

**International Solar Alliance (ISA) Expression of interest  
for Empanelment of Global Firms / Companies for Assessment of Solar Rooftops in  
member countries of ISA (Middle & Southern Africa Region)**

ISA invites interested companies to apply on the following:

**Summary of proposal:**

ISA member countries are endowed with vast potential of solar energy. The respective Governments in the member countries are making efforts to tap Solar Energy resources to improve the availability of power in the member countries by promoting solar power projects. Solar Rooftop in many parts of the member countries is still at an early stage. This segment is attractive to the governments, utilities and cities as they do not require pooling of land or separate transmission facilities. At the same time, it makes consumers into prosumers by becoming active participants in the energy sector.

ISA Programme No. 04 viz., “Scaling Solar Rooftops” was launched with an objective to promote, assess potential, harmonize demand and pool resources for rapid deployment of and scaling up Rooftop Solar (Off-Grid and Grid-Connected) in pursuit of the objectives of Paris Declaration, 2015 and towards fulfilment of its obligations under Article II and III (2) of Framework Agreement.

In this context, ISA is looking for competent firms / companies to help achieve the above mentioned objectives by way of assessing the solar rooftop potential in member countries of ISA **(Middle & Southern Africa region)** as detailed brought out in this document.

**The Firm/Company shall provide the following services:**

**Outputs:**

The selected firm is generally required to carry out the following activities while doing the assessment in member countries of ISA **(Middle & Southern Africa region)**, as per the requirement of ISA. The key deliverables of the firm / company shall be one or more of the following to enable the readiness of the member country for the scaling of Solar Rooftop Projects (SRT) projects:

- a) **Prepare Country Energy Profile and rooftop assessment report** to understand the readiness of the country in scaling up solar rooftop programme, which includes but not limited to:
  - l) Segment the possible beneficiaries and an analysis of their energy demand and their willingness and ability to pay, for the following:
    - a) Government buildings (including total demand, capacity, consumption, geolocation, etc.)
    - b) Commercial & Industrial buildings (including total demand, capacity, consumption, geolocation, etc.)

- c) Institutional buildings (including total demand, capacity, consumption, geolocation, etc.)
    - d) Residential buildings/Public/community buildings, Health centres, schools, village community centers etc. (including total demand, capacity, consumption, geolocation, etc.)
  - II) Assess the capacity of existing Power evacuation infrastructure and its proximity to the existing substation.
  - III) Assess capacity & compatibility of available energy source (i.e. diesel generators) at the site and indicate the most cost-effective source or combination of sources.
  - IV) Report must include the most suitable solar rooftop location(s) based on the physical assessment. This will serve as basis for the technical design of the solar rooftop project and to prioritize the location(s).
  - V) Based on the above aspects, estimating the most optimum size of the solar rooftop projects for the identified location(s).
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- b) Prepare Report on the Financial Ecosystem of the member country with regard to financing of solar rooftop projects. (Macroeconomic environment, Business models, Financing instruments, incentives schemes, portfolio of regional/national banks etc.)
  - c) Review the existing energy/solar policy/regulations of the member country and identify the gaps/challenges and provide the recommendations accordingly to scale the solar rooftop projects in consultation with concerned administrative ministry and associated departments/agencies of the member country.
  - d) If the member country does not have Solar Rooftop Policy, preparation of a suitable draft of solar rooftop policy in consultation with concerned administrative ministry and associated departments/agencies.
  - e) The firm / company shall also assist in arranging training programme & workshops during country missions in member country.
  - f) The assessment report shall be accepted only upon concurrence of the member country.
  - g) Preparation of standard Project documents like model bidding document, Power Purchase Agreement, Concession Agreement etc. (wherever required).
  - h) Based on the above mentioned assessment report, preparation of bankable detailed project report of the finalized rooftop site(s) in the member country. The bankable details project report shall consist of following:

- (i) Site survey details, selection of suitable space, analysis of installed electrical equipments & connected loads, Load management.
- (ii) Basic engineering of proposed Solar rooftop plant including layout, shadow analysis, technology selection, technical description & specification of all the components, Water & Auxiliary power requirements.
- (iii) Techno-commercial study including Design Simulation & estimation of generated energy, proposed Business models with its benefits, Financial analysis covering financial viability, ROE, profitability and cash flow at levelized tariff etc.)
- (iv) Preparation of detailed engineering drawings for the projects including but not limited to the following:
  - a. Solar array layout (to be located in completely shadow free space identified during site survey).
  - b. Single line diagram (clearly showing and differentiating existing energy flow diagram and proposed solar power generation, distribution and integration with the existing power evacuation network).
  - c. Details of cable routing and termination (including complete specifications).
  - d. Control room equipment layout and complete equipment interconnection.
  - e. Location and interconnection of bi-directional energy meter.
  - f. A set of documents including complete specifications, warranty terms and details of traceability of all the equipments to be supplied with the power plant.
- (v) Data regarding reduction in CO2 emissions with the proposed project.
- (vi) Compliance of all type of statutory approvals required for the commissioning of Solar Rooftop Plant.
- (vii) Proposed Solar Rooftop Plant Project Implementation schedule.
- (viii) Proposed Solar Rooftop Plant operation planning. (manpower planning, operation & maintenance activities, Risk Analysis)
- (ix) Conclusion & recommendations.

**Note:**

1. For preparation of the above-mentioned reports, the firm / company shall closely interact and liaison with the key stakeholders like policy makers, regulators, Power generation & transmission utilities, power distribution companies etc. of the member country.
2. The firm / company shall submit the soft copy and appropriate number of translated hard copies of these reports as per the requirement of the member country.

The exact scope of work would be finalized by ISA as per the requirement of the member country.

## Eligibility criteria

<b>List of attributes :</b>
<b>Specific Requirements :</b>
Should have completed site survey of minimum cumulative capacity of 2MW of Solar Rooftop Projects (hereinafter referred as SRT) (minimum 10 locations) within the Middle & Southern Africa region and produced the feasibility reports. Such reports should have been endorsed by Funding Agencies/Governments.
Should have a pool of skilled technical staff competent to conceive, design and formulate SRT projects customized to the actual geographical and environmental conditions of the actual sites undertaken. The lead member of the staff should have minimum 5 years of experience in the Renewable Energy Sector.
<b>General Requirements :</b>
Wherever assessment has been carried out by the firm/ company , the following should have been included by the firm/company:
Conducting detailed surveys, including energy demand, and consumption pattern of available government buildings, industrial, commercial, Institutional and residential roofs for the purpose of conceiving and formulating Solar Rooftop (SRT) Projects including the design of optimum size of SRT
Should have been involved with the Solar Rooftop Policies, Renewable Energy policies, Electrification plans, Electricity and RE Power regulations, Technical standards for solar rooftops, net metering and gross metering policies, grid connectivity standards and the electricity regulatory framework
Should have experience in commercial documentation (in the appropriate official languages) like PPA, Concession agreements, payment security instruments, bidding documents for selection of Renewable Energy Service Companies (RESCOs) etc.
Should have experience in business models, financing mechanisms for solar rooftops, power purchase transaction models etc.
Should have experience in coordination with various stakeholders like policy makers, regulators, Power generation & transmission utilities, power distribution companies etc.

## Submission details

Company Profile.

Registration certificate;

Compliance Statement for Specific/General requirement as mentioned under Eligibility Clause , along with documentary evidence against each requirement.

List and value of projects performed for the last 3 years plus client's contact details who may be contacted for further information regarding their feedback on those contracts.

List and value of ongoing Projects with ISA (if any) and other national/multi-national organization with contact details of clients and current completion ratio of each ongoing project;

Completed and signed CVs for the proposed key Personnel.

## **Empanelment period:**

The time line of the empanelment period shall be 2 years from the date of award of the empanelment contract. Further any extension in time shall be mutually decided based on the requirement /work progress.

### **- How to submit**

Proposal Submission Address- E-mail: [procurement@isolaralliance.org](mailto:procurement@isolaralliance.org)

Format: PDF files only

File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.

All files must be free of viruses and not corrupted.

Max. File Size per transmission: 5 MB

***When to submit*** (*Expression of interest and statements of qualification must be delivered to the email address below above by **31 May 2022***)-

Interested Companies must provide information indicating that they are qualified to perform the services (brochure, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc...). Companies may associate to enhance their qualifications.

The EOI and accompanying documents must be received through email no later by **31 May 2022** clearly labeled “EOI for **for Empanelment of Global Firms / Companies for Assessment of Solar Rooftops in member countries of ISA (Middle & Southern Africa Region)**”.

EOI from suppliers failing to provide the request information will be disregarded. Request for Proposal and any subsequent purchase order will be issued in accordance with the rule and procedures of ISA.

This EOI does not entail any commitment on the part of ISA, either financial or otherwise. ISA reserve the right to accept or reject any or all EOI without incurring any obligation to inform the affected applicant/s of the grounds.

Interested consultants may obtain further information at the below email address.  
[procurement@isolaralliance.org](mailto:procurement@isolaralliance.org)