# New fuel to get sea freight environmentally shipshape

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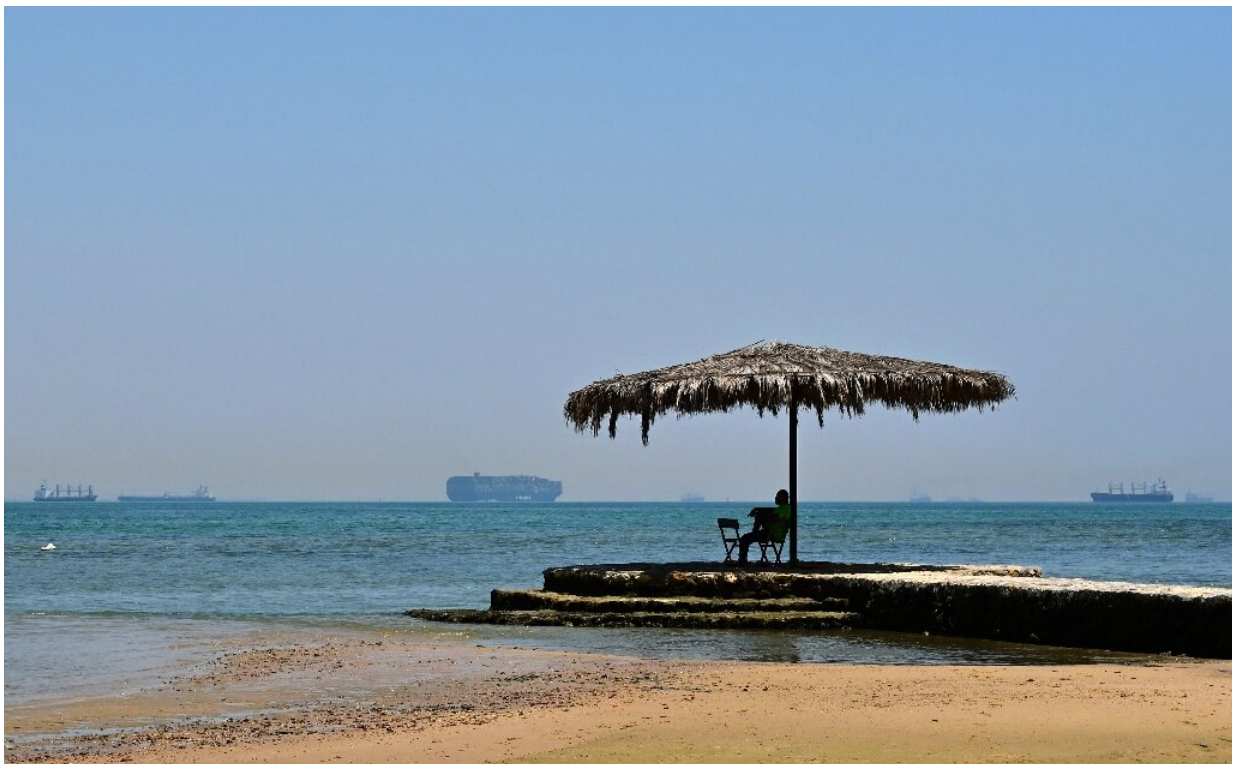

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The International Maritime Organization decided in 2016 that the sulphur levels in fuels for ships would have to fall to 0.5 percent in 2020, compared to 3.5 percent currently.

The idea is to reduce the emission of highly toxic sulphur dioxide—a health hazard also responsible for causing acid rain—by the nearly 80,000 cargo ships which ply the seas delivering raw materials and merchandise.

The shipping industry is critical to the global economy but the pollution it generates is estimated to cause 400,000 premature deaths and 14 million cases of asthma among children per year, according to a 2018 article in the magazine Nature.

Shipowners have several options to meet the new regulations.

One is to continue with heavy fuel oil but install scrubbers that remove sulphur from the exhaust fumes. But these can be expensive, and some models dump the water used to clean the exhaust into the ocean, a practice that some say could get them banned, too.

A second option is for shipowners to convert their vessels to run on liquefied natural gas (LNG), a fuel which is much less polluting. So far few have chosen this option as LNG fuelling infrastructure doesn't exist in all ports.

The easiest option for many is to switch to new fuels with low sulphur content or marine diesel oil.


As ships seek comply with the new fuel regulations the oil industry will need to make a major shift

Around 3.6 million barrels of oil per day are used to produce the fuels used by the shipping industry. Around one-sixth of the total is expected to remain dedicated to production of high-sulphur content heavy fuel oil for vessels equipped with scrubbers or those which do not immediately comply with the new regulations.

"That leaves about 3 millions barrels a day that needs to adjust to the 0.5 percent fuel regulation" said Chris Midgley, head of analytics at S&P Global Platts.

## Sweet and sour

The International Energy Agency said recently that the oil products market is heading for its "largest ever transformation" as refiners "will need to adapt to a new demand landscape".

The first impact on shipowners will likely be an increase in costs.

Fuels that meet the new regulations are more complicated to produce and are "two times more expensive, but we could see an even larger increase with higher demand," said Nelly Grassin of Armateurs de France.

Even those whose ships remain on heavy fuel oil could face higher prices as refineries need to recoup costs on smaller volumes.

Cargo firms may then be tempted to raise their rates to ship goods, which could eventually lead to higher prices for consumers.


Consumers may end up footing the bill for the fuel cleanup

The higher demand for compliant fuels will mean higher demand for low-sulphur crude oil that is used to produce petrol and jet fuel, thus it may also have a knock-on effect for consumers with higher prices to drive or fly.

Both Brent and WTI, two benchmark grades of crude oil that are heavily traded on the markets, are "sweet" in industry parlance, meaning they have a low sulphur content.

But crude pumped from many other areas is "sour", meaning it has more sulphur, including hydrogen sulphide which is responsible for causing the "rotten egg" smell, and more costly to process.

"Brent could rise and test $70, maybe break through $70 at the end of the year," said Midgley, compared to under $60 per barrel currently.

The new IMO fuel regulations "will have a knock-on impact on all consumers who are buying gasoline or diesel," he added.

For Alan Gelder, a vice president at the energy research and consultancy group Wood Mackenzie, "the general public will be impacted by the IMO regulation in two major ways -- the cost of flights and the retail prices of road diesel."

Any increases in airfares are likely to be more gradual as airlines usually lock in prices for several months in advance using financial tools.



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