

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.

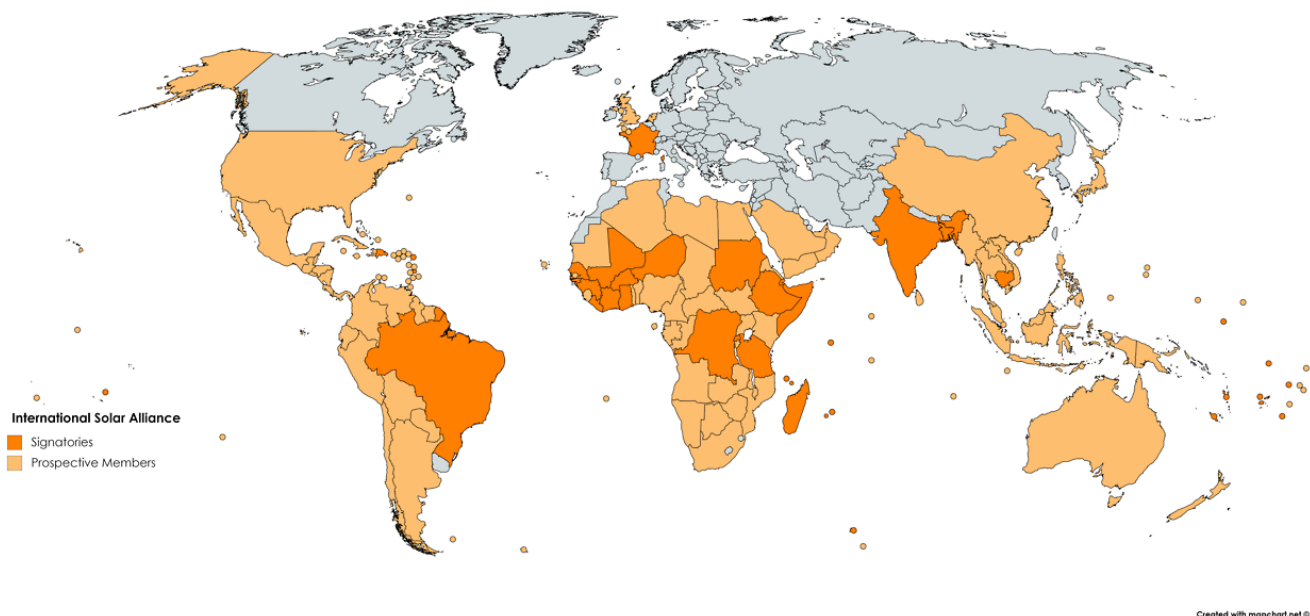
The founding conference of ISA was held on March 11, 2018, in India marked a significant step in mobilizing international efforts toward solar deployment.

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

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



- **3rd 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 5th** 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.

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

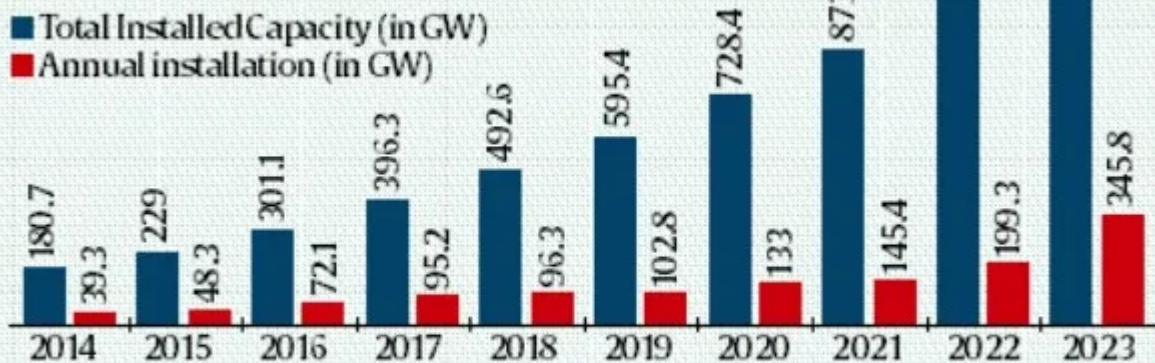
Subsidy:	➤ 30% (50% in select areas).
Target:	➤ 34.8 GW by March 2026.


Solar Parks

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

Capacity Target:	➤ 40,000 MW by 2025-26.
Infrastructure:	➤ Transmission lines, water access, etc.
Collaboration:	➤ 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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