

Maritime Decarbonization Monthly

June 2022

Thought of the Month:

“Shipping could be moving towards net-zero by 2050”

The Big Picture

The recent and much-anticipated meeting of the Marine Environmental Protection Committee, which held its 78th session June 6-10th (**MEPC 78**), underlined that **sufficient momentum and support exists among most member states for the IMO to begin setting more ambitious targets and policies** at upcoming IMO meetings. The focus was to progress IMO policy to build an effective greenhouse gas emissions (GHG) reduction strategy to be approved at MEPC 80 in 2023.

Another notable aspect of MEPC 78 was the **rejection of a proposal led by the International Chamber of Shipping (ICS) for a \$5bn decarbonization research and development fund** that would have provided a market-based approach to reducing shipping’s carbon emissions. The plan focused on a mandatory levy of \$2/ton on bunker fuel that would have helped facilitate the application of new technologies at scale. The rejection of such a proposal signals a reluctance by the IMO to be responsible for managing and supervising such a scheme. Separately, a proposal to establish a Sulphur Emission Control Area (SECA) in the Mediterranean Sea was approved for adoption at MEPC 79 in December 2022.

What’s New

ICS’s Shaping the Future of Shipping Summit, held in London in late June, agreed to progress a **Clean Energy Marine Hubs Initiative (CEMH)** which would coordinate decarbonization efforts between stakeholders by **developing collaboration between the energy sector and maritime industry**. The vision for the hubs will also enable policymakers to unlock the potential of clean energy development. Attendees agreed on unilateral moves to prioritize R&D funding for low- and zero-carbon fuels.

Our View

The absence of an international R&D fund for new ship technologies and alternative fuel production is a **key issue** in reaching net-zero goals for the shipping industry. This month, the Mærsk Mc-Kinney Møller Centre for Zero Carbon Shipping received a second donation from the A.P. Møller and Chastine Mc-Kinney Møller Foundation valued at DKK 320 million (\$45 million) to accelerate the maritime industry’s decarbonization through collaboration. This donation comes on top of the DKK 400 million (\$56.4 million) the center received as start-up funding when it was launched in June 2020. The donation from the A.P. Moller Foundation is expected to contribute to the continued operations of the center across three work programs. Although the absence of an international fund is unfortunate, **private funding** remains crucial in progressing the goals towards marine decarbonization.

Industry Trends

Fuels

The **Ship It Zero coalition** has urged shipping companies to cancel all new fossil fuel newbuilds in their order books and **invest only in zero-emission** technologies and fuels for their future global fleets.

LNG

- Preparing for future fuel mix, Dutch independent marine fuel supplier, **Titan LNG**, has decided to rebrand as Titan. The new name reflects Titan's **commitment to delivering all the fuels that decarbonize shipping**, such as liquefied biomethane (LBM), and any hydrogen-derived green fuel in the future.
- LNG is now leading the way for alternative fuels. **There are now 805 LNG-fueled ships in operation or on order**, and 229 more 'LNG-ready' ships, according to the latest Alternative Fuels Insight from the classification society, DNV. Car and passenger ferry operators have been quick to adopt LNG as a fuel, with 46 ships already in operation and seven more on order. However, containerships will soon take a strong lead. The 35 boxships already operating on LNG will soon be joined by 172 new ones, taking the total to 207. In other major groups, there are 87 crude oil tankers that run on LNG, either in operation or under construction; 70 oil/chemical tankers; and 62 bulk carriers.

Biofuels Production / Expansion

- The British-Dutch biofuel producer **Argent Energy** is expanding its second-generation biodiesel production capacity in the Port of Amsterdam to contribute to sustainable shipping and road transport. The company is **targeting a fivefold increase in production** – from 100,000 tons of biodiesel per year to 540,000 tons.
- Biofuel trials: Greek ship management company **Capital Ship Management** and classification society **Lloyd's Register (LR)** agreed to trial the use of biofuels in a new pilot project to support the maritime industry's research for low to zero-

carbon fuels. Under the project, **biofuel-blended marine fuel will be tested on Capital managed 300,000 dwt crude tanker, Appollonas.**

