



# Decarbonising shipping

Navigating the challenges and opportunities in 2025

During 2024, the global shipping industry faced mounting pressure to accelerate its decarbonisation efforts. Policymakers and regulators demanded faster progress toward climate goals, a call echoed by industry customers, many of whom are increasingly held accountable by stakeholders for emissions within their supply chains.

In response, financial institutions and institutional investors have intensified their focus on environmental performance, making access to capital increasingly dependent on decarbonisation targets throughout a vessel's full lifecycle.

Whilst the shipping sector is generally considered a hard to abate sector, there are a growing array of new equipment and technical modifications available to improve vessel energy efficiency.

Coupled with uncertainty surrounding alternative fuels, maritime businesses are facing tough decisions on how to proceed and succeed. Compounding the challenge, the sector faces growing pressure to reduce emissions while ensuring the well-being of wider stakeholders, including seafarers, and minimising impacts on ocean ecosystems.

As these challenges continue into 2025 and beyond, those who invest strategically in sustainability plans and actions can transform their efforts into a competitive advantage.

Opposite and overleaf, we outline the regulatory forces driving change in the maritime sector during 2025, along with the emerging challenges and opportunities.

## Regulatory drivers for decarbonisation

The regulatory drivers for decarbonisation are gathering at pace and the cost of compliance is expected to rise significantly in 2025 and the years to come.

At a global level, the IMO continued to set the pace in 2024 with negotiations on a mid-term basket of measures to meet the 2023 IMO Strategy on Reduction of Greenhouse Gases (GHG) Emissions from Ships. The IMO's Marine Environment Protection Committee (MEPC 82) discussions held in London, focused on designing a global marine fuel standard, as well as a maritime GHG emissions pricing mechanism. While the IMO's discussions are moving forward, many specifics are still being finalised.

Given the ongoing uncertainty surrounding these measures, the market is likely to experience a period of inertia, with shipping companies adopting a wait-and-see approach until there is greater clarity on the specific requirements that will ultimately take effect in 2027.

The European Union (EU) also continued to raise the pressure at a jurisdictional level. Since January 2024, the EU's Emissions Trading System (EU ETS) was extended to cover emissions from all large ships entering EU ports, regardless of the flag they fly.

Following the same principle as other EU ETS sectors, shipping companies are required to actively monitor their emissions and acquire and surrender EU allowances (EUAs) for each tonne of reported greenhouse gas emissions.

As the phased implementation of the EU ETS continues, shipping companies will now be required to surrender allowances for up to 40% of the emissions reported in 2024. This requirement will increase to 70% of the emissions reported in 2025 by 2026.

Other significant legislative changes include the implementation of the FuelEU Maritime Regulation (FEMREG), which took effect from 1 January 2025. Approved as part of the EU's Fit for 55 packages, the regulation aims to accelerate the use of renewable and low-carbon fuels such as biofuels and liquified natural gas (LNG).



## FEMREG key requirements include:



### Well-to-wake greenhouse gas intensity calculation

Operators must calculate the greenhouse gas intensity of each ship's fuel consumption and reduce it over a 25-year period. This will start at a 2% reduction in 2025 (against a 2020 baseline), increasing to 6% in 2030, and accelerating from 2035 to reach an 80% reduction by 2050.



### Monitoring and reporting

Shipping firms will need to adhere to new reporting requirements to track their emissions. Monitoring plans must be submitted to verifiers for approval, and all energy consumed within EU/EEA ports and journeys between these ports must be reported.



### Contractual clarification

The regulation is a shared responsibility, impacting shipowners, charterers, ship managers, and other stakeholders. Contracts must be reviewed to clarify responsibilities for compliance measures and penalties.

