

India's first National Centre of Excellence for Green Port & Shipping (NCoEGPS)

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In news– The Union Minister of Ports, Shipping & Waterway(MoPSW), has announced India's first NCoEGPS during INMARCO 2022 in Mumbai.

About NCoEGPS-

- The work undertaken by the NCoEGPS will provide the decision makers at a national and sub-national level with methodology and **framework to implement carbon neutrality measures**, to meet (and exceed) obligations under the Paris Accord through electrification of process, through renewable energy, carbon capture and storage, and other emerging alternate fuel technologies including green fuels.
- The scope of work carried out by NCoEGPS will also include training and capacity of different stakeholders for fast-tracking adoption of green measures identified through research.
- The **NCoEGPS will be working under the framework of the Sagarmala programme of the MoPSW.**
- The **main objective of the proposed NCoEGPS is to provide support to MoPSW in developing and maintaining a policy and regulatory framework for a green alternative technologies** road map for the shipping sector in India for its transition to carbon neutrality and CE principles.
- To achieve this objective, the NCoEGPS will focus on five broad areas:
 - Policy, Regulatory and Research.
 - Human Resource development.

- Network- Key Partners and Strategic collaborators.
- Explore- Area of work, outcomes, projects and resources.
- Engage- Past events, upcoming events, dissemination.
- **NCoEGPS will act as a technological arm of MoPSW** for providing the needed support on Policy, Research and Cooperation on Green Shipping areas for Ports, DG Shipping, CSL and other institutions under the umbrella of MoPSW.
- The Center will be a host of several technological arms to support the port and shipping sector and will provide solutions to a variety of problems being faced in the industry through scientific research.
- It will also carry out valuable education, applied research and technology transfer in maritime transportation at the local, regional, national and International levels.
- It will focus on the following areas-
 - Energy Management – Energy management tools, waste energy recovery systems
 - Emission Management- Alternate, clean Energy/Fuel, emission control & monitoring.
 - Sustainable Maritime Operations – novel technologies and approaches
- **The specific objectives of the formation of NCoEGPS are defined as follows –**
 - To empower ‘Make in India’ in Port, Coastal and Inland water transport, and Engineering by developing state of art technologies and application products.
 - To enable fast-track innovations in order to provide most appropriate solutions to various challenges in these sectors.

- To create a pool of competent manpower to the industry equipped with state of the art theoretical and practical knowhow.
- Self-sufficiency in providing short term solutions through scientific studies technology development technical arm in identifying and analysing complex problems and solving issues
- The NCoEGPS faculty / scientists/ engineers will work towards an in-depth understanding of the problems being faced by the MoPSW and their associates in order to offer effective recommendations and position their R&D activities towards sustainable goals as and when required being dictated by day to day problems.
- **The Energy and Resources Institute (TERI) is the knowledge and implementation partner for this project.**
- This Centre will help in policy and regulatory support to the Ministry of Ports, Shipping and Waterways for developing regulatory framework and alternate technology adoption roadmap for Green Shipping to foster carbon neutrality and circular economy (CE) in the shipping sector in India.

Background-

- **The centre aims to develop a regulatory framework and alternate technology adoption road map for Green Shipping to foster carbon neutrality and circular economy** (CE) in the shipping sector in India. India intends to increase the share of renewable energy to 60% of the total power demand of each of its major ports from a present share of less than 10%. This will be through solar and wind-generated power.
- **The ports have also aimed to reduce Carbon emissions per ton of cargo handled by 30% by 2030.** The **Maritime Vision Document 2030**, released by the Prime Minister of India

is a 10 Year blueprint on India's vision of a sustainable Maritime sector and vibrant blue economy. **India has been selected as the first country under the IMO Green Voyage 2050 project** to conduct a pilot project related to **Green Shipping**.

- India will also be implementing IMO energy efficiency requirements for existing ships and carbon intensity requirements on all its vessels whether coastal or international in order to help achieve IMO GHG reduction targets.
- **India is already supplying shore power to ships with power demand less than 150 KW at present** and targeting to supply shore power to all visiting ships.
- **India is working actively at Marine Environmental Protection Committee of IMO** to help devise acceptable regulatory requirements for GHG emission reduction in line with IMO GHG initial strategy.
- India's Nationally Determined Contributions (NDC) under the Paris Agreement for the Period 2021-2030 include: to reduce the emissions intensity of its GDP by 33 to 35 per cent by 2030 from 2005 level, and to achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 with the help of transfer of technology and low-cost international finance.