

# Clean and Green Navy

June 24, 2019

**Clean and Green Navy- a pledge towards Renewable Energy generation**

**Syllabus:** Environment and conservation / Various Security forces and agencies and their mandate



**Key Highlights of the initiative are**

- Indian Navy under Clean and Green Navy initiative pledges **1.5% of its Works budget towards Renewable Energy generation.**
- **Indian Navy Environment Conservation Roadmap (INECR)** – Indian Navy has formulated specific plans covering the entire gamut of operations, maintenance, administration and infrastructure/ community living. Its key features include;
  1. The Roadmap envisions **'Reduction in Energy Consumption' and 'Diversification of Energy Supply'** as the Key Result Areas.
  2. While the existing military, diplomatic, constabulary and benign roles envisioned in the Indian Navy's Maritime Doctrine define the objectives of its operations, the Green Initiatives Programme of the Indian Navy has added a new dimension i.e. social responsibility to it.
  3. Under the INECR, numerous policies aimed at reduction of energy consumption and environment sustenance have been formulated and disseminated to all ships, as well as shore establishments.
  4. **Solar photovoltaic (PV) projects** has been one of the focus areas of the Indian Navy since the inception of the INECR. The efforts undertaken in the last few years

have started to fructify now.

- 24 MW of Solar Photovoltaic (PV) projects consisting of both Rooftop and Land based solar panels are under execution at various shore establishments of the Navy under the Jawaharlal Nehru National Solar Mission (JNNSM).
- Similarly, pilot projects utilizing wind or a mix of both solar and wind (hybrid) are also being taken up progressively which will not only reduce carbon footprint but also help achieve self-sustenance in energy security.
- Indian Navy has taken up initiatives for sustained usage of biodiesel for all MT vehicles. Continued usage of B5 blend of **High Speed Diesel (HSD)** for PAN Navy use in all Motor Transport vehicles is a step in this direction.

### **Various steps taken by the Indian Navy and its importance**

- **The Green Initiatives Programme would aid in boosting the national interests of environment sustainability and self-reliance in energy.**
- Indian Navy has also focused attention towards addressing the menace of Air Pollution by way of various **environmental remediation measures for mitigating** it such as sapling plantation, arboriculture and horticulture, anti-plastic drive, effluent treatment plants etc which are an example of integration of the policies supported by concrete actions.
- **Towards reduction in the energy consumption of all** its bases and ships, focused attention has been paid towards use of renewable energy sources and institution of various energy conservation measures such as use of occupancy sensors, battery operated vehicles, solar street lights, LED lights, audit of yards, SCADA based electric metering etc.
- **Water Conservation at various Naval stations** has been achieved through incorporation of drip irrigation

technique, rain water harvesting, re-use of RO water and SCADA based water distribution system.

- **Segregated Waste Collection Centre (SWCC)** was inaugurated with the **support from Defence Wives Welfare Association (DWWA) at Port Blair**, which incorporated modern methods of waste collection and management system. This has been one of the pioneering initiatives taken up by Indian Navy, which has **facilitated the process of waste management for units based at Port Blair**.
- **Biogas Plant, Compost Pits, Vermi-culture, Paper Recycling Machine and Composter machine are some steps taken in Waste Management domain**. An estimated savings of 140 LPG cylinders per year is accrued through implementation of biogas plant using biodegradable waste and Organic Waste Converters across naval units.
- **Awareness drives and programmes by means of coastal cleanliness, lectures** etc are organized regularly to enhance participation and ensure better outreach amongst communities and contribute to the “Swachh Bharat Abhiyan”.
- Emphasis is also being accorded to ensure that pollution is kept minimal in harbours and seas. **Effluent treatment plants for neutralizing toxic waste prior discharge**, utilization of Sullage Barges for collection of floatsam and induction of equipment which ensure compliance to MARPOL requirements though not mandated for men-of-war are some of the few steps taken to ensure for the purpose.

Although a lot has been achieved in the last one year, Navy is furthering its march towards the pursuance of the energy and environment goals of our country to ensure a greener and cleaner tomorrow for our future generations. **The Green Initiatives Programme would aid in boosting the national interests of environment sustainability and self-reliance in energy.**