

Maritime Decarbonization Monthly

July 2023

Thought of the Month:

“IMO member states just agreed to reach net-zero GHG emissions by or around 2050”

The Big Picture

The member states of the International Maritime Organization (IMO) achieved a **significant milestone** in July, by unanimously adopting the 2023 IMO Greenhouse Gas Strategy. Under this landmark accord, **IMO member states have committed to achieving net-zero GHG emissions from international shipping by approximately 2050**. This bold objective will be achieved through progressive interim checkpoints of 20-30% reduction in GHG by 2030 and 70-80% reduction by 2040. Additionally, the strategy aims to accelerate the adoption of cleaner energy sources within the shipping sector. By 2030, zero or near-zero GHG energy, fuels, and technologies are targeted to comprise 5-10% of shipping's overall energy mix. This step is crucial in driving the industry towards a more sustainable and environmentally friendly future. The agreement also outlines plans to **establish a marine GHG fuel standard** and a maritime GHG emissions pricing mechanism to further support these goals. These initiatives are expected to be formulated by 2025 and, if ratified, could enter into force as early as 2027.

What's New

Following two years of intense negotiations, the European Union (EU) has achieved a significant breakthrough by reaching a consensus on the definitive regulations for climate-neutral shipping, **officially introducing the FuelEU Maritime initiative**. From 2025 onwards, the industry will be subject to the specific provisions of the FuelEU Maritime initiative. These measures **mandate that shipping companies take gradual and strategic actions** to mitigate the climate impact of the fuels they use. The EU's commitment to implementing the emissions trading system and the FuelEU Maritime initiative strongly conveys the region's dedication to combating climate change. These measures are expected to drive **significant progress** in transitioning the maritime sector towards climate neutrality, contributing considerably to reducing GHG emissions.

Our View

The recent IMO decision increases pressure on the shipping industry to reduce carbon emissions and demonstrates that stakeholders recognize that the issue needs to be addressed urgently. To encourage the adoption of low-carbon options, it's important for different players to work together to **create a clear and transparent picture of the demand** for low-emission ships and fuels. In addition, investing in **demonstration projects and research** will provide valuable insights for fuel suppliers and ship owners to help them make decisions about sustainable fuel options. Overall, decarbonization requires a holistic approach to fleet composition. This includes **implementing efficiency measures**, investing in dual-fuel capable vessels, retrofitting existing vessels, and ensuring sufficient capacity for newbuilds and repairs. A critical element remains the feasibility of **green corridors**, which will accelerate progress toward greener shipping practices.

Industry Trends

Fuels

Eastern Pacific Shipping (EPS) has taken a significant step towards promoting sustainable energy solutions by signing a Framework Cooperation Agreement (FCA) with **China Power International Development Limited**. The primary focus of this agreement is to foster collaboration in the production of green energy and renewable fuel solutions for the maritime industry. Specifically, EPS and China Power will work together to advance the development and widespread adoption of energy alternatives, with a particular emphasis on green ammonia and green methanol.

Biofuels

Japanese shipping major **NYK Line** has trialed biodiesel fuel at Kinuura port onboard wood-chip carrier Daio Austral, which transports wood chips for Daio Paper Corporation. This was the first oceangoing vessel operated by NYK to receive biodiesel fuel in Japan. The ship then made a test voyage to Cai Lan port in Vietnam. The ship started its voyage on 22 June and arrived safely on 29 June.

Green Corridors

Portugal and Brazil inked a green shipping corridor agreement in July. **Portugal's Sines port** and **Companhia Siderúrgica Nacional of Brazil** signed a memorandum of understanding to develop sustainable, green, and digital shipping corridors with a strong focus on green hydrogen supplies. The MoU was signed as part of the **Global Gateway**, a new European Union strategy to promote smart, clean, and safe connections to digital, energy, and transport sectors.

