At the impact level, the project seeks to support a more diversified and innovation driven economy in T&T. The specific objective of the project is to catalyze an

¹⁴ Jeetendra Khadan, "Are Oil and Gas Smothering the Private Sector in Trinidad and Tobago" IDB 2016.

¹⁵ Jeetendra Khadan, "Are Oil and Gas Smothering the Private Sector in Trinidad and Tobago" IDB 2016.

¹⁶ The Arthur Lok Jack Graduate School of Business (2014) "Assessment of the Innovation System of Trinidad and Tobago".

¹⁷ Examples include Singapore and Japan, ranked in the top 5 for the 2018 Global Competitiveness Index

increase in innovation activity in order to drive business led **economic growth and jobs**, via the development of new markets, products, services and business models, increased efficiency and competitiveness. The intervention will include three major components that will be implemented concurrently: (i) Provision of grant financing and technical support to organizations seeking to innovate in the development of goods, services, business models and export market access; (ii) Closer applied collaboration between tertiary institutions and firms in developing innovative solutions for key market, operational and organizational challenges, and (iii) Increased coordination of key stakeholder organizations to strengthen the local innovation ecosystem, both during and beyond the duration of the project intervention.

- 2.2 **Innovation.** The proposed solution is innovative in the context of T&T in that it presents a multi-faceted approach to address the strengthening of the ecosystem for innovation, in that it includes financing, capacity building, closer linkages between academia and the productive sectors, and a model to coordinate key stakeholder organizations in the innovation ecosystem. In addition, the project is innovative in its resource mobilization strategy as the EU Delegation in T&T, recognizing the IDB Lab's experience in design and project implementation support, entered into a partnership to leverage these skills and ensure strategic, targeted, and well managed delivery of its resources to key beneficiaries, in order to achieve maximum impact. In this project, **IDB Lab has attracted significant resource mobilization for innovation, based on the recognition of its technical value add/additionality by the co-financing partner, the European Union.**
- 2.3 **Component I: The Innovation Challenge Facility US\$8,332,200 (IDB Lab US\$174,900, Counterpart US\$35,300, EU Co-financing US\$8,122,000).** The first component will establish a **competitive and demand-driven innovation challenge facility** targeting organizations in T&T that are seeking financing for innovation in products, services, channels, new markets and business models etc. Demand driven innovation funds that allocate resources to private firms on a competitive basis have been found to be an effective mechanism for driving innovation in the Latin America and Caribbean (LAC) region.¹⁸
- 2.4 **The innovation challenge facility will be a competitive, demand driven facility offering financing for innovation, primarily targeting Small and Medium Enterprises (SMEs).** CARIRI will be supported in day to day management of the Innovation Challenge Facility by a local private sector management firm selected based on a competitive bidding process.
- 2.5 To ensure transparency, equity, inclusion and maximum impact, the Innovation Challenge Facility will be implemented in accordance with clearly defined operating regulations, based on and adapted from global models, as well as relevant regional and local studies and lessons learned. A structured multi-channel outreach program will be designed and rolled out to promote the facility and

¹⁸ Juan Carlos Navarro, Jose Miguel Benavente and Gustavo Crespi, "The New Imperative of Innovation", IDB 2016.

encourage participation, while also ensuring that gender, geographic and other relevant inclusion concerns, are addressed in all outreach and promotion efforts.

- 2.6 The innovation challenge will be open to all sectors, with the exception of primary Oil and Gas extraction and production. Priority areas will include Technologies for Inclusion, ICT, Renewable Energy, Energy Efficiency, Waste Reduction, High Value Agribusiness, and Manufacturing. Additionally, it is expected that technology will be a key feature and platform for innovation proposals developed by applicants.
- 2.7 The innovation challenge facility will launch a series of calls for applications in T&T until the funding for innovation is fully allocated. To address the issue of applying innovation for inclusion and improving lives of poor and vulnerable segments of the national population, at least two calls for applications will be launched for “Inclusive Innovation Solutions” that respond to challenges faced on a day to day basis by lower income and excluded groups within T&T. Such solutions could include for example, innovations in sustainable and affordable delivery of utilities, health, housing, transport, education, or access to credit for lower income segments of the population or inclusion of special needs/vulnerable groups. In order to ensure that inclusive innovations are encouraged and prioritized the development of the specific criteria and operating processes for the implementation of the Innovation Challenge Facility will be developed via a multi stakeholder engagement workshop.
- 2.8 A two-stage process for applications to the innovation challenge is envisaged. The first is designed to crowd in the largest number of viable ideas using broad based outreach and a simple application model as well as the opportunity to participate in small workshops and online forums to support applicants’ preparation of a project pitch in this initial stage. Applicants are expected to include: (i) small organizations/innovators/entrepreneurs (ii) medium sized organizations with an established commercial track record and (iii) other organizations/clusters innovating delivery of goods and services, including models for delivery of goods and services that may traditionally be provided by the state. **For the first category of applicants (small organizations/innovators/entrepreneurs), current research and lessons of experience indicate that additional support and attention is required to curate and develop ideas to the point that they are evaluable and fundable.**¹⁹
- 2.9 Individuals and small organizations have the ability to dream, but when they are operating in an underdeveloped innovation ecosystem, they often lack access to technical/advisory support and coaching required to convert ideas into viable investments for commercialization. To address this gap, small organizations and individual applicants to the innovation challenge facility will be enrolled in an existing Innovation Advisory Services (IAS) program²⁰ which is also financed by IDB Lab, and is being already implemented by the Executing Agency CARIRI (TT-T1073 Bridging the Gap to Commercial Application of Innovation). This program provides technical advice and support to participants in the development

¹⁹ NESTA, “Funding Innovation: A Practice Guide, Making Money Work Harder”, November 2018.

