

Tracking Progress: Marine Decarbonisation of the Global Fleet

Monthly data analysed from Jan 2022 to Apr 2024 from Clarkson’s World Fleet Register’s Green Technology Tracker.

Introduction

IMCA has analysed trends in the maritime sector to provide members some insight to the investments being made in clean fuel and decarbonisation of the global fleet. The data has been extracted from the Clarkson’s World Fleet Register, IMCA will update the analysis every 3 months and issue an update to members.

Summary

The evolving landscape of climate regulation, including the IMO’s ambitious greenhouse gas targets, is catalysing a shift towards decarbonisation in the maritime sector. To meet these targets there has been a clear uptake in alternative fuel capable vessels and green technologies over a relatively short period of time. The data in this report shows clear positive trends towards decarbonisation.

Alternative fuels

There has been a noticeable increase in the ordering of vessels capable of alternative fuels and propulsion in recent years. Of these, LNG is the most popular, followed by battery/hybrid propulsion, methanol, and LPG (see Figure 1).

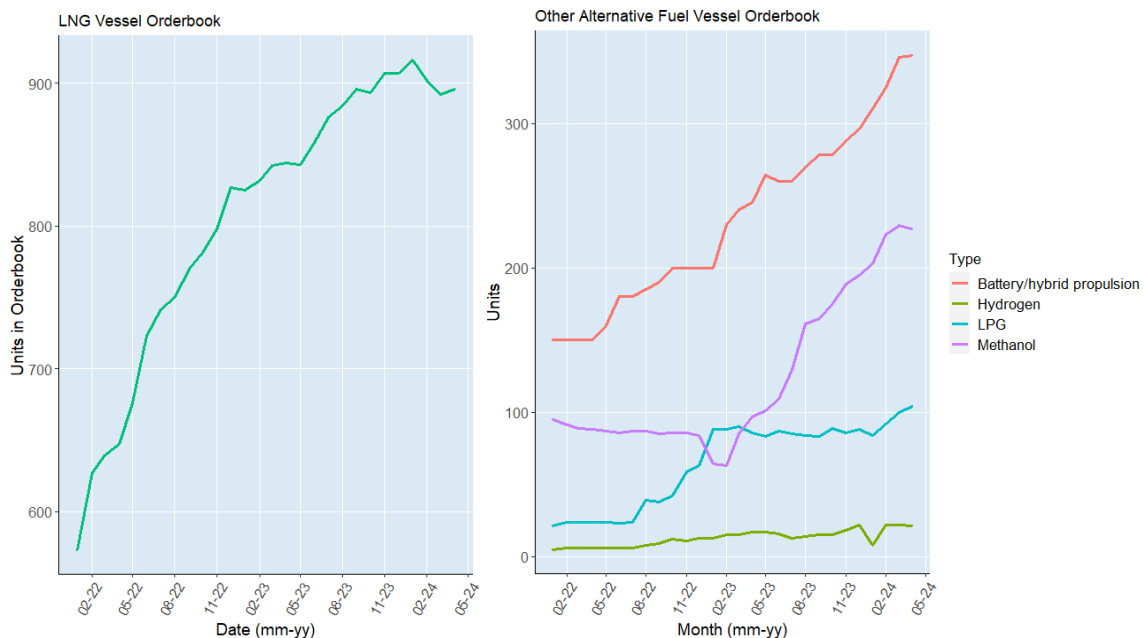


Figure 1. Units of alternative fuel or battery/hybrid propulsion capable vessels in the global orderbook (Jan-22 to Apr-24)

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As of April 2024 this cumulated to 49.5% (110.2m GT) of the orderbook in terms of tonnage capable of alternative fuels or battery hybrid propulsion, a significant jump from ~35% in early 2022 (see Figure 2). This has translated to 6.5% (104.8m GT) of the Global fleet on the water already capable of alternative fuels or battery hybrid propulsion.

