



पत्तन, पोत परिवहन
एवं जलमार्ग मंत्रालय
MINISTRY OF
PORTS, SHIPPING
AND WATERWAYS



Maritime INDIA @ Net Zero National Green Shipping Policy (NGSP) 3-Day Webinar

Contact Person:

Shri Pravin Kumar Roy, Engineer & Ship Surveyor - cum-DDG (Tech.)
+91 9207856694, pravin.roy-dgs@gov.in

Shri Rahul Chahar, Project Associate,
NCOEGPS, at +91 8800585256 or
rahul.chahar@teri.res.in (via email/WhatsApp)

The National Green Shipping Policy (NGSP) is being developed as a comprehensive framework to guide India's transition towards environmentally sustainable, energy-efficient and future-ready maritime operations. The policy adopts a systems-based approach, addressing the maritime value chain across seven key pillars, viz. Green Fuels, Green Ports, Green Ships, Green Ship Recycling, Green Technology, Green Finance and Green Skill Development & Capacity Building, with an additional cross-cutting focus on Pollution Prevention.

In this context, the Maritime INDIA @ Net Zero – NGSP Multi-Ministerial Workshop was conducted on 14–15 January 2026, jointly by the Directorate General of Shipping (DGS) and the National Centre of Excellence for Green Ports and Shipping (NCoEGPS) - TERI. The workshop served as a high-level platform bringing together ministries, regulators, industry stakeholders and technical institutions to deliberate on the proposed NGSP framework and its implementation pathways. The discussions focused on translating policy intent into actionable national strategies, identifying sector-specific challenges and strengthening institutional coordination mechanisms.

Building upon the outcomes and deliberations of the workshop, the Directorate General of Shipping, in collaboration with NCoEGPS, is conducting a structured 3-day webinar series to undertake detailed pillar-wise consultations on the NGSP.



The objective of the webinar is to:

- Present detailed national action plans across all NGSP pillars
- Facilitate focused stakeholder deliberations on implementation pathways
- Identify priority action areas
- Enable inter-ministerial coordination and industry alignment

DAY 1

Session 1: Opening and Context Setting

The opening segment will set the overall context for the webinar series by presenting the objectives, structure, and expected outcomes of the 3-day deliberations. It will also provide a brief recap of the January workshop and outline how the discussions will translate into actionable policy inputs under NGSP.

09:30-09:45 | Welcome Remarks | TERI

09:45-10:00 | Opening Address | DGS

10:00-10:20 | Presentation: Context, Objectives and Approach for the 3-Day Webinar | DGS/ TERI

Session 2: Green Fuels

Overview

This session will focus on the transition from conventional marine fuels to low-carbon and zero-carbon alternatives across the full maritime value chain, including fuel production, supply ecosystems, storage and bunkering infrastructure, safety protocols, and regulatory preparedness.

The discussion will examine India's evolving fuel strategy, including the role of biofuels, LNG as a transition fuel, and emerging fuels such as green methanol, green ammonia, and hydrogen. It will also address challenges related to infrastructure readiness, cost competitiveness, technology maturity, and safety and standards development.

Particular emphasis will be placed on addressing the current demand–supply deadlock, where fuel producers, ports, and ship operators are awaiting parallel developments. The session will aim to identify practical interventions for early adoption and a phased national fuel transition pathway aligned with international regulatory developments and India’s energy transition priorities.

Schedule

10:20 - 10:50 | Session Introduction and Technical Presentation |

DGS / TERI

10-50 - 11:10 | Expert Presentation

11:10 - 12:30 | Stakeholder Deliberations

12:30 - 13:00 | Summary of Key Recommendations

13:00 - 14:00 | Lunch Break

Session 3: Green Ports and Port-led Decarbonisation

Overview

This session will examine the role of ports as critical enablers of maritime decarbonisation and as key nodes in the transition towards a low-carbon maritime ecosystem. The discussion will focus on the operational, infrastructural, and institutional measures required to transform Indian ports into sustainable and energy-efficient hubs.

Key themes will include the Green Port Performance Index (GPPI), development of measurable indicators and tier-based frameworks, port electrification, shore-to-ship power (OPS), renewable energy integration, energy-efficient cargo handling systems, and environmental monitoring mechanisms.