²⁰ TT-T1073, “Bridging the Gap to Commercial Application of Innovations”, approved December 2017.

- of innovation value propositions, including scanning, market analysis, technology development and sourcing, rapid prototyping and the definition of a business model to facilitate investment for commercial application. Costs of participation are already covered by CARIRI under the IDB Lab financed operation TT-T1073, and on completion of this program, smaller organizations and individuals applying to the innovation challenge facility will be able to present a more evaluable financing proposal. In addition, other applicants that demonstrate a strong idea, but whose initial proposal submitted for the first round of evaluation requires further development, can also be enrolled in CARIRI's IAS program, and may submit again in a subsequent call.
- 2.10 Applicants shortlisted in the initial round to proceed to the second stage of evaluation will develop a more detailed funding proposal, using a business model canvas, anchored by a strong value proposition and articulating a clear theory of change. **Innovation proposals that target export earnings, job creation, deliver social and environmental benefits and those that specifically target and deliver benefits/solutions relevant to last mile, excluded and vulnerable populations will be prioritized.** Applicants selected to proceed to the second stage will be supported by a team of specialists, working one on one with applicants in bootcamps as well as virtual settings, to provide technical support and advice for their funding applications. Larger organizations applying for financing via this second stage of the innovation challenge, may be matched during the application stage and after award of financing (if successful), with local and regional accelerator programs, angel and early stage investors as well as Venture Capital (VC) funds. These entities²¹ (accelerators, company builders, VC funds) may be engaged as part of the design and delivery of the innovation challenge facility, and can potentially assist in co-financing, and in translating the implementation of an applicant's innovation proposal to concrete commercial/social and environmental gains. **It is noted in current research, that lack of this type of downstream support is a key mistake made in the design of innovation financing models and can compromise successful and sustainable outcomes.**²²
- 2.11 Submissions in both the first and second stages will be evaluated by an **independent expert advisory panel** selected from leaders and innovators in the private sector, academia and science and technology organizations, primarily within the Caribbean and greater LAC region. IDB Lab in its role as a connector will assist the Executing Agency to identify organizations that can nominate potential candidates. In addition, CARIRI as the Executing Agency and a founding member of the World Association of Industry and Technology Research Organizations (WAITRO) will also draw on its network to identify potential candidates.
- 2.12 **The day to day management of the innovation challenge facility component will be managed by a specialized private sector firm, selected on a competitive basis.** This management firm will be responsible for promoting the facility, organization of calls for proposals every six months, supporting the

²¹ These organizations can be identified with assistance from IDB Lab team, leveraging project partnerships and institutional partnerships formed over the past 2 years.

²² NESTA, "Funding Innovation: A Practice Guide, Making Money Work Harder", November 2018.

independent expert advisory panel in initial screening and shortlisting of stage one applicants supporting applicants in development of detailed innovation financing proposals, linking applicants to relevant VC funds and accelerator/company builders, development of legal agreements with applicants selected for financing, as well as monitoring, provision of ongoing technical and advisory support, and reporting on beneficiaries' performance in the post approval phase.

- 2.13 Financing for innovation will be provided via non-reimbursable grants that are estimated to average US\$100,000 per award but can be up to a maximum of US\$500,000 for exceptional and inclusive innovations that target last mile, poor and vulnerable populations in particular. Innovation financing will be subject to execution of a legal agreement signed by the beneficiary organization and CARIRI which will outline key terms and conditions including: co-financing from awardees, a procurement plan, compliance procedures to ensure adherence to the EU requirements including EU restrictive measures,²³ triggers for disbursements, role of the innovation challenge management firm during implementation of the innovation, participation in events to showcase the project, exit and mediation procedures and reporting requirements. Funds disbursed to awardees will be made in accordance with clear disbursement triggers to be achieved by the awardee firms. A level of co-financing at parameters set for applicant characteristics/size in the operating regulations, as well as a viable demonstration of growth/profit potential, will be required of all successful applicants. The innovation challenge facility management firm will track progress of organizations selected for financing and will prepare required disbursement requests with supporting documents including, but not limited to, achievement of disbursement triggers and compliance with the defined procurement plan, IDB Procurement policies and the EU restrictive measures. Disbursement requests prepared by innovation challenge management firm will be submitted to CARIRI, as the project Executing Agency for CARIRI'S review, validation and processing.
- 2.14 **Component II: Building Industry and Academic Linkages US\$598,500 (IDB Lab US\$105,000, Counterpart US\$237,500 EU Co-financing US\$255,000)**
The second component of the proposed solution will to seek to forge closer ties between academia and private sector firms, by piloting a model for structured collaboration of tertiary institutions with local firms in advancing applied research and development (R&D) for innovation. Research findings by the OECD from 2013 note that SMEs are frequently disadvantaged relative to larger firms in accessing human resources in science and technology,²⁴ while the LAC region's universities produce researchers and skills that are largely not used by industry.²⁵ The

²³ Restrictive measures include ensuring that the EU resources are not provided to suppliers of goods and services or to innovation challenge beneficiaries that are included in the EU sanctions list www.sanctionsmap.eu. The sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the EU's Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website, it is the OJ version that prevails.

