

REQUEST FOR EXPRESSIONS OF INTEREST | CONSULTING SERVICES ENERGY DIVISION, INE/ENE

Selection # as assigned by e-Tool:	HA-T1243-P004
Selection Method:	Competitive Selection
Country:	Haiti
Sector:	Energy
Funding TC:	HA-T1243 - ATN/OC-17428-HA
Project related:	HA-L1140 - 4900/GR-HA (Improving Electricity Access in Haiti
TC name:	Support to Improving Electricity Access in Haiti
Link to TC document HA-T1243:	https://www.iadb.org/en/project/HA-T1243

Description	Technical assistance and preparation of an International Competitive Tender process, for the
of Services:	contracting of design, installation, operation and maintenance of two solar photovoltaic plants
	connected to a thermal power plant and a set of batteries, in the Caracol Industrial Park (PIC)
	of Haiti

The Inter-American Development Bank (IDB) is executing the operation HA-L1140 - 4900/GR-HA (Improving Electricity Access in Haiti). 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 (<u>http://beo-procurement.iadb.org/home</u>) by December 23, 2019, 5:00 P.M. (Washington D.C. Time).

The consulting services ("the Services") include to provide technical assistance in the preparation of the bidding documents pursuant IDB procurement policies and principles and advice Government of Haiti (GoH) through its Project Executing Agency during the different phases of the tender process.

Eligible consulting firms will be selected in accordance with the procedures set out in the Inter-American Development Bank: <u>Policy for the Selection and Contracting of Consulting firms for Bank-executed</u> <u>Operational Work</u> - GN-2765-1. 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 below in the <u>draft summary</u> 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.). 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.

Interested eligible consulting firms may obtain further information during office hours, 9:00 AM to 5:00 PM, (Washington D.C. Time) by sending an email to Wilkferg Vanegas (INE/ENE) <u>wilkfergv@iadb.org</u> in copy Jesus Tejeda (<u>jesust@iadb.org</u>).

Inter-American Development Bank

Energy Division (INE/ENE) Attn: Jesús Tejeda (HA-L1140 Project Team Leader)

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Terms of Reference

TERMS OF REFERENCE

ΗΑΙΤΙ

ENERGY DIVISION | INE-ENE

Consultancy Services: Technical assistance and preparation of an International Competitive Tender process, for the contracting of design, installation, operation and maintenance of two solar photovoltaic plants connected to a thermal power plant and a set of batteries, in the Caracol Industrial Park (PIC) of Haiti.

I. Background and Justification

- 1.1 The Government of Haiti (GoH) has developed in the north of the country the Caracol Industrial Park (PIC) that provides jobs to more than 13,000 people. The electricity of the PIC is supplied by a 10MW Thermal Plant (TEP) installed in the site, consisting of 6 units of 1,67 MW each operating with Heavy Fuel Oil (HFO) and / or Diesel.
- 1.2 The electricity consumption of PIC Customers is mostly from Monday to Friday from 7:00 AM to 5:00 PM and during half a day of Saturday, with a peak demand of about 5.0MW. The TEP also supplies energy to residential and commercial customers (Non-PIC customers) from: Caracol, Limonade, Trou du Nord, Terrier Rouge and Sainte Suzanne. In the coming years, it is expected to interconnect the PIC electrical system to a small local electrical system at Fort Liberté/Terrier Rouge. The power installed capacity at Fort Liberté consists of a 5.75 MW Thermal Plant (TEPFL), consisting of 4 units each operating with Diesel.
- 1.3 The cost of energy paid by customers depends mostly on the cost of importing the fuel and the administrative burden. This rate is high, and it represents a new challenge for the sustainability of the PIC, especially in the event of an increase in fuel prices.
- 1.4 To reduce electricity costs, thereby improving economic competitiveness and sustainability of the industries at the PIC, the Government of Haiti with IDB and USAID support, will finance the design, supply, installation, commissioning, of one 8-MW, and one 4-MW, solar PV plant, combined with battery storage to bridge short-term power fluctuations. The administration, operation & maintenance (AO&M) will be covered throughout the tariff. The PV plants will partially substitute power from the TEP, acting as backup for the PIC and for non-PIC customers. The solar plants will be erected inside the PIC and occupy approx. 18 ha of land already assigned for industrial use. The TEP, currently operated by NRECA on behalf of USAID, will therefore be transferred to the GoH and operated by an Independent Concessionaire (ICT), selected under an international competitive process led by ANARSE and supported by USAID. It is expected that the same independent concessionaire will be responsible for the rehabilitation and operation of the Fort Liberté thermal plant.
- 1.5 The 8-MW PV plant will: (i) be connected to the PIC's internal grid providing RE-based electricity; (ii) have a dedicated operator to manage the electricity infrastructure in the PIC; (iii) sell surplus solar energy, when required by the thermal concessionaire; and (iv) enable reducing the cost of electricity for the PIC by partially replacing HFO/diesel with RE. An industrial tariff will be implemented into the PIC having two components, a solar component mainly reflecting the cost of AO&M; and a thermal component reflecting the cost of fuel. IDB and the GoH strive at offering a tariff of about US\$ 0.16 per kWh for industrial consumers to keep the PIC attractive for the tenant companies and prospective investors in Haiti. The calculations made based on current O&M conditions of the TEP, show that this tariff level is possible while ensuring financial robustness of PV power plant and a cost of the thermal fuel portion below US\$0.30/kWh.



