

Carrier decarbonization business case flawed: Seaspan



The 15,000-TEU Sammy Ofer is the first of 10 LNG-powered ships ordered under a long-term chartering agreement between Zim and Seaspan Corporation. Photo credit: Seaspan.

Greg Knowler, Senior Editor Europe | Jun 1, 2023, 10:32 AM EDT

The current business case for container shipping meeting its decarbonization targets will not work until carriers have greater security around supply of green fuels that will drive up demand, according to Seaspan Corporation.

“The big stumbling block here is how do we solve this catch-22 between demand not quite being there and supply not being there,” Torsten Holst Pedersen, COO of Seaspan, told the Decarbonizing Shipping conference in Copenhagen this week.

“It really comes down to making the economics work, because otherwise, we will continue to go around in a vicious circle where nothing gets done,” he added. “We

cannot decarbonize shipping by good intent alone, and if it is not economically viable, we are not going to get there.”

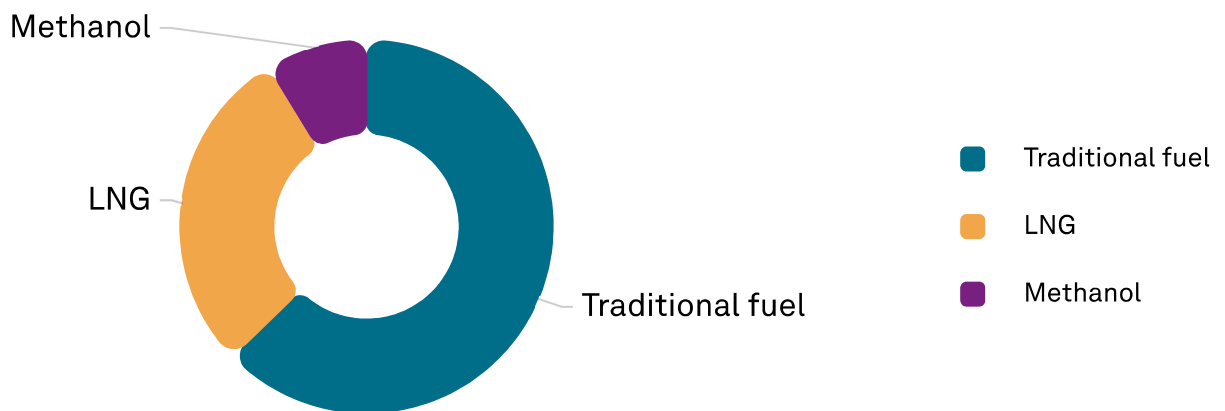
Pedersen’s sober assessment of container shipping’s progress toward decarbonization stood in contrast with that of Maersk, which told the conference that despite the many supply challenges, momentum was building in the alternative fuel sector, especially around green methanol.

“We see that green methanol is a solution that can be implemented at scale in this decade, and the speed at which it is developing has been amazing,” said Emma Mazhari, head of energy markets at Maersk. “Just one year ago, we were alone on the dance floor having chosen green methanol as a decarbonization solution, but we are encouraged to see many of our fellow container lines following our lead.”

Container lines invest in alternative fuel ships, but traditional bunkers dominate

Global TEU capacity of container ships on order capable of running on methanol, liquefied natural gas (LNG), and traditional marine fuel

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Maersk has 19 dual-fuel methanol container ships on order, and other carriers such as HMM have recently placed orders for methanol-powered ships. Mazhari said these orders broke the “chicken-and-egg” situation, in which supply was waiting on demand signals and vice versa.

“The beginning of a market is being created,” she said. “We have many new players entering the green methanol market with dedicated projects and we are pursuing many green methanol projects at speed.”

The carrier has signed strategic agreements with six companies to provide a total of 730,000 tonnes of methanol per year by the end of 2025 that will be used to power its 19 newbuildings when they hit the water starting in 2025.

Although a pipeline has been created for the supply of green methanol, Mazhari acknowledged that it will take time before the fuel can actually be delivered, with issues such as permitting for energy projects potentially delaying production.

Security of supply

To build the business case for decarbonization, Seaspan, the world’s largest owner-operator of container ships, last week partnered with investment giant Copenhagen Infrastructure Partners (CIP) to bring producers of alternative fuels together to address security of green fuel supply for carriers on the key trade lanes.

“The aim is to deliver fuel certainty for our customers in key ports around the world,” Pedersen told the *Journal of Commerce* on the sidelines of the conference. “We need enough producers to be on board because the market is so fragmented, and with CIP we will bring in those companies that are best suited to break the current situation where the container lines wait for green fuel supply and producers wait for demand.”

With an owned fleet of 189 vessels with a total capacity of 1.9 million TEUs on long-term lease to various container carriers, Seaspan is taking an “agnostic” approach to alternative marine fuels, Pedersen said.

“We will give any kind of fuel equal weight, so we are able to build and operate methanol ships or ammonia ships,” he said. “And if someone signs up for nuclear ships, we should be able to handle those as well.”

Closing the price gap

Speakers at the Decarbonizing Shipping conference agreed that the price differential between current fossil-based marine fuel and green fuels was far too wide to make it financially sustainable across the industry.

Pedersen noted that the price of low-sulfur fuel oil in May was \$539.50 per ton, while green methanol was priced at \$1,475 per ton. He suggested a carbon emissions penalty of about \$200 to \$300 per ton of CO₂ would help to equalize the costs of green and conventional fuels. Maersk reiterated its position at the conference for a

market-based carbon tax of at least \$150 per ton of greenhouse gas emissions, even though with emissions of 34 million tons of CO₂ a year it would add more than \$5 billion to the carrier's annual fuel costs.

Claus Winter Graugaard, CTO of the Maersk Mc-Kinney-Møller Center for Zero Carbon Shipping, told attendees the industry was not yet on the right path and action in several areas was needed this decade if emissions-cutting targets were to be achieved. He cited improving onboard vessel energy efficiency, enabling alternative fuel pathways, support for bold first movers and greater regulatory support.

"Closing the cost gap between conventional and alternative marine fuels requires market-based measures that level the playing field," he added.

The conference also heard that a lack of clear regulations around green fuels was frustrating investment by banks and financial institutions in new vessels and infrastructure.

"The unclear effects of the current regulatory framework do not allow for the financing to support the investment, and a substantial carbon tax could make it work," said Atle Sommer, managing director of Grieg Star, the ship management unit of Grieg Maritime Group.

Regulations on carbon taxes and the possibility of a global carbon levy will be discussed at the upcoming International Maritime Organization (IMO) MEPC 80 meeting in July. Among other things, the IMO intends to revise its greenhouse gas emissions strategy at the London meeting.

Shipping accounts for an estimated 3% of carbon emissions caused by human activities, and current International IMO targets are to cut carbon dioxide emissions by at least 40% by 2030 as measured against a 2008 baseline, and by 70% by 2050. These will be reviewed in 2023, with the intention of fully decarbonizing shipping by 2050.

But the scale of the challenges facing the decarbonization of container shipping, and the progress made so far, has left Pedersen unconvinced that the industry, with 6,000 vessels in the global fleet, is on track to meet emissions targets.

"There are lots of new orders for ships, but something must happen with the rest of the fleet ... it won't just disappear," he said. "We can't just replace the existing global merchant fleet with new buildings. That will take us well beyond 2050."

Pedersen pointed to the current container shipping order book of 962 vessels, which includes "just" 82 orders for methanol-ready ships.

“With my ex-CFO cold beady eyes, that does not look like an industry that is anywhere close to a 2030, 2040, or 2050 timeline,” he said.

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