²⁴ Juan Carlos Navarro, Jose Miguel Benavente and Gustavo Crespi, "The New Imperative of Innovation", IDB 2016.

²⁵ Juan Carlos Navarro, Jose Miguel Benavente and Gustavo Crespi, "The New Imperative of Innovation", IDB 2016.

- government of T&T has invested heavily in expanding access to tertiary education by providing financial support for undergraduate and graduate studies. However, the level of applied, commercially oriented R&D work between academic institutions and local firms remains low. Under this component, a program will be designed and piloted to link tertiary graduate student interns (at the masters or doctoral level), with local firms seeking to solve specific challenges and conduct applied research for innovation. This program will be piloted with participation by the University of Trinidad and Tobago (UTT) which offers a range of applied programs in engineering, innovation, manufacturing and technology, and potentially the local campus of the University of the West Indies (UWI). Organizations wishing to secure support will be required to define and submit a specific challenge/scope of work that will be required from the student interns, while technical backstopping and quality assurance will be provided by university faculty in consultation with the senior management of organizations in which students are placed.
- 2.15 Research and development and innovation projects proposed by firms seeking to attract graduate talent via the program, will be assessed by the Executing Agency CARIRI using their Innovation Gap Analysis (iGAP) methodology to ensure a clear definition of the core problem identified. iGAP is a methodology adapted for T&T by CARIRI with support from the Danish Technological Institute (DTI), to assess opportunities for innovation in local firms. DTI has trained 10 iGap agents specialized in a range of disciplines from CARIRI's technical staff and will provide backstopping for the firm level assessments.²⁶ This exercise will assist applicant firms in structuring the requested internship. Direct costs of the iGAP assessment will be borne by participating firms.
- 2.16 Firm opportunities for graduate placement, as well as interested graduate student intern profiles will be posted on a platform managed by CARIRI to allow both parties to assess best fit, and will be followed by a two-day mixer/matching event to allow participating firms, students and academic faculty to meet in person prior to finalizing placements. To ensure success, the pilot will start by engaging faculties of UTT that are interested and open to participation, building on some small-scale initiatives in the departments of Manufacturing and Design Engineering, and Technology, which currently place students in firms for problem solving. Clear requirements of receiving organizations' management, student interns and their supervising faculty members, as well as ownership of intellectual property will be defined to structure the program for success and will be included in a Memorandum of Understanding signed by participating firms, students and supervising faculty members. The internships will average six months and students will receive an internship fee during this period which will be partially financed by applicant firms, via a minimum contribution of 50% of internship costs,²⁷ with the balance financed with project resources. Payments will be disbursed by CARIRI to

²⁶ Since 2017 CARIRI has assessed over 70 local firms to assist in defining and developing innovation projects.

²⁷ The EU Action Document approved for provision of co-financing in respect of this project "Support for a Competitive and Innovative Economy in Trinidad and Tobago" includes specific reference to payments for student interns as an eligible expense duly considered and approved by the EU

firms receiving graduate students to finance partial costs of the internships. Participating students will be expected to produce a paper or study on their internship work assignment, in collaboration with the firm in which they are placed.

- 2.17 **Component III: Building the Innovation Network US\$484,500 (IDB Lab US\$114,500, EU Co-financing US\$370,000)** This third component seeks to build capacity amongst local innovation stakeholders to better coordinate efforts of T&T's highly fragmented and uncoordinated innovation ecosystem. CARIRI, as the lead organization driving innovation in the current ecosystem in T&T, and supported by a full-time innovation coordinator, will implement planned activities under this component. IDB experience in innovation financing, indicates that coordination of key actors in the innovation ecosystem is a critical requirement.²⁸ The focus of this component will be to engage the primary stakeholder organizations²⁹ in a design thinking process to define and agree on three to four key initiatives on which they can collaborate, to strengthen support to and reporting on innovation in T&T. Progress and lessons learned will be reviewed in a series of collaborative workshops over the period of the project.
- 2.18 Additionally, critical supporting activities will include the following: (i) in order to secure ongoing financial support for innovation, project resources will be used to secure a facilitator that can assist the CARIRI team in sensitizing the investment community as well as innovators on the potential opportunities and economic benefits of innovation financing, including the use of associated risk management tools and differentiated financial instruments currently available and in use in more advanced innovative economies; (ii) in order to provide linkages for support of innovation, a digital platform will be developed and maintained by CARIRI, which will connect local innovators with relevant and available resources locally and abroad, including financing, business support, incubation and mentorship programs and export market access mechanisms and support; (iii) to facilitate collation and reporting on T&T's progress in innovation, CARIRI with support from a consultant and other key stakeholders, will develop a Data Collection and Measurement Framework and process for reporting on international innovation indicators,³⁰ and (iv) to support sustainability and strengthening of innovation support in T&T, the project will finance exchanges and knowledge sharing between CARIRI³¹ as well as local ecosystem actors and successful regional innovation organizations such as CUBO in Brazil. Importantly, in the final year of project implementation, key participating stakeholders will be engaged in the development, promotion and advocacy of a plan for sustainability. The plan will outline activities, resources and stakeholder engagement required for continuity in supporting innovation in T&T beyond the period of project financing. In addition, this

