**TT-T1087 TC Document**

**Building the Regulatory Regime for the Development of Utility Scale Renewable Energy Generation**

1. **Basic information for the TC**

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| * Country/Region: | TRINIDAD Y TOBAGO |
| * TC Name: | Building the Regulatory Regime for the Development of Utility Scale Renewable Energy Generation |
| * TC Number: | TT-T1087 |
| * Team Leader/Members: | Sologuren Blanco, Jaime (INE/ENE) Team Leader; Carvalho Metanias Hallack, Michelle (INE/ENE) Alternate Team Leader; Madrigal Martínez, Marcelino (INE/ENE) Alternate Team Leader; Alleng, Gerard P. (CSD/CCS); Baltodano Carrasquilla, Fabiola (INE/ENE); Corriols Diaz, Leonor Odilie (VPC/FMP); Greco, Maria Sofia (LEG/SGO); Hernandez-Santoyo, Joel (INE/ENE); James, Dale Anthony (CCB/CTT); Louis-Grant, Paula (VPC/FMP); Marquez Barroeta, Fidel (INE/ENE); Suber, Stephanie Anne (INE/ENE) |
| * Taxonomy: | Client Support (CS) |
| * Operation Supported by the TC: | Not Applicable. |
| * Date of TC Abstract authorization: | 13 Jan 2020 |
| * Beneficiary: | Government of the Republic of Trinidad and Tobago |
| * Executing Agency and contact name: | Inter-American Development Bank through its Infrastructure and Energy Department |
| * Donors providing funding: | OC Strategic Development Program  for Infrastructure(INF) |
| * IDB Funding Requested: | US$250,000.00 |
| * Local counterpart funding, if any: | US$0 |
| * Disbursement period (which includes Execution period): | 24 months |
| * Required start date: | March 2020 |
| * Types of consultants: | Consulting Firms and Individual Consultants |
| * Prepared by Unit: | INE/ENE-Energy |
| * Unit of Disbursement Responsibility: | CCB/CTT-Ctry Off Trinidad & Tobago |
| * TC included in Country Strategy (y/n): | Yes |
| * TC included in CPD (y/n): | Yes |
| * Alignment to the Update to the Institutional Strategy 2010-2020: | Productivity and innovation; Institutional capacity and rule of law; Environmental sustainability |

