

Tracking Progress: Marine Decarbonisation of Global Fleet

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

Introduction

IMCA analyses trends in the maritime sector to provide members insight into the investments being made in clean fuel and the decarbonisation of the global fleet. The data has been extracted from the Clarkson's World Fleet Register. IMCA repeats this analysis quarterly to provide an update to members.

Summary

The changing climate regulations, including the IMO's ambitious greenhouse gas targets, are driving a shift towards decarbonisation in the maritime sector. To achieve these targets, there has been a noticeable increase in vessels capable of using alternative fuels and the adoption of green technologies in a relatively short time. The data in this report highlights 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).

In August, the orderbook had the greatest total tonnage and percentage of vessels capable of alternative fuels and propulsion on the orderbook in history. This surpassed half the orderbook with 50.9% (121.8m GT) 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 6.9% (111.9m GT) of the Global fleet on the water already capable of alternative fuels or battery hybrid propulsion.

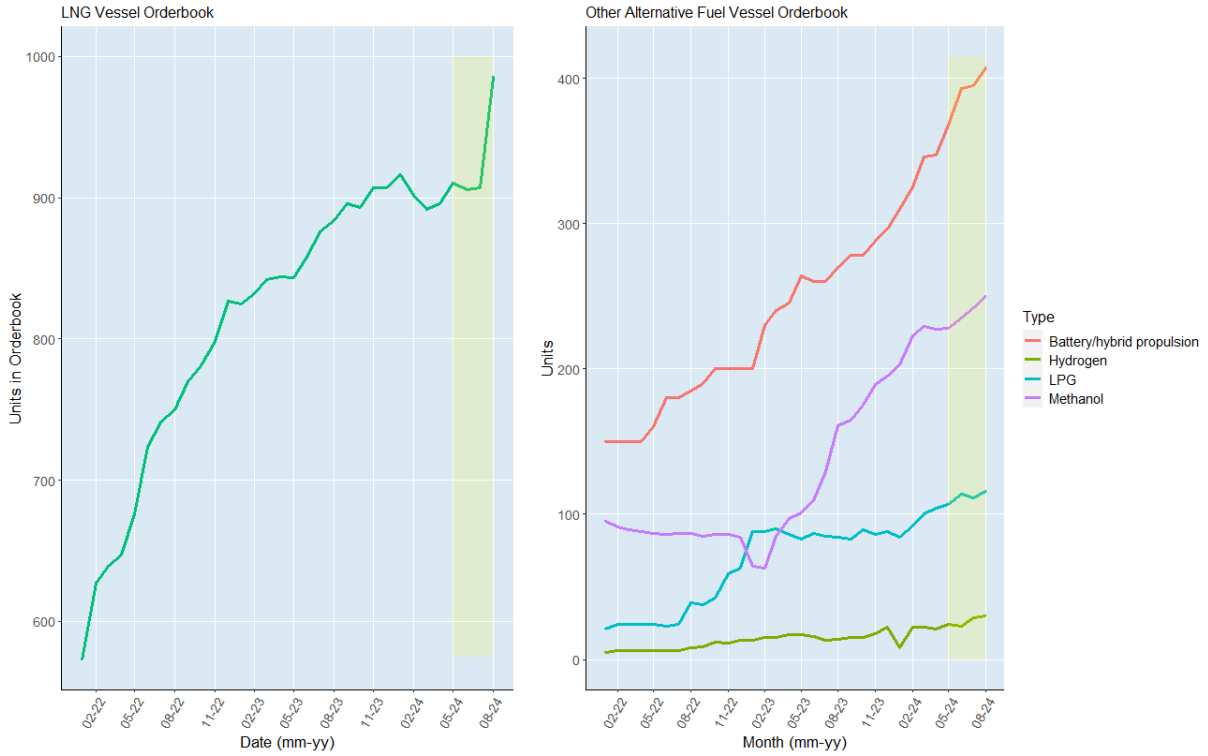


Figure 1. Units of alternative fuel or battery/hybrid propulsion capable vessels in the global orderbook (Jan-22 to Aug-22). Last quarter is highlighted

