



Reference EOI No.: 004/07/2022

Date: 12 July 2022

**International Solar Alliance (ISA) Expression of interest for Empanelment of Global Firms to support implementation of Floating Solar Projects**

**Introduction**

International Solar Alliance (ISA) is an inter-governmental treaty-based organization, established at COP 21 in 2015, with 107 UN member states being signatory to its Framework Agreement, of which 86 are ratified members. ISA is dedicated to supporting its membership in achieving Sustainable Development Goals 7 and 13, along with other SDG co-benefits, through promotion of affordable solar energy. The ISA Secretariat provides support to its membership across key pillars of Analytics & Advocacy, Capacity Building & Ecosystem Readiness, and Programmatic Support. The office of ISA Secretariat is situated in Gwal Pahari, Gurugram, India and the address is:

International Solar Alliance Secretariat  
Surya Bhawan, National Institute of Solar Energy Campus,  
Gwal Pahari, Faridabad-Gurugram Road, Gurugram, Haryana – 122003, India  
[Email: info@isolaralliance.org](mailto:info@isolaralliance.org)  
Web site : isolaralliance.org

The ISA has launched nine thematic programmes to support the member countries in developing solar energy resources, as per their needs and priorities, in pursuit of Sustainable Development Goals and Paris Declaration. ISA's programme number 06 – "Solar Parks" programme – was launched in the year 2020 and focuses on supporting ISA member countries develop large-scale ground mounted and/or floating solar PV projects. The programme was launched to address the demand of the member countries for large-scale projects to bring about rapid energy transition as well as rapid development of large-scale solar energy sector.

The programme, currently, focuses on development of large-scale projects under Independent Power Producer (IPP) modality anchored on long-term Power Purchase Agreement (PPA). The member countries expresses interest for development of large-scale solar PV capacity, as per their needs & priorities. The ISA Secretariat supports the membership in availing expert Project Management Consultancy support for evaluation of the expressed capacity and development of projects through financial closure.

**Section 1: Summary of Proposal:**

The ISA Secretariat aims to assess potential for development of floating solar projects in identified member countries and support such member countries, as per their needs and priorities, in developing detailed site-specific studies. This Expression of Interest is intended to empanel expert firms/companies/agencies for identification of potential floating solar projects, in member countries that have expressed an interest for such projects, and/or undertake detailed site-specific feasibility studies.

The EoI consists of two work packages as per the scope of work provided below in Section 2. Interested applicants may apply under either or both of the work packages. Detailed Terms of Reference for both the work packages are provided in Section 3.

International Solar Alliance invites interested firms/companies to apply on the following:

### **Section 2: Scope of Work**

1. The assessment of floating solar potential and preliminary development of projects is to be undertaken in two-phases – Phase -1 and Phase -2. Some member countries may require studies under both phases while, some member countries may require support under either of the two phases.
2. **Work Package A:** Work Package A will focus on Phase-1 studies. The study will include a holistic assessment of the potential for deployment of floating solar projects in identified member countries will be undertaken. The assessment will encompass, *inter alia*, existing policy & regulatory framework, and gaps therein for promotion of floating solar projects, current installed capacity of grid-connected large-scale projects including floating solar, global best design practices, current and planned transmission network, preliminary identification of potential sites and potential capacity.
3. **Work Package B:** Work Package B will focus on Phase-2 studies. The Phase-2 will include site-specific feasibility study, in consultation with Member countries, for floating solar projects, identified either under Phase-1 study or suggested by the Member country.

### **Section 3: Detailed Terms of Reference – Expected Outputs**

#### **3. A: Work Package A**

1. Under Work Package A (to be undertaken in Phase 1), the expert firm/company/agency shall review the status of existing floating solar/ground mounted solar PV segment in the identified member country encompassing, *inter alia*,
  - a. Current policy/regulatory regime such as feed-in-tariff/reverse auction, waiver of wheeling charges, dispatch regulations, policy/regulations on captive consumption (on-site/off-site), public-private partnership framework (IPP modality), fiscal incentives such as accelerated depreciation, tax holidays, waiver of custom duties, environmental clearances, framework for ownership of water bodies;
  - b. An overview of global best design practices for floating solar projects and case studies on environmental impact of floating solar projects;
  - c. Existing capacity of floating solar projects. If no floating solar projects have been developed, then existing capacity of ground mounted projects;
  - d. Overview of existing grid infrastructure encompassing, *inter alia*, transmission line network, substation capacity, line voltages across different regions in the country, demand centres;
  - e. Negotiated Tariffs and Discovered tariffs, if projects are awarded through reverse auction;
  - f. Overview of existing business models (PPA under BOO/BOOT, Captive consumption) and financing (prevailing interest rates, interest deferment, sovereign guarantee mechanism, off-taker risk mitigation mechanisms, currency convertibility etc.);
  - g. Identification of potential sites and potential capacity for floating solar installations, including hydro-solar hybrid installations; and
  - h. Any other relevant issues requested by the member country.
2. The **expected output(s) under Work Package A** will be

- a. Preparation of a country-wide pre-feasibility report for deployment of floating solar projects including assessment of cumulative floating solar capacity that may be deployed given current transmission infrastructure, identification of potential sites, policy and regulatory recommendations for development of floating solar projects, and roadmap for implementation of assessed capacity.

