

BELIZE
Rural Electrification Program
(BL-L1049)

Request for Information (RFI) Notice for Solar Mini Grids

The Government of Belize, through the Ministry of Public Utilities, Energy and Logistics (MPUEL), with financing from the Inter-American Development Bank (IDB), is implementing the Rural Electrification Program (BL-L1049). The Program aims to improve living conditions and economic opportunities for rural populations in Belize through increased access to electricity services.

This request for information seeks to identify the availability, particularities, and/or operational, technical, functional, and commercial characteristics, as well as the qualifications and experiences of potential bidders interested in participating in the procurement process. The information provided will be used exclusively in the context of market research and will not be subject to any public disclosure. Note that this RFI is for market research only and will not be used to prequalify or evaluate firms, and will not give any respondent an advantage in future procurement. Any costs incurred in preparing responses to the RFI or attending any virtual meeting will be solely at the responsibility of the interested companies.

As part of the Program, MPUEL intend to procure the design, supply and installation of four solar photovoltaic (PV) mini-grid systems with battery energy storage systems (BESS) in remote rural communities, within the Toledo district in Belize, with an accumulated solar capacity of 1.2 MW and an estimated budget of US\$ 5.6 Million. The procurement is currently envisaged to comprise four Lots, with one solar mini-grid per Lot. Bidders may be awarded more than one Lot, subject to demonstrating adequate technical, financial, and implementation capacity. Regardless of whether the Lots are awarded to one or several providers, implementation of the four mini-grids is expected to proceed in parallel, with all four systems completed within a common implementation period of approximately 12 months from contract effectiveness.

The proposed investments are expected to include, among others, solar PV generation, battery energy storage, power conversion and control systems, monitoring and communication systems, civil works, and other equipment and services necessary to provide reliable electricity service to the beneficiary communities. The contracts will also include training related to the O&M and supply of spare parts. Annex 1 provides additional details about the project scope and technical specifications.

The procurement of these works will be carried out through an International Competitive Bidding open to all companies or consortia interested from [IDB member countries](#). The bidding process is expected to take place during the first half of 2027, following the [IDB's Procurement Policies](#) and will be published both on the [Inter-American Development Bank's Procurement Portal](#) and on procurement.gov.bz/opportunities. Therefore, the MPUEL is interested in receiving the following information before 2:00 p.m. (Belize time) on October 16, 2026, at the email address: info@energy.gov.bz

- **Company profile and relevant technical experience.** Brief company profile and relevant experience in solar PV and BESS projects, particularly solar mini-grids implemented in remote, rural, island, or logistically challenging locations.
- **Financial capacity and qualification requirements.** Provide information on your company's financial capacity, including annual turnover, access to financial resources or working capital, and any other information you consider relevant. Based on your experience, please also provide views on appropriate minimum financial qualification requirements for the proposed procurement, including annual turnover, liquidity, and other indicators of financial capacity.
- **Key personnel requirements.** Views and required experience on the key professional that should be required for successful contract implementation, including project management, electrical engineering, solar PV/BESS, environmental, social, and occupational health and safety expertise. Please also comment on the availability of qualified personnel with experience working in remote and Indigenous communities and, where relevant, knowledge of local languages. Considering the indicative implementation period, please also comment on the availability of sufficient qualified personnel to execute multiple Lots concurrently in the event that a Bidder is awarded more than one Lot, including which key positions could reasonably be shared across Lots and which would require dedicated personnel for each site.
- **Local participation and subcontracting.** Comment on potential activities that could reasonably be undertaken by Belizean firms, local workers, or community members, including civil works, transportation, logistics, site preparation and other support services.
- **Environmental, social, health and safety requirements.** Mention de company experience implementing projects subject to international financial institution ESHS requirements, particularly in remote and Indigenous communities.
- **Request views on supply-chain risk mitigation.** Given the solar PV supply chain, please comment on practical documentation, traceability, manufacturer declarations, and due-diligence measures that could be incorporated in the bidding documents to address supply-chain integrity risks without creating unnecessary barriers to participation.

A virtual meeting will be held on Tuesday October 6, 2026, at 1PM Belize time, to present the project in greater detail and provide an opportunity to Q&As. Interested firms may join through the following link: <https://teams.microsoft.com/meet/241211727396218?p=32juXLsE7sZUt94bos>

Meeting ID: 241 211 727 396 218
Passcode: GF7kA3mn

Dial in by phone

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Neither this request for information nor the provision of information within this framework constitutes a legal agreement, nor does it obligate the Program or any of the interested parties in any way regarding the information requested and provided, as it corresponds to a market research process prior to the aforementioned procurement process. The submission of information in this request should not be considered as a prior participation instance in the selection process referred to in this Notice.

All information provided to the Program by interested parties, voluntarily submitted, is considered confidential and cannot be made available to third parties for their use, unless it is information made public by its owner in any other way.

The requested information must be presented in English.