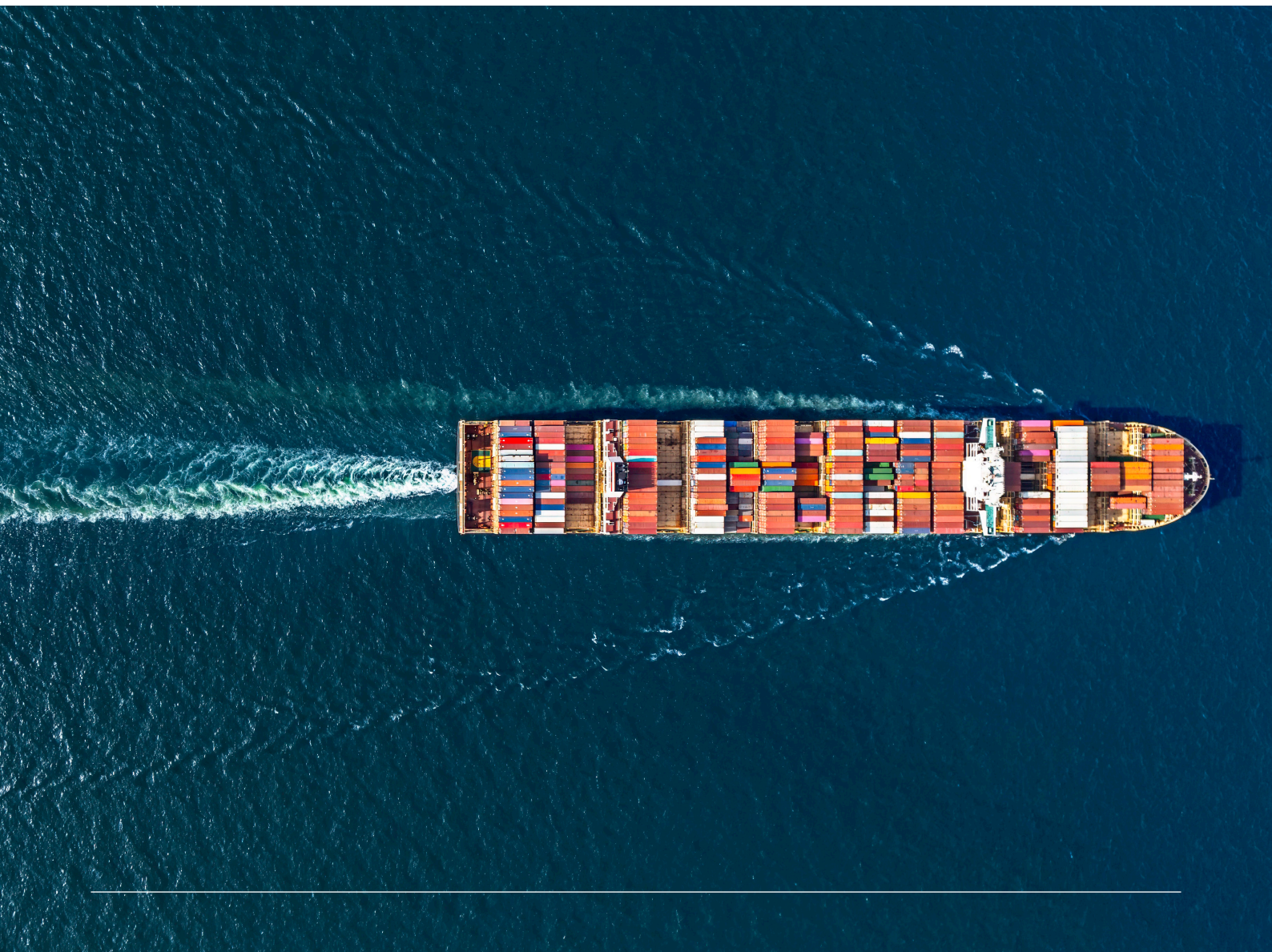


### Vessel sale and purchase agreements

FEMREG will impact agreements for vessels operating in the EU, with specific requirements for sellers to record and report GHG intensity data during their period of responsibility.

The influence of broader ESG EU regulations is also significant and cannot be overlooked. In particular, the EU is rapidly advancing towards mandating larger companies to publicly disclose information about their supply chains under the new Corporate Sustainability Reporting Directive (CSRD). Consequently, many of the shipping industry's biggest customers will be demanding greater transparency on emissions from ship owners to fulfil their own reporting obligations.

Other jurisdictions have also indicated they will press ahead with their own regulation. Recent announcements from the UK Government indicate that the domestic maritime and shipping sector is to be included in the UK ETS from 2026, with further coverage of international routes also under consultation. The combined impact of these global measures is driving a significant transformation in the shipping industry, requiring companies to adapt operations to meet ambitious climate targets and sustain their market position.







### Crew welfare and the maritime just transition

Crew welfare will remain a key focus for the maritime sector in 2025. In 2024, the industry faced heightened global scrutiny due to ongoing operations in high-risk zones like the Red Sea, where missile attacks by Yemen's Houthi militants raised significant concerns.

