

REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES)

Infrastructure Development Bank of Zimbabwe

Budget reference No: Project ID No.:

Project Name:

IDBZ/IPDR1/Rufaro-Solar/22102018
Feasibility Study and Environment & Social Impact Assessment (ESIA) for the Proposed Rufaro Solar Project

- The Infrastructure Development Bank of Zimbabwe ("IDBZ/the Bank") was formed on the 31st of August 2005 and was primarily set up as a vehicle for the promotion of economic development and growth, and improvement of the living standards of Zimbabweans through the development of infrastructure, which includes but not limited to energy, transport, water and sanitation, information communication technology (ICT) and housing. The Bank is also enjoined to develop institutional capacity in undertakings and enterprise involved in infrastructure development in Zimbabwe (IDBZ Act (Chapter 24:14). The Bank, therefore, operates primarily as an infrastructure Development Finance Institution (DFI).
- Rufaro Solar Farm One (Private) Limited is a Special Purpose Vehicle ("SPV/the Promoter") incorporated under the laws of Zimbabwe. The SPV is licensed as an Independent Power Producer ("IPP") by the Zimbabwe Energy Regulatory Authority ("ZERA").
- The IDBZ in partnership with the project promoter, Rufaro Solar Farm One (Private) Limited intend to undertake a detailed Feasibility Study and Environmental and Social Impact Assessment ("ESIA") for establishing a 50MW solar energy plant in Marondera Town, Zimbabwe.
- The project is located at Longlands Farm measuring about 300 hectares in Marondera Town, Mashonaland East Province in Zimbabwe, and will be implemented in phases. The first phase will be carried out on a 100-hectare piece of land and is expected to generate 50MW which will be fed into the national grid.
- The 50MW Plant will comprise individual solar panels connected into several strings. These strings will be connected in parallel into an inverter. The inverter then optimizes the energy yield of the solar field, converts to alternate current and stabilizes the voltage. On the AC side, an inverter will deliver a low voltage of approximately 600V, which is transformed to medium voltage (MC) at 33kV. The project is expected to cost US\$71 million. The project is currently at preparatory
- The purpose of the consultancy assignment is to conduct a Full Feasibility Study covering preliminary technical designs, analysing the legal and regulatory environment, carrying out a detailed economic, financial and social analysis, risk analysis, gender analysis and institutional analysis in line with international best practices.
- Additionally, the purpose includes conducting an Environment and Social Impact Assessment (ESIA) study, including an Environmental and Social Management Plan (ESMP) as required in terms of the Environmental Management Act (Chapter 20:27) as read with Statutory Instrument 7 of 2007 (EIA and Ecosystems Protection Regulations) and in line with international best practices. The ESIA will include a gender Impact assessment as part of the assessment.
- The IDBZ now invites eligible National, Regional and International Consulting Firms to indicate their interest in providing the consultancy services for the detailed feasibility study which will include the technical analysis to ascertain technical viability, financial analysis, economic analysis, Environmental and Social Impact Assessments. Interested Consulting Firms/consortia must provide information demonstrating that they are qualified to undertake this assignment individually or a consortium i.e. provide Company profiles, Company registration documents, Curriculum Vitae, brochures, description of similar assignments; experience under similar environment or conditions; availability of appropriate skills/ experience among staff, etc. Prospective Consulting Firms may constitute joint-ventures where necessary to enhance their capacity to undertake the assignment.
- The main objective of the Consulting Services is to prepare a feasibility study and ESIA for the proposed Rufaro Solar Project. This is required for the Project to be implemented in a technically feasible, financially viable as well as environmentally and socially sustainable manner, and in full compliance with both the Zimbabwe legal and regulatory requirements as well as international best practise standards applicable to solar power projects. Broadly, the selected Consultant shall:

 i. Carry out a detailed full feasibility study which will include a robust technical and financial model and risk register

 ii. Establish environmental, social and gender baseline conditions for the site at a broad level.

