



INTERNATIONAL
MARITIME
ORGANIZATION

IMO Climate Action and Clean Air Capacity Development Support

Regional Expert Meeting on the Possible Designation of the Mediterranean, as a whole, as a
Nitrogen Oxides Emission Control Area (Med NOx ECA)

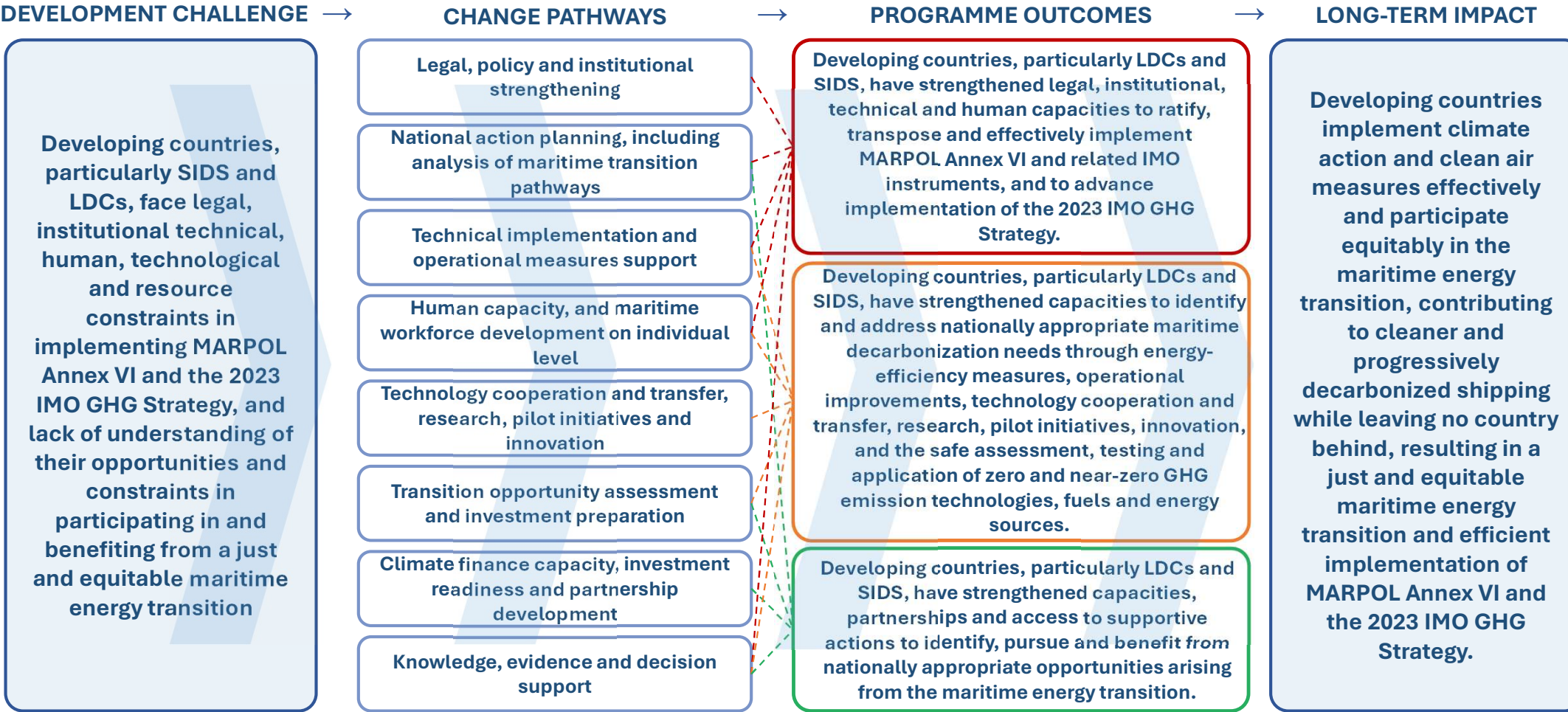
7 and 8 October 2026

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INTERNATIONAL MARITIME ORGANIZATION

Non sensitive

Climate Action and Clean Air Thematic Programme: supported by GreenVoyage2050, GMN, FRS Africa, GHG SMART, FFT projects, ITCP and GHG Trust Fund



Climate Action and Clean Air: Capacity Development Support Pathways



Legal, Policy and Institutional Strengthening

Strengthen the legal, policy, institutional, capacity to implement MARPOL Annex VI and related IMO instruments, including IMO2020, and the 2023 IMO GHG Strategy.



