



## ISA's SolarX Grand Challenge- A Start-up Initiative

**Date: February 6, 2023**

**Time- 1200-1330 hours IST**

**Venue: ISA Pavilion**

**Bangalore International Convention Centre**

*(Hybrid Mode)*

International Solar Alliance (ISA) will host an event on SolarX Grand Challenge- A Start-up Initiative at the India Energy Week (ISA Pavilion) on February 6, 2023, from 10:30-12:00 hrs IST at Bengaluru, India. The event will feature high-level discussions on the “Need for promoting innovations for supporting local solutions and enhancing the entrepreneurial ecosystem in the solar energy sector in Africa” bringing together leaders from various FIs/MDBs/Donor agencies/organizations.

ISA, an Inter-Governmental organization with 112 signatory countries, has been helping its member countries to scale up solar and make it a preferred source of energy. Through the Solar X Grand Challenge, ISA aims to mobilize resources for solar by promoting the start-up ecosystem throughout the globe. The core objectives of the program are to identify innovative solar solutions, promote the local start-up ecosystem and catalyze growth potential for the African nations.

### **Context- Need for a start-up challenge in solar energy ecosystem**

The global energy crisis combined with the search for an alternate source of energy is emerging to be the paramount subject matter for global leaders. More than 700 million people across the globe still do not have access to modern energy sources. Solar energy is the strongest contender to offer safe, clean, and affordable sources of energy. Solar energy provides countries with an unprecedented opportunity to bring prosperity, energy security, and sustainable development to their people. While solar energy is abundant, it represents a tiny fraction of the world's current energy mix. Although the availability of sunlight is abundant in tropical regions, the accessibility to frugal methods of implementation is scarce. Hence, it is imperative to scout for innovative and frugal means of solar energy generation or distribution sources.

### **ISA's SolarX Grand Challenge**

The SolarX Grand Challenge aims to accelerate investments in solar by creating a pool of entrepreneurs and start-ups in the solar energy sector of ISA member countries. The first edition is focused on the African region, aiming to promote innovation, discover local solutions, and enable entrepreneurs with the over-arching objective of building human and institutional capacity to sustain and grow solar businesses. The SolarX Grand Challenge will enable four-fold benefits in technology, finance, innovation, and the business startup ecosystem of the solar energy sector in the region.



The SolarX Challenge will be a leading force in driving the world's transformation to a renewable energy

economy that promotes innovation in the solar energy space and accelerates a responsible energy transition. The challenge is expected to bring together more than 100+ start-ups from across the African

solar segments in year 1. Upto 20 new and innovative startups would be shortlisted and given technical and financial assistance under this initiative.

The first edition is focused on the African region, aiming to promote innovation and discover local solutions, with the over-arching objective of capacity building. The SolarX Grand Challenge will address a three-fold benefit for the African region:

- Promotion of the solar energy sector
- Thinning of the gap of the energy crisis in Africa
- Promotion of a strong startup ecosystem in Africa

### Problem Statements

For the first edition (2022-23), the Solar X Grand challenge will be focused on encouraging startups that provide solutions to the following problem statements:

1. Technical and financial innovations to accelerate the deployment of **off-grid solar applications** (mini-grids and SHS) to displace diesel, charcoal or traditional biomass
2. Development of more efficient models having high scalability potential and enhancing cost competitiveness (including life cycle costs) for solar drying, solar water heating, solar cooking or other similar **productive use applications**
3. Technical and/or business model innovations to bring down the cost of, or support grid integration for **rooftop solar systems**
4. Innovative solutions **combining use of solar with other applications (e.g. AgriPV)** to save land and boost small holder family incomes
5. **Manufacturing innovations (deployment or integration)** to lower the cost or improve efficiency/efficacy of solar or ancillary equipment in target markets
6. Innovative business models of solar power to emerging use cases such as **eMobility, green Hydrogen, round-the-clock power, battery waste management etc.**
7. Development of **soft tools based on AI, IoT** to improve the manufacturing, deployment or integration of solar energy applications
8. Development of **eco-system in terms of manufacturing of balance of system components**, such as, high efficiency inverters, glass cover options for modules to maintain high transmittance and reduce use of water in cleaning, EVA sheets, etc.



9. Development of **high-efficiency DC pumps with smart controller** having potential for scalability and practical business models for dissemination
10. Services or software which help in land mapping e.g., **geo-spatial drones**

### Expected Outcome

After the successful launch of the challenge at CoP27, the '[Call for Applications](#)' for the challenge has already been initiated digitally through the ISA and Invest India websites. The applicants are invited to apply by March 31, 2023. The evaluation and shortlisting of the applications are expected to be completed by June 2023. **This will be followed by the declaration of the winners in July 2023.** A cash grant of USD 15,000 each for 20 startups will be offered as a winning prize. The challenge is expected to bring together more than 100+ start-ups from across the African solar segments in year one. The program will come to closure with learnings and strategies for implementing the next leg in a different geography with enhanced objectives.

The topics of discussion will include:

- Need for promoting innovations for crowdsourcing local solutions and enhancing the entrepreneurial ecosystem in the solar energy space in Africa
- Mobilizing resources for strengthening the solar start-up ecosystem to address the ongoing energy crisis in Africa
- Ensure universal access – addressing concerns of technology dispersion and affordability

## Agenda and Potential Speakers (Digital)

### *SolarX goes DIGITAL*

Duration	Discussion Point	Potential Speakers
5 Minutes	<p><b>Welcome Address</b></p> <p>Introduction to ISA's SolarX Grand Challenge and its main objectives</p>	<p><b>H.E. Dr Ajay Mathur (video)</b> Director General <i>International Solar Alliance</i></p>
10 Minutes	<p><b>Opening Remarks</b></p> <p>ISA's role to promote, innovate, and scale-up the solar capacity in the African Continent including a presentation on SolarX grand challenge</p>	<p><b>Mr Joshua Wycliffe</b> Chief of Operations <i>International Solar Alliance</i></p>
20 minutes	<p><b>Special discussion on 'India's role in promoting the startup ecosystem and linkages with G20'</b></p>	<p><b>Moderated by: Mr Joshua Wycliffe</b></p> <ul style="list-style-type: none"> <li><b>Dr Chintan Vaishnav</b>, Chair, Startup 20 Engagement Group under G20 India Presidency, Government of India</li> <li><b>Mr Deepak Bagla (hybrid)</b> Managing Director and CEO <i>Invest India</i></li> </ul>
40 Minutes	<p><b>Presentations and discussions on "Need for promoting innovations for supporting local solutions and enhancing the entrepreneurial ecosystem in Africa"</b></p>	<ul style="list-style-type: none"> <li><b>Mr Peter Damgaard Jensen</b>, CIC (tbc)</li> <li><b>Mr Vivek Mittal</b>, AfIDA (tbc)</li> <li><b>Mr Koen Peters</b>, GOGLA (tbc)</li> <li><b>Ms Jessica Stephens</b>, AMDA (tbc)</li> <li><b>Mr Dushyant Thakor</b>, WAIPA (in-person)</li> <li><b>Mr Nalin Agarwal</b>, Founder, Climate collective (in-person)</li> <li><b>Country reps and national focal points to ISA from Africa (tbc)</b></li> </ul>
5 Minutes	<p><b>Closing Remarks</b></p>	<p><b>Ms Pragya Gupta</b> <i>ISA</i></p>