²⁸ Juan Carlos Navarro, Jose Miguel Benavente and Gustavo Crespi, "The New Imperative of Innovation", IDB 2016.

²⁹ Key stakeholders may include CARIRI, key tertiary level academic institutions, ExportTT the export promotion organization, the Intellectual Property Office, the National Institute of Higher Education in Research, Science and Technology, InvestTT the investment facilitation company and state and private sector industry associations.

³⁰ For example, data required to report on indicators for the Global Innovation Index (GII).

³¹ Costs of participation by CARIRI in knowledge exchange with other innovation programs in LAC will be financed from IDB Lab resources included in the budget for Component III.

component includes a consultancy to provide CARIRI with advisory support to ensure gender and other inclusion factors are built into all outreach and stakeholder engagement activities, including those in Components I and II.

B. Project results, measurement, monitoring and evaluation

- 2.19 At the impact level, the project is targeting a positive movement in the ranking of T&T in the Global Innovation Index and in the Innovation Capability pillar of the Global Competitiveness Index. Key outcomes that are expected include: innovation support to at least 1,500 SMEs and innovators applying to the innovation challenge, and provision of innovation funding to at least 75 organizations. To ensure that the project addresses last mile population segments, least two calls under the Innovation Challenge Facility (Component I), will target “innovations for inclusion”, which are estimated to benefit at least 10,000 low income persons/2,000 low income households. In addition, at least 35 firms will host internships in specific applied R&D and innovation development challenges for a minimum of 50 graduate students (of which 25 will be female), forging practical and value-added linkages between academia and industry in T&T, and piloting a system for greater and more systematic integration of academic talent into the innovation process of firms. Additionally, CARIRI will lead the roll out of a collaborative model to build a more efficient and impactful innovation ecosystem, via the implementation of at least three collaborative projects, as well as sensitization of potential investors and innovators, the roll out of an information platform to connect innovators with support and resources, and the design and implementation of a practical framework and process for the measurement, collation and reporting/communication on key innovation indicators.³²
- 2.20 It is expected that CARIRI’s experience in all three inter-related components over the life of the project will facilitate knowledge transfer and capacity building from external partners/consultants contracted to assist in implementation of project activities, which will support project sustainability and continuity via the expansion of CARIRI’s role as the lead institution coordinating innovation support in T&T.
- 2.21 The project contributes to two of the IDB Group’s Country Development Results indicators as outlined in the 2015-2019 Corporate Results Framework: #16 Number of Micro, Small and Medium Enterprises financed and #17 Micro Small and Medium Enterprises provided with non-financial support. Additionally, the project contributes to two regional indicators: #5 Global Innovation Index and #6 Research and Development Expenditure as a Percentage of GDP.
- 2.22 The project will also contribute to the United Nations Sustainable Development Goals as follows: (i) #9 Industry, Innovation and Infrastructure, specifically target 9.5 “Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per one million people and public and private research and development spending”; and target 9.B “Support domestic technology development, research and innovation in developing countries, including by

³² As per the results matrix, analysis of overall project results at the component level will be disaggregated to allow identification of beneficiary participation by gender, geographic location, organizational type etc.

ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities”; (ii) #17 Partnerships for the Goals, specifically target 17.3 “Mobilize additional financial resources for developing countries from multiple sources”; (iii) #8 Decent Work and Economic Growth, specifically target 8.2 “Achieve higher levels of economic productivity through diversification, technological upgrading and innovation”; and potentially (iv) #12 Responsible Consumption and Production, given the focus of the Innovation Challenge Facility (Component I) on innovations for waste reduction, energy efficiency and renewable energy.

