

ANNEX 1



Empowered lives.
Resilient nations.

TERMS OF REFERENCE

Individual Consultant

Project:	Global Climate Change Alliance Plus (GCCA+) “Support to the Implementation of Trinidad and Tobago’s Nationally Determined Contribution” – Technical Assistance to the Ministry of Energy and Energy Industries, Trinidad and Tobago
Consultancy:	Develop a Renewable Energy Feed-In Tariff (FIT) Implementation Plan for Trinidad and Tobago and Conduct Capacity Building
Duty Station:	Port of Spain, Trinidad and Tobago
Duration of Project:	Maximum 4 months
Type of Contract:	Individual Contract

1. BACKGROUND

The United Nations Development Programme (UNDP), the Government of the Republic of Trinidad and Tobago (GoRTT) and the European Union (EU) Delegation to Trinidad and Tobago are partnering under the Global Climate Change Alliance Plus (GCCA+) Initiative to implement a project entitled “Support to the Implementation of Trinidad and Tobago’s Nationally Determined Contribution (NDC)”. The overall objective of this GCCA+ Project is to support Trinidad and Tobago in achieving its commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement as outlined in its NDC target.¹ Specifically, the project aims to (1) strengthen the country’s capacity to produce and maintain electric energy through solar systems, (2) develop operational systems for the effective implementation of the new renewable energy (RE)/energy efficiency (EE)-conducive policy, legislative and regulatory framework, and (3) raise public awareness on EE, appropriate pricing of energy and on the benefits of using RE.

These actions and their desired outcomes will be achieved through the following key project outputs:

Output 1: Installation of solar energy systems in public utilities and remote communities with the increased capacity to maintain solar power systems.

Output 2: Support to the implementation of the new RE/EE-conducive policy and legislative framework.

Output 3: Public awareness raising on EE, correct pricing and RE.

¹ Trinidad and Tobago has committed to (1) an overall reduction in cumulative greenhouse (GHG) emissions from its three main emitting sectors (power generation, transport and industry) by 15% by 2030 from business as usual (BAU), equivalent to 103 MtCO₂e, conditional on international financing; (2) unconditional reduction in public transportation emissions by 30% or 1.7 MtCO₂e compared to 2013 levels by December 31, 2030.

Output 4: Donor communications and visibility.

2. REQUEST FOR CONSULTANCY

In addition to having a significant dependency on the oil and natural gas sector, Trinidad and Tobago has a high per capita energy consumption (6,510 kWh per capita in the year 2017).² Electricity generation is almost solely dependent on natural gas, consuming approximately 8% of total natural gas produced in the country, while renewable energy installed capacity was estimated at only 4.4 kW (2017). In 2015, the total greenhouse gas (GHG) emissions in Trinidad and Tobago amounted to 50.84 MtCO₂,³ with the electricity generation sector accounting for approximately 19%.

Given these circumstances, the country is working towards greater energy efficiency and an optimized energy mix that includes a larger share of renewables. This is evidenced in key policy instruments including the National Development Strategy (VISION 2030), national goal of 10% RE supply by 2021, National Climate Change Strategy (NCCP) and Nationally Determined Contribution (NDC). While economic trends and GHG emissions reduction targets are driving the shift from a heavily fossil fuel-based economy towards a low carbon economy, the following challenges must be overcome in order to meet the goals outlined in these policies with respect to RE/EE: low and subsidised electricity rates, lack of implementation of conducive policies and legislative framework, limited technical expertise for solar energy generation and maintenance, and a lack of awareness of appropriate energy pricing and advantages of RE/EE.

In light of the GoRTT's ongoing work of adjusting the current policies and legislation to make them more conducive to power generation by RE and to encourage energy efficiency (EE), technical assistance will be provided to the Ministry of Energy and Energy Industries (MEEI) for the operationalisation of the new policies and regulations by addressing barriers and challenges. **As part of the GCCA+ Project, this consultancy seeks to 'Develop a Renewable Energy Feed-In Tariff (FIT) Implementation Plan for Trinidad and Tobago'.** On behalf of the GoRTT, the UNDP is seeking a suitable professional to work with the MEEI and the GCCA+ Project Team to carry out this activity under Output 2 of the Project.

3. OBJECTIVES OF THE ASSIGNMENT/CONSULTANCY

Building on the FIT Policy, which is currently under development, this consultancy has the following key objectives towards the development of the Renewable Energy Feed-in Tariff Implementation Plan:

- i. Provide expert advice and recommendations on the implementation of the FIT Policy in Trinidad and Tobago.
- ii. Develop and provide options of how recommendations could be implemented, specifically in projects of sizes applicable to the FIT Policy.
- iii. Identify capacity needs of stakeholders with respect to FIT implementation and undertake training to address them, including for the options developed.

