

# **DRAFT NATIONAL OFFSHORE WIND ENERGY POLICY**

## **SUB GROUP 2 ON RENEWABLE ENERGY**

### **FOR GIZ-IGEF**




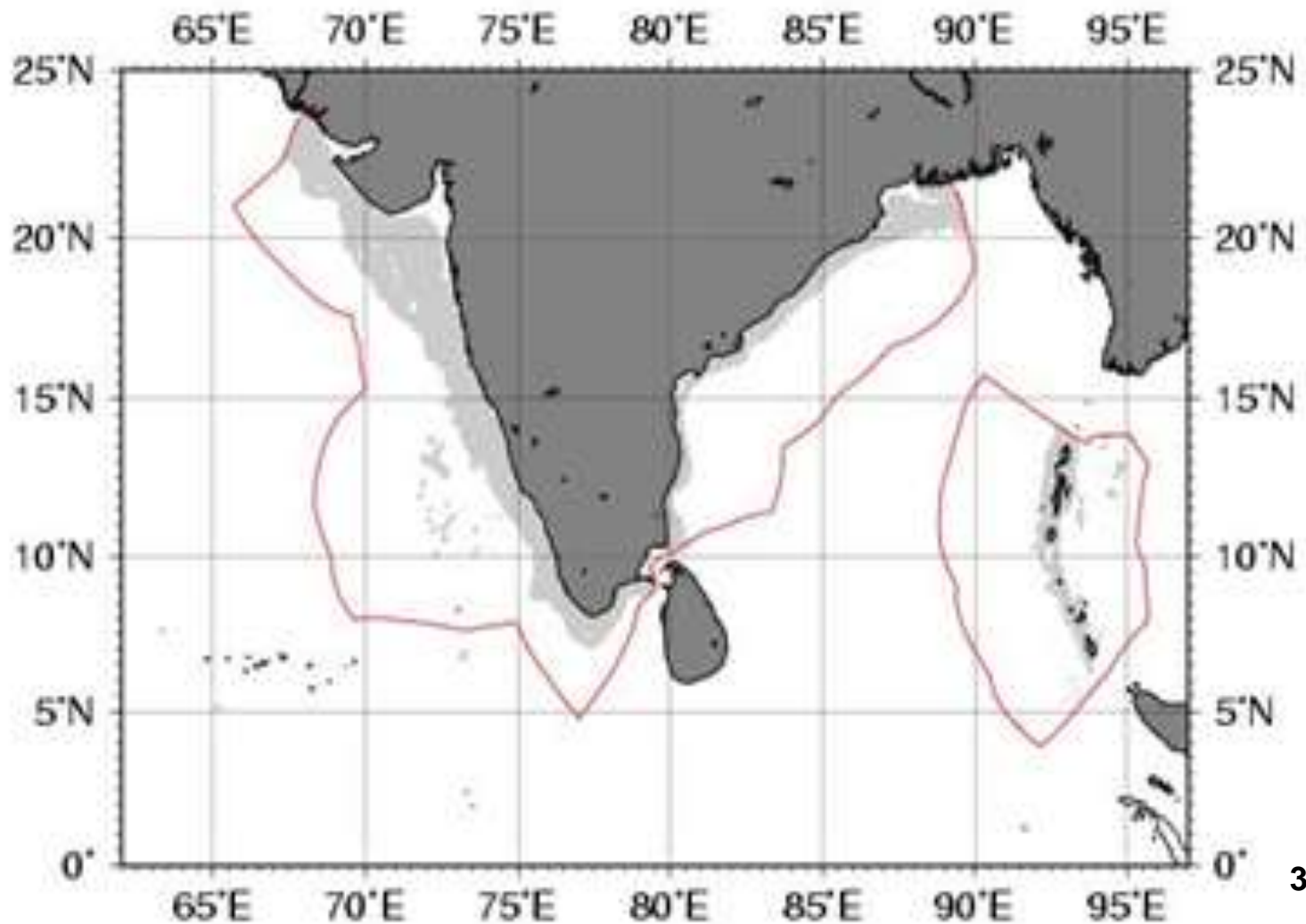
**Ministry of New & Renewable Energy**

# BACKGROUND

- 54 locations on the coast in the states of Tamil Nadu, Gujarat, Odisha, Maharashtra, Andhra Pradesh, Karnataka, Kerala, West Bengal, Puducherry and Goa monitored.
- Preliminary study indicates off-shore potential of 1 GW each at Rameshwaram and Kanyakumari – requires wind data validation.
- Off-shore Wind Energy Steering Committee (OWESC) was constituted under the Chairmanship of Secretary, MNRE, to suggest policy framework and inter-agency coordination.
- Sub-Committee on Policy constituted under the Chairmanship of Chairman, TNEB, to suggest draft policy.
- Draft Offshore Wind Energy Policy was prepared and put up on MNRE's website for inviting suggestions / comments from various stakeholders and the general public.