- 2.23 In order to facilitate collation and monitoring of all targeted project results, a dedicated monitoring platform will be developed and managed by CARIRI to track the progress of key beneficiaries and stakeholder participants, as well as outcomes of their participation. A particular focus will be placed on tracking and assessment of applicants to the innovation challenge facility, support provided to applicants and feedback on the quality and relevance of support, the progress of applicants moving to the second stage of the selection process, and importantly, the business results/social and inclusion impact achieved by recipients of funding, as well as lessons learned. In this regard, the Innovation Challenge Facility management firm, utilizing CARIRI's dedicated monitoring platform, will support CARIRI in tracking, collation, analysis and reporting of all information required for reporting, especially in respect of Component I activities.
- 2.24 In accordance with IDB Lab requirements, CARIRI will report on project results every six months via the IDB Lab's Project Status Reporting (PSR) system and will also complete a final Project Status Report on conclusion of the project.
- 2.25 **Annual progress report:** In addition, CARIRI will submit an Annual Progress Reports to the IDB within 30 days after the end of each fiscal reporting period, in accordance with EU requirements. The Annual Progress Report will include information on: (a) actual project results (including updated results matrix), (b) project activities, (c) implementation of a Visibility and Communications plan and (d) the operational work plan for the following period. The financial section of the report will track expenses by activity under the approved budget. In addition, the Annual Progress Report will include a projection of the EU financing budget requirements for the next 12 months. At the end of the project, a final progress report shall cover the entire implementation period for the above-mentioned items, and a summary cash inflows and outflows on eligible project expenses.
- 2.26 The project will also be subject to a midterm evaluation financed by IDB Lab resources, which will be conducted by an independent consultant, either upon the project reaching 50% of disbursement, or at mid-point in the project execution period, whichever comes first. The objectives of this evaluation will be to: (i) assist CARIRI in strengthening the project intervention strategy and model, and (ii) recommend changes to project activities and expenditure, in order to improve results and impact over the life of the project. A final evaluation initiated and financed by the EU,³³ will also be conducted to assess results and key lessons

³³ The EU will retain 150,000 euros from the 11th EDF “Support to a Competitive and Innovative Economy in Trinidad and Tobago” to finance a final evaluation. Procurement, contracting and management of the final evaluation consultancy will be managed directly by the EU.

learned, which may serve to extend knowledge on innovation and innovation ecosystem development particularly in small states.

III. ALIGNMENT WITH THE IDB GROUP, SCALABILITY, AND RISKS

A. Alignment with the IDB Group

- 3.1 The proposed project is a direct fit with the commitments of IDB Lab in supporting C and D and Small and Island Economies, and with the objectives of the IDB Lab's Knowledge Economy (KE) thematic focus, specifically the provision of access to finance for innovation, building of human and institutional capacity, supporting the development of innovative solutions related to climate finance and gender equality, and the development of an eco-system approach to support innovation. There is a direct fit with IDB Lab's Knowledge Economy portfolio in the wider region, and particularly the Caribbean countries portfolio, which includes several projects supporting innovation and entrepreneurship³⁴, and as outlined under Component I, the project directly leverages the IDB Lab project TT-T1073 which provides advisory support for individuals and smaller organizations seeking to innovate.
- 3.2 The project draws directly on earlier research and recommended approaches developed by IDB's Competitiveness Technology and Innovation (CTI) division during the development of a proposed loan operation for supporting innovation in T&T,³⁵ as well as research on innovation in the wider LAC region. Additionally project design, particularly the Innovation Challenge Facility, draws on experience and lessons learned from global experiences as well as the lessons learned by Compete Caribbean during the course of its initial program, which included a window for financing of innovation projects to be implemented by private sector firms in the Caribbean region.
- 3.3 The project has strong synergies with the work of IDB's CTI division and that of Compete Caribbean in supporting competitiveness and innovation in the Caribbean region, and may also present medium term funding opportunities for IDB Invest, as larger enterprises selected for financing under the Innovation Challenge Facility continue to innovate and may require follow-on investment for growth. The project is aligned to the current IDB Group strategy with Trinidad and Tobago 2016-2020, which focuses on support for private sector development as one of three central thematic pillars. In addition, the project is consistent with two key imperatives of the IDB Group's Update to the Institutional Strategy,³⁶ firstly in supporting innovation and technology adoption as a key lever in economic growth and development, and secondly, in the mobilization of external resources through partnerships.

³⁴ TT-1073 Innovation Advisory Services, GY-T1159 Nexus Hub Tech Solutions, SU-T1095 Creative Industries and Tech Hub, RG-M1284 Youth Entrepreneurship Partnership Caribbean and BA-T1047 TEN Habitat.

³⁵ TT-L1043 Support for Economic Growth Competitiveness and Innovation in Trinidad and Tobago; note the loan operation did not proceed to detailed design.

³⁶ Document GN-2933-1, Update to the Institutional Strategy 2020-2023. Development Solutions that Reignite Growth and Improve Lives.

B. Scalability

- 3.4 The project investment can be sustained and scaled in T&T given the investment in capacity building, and project-based coordination of key stakeholder organizations within the local innovation ecosystem as outlined in Component III, and in showcasing the demonstration effect of the project to key decision makers within both public and private sector financing agencies during the course of implementation. CARIRI as a lead actor in the current innovation ecosystem in T&T, has the mandate, professional staff, physical facilities, services and private sector reach to play a key role in sustainability and will play a lead role in supporting and driving innovation beyond the period of project investment. The role of IDB's Country Office in regular engagement of its key counterparts on the project activities and impact, could also potentially result in a decision of government to re-engage in the development of a loan operation to support innovation, an initiative already started under the leadership of the IDB's CTI division and the Ministry of Planning and Development.³⁷ Additionally, the project under Component III, will include a specific plan for further strengthening, continuity and scaling of innovation support in T&T. In terms of regional scaling, CARIRI's linkages with other Research and Technology Organizations across the globe as a founding member of the World Association of Industrial and Technological Research Organizations (WAITRO), can facilitate strategic knowledge sharing and potential replication beyond T&T, as the project will demonstrate a multifaceted model to drive innovation in a small island open economy, which can be scaled horizontally by other countries in the Caribbean and wider region. IDB Lab in its role as a strategic connector can play a further role in linking CARIRI with other innovation hubs and programs in the LAC region, to support exchange of knowledge for horizontal scaling.