The session will also deliberate on the readiness of ports to support alternative fuels, including the requirements for storage, handling, and bunkering infrastructure, along with related safety and regulatory considerations. It will identify implementation challenges across major and non-major ports and outline a phased roadmap for port-led decarbonisation.

Schedule

14:00 - 14:30 | Session Introduction and Technical Presentation | DGS / TERI

14:30 - 15:00 | Expert Presentation

15:00 - 16:45 | Stakeholder Deliberations

16:45 - 17:30 | Summary of Key Recommendations

17:30 - 18:30 | Summary of the day's proceeding and closing

DAY 2

Session 4: Green Technology

This session will examine the role of green technologies as a key cross-cutting enabler across the maritime value chain, covering applications in ships, ports and shipyards. The discussion will focus on technologies that deliver measurable improvements in energy efficiency, emissions reduction and operational optimisation.

Key areas to be covered include energy-saving devices, hybrid propulsion systems, electrification solutions, digital monitoring and optimisation tools and retrofit technologies. The session will also highlight the importance of digital systems such as real-time performance monitoring, MRV integration and data-driven decision-making in supporting decarbonisation outcomes.

A central focus of the session will be the need to identify priority technologies for the Indian context and to establish a national baseline on current levels of technology adoption across vessels, ports and shipyards. This will enable informed policy interventions and targeted support mechanisms in subsequent phases.

The deliberations will aim to identify practical actions, baseline data collection, prioritisation of key technologies and enabling measures for adoption, including domestic capability development and industry partnerships.

Schedule

09:30 - 10:00 | Session Introduction and Technical Presentation | DGS / TERI

10:00 - 10:30 | Expert Presentation

10:30 - 12:10 | Stakeholder Deliberations

12:10 - 12:35 | Summary of Key Recommendations

12:35 - 13:30 | Lunch Break

Session 5: Green Finance and Investment Enablement

This session will focus on the financial and market mechanisms required to enable and scale maritime decarbonisation across the NGSP pillars. It will examine a range of instruments including green bonds, sustainability-linked loans and bonds, blended finance structures and concessional funding mechanisms, along with their applicability to maritime projects.

The session will also deliberate on the role of institutional frameworks and financial entities, including banks, NBFCs, development finance institutions and sector-specific funds, in supporting investments across ships, ports, fuels and recycling infrastructure. Particular attention will be given to risk-sharing mechanisms, viability gap funding and credit enhancement structures required to improve project bankability.

In addition, the session will explore challenges related to access to capital, cost of financing, lack of standardised ESG frameworks and limited availability of performance-linked data, which constrain financing flows into green maritime projects.

The deliberations will aim to identify practical interventions, including development of financing frameworks, mobilisation of institutional capital and alignment of regulatory and policy support to enable investment in the maritime sector's green transition.

Schedule

13:30 - 13:50 | Session Introduction and Technical Presentation | DGS / TERI

13:50 - 14:10 | Expert Presentation

14:10 - 15:20 | Stakeholder Deliberations

15:20 - 15:35 | Summary of Key Recommendations

15:35 - 15:50 | Tea Break

DAY 3

Session 6: Green Skill Development and Capacity Building

This session will focus on building workforce readiness to support the maritime sector's transition towards greener and more sustainable operations. It will examine the development of national competency frameworks, covering skills required across shipbuilding, retrofit, port operations, fuel handling and compliance monitoring.

The session will also address the need for institutional mechanisms, including the role of maritime training institutes, universities, industry bodies and regulatory agencies in developing and delivering structured training and certification programmes. Alignment with international standards and emerging training frameworks will be a key area of discussion to ensure global compatibility and recognition.

In addition, the session will deliberate on existing skill gaps, trainer capacity, curriculum modernisation and industry-academia collaboration, along with the integration of green competencies into organisational systems and workforce planning.

The deliberations will aim to identify immediate actions for standardisation of competency frameworks, initiation of training programmes and institutional coordination mechanisms to support the implementation of NGSP.

