

All companies engaged in the buying or selling of commodities are faced with the daily challenges of price volatility. As **Mike Corley**, President of Mercatus Energy Advisors, explains, adopting a prudent and proactive bunker hedging strategy can alleviate much of the financial pain caused by unpredictable price swings

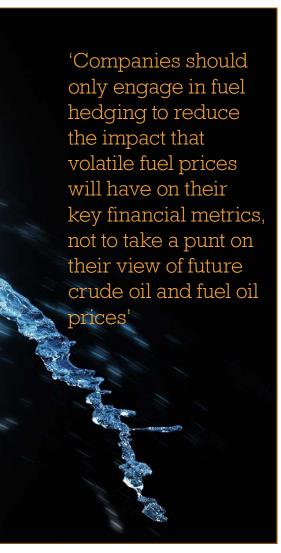
In the marine transportation industry, bunker fuel prices can have a significant impact on the bottom line, not to mention adding to the difficult task of developing budgets for future months or quarters. If fuel costs are not actively managed, they can lead companies across the industry to exceed budget forecasts, or worse, be subjected to reduced profit margins or losses.

There is a long list of factors that impact bunker prices, but economic conditions, crude oil and fuel inventories and currency values, as well as the market's perception of these factors, are the primary factors that drive crude oil and in turn, fuel prices. However, the industry need not be constantly subjected to fuel price volatility as hedging allows consumers, producers, refiners, suppliers and traders to mitigate their exposure to the ups and downs of the fuel markets.

At the time of writing, prompt Brent crude oil futures were trading near \$63 a barrel while prompt fuel oil futures in the three major global markets – Singapore, Rotterdam and US Gulf Coast – were trading near \$363 per metric tonne (p/mt), \$347 p/mt and \$349 p/mt, respectively. Where will crude oil and fuel oil prices trade three months, six months or one

year from now? Even the most accurate crystal ball will fail to provide you with a meaningful forecast, hence the reason why companies across the industry are well served by developing robust fuel oil hedging programs.

Fuel hedging reduces a company's exposure to volatile fuel oil prices by transferring that risk to companies that have opposite risk profiles or to traders who are willing to accept the company's price risk in exchange for a potential profit opportunity. In essence, fuel hedging, also known as bunker hedging, involves establishing a position in a financial instrument that is equal and opposite of



the company's exposure in the spot market. The spot market is the term used to describe the 'market' in which barges and cargoes of physical fuel oil are traded in the major market locations around the world.

Fuel hedging works because fuel oil prices in the spot market and financial derivatives (swaps and futures) for fuel oil, and to a lesser extent, crude oil, have a strong correlation to their respective counterparts. While the price difference between fuel oil in the spot market in any given region may differ from the price of a financial derivative on fuel oil or crude oil, the risk of such a price difference (which is known in the trading industry as 'basis') is generally much lower than the risk presented if a company with fuel price risk chooses not to hedge their exposure at all. That being said, basis risk can be significant and needs to be given serious consideration before implementing any fuel hedging strategies.

While the purpose of fuel hedging is to mitigate a company's exposure to volatile fuel prices, all too many in the industry, as well as the analysts and journalists who cover the industry, see that hedging is a means for a company to gamble on the price of fuel,

when in fact it is actually quite the opposite when executed and managed properly. Gambling on fuel prices, also known as speculating, often produces results that are far worse than doing nothing at all. Companies should only engage in fuel hedging to reduce the impact that volatile fuel prices will have on their key financial metrics (e.g. margins, profits, etc.), not to take a punt on their view of future crude oil and fuel oil prices.

Companies in the industry whose margins and profits are impacted by fuel prices and who do not engage in fuel hedging are essentially saying one of two things:

- Our company has the ability to pass on any and all increases in fuel prices to our customers, without a negative impact on our profit margins
- Our company is very confident that fuel prices are going to remain near the current price or change in our favour and we are comfortable buying fuel at a higher price (or selling fuel at a lower price in the case of a seller), if, in fact, our analysis proves to be incorrect.

So how can a company develop and implement a proper fuel hedging program? The first step should be to conduct a proper analysis of your fuel-related economics and volumes. Are you and/or your customers subject to a fuel surcharge? If yes, what is the correlation between the fuel surcharge formula and your actual fuel economics? Do you anticipate any changes in your business which will change your fuel volumes or economics? How will the 2020 sulphur cap impact your company? Do your competitors actively hedge their fuel price risk? Do your suppliers or customers expect you to accept 100% of the risk associated with always changing fuel prices?

All of these questions, as well as numerous