GIQ

IMO 2020 Are You Ready?

Imperative Survey: Addressing Impacts of Implementation

Executive Insights

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EXECUTIVE SUMMARY

IMO 2020: Are Your Ready?

The International Maritime Organization's (IMO) ruling to reduce the sulfur cap for bunker fuel from 3.5% to 0.5% from January 2020 will have huge implications along the oil value chain. High sulfur fuel oil (HSFO) was used for approximately 70% of the world's bunker fuel in 2016. Unsurprisingly, a rise in low sulfur fuel oil (LSFO) volumes is anticipated, as is the growth of LNG bunkering and scrubbers. Yet, the search for a united and affordable game plan to post-2020 bunkering keeps coming up short. The market appears rudderless as the tick-tock of the clock gets louder. Amid the vacuum of clarity, many stakeholders are betting against governments' commitment or ability to police and penalize those falling foul of the ruling. Many more are standing on the sidelines with their hands in their pockets, waiting for strong signals before they spend billions of US dollars updating their infrastructure to meet compliance. When one considers that the marine sector accounted for half of global fuel oil demand in 2017 (3.8 million b/d) and that more than half of this had a sulfur content of between 1% - 3.5%, one can see how dramatic an impact full compliance to IMO 2020 might have across the industry.

As National Oil Companies increasingly transition to National 'Energy' Companies, alignment of the maritime sector with the general energy transition is also expected. In certain geographies, wind and solar now vie with oil and natural gas to provide new electricity generating capacity. Iceland, Paraguay, Norway, and Costa Rica, for example, are leading the way with nearly 100% of their energy coming from renewable sources. On the other end of the spectrum, however, are countries such as China – the world's largest emitter of CO₂. The barriers to a 100% renewable future are multifaceted and complex as they are feasible, but the ongoing energy transition is a megatrend that we simply cannot avoid - and the maritime sector is no exception.

Accelerating alignment across the value chain – from refiners, traders, ports to shippers and more - lies at the heart of making 2020 compliance a reality. Energy stakeholders sitting in a pitch-black IMO 2020 waiting room, with just the three months to go, need guidance.

SOURCE

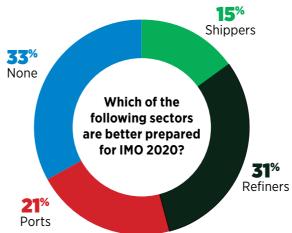
The following survey results and insights were harvested from the brainstorming sessions and input of more than 350 government and high-level energy stakeholders

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COMPLIANCE READINESS

The maritime industry is bracing itself for the rapid approach of January 1st, 2020 – the day on which the sulphur limit imposed under IMO 2020 comes into effect. But who is ready for IMO 2020; and who is not? There is a somewhat inconsistent approach to the implementation of IMO 2020 and varying degrees of readiness among stakeholders. If this is not adequately, and urgently addressed, this will result in confusion and delays when IMO 2020 comes into force.

67% of those surveyed believe that some combination of shippers, refiners, and ports are prepared for IMO 2020.



INSIGHT

"Unofficial sources even within the IMO have been off record, saying that they don't expect everyone to fully comply but on this list of stakeholders, it's obviously easier for the ports to be prepared because they iust have to enforce rules whereas others need to invest... The ports that I have seen are very clear in towing the line and threatening enforcement and consequences to stakeholders who are caught not complying."

Mike Muller, Director of Oil Business **Development & Head of Trading,** Vitol Asia

\$2mn - \$10mn General range of costs per vessel for retrofitting scrubbers

INSIGHT

"I think shippers are more prepared than anybody; of course that's a massive group of entities with a giant number of vessels. By our estimates more than 2,400 scrubbers have been installed or will be installed by the end of the year. More than 3000 scrubbers will be installed by the end of 2020. Really the only constituency that is absolutely 100% exposed to this is the shipping industry. What I hear is that everyone is switching the lights on October 15th to go to low sulfur fuel."

Dave Ernsburger, Global Head of Commodities Pricing, **S&P Global Platts**

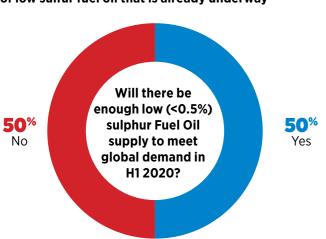
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SUPPLY OUTLOOK FOR LOW SULFUR FUEL OIL (LSFO)

For the first time since engines replaced sails in the early 19th century, the operational status quo of global shipping is being rewritten. The International Maritime Organization's (IMO) ruling to reduce the sulfur cap for bunker fuel from 3.5% to 0.5% means an overhaul of the industry facilitating 90% of the world's trade, including energy commodities – and quickly. 2020 is less than three months away for energy stakeholders to adapt to one of the biggest disruptions in the shipping industry in living memory. High sulfur fuel oil (HSFO) was used for approximately 70% of the world's bunker fuel in 2016; volumes that will not be compliant post-2020. The impact of the IMO ruling could result in a demand drop of as much as 2.1 million barrels per day in HSFO accounting for nearly 30% of global residual fuel oil demand. As with any major change, some hurdles must be navigated first; this is not a negative, but a sign of progress. The lines of communication between refineries, ports and ship owners need to improve to accurately gauge the need and subsequent supply of LSFO supply from 2020.

Many stakeholders may not be aware of the production of low sulfur fuel oil that is already underway



5%

The shipping industry is responsible for approximately 5% of global oil demand which is similar to the combined demand for oil from Germany, France and the United Kingdom combined.

Source: IEA

INSIGHT

"Storage is full. We see ships full, laying in the harbour waiting for the change. The refineries are all ready to switch and have been prepared as well. I think there will be enough product available at the time. That is not a concern. I'm sure there will be initial teething problems in terms of system changes but overall I think the supply side will be fine."

Keith Martin, CEO, Uniper Global Commodities & CCO, Uniper SE

PRICE INDICATORS

With the global low-sulfur mandate now just three months away, analysts say key price indicators for the new bunker fuel product are trending upward, although they caution limited trading activity prevents full price discovery at this point. Some energy analysts say a more accurate view of the cost of very low-sulfur fuel oil (VLFSO) won't be possible until the first quarter of 2020, but the current spread between VLSFO and traditional high-sulfur fuel oil (HSFO), and the price of gasoil futures, suggest a sharp increase is coming compared with existing bunker fuels.

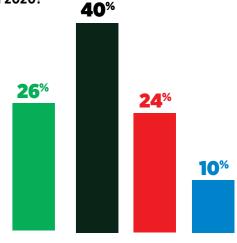
As January 2020 approaches, the LSFO and HSFO price spread will be more certain, providing clearer signals to market participants on how to react, invest and plan IMO 2020: What will the average price spread per metric ton of LSFO over HSFO be in Q1 2020?



B. \$200-\$300

C. \$300-\$400

D. \$400-\$500



INSIGHT

"I voted for C. If you actually look where Q1 was trading, the high five, 0.5 differential, that market is now trading at \$276 a tonne. So, that's where the traders think the market is. To get to \$300 a tonne, you only need \$25 more... I think you're going to achieve it through the fact that the high sulphur market is going to be pushed out and that's what's going to drive us."

Magid Shenouda, Deputy CEO & Global Head of Trading, Mercuria Energy Group

INSIGHT

"I voted B, probably slightly conservatively...I think it would be very good for low sulfur fuel oil given where marine gas oil prices are as well. I think somewhere between \$200 and \$300."

Adi Imsirovic, Head of Oil, Gazprom Marketing & Trading

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