 - to prepare an environmental and social impact assessment study for the proposed Rufaro Solar Project.
- Selection of Consulting Firms shall be through Quality-and-Cost Based selection (QCBS) method.
- Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the Public Procurement and Disposal of Public Assets Act [Chapter 22:23] as read with the Public Procurement and Disposal of Public Assets Regulations SI 5 of 2018 as well as the IDBZ "Rules and Procedures for the use of Consultants" downloadable from the IDBZ website, www.idbz.co.zw.
- The Feasibility study work to be undertaken by the Consultant requires interdisciplinary analysis. The general skills required for a feasibility study include but not limited to, Team Leader, Mechanical Engineer/Solar PV Expert, Electrical/Power System Engineer; Civil/Geotechnical Engineer, Topographical Surveyor, Hydrologist, Energy Economist, Energy Expert, Social Scientist / Gender Specialist, Financial Expert, GIS Specialist, Lead Environmental Planner, Botanist/Biologist/Ecologists and Lead Social Development Specialist.
- m) Firms must clearly state their years of experience in relevant fields of expertise. Further, the criteria for shortlisting shall include, but not limited to the following:
 - The Consultant's experience should include a completion of at least five assignments of similar nature. Added advantage for Lead Firms with at least 10 years of relevant experience (Solar Energy Plants):
 - experience working locally, regionally and internationally; and exposure to gender analytical frameworks and mainstreaming.
- The Key Personnel below shall have the following attributes:

1. Team Leader/Project Manager

At least a Masters' Degree in a related technical field, Additional postgraduate qualification in Renewable Energy or Energy Management will be an advantage. At least 5 years work experience in the development of Solar PV design, integration and RFP development for utility scale solar PV farms. Demonstrated high level technical writing and communications skills in the preparation of technical reports, technical specifications, technical training materials and presentations. Highly developed personal communication and people skills with evidence of track record in effective team work and collaboration.

2. Financial Analyst/Financial Modelling Specialist

At least a Masters' Degree in Finance, Economics or equivalent together with at least five years of experience developing and analysing financial models utilizing non-recourse financial structures for power generation facilities, together with tariff analysis. The Financial Analyst/s should demonstrate experience of having prepared financial models for at least three private sector financings in the power sector, using non-recourse project finance.

3. Electrical Engineer/Solar PV Expert:

At least a bachelor's Degree in a related Engineering specialization with a minimum of ten years of experience in the solar PV sector including at least five years of experience in PV power plant development covering design, procurement or construction. The solar expert should have good command of PV standards and proven experience on resource assessment and calculation of energy yield for solar PV projects.

4. Energy Economist:

At least Master's Degree in Economics with a minimum of eight years of experience of the economics of power system planning, project design, economic appraisal of investment projects. Demonstrated experience in economic appraisal of solar power projects.

5. Power System Engineer

At least a bachelor's degree in electrical engineering or a related field. A minimum of eight years' experience in power systems operations or planning.

6. Civil/ Geotechnical Engineer

At least a bachelor's degree in engineering. A minimum of 10 years' experience in design and supervision of construction of geotechnical structures including foundations, slopes, excavations, and retaining walls.

7. Topographical Surveyor

At least a bachelor's degree in surveying or geomatics. A minimum of ten years in geodetic, hydrographic and cadastral surveys.

8. Social scientist / Gender specialist

A social assessment and development expert with at least ten (10) years' experience in development work carrying out social and gender analysis work.

- Availability of backstopping staff in addition to key experts provided below will be added advantage.
- p) The assignment is expected to span over a period of six (6) months.

Expressions of Interest must be delivered to the address below on or before 22 October 2018 by 1500hrs and clearly labelled as follows: "FOI - Feasibility Study and ESIA for Rufaro Solar Project: IDBZ/IPDR1/Rufaro-Solar/22102018".



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