

## **REQUEST FOR EXPRESSIONS OF INTEREST** **CONSULTING SERVICES**

Selection # as assigned by e-Tool: JA-T1206-P004

Selection Method: Simplified Competitive

Country: Jamaica

Sector: Energy

Funding – TC #: ATN/OC-19437-JA

Project #: JA-T1206

TC name: Implementation and Technical Support for the Energy Sector in Jamaica

Description of Services: The objective of this consultancy is to support the Government of Jamaica in developing a sustainable electrification plan that leads the country to achieve universal energy access by 2030.

Link to TC document: <https://www.iadb.org/en/project/JA-T1206>

The Inter-American Development Bank (IDB) is executing the above-mentioned operation. For this operation, the IDB intends to contract consulting services described in this Request for Expressions of Interest. Expressions of interest must be delivered using the IDB Portal for Bank Executed Operations ( <http://beo-procurement.iadb.org/home>) by: **March 16, 2023, 5:00 P.M. (Washington D.C. Time)**.

To access the IDB Portal, the firms must generate a registration account, including **all** the data requested by the Portal. If any of the information requested is not included, the firm will not be able to participate in this or any other Bank-executed selection process for operational work. If the firm has been previously registered, please validate that you have **all** the firm's information updated and complete before submitting an expression of interest.

The consulting services ("the Services") include: i) develop an integrated implementation plan for the total access to electricity in Jamaica by 2030 for rural electrification and urban electricity densification; (ii) design a pilot demonstration project for two (2) communities satisfying both rural electrification and urban electricity densification.

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: [Policy for the Selection and Contracting of Consulting firms for Bank-executed Operational Work](#) – GN-2765-4. All eligible consulting firms, as defined in the Policy may express an interest. If the Consulting Firm is presented in a Consortium, it will designate one of them as a representative, and the latter will be responsible for the communications, the registration in the portal and for submitting the corresponding documents.

The IDB now invites eligible consulting firms to indicate their interest in providing the services described above in the draft summary of the intended Terms of Reference for the assignment. Interested consulting firms must provide information establishing that they are qualified to perform the Services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consulting firms must provide specific evidence of experience in:

- The use of a georeferenced planning software to carry out geospatial analysis of rural electrification planning at the level of each consumer, showing the results in GIS format.
- Preparation of electricity access projects, in rural and urban areas considering different electrification modes and integrating renewable energy.
- Knowledge of the legal framework of Jamaica's electricity sector is essential.
- Evidence of participation in similar processes in the region is highly desirable.

Eligible consulting firms may associate in a form of a Joint Venture or a sub-consultancy agreement to enhance their qualifications. Such association or Joint Venture shall appoint one of the firms as the representative.

**Note: Please consider that this stage of the process is to receive expressions of interest, so it is requested to send information that demonstrates that the Firm is suitable for this service. Do not send complete technical proposals. Do not send only experts' CVs. Do not send price proposals. Please submit only relevant information for this consulting process.**

Interested eligible consulting firms may obtain further information during office hours, 09:00 AM to 05:00 PM, (Washington D.C. Time) by sending an email to: Roberto Aiello at [raiello@iadb.org](mailto:raiello@iadb.org) and copy to Rochelle Johnson at [rochellej@iadb.org](mailto:rochellej@iadb.org).

Inter-American Development Bank

Division: Energy

Attn: Roberto Aiello – Principal Regional Energy Specialist

## **DRAFT TERMS OF REFERENCE**

### **Formulation of a Sustainable Electrification Plan for Jamaica to support the country's efforts to achieve universal energy access by 2030**