Reports also highlighted the urgent need for improved working conditions and ethical recruitment practices. Notably, the International Seafarers Welfare and Assistance Network (ISWAN) exposed the role of unlicensed recruitment agencies in India, prompting calls for stronger protections against seafarer exploitation. As a result, shipowners are facing increased pressure to ensure the safety of their crews, with major banks, including ING and Citigroup, considering factoring crew safety into their lending decisions.

Against this backdrop, the intersection of decarbonisation and crew safety is of heightened importance. At COP28, the Maritime Just Transition Task Force (MJTF) introduced the 'Baseline Training Framework for Seafarers in Decarbonisation', underscored the importance of upskilling seafarers to navigate the complexities of decarbonisation and emerging technologies. In November 2024, the MJTF released findings from consultations aimed at overhauling seafarer competencies to safely manage hazardous fuels like ammonia and hydrogen. These developments highlight key areas for future standards. As vessels become increasingly sophisticated, continued investment in crew training, safety protocols, and well-being will be vital to mitigate risk.

### Biodiversity and ocean protection measures

The protection of biodiversity is gaining increasing attention on both governmental and corporate agendas, driven by the growing recognition of the global economy's reliance on dwindling ecosystem services. This shift is gaining momentum, propelled by regulatory frameworks like the Corporate Sustainability Reporting Directive (CSRD) and proactive industry initiatives such as the Taskforce on Nature-related Financial Disclosures (TNFD) recommendations.

The shipping sector, which directly interacts with aquatic ecosystems, is expected to be significantly impacted by this evolving agenda. Research highlights the sector's substantial contribution to biodiversity loss, particularly through ballast water discharge, the transfer of invasive species, and underwater noise pollution.

In response, the IMO has aligned itself with frameworks like the Global Biodiversity Framework (GBF) and is anticipated to face increasing pressure to prioritise biodiversity protection through regulation in the coming years. The 2030 Shipping Pact for People and Nature (2030 SPPaN) has already outlined biodiversity targets for the sector, emphasising the alignment between nature-based solutions and many existing decarbonisation efforts.

By integrating advanced technologies into transition plans, such as enhanced ballast water management and noise-reduction systems, maritime businesses can simultaneously meet emission reduction and biodiversity protection goals, transforming decarbonisation investments into a competitive advantage.

## Key Recommendations

The shipping industry is on the brink of a transformation that will define the next century of global trade.

By embracing sustainability and fostering innovation, maritime companies can not only ensure compliance with emerging regulation but are also likely benefit from increased investor interest, and a growing market for environmentally responsible shipping. Below is a list of our top recommendations to navigate the transition:

**01**

### Develop a smart decarbonisation road map

- ▶ Conduct a thorough emissions audit through collecting fuel consumption and emissions data through logs, sensors and emissions factors, establish a baseline, and begin planning a phased implementation of energy efficiency and decarbonisation initiatives aligned with each vessel's serviceable life.
- ▶ Consider the use of digital solutions to model alternative pathways to help you invest with a much cleaner idea of what the payback will be.
- ▶ Take a holistic approach, considering materiality assessments to understand impacts on biodiversity and identify solutions that meet multiple goals.

**02**

### Continually scan the horizon

- ▶ Monitor emerging regulations to stay ahead of compliance risks and engage in scenario planning to assess the potential impact of climate related risks (both transition and physical). Harmonisation of regulations across jurisdictions (EU, UK, IMO), while critical, is still a distant goal, meaning you must be prepared to manage compliance across different regions.
- ▶ Keep track of technological advancements and consider engaging in pilot studies. The scale of decarbonisation challenges in the maritime sector is driving the rise of startups, many of which are partnering with maritime players to secure funding. Early adopters of decarbonisation technologies will not only stay ahead of regulatory pressures but also position themselves as leaders in the expanding green shipping market.

**03**

### Collaborate with industry stakeholders

- ▶ Work with industry stakeholders to drive your transition. Responding to the decarbonisation challenge is going to require co-ordinated action from a multitude of actors. Port owners for example will need to develop the infrastructure required to support ships running on new types of fuel.
- ▶ Efforts like green shipping corridors and buyers' alliances that bring stakeholders together and allow for better exchange of information have already proven successful methods of implementation for maritime businesses.



The BDO Shipping and Transport team is one of the world's leading financial advisors to the maritime community, not only do we advising on sustainability challenges but we also provide a comprehensive range of services including audit, tax and corporate finance advice.

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