Schedule

15:50 – 16:10 Session Introduction and Technical Presentation | DGS / TERI

16:10 – 16:30 Expert Presentation

16:30 – 18:00 Stakeholder Deliberations

18:00 – 18:30 Summary of Key Recommendations

Session 7: Green Ships (Shipbuilding, Retrofit and Repair)

This session will focus on the lifecycle decarbonisation of vessels, covering interventions at the stages of ship design, construction, retrofit and repair. It will examine the development of green shipbuilding standards that incorporate energy efficiency, alternative fuel readiness and digital monitoring systems, aligned with evolving international regulatory frameworks.

The session will also address retrofit pathways for the existing fleet, recognising that near-term emissions reduction will be driven largely through technological upgrades such as energy-saving devices, hybridisation, fuel switching and digital optimisation systems. In parallel, discussions will cover environmentally responsible ship repair practices, including reduction of operational emissions, waste management and sustainable yard operations.

A key focus area will be the readiness of Indian shipyards and repair facilities, including their technical capabilities, infrastructure requirements and alignment with global standards such as EEXI, CII and lifecycle emissions considerations. The session will also explore the role of domestic manufacturing, technology partnerships and policy support mechanisms in strengthening India's position in green shipbuilding and retrofit markets.

The deliberations will aim to identify practical short-term actions, including development of standards, certification frameworks and pilot programmes, while outlining a phased transition pathway for decarbonising India's vessel fleet.

Schedule

09:30 - 10:00 | Session Introduction and Technical Presentation | DGS / TERI

10:00 - 10:30 | Expert Presentation

10:30 - 12:10 | Stakeholder Deliberations

12:10 - 12:30 | Summary of Key Recommendations

12:30 - 13:30 | Lunch

Session 8: Green Ship Recycling and Circular Economy

This session will focus on strengthening India's ship recycling ecosystem through the development of an environmentally compliant, safe and globally competitive framework, aligned with the Hong Kong International Convention (HKC) and national regulatory provisions.

The session will cover the proposed Green Ship Recycling Compliance (GSRC) tier framework, including classification of recycling facilities based on infrastructure, environmental performance, digital compliance and workforce standards. Discussions will examine the requirements for yard modernisation, including impermeable flooring, drainage and effluent treatment systems, hazardous waste management and environmentally sound dismantling practices.

Key focus will also be placed on worker safety and welfare, including training, certification and use of standardised safety protocols and equipment. The session will further explore the role of digital systems, including Inventory of Hazardous Materials (IHM), Ship Recycling Plans (SRP) and reporting mechanisms, in improving transparency and compliance monitoring.

In addition, the session will examine integration with circular economy initiatives, particularly linkages with the green steel ecosystem, material recovery optimisation and carbon accounting frameworks. The deliberations will aim to identify measures to strengthen India's leadership in sustainable ship recycling while enabling expansion of capacity across additional coastal locations.

Schedule

13:30 - 13:50 | Session Introduction and Technical Presentation | DGS / TERI

13:50 - 14:10 | Expert Presentation

14:10 - 15:10 | Stakeholder Deliberations

15:10 - 15:20 | Summary of Key Recommendations

15:20 - 15:35 | Tea break

Session 9: Pollution Prevention (Separate Vertical)

This session will address pollution prevention as a cross-cutting but independent vertical, focusing on strengthening monitoring, reporting and compliance systems across ships, ports and shipyards. The discussion will build upon existing regulatory frameworks and examine the need for greater standardisation, consolidation and visibility of pollution-related data at the national level.

The session will cover key areas including ship-source pollution control under MARPOL Annexes, port waste management systems, shipyard environmental compliance and digital reporting mechanisms. Particular emphasis will be placed on the development of a centralised pollution monitoring and reporting architecture, enabling improved enforcement and policy decision-making.

In addition, the session will touch upon the London Convention and London Protocol, in relation to the control of dumping at sea and management of marine pollution risks. The need for strengthening compliance, monitoring mechanisms and alignment with global best practices will be discussed.

Schedule

15:35 - 15:45 | Session Introduction

15:45 - 15:55 | Technical Presentation

15:55 - 16:35 | Presentation: London Convention Shri Pravin Roy

16:35 - 18:00 | Stakeholder Deliberations

Session 10: Closing Session

18:00 - 18:30 | Concluding remarks from Director General, DGS and Director General TERI

We look forward to your participation and valuable insights as we move into the second phase of stakeholder consultations for drafting the National Green Shipping Policy (NGSP)

