

***Asia's largest
Solar Power Plant:
Rewa Solar Plant***



Asia's largest Solar Power Plant: Rewa Solar Plant

Summit

On 9th July, the Prime Minister dedicated the **750-megawatt** ultra-mega solar power plant to the country.

Capacity

- It comprises three solar generating units of 250 MW each located on a 500-hectare plot of land inside a solar park with a total area of 1500 hectares. Its total capacity is 750 MW.

Project Developer

- It is set up by Rewa Ultra Mega Solar (RUMS) Ltd, which is a joint venture between Madhya Pradesh Urja Vikas Nigam Ltd (MPUVNL) and state-owned Solar Energy Corporation of India (SECI).



Funding

- Central financial assistance of Rs 138 crore has been provided to RUMSL for the development of the park. **It is the first project to get funding from the Clean Technology Fund (CTF) in India. It is the first solar park in India to get World Bank funding.**

Off-takers

- It is the first solar project in India having different Categories of Off-takers: MPPMCL and Discoms (Licensed Utilities), DMRC (Open Access Consumer). The project is the first renewable energy project to supply to an institutional customer outside the state, the Delhi Metro Rail Corporation (DMRC).

Significance of Rewa Ultra Mega Solar Project

- **Self-sufficiency in electricity is very important for a self-reliant India and solar energy will play a key role in achieving the Atmanirbhar Bharat (self-reliant India) goal.**
- **India has a global commitment to clean energy through its NDCs.**
- **The solar project will reduce emissions equivalent to approximately 15 lakh tonne of carbon dioxide every year.**

Key Highlight's

- PM called solar energy as pure, sure, and secure. It is sure because other sources of energy might be depleted but not of the sun. It will always continue to shine. It is pure because it helps the environment instead of polluting it and secure because it is a symbol of self-reliance.
- PM made a pitch for self-sufficiency in the solar sector. He called on the domestic manufacturers to ramp up production of solar panels, battery, and storage capacity, solar cells, and modules. Necessary steps are being taken to enhance the manufacturing of solar photovoltaic (PV) modules.
- He reiterated that government departments and institutions will only procure solar equipment from domestic manufacturers.
- **For example, it has been made mandatory to use solar photovoltaic cells and modules made in India in pumps under Kusum [KisanUrja Suraksha Evam UtthaanMahabhiyan] scheme and rooftop panels on houses. This is to be understood in the context of measures being implemented by the government to reduce its dependency on China for power equipment imports.**



Picture Source* - Ministry of New & Renewable Energy Website

CLAT 2021

A Comprehensive Course

[START FREE TRIAL](#)

Solar Power in India

- National Institute of Solar Energy has assessed the Country's solar potential of about 748 GW assuming 3% of the wasteland area to be covered by Solar PV modules. India had a total grid-interactive solar power capacity of 35 GW at the end of June 2020 as per the Ministry of Power and New and Renewable Energy.
- **Recently, India achieved a 5th global position in solar power deployment by surpassing Italy. Solar power capacity has increased by more than 11 times in the last five years from 2.6 GW in March 2014 to 30 GW in July 2019 and 35 GW in June 2020.**
- Presently, solar tariff in India is very competitive and has achieved grid parity. The price of solar energy has come down to Rs 2-2.50 per unit from Rs 7-8 per unit in 2014.

Scheme of Development of Solar Parks & Ultra Mega Solar Power Projects in India

- It was rolled out in December 2014. Under this scheme, it was proposed to set up at least 25 Solar Parks and Ultra Mega Solar Power Projects targeting over 20,000 MW of solar power installed capacity within a span of 5 years starting from 2014-15.
- The capacity of the Scheme has been enhanced from 20,000 MW to 40,000 MW vide this Ministry's order dated 21-03-2017. These parks are proposed to be set up by 2021-22. Its objective is to facilitate the solar project developers to set up projects in a plug and play model. Solar power projects can be set up anywhere in the country, however, the scattering of solar power projects leads to higher project cost per MW and higher transmission losses.
- Individual projects of smaller capacity incur significant expenses in site development, drawing separate transmission lines to the nearest substation, procuring water, and in the creation of other necessary infrastructure.
- **It also takes a long time for project developers to acquire land, get a change of land use and various permissions, etc. which delays the project. To overcome these challenges, the scheme for "Development of Solar Parks and Ultra-Mega Solar Power Projects" was rolled out.**

Period of Validity

- **It will run up to 2021-22.**

Salient Features of the Scheme:

- The scheme envisages supporting the States/UTs in setting up solar parks at various locations in the country with a view to creating the required infrastructure for setting up solar power projects. The solar parks provide suitable developed land with all clearances, transmission systems, water access, road connectivity, communication network, etc.
- The scheme facilitates and speeds up the installation of grid-connected solar power projects for electricity generation on a large scale. All the States and Union Territories are eligible for getting benefits under the scheme.
- The capacity of the solar parks shall be 500 MW and above. However, smaller parks are also considered where contiguous land may be difficult to acquire in view of difficult terrain and where there is an acute shortage of non-agricultural land.
- The solar parks are developed in collaboration with the State Governments and their agencies, CPSUs, and private entrepreneurs. The implementing agency is termed as Solar Power Park Developer (SPPD).

Examples of Solar Parks in India

- **Bhalda Solar Park** - It is located in Bhalda, Rajasthan. It has a total solar capacity of 2245 MW.
- **Pavagada Solar Park** - It is in Tumkur district of Karnataka. It has a total solar capacity of 2050 MW.

India's Import of Solar Equipment & Recent Policy Change

- China was the top exporter of solar cells and modules to India between 2019-2020, accounting for around 77.5 percent of the total imports (\$1.68 billion) of the equipment.
- There was also a recent announcement in June by Minister of Power and New and Renewable Energy that it has plans to implement basic customs duties of around 15-25 percent on solar equipment starting August. This duty would subsequently go up to as much as 40 percent.

Key Takeaways

- It is the first project to get funding from the Clean Technology Fund (CTF) in India. It is the first solar park in India to get World Bank funding.
- India achieved a 5th global position in solar power deployment by surpassing Italy. Solar power capacity has increased by more than 11 times in the last five years from 2.6 GW in March 2014 to 30 GW in July 2019 and 35 GW in June 2020.
- It also takes a long time for project developers to acquire land, get a change of land use and various permissions, etc. which delays the project. To overcome these challenges, the scheme for "Development of Solar Parks and Ultra-Mega Solar Power Projects" was rolled out.

-----0-----

CLAT 2021:

A Comprehensive Course

1-year program with a day-wise study-plan
to reach your dream NLU

Why take this course?

- › Expert guidance by NLU alumni provided
- › Day-wise study plan covering the entire syllabus
- › All topics covered through live classes & quizzes
- › Daily quizzes to boost your speed and accuracy



Surajit Shantanu, Navin, Savitri, Ankit, Pranav