National Action Planning, Including Analysis of Maritime Transition Pathways

Support developing countries to develop, update and implement National Action Plans (NAPs) to address GHG emissions from ships.



Technical Implementation and Operational Measures Support

Strengthen capabilities of maritime administrations and stakeholders in developing countries to implement IMO climate and clean air requirements and technical and operational measures.



Human Capacity and Maritime Workforce Development

Strengthen knowledge, skills and competencies of maritime personnel, policymakers, and education and training institutions, to support implementation of the 2023 IMO GHG Strategy.



Technology Cooperation and Transfer, Research, Pilot Initiatives and Innovation

Support developing countries to assess, test and apply energy-efficiency measures and operational solutions through pilots, research and technology transfer and cooperation.



Transition Opportunity Assessment and Investment Preparation

Support developing countries to identify and benefit from maritime energy transition, including alternative fuels, bunkering, ports and maritime infrastructure, green shipping corridors and related value chains.



Climate Finance Capacity, Investment Readiness and Partnership Development

Strengthen capacity of maritime administrations and stakeholders in developing countries to understand climate and maritime finance, develop bankable investment initiatives, and engage with financial institutions and technology partners.



Knowledge, Evidence and Decision Support

Generate, consolidate and make accessible the evidence, tools and information needed for legal, policy, technical, operational and investment decisions.

Recent Climate action and Clean air technical cooperation support activities provided by IMO in the Mediterranean

Legal, Policy and Institutional Strengthening

- Technical support to strengthen the capacity of Morocco to domesticate and effectively implement MARPOL Annex VI and its amendments - **ITCP**

National Action Planning, including Analysis of Maritime Transition Pathways

- NAP support (Egypt) – **GreenVoyage2050**
- Mediterranean low sulphur fuel readiness study – **ITCP/REMPEC**
- Med Nox ECA feasibility study - **ITCP/REMPEC**
- Study on use of exhaust gas cleaning systems - **ITCP**

Human Capacity and Maritime Workforce Development and Knowledge, Evidence and Decision Support/support in operational measures

- National workshop on MARPOL Annex VI ratification (Egypt and Morocco) - **ITCP**
- Regional workshop on IMO 2020 / Med Sox ECA implementation - **ITCP**
- MARPOL Annex VI “How to Do it” manual - **ITCP**

Feasibility Studies and Pilots

Support	Focus and Impact	Status
Climate and Clean Air		
Mediterranean low sulphur fuel readiness study (ITCP/REMPEC)	Gap analysis of regional readiness to respond to a pollution incident involving low sulphur fuels.	Completed
Med Nox ECA feasibility study (ITCP/REMPEC)	Technical and feasibility study examining the possibility of designating the Mediterranean Sea as an Emission Control Area for Nitrogen Oxides (Med NOx ECA).	Completed – recommendations now under consideration.
Exhaust gas cleaning systems study (ITCP)	Study on the environmental and legal impacts of the use of exhaust gas cleaning systems in the Mediterranean Sea.	Completed – study and recommendations delivered.
Türkiye's Sea of Marmara ferry decarbonization study (GreenVoyage2050)	Evaluated battery-electric and hybrid propulsion technologies for the ferry network; identified priority pilot routes.	Completed. Follow-up is guiding future deployment of the identified pilot routes

Building Capacity for Alternative Fuels (GreenVoyage2050)

Support	Scope	Description
National Action Plan (NAP) development support to Egypt	National	Egypt is currently developing its NAP, prioritizing reducing emissions from ports, international fleet, and supporting the supply of alternative marine fuels.
Knowledge Products		
Global Train-the-Trainers Course on Alternative Fuels	Global	Resulted in more than 20 trainers trained worldwide, as well as a new Integrated Maritime-Energy Policy Planning course.
Alternative Fuel Training Portal in collaboration with CIMAC	Global, in development	An online Alternative Fuel Training Portal was initiated in collaboration with CIMAC, providing practical training materials for seafarers and port personnel.
Training course published: Alternative Fuels and Energy Carriers for Maritime Shipping.	Global	Workshop package on available and emerging marine fuels, covering production pathways, emissions-reduction potential, infrastructure needs and costs, for government officials, energy suppliers, port personnel and shipping stakeholders.