Technology

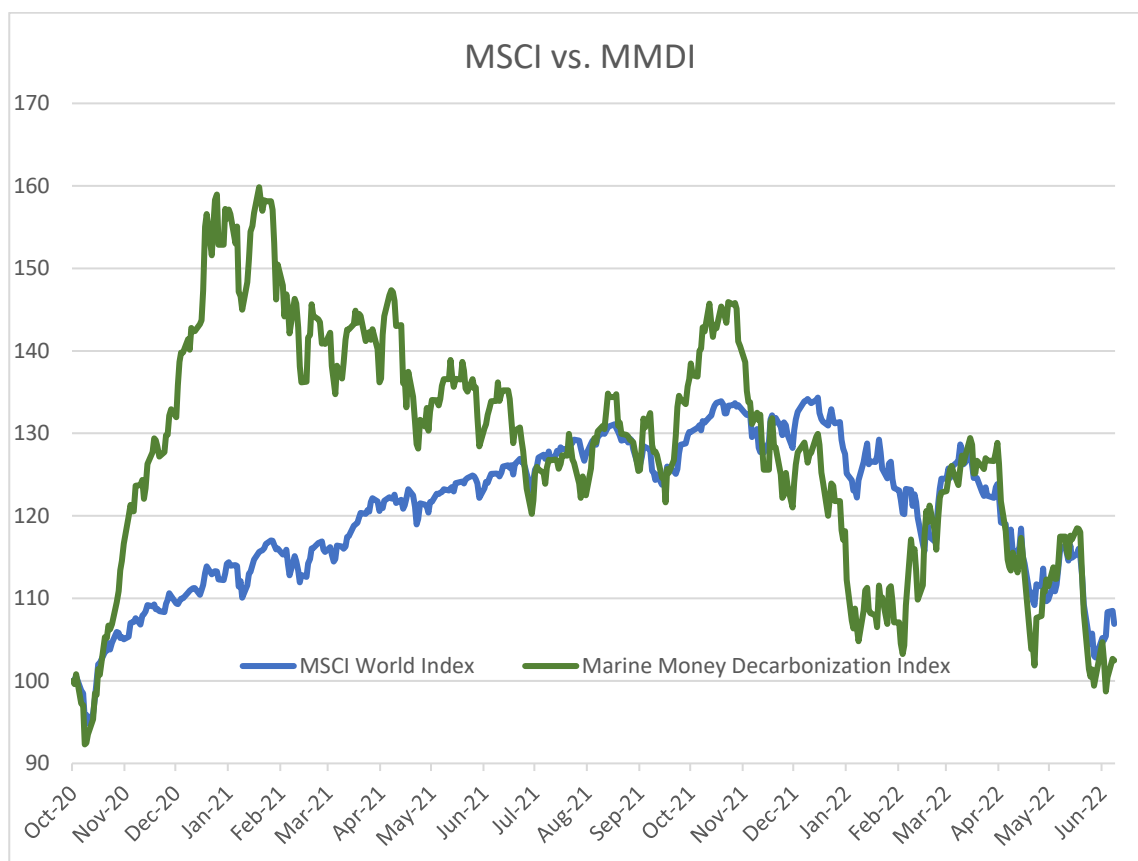
- **MOL** is the first Japanese company to take part in **First Movers Coalition**, a platform aimed at helping governments and major global companies cooperate to launch technologies needed to achieve net-zero emissions by 2050 and enhance cost competitiveness.
- The Finnish technology group **Wärtsilä opened its new technology center**, The Sustainable Technology Hub in Vaasa, Finland to accelerate decarbonization by fostering innovation, collaboration, and the development of green technologies.

New Designs

- ABS approved **Samsung Heavy Industries** ammonia-fueled Neo-Panamax containership design. Hyundai Heavy Industries is working with compatriot owner **Hyundai Glovis** to develop the world's **largest carbon dioxide carrier**. ABS is on board the project to create a 74,000cm CO2 carrier, far larger than anything thus far announced in the nascent CO2 trades. Mitsubishi Shipbuilding, a part of Mitsubishi Heavy Industries (MHI) Group, completed the conceptual design of a very large gas carrier (VLGC) initially powered by liquefied petroleum gas (LPG) but adaptable to future use of ammonia as the main fuel.

Green Ships

- **MOL** has held a naming ceremony for the third vessel in the **EeneX** series of **next-generation coal carriers**, Energia Azalea. The 99,965 dwt carrier was built to serve Japanese energy company Chugoku Electric Power by transporting coal from overseas to its power stations and contributing to a sustainable and stable supply of electricity.



Relevant Prices

Fuel Prices

	Price	YOY
Crude Oil, Brent	119.49 \$/bbl	59.8%
Natural Gas, Henry Hub	6.71 \$/MMbtu	84.7%
LNG, Korea/Japan	37.00 \$/MMbtu	191.3%
Coal, Rotterdam	370 \$/mt	255.8%
VLSFO, Rotterdam	891 \$/mt	70.0%
Methanol, China	38.75 \$/mt	1.5%
Palm Oil, Malaysia	46.06 \$/mt	34.0%

Stock Indices

Marine Money Decarbonization Index	309	-26.2%
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Carbon Emission Allowances

EU Emission Allowances	91.58 \$/kt	57.3%
UK Emission Allowances	101.79 \$/kt	64.5%

Note: All prices as of last closing prior to the report; Sources: Bloomberg and Breakwave Advisors

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