

Reference EOI No.: 005/09/2022

Date: 5 September 2022

**International Solar Alliance (ISA) Expression of interest  
for Empanelment of Global Firms / Companies for Assessment of Solar Rooftops in member countries of  
ISA (Asia Pacific Region)**

ISA invites interested firms/ 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 (**Asia Pacific 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 (**Asia Pacific 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 centres 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).
- 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**

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| <b>List of attributes :</b>  |
| <b>Specific Requirements :</b>   |
| Should have completed site survey of minimum cumulative capacity of 500kW of Solar Rooftop |

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| Projects (hereinafter referred as SRT) preferably within the Asia Pacific region and produced the feasibility reports.  |
| Should have a pool of skilled technical staff competent to conceive, design and formulate SRT projects. The lead member of the staff should have minimum 5 years of experience in the Renewable Energy Sector.  |
| <b>General Requirements :</b><br>Wherever assessment has been carried out by the firm/ company , the one or more of 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 (RESCO) 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.

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| <i>Joint Venture, Consortium or Association</i> | 1.1 If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Proposal, they shall confirm in their Proposal that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV,. |
|   | 1.2 After the Deadline for Submission of Proposal, the lead entity identified to  |

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|  | <p>represent the JV, Consortium or Association shall not be altered without the prior written consent of ISA.</p> <p>1.3 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by ISA.</p> <p>1.4 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:</p> <p>a) Those that were undertaken together by the JV, Consortium or Association; and</p> <p>b) Those that were undertaken by the individual entities of the JV, Consortium or Association.</p> <p>1.5 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.</p> <p>JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm.</p> |
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**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

Language: English

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 (deadline= Expression of interest and statements of qualification must be delivered to the address below by 20 September 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 20 September 2022 clearly labeled “EOI for for Empanelment of Global Firms / Companies for Assessment of Solar Rooftops in member countries of ISA (Asia Pacific 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)