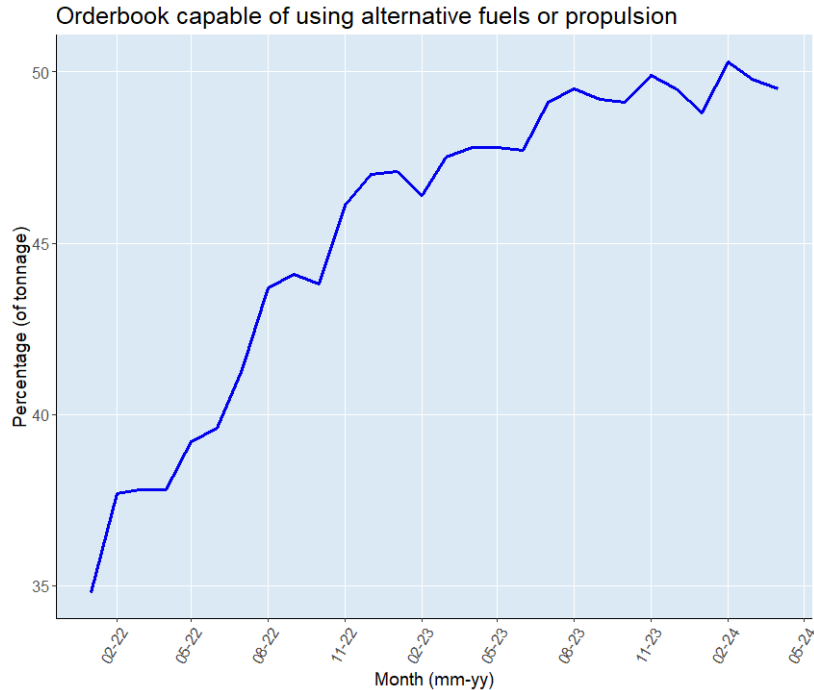


Figure 2. Percentage (in terms of tonnage) of the global vessel orderbook capable of alternative fuels or battery/hybrid propulsion (Jan-22 to Apr-24)

Energy Saving Technologies and Scrubbers

Energy Saving Technologies (ESTs) have now been fitted onto 32.1% of the global fleet (in terms of tonnage), an increase from 22.4% this time two years ago. These technologies include air lubrication systems, propeller ducts, Flettner rotors, wind kites and others. Scrubbers are also now fitted or set to be fitted on 27.6% of the global fleet.

Green Ports

Port infrastructure is reflecting this drive for decarbonisation with more active LNG bunkering ports than ever. As of April 2024 there were 190 of these ‘Green Ports’ with another 83 facilities currently planned. This shows a 31% increase compared to two years earlier. Shore power is also an increasingly popular choice with over 2,590 vessels fitted or set to be fitted with shore power connections. This number has more than doubled since the start of 2022 when there were only 1,229.

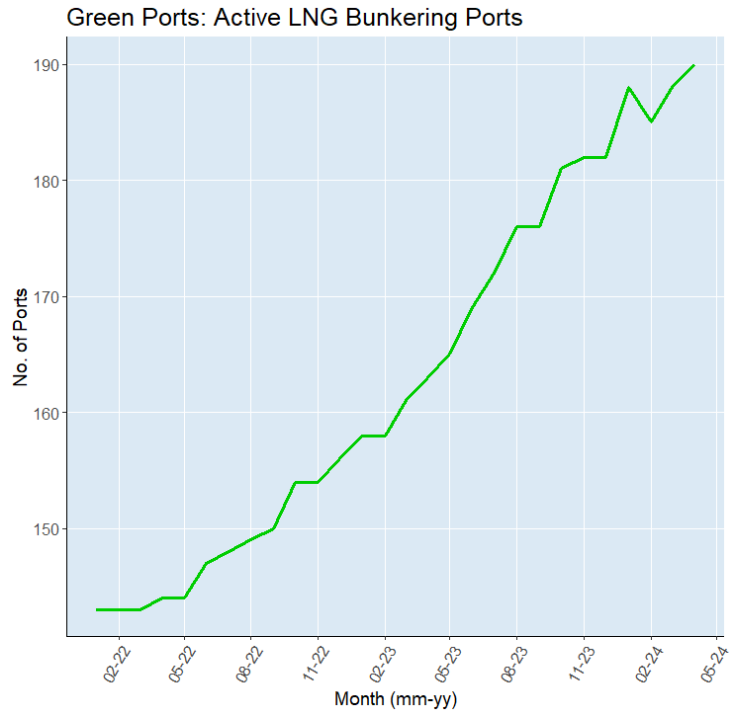


Figure 3. Number of active LNG bunkering ports globally (Jan-22 to Apr-24)

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Related Guidance

- ◆ Data and further insights available from: [World Fleet Register \(clarksons.net\)](https://www.clarksons.net)