

## Taking Stock of International Solar Alliance

### Why in News?

The 7th Session of the International Solar Alliance (ISA) was held in New Delhi from November 3 to 6, 2024.

### What are the initiatives launched in the 7th Session?

- **International Solar Alliance** - It is a global initiative launched in 2015 by India and France at the COP21 summit in Paris.

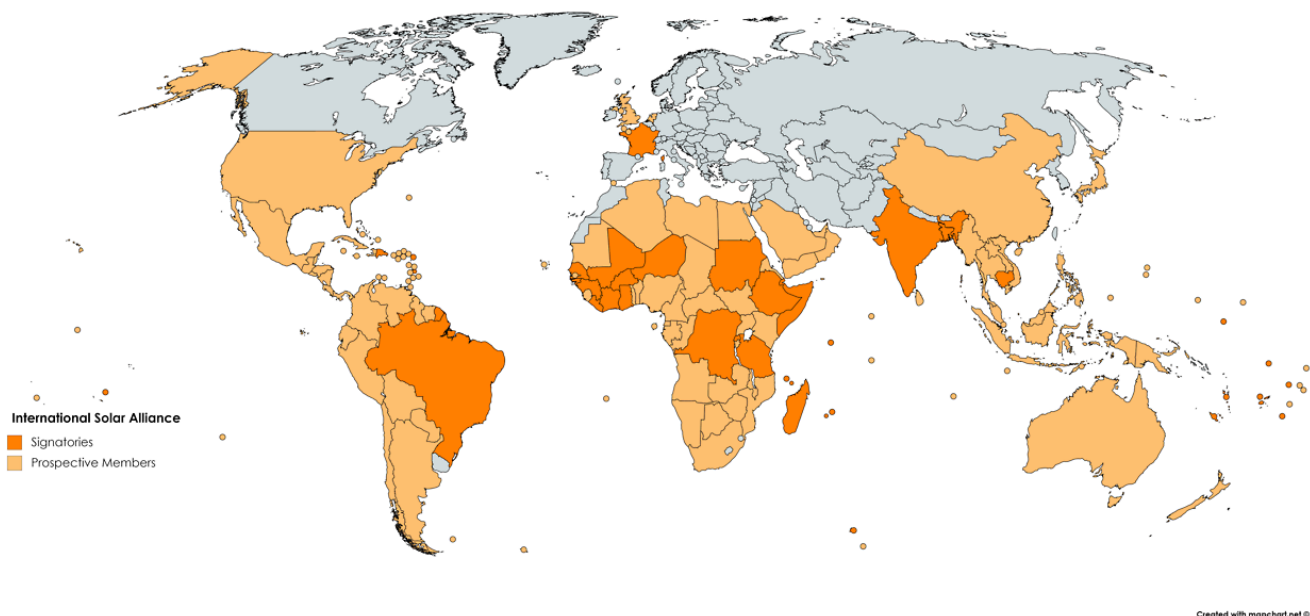
*The founding conference of ISA was held on March 11, 2018, in India marked a significant step in mobilizing international efforts toward solar deployment.*

- **Objective** - To promote solar energy as a sustainable solution for energy access and climate change.
  - **Towards 1000 strategy** - To unlock **US\$1 trillion** in solar investments by 2030.
  - To provide energy access to 1 billion people and install **1,000 GW** of solar energy capacity.

*Achieving these targets would significantly mitigate global carbon emissions, reducing 1,000 million tonnes of CO2 annually.*

- **Approach**
  - Analytics & Advocacy
  - Capacity Building
  - Programmatic Support
- **Headquarters** - New Delhi, India.
  - ISA is the first international organization established in the country.
- **Members** - **120 signatories**, including **102 fully ratified member countries**.

*Initially focused on developing countries, the ISA's Framework Agreement was amended in 2020 to allow all United Nations member states to join.*



- **Four Regional Groups**

- Africa
- Asia and the Pacific
- Europe and Others
- Latin America and the Caribbean

- **Annual Meet** - The Assembly meets annually at the ISA's headquarters to assess the impact of programs and activities.