C. Project and institutional risks

- 3.5 **Project external risks:** Key risks that have been identified and the corresponding mitigation strategies are as follows: (i) Lack of demand for innovation financing, specifically the innovation challenge does not receive enough applications (quantity) or of required quality. This risk will be mitigated through technical workshops for applicants and targeted communication/outreach. (ii) Performance of independent expert advisory panel and the innovation challenge facility management firm are not aligned with the program objectives. This risk will be mitigated via a clear definition of requirements and performance standards in contracts with exit clauses in the event of nonperformance. CARIRI may also consider offering initial contracts for a shorter time period (as opposed to the duration of the project), with an option to extend based on positive evaluation of the contract performance. (iii) Recipients of funds via the innovation challenge do not implement proposed projects. This risk will be mitigated through close monitoring of recipients with disbursements tied to achievement of pre-defined disbursement triggers. (iv) Innovations do not find market traction; this outcome is to be expected in some cases, but can be mitigated in part, via support to awardee organizations during implementation, through rigorous design of the innovation

³⁷ TT-L1043 Support for Economic Growth Competitiveness and Innovation in Trinidad and Tobago.

- challenge facility, drawing on lessons from regional and global experience, via and the adaption of processes and focus areas as needed during implementation.
- 3.6 **Institutional Risks:** CARIRI is scored as Low Risk in all four dimensions of the IDB Lab's Diagnostic of Executing Agency Needs (DNA) which assesses Executing Agency capacity and experience, as well as associated risk in the following areas: Procurement, Accounting and Financial Management, Technical and Monitoring Capability and Knowledge Management and Strategic Communication Capacity.
- 3.7 CARIRI is incorporated under an Act of Parliament of 1970 which prescribes the composition of the Board of Directors, specifying the inclusion of representatives of organizations, some of which are no longer in existence. In this regard, CARIRI has introduced an amendment to the Act to update amongst other outdated provisions, the composition of the Board of Directors. The updated Act has not yet been laid in Parliament, and as a result, CARIRI currently has no Board of Directors in place and the CEO reports directly to the Permanent Secretary of the Ministry of Planning and Development (MPD). This arrangement has not affected independent operations of CARIRI, but the absence of a Board of Directors has precluded signing of the audited financial statements of the institution. This matter is expected to be resolved early in 2020, but as a mitigation strategy for independent financial oversight in the interim, the project has been designed to include: (i) a dedicated project financial officer, (ii) independent fiduciary review on at least a semiannual basis, and (iii) an annual audit of project inflows and expenditure by an independent firm.

IV. INSTRUMENT AND BUDGET PROPOSAL

- 4.1 The project has a total cost of US\$10,010,800, of which US\$580,000 (6%) will be provided by IDB Lab, US\$638,800 (6%) in counterpart financing and co-financing of US\$8,792,000 (equivalent of 7,850,000 euros³⁸) (88%) from the European Union. EU resources used for co-financing of this project represent the EU's 11th European Development Fund:³⁹ "Support to a Competitive and Innovative Economy in Trinidad and Tobago" (CRIS number FED/2018/041-600).
- 4.2 The EU resources for this program will be transferred from the EU to the IDB through an Investment Grant (TT-G1002). For that purpose, the EU and the IDB will enter into a Delegation Agreement that will be subject to the Framework Administrative Agreement (FAA) between the EU and the IDB dated June 10, 2015 (the EU-IDB Framework Agreement).⁴⁰ The IDB and the EU are currently negotiating an updated EU-IDB Framework Agreement scheduled for

³⁸ The exchange rate used is 1 Euro = US\$1.12.

³⁹ The 11th European Development Fund is one of the major external financing instruments, expiring at the end of 2020. It aims to ensure cooperation with African, Caribbean and Pacific States, contracting parties to the Cotonou Partnership Agreement, and with the Overseas Countries and Territories.

⁴⁰ The EU-IDB Framework Agreement amends, supplements, and interprets the EU standard contractual conditions, known as the Pillar Assessed Grant or Delegation Agreement (PAGODA), to adapt them to the specificities of the IDB. Approved by document GN-2610-2, this requires the applicability of expanded procurement rules, as well as additional rules on eligibility of expenses, budget modification, reporting and the integration of a communications and visibility plan, among others.

consideration by the IDB Board in December 2019. If approved and then signed by the IDB and the EU prior to approval of this project, the updated Framework Agreement will be the applicable framework.

