

## **ISA PROGRAM 4 : 'SCALING ROOFTOP SOLAR'**

(Launched during ISA Summit, 11 March 2018)

**Program Code:** ISA/04/2017/SRS

**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 the Paris Declaration, 2015 and towards fulfillment of its obligations under Article II and III (2) of Framework Agreement.

**Coverage & Scope:** The Program of five (5) years duration, from the date of launch or till year 2022, covers the following:

- i. Off-Grid and Grid-connected roof-top solar in 121 Prospective Member Countries including Island States with the support of ISA Member Countries, Partner Countries and Other Countries;
- ii. All types, shapes and sizes of roof and in various rooftop segments viz. residential, commercial, industrial, institutional and others, either public or private, in rural, semi-urban and urban areas; and
- iii. All kinds of existing or future technologies in the field of Solar PV Modules, Thin Films, Flexible Modules, Solar Tiles, etc.; Inverters, Hybrid Inverters, Micro-Inverters, Power Controllers, etc.; Storage Devices, Module Mounting/Fixing Structures, Smart Meters, Measuring Instruments, Tracking/ Remote Monitoring Systems, Auto-Panel Cleaning Devices, Cables, Cable Treys, Connectors, Junction Boxes, Distribution Boxes, Relays, Fuses, Arrestors, Safety Devices, etc. subject to their meeting the relevant IEC Codes and/or other Codes or Standards or regulations as specified by the Member Country, Partner Country, ISA or the Appropriate Authority.

### **Action Plan and Activities for Successful Implementation of the Program:**

1. Assessment of Rooftop Solar Potential and Demand Aggregation and Implementation Plan Settings in the Member Countries or Partner Countries or Other Countries under various categories and sectors by adopting various physical, remote-sensing and other survey tools, methods, procedures, questionnaires and processes.
2. Development and adoption of Common Methodologies for
  - i. Progressive and enabling Rooftop Solar Policy & Regulations including Tariff Regulations; Building Codes;
  - ii. Model Bidding Documents and Model Power Purchase Agreements;
  - iii. Standards, Certifications and Quality Assurance Plan, Inspection and Testing;
  - iv. Grid-Connectivity Norms and Processes; Net and Gross Metering Systems/ Procedures; and
  - v. Installation and O & M Practices, Safety Measures, Remote Monitoring Systems, etc.
  - vi. Any other incidental activity
3. Promotion of Rooftop Solar by organizing Awareness Program, Capacity Building Program, Sharing of Best Practices and Successful Business Models for Entrepreneurs, Micro, Small and Medium Enterprises, Project Developers, Utility Engineers, Financial Institutions, Banks, etc.; Also, organization of international, regional and national conferences, seminars, workshops, roundtables, exhibitions, etc to sensitize various stakeholders including public at large in association with Partner exhibitions, etc to sensitize various stakeholders including public at large in association with Partner Organizations, Think Tanks, Civil Societies, Vendors, Suppliers, OEMs, Industry and Trade Associations, Entrepreneurs, Start-ups etc. for rapid market development and penetration;

4. Development and dissemination of Distant Learning Program, Training/ Skill Development Program and Certification Courses through various e-platforms, Videos, training literatures, documentation etc. in association with Educational and Technical Training Institutions, Development Agencies, Skill Council for Green Jobs, NGOs, etc. to build a skilled and trained workforce in the rooftop solar segment;
5. Facilitation of Technical and Financial Assistance to public and private entities, to plan and design rooftop solar program, prepare techno-economic feasibility reports and detail project reports; to draw finance and invest plan, encourage public-private partnerships; to prepare and float Expression of Interests (EoI), Request for Proposal (RfP), to finalize, award and manage domestic and international competitive bidding through e-platforms, post-award contract management, project installation, operation and maintenance and project monitoring during implementation, operation & maintenance stage through ICT, e-platforms or remote monitoring systems in association with Member Countries, Partner Countries, Other Countries, Technical and Knowledge Partners, Think Tanks and Consultants to enhance Local Institutional Capacity among Member Countries; and
6. Integration of Roof-top Solar with Grid Distribution System, Energy Storage Systems and Solar Water Heating Systems, Policy and Regulatory Advocacy and to create necessary infrastructure and market for solar technologies, products and services to supplement Smart City Program and e-Mobility Program of the Member Countries in association with Member Countries, Partner Countries, Partner Organizations, Think Tanks, civil societies, NGOs, Consultants, Advocacy Groups, Forums, Vendors, Suppliers, OEMs, and Industry /Trade Associations.
7. Enforcement of Quality Parameters of Solar PV Panels, Inverters and balance of equipments. The Plan and Program may undergo change, modification or amendment, either in part or in full or may include new Plan and Program in consultation with ISA or as decided by the Member Country or Countries.

#### **Approach & Methodology:**

- i. The Program is through voluntary participation only. All decisions about the planning and implementation of the Program shall be taken by the Member Countries.
- ii. Member Country is to designate a Country Representative responsible for the Program within one month of the launch of the Program.
- iii. The Country Representative shall extend all necessary cooperation towards implementation of the program and communicate with ISA through an appropriate digital platform. The Country Representative shall provide inputs required from the Member Country from time to time to the ISA Program Director keeping National Focal Point informed.
- iv. The Program shall be designed based on the information shared by the Member Country and implemented through digital circulation and open consultation. Member Country shall carry out assessment of rooftop solar potential, carry out and facilitate aggregation of demand, set targets, and formulate plans for implementation of the Program. ISA or its authorized agency may assist the member country in such matters to achieve economy of scale, reduction in costs and speedy implementation of the program.
- v. The Country Representative shall submit Quarterly Reports in a Standard ISA Format as designed in consultation with Member Countries to enable ISA submit periodic reports to the Assembly.

It is proposed that the process be continued under our collective leadership until the objective of bringing affordable and reliable solar applications for scaling solar rooftop within the reach of all ISA Member Countries, Island States and other Partner Countries is reached.

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