- **ISA & SDG** - The ISA aims to achieve the Sustainable Development Goals, especially in the areas of affordable and clean energy (**SDG 7**) and climate action (**SDG 13**).

- **Focus of 7th Session** - Accelerating solar energy deployment across its Member Countries, particularly in regions with limited energy access.

- **Elections**

- **Presidency** - India
- **Co Presidency** - France
- **Vice Presidents**
  - Africa region: Ghana and Seychelles
  - Asia and the Pacific region: Australia and Sri Lanka
  - Europe and Others region: Germany and Italy
  - Latin America and the Caribbean region: Grenada and Suriname

*The seventh session of the ISA Assembly elected Mr. Ashish Khanna from India as its third Director General.*

ISA Initiatives	
<b>SolarX Startup Challenge</b>	It was introduced at COP27(2022) to support innovative solar businesses in ISA Member Countries.
<b>STAR-C Initiative</b>	To strengthen solar technology skills in developing economies.
<b>Global Solar Facility</b>	To catalyse investment in underserved regions, particularly Africa.

<b>Viability Gap Funding Scheme</b>	To provide grants to solar projects in Least Developed Countries and Small Island Developing States, easing financial barriers.
<b>Solar Data Portal</b>	It offers real- time data to inform investment decisions.
<b>International Solar Festival</b>	To foster global collaboration on solar solutions.
<b>Green Hydrogen Innovation Centre</b>	To explore synergies between solar energy and hydrogen.
<b>ISA Knowledge Series and World Solar Reports</b>	To promote research, insights, and market trends, positioning ISA as a leading advocate for solar energy worldwide.



- **3<sup>rd</sup> edition of the World Solar Report series**

- World Solar Market Report
- World Investment Report
- World Technology Report
- Green Hydrogen Readiness Assessment for African Countries.





### What are the significances of ISA ?

- India plays a pivotal role in shaping ISA's initiatives and fostering international cooperation.
- **Multilateralism** - ISA reflects India's commitment to multilateralism.
- **Solar Facilitator** - ISA help countries overcome financial, technological, regulatory, or other barriers in harnessing solar energy.
- **Carbon-neutral future** - By reducing carbon emissions and promote sustainable development, it helps India achieve its Panchamrit targets.
- **Advancing global solar cooperation** - ISA provides policy support, technology capacity building , investment facilitation to smaller countries.
- **Enhancing energy security** - By leveraging international cooperation and innovative solutions, the ISA is set to make significant strides toward achieving global climate goals and ensuring energy for all.
- **Clean energy transition** - Promoting solar energy across sectors such as agriculture, health, transport, and power generation.
- **Strategic Tool** - It is an important part of India's outreach to the Global South, particularly to countries in Africa.

### What are the challenges with ISA?

- **Slow deployment of solar energy** - Despite 9 years of existence, no ISA-facilitated solar power project has been started operations.

*The first ISA project is expected to be in Cuba where auctions have taken place and a developer has been selected to set up a 60 MW plant.*

- **Entry Barriers** - Smaller developing countries, particularly in Africa do not have prior experience of executing large power projects.
- **Dominance of China in Solar Products** - Over 80 per cent of the solar products manufacturing is concentrated in China, which is seen as another barrier to quick

spread of solar energy in smaller markets

- **Less investments in Africa** - Less than 2 per cent of new additions are happening in Africa, a region that houses about 80 per cent of the nearly 745 million people who still do not have access to electricity.
- **Inadequate global participation** - ISA is still largely viewed as an Indian initiative and it is almost entirely funded by India.
- **Underutilization** - ISA offices have been under-staffed and under-funded, and conflict with Ministry of New and Renewable Energy.
- **Inadequate Inspiration** - Failure to create excitement about solar energy in countries that are in desperate need of access to cheap and reliable energy source.

### What lies ahead?

- Rotate the presidency of ISA among other countries to encourage their participation and contribution.
- Expedite the operation of ISA funded projects to inspire members to take actively participate.

