

# **Intersolar Europe 2023 Exhibition**

#### Published On: 19-06-2023

**Why is in news?** IREDA participates in "Intersolar Europe 2023" Exhibition in Munich, engages with global stakeholders to drive transition to a more sustainable future

**Indian Renewable Energy Development Agency** (IREDA) participated in the three-day "Intersolar Europe 2023" exhibition held in Munich, Germany from 14th to 16th June, 2023.

IREDA, a Mini Ratna (Category – I) Government of India enterprise under the administrative control of Ministry of New and Renewable Energy, had set up a pavilion at the exhibition to educate visitors about the organization.

Visitors to the pavilion had the **opportunity to learn about IREDA's initiatives in financing renewable energy projects, promoting energy efficiency, and supporting the growth of renewable energy sector** in India.

The pavilion **also served as a platform** for **networking and exploring potential business opportunities** with IREDA, especially at the crucial time of energy transition and Initial Public Offering (IPO) plan of IREDA.

#### Solar energy in India:

India, being a tropical country is endowed with plenty of solar energy; hence, exploitation of solar energy becomes an important component of renewable energy sector

India is endowed with **vast solar energy potential**. About **5,000 trillion kWh per year energy** is incident over India's land area with most parts receiving 4-7 kWh per sq. m per day

**Karnataka leads India's list of states producing solar energy**, with a total installed solar power capacity of about 7,100MW; **followed by Telangana, Rajasthan, Andhra Pradesh and Gujarat.** 

Also, India is now the fourth-largest solar power producer in the world.

In pursuance to enhance Solar Energy production, **India along with France launched the International Solar Alliance** with the aim to **promote solar energy in 121 member countries** and to **mobilise over \$1 trillion of investment** for **the deployment of solar energy at affordable costs**.

The target set by India, for installed solar energy capacity is 100 GW by March 2023 — 40 GW rooftop solar and 60 GW ground-mounted utility scale.

## Govt. of India Initiatives:

The govt. of India established a **19,500-crore production linked incentive (PLI) scheme** on **'national programme on high efficiency solar PV modules'**, seeking to attract Rs 94,000-crore investment in the sector.

**Modified Special Incentive Package Scheme (M-SIPS)** of Ministry of Electronics & Information Technology offers a 20-25 percent **subsidy for investments** in capital expenditure for setting up a manufacturing facility.

Kamaraj IAS Academy

Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040 Phone: 044 4353 9988 / 98403 94477 / Whatsapp : 09710729833 Atal Jyoti Yojana (AJAY): The AJAY scheme was launched in September 2016 for the installation of solar street lighting (SSL) systems in states with less than 50% of households covered with grid power (as per Census 2011).

**PM KUSUM**: The scheme aims to **add solar and other renewable capacity** of 30,800 MW by 2022 with total central financial support of Rs. 34,422 Crores.

**Solar Park Scheme**: The Solar Park Scheme plans to build a number of solar parks, each with a capacity of nearly 500 MW, across several states.

**SRISTI Scheme**: **Sustainable rooftop implementation of Solar transfiguration of India (SRISTI) scheme** to promote rooftop solar power projects in India.

**National Solar Mission**: It is a major initiative of the Government of India and State Governments to promote ecologically sustainable growth while addressing India's energy security challenge.

## **Benefits of Solar Energy**:

Solar energy is a **renewable source of energy**, meaning it can be **produced indefinitely** without depleting resources.

Solar energy is a clean source of energy, producing no harmful emissions or pollution.

The cost of solar energy has decreased significantly in recent years, making it **increasingly cost-effective as a source** of energy.

Solar energy systems are becoming **increasingly reliable and durable**, requiring little maintenance.

Solar energy can be used for a wide range of applications, including electricity generation, heating, and lighting.

Solar energy systems can be installed on a small scale, making it possible to generate energy locally, **reducing dependence on centralized energy sources**.

## **Challenges with Solar Energy in India**:

Despite recent reductions in the cost of solar panel technology, the upfront **cost of installation remains high**, which can be a barrier to adoption for many households and businesses.

Access to finance for renewable energy projects can be limited, particularly for smaller and rural projects, which can make it challenging for individuals and organizations to invest in solar energy.

A lack of adequate infrastructure and grid connectivity in some areas of the country can make it difficult to transmit the electricity generated from solar panels to where it is needed.

**Finding suitable land** for large-scale solar projects can be a challenge in India, particularly given competing demands for land for other purposes such as agriculture and urban development.

**Poor maintenance and operation** of solar power systems can reduce their efficiency and effectiveness, which can impact the long-term viability of renewable energy projects in India.