Knowledge, Evidence and Decision Support supported by GreenVoyage2050 and ITCP

Practical tools, guidance and capacity-building resources

Policy and Regulatory Implementation

- MARPOL Annex VI [Implementation Handbook for online publication](#).
- [Clause-by-Clause analysis of MARPOL Annex VI](#) available in all official IMO languages
- [International Safety Management \(ISM\) Code](#) e-learning course produced in English, French and Spanish.
- GHG-SMART training modules translated into French to expand access for francophone countries.

Energy Efficiency and Operational Measures

- E-learning course: [Introductory Course on Energy Efficient Ship Operations](#)
- E-learning course: [Energy Saving at Sea](#), [Just In Time Arrival Portal](#) launched, with a [Carbon Intensity Indicator \(CII\)](#) and [Energy Efficiency Existing Ship Index \(EEXI\)](#) video series.
- [Energy Efficiency Technologies \(EET\) Portal](#) and [Appraisal Tool](#) updated.
- Guidance on energy efficiency advanced through the [Low Carbon GIA](#).
- [Wind Propulsion Technologies](#) Guide progressed.
- [A Practical Guide to the Selection of Energy Efficiency Technologies for Ships](#) published.

Alternative fuels and Fuel Lifecycle Emissions

- [Low Carbon GIA](#) established, delivering a [regulatory mapping exercise](#) and a [life cycle assessment terminology](#) glossary.
- Industry dialogue on chain-of-custody models for sustainable marine fuels.
- ["Key Questions for Alternative Marine Fuel Producers"](#) checklist
- Online Alternative Fuel Training Portal initiated with CIMAC, for seafarers and port personnel.
- Training course published: [Alternative Fuels and Energy Carriers for Maritime Shipping](#).
- Baseline Training Framework with the Maritime Just Transition Task Force on ALT FUELS SAFETY

Ports and Green Shipping Corridors

- Training course on [Onshore Power Supply](#).
- Workshop package on Route-based Action Plans and Port Actions for Green Shipping.
- [Routes-Based Action Plan Methodology](#) to support green shipping corridors.
- Ship-Port Interface [Guide](#) to reduce GHG emissions at the ship-port interface.
- [Port Emissions Toolkit](#), designed, giving ports a practical framework to assess and reduce emissions.

The challenge: turning ambition into investment

Large-scale investment into maritime decarbonization remains hindered by:



Limited project preparation capacity and lack of familiarity with financing options



Fragmented collaboration / limited interaction between maritime transport, finance and energy sectors



Absence of scalable financing solutions owing to perceived technology and investment risks



Lack of project pipeline



Over **US\$1.8 trillion** in investment is needed by 2050 to achieve net-zero shipping.

IMO's Response: Partnering to Unlock Maritime Investment

FIN-SMART+ - *a new joint initiative with EBRD, the World Bank and GEF*



Knowledge and capacity building

Strengthening knowledge and capacity to access finance for maritime decarbonization.



Strategic dialogue

Bringing together maritime, financial and other stakeholders to strengthen collaboration and address investment barriers.



Project preparation and incubation

Supporting maritime decarbonization projects to move towards investment readiness.



Matchmaking and pipeline development

Connecting projects with potential partners and financiers to help mobilize investment.

GreenVoyage2050 call for proposals

- GreenVoyage2050 issues annual open calls to countries via IMO Circular Letter. Countries who wish to receive support for the development of National Action Plans or undertake Pilot Feasibility Studies are invited to apply.
- Previous Open Calls:
 - Pilot Projects - [Circular Letter No. 5160](#)
 - NAPs - [Circular Letter No. 5062](#)
- Follow GreenVoyage2050 on [LinkedIn](#) for future announcements. Next open call for 2027 NAP support coming soon.



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Circular Letter No.5160
10 April 2026

To: All IMO Member States

Subject: **Call for applications to the GreenVoyage2050 Accelerator: Technical assistance for pilot project feasibility studies to reduce GHG emissions from ships**

Overview: GreenVoyage2050 Programme

1 In 2023, MEPC 80 adopted the *IMO Strategy on reduction of GHG emissions from ships* ([Resolution MEPC.377\(80\)](#)), reaffirming IMO's commitment to reducing GHG emissions from international shipping. The 2023 IMO GHG Strategy includes levels of ambition such as achieving net-zero GHG emissions by or around, i.e. close to, 2050, and a commitment to ensuring the uptake of alternative zero or near-zero GHG emission technologies, fuels, and/or energy sources by 2030.

