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Year End Review 2019: Ministry of New and Renewable Energy

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Important Schemes and Policies

Nationally Determined Contributions as per the Paris Accord

- As a part of Nationally Determined Contributions as per the Paris Accord on Climate Change, India has made a pledge that by 2030, 40% of our installed power generation capacity shall be from non-fossil fuel sources and also by 2030, reduce emission intensity of GDP by 33-35 % from 2005 level.
- Economic growth, increasing prosperity, a growing rate of urbanisation and rising per capita energy consumption has increased the energy demand of the country.
- In 2015, India decided that 175 GW of renewable energy capacity will be installed by the year 2022.
 - This includes 100 GW from solar, 60 GW from wind, 10 GW from biomass and 5 GW from small hydro power.
- The substantial higher capacity target will ensure greater energy security, improved energy access and enhanced employment opportunities.

Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)

- The scheme covers grid-connected Renewable Energy power plants (0.5 – 2 MW)/ Solar water pumps/ grid connected agriculture pumps.
- Components of the scheme-
 - Installation of 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Energy Power Plants by farmers of 500 kW to 2 MW capacity within 5 km distance from sub-station primarily on barren/uncultivable land.
 - Installation of standalone off-grid solar water pumps to fulfil irrigation needs of farmers not connected to grid.
 - Solarization of existing grid-connected agriculture pumps to make farmers independent of grid supply and also sell surplus solar power generated to Discom and get extra income.

Scheme for Development of Ultra Mega Renewable Energy Power Parks

- It is a scheme to develop Ultra Mega Renewable Energy Power Parks (UMREPPs) under the existing Solar Park Scheme.
- The objective of the UMREPP is to provide land upfront to the project developer and facilitate transmission infrastructure for developing Renewable Energy (RE) based Power Parks with solar/wind/hybrid and also with storage systems.

Grid-Connected Rooftop Solar (RTS) Programme

The union cabinet has approved Phase-II of Grid Connected Rooftop Solar Programme for achieving a cumulative capacity of **40,000 MW from Rooftop Solar Projects by the year 2022.**

- In grid-connected rooftop or small Solar Photovoltaic (SPV) system, the DC power generated from the SPV panel is converted to AC power using the power conditioning unit and is fed to the grid.
- The major objective of the programme includes:
 - To promote the grid-connected SPV rooftop and small SPV power generating plants among the residential, community, institutional, industrial and commercial establishments.
 - To mitigate the dependence on fossil fuel based electricity generation and encourage environment-friendly Solar electricity generation.
 - To create an enabling environment for investment in the solar energy sector by the private sector, state government and the individuals.
 - To create an enabling environment for the supply of solar power from rooftop and small plants to the grid.

National Wind-Solar Hybrid Policy

- The main objective of the National Wind-Solar Hybrid Policy, 2018 is to provide a framework for promotion of large grid connected wind-solar PV hybrid system for optimal and efficient utilization of wind and solar resources, transmission infrastructure and land.
- The wind - solar PV hybrid systems will help in reducing the variability in renewable power generation and achieving better grid stability.
- The policy also aims to encourage new technologies, methods and way-outs involving combined operation of wind and solar PV plants.

