



Research Unit
Press Information Bureau
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India Shines Bright!

A New Era in Solar Energy: Progress Driven by the International Solar Alliance

(Ministry of New & Renewable Energy)

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Introduction

The International Solar Alliance (ISA) is a global initiative launched in 2015 by India and France at the COP21 summit in Paris to promote solar energy as a sustainable solution for energy access and climate change. Headquartered in India, the ISA is the first international organization established in the country, reflecting India's commitment to multilateralism and a carbon-neutral future. With 120 Member and Signatory Countries, the ISA plays a key role in advancing global solar cooperation, enhancing energy security, and supporting the transition to cleaner energy systems.



7th Session of ISA

The 7th Session of the International Solar Alliance (ISA), which was held in New Delhi from **November 3 to 6, 2024**, focused on accelerating solar energy deployment across its Member Countries, particularly in regions with limited energy access. During this session, several significant initiatives, programs, and funding schemes aimed at supporting solar energy projects and fostering global cooperation were presented and discussed.



The ISA launched several key initiatives to advance global solar energy adoption. The **SolarX Startup Challenge**, introduced at COP27, supported innovative solar businesses in ISA Member Countries. The **STAR-C Initiative** strengthened solar technology skills in developing economies, while the **Global Solar Facility** catalyzed investment in underserved regions, particularly Africa. The **Viability Gap Funding Scheme** provided grants to solar projects in Least Developed Countries and Small Island Developing States, easing financial barriers. The **Solar Data Portal** offered real-time data to inform investment

decisions, and the **International Solar Festival** fostered global collaboration on solar solutions. Additionally, the **Green Hydrogen Innovation Centre** explored synergies between solar energy and hydrogen, and the **ISA Knowledge Series** and **World Solar Reports** promoted research, insights, and market trends, positioning ISA as a leading advocate for solar energy worldwide. The seventh session of the ISA Assembly elected **Mr. Ashish Khanna** from India as its third Director General. The Director General of the International Solar Alliance (ISA) played a pivotal role in advancing the organization's mandate. This included supporting member countries in addressing shared challenges and fostering coordinated efforts to accelerate the global

deployment of solar energy. The seventh session also elected its **President** and **Co-President** for 2024–2026. **India** was the sole candidate for President, while **France** won the Co-Presidency over **Grenada**.

Under the ISA Assembly's Rules of Procedure, the President, Co-President, and Vice Presidents were elected with consideration for equitable geographical representation across four regional groups of the ISA Members: **Africa, Asia and the Pacific, Europe and Others**, and **Latin America and the Caribbean**. The eight Vice Presidents of the Standing Committee, two from each region, were selected based on seniority in ratifying the ISA's Framework Agreement.

The Vice Presidents for the upcoming term were:

- **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



As the ISA's apex decision-making body, the Assembly played a key role in shaping and overseeing the implementation of the ISA's Framework Agreement and coordinating actions to meet its objectives. The International Solar Alliance, in collaboration with India's **Ministry of New & Renewable Energy**, the **Asian Development Bank**, and the **International Solar Energy Society**, also hosted the **third High-level Conference on New Technologies for Clean Energy Transition** alongside the Seventh ISA Assembly. The conference aimed to turn dialogue into action, with sessions on **advanced solar technologies**, **emerging storage solutions**, and solar's potential to drive **equitable economic, social, and environmental development**. Along with

that, the **third edition of the World Solar Report series** was also launched, featuring four key reports: the **World Solar Market Report**, **World Investment Report**, **World Technology Report**, and the **Green Hydrogen Readiness Assessment for African Countries**. These reports focused on global solar growth, investment trends, technological advancements, and Africa's potential in green hydrogen, each highlighting a critical aspect of the global transition to sustainable energy.

Overview of ISA

The genesis of ISA came from a shared vision between India and France to combat climate change through the widespread adoption of solar energy technologies. The founding conference of ISA was held on March 11, 2018, in India marked a significant step in mobilizing international efforts toward solar deployment. 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).

