

THE 2020 SULPHUR CAP

With just over a year until the 2020 sulphur cap comes into force, international commentary continues to reveal much uncertainty and increasing anxiety across the sector.

The IMO-imposed rule will reduce permissible sulphur emissions from vessels to 0.5 percent from 3.5 percent beginning on Jan. 1, 2020. In order to comply vessels will have to use low sulphur fuel (LSFO), alternate fuels such as LNG or have scrubber technology fitted.

There is no doubt that this represents a very significant, industry-wide, change event which will likely have far reaching effects on the global shipping industry for many years to come. Much of the current commentary focuses on which of the various options for compliance will prevail, the potential cost impacts of compliance and sector readiness.

- **LSFO, scrubbers or alternate fuels**

While LNG fuelling has potential and carriers are giving scrubbers another look because of rising oil prices, analysts still expect that the majority of ships will meet the mandate by burning low-sulphur fuel.

In a report on the low-sulphur fuel challenge facing shipping, UK-based financial research company Marex Spectron has said the main limiting factor behind the installation of a scrubber is its huge capital cost, with prices typically ranging from USD3 million to USD8 million. Installation times, generally around six months, are also rising because of increasing demand. In addition to these concerns there is talk of the reduced cargo capacity due to the added weight, and the prospect that scrubbers are likely to become superfluous over time due to increased production of low sulphur fuels.

Despite this the industry appears to be warming up to scrubber adoption, with Maersk changing its position recently to announce limited installation. MSC is taking the scrubber approach, while CMA CGM has said it will burn low-sulphur fuel and power nine of its mega-ships, which are on order, via LNG.

Alternate fuels such as LNG are seen as a long-term solution rather than immediate prospect, due largely to the underdeveloped global infrastructure, slow global investment, and inefficient fuel transfer technology.

- **Dilemmas for both ship owners and the fuel industry**

Because there remains no clear indication of which way the shipping industry is heading, refiners are unsure of how much low-sulphur fuel to produce.

The conundrum in the shipping industry is that refiners and ships are depending on each other. Refiners are waiting to see what route shipowners take, while the latter are keen to see what actions the refiners will take.

If refiners choose to commit to low-sulphur fuel production, ships installed with scrubbers could face a shortage in heavy fuel oil supply, but if there are a majority of scrubber installations, refiners may cut back on producing low-sulphur fuel.

The expectation is that the price of HSFO will decline after the implementation of IMO regulations, as most existing demand will shift to LSFO. At the same time, the tight availability of LSFO will ensure high premiums for LSFO. The price differential between LSFO and HSFO then becomes a key determinant in the attractiveness of fitting a scrubber. To complicate matters, the premium for LSFO is expected to gradually decline from 2020 as supply increases and accordingly, the savings on bunker cost will decrease.

In addition to the premium of LSFO over HSO, the age of the ship will also be a crucial factor, as younger vessels will have more time to recover the investment in a scrubber. Newbuild ships will also have an advantage, as they will not only have a longer trading life to recover the cost of the scrubber, but also the cost of fitting a scrubber to a newbuild will be less than an existing ship, as customisation is required to retrofit a scrubber in existing deck space.

- **Cost of compliance**

Whichever option is implemented to comply with the new rules it will clearly come at a cost. Although estimates vary, many analysts project costs in the vicinity of USD 15 Billion. Maersk Line anticipates it will have to pay over USD 2 billion more for fuel on annual basis. Hapag-Lloyd is the latest carrier to place a billion dollar price tag on compliance estimating its additional costs will be around USD1 billion in the first years. CMA CGM expects bunker costs to rise by USD1.5 billion, and MSC is predicting an additional cost of more than USD2 billion a year.

Bunker fuel costs are expected to rise even before 2020 and continue rising afterwards until a balance is found between demand and refinery bunker fuel output.

Based on independent “futures” prices, global shipping consultancy Drewry predicts LSFO prices per tonne will be 55% higher than current HSFO’s although the premium is expected to gradually decline as supply increases.

- **Bunker fuel surcharges**

In response to the projected costs, lines are introducing new bunker adjustment factor surcharge (BAFs). So far, five global container lines (Maersk Line, Mediterranean Shipping Co., CMA CGM, and most recently Hapag-Lloyd and OOCL) have announced these cost recovery mechanisms.

The mechanisms announced by carriers to date are broadly similar. For example, Hapag-Lloyd’s Marine Fuel Recovery (MFR) formula uses a typical representative service in the market on a specific trade and takes into account parameters such as the vessel consumption per day, fuel type and price, sea and port days, and carried TEU.

Maersk’s fuel calculation is based on the formula: $BAF = \text{fuel price} \times \text{trade factor}$. The fuel price to be used will be based on high-sulphur fuel (IFO 380) in 2019 and will be switched to 0.5 percent low-sulphur fuel oil (LSFO) from Jan. 1, 2020. The Maersk BAF tariff will be reviewed on a quarterly basis and will be adjusted only when fuel prices change by more than USD10/ton.

However, the tariffs could also be adjusted monthly if the fuel price changes by more than USD50/ton.

For a summary of the shipping line announcements see the links below:

[Maersk Line- IMO Regulations 2020: New BAF to replace SBF](#)

[MSC- IMO Sulphur Cap Surcharges](#)

[CMA CGM- Low Sulphur Regulation 2020](#)

[Hapag Lloyd- Marine Fuel Recovery Mechanism](#)

[OOCL Fleet moves to meet IMO 2020 Regulation](#)

While the lines have described their BAFs as intended to provide clarity for customers in planning their supply chains, internationally there remains widespread distrust of the fuel surcharge mechanism. Analysts such as Alphaliner say carriers need to incorporate all of the component factors that would affect their bunker fuel costs in order to dispel shippers' concerns about transparency and concern that they are paying too much for fuel. Some are of the view that the lines will use the new regulation as a revenue opportunity rather than a cost recovery programme. Adding fuel to the fire is the timing of the introduction of some of the BAFs - Maersk and MSC will be introducing their cost recovery programme from 1 January 2019, one year earlier than the introduction of the IMO's regulation.

- Uncertainty for shippers and freight forwarders

This all adds up to considerable uncertainty for shippers. A recent Drewry survey found that four in every five shippers participating in the survey had yet to receive clarity from their providers as to how the anticipated future fuel cost increases would be met – and only one in ten shippers have performed a real analysis of the impact the impending sulphur cap will have on their costs.

In Drewry's view, the level of uncertainty today as to the total cost impact is so large that nobody is able to provide a confident forecast of the cost of compliance; the only certainty is that the extra cost will run into billions of dollars globally come 2020.

What is clear is that shippers will be expected to shoulder the additional costs – and shippers must therefore start planning for the likelihood of freight rate increases – very likely from 2019.