National Offshore Wind Energy Policy

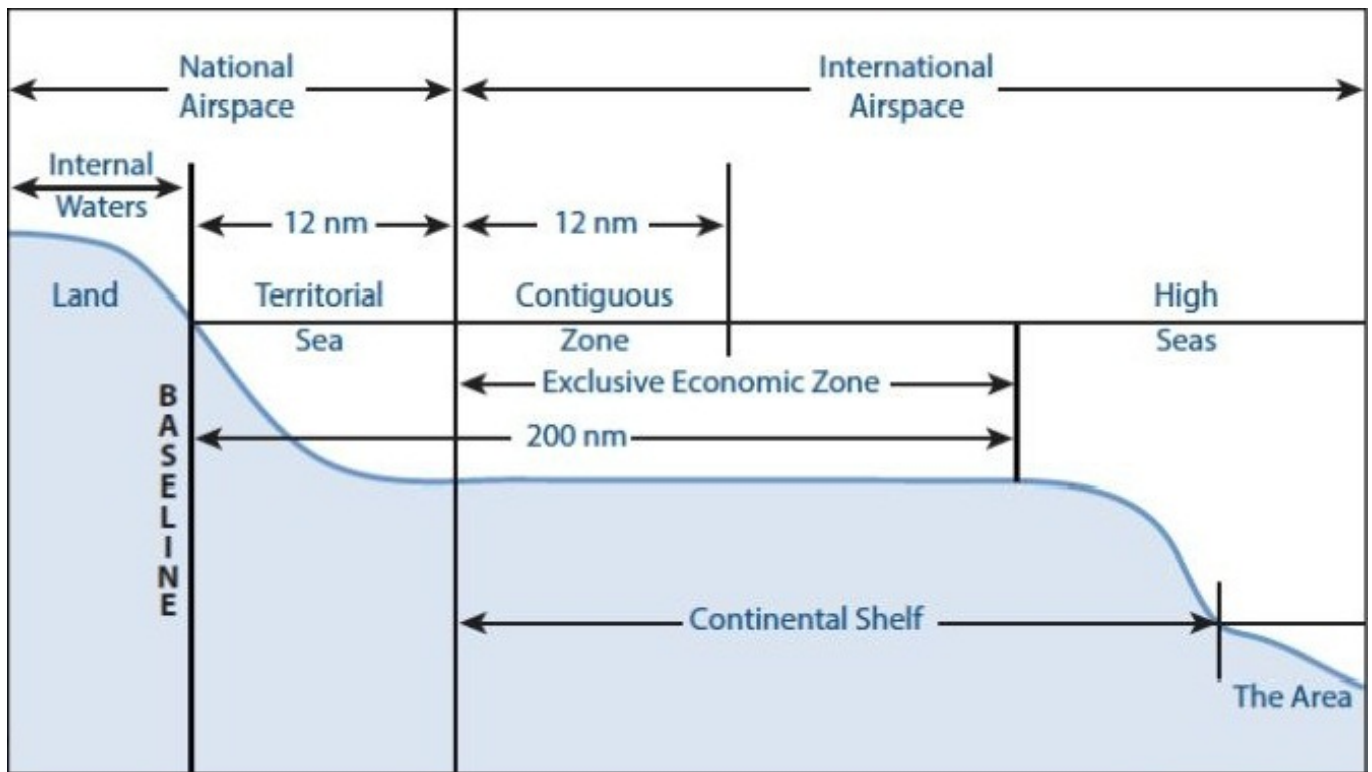
- The National Offshore wind energy policy was notified in October 2015 with an objective to develop the offshore wind energy in the Indian **Exclusive Economic Zone (EEZ)** along the Indian coastline of 7600 km.

- Eight zones are identified each in Gujarat and Tamil Nadu having cumulative offshore wind energy potential of 70 GW.

Exclusive Economic Zone

- Each coastal State may claim an EEZ beyond and adjacent to its territorial sea that extends seaward up to 200 nm from its baselines.
- Within its EEZ, a coastal state has:
 - Sovereign rights for the purpose of exploring, exploiting, conserving and managing natural resources, whether living or nonliving, of the seabed and subsoil.
 - Rights to carry out activities like the production of energy from the water, currents and wind.
- Unlike the territorial sea and the contiguous zone, the EEZ only allows for the above-mentioned resource rights. It does not give a coastal state the right to prohibit or limit freedom of navigation or overflight, subject to very limited exceptions.

Maritime Zones



Atal Jyoti Yojana (AJAY)

- Phase II of Atal Jyoti Yojana (AJAY) was launched.
- Phase I of AJAY scheme was launched in September 2016 for the installation of solar street lighting (SSL) systems in states with less than 50% households covered with grid power (as per Census 2011).

- **The AJAY scheme provides solar street lighting (SSL) systems for public use.** These public uses include:
 - Lighting roads and intersections in remote, rural and semi-urban areas that do not have adequate lighting and lighting at bus stops, public conveniences and market places.

International Engagement

Second Assembly of the International Solar Alliance (ISA)

The Ministry hosted the second assembly of International Solar Alliance (ISA) on 30th and 31st October 2019, New Delhi.

- The Assembly is the supreme decision making body of the ISA, and gives directions on various administrative, financial and programme related issues.
- India (represented by the Minister for New and Renewable Energy and Power) is the President and France is the Co-President of the ISA Assembly.

International Solar Alliance

- The ISA, is an Indian initiative that was launched by the Prime Minister of India and the President of France on 30th November 2015 in Paris, France on the side-lines of the **Conference of the Parties (COP-21)**, with 121 solar resource rich countries lying fully or partially between the tropic of Cancer and tropic of Capricorn as prospective members.
- The overarching objective of the ISA is to collectively address key common challenges to the scaling up of solar energy in ISA member countries.

Read TTP on Solar Energy