



# COSCO signs for methanol engine retrofits at Marintec China

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COSCO Shipping has signed up a series of its containerships for a methanol dual-fuel revamp at the Marintec China exhibition in Shanghai.

COSCO Group shipyard COSCO Shipping Heavy Industry has selected Germany's MAN Energy Solutions and Finnish marine technology provider Wärtsilä for the project.

The deal covers four 13,800 teu and four 20,000 teu ships spread equally between the engine makers.

According to MAN, the first boxship of the series is scheduled for retrofit in the second quarter of 2025 when these vessels will also become the first fitted with its S90-LGIM engines. The German engine maker also has options for the retrofit of an additional nine 20,000 teu ships, while Wärtsilä has not revealed any further details about its deal with COSCO.

Michael Petersen, MAN senior vice president and head of PrimeServ Denmark, said: "It's very promising to see one of the largest shipping companies globally choosing MAN Energy Solutions as a partner to attain their decarbonisation goals."

Analysis from class society DNV highlighted methanol as the second most popular alternative fuel choice for newbuild orders last year after LNG. However, this year's latest numbers show the two fuels switching places when it comes to newbuilding orders.

As for retrofits, Maersk and MAN set the ball rolling on methanol in June for the first engine conversion in the middle of 2024. The duo also has a deal in place for the retrofit of the G95 main engines aboard 11 Maersk boxships to dual-fuel. Seaspan, the world's largest boxship lessor, contracted with MAN in July for 15 methanol dual-fuel engine retrofits with options for 45 more projects.

MAN suggested that retrofitting an engine to dual-fuel operation is one of the most effective ways to drive greater efficiency and profitability from a fleet.

The company's spokesperson Pádraig Kellehe told *Splash Extra* earlier this year vessels whose original value was higher than \$50m make for retrofit candidates since a full dual-fuel retrofit project for cheaper vessels would be costly compared to building a new vessel with dual-fuel engines from scratch. This is because the cost of

retrofitting, which includes the fuel storage and fuel supply system, ranges between \$5m and \$15m.

"Typically, good candidates for dual-fuel retrofits are containerships with over 5,500 teu, tankers with over 50,000 dwt, bulkers with 160,000 dwt, LPG carriers with over 38,000 cu m, and larger modern roro vessels and PCTC carriers," Kelleher said.

Dr Tristan Smith, associate professor in energy and shipping at UCL Energy Institute, has argued the potential for engine retrofits among today's global merchant fleet is "thousands of ships per year".

Smith and his team submitted a paper to the International Maritime Organization on the matter discussing the costs involved compared to using more expensive drop-in fuels or scrapping.

"Retrofit is highly attractive," Smith told *Splash* earlier this year, adding that his team tested the shipyard capacity for the rates of retrofit and found, unlike this week's LR report, there are no constraints.

"We are in the early days of a huge wave of dual-fuel retrofits and see many concrete projects coming online with the capacity to meet shipping's demand for green fuels, such as e-methanol and bioLNG. We expect that owners who have opted to wait and watch over the past few years will ultimately also convert their tonnage to dual-fuel," added MAN's Petersen.