- 4.3 The instrument to be used for IDB Lab financing is a non-reimbursable grant. The use of non-reimbursable resources from IDB Lab is justified as the project seeks to build a sustainable ecosystem for innovation driven growth in T&T.
- 4.4 The proposed non-reimbursable resources of US\$580,000 from IDB Lab will leverage **US\$8,792,000** in non-reimbursable resources available from the European Union under the 11th European Development Fund (EDF) "Support to a Competitive and Innovative Economy in Trinidad and Tobago", demonstrating significant levels of external resource mobilization by the IDB Lab.
- 4.5 Subject to negotiation with the European Union in the context of a Contribution Delegation Agreement, up to 5.8 % of the EU project co-financing amount may be reserved as a fee to cover expenses of the IDB related to the EU requirements and project administration. Such fee may be reserved from the project budget (reducing project funding), or may be added to the EU portion of the project budget; if the maximum amount is agreed to be added to the EU co-financing, the total EU financing amount translated to USD would be approximately US\$8,792,000 + \$508,718 maximum fee = US\$9,300,718. The administrative fee will be distributed among the relevant departments of the Bank. Management will report the fee amount in the context of project reporting to the Donors Committee.
- 4.6 It is envisaged that approximately 92% of the EU co-financing will be focused on provision of innovation grants to successful applicants in the innovation challenge, as well as all management and technical support costs in delivery of Component I. The remaining 8% of the EU resources will be used to co-finance Components II (3%) and III (4%), specifically the tertiary graduate private sector insertion program and the innovation network, as well as advisory support for gender inclusion budgeted under Project Administration (US\$24,000) and a provision for contingencies (US\$21,000).

Project Categories	IDB Lab	Counterpart	Co-financing	Total
Component I: Innovation Challenge Facility	174,900	35,300	8,122,000	8,332,200
Component II: Building Industry and Academic Linkages	105,500	237,500	255,000	598,000
Component III: Building the Innovation Network	114,500		370,000	484,500
Project administration (Executing Unit costs)	86,000	366,000	24,000	476,000
Mid term and final evaluation (if applicable)	25,000			25,000
Ex post reviews	20,000			20,000
Audited financial statements	48,000			48,000
Contingencies	6,100		21,000	27,100
Grand total	580,000	638,800	8,792,000	10,010,800
% of financing	6%	6%	88%	100%

V. EXECUTING AGENCY (EA) AND IMPLEMENTATION STRUCTURE

A. Executing agency(s) description

- 5.1 The Caribbean Industrial Research Institute (CARIRI) will be the Executing Agency of this project and will sign the agreement with the IDB. CARIRI was established in 1970, via an Act of Parliament, with technical and financial assistance from the United Nations Development Programme (UNDP), and the United Nations Industrial Development Organization (UNIDO). CARIRI is an independent agency⁴¹ that acts as the national focal point for technology and innovation to the private sector, via the provision of value added technological and business development solutions to both the manufacturing and service sectors. CARIRI is funded via a mix of government transfers, revenues for the delivery of technical services to firms, and financing for projects from international donors. Over the past five decades, CARIRI has evolved from its core base of quality and metrology services, to deliver additional value-added services, including food safety, data science and analytics, information and communications technology, innovation, business hatchery and accelerator support. In addition to its main location at the University of the West Indies St. Augustine Campus, CARIRI operates a business incubation and support center, the Centre for Enterprise Development located in central Trinidad. This center includes a mobile application laboratory, a FABLAB equipped with 3D printers, technology bays and related infrastructure, state of the art business facilities, CARIRI's ICT services hub serving the SME sector, and the Microsoft Innovation Centre.
- 5.2 CARIRI has been selected as the Executing Agency based on alignment of their mandate, interests and organizational capacity with the objectives and intervention logic of the project and will also provide counterpart resources. CARIRI has been identified as the entity to implement the project based on the following factors: (i) CARIRI is the largest independent state agency in T&T focused on supporting innovation. Evidence of this includes the IDB Lab financed operation TT-T1073, which supports both the Innovation Advisory Services and CARIRI's Innovation Gap Analysis programs previously referenced, as well as their core business activities as a research and technology transfer organization. In this regard, CARIRI is well positioned to support sustainability of the project impact and mainstreaming of activities beyond the financing period; (ii) CARIRI as a state agency reports to the Ministry of Planning and Development in Trinidad and Tobago which is the institutional partner of the European Union Delegation (the co-financing partner in this project); (iii) CARIRI has organizational capacity and facilities, that can be used to host the project; (iv) CARIRI has experience and a strong track record of partnership with the IDB Lab, having previously executed two projects (TT-M1009 and TT-M1014), and is currently executing one operation (TT-T1073). In all operations, CARIRI has fully realized or surpassed targeted objectives, and in each, has fully complied with technical, administrative and fiduciary requirements of the IDB and IDB Lab; (v) in accordance with IDB policy and practice, CARIRI will not receive fees for its role in project execution and

⁴¹ Day to day operations, management of financial resources, human resources and facilities, procurement and governance are managed by CARIRI independently of their line Ministry, the Ministry of Planning and Development.

management; and (iv) CARIRI also has a high level of convening, technical and fiduciary/administrative capacity required to execute the project.