1. **Objectives and Justification of the TC**
   1. The general objective of this Technical Cooperation (TC) is to advance Trinidad and Tobago’s (T&T) sustainable development path by providing support for development of a licencing framework for the introduction of Renewable Energy (RE) in the electricity generation matrix. Specifically, the TC will: i) assist in the development of a draft RE Licence document and a legal review of the Regulated Industries Commission (RIC) Act for the development of utility scale Solar PV projects interconnected to the national electricity grid; and, ii) will provide support for institutional strengthening and capacity building to the RIC and main Government stakeholders in the RE sector[[1]](#footnote-2), inclusive of Ministry of Public Utilities (MPU) and Ministry of Energy and Energy Industries (MEEI).
   2. Trinidad and Tobago has a well-developed and extensive electricity infrastructure. However, the development of utility scale RE generation is still in their nascent stages in the country and requires technical and institutional support for its deployment.
   3. The electricity sector consists of the government-owned electricity transmission and distribution utility, through the Trinidad and Tobago Electricity Commission (T&TEC)[[2]](#footnote-3) and three Independent Power Producers (IPPs) using natural gas (NG). At a national level, the installed capacity is 2428.7MW[[3]](#footnote-4) split between four electricity producers, and NG is the primary energy source for electricity generation (96%)[[4]](#footnote-5). The National Gas Company (NGC) pipes fuel to the IPPs, whilst T&TEC pays NGC preferential rates for the fuel[[5]](#footnote-6). This NG price represents a high opportunity cost for the country considering that the same NG could be sold to the existing petrochemical industry or for export at a higher price; therefore, an opportunity for RE generation that could displace NG for electricity generation. The opportunity costs as a result of this mode of utilization are ranging from 1.7 to 3.2 US billion up to 2030.[[6]](#footnote-7)
   4. The country offers excellent solar and good wind energy potential, however, the generation cost of RE electricity is directly competitive to fossil fuel technologies, which following the existing subsidy scheme makes RE generation less attractive. Additionally, the existing legal and regulatory framework have also contributed for the RE sector not to develop in the country.
   5. Recently, T&T has experienced declines in the production[[7]](#footnote-8) of NG, which use in power generation already constitutes an opportunity cost for the country. This, as well as the ratification to the Paris agreement of achieving 10% of RE generation in the energy matrix by 2021[[8]](#footnote-9), has caused the Government of the Republic of Trinidad and Tobago (GoRTT) to intensify discussions on an optimization strategy for the NG utilization and exploration of development of RE resources while also increasing energy efficiency (EE) and energy conservation (EC) in the energy sector.
   6. In 2018, the Ministry of Energy and Energy Industries (MEEI) launched a public call for “Expressions of Interest” for the development of RE projects in T&T. As a result, in 2019 shortlisted project developers presented full RE projects proposals, which were evaluated by a multi-stakeholder Committee, led by the MEEI. Projects were awarded and implementation is expected in the near future.[[9]](#footnote-10)
   7. As indicated in the 2020 Fiscal Budget Statement, the GoRTT is taking the lead towards a sustainable energy future for T&T, which seeks to integrate RE, EE and EC as key pillars of the sustainable energy transition for the near future. The GoRTT has stated and recognized that RE development will provide greater diversity in the energy mix, which is vital to long-term energy security and sustainability of energy supply.
   8. In addition to start with investment projects (¶II.6) to develop RE in Trinidad and Tobago, it is essential to establish a facilitating environment. Currently there is no established regulation for RE projects in the country. If this is not developed in a timely manner, it could hinder the efforts already undertaken by GoRTT. Thus, as part of the RE framework development, the TC will contribute to the development of a draft Licence for RE utility scale[[10]](#footnote-11) generation, which the RIC as sector regulatory agency has mandated, that will not only contribute to advance the mentioned RE investment projects but also start building some of the grounds for future RE development in the country with a set of protocols and processes that will be available and reinforce more transparency for any future RE development in the country.
   9. The Regulated Industries Commission (RIC) requested technical assistance from the IDB for the development of an appropriate draft Licence which will be used to customize a Licence for a utility scale RE power generators, and for further RE development in the country. Additionally, this support will include a Gap Analysis of the existing RIC Act specifically focusing on RE and EE for the electricity generation sector licensing.
   10. **Sector knowledge.** The IDB has been actively supporting the GoRTT in the energy sector. In 2019, the IDB provided direct support to the Ministry of Public Utilities with a Level 2 Energy Audit and recommendations to promote energy conservation and improve EE in one of its main government buildings: Tower C, as part of a wider program for EC and EE in Government owned and occupied buildings. In 2011, with the Sustainable Energy Program (Programmatic Policy Based Loan (PBP) 2617/OC-TT), the IDB supported the transition of T&T to a more sustainable, efficient and clean energy matrix[[11]](#footnote-12). A Technical Cooperation, (TC) TT-T1027 was approved in 2011, together with the first operation of the PBP, to provide support to the GoRTT in achieving its objectives related to RE and EE. Furthermore, the Knowledge and Capacity Building Product (KCP) RG-K1002 “Fiscal and Non-Fiscal Incentives to promote Renewable Energy” financed a study which reviewed the energy sector and key institutions, obstacles and drivers for the development of a new energy policy, as well as sustainable energy initiatives.
   11. **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) and it is aligned with the development challenges: (i) social inclusion and equality by the promotion of productive uses of electricity; and (ii) productivity and innovation with the required draft Licence for RE projects. The project is also aligned with the theme of climate change and environmental sustainability as the IDB support will enable the development of RE projects that contribute to reducing CO2 emissions. Additionally, the project will contribute to the Corporate Results Framework 2016-2019 (GN-2727-6) through the indicators of: (i) installed power generation from RE sources; (ii) reduction of CO2 emissions with support of IDBG financing; and (iii) micro/small/medium enterprises provided with non-financial support. The program is also aligned with the IDB Country Strategy of Trinidad and Tobago by strengthening public sector institutions in Government, and the Government’s commitment to climate change mitigation measures.
2. **Description of activities/component and budget**
   1. **Component 1: Development of the Licencing Framework for utility scale RE electricity supply:** This component will facilitate the development of the licencing framework that includes a draft Licence for utility scale Solar PV projects inclusive of: i) application procedures; ii) issue, cancelation and suspension procedures; iii) terms and condition of licences generally; iv) licencing forms and fees; and v) prescribing sanctions for non-compliance. The component includes the development of regulations, norms and documents that will enable RIC, in accordance with the existing Act, to recommend granting Licences for utility scale RE projects, as well as the identification of required prior licensing permits from other relevant stakeholders in T&T (i.e. Environmental Management Authority (EMA), T&TEC, MEEI, others) and the identified required processes[[12]](#footnote-13).
   2. An institutional assessment of the RIC will be conducted in order to assess the existing governance structure, interrelations with other GoRTT Ministries/agencies, and existing relevant institutional mandates for further development of RE in T&T and the administration of the licensing regime. In addition, the gap analysis and best practices recommendations based on the RIC Act on overall suppliers of electricity will be outlined.
   3. **Component 2: Capacity Building and Inter-institutional coordination:** This component will strengthen the institutional capacity of RIC and selected GoRTT stakeholders[[13]](#footnote-14) and improve the GoRTT institutional coordination for the development of the RE sector in T&T by the preparation of workshops and seminars[[14]](#footnote-15). Training and capacity building are critical elements for the development of RE sector. This component will finance a series of workshops and training sessions with the technical teams from the RIC and relevant Government institutions where the licencing best practices, inclusive of enforcement and behavioral economics are emphasized, so that they are embedded into day-to-day activities.[[15]](#footnote-16)
   4. In addition, it will support in building knowledge products, like technical note and its dissemination.

