

# Solar-Wind Hybrid Parks

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In news

The government of India proposed to develop wind parks and wind-solar hybrid parks in the country

Aim

The concept note aims to address a key issue faced by renewable energy projects, in particular, wind energy projects

What is the need for the hybrid project?

- The solar power project is commissioned on contiguous land, while the wind power project requires scattered land on footprint basis which not only increases the transmission cost but also increases the possibility of land-related issues.
- In order to overcome these challenges and to speed up the installation of wind power projects, the scheme Development of Wind Parks/Wind-Solar Hybrid Park with proper infrastructure including evacuation facilities in place has been proposed.

Plug and play solution

- The proposal says that the Wind Energy Park will provide a plug and play solution (availability of land, transmission, necessary infrastructure and necessary approvals) to the investors for installing wind/wind-solar power projects
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Sites identified for these project

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- These sites are located in the states of Tamil Nadu, Andhra Pradesh, Karnataka, Gujarat, Rajasthan, Madhya Pradesh, and Telangana.
- As per the proposal, areas with wind potential with a capacity utilisation factor of more than 30 per cent will be chosen.
- Further, if the site has solar potential, the developer may consider building a wind-solar hybrid plant subject to consent from the respective state governments.
- The State government would designate park developers who would undertake the development of park including DPR preparation, land, transmission infrastructure, etc.

### Project capacity

- The Concept Note has identified potential to install projects for a capacity of 53,495 MW (5 MW per sq km). The capacity of each park should be 500 MW and more.
- However, parks of lower capacity may also be developed depending upon the availability of land and resource.
- In any case, the capacity of each park shall not be less than 50 MW.

### Financial assistance

- As per the proposal, park developers may also be allowed to pool small investor into the single park.
- MNRE will provide financial assistance of 25 lakh per park to the developer for DPR preparation and 30 lakh per MW or 30 per cent of the park development cost to park developer, whichever is lower.

### India's Renewable energy target

The Government of India has set a target of installing 175 GW

of renewable energy capacity by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.