

# Maritime Decarbonization Monthly

May 2022

*Thought of the  
Month:*

*“IMO member states near carbon levy adoption”*

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## The Big Picture

The Intersessional Working Group on Greenhouse Gases (ISWG-GHG) showed **genuine progress on pricing greenhouse gas emissions** ahead of June’s gathering of the Marine Environment Protection Committee (MEPC) at the International Maritime Organization (IMO).

Delegates moved forward with a basket of measures that contains both technical – a fuel standard – and market-based measures, such as a carbon levy. Delegates from the UK, New Zealand, and the Bahamas spoke for the first time in favor of a carbon pricing measure at the IMO. **The meeting concluded that there was a consensus to price GHG emissions at IMO.** This is a major development as the concept of market-based measures has been on the table at the IMO for more than a decade and is often fiercely debated between member states. In the meantime, the European Parliament is pressing ahead with its own plans to include shipping within the bloc’s emission trading scheme.

## What’s New

Ports are now emerging with decisive actions to support the decarbonization of shipping. In addition to the initiatives looking at the formation of green shipping corridors, **individual ports are introducing green incentives** for ships that meet emission standards or employ alternative green fuels to reduce emissions. The Maritime and Port Authority of Singapore announced that as of May 1, 2022, it is introducing enhancements to its Green Port Program to encourage environmental sustainability among ocean-going vessels calling at the Port. In addition, the Halifax Port Authority in Canada announced that it is offering incentives to container and RoRo vessels that voluntarily register and meet the International Association of Ports and Harbors’ (IAPH) Environmental Ship Index’s requirements for reducing greenhouse gas emissions.

## Our View

The pathway for the shipping industry to reach the net-zero goal is going to be a long-term challenge. There is still a lot of research to be done that that will require significant investment when it comes to the development of green fuels. A new report commissioned by the International Chamber of Shipping (ICS) has captured the needs of the shipping industry’s future fuel demand to reach the net-zero goal in order to understand the duration of shipping’s pathway to decarbonization.

According to the report, **shipping’s green fuel needs would require electricity from renewable sources to be equivalent to the entire world’s current renewable energy production** to reach the industry’s 2050 net-zero goal. The report urgently calls for increased R&D in green fuels and the development of production infrastructure in key geographic locations such as Latin America and Africa. These are major obstacles to overcome, and we believe the need for increasing investment in the space is real and significant in size.

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## Industry Trends

### Fuels

In May, significant alliances for the development of methanol and hydrogen fuels emerged, and considerable progress was made in the development of the biofuel supply chain.

### Alliances

- **Methanol:** Alfa Laval has become a member of the Methanol Institute. Founded in 1989, the Methanol Institute serves as the global trade association for the methanol industry, representing the world's leading methanol producers, distributors, and technology companies.
- **Hydrogen:** Norway's vessel owner and operator Golden Energy Offshore Services has teamed up with Gen2 Energy, a compatriot hydrogen company, to explore the use and availability of hydrogen-based fuels in the maritime industry.
- **Synthetic Methane:** French liner CMA CGM is accelerating the pace of its fleet's transition to new low-carbon fuel sources by joining an industrial demonstrator project that aims to produce green hydrogen from renewable power and e-methane, a synthetic gas that combines hydrogen and CO2 captured from industrial processes.

### Biofuel Supply Chain

- **Biofuel Supply in the Middle East:** Monjasa, in collaboration with energy company Uniper and biofuel producer Neutral Fuels, has completed its first blending and supply of marine fuels in the United Arab Emirates (UAE).
- **Biofuel Supply in Singapore:** European biofuel producer GoodFuels has teamed with Japanese trading house Itochu to scale sustainable marine biofuel in Singapore, Japan, and Asia-Pacific. GoodFuels and Itochu will initially focus on the supply of sustainable marine biofuels to all

Singaporean territorial waters, waterways, and harbors, as well as prospective customers transiting the Strait of Malacca.