**Indicative Budget (US$)**

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| **Activity/Component** | **Description** | **IDB/Fund Funding** | **Total Funding** |
| Component 1 | Development of the Licensing Framework for utility scale RE electricity supply | 180,000 | 180,000 |
| Component 2 | Capacity Building and Inter-institutional coordination | 70,000 | 70,000 |
| **Total** | | **250,000** | **250,000** |

1. **Executing agency and execution structure** 
   1. The GoRTT requested the IDB to act as the Executing Agency as per their letter of 21st of November 2019. The IDB role is essential for the coordination and articulation of the activities between the different stakeholders towards the achievement of the objectives. Furthermore, the IDB will be able to leverage its extensive network of internal and external subject-matter experts and well-established relationships with stakeholders in order to ensure a smooth execution.
   2. All activities to be executed under this TC have been included in the Procurement Plan (see Annex IV) and will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-4 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature and; (c) GN-2303-20 for logistics and other related services. Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature and; (c) GN-2303-20 for logistics and other related services.
   3. The Energy Division (INE/ENE) will have technical responsibility for the execution of the TC, in coordination with the CCB/CTT. The focal point designated and sector specialist responsible for executing this TC will be the Energy Specialist of INE/ENE. The IDB team will lead the implementation, programmatic oversight of the different activities, and coordinate results with GoRTT team.
2. **Major issues** 
   1. The main issues of the implementation of the TC activities are related to the need of high coordination between the program stakeholders. While the government has set forth a strategy for RE development[[16]](#footnote-17) and has taken actions for actual RE projects; and the slow uptake of RE in the past caused by the absence of the institutional capacity and inter-institutional coordination, could delay the deployment of utility scale RE projects in T&T.
   2. To mitigate this risk, the expected outcome from the TC will be drawn from best practices of RE frameworks and will be extensively coordinated with GoRTT stakeholders. Therefore, the TC will finance workshops and training activities amongst GoRTT stakeholders, which will be undertaken jointly by the authorities of the GoRTT to work with all relevant stakeholders and manage expectations, quality and content of the licencing framework and draft Licence accordingly.
3. **Exceptions to Bank policy**
   1. None apply.
4. **Environmental and Social Classification** 
   1. As per the Directive B.3 of the Environmental and Safeguards Compliance Policy, this operation is classified as Category “C” (operations that are likely to cause minimal or no negative environmental and/or social impacts. See [Safeguard Policy Filter Report](https://idbg.sharepoint.com/teams/EZ-TT-TCP/TT-T1087/50%20Environmental%20and%20Social/TT-T1087_SPF_20200304_1021.pdf) and [Safeguard Screening Form](https://idbg.sharepoint.com/teams/EZ-TT-TCP/TT-T1087/50%20Environmental%20and%20Social/TT-T1087_SSF_20200304_1021.pdf).

**Required Annexes:**

[Request from the Client - TT-T1087](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-209995372-1)

[Results Matrix - TT-T1087](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-209995372-9)

[Terms of Reference - TT-T1087](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-209995372-11)

[Procurement Plan - TT-T1087](https://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-209995372-10)

1. These include personnel working in the GoRTT agencies or institutions that work directly or relate to the energy sector under Ministry of Public Utilities (MPU), Ministry of Energy and Energy Industries (MEEI), Ministry of Public Administration (MPA), including the Trinidad and Tobago Electricity Commission (T&TEC), National Gas Company (NGC), National Energy Company (NEC) and Electricity Generation Companies, [↑](#footnote-ref-2)
2. T&TEC is a shareholder in some of the generation companies and the sole electricity producer in Tobago. [↑](#footnote-ref-3)
3. <https://publications.iadb.org/publications/english/document/Energy-Dossier-Trinidad-and-Tobago.pdf> [↑](#footnote-ref-4)
4. Around 4% is Diesel and some small solar projects are installed especially in rural areas. [↑](#footnote-ref-5)
5. In 2017, approximately 9% of the country’s annual gas production was used to generate electricity which is sold at a retail average price of US$0.05US/kWh, the lowest price per kWh in the Caribbean Region. [↑](#footnote-ref-6)
6. <https://eeas.europa.eu/sites/eeas/files/tt_sustainable_energy_roadmap_2.pdf> [↑](#footnote-ref-7)
7. Natural gas reserves have been decreasing by around 1 tcf annually. (<https://eeas.europa.eu/sites/eeas/files/tt_sustainable_energy_roadmap_2.pdf>) [↑](#footnote-ref-8)
8. This target is part of the National Determined Contribution (NDC) of the country ratified under the Paris Agreement. [↑](#footnote-ref-9)
9. <https://energynow.tt/blog/cabinet-gives-bp-and-shell-go-ahead-to-negotiate-a-ppa-for-solar-project-in-tampt> [↑](#footnote-ref-10)
10. Following the MEEI expression of interest, utility scale projects are considered those that have an installed capacity of 3MW or higher. <https://www.finance.gov.tt/2019/10/07/budget-statement-2020/> [↑](#footnote-ref-11)
11. The program was the first one of three individual operations to support GoRTT in accomplishing the objective. Only the first operation was prepared, approved and disbursed. The other two envisioned individual operations were subsequently cancelled at the request of the GORTT. [↑](#footnote-ref-12)
12. 12 Minimum requirements for environmental and social impact assessment for RE projects, in line with international best practices, will be included. [↑](#footnote-ref-13)
13. Selection to be done in coordination with the MPU and the MEEI and will be based on the type of training and mandate of the selected GoRTT agency/institution concerning the area of the training [↑](#footnote-ref-14)
14. This will include coordination with the Environmental Management Agency, T&TEC, The Energy Chamber and other public and private stakeholders. [↑](#footnote-ref-15)
15. Minimum requirements for environmental and social impact assessment for RE projects will be addressed, in line with international good practices. [↑](#footnote-ref-16)
16. Currently the Energy Efficiency and Energy Conservation policy and action plan is under development. Additionally, the MEEI with support the EU develop a sustainable energy road map: <https://eeas.europa.eu/sites/eeas/files/tt_sustainable_energy_roadmap_2.pdf> [↑](#footnote-ref-17)