**India's Solar Sector**



- India **ranks 5<sup>th</sup>** globally in solar power capacity.
- **India's installed solar capacity** - 90.76 GW (As of September 2024)
- It has been increased 30-fold over the past 9 years.
- **India's solar potential** - 748 GW(National Institute of Solar Energy estimate)
- **Five Panchamrit targets**
  - India will reach its non-fossil energy capacity to 500 GW by 2030.
  - India will meet 50 percent of its energy requirements from renewable energy by 2030.
  - India will reduce the total projected carbon emissions by one billion tonnes from now onwards till 2030.
  - By 2030, India will reduce the carbon intensity of its economy by less than 45 percent.
  - By the year 2070, India will achieve the target of Net Zero.
- **India's Progress**
  - 46.3% of the country's total energy capacity now comes from non-fossil sources.

## Government Initiatives

**PM Surya Ghar Muft Bijlee Yojana**

This scheme offers free electricity (up to 300 units/month) to 1 crore households in India that install rooftop solar units. It promotes renewable energy and reduces electricity costs.

<b>Free Electricity:</b>	➤ Up to 300 units/month for eligible households
<b>Financing:</b>	➤ Low-interest loans for installation.
<b>Annual Savings:</b>	➤ ₹15,000 for 300 units/month.
<b>Outlay:</b>	➤ ₹75,021 Crore.

**PM-KUSUM**

Aimed at boosting solar power in agriculture, this scheme targets 34.8 GW capacity by 2026. It focuses on reducing diesel use, increasing farmer income, and reducing pollution.

**Components:**

A: 10,000 MW solar plants.

B: 1.4 million stand-alone solar pumps.

C: 3.5 million grid-connected pumps.

<b>Subsidy:</b>	➤ 30% (50% in select areas).
<b>Target:</b>	➤ 34.8 GW by March 2026.

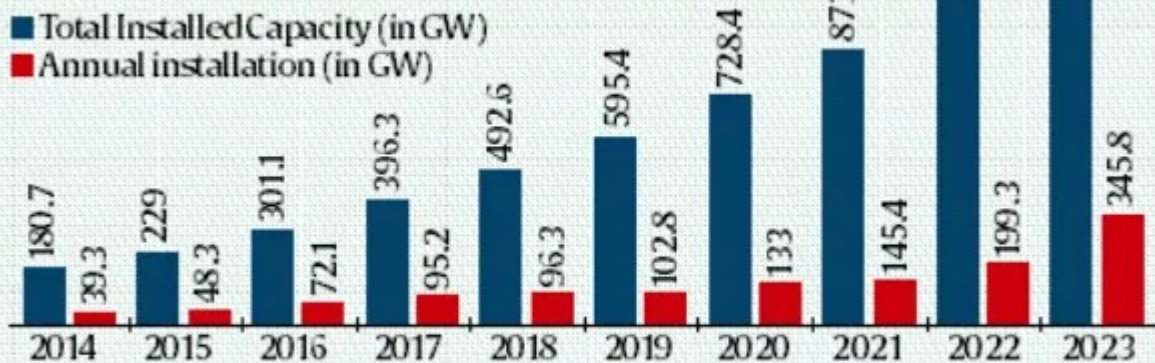
**Solar Parks**

Launched in 2014, this scheme establishes large solar parks (500 MW+) to streamline solar power generation by providing necessary infrastructure.

<b>Capacity Target:</b>	➤ 40,000 MW by 2025-26.
<b>Infrastructure:</b>	➤ Transmission lines, water access, etc.
<b>Collaboration:</b>	➤ State and private sector partnerships.



## TOTAL INSTALLED CAPACITY ANNUAL INSTALLATION (IN GW)



## COUNTRIES WITH BIGGEST SOLAR FOOTPRINT

Total installed capacity in 2023 (in GW)

China	609.3	India*	72.7
European Union	254.7	Brazil	37.5
United States	137.7	Australia	33.8
Japan	87	Italy	29.7
Germany	81.7	Spain	28.7

\* India's installed capacity reached 90.76 GW by end of September 2024

Source: World Solar Market Report, 2024, ISA



## References

1. [PIB | India Shines Bright](#)
2. [The Indian Express | Taking Stock of ISA](#)



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