New Vessel Design

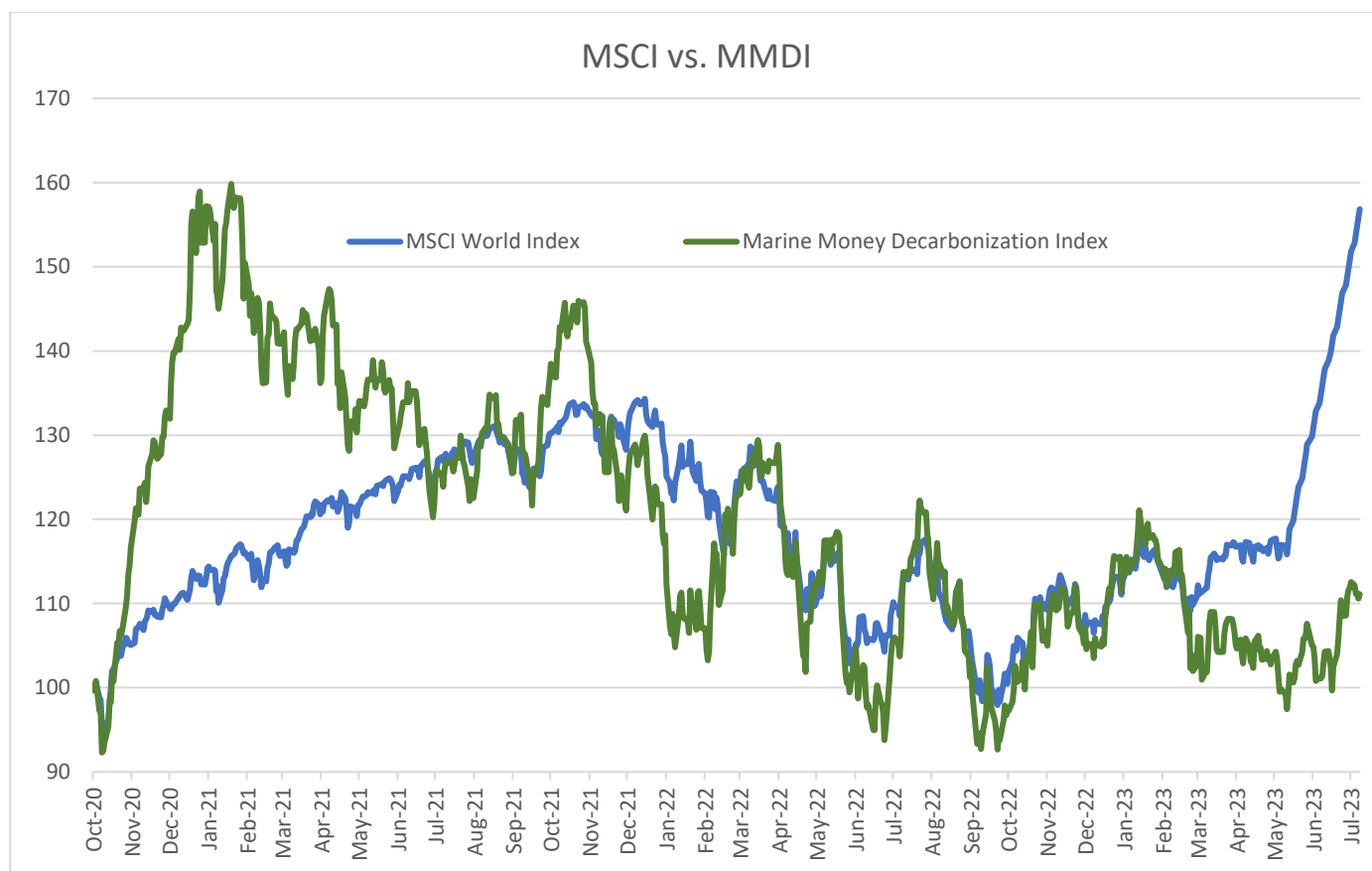
Japanese heavyweights **Mitsubishi Shipbuilding** and **NYK Line** have secured an Approval in Principle for their jointly developed ammonia and liquefied CO₂ (LCO₂) carrier from **ClassNK**. The vessel is designed to carry both ammonia and LCO₂ safely and economically using the same carrier. The NH₃/LCO₂ carrier enables operations such as transporting ammonia to thermal power plants on the outbound route and transporting CO₂ emitted from thermal power plants to storage sites on the return route.

Technology

Swiss marine power company, **WinGD**, is making significant strides in the development of its dual-fuel ammonia engines and is on track to deliver the first engines by the first quarter of 2025. To further bolster their commitment to ammonia-powered engines, WinGD recently inked a partnership with **AET Tankers** and **Akademi Laut Malaysia** to develop crew training programs specifically focused on ammonia engines. The success of WinGD's activities is also driven by strong collaborations with engine and shipbuilders in China, Japan, and Korea. These partnerships facilitate the advancement of sustainable propulsion technologies, ensuring that ammonia engines become a viable and environmentally friendly option for the maritime industry.

Green Ships

Greece's **Capital Ship Management** has welcomed the last of six LNG fuel-ready tankers with eco-friendly design – the newbuild 50,000 dwt chemical/product medium range tanker M/T Akrisios. Like its sister vessels, the M/T Akrisios is assigned with Wind-Assisted Ready and HVSC-Ready notations by the classification society **ABS**.



Relevant Prices

Fuel Prices

	Price	YOY
Crude Oil, Brent	84.99 \$/bbl	-22.7%
Natural Gas, Henry Hub	2.64 \$/MMbtu	-67.6%
LNG, Korea/Japan	10.78 \$/MMbtu	-74.0%
Coal, Rotterdam	98 \$/mt	-74.1%
VLSFO, Rotterdam	576 \$/mt	-25.8%
Methanol, China	31.04 \$/mt	-13.1%
Palm Oil, Malaysia	34.00 \$/mt	-3.9%

Stock Indices

Marine Money Decarbonization Index	341	-2.3%
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Carbon Emission Allowances

EU Emission Allowances	96.59 \$/kt	11.4%
UK Emission Allowances	60.37 \$/kt	-40.0%

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

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Contact:

Breakwave Advisors LLC
17 State Street, 40th floor
New York, NY 10004
Tel: +(1) 646 775 2898
Email: research@breakwaveadvisors.com