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Maersk launches massive retrofit drive to boost vessel fuel efficiency



Making changes to a ship's bulbous bow reduces drag and cuts fuel consumption. Photo credit:

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<u>Greg Knowler</u> | Oct 2, 2025, 11:03 AM EDT

Maersk on Thursday announced a 200-ship retrofit program of its time-charter fleet to reduce slot costs through improved fuel efficiency and greater carrying capacity, generating cost savings and lowering greenhouse gas emissions.

The large-scale effort is a tacit acknowledgement of the immense challenges of the energy transition and the scaling up of alternative fuels necessary to meet the maritime industry's net-zero targets.

"While fuel transition is needed to reach our long-term goal of net-zero emissions by 2040, investments in existing fleet efficiency enhancement technologies is a powerful

tool to gain significant emissions reductions in the short term," Ahmed Hassan, head of asset strategy and strategic partnerships at Maersk, said in a statement.

"This strong emphasis on efficiency measures can deliver tangible progress towards our 2030 goal," Hassan added. "That goes for owned as well as chartered vessels."

More than 1,500 individual retrofit projects involving 50 different shipowners, with another 1,000 projects scheduled for 2027, are aimed at helping the carrier meet its short-term decarbonization goals. Maersk has set a target of a 35% absolute reduction in Scope 1 emissions by 2030 compared with the 2022 baseline year.

Maersk did not disclose the cost of the retrofits but said the investments will be split between the carrier and the vessel owners.

"Our medium- and long-term chartered fleet makes up a significant proportion of our operations as well as of our total fuel consumption," Hassan said. "By working closely with our partners, we aim to implement solutions that not only reduce emissions but also enhance the overall competitiveness of our fleet.

"Fleet renewal is often seen as new vessels replacing the old, but it is also about ensuring your existing vessels keep their competitive edge," he added.

Range of solutions rolled out

The scale of Maersk's project, which covers vessels of different sizes and configurations, requires varying retrofit tools. Many of the 200 vessels being retrofitted will have their bulbous bow replaced to reduce drag and enhance hydrodynamic efficiency, ultimately lowering fuel consumption.

Other retrofit solutions include the replacement of propellers that will maximize thrust while minimizing energy loss, reducing reliance on fuel oil-fired boilers, and the installation of shaft generator systems that cut down auxiliary engine usage.

Cargo-carrying capacity is also being enhanced through a range of structural and technical improvements, such as elevating the wheelhouse to improve line of sight and increase intake, raising the lashing bridges, strengthening the vessel's deadweight capacity for deeper drafts, and upgrading both lashing systems and loading computer functionalities.

"Many of these ships were designed and constructed at a time when container vessels in general were sailing at faster speeds," Anda Cristescu, head of chartering and newbuilding at Maersk, said in the carrier's statement.

"To bring down fuel consumption, we have over the years introduced less compressed vessel schedules, but the propellers and bulbs optimized for faster speeds have been kept. There lies a big efficiency potential in replacing them," she added.

Maersk has maintained its fleet at just over 4 million TEUs for several years, a capacity it regards as "optimal." The carrier last December made a 20-ship order totaling 300,000 TEUs with delivery scheduled for 2028, but said the new vessels will replace older tonnage.

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