ANNEX 1. PROJECT DESCRIPTION AND INDICATIVE TECHNICAL REQUIREMENTS

This Annex provides interested firms with a description of the four solar mini-grid investments and the principal technical requirements currently envisaged. It is provided for market-sounding purposes only. The final scope, specifications, quantities, qualification requirements and contractual conditions will be those included in the bidding documents.

1. Indicative plant description

	Community 1	Community 2	Community 3	Community 4
Total PV capacity @STC (kWp)	≥ 255	≥ 255	≥ 375	≥ 375
Minimum DC-coupled PV capacity (kWp @STC)	≥ 60	≥ 60	≥ 60	≥ 60
Type of PV support structure	Ground-mounted PV			
Battery type	Li-ion LFP			
Battery nominal capacity (kWh @C20 @25°C, max DoD ≥ 80%)	≥ 648	≥ 586	≥ 960	≥ 960
Battery nominal voltage (Vdc)	< 1500			
Battery inverter, total continuous power output (kVA @40°C)	≥ 150*	≥ 105	≥ 170	≥ 150
Power plant's nominal AC voltage (V) & frequency (Hz)	277 / 480 Vac, 3-phase 4-wire 60Hz			
Step-up Transformer (kVA) (out of SoW)	≥ 150	≥ 105	≥ 170	≥ 150

2. Indicative scope of works

- Initial site visits and verification of site conditions, accessibility, construction constraints and risks.
- Detailed engineering of the electrical, mechanical and civil works, including the required engineering for soil assessment to withstand strong winds and floods (when applicable) based on the reference layouts, single-line diagrams and minimum design requirements to be included in the bidding documents.
- Supply, transport, customs clearance, storage, handling and installation of PV modules and mounting structures, Li-ion LFP BESS, power conversion equipment, controls, monitoring and communications, switchgear, protection, cabling, earthing and associated equipment.
- Construction of a technical building for power conversion, storage, auxiliary and monitoring equipment, including operator/storage space, sanitation, rainwater collection, drainage, air-conditioning and fire detection/suppression.
- Associated civil works, including minor clearing, grading and levelling, foundations, minor access-road improvements where required, drainage, perimeter fencing, gate and security lighting.

- Pre-commissioning, commissioning, performance testing, operational acceptance, as-built documentation, O&M manuals, training of BEL staff and community members, spare parts and post-commissioning technical/O&M support as specified in the final bidding documents.
- The step-up transformers and the MV distribution lines are outside the Contractor's supply scope. The Contractor's electrical scope is expected to terminate at the LV connection point of the step-up transformer, including the underground AC cable and conduit from the technical building to that connection point. Removal of large vegetation is also currently envisaged as an Employer responsibility, subject to confirmation in the final bidding documents

3. Principal technical and functional requirements

- **System architecture:** Ground-mounted PV with Li-ion LFP battery storage. Multiple DC-coupled or mixed AC/DC-coupled architectures may be accepted, provided the Bidder demonstrates compliance with all functional and performance requirements. At least 60 kWp of PV at each site is currently required to be DC-coupled.
- **Renewable operation:** The mini-grids shall operate as 100% renewable systems under normal conditions, with the battery inverters forming the grid and managing PV generation, battery charging/discharging and PV curtailment.
- **Diesel-generator readiness:** Although diesel generators are not included in the present scope, the system architecture, controls, space and conduits shall allow future integration of a backup generator, including hybrid and bypass operating modes.
- **Grid readiness:** All systems shall be ready for future connection to the national grid, including suitable protection, control interfaces, interconnection switchgear and metering. They shall support transition between islanded and grid-connected operation and prevent reverse power flow unless expressly permitted and metered by BEL.
- **Black start:** Battery inverters and batteries shall be capable of black-starting the system and magnetizing the step-up transformer. Re-energization procedures shall be developed during detailed engineering.
- **Monitoring and communications:** A central monitoring platform shall integrate power conversion equipment, energy/power meters and environmental sensors. Internet connectivity via Low Earth Orbit is envisaged for remote monitoring.
- **Modularity and expandability:** The design shall use standardized, modular equipment arrangements that facilitate independent replacement and future expansion without major redesign of the electrical architecture.

4. Indicative key personnel

The current Employer's Requirements identify the following key positions. These requirements are indicative for the RFI and may be refined following market feedback and before issuance of the bidding documents.

Position	Total experience	Similar works	Indicative focus
Project Manager	10 yrs	5 yrs	Remote solar PV/BESS mini-grid project management
Site Engineer / Construction Manager	10 yrs	5 yrs	On-site construction management
Electrical Engineer / Solar PV Specialist	10 yrs	5 yrs	PV/BESS design, commissioning and grid integration

Civil Engineer	7 yrs	5 yrs	Civil/structural works for solar plants and technical building
Quality Control Inspector	7 yrs	5 yrs	QA/QC; ISO 9001 compliance
Health and Safety Officer	7 yrs	5 yrs	ESH requirements compliance
Community Liaison Officer	7 yrs	5 yrs	Indigenous-community engagement
Environmental Specialist	7 yrs	5 yrs	Environmental management, monitoring and reporting