Shipowner decarbonisation ambition and action rise

More owners and operators prioritising decarbonisation, setting goals, implementing strategies, and using biofuels, GCMD report finds.

June 11, 2025 *by Gary Howard, Middle East correspondent*

Image: bound4blue

A survey of 114 shipowners and operators conducted by the Global Centre for Maritime Decarbonisation (GCMD) found decarbonisation is a strategic priority for more respondents than in its inaugural survey two years ago, more companies have net zero targets in place, and twice the number of respondents have decarbonisation roadmaps in place.

The report “Advancing Maritime Decarbonization: Insights from the GCMD-BCG Global Maritime Decarbonization Survey” includes data from a survey conducted between October 2024 and February 2025, and comparisons to the inaugural report published in September 2023.

The new survey found net zero a high or critical/essential strategic priority for 77% of respondents, up from 73% in 2023, with a greater proportion of critical/essential responses. Of the 114 respondents, 59% worked at companies with a net zero target, up from 54% of the 128 respondents in the 2022-23 survey. The proportion of companies planning to set targets within 12 months rose from 9% in 2022-2023 to 17% in 2024-25.

Companies with a clear decarbonisation roadmap rose from 27% to 54%, and 41% of respondents' companies had roadmaps under development.

The survey also found increases across the board in the deployment of low-carbon fuels, technological efficiency measures, and operational efficiency levers, with the exception of using ammonia as a fuel which remained at zero.

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In terms of the vessel solutions being deployed, 6% of respondents had adopted methanol, compared to 3% in the last report, and the use of bio-blended fuels rose from 22% to 46% of respondents.

Among the basket of widely-adopted technological efficiency levers including advanced hull coatings, main engine improvements, propeller improvements and reduced auxiliary power demand, adoption rose from between 61% and 80% to between 80% and 60%. For the less widely-adopted technological efficiency levers including hydrodynamic design, waste heat recovery, air lubrication, solar power, and wind power, adoption rose from between 9% and 46% to between 14% and 72%.

A similar trend was seen across operational efficiency levers, with widely adopted measures like weather routing and slow steaming reaching between 83% and 92% adoption, and the less widely-adopted measures such as just in time operations, cold ironing and autopilot adjustments rising to between 41% and 64% adoption rates.

The report noted some nuance within the adoption figures: "For instance, all methanol adopters report that less than 20% of their vessels use it, while amongst bio-blended fuel adopters, 69% reported deploying it to less than 20% of their vessels. For nascent operational efficiency levers (TOLs), such as wind-assisted propulsion systems, solar panels, super light ships, air lubrication, and optimization water flow hull openings, more than half of the adopters have deployed it to less than a fifth of their vessel fleet."

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The report said that the improvements in ambition, strategic planning and adoption of decarbonisation methods had occurred despite headwinds in the form of geopolitical instability and threats of global trade tariffs. The survey data was collected ahead of MEPC 83 and its initial approval of the global greenhouse gas pricing framework for emissions from shipping.

The report breaks down the shipping industry into the decarbonisation archetypes of conservatives, followers, and frontrunners, and charted the progress of the 42 respondents who completed both surveys. Of the nine identified as conservative in 2023, three advanced to become followers and two jumped straight to frontrunners. Six of the 19 followers in the

2023 survey progressed to frontrunners. No respondents moved backwards towards conservatism.

Alongside the survey data, GCMD and Boston Consulting Group conducted surveys and interviews with leading ports to gather their insights into decarbonisation progress.

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The report listed four required actions to realise shipping’s decarbonisation ambitions: levelling the playing field with policy and regulation, fostering economic viability with incentives and finance mechanisms, signalling demand for infrastructure development, and bridging awareness gaps among conservatives and followers to boost adoption of TOLs.

Dr Sanjay C Kuttan, chief strategy officer of GCMD, said: “Positive developments in maritime policy, especially from the IMO, which further tighten limits on GHG emissions, along with the increased ambitions voiced by survey respondents, are encouraging signals. Greater co-operation with the ports and pertinent stakeholders across the various value chains will be required to address challenges across the broader ecosystem. With the right investments and collaborative actions, the maritime industry can chart a course to a future where sustainable decarbonisation and commercial success can co-exist.”

Anand Veeraraghavan, managing director and senior partner of BCG, said: “It is encouraging to see that even in the face of global uncertainties, the maritime industry's decarbonisation ambitions remain intact and steadfast. The recent MEPC outcomes mark a pivotal step forward, sharpening demand signals with incentives for exceeding compliance goals and penalty mechanisms for shortfalls. Now is the time for the industry—both ships and ports—to build on this momentum.”