- 1.6 The 4-MW PV plant will supply electricity to neighboring communities outside of the PIC through the ICT. Meanwhile, the load of the electrical system will be gradually increased by expansion of the regional grid to residential end-users and micro-businesses.
- 1.7 The 4-MW PV plant will supply electricity to neighboring communities outside of the PIC through the ICT. Meanwhile, the load of the electrical system will be gradually increased by expansion of the regional grid to residential end-users and micro-businesses.
- 1.8 Both solar plants will have a single independent operator (the Solar Operator) and a PPA with the ICT. The ICT will be responsible for O&M of the thermal plants, for the effective dispatch of electricity to non-CIP customers, and for purchase of any excess of energy from the 8-MW plant offered by the Solar Operator. The 8-MWp plant will be connected to the grid and it will have priority to dispatch power to the PIC over the thermal plants.
- 1.9 The 4-MW PV plant will be connected to the grid and operated by the same Solar Operator. The concessionaire will prioritize this RE-based electricity to dispatch to non-PIC customers. The price of the electricity will be similar to the energy delivered by the 8-MW PV plant.
- 1.10 In order to move forward with this project, it is planned to carry out an International Competitive Tender process for the design, supply, installation and operation and maintenance of the 8MW and 4MW PV plants and the set of batteries. A Consulting Firm will be hired to provide technical assistance in the elaboration and assembly of the bidding documents and provide technical advice for bid awarding.

II. Objective

2.1 The main objective of the Consultant is to provide technical assistance in the preparation of the bidding documents pursuant IDB procurement policies and principles and advice Government of Haiti (GoH) through its Project Executing Agency during the different phases of the tender process.

III. Scope of Services

The consultant will carry out at least the following activities:

- 3.1 Work in close coordination with the Executing Agency of the program HA L1140, the Ministry of Economy and Finance (MEF) of Haiti and its Executing Unit (UTE).
- 3.2 Review the literature of the sector associated with this project, including *interalia*: related sector regulation in Haiti; 2018 PIC Report; the recently Request for Proposal (RFP) of the TEP published by the GoH; the Term Sheet of the RFP; IDB program document HA-L1140 and its technical annexes; the stability study.
- 3.3 Review IDB procurement policies and standard documents for the preparation of the tender package and recommend the type and method of procurement to be used. Propose adjustments to the standard document if necessary.
- 3.4 Review the technical data provided by IDB and propose adjustments if necessary
- 3.5 Collect any additional information needed for the preparation of the technical specifications of the tender document.
- 3.6 As part of the technical specifications and with the information provided and collected, prepare a Term Sheet annex that includes: a single diagram of the project; responsibilities of the Solar Operator *vis-à-vis* the operation and maintenance of the PIC's electrical system and its connection to the concessionaire of the TEP; compliance of local regulation for the construction, operation and maintenance of the project.
- 3.7 Propose the methodology and criteria for the evaluation of proposals taking into consideration the importance of securing an adequate tariff for the PIC's customers as per program's documents.