2 To support the 2023 IMO GHG Strategy, IMO is implementing [GreenVoyage2050](#), a technical cooperation programme that assists developing countries, including small island developing States (SIDS) and least developed countries (LDCs), to reduce GHG emissions from shipping. Phase I of GreenVoyage2050 (2020-2023) supported partnering countries in developing policy frameworks and pilot projects to reduce GHG emissions from ships. Phase II of GreenVoyage2050 (2024-2030) continues and expands this support, leveraging substantial funding from its donors (currently Denmark, Finland, France, Germany, the Kingdom of the Netherlands and Norway).

3 Through regular open calls, Member States are invited to express their interest in participating in the GreenVoyage2050 Accelerator and accessing technical assistance for pilot project feasibility studies to support the deployment of innovative zero- or near-zero GHG emission solutions onboard ships and in ports. Selected countries will be invited to join the programme as partner countries. The technical assistance is expected to commence in July 2026 and will be provided over approximately 18 months.

Pilot project feasibility studies to deploy zero- or near-zero GHG emissions solutions

4 Phase I of GreenVoyage2050 identified the absence of robust pilot project proposals as a significant barrier to investment in GHG reduction initiatives. The project preparation process is often extensive and requires substantial time and resources, particularly in developing countries. Recognizing this challenge, GreenVoyage2050 established the GreenVoyage2050 Accelerator to ensure that projects are de-risked and financeable, thereby enhancing their attractiveness to potential investors. By providing technical assistance and support, the GreenVoyage2050 Accelerator seeks to facilitate the development of a pipeline of projects capable of securing the necessary investment.

5 GreenVoyage2050 awards technical assistance for pilot project feasibility studies through an open and competitive process between 2024 and 2028, inviting interested and eligible stakeholders to apply. Given the existing funding limit, GreenVoyage2050 may not be able to fund all proposed projects.

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Needs assessment input: new TC Request Management System

- The IMO receives all ad hoc Technical Cooperation requests from Member States through the IMO TC Request Management System.
- Requests should be submitted by the appointed focal point

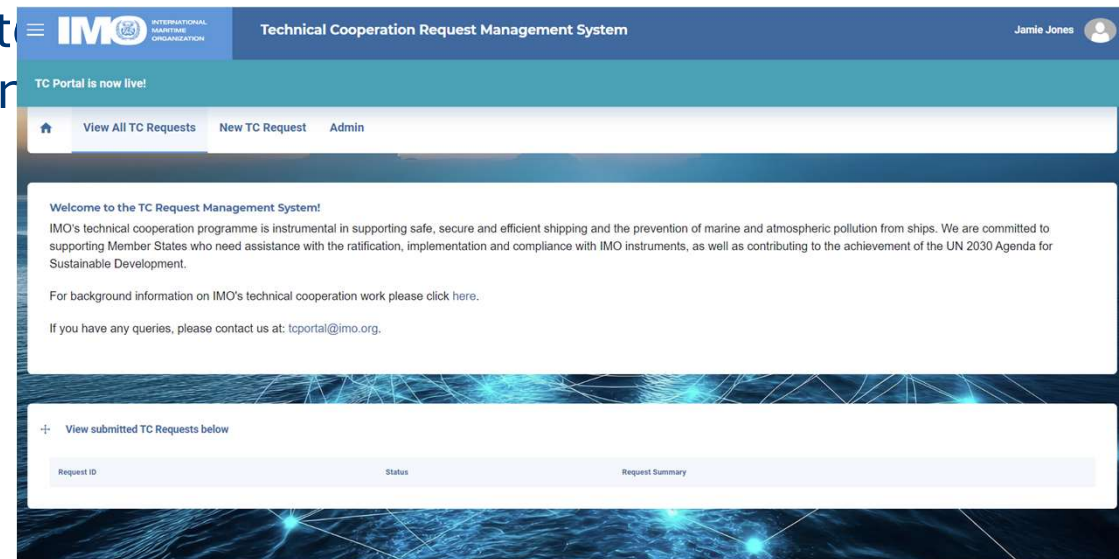
<https://tcportal.imo.org/TCRequests>

Inquiries can be sent to:

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