² 2017 Energy Report Card Trinidad and Tobago.

³ Emissions Database for Global Atmospheric Research, Fossil CO₂ and GHG emissions of all world countries 2019 report, <https://edgar.jrc.ec.europa.eu/>

4. EXPECTED RESULTS AND KEY DELIVERABLES

The selected Consultant, with guidance from the GCCA+ Project Team and MEEI personnel, will be responsible for providing technical backstopping towards the implementation of the FIT Policy. He/she will play a leading role in (1) the development of a detailed methodology for deriving FITs for the respective technologies for the admission of renewable energy to the national grid in Trinidad and Tobago, (2) the preparation of detailed options of how the Policy could be implemented and (3) conducting training workshops on the developed Renewable Energy FIT Implementation Plan.⁴ Specifically, the Consultant will have the following principal responsibilities and deliverables, as well as other related tasks that the Project Team may identify as necessary to the success of the Project in attaining its objectives:

Inception Report with a Detailed Methodology and Work Plan

- i. Develop consultancy schedule, approach, strategies, required stakeholder consultations and other related activities.

Draft Renewable Energy Feed-in Tariff Implementation Plan for Trinidad and Tobago

With technical support and relevant guidance from the Project Manager, develop a draft Renewable Energy FIT Implementation Plan that addresses the transformational process required to adopt renewable energy in Trinidad and Tobago. This deliverable should include, but is not limited to the following:

- ii. Review of regional/international Feed-in Tariff practices and available national studies/literature and assist with the development of a detailed methodology for deriving FITs for the respective technologies, as well as recommend starting FIT rates for T&T.
- iii. Review of Trinidad and Tobago's legislation including the Trinidad and Tobago Electricity Commission (T&TEC) Act and Regulated Industries Commission (RIC) Act and recommend legislative options for implementing the FIT Policy.
- iv. Develop a "Form of Interconnection with Grid" for RE Facility use and propose operational guidelines/requirements for the introduction of energy from small- and medium-scale facilities based on international best practices.
- v. Determine the roles and responsibilities and identify the step-by-step actions to be undertaken by the various stakeholders that are involved in the process of FIT implementation.
- vi. Recommend minimum technical codes and standards for adoption by facilities and regulators (Electrical Inspectorate, T&TEC and RIC).

Capacity Building Programme and Report for Relevant Stakeholders Such as the MEEI, Ministry of Planning and Development (MPD), Ministry of Public Utilities (MPU), RIC and T&TEC

- vii. Conduct stakeholder consultations to determine FIT implementation capacity building requirements among stakeholders.
- viii. Based on the identified capacity needs, develop a Capacity Building Programme for FIT

⁴ Logistical support for stakeholder consultations and training sessions will be provided.

implementation, inclusive of supporting materials such as reports and presentations.

- ix. Conduct a training session with relevant stakeholders on the elements outlined in the Capacity Building Programme and provide a Capacity Building Report on the training exercises conducted.

Final Renewable Energy Feed-in Tariff Implementation Plan for Trinidad and Tobago

- x. Based on feedback received, and in collaboration with the GCCA+ Project Team and Ministry of Energy and Energy Industries, and other relevant stakeholders, finalize the Renewable Energy FIT Implementation Plan.

5. QUALIFICATIONS AND EXPERIENCE

I. Education:

Master's Degree, or above, in Electrical, Renewable Energy Engineering, Energy Economics, or a closely related field, with equivalent relevant work experience in renewable energy with a focus on developing appropriate compensation mechanisms to support FITs.

Competencies:

Strong analytical, writing and communication skills.

Ability to prepare publications, reports and presentations.

Ability to work with a multidisciplinary and multicultural team.

Strong motivation and ability to work and deliver under short deadlines.

Focus on impacts and results for the client and has the ability to respond positively to critical feedback.

Ability to work independently.

Familiarity with government processes is strongly desired.

Experience:

At least 5-10 years of senior level experience, preferably in private sector business as a project lead engineer/scientist for renewable energy.

Demonstrate experience in undertaking similar assignments, with an emphasis on small island transmission grids.

Experience in conducting feed-in tariff and net-billing studies.

Exposure to renewable energy production and utilization for electricity generation is desirable.

Experience in training on renewable energy and energy tariff concepts.

In-depth knowledge of Private business sector with potential for partnership in renewable energy/production.

Immense technical knowledge of international best practice on FITs.

Knowledge of small island power systems and policies that revolve around renewable energy.

Experience in dealing with international and national experts and institutions.

Sound understanding of key software packages (MS Office).

Fluency in written and spoken English.

6. DURATION

The assignment must be completed within four (4) months of the start date.