### **3. B: Work Package B**

1. Under Work Package B, the expert firm/agency/company shall undertake site-specific feasibility study for identified projects. The study may encompass following:
  - a. Reservoir specific details such as area availability, commercial activities in the reservoirs, dead storage level/minimum drawdown level/full reservoir level, seasonal swelling/flooding zone, discharge systems, flow rate, bathymetric details such as bed terrain/undercurrent waves, water characteristics (TDS, pollutants etc), soil type and other geo-technical details, climactic details such as wind speeds, humidity, salinity etc.
  - b. Power evacuation infrastructure
    - i. Availability and distance to nearest transmission line (voltage level) for LILCO connection
    - ii. Availability, capacity/voltage level, distance, and bay availability at nearest substation
    - iii. Load flow details of the substation
  - c. Other site-specific details
    - i. Availability of nearby land
    - ii. Access to site
  - d. Economic analysis for proposed floating solar project
2. The **expected output(s) under Work Package B** will be
  - a. Detailed site-specific feasibility studies for identified sites for floating solar projects

## **Section 4: Eligibility Criteria**

### **4. A: Specific Minimum Requirements for Work Package A**

1. Should have executed minimum 6 assignments of preparation of country-wide/regional prefeasibility study and/or large-scale solar PV capacity roadmap, of which at least 2 assignments on floating Solar PV segment, including business models, financing models, power purchase transaction models etc.
2. Should have a minimum pool of experts to complete the task described above and deliver the outputs satisfactorily to ISA and the country. The lead member should have a University degree or equivalent professional qualifications in one or more of the major fields of solar sector with minimum of 15 years of experience with a renewable/solar energy sector at managerial level, responsible for planning of national renewable/solar energy development or equivalent professional experience.

### **4. B: Specific Minimum Requirements for Work Package B**

1. The expert firm/agency/company should have experience in:

- a. Undertaken Feasibility studies including site-specific technical studies for grid connected ground mounted/floating solar energy projects with a cumulative capacity of 250 MW or more  
AND
  - b. Undertaken Feasibility studies including site-specific technical studies for floating solar PV projects for a cumulative capacity of 20 MW or more.
- 2. Should have a minimum pool of experts to undertake technical studies for floating solar PV projects encompassing,
  - a. Team lead with a minimum experience of 10 years in leading feasibility studies, including site-specific technical studies, for large-scale grid connected solar PV projects, with an experience of leading technical feasibility studies for atleast 3 floating solar PV projects.
  - b. One expert with demonstrable experience in undertaking geotechnical studies and bathymetric studies for floating solar PV projects, with a minimum experience of undertaking studies for a minimum of three floating solar PV projects.
  - c. One expert with demonstrable experience in undertaking grid connection studies for large-scale grid-connected Solar PV projects, with a minimum relevant experience of five years.

#### **4. C: General Requirements for both Work Packages**

- 1. Should have demonstrable experience in providing policy and regulatory advisory services to government, multi-lateral institutions such as multi-lateral development banks, and inter-governmental organizations.
- 2. Should have experience in coordination with various stakeholders like policy makers, regulators, power generation & transmission utilities, power distribution companies etc.

#### **Section 5: Submission details**

The applicant firm/agency/company may apply under either Work Package A or B or both. The application should include following details:

- 1. Company Profile
- 2. Registration certificate
- 3. Compliance Statement for Specific/General requirement as mentioned under Eligibility Clause, along with documentary evidence against each requirement
- 4. In case of application for Work Package A, list and work orders of minimum six assignments of preparation of country-wide prefeasibility study and/or large-scale solar PV capacity roadmap, of which atleast 2 assignments on Floating Solar PV projects
- 5. List and capacity of large-scale floating solar PV projects, wherein the applicant has undertaken feasibility studies including site-specific technical studies , for the last 3 years plus client's contact details who may be contacted for further information regarding their feedback on those contracts
- 6. List of and work order of assignments executed for multilateral organizations, sovereign governments, lenders, and project developers related to advisory support on business models, financing models, Power Purchase Transaction models, policy and regulatory recommendations for large-scale grid connected floating solar PV projects
- 7. 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

8. Completed and signed CVs for the proposed key Personnel.

### **Section 6: Empanelment Period**

The empanelment will be for Two (2) Years from the date of award of empanelment contract. The contract may be extended further based on progress and mutual decision. Based on the requirement raised by an ISA member country under either or both the work packages, as and when received, a Request for Proposal (RfP) will be issued by the ISA Secretariat to the empaneled agencies/firms requesting them to submit technical and financial bids.

The ISA Secretariat may choose to review the empanelment under this after 6 months from the date of notification of empanelment.

### **Section 7: Submission procedure**

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

The EOI and accompanying documents must be received through email no later by 04 August 2022 clearly labelled “**EOI for Empanelment of Global Firms to support implementation of Floating Solar Projects**”.

EOI from agencies/firms 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)