- 3.8 Based on a most accurate market approach, prepare a cost table of main components of the project, including: (i) investment costs (US\$/MWp); (ii) Operation and Maintenance (Solar Plants and PIC Network); (iii) resilience infrastructure for the installation of solar panels (on roofs and on the ground); (iv) insurance of both solar plants; and (vi) other costs to secure proper construction of the project.
- 3.9 Preparation of the tender package for approval by the EA and the IDB. The tender documents should consider elements to facilitate the preparation of proposals and their evaluation, as well as the management and supervision of the contract.
- 3.10 Advice the EA: (i) during the publication and evaluation of proposals.

IV. Key Activities

- 4.1 Activity 1- Completion of activities 3.1 and 3.2 of these Terms of Reference (ToR) and preparation of the work program and its methodology.
- 4.2 Activity 2- Technical specifications as indicated in activities 3.3 to 3.8 of these ToR.
- 4.3 Activity 3- Tender package according to activity 3.9.
- 4.4 Activity 4- According to activity 3.10, submit a report including: (i) questions and responses to bidders during the RFP process; and (ii) evaluation report with IDB No Objection.

V. Expected Outcome and Deliverables

- 5.1 The consultant must deliver the following products in French and English.
- 5.2 Deliveries:
 - i. First deliverable: Activity 1- Work program;
 - ii. Second deliverable: Activity 2- Technical specifications;
 - iii. Third deliverable: Activity 3- Tender package; and
 - iv. Fourth deliverable: Activity 4- Final report.

VI. Project Schedule, Milestones and Reporting Requirements

- 6.1 The duration of execution of these ToR will be 3 months from the date of signature of the contract. Three missions of three days each are contemplated to Haiti (Port-au-Prince and the North East to the CIP) during the execution of these ToR.
 - i. First deliverable: 15 days from the contract signature;
 - ii. Second deliverable: 30 days from the contract signature;
 - iii. Third deliverable: 55 days from the contract signature; and
 - iv. Fourth deliverable: 66 days from the contract signature.
- 6.2 The consultant should submit all documents in editable format and spreadsheets used. Every report must be submitted to the Bank in electronic file. Report should include cover, main document, and all annexes. (Zip files won't be accepted as final reports).

VII. Acceptance Criteria

7.1 The IDB will submit a written approval after each deliverable is submitted with all comments dully addressed.

VIII. Supervision and Reporting

8.1 The coordination of this consultancy will be led by Jesus Tejeda (INE/ENE): jesust@iadb.org; and Wilkferg Vanegas (INE/ENE) wilkfergv@iadb.org.



IX. Schedule of Payments

- 9.1 Payments will be specified in the contract, using the concept of lump sum, and will be made based on the above deliverables once received and approved to the satisfaction of IDB as follows:
 - i. 15% at approval of first deliverable;
 - ii. 30% at approval of second deliverable
 - iii. 40% at approval of third deliverable;
 - iv. 15% at approval of fourth deliverable.

X. Qualifications

- 10.1 The consultant must have at least five (5) years of proven experience in similar services and demonstrate knowledge in: power generation with solar-PV and thermal power; designs of hybrid systems with RE, preferably solar-PV-HFO/Diesel-Batteries; design of electrical sub-transmission and distribution systems; international procurement processes; sector legal and regulatory affairs; solar-PV and batteries market. Experience using procurement policies from international donors and the use of innovative mechanisms to facilitate quality and transparency in the preparation and evaluation of proposals, as well as for the management of the contract will be an advantage.
- 10.2 Must have participated in the preparation and successful award of at least one similar international tender process in the last five years.
- 10.3 The working language will be English and French.

XI. Consanguinity

11.1 Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractual, will not be eligible to provide services for the Bank.

XII. Diversity

12.1 The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afro-descendants and persons of indigenous origins to apply.