#### **1. Background and Justification**

- 1.1. Jamaica produces very little energy from indigenous resources, relying primarily on fossil fuels imports that averaged 22.82 million Barrels of Oil Equivalent (BOE) per annum during the period 2015-2019. The country has a high electricity coverage of 96.8%, which represents approximately 95,000 people with no access to living in vulnerable conditions mostly in rural areas. In addition, it has one of the highest electricity tariffs and energy loss in the region at US\$0.34/kWh and 28%, respectively. The high tariff is primarily due to high levels of electricity theft and electricity generation that depend on old and inefficient heavy-fuel oil generators that run on expensive imported oil. The country's total capacity installed (2020) is 1101 MWh, of which 188.2 MWh is renewables. Jamaica's Integrated Resource Plan indicated that there is an untapped renewable energy potential of 960MW. Jamaica's economy is characterized by high energy intensity and low energy efficiency.
- 1.2. The Jamaican National Energy Policy 2009-2030 contemplates the development of renewable energy sources for energy diversification with targets of 30% renewables by 2030. The key goals of the energy policy are to: (a) increase Jamaica's energy security by diversifying the energy matrix; (b) enhance Jamaica's economic competitiveness and performance by improving the efficiency of the energy sector, and minimizing end-users energy costs; (c) reduce Greenhouse gas (GHG) emissions from the energy sector, and (d) delineate and implement well defined institutional and regulatory frameworks as Jamaica's economy is severely negatively impacted by the high energy prices for consumers and businesses.
- 1.3. The future of power and energy in Jamaica and the region is at a precarious position and a significant junction. Caribbean islands and the power stakeholders operating within them realise that the impact of providing universal/total electricity access to affordable energy will not only lead to accelerated economic development but significant social improvements. Yet, to achieve universal/total electricity access executives have many strategic decisions ahead of them. The hitherto business as usual of bulk energy production and distribution through fossil-fuelled power plants, centralised grids, and private sector vertically integrated utilities, is quickly coming under threat from new models of energy production and distribution.
- 1.4. Technology advancement coupled with its accelerated pace and the lowering of prices is transforming the energy sector beyond that which can be imagined. The electricity sector planners are now abandoning traditional planning approaches and tools and looking towards new methods and tools to take advantage of the opportunities, which provide multifaceted and integrated solutions across the energy sector. The game changer is solar PV and battery storage, which brings portability, flexibility, profitability, resiliency, reliability, job creation, sustainability, and the list continues of benefits to the island economy. It is with this game changer that the opportunities, risks, and value propositions are critical to support the Government of Jamaica's Medium - Long Term Macro Economic Programme for sustainable growth.
- 1.5. A major factor contributing to non-technical energy loss is the issue of affordability coupled with social and economic challenges. This challenge is primarily within the inner city, informal settlements, and similar types of communities across the island. The situation of electricity theft has been and continues to be a perennial

problem for decades that has led itself to entrenched behaviour within these communities. This challenge will require a focused and intentional approach to address on a sustained basis. In these communities, it is a known fact that normal commercial operations are extremely difficult to be conducted and the intervention of the security forces to enforce law and order. It is estimated that within these communities there are approximately 210,000 illegal users who contribute to over 40% of total electricity energy loss.

- 1.6. In August 2015, Jamaica promulgated a new Electricity Act that repealed the Electric Lighting Act of 1890 and related legislations, with the purpose of consolidating and modernizing the laws relating to the generation, transmission, distribution, supply, dispatch, and use of electricity. The objectives of the Act are, among others; to provide for a modern system of regulation of electricity activities, to provide clarity in the roles of the stakeholders of the sector, and to prescribe the required standards in the electricity sector. Among the changes heralded by the new Electricity Act is that the planning function for the electricity sector has been transferred from the Office of Utilities Regulation (OUR) to the Ministry of Science, Energy and Technology (MSET), thereby aligning the planning function with the policy imperatives.
- 1.7. The new Act specifically addresses electricity access in rural communities and requires that the Single Buyer, Jamaica Public Service (JPS) shall have the responsibilities for rural electrification, however, the Single Buyer may waive its right to provide such service in respect of a particular geographical area, and where JPS has opted to waive its right to provide electricity access in rural communities, a person, may with a grant of a license from the Minister, develop a micro-grid or renewable energy solutions for that geographical location. The OUR shall have oversight of the tariff to be charged in that particular geographic area and to the extent that the solution in the rural area is from renewable energy sources, a System Benefit Fund may be utilized to subsidize the tariff to rural customers to achieve grid parity. That is, the act seeks to advance the electrification process as key to economic development and growth, a fact underscored by the international community's use of the rate of electrification as a primary measurement of a country's overall development. Based on the Rural Electrification Study, 50,294 consumers lack access to electricity and require both off-grid and grid expansion solutions, while 270,303 consumers are connected illegally and require regularization in the provision of the service.

## **2. Objectives**

- 2.1. The general objective is to develop a sustainable integrated implementation plan for the total access to electricity in Jamaica by 2030. The implementation plan will target both households that currently lack complete access to electricity and households with illegal electricity connections.

## **3. Scope of Services**

- 3.1. The scope of services is as follows: i) develop an integrated implementation plan for the total access to electricity in Jamaica by 2030 for rural electrification and urban electricity densification; (ii) design a pilot demonstration project for two (2) communities satisfying both rural electrification and urban electricity densification.

## **4. Key Activities**

- 4.1. Review existing reports, studies, and legalisations that discussed/analyzed electricity access, including but not limited to the Rural Electrification Study, Energy Loss Independent Report, and National Electricity Reduction Loss Plan.

