

BLUE NDC CHALLENGE - ENVIRONMENT

NEWS: France and Brazil launched a landmark international initiative **Blue Nationally Determined Contributions (NDC) Challenge**.

WHAT'S IN THE NEWS?

About the Blue NDC Challenge

- **Purpose and Vision:**

The Blue NDC Challenge is an international initiative that urges countries to **integrate ocean-centric climate actions** into their **Nationally Determined Contributions (NDCs)**—the national climate plans under the **Paris Agreement**.

- **Focus on COP30:**

The initiative aims to **scale up global commitment to ocean-based climate solutions** in the lead-up to the **30th Conference of Parties (COP30)** of the UNFCCC, to be hosted in **Belem, Brazil**, in 2025.

- **Key Supporters:**

The challenge is supported by leading environmental and research organizations including:

- **Ocean Conservancy**
- **Ocean & Climate Platform**
- **World Resources Institute (WRI)**, through the **Ocean Resilience and Climate Alliance (ORCA)**
- **WWF-Brazil**

Significance of Oceans in Climate Action

- **Global Carbon Sink:**

Oceans absorb **more than 25% of global carbon dioxide (CO₂) emissions** and approximately **90% of the excess heat** generated by anthropogenic (human-induced) activities. This makes oceans a **vital buffer against climate change**.

- **Blue Carbon Ecosystems:**

Coastal and marine ecosystems—such as **mangroves, seagrasses, and salt marshes**—are known as **blue carbon ecosystems**. These systems can **sequester carbon at rates 3–5 times greater** than terrestrial forests per unit area.

- **Biodiversity and Resilience:**

Oceans support **immense biodiversity**, and maintaining the health of marine ecosystems enhances the **resilience of natural systems** to climate-related shocks like warming, acidification, and sea-level rise.

- **Livelihoods and Food Security:**

More than **3 billion people globally** depend on ocean resources for **food, employment, and economic activities**, particularly in developing coastal nations and small island states.

Key Global and National Initiatives for Ocean Conservation

- **Ocean Cleanup Project (2013–present):**

A non-profit initiative that develops and deploys innovative technologies to **extract plastic**

waste from oceans and rivers, aiming to remove large concentrations such as the **Great Pacific Garbage Patch**.

- **UN Decade of Ocean Science for Sustainable Development (2021–2030):**
A United Nations-led initiative to **advance ocean science**, improve data sharing, and promote collaborative solutions for **sustainable ocean governance** and climate mitigation.
- **High Seas Treaty (BBNJ Agreement, 2023):**
A legally binding international treaty adopted to **protect marine biodiversity in areas beyond national jurisdiction**, covering nearly **two-thirds of the world's ocean**.
- **Blue Carbon Initiatives:**
These initiatives promote the **conservation and restoration** of blue carbon ecosystems like **mangroves and tidal wetlands**, which provide both climate and biodiversity benefits.
- **National Marine Protected Areas (MPAs):**
Designated regions aimed at **protecting ecologically sensitive marine and coastal habitats** such as coral reefs, estuaries, and mangroves from unsustainable activities and development.
- **Integrated Coastal Zone Management (ICZM):**
A holistic strategy used by many countries, including India, to **regulate and coordinate human activity** along coasts, combat **pollution, erosion, overfishing**, and promote sustainable livelihoods.

Challenges and Barriers to Ocean-Based Climate Action

- **Financial Constraints:**
Many **developing countries and small island developing states (SIDS)** lack the **financial resources and international support** required to implement large-scale ocean conservation and climate mitigation programs.
- **Technical and Scientific Complexity:**
Implementing effective ocean-based solutions requires **high-end scientific knowledge**, including **satellite mapping, marine biodiversity assessments, and carbon stock quantification**, which may not be readily accessible in all regions.
- **Data Gaps and Limited Capacity:**
A lack of **reliable marine data, monitoring infrastructure, and trained human resources** often hinders the formulation and implementation of science-based marine policies.
- **Governance and Jurisdictional Issues:**
Oceans are **transboundary in nature**, and managing areas beyond national jurisdiction poses legal and governance challenges, requiring **international cooperation** and compliance mechanisms.

Source: <https://www.downtoearth.org.in/water/unoc3-brazil-and-france-launch-initiative-to-encourage-ocean-focused-action-in-national-climate-plans-ahead-of-unfccc-cop-30-six-countries-join>