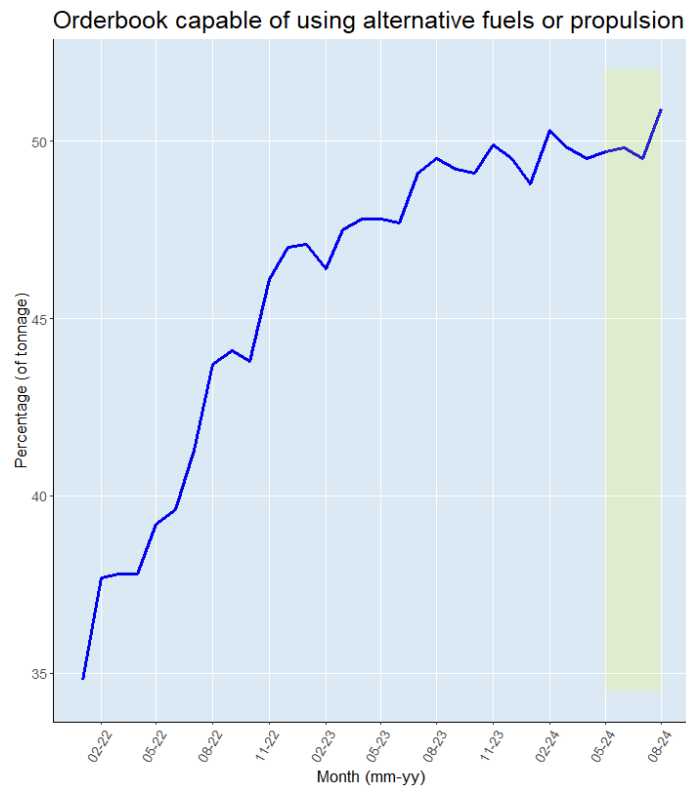


Figure 2. Percentage (in terms of tonnage) of the global vessel orderbook capable of alternative fuels or battery/hybrid (Jan-22 to Aug-24). Last quarter is highlighted

Energy Saving Technologies and Scrubbers

Energy Saving Technologies (EST) have now be fitted onto 33.8% of the global fleet (in terms of tonnage), a 10% increase from 23.8% two years prior. 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 28.4% of the global fleet.

Green Ports

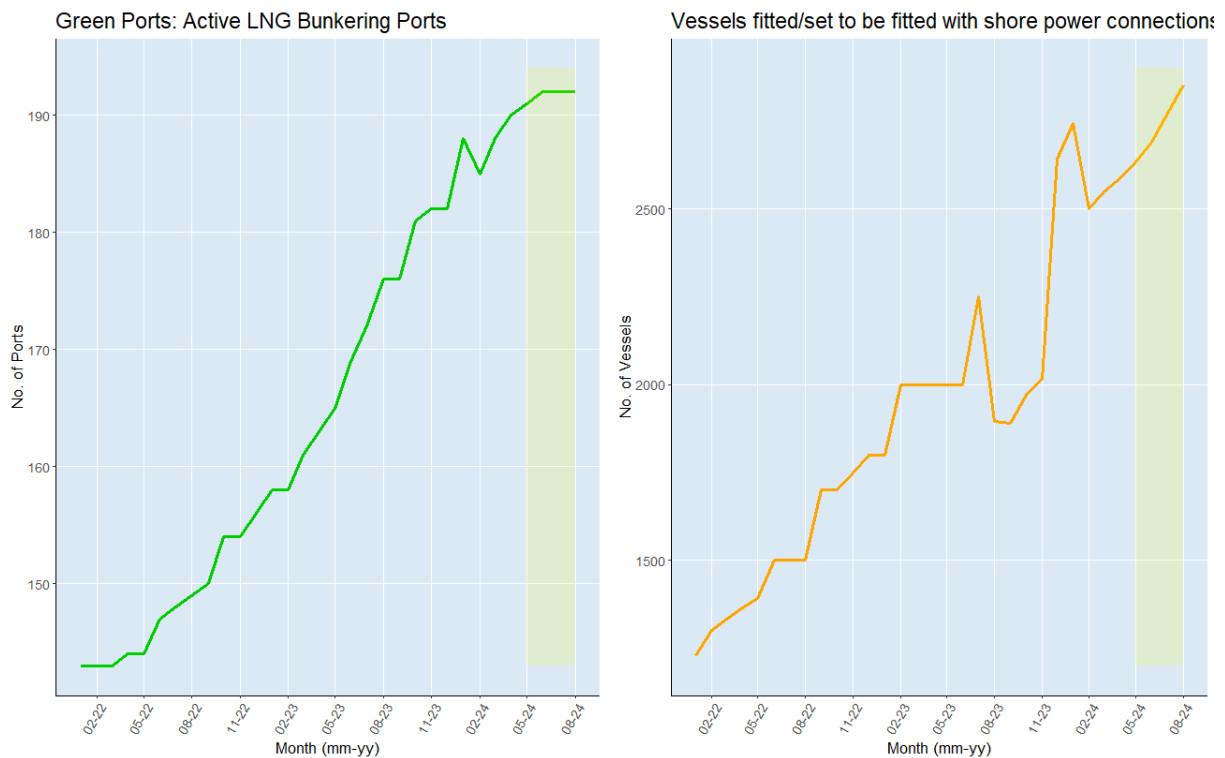


Figure 3. Number of active LNG bunkering ports globally (Jan-22 to Aug-24) (left) and number of vessels fitted or set to be fitted with shore power connections (right). Last quarter is highlighted

Port infrastructure is reflecting this drive for decarbonisation with more active LNG bunkering ports than ever. As of August 2024 there were 192 of these 'Green Ports' with another 82 facilities currently planned. This shows a 34% increase compared to start of 2022. Shore power is also an increasingly popular choice with over 2,854 vessels fitted or set to be fitted with shore power connections. This is a 132% increase from the start of 2022 when there were only 1,229.

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Related Guidance

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