# India's Exclusive Economic Zone

10-1000m depths in EEZ 



# ESSENTIAL ELEMENTS OF DEVELOPMENT OF OFFSHORE WIND ENERGY

- Preliminary Resource Assessment and demarcation of blocks.
- Environment Impact Assessment (EIA) study of proposed Offshore Wind Farms regarding aquatic life, fishing etc., studies relating to navigation, undersea mining and related exploration/exploitation activities and other users of the sea.
- Oceanographic studies to determine the construction costs for special foundations, special ships for both operation & maintenance requirements.
- Sea Bed Lease Arrangement.
- Single Window Procedure for Statutory Approvals.
- Grid Connectivity and Evacuation of Power
- Technology
- Incentives
- Security & Confidentiality of the data collected during studies and surveys.

# NODAL MINISTRY

As the nodal ministry, role of MNRE will include but not limited to the following.

- Overall monitoring of the offshore wind development in the country.
- Co-ordination with other Ministries/Departments.
- Issuing guidelines/directives for development of offshore wind energy.
- Oversee working and to provide necessary support to National Offshore Wind Energy Agency (NOWA) for smooth functioning.
- Promoting indigenous research for technology development.
- Coordination towards tariff setting and regulatory issues.

# NATIONAL OFFSHORE WIND ENERGY AGENCY (NOWA)

The Government of India shall establish a National Offshore Wind Energy Agency (NOWA), under the aegis of MNRE, for the development of Offshore Wind Energy as the Nodal agency, which will be responsible for the following:

- Carry out and also coordinate resource assessment and surveys in the EEZ of the country.
- Enter into contract with the project developers for development of offshore wind energy project within the EEZ of the country.
- Development of International Cooperation.
- Act as a Single Window Agency to accept applications and coordinate with concerned Ministries/Departments for necessary clearances.

# THE OFFSHORE WIND DEVELOPMENTAL MODEL

- The preliminary Resource Assessment, Environment Impact Assessment (EIA) and Oceanography Survey will be carried out by the NOWA for demarcation of offshore wind energy Blocks.
- State designated nodal agency / distribution utility of a state will sign PPA as per the guidelines fixed by CERC and respective SERC.
- Ministry of Shipping (for major ports), State Maritime Board/State designated agency (for minor ports) to monitor offshore wind farm installation during construction phase – related with movement of ships and goods and construction activity at port.
- Overall monitoring to be done by OWESC headed by Secretary, MNRE - regular monitoring of progress for development of offshore wind energy project activities.
- The Government may call for proposals for development of offshore wind energy Demonstration Project(s)/Pilot Project(s) in specific block(s).
- The incentives being provided to onshore wind projects viz. tax holidays, concessional custom duty etc. may be available to offshore wind projects. Additional incentives such as Viability Gap Funding (VGF) may be considered.

# CURRENT STATUS

- A National Consultation on development of Offshore Wind Energy in the Country was organized on 14<sup>th</sup> August, 2013 to get suggestions/feedback of the stakeholders on the draft policy.
- A draft Cabinet Note for introduction of National Offshore Wind Energy Policy was circulated for Inter-ministerial Consultations to 17 Ministries / Departments including Prime Minister's Office for comments in February, 2014.
- Two studies, one by IT Power and the other by GWEC led Consortium, are being carried out through International funding by DFID (UK) and EU respectively.
- Under the DFID funded project a visit was organized to the United Kingdom to understand the success of development of UK offshore wind projects
- Ministry has constituted a Core Group consisting of Representatives from C-WET, GPCL, IT Power and WISE to support activities like identification of potential sites, resource assessment, techno-commercial & feasibility studies and financial model.
- Series of meetings of the Core Group have been organized to discuss various aspects, steps and issues pertaining to setting up of demonstration offshore wind power project.



# CURRENT STATUS – CONTD.

- The possibility of setting up of a first pilot demonstration offshore wind energy project is being discussed with ONGC.
- A 100 m level wind monitoring station has been installed and commissioned at Dhanuskodi in Tamilnadu by C-WET in September, 2013.
- Data has been collecting remotely through modem and its analysis for the six months i.e. October to December, 2013 and January to March, 2014 have revealed an average monthly wind speed of 8.3 m/sec at 100 m and 8.2 m/sec. at 80 m height respectively.

# 100 M LEVEL WIND MONITORING STATION AT DHANUSKODI, RAMESHWARAM, TAMIL NADU





***THANK YOU***