B. Implementation structure and mechanism

- 5.3 CARIRI will establish an executing unit and the necessary structure to execute project activities and manage project resources effectively and efficiently. The execution unit will include the firm selected to manage the Innovation Challenge Facility (Component I), a full-time innovation coordinator and a dedicated financial officer on a part time basis, all of which will be contracted over the duration of the project's execution period. The project executing unit will also receive technical input and backstopping from CARIRI's IAS and iGAP teams, IT, Data Analytics and financial and procurement divisions, as well as executive management. CARIRI will be responsible for managing all project disbursements, financial reporting and procurement activities, including but not limited to, ensuring compliance with the EU Restrictive Measures in project procurement, as well as procurement financed by the EU resources undertaken by organizations approved for financing under the Innovation Challenge Facility (Component I). CARIRI will also be responsible for providing all technical and financial progress reports during project implementation. Details on the structure of the execution unit and reporting requirements are in Annex V in the project technical files.
- 5.4 A Project Steering Committee will be established to oversee and to provide overall guidance to the implementation of the project and will meet on a quarterly and on an ad hoc basis as required/requested by CARIRI as the Executing Agency or EU and IDB Lab as financing partners. The key responsibilities of the Project Steering Committee will include: (i) Monitoring of technical implementation, contractual compliance and reporting requirements, (ii) Review of the Annual Progress Report and Project Status Reports, (iii) Monitoring and update as required of project risks and mitigation actions, (iv) Assessment of any challenges to project execution and approval of activities required to address such challenges, (v) Budget monitoring, (vi) Participation in project promotion, visibility and communications activities as required, and (vii) Review and approval of the final list of organizations recommended for receipt of funding under the Innovation Challenge Facility (Component I). The Committee will comprise representatives of the EU Delegation, IDB Lab, and the Ministry of Planning and Development's (MPD) European Development Facility (EDF) Unit, (the institutional counterpart of the EU in Trinidad and Tobago). Key consultants, including the lead consultant from the Innovation Challenge Facility management firm, may be invited to also participate as needed. Secretarial support to the Project Steering Committee will be provided by the MPD/EDF Unit to ensure a level of independence in the recording of Project Steering Committee decisions and deliberations.

VI. COMPLIANCE WITH MILESTONES AND SPECIAL FIDUCIARY ARRANGEMENTS

- 6.1 **Disbursement by results, fiduciary arrangements.** The Executing Agency will adhere to the standard IDB Lab disbursement by results, modified IDB procurement policy⁴² and financial management arrangements⁴³ as specified in

⁴² Link to the Policy: Procurement of Works and Goods Policy.

Annex V and VI . Project accounting and procurement records will be subject to review by an independent firm financed from IDB Lab resources on a semiannual basis. Any issues or recommendations arising will be documented and communicated to CARIRI and a plan will be developed to implement required changes. All actions to implement recommended changes will be monitored by the IDB Country Office and IDB Lab team leader.

- 6.2 The Executing Agency will adhere IDB procurement policies and procedures for private sector entities as outlined in GN-2350-9 and GN-2349-9 Appendix 4: Policies for Procurement in Loans to the Private Sector, subject to the exceptions indicated below.
- 6.3 **Procurement Policies & Exceptions.** Two partial exceptions to the Bank's Procurement Policies are requested for approval by the IDB Board of Executive Directors in order to be able to: (i) recognize EU restrictive measures; and (ii) apply a procurement selection method not included in said policies. Regarding the first exception, the EU restrictive measures imply that no support or economic resources are to be made available, directly or indirectly, to or for the benefit of entities, individuals or groups of individuals subject to restrictive measures and identified in a list available at www.sanctionsmap.eu.⁴⁴ This eligibility requirement implies a modification to the eligibility requirements contained in the Bank's Procurement Policies.⁴⁵ Additionally, in accordance with the EU-IDB Framework Agreement (GN-2610-2, 4.13 and 4.14), the following will apply: (i) all procurement processes financed partially or wholly with resources from the EU will be open to supplier, consultants, contractors and service providers from IDB member countries and also from countries recognized by the EU as eligible (list published by the EU as an annex to the "Practical Guide to Contract. Procedures for EU External Actions"); and (ii) the Executing Agency shall retain relevant documentation during project implementation for a period of at least five years from the last disbursement date.
- 6.4 An annual audit will be undertaken on project financial records.

VII. INFORMATION DISCLOSURE AND INTELLECTUAL PROPERTY

- 7.1 **Information disclosure.** Project information is not considered confidential under the IDB Access to Information Policy. This document is therefore public in accordance with said policy.
- 7.2 **Intellectual property.** The Executing Agency shall own the intellectual property rights to all works produced or results obtained under the Project with the clear exception of (i) innovations presented/selected for financing under the Innovation Challenge Facility (Component I), and (iii) R&D and innovation projects undertaken by graduate students in Component II.

⁴³ Link to the document Financial Management Operational Guidelines

⁴⁴ The EU Restrictive Measures support specific EU Common Foreign and Security Policy objectives or UN Security Council Resolutions, which are not equivalent to prohibited practices. It should be noted that the Bank is currently negotiating a new Framework Agreement with the EU which will contain a similar provision regarding EU restrictive measures. This new requirement stems from the EU Financial Regulation in force as of August of 2018.

⁴⁵ Paragraphs 1.16 and 1.11 of GN-2349-9 and GN-2350-9, respectively.