Analysis

Nor-Shipping: Plenty of Green Focus

Next week, the 35th Nor-Shipping trade exhibition returns to its traditional summer (by Norwegian standards!) slot. Like most maritime gatherings today, there will be plenty of green focus including a first dedicated offshore wind seminar. In this week's *Analysis*, we update some of our data points tracking shipping's Green Transition, hopefully providing helpful context for discussions in Oslo.

Green Technology...

A key element in shipping's vital decarbonisation pathway (today shipping emits 2.1% of global CO₂) will be a transition to a "greener" fleet and many from the 1,000 strong exhibitor list at Nor-Shipping will be marketing innovative solutions around Energy Saving Technologies (ESTs), alternative fuel solutions and routing optimisation software. Our latest Green Technology Tracker (see SIN, underlying data on WFR) profiles progress with 5.5% of fleet capacity today alternative fuelled (up from 2.3% in 2017 and expected to reach 6.5% by 2025). Although alternative fuelled newbuild ordering has been a little slower in 2023 to date (albeit with a relative trend towards methanol: 14% of orders by tonnage vs 22% dual fuel LNG), 48% of overall orderbook capacity is now alternative fuelled (vs 11% in 2017). The orderbook also has plenty of optionality built in with 371 LNG "ready" orders, 191 ammonia "ready", 130 methanol "ready" and 9 hydrogen "ready".

Many suppliers at Nor-Shipping will be busy promoting ESTs. We estimate significant ESTs have already been fitted on over 6,250 ships, accounting for 27.3% of fleet tonnage: this includes propeller ducts (>2,000), rudder bulbs (>1,600), Flettner rotors (>20), wind kites and rigid sails (>12), air lubrication systems (>350) and others. Scrubbers are now fitted to over 5,050 ships in the fleet, equivalent to 25% of total tonnage (retrofitting activity remains at relatively low levels but orders for newbuildings have picked up marginally in 2023, with reported orders already surpassing last year's total). 'Eco' ships make up a growing share of the fleet (eco 'modern' vessels now 30.4% of total GT vs 14.6% at start-2018). As we have discussed previously, there will be implications for earnings potential, asset values and increasingly "tiered" and complex charter markets as this green fleet transition evolves. And for shipyards exhibiting, there is the opportunity for huge fleet renewal requirements (we estimate \$1.6 trillion of newbuild orders in the next ten years although investment may be "lumpy" as technology, regulations and yard capacity evolve).

Offshore Transition...

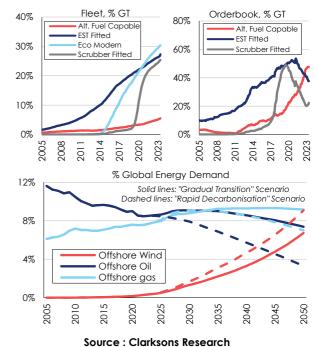
Offshore wind is a hugely exciting sector that we expect to play a vital role in global energy transition (today we estimate that 0.4% of global energy is produced by offshore wind but that this could grow to between 7% and 9% by

2050). We have been closely tracking all wind farm projects globally (we forecast there could be over 30,000 turbines and 740 farms producing 250 GW by 2030 compared to 12,000 turbines, 280 farms and 60 GW today) as well as a specialised fleet that is quickly developing to support construction and maintenance (we are tracking all WTIVs, C/SOVs, CTVs and related newbuilds). At the other end of the spectrum, Offshore oil and gas (Norway has rich heritage and expertise here) still produces 16% of global energy and, after many years in the "doldrums", dayrates and utilisation are improving as the world tries to balance energy transition with energy security needs. Enjoy Nor-Shipping and we hope that the "green" stats help!

Graph of the Week

The top graphs shows the uptake of green technology as a % of capacity (GT) in the fleet (left graph) and orderbook (right). See World Fleet Register (WFR) for underlying data. The bottom chart shows scenarios for the share of global energy from offshore oil and gas and offshore wind. See Offshore Intelligence Network (OIN) and Renewables Intelligence Network (RIN) for underlying data. Clarksons Research will be exhibiting at Nor -Shipping: visit us at stand number DO5-12. Oslo is an important centre for broader Clarksons Group, including shipbroking and investment banking activities.

The author of this feature article is Stephen Gordon. Any views or opinions presented are solely those of the author and do not necessarily represent those of the Clarksons group.



Shipping Intelligence Weekly, 02 June 2023

Published by:
Clarkson Research Services Limited
Commodity Quay, St Katharine Docks
London E1W 1BF, England.
Tel: + (44) (0) 20 7334 3134
E-mail: sales.crs@clarksons.co.uk
Website: www.clarksons.net
Group: www.clarksons.com
Shipping Intelligence Network: sin.clarksons.net

World Fleet Register: wfr.clarksons.net
Printed on FSC/PEFC certified paper.

Shipping Intelligence Weekly is available each Friday on Shipping Intelligence Network.

Contact research.crs@clarksons.com for subscription details. Renewables

Editorial Board:

Managing Director Research Director Market Research Editor

Clarksons Contacts:

S&P Tankers Specialised Gas Dry Cargo Containers Freight Derivatives Stephen Gordon Trevor Crowe Sarah Holden David Whittaker

J. Brynteson R. Knight J. Webber T. Becker

T. Francis
S. Goodrich
B. Courtney

C. Brugård F. Colban-Andersen The material and the information contained herein are provided for general information purposes, and may not be reproduced without the written permission of Clarksons Research. To the maximum extent permitted by law, Clarksons Research shall not be liable to the recipient or any third party for any loss, liability or damage, cost or expense including without limitation, direct, indirect, consequential loss or damage, any loss of profit, loss of use, loss of or interruption in business, loss of goodwill, loss of data arising out of, or in connection with, the use of and the reliance on the information whether in contract, tort, negligence, bailment, breach of statutory duty or otherwise, even if foreseeable. This disclaimer shall be governed by and construed in accordance with English law.