Initially focused on developing countries, the ISA's Framework Agreement was amended in 2020 to allow all United Nations member states to join, further broadening its reach and reinforcing the global nature of the alliance. Today, the ISA represents 120 signatories, including 102 fully ratified member countries, making it a vital global coalition in the renewable energy landscape¹. The Assembly meets annually at the ISA's headquarters to assess the impact of programs and activities on solar energy deployment, performance, reliability, cost, and financing scale.

Objective:

The International Solar Alliance (ISA) aims to unlock US\$1 trillion in solar investments by 2030 through its '**Towards 1000**' strategy, focusing on reducing both technology and financing costs. This ambitious plan aims 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.

The ISA currently has nine comprehensive programs, each targeting a specific application to

¹ https://isa.int/membership/membership_country_list?type=mcl

promote the deployment of solar energy solutions. These programs concentrate on three priority areas: Analytics & Advocacy, Capacity Building, and Programmatic Support, all aimed at fostering a conducive environment for solar energy investments within the country. These initiatives are designed to create a favourable environment for solar energy investments and facilitate sharing best practices among member countries.

By promoting solar energy across sectors such as agriculture, health, transport, and power generation, ISA member countries enact policies and share best practices to drive change. The alliance has developed and tested innovative business models for solar projects, supported governments in creating solar-friendly legislation through its Ease of Doing Solar analytics, and pooled demand for solar technology to lower costs. Furthermore, ISA enhances access to finance by mitigating risks and making the sector more appealing to private investors, ultimately fostering a sustainable energy future.

India's Leadership in ISA

India's commitment to renewable energy and climate action laid the groundwork for the formation of the ISA. India's ambitious renewable energy goals, mainly its target of achieving 500 GW of non-fossil fuel-based energy by 2030, align closely with the ISA's mission to drive solar energy adoption worldwide. This goal is part of the broader **Panchamrit Initiative**, which aims to reduce carbon emissions and promote sustainable development². Furthermore, India plays a pivotal role in shaping ISA's initiatives and fostering international cooperation. The nation's extensive experience in scaling solar projects and policy frameworks serves as a model for other member countries, especially those in need of enhanced energy access. By sharing best practices and technical expertise, India aims to empower other nations in their solar energy journeys.

Overview of India's Solar Sector

India's solar sector is rapidly expanding, with the country ranking fifth globally in solar power capacity. As of September 2024, India's installed solar capacity stands at approximately 90.76 GW, having increased 30-fold over the past nine years. The National Institute of Solar Energy estimates India's solar potential at 748 GW.

² Five Panchamrit targets includes (i) India will reach its non-fossil energy capacity to 500 GW by 2030, (ii) India will meet 50 percent of its energy requirements from renewable energy by 2030, (iii) India will reduce the total projected carbon emissions by one billion tonnes from now onwards till 2030, (iv) By 2030, India will reduce the carbon intensity of its economy by less than 45 percent, and (v) by the year 2070, India will achieve the target of Net Zero.

The country has made remarkable strides, with its installed non-fossil fuel capacity increasing by 396% in the last 8.5 years.

Approximately 46.3% of the country's total energy capacity now comes from non-fossil sources. This growth reflects India's commitment to sustainable energy, as outlined in its ambitious target set during international climate discussions.

The Indian government's proactive policies, including the allowance of 100% foreign direct investment (FDI) in renewable energy projects, further bolster the sector's growth and attractiveness to

investors. The ongoing technological advancements and a strong regulatory framework create a favourable landscape for solar energy projects.

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.

Conclusion

The International Solar Alliance represents a transformative movement toward a sustainable energy future. With India leading this initiative, the ISA not only aims to enhance energy access and security but also to significantly reduce carbon emissions globally. The upcoming assembly serves as a vital platform for collaboration among nations, reinforcing the need for urgent action in solar energy deployment.

As countries unite under the ISA's mission, the potential for solar energy to become a cornerstone of the global energy landscape grows stronger. The work of the ISA, along with India's commitment to solar energy, promises a cleaner, more sustainable world for future generations. 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.

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