

UPSC Civil Services Examination

UPSC Notes [GS-III]

Topic: National Wind-Solar Hybrid Policy - UPSC Notes

National Wind-Solar Hybrid Policy was adopted on 14 May 2018 by the Ministry of New and Renewable Energy (MNRE) as an initiative to promote large grid-connected wind-solar PV hybrid system for efficient utilization of the transmission infrastructure and land. National Wind-Solar Hybrid Policy also aims to reduce the variability in renewable power generation and to achieve better grid stability.

National Wind-Solar Hybrid Policy is an important topic for the [IAS Exam](#) and forms an important part of the [UPSC Syllabus](#).

Formation of National Wind-Solar Hybrid Policy

The Union government has set an ambitious target of achieving 175 GigaWatt (GW) of installed capacity from renewable energy sources by 2022, which includes 100 GW of solar and 60 GW of wind power capacity. The total renewable power installed capacity in the country stood at about 70 GW in the financial year 2017-18. There have been significant capacity additions in renewables in recent years and hybrid energy will further help in better utilisation of resources.

The Ministry of New and Renewable Energy has issued National Wind-Solar Hybrid Policy on 14 May 2018 with an aim to boost renewable power generation by promoting new projects as well as hybridisation of existing ones. Government is also going to launch a scheme for new hybrid projects under this policy.

Objectives of National Wind-Solar Hybrid Policy

The major objectives of the National Wind-Solar Hybrid Policy are as follows:

- Provide a comprehensive framework for the promotion of large grid-connected wind-solar photovoltaic (PV) hybrid system for efficient utilization of transmission infrastructure and land.
- Reduce variability in renewable power generation and achieve better grid stability.
- Encourage new technologies, methods and way-outs involving combined operation of wind and solar PV plants.

Features of National Wind-Solar Hybrid Policy

Some of the important features of National Wind-Solar Policy are mentioned below:

1. It has been provided in a hybrid project, subject to the condition that, rated power capacity of one resource be at least 25% of the rated power capacity of other resources for it to be recognised hybrid project.
2. The Policy provides for the integration of both energy sources i.e. wind and solar at alternating current (AC) as well as direct current (DC) level.
3. It seeks to promote new hybrid projects as well as hybridisation of existing wind and solar projects. It allows hybridisation of existing projects (wind or solar) with higher transmission capacity than sanctioned one, subject to availability of margin in existing transmission capacity.
4. It will be on the tariff-based transparent bidding process for which Government entities may invite bids.
5. The policy permits the use of battery storage in hybrid projects for optimising output and reducing variability.
6. It mandates the regulatory authorities to formulate necessary standards and regulations for wind-solar hybrid systems.

National Wind-Solar Hybrid Policy is an important policy adopted by the Government of India. Candidates preparing for [UPSC 2020](#) are also advised to keep a track on the latest [current affairs](#) topics related to several developments in the country.