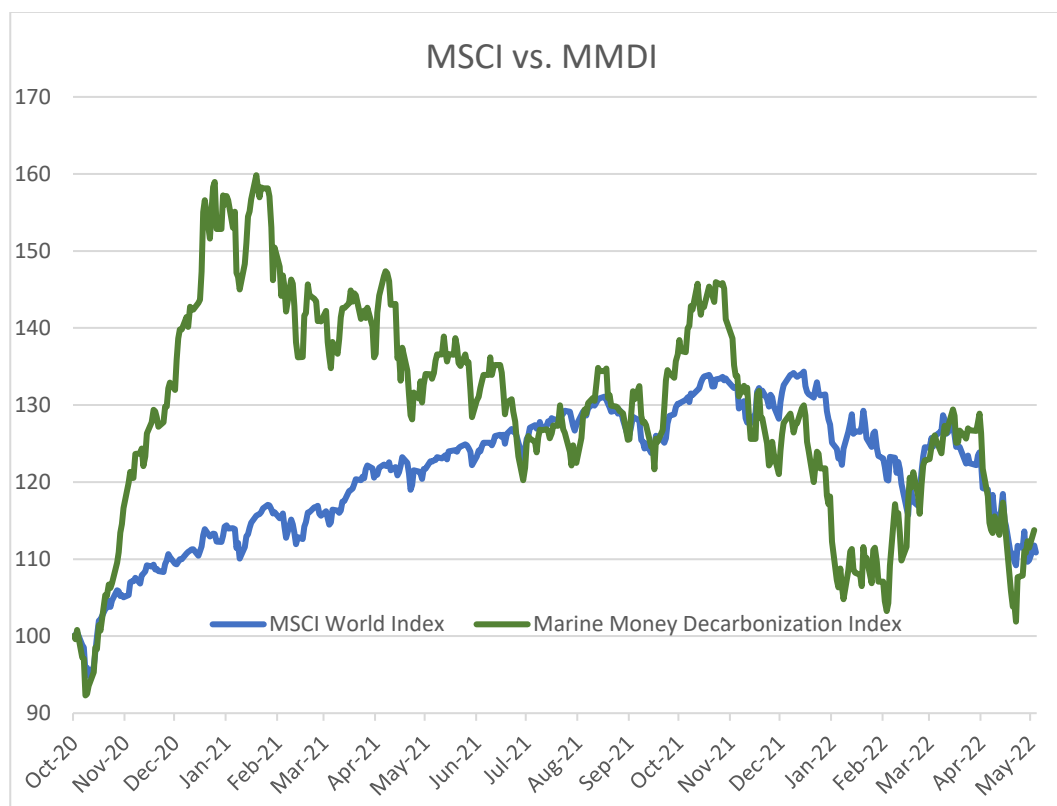
### Technology

- Japan's K-Line, working with partners, has developed conceptual designs for a **new generation of bulk carriers that would minimize emissions while enhancing operational efficiency**. The concept uses a core power system enhanced by small-scale electric generation and optional synergistic energy-saving technologies. ClassNK has reviewed the designs and issued Approvals in Principle (AIP) for two sizes of the vessel concept.

### Green Ships

New alliances for the development of zero-emission ships were established in May.

- MOL Drybulk, a subsidiary of Mitsui O.S.K. Lines (MOL), has signed a memorandum of understanding with sustainable wood bioenergy producer Enviva to deploy an environmentally friendly bulk carrier to reduce the greenhouse gas (GHG) emissions in the woody biomass supply chain. The 62,900-dwt vessel will be built by Oshima Shipbuilding and is scheduled for launch in 2024.
- Hong Kong-based dry bulk shipping company **Pacific Basin** has signed a memorandum of understanding with Japanese shipyard **Nihon Shipyard** and trading and investment company **Mitsui** to cooperate in the investigation and development of zero-emission vessels. The partners will also explore the investment in related bunkering infrastructure.



## Relevant Prices

### Fuel Prices

	Price	YOY
Crude Oil, Brent	114.54 \$/bbl	188.4%
Natural Gas, Henry Hub	9.10 \$/MMbtu	205.0%
LNG, Korea/Japan	22.22 \$/MMbtu	109.6%
Coal, Rotterdam	290 \$/mt	219.0%
VLSFO, Rotterdam	826 \$/mt	74.3%
Methanol, China	40.99 \$/mt	2.8%
Palm Oil, Malaysia	64.52 \$/mt	62.1%

### Stock Indices

Marine Money Decarbonization Index	347	-15.8%
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### Carbon Emission Allowances

EU Emission Allowances	86.96 \$/kt	51.6%
UK Emission Allowances	103.08 \$/kt	61.1%

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

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