- 4.2. The consulting firm shall use internationally accepted methodologies and best practices designed to achieve the overall objectives by leveraging prior works, energy policies, the electricity act 2015, and stakeholder engagement. The services shall include, but not be limited to, the following task:
- 4.3. Review and consider available reports in particular 'Rural Electrification for Jamaica Final Report 2019' and interview existing agencies with responsibility in the Jamaica energy sector, electric utility, legal and regulatory framework and advise on the challenges, opportunities, risks, and value propositions to support the Government of Jamaica Medium - Long Term Macro Economic Programme for sustainable growth;
- 4.4. Conduct an assessment and review of the identified unserved communities, informal settlements, and inner-city communities' households to become electrified and legitimate customers consistent with JPS non-technical energy loss spectrum.
- 4.5. Conduct a technical, financial, economic, social, political, and regulatory assessment of providing sustainable electrification solutions to unserved and challenged communities based on grid extensions, micro-grid, ground/roof-mounted solar PV systems, and/or other renewable feasible options for the medium to long term. This shall include relevant social intervention, development plans and programs to achieve the objective.
- 4.6. Conduct a technical, financial, economic, social, political, and regulatory assessment of providing sustainable electrification solutions to regularize the existence of illegal or irregular connections in rural and urban areas based on grid modernization, metering, grid extensions, micro-grid, ground/roof-mounted solar PV systems, and/or other renewable feasible options for the medium to long term. This shall include relevant social intervention, development plans, commercial practices, and programs to achieve the objective.
- 4.7. The new Act requires that JPS shall have the responsibilities for rural electrification, however, JPS may waive its right to provide such service in respect of a particular geographical area, and where JPS has opted to waive its right to provide electricity access in rural communities, a person, may with a grant of a license from the Minister, develop a micro-grid or renewable energy solutions for that geographical location. The consultant shall identify, and group communities based on the geographic area with the relevant information for submission to JPS to facilitate their timely response to provide electricity service to these rural communities.
- 4.8. The Comprehensive Integrated Implementation Plan - Using results from the above assessments, provide tailored sustainable solutions based on the socio-economic challenges and impact within these communities as a critical assessment on the affordability and willingness to pay of households and investor risks towards the sustainability of any proposed total electricity access program. In addition, to inform total electricity access policies that outline the roles and responsibilities of key Government agencies, as well as the guidelines for their cooperation and collaboration.
- 4.9. Develop a pilot demonstration project for two (2) communities satisfying both rural electrification households and existing illegal users consistent with Task (v).
- 4.10. The assessments and subsequent solutions will take into account guidelines under the IDB's new Environmental and Social Policy Framework (ESPF) which seek to address issues surrounding elements such as labour and working conditions particularly in the supply chain for renewable energy options (e.g., solar

panels), resource efficiency and pollution prevention, community health and safety, and stakeholder engagement.

4.11. Five (5) reports will be provided including an Inception Report, Interim Reports, and a Final Report.

## **5. Expected Outcome and Deliverables**

- 5.1. **Deliverable 1:** Prepare an Inception Report no later than two (2) weeks after the start of the consultancy.
- 5.2. **Deliverable 2:** Develop an Interim Report on Activities 4.1 to 4.6
- 5.3. **Deliverable 3:** Draft Comprehensive Integrated Implementation Plan – Total Access to Electricity in Jamaica by 2030
- 5.4. **Deliverable 4:** Final Report and presentation to Key Stakeholders based on comments from the draft report. In addition to capacity building for key stakeholders during and/or the end of the project.

## **6. Project Schedule and Milestones**

6.1. The duration of the Consultancy will be 8 months.

Deliverables	Estimated Duration
Inception Report no later than two (2) weeks after the start of the consultancy.	Within 20 days of contract signing
Interim Report on Tasks 4.1 – 4.6.	Within 2 months of contract signing
Draft Comprehensive Integrated Implementation Plan – Total Access to Electricity in Jamaica by 2030	Within 4 months of contract signing
Final Report and presentation to Key Stakeholders based on comments from the draft report. In addition to capacity building to key stakeholders during and/or end of the project.	Within 6 months of contract signing

## **7. Reporting Requirements**

7.1. All reports must be completed in English. Reports should contain a contents page and an executive summary.

## **8. Acceptance Criteria**

- 8.1. Deliverables will be accepted based on agreements on the scope of services herein and the approach reached with consultants at inception. Additionally, deliverables will be reviewed and approved by Mr. Roberto Aiello, Principal Regional Energy Specialist in consultation with the Ministry of Science, Energy, and Technology.
- 8.2. The consultancy firm shall have demonstrated previous experience in rural and urban electrification planning and regulations. Previous experience with Jamaica and in the region is highly desirable. Previous experience with the IDB or other International Organizations is highly desirable.

## **9. Other Requirements**

9.1. It is expected that the work will be carried out by at least five experts: one senior project lead, one senior

distribution design and construction specialist, one expert on rural electrification, one financial and economic expert, and one social impact specialist.

## **10. Supervision and Reporting**

10.1. The Energy Portfolio is supervised by Mr. Roberto Aiello, Principal Regional Energy Specialist (INE/ENE) based in CJA. The Consultancy will be supervised and report to Mr. Roberto Aiello.

## **11. Schedule of Payments**

11.1. Payments will be made in United States Dollar (USD) and will be paid based on the submission of the following:

Deliverables	%
Inception Report no later than two (2) weeks after the start of the consultancy.	10%
Interim Report on Tasks 4.1 – 4.6.	40%
Draft Comprehensive Integrated Implementation Plan – Total Access to Electricity in Jamaica by 2030	25%
Final Report and presentation to Key Stakeholders based on comments from the draft report. In addition to capacity Building to key stakeholders during and/or end of project.	25%