7. REPORTING REQUIREMENTS

The Consultant will report directly to the GCCA+ Project Team. In addition, he/she is expected to meet as necessary with the Project Team and Personnel of the Ministry of Energy and Energy Industries (MEEI), and relevant stakeholders. At the end of the contracted time period, the Consultant shall submit all project outputs to the Project Team, which will be assessed for validity and completeness of required information and should be in the desired format identified by the client. Once approved, all outputs become the property of the client to utilise and disseminate as deemed necessary.

8. SUBMISSION REQUIREMENTS

Interested individual consultants must submit the following documents/information to demonstrate their suitability for the assignment:

I. Technical Proposal:

The consultant should explain why they are the most suitable for the work, and demonstrate an understanding of renewable energy FIT issues internationally, and in the context of Trinidad and Tobago and Small Island Developing States:

Provide a methodology on how they will approach and conduct the work;

Provide a suitable timeline proposed for undertaking the assignment;

Personal CV including experience in similar projects and at least three (3) referees with their contacts.

II. Financial Proposal:

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables. Payments are based upon deliverables, (i.e., upon delivery of the services specified in the TOR).

In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including professional fees, travel, per diems, accommodation, and number of anticipated working days). Costs associated with hosting the training session (venue, catering and other logistics) will be covered by the GCCA+ Project and do not need to be included in the financial proposal.

III. Travel:

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. For this assignment, should the consultant be based outside Trinidad and Tobago, the majority of the work will be performed remotely. Most of the communication will be done via email and/or video conferencing. The consultant will only be required to travel to the duty station for field data collection, training of stakeholders and presentation of final reports.

9. EVALUATION

Only candidates who have obtained at least 70% in the technical evaluation process will be considered

Method: Highest total score of weighted technical (proposed work plan and interview) and financial criteria. The price proposals of all consultants, who have attained a minimum 70% score in the

technical evaluation (proposed work plan and interviewed), will be considered. UNDP will award contract to the individual that receives the highest score out of a predetermined weighted technical and financial criterion as follows: 70% Technical criteria, 30% Financial criteria. The technical criteria are described in the following table:

	<i>Table 1 Shortlisting Criteria</i>	<i>Maximum Obtainable points</i>
1	Qualifications (academic & technical, minimum Masters)	20
2	Adequate work and/or professional experience	30
3	General understanding and Knowledge of renewable energy production for electricity generation. Demonstrable understanding of FITs/net-billing issues in the region and internationally	20
4	Relevant Professional/Work Experience – <ul style="list-style-type: none"> - Demonstrate relevant work experience in FITs - Demonstrate work in small island transmission networks 	20 10
5	Technical Competence/ Methodology/Approach – Clear methodology of how the assignment will be undertaken with reasonable timelines. Reasonable indication of the competence on the subject matter (FITs and/or Net-billing and ability to train) clear response to the terms of reference	30
6	Presentation & Packaging – Good writing, interpretation and communication skills.	20
	Total Maximum Obtainable Points	150

Once candidates have been shortlisted, i.e. they have attained a technical score of at least 70% on their technical proposal (proposed work plan), only then, would they be interviewed for the position.

At the interview stage, candidates must attain a score of 70% for their financial proposals to be evaluated.

The final evaluation process is based on a 70:30 weighting, with 30 points being allocated to the financial component.

The following formula (cumulative analysis) is used to determine the financial scoring: $p = y (\mu/z)$, Where:

p = points for the financial proposal being evaluated

y = maximum number of points for the financial proposal

μ = price of the lowest priced proposal

z = price of the proposal being evaluated

10. TERMS OF PAYMENT

10% upon acceptance and approval of the **Inception Report with Methodology and Work Plan.**

40% upon acceptance and approval of the **Draft Renewable Energy Feed-in Tariff Implementation Plan for Trinidad and Tobago.**

30% upon acceptance and approval of the **Capacity Building Programme and Report for Relevant Stakeholders.**

20% upon acceptance and approval of the **Final Renewable Energy Feed-in Tariff Implementation Plan for Trinidad and Tobago.**

11. ADDITIONAL REQUIREMENTS FOR THE RECOMMENDED CONTRACTOR

The recommended Individual contractor below age 65 is required to submit a statement of good health and a copy of his/her medical insurance prior to commencement of services in any offices or premises of UNDP, or before engaging in any travel required by UNDP or connected with the performance of the contract. Medical examination is not required.

The recommended Individual contractor aged 65 and older is required to submit a statement of good health signed by a recognized physician and a copy of his/her medical insurance prior to commencement of services in any offices or premises of UNDP, or before engaging in any travel required by UNDP, or connected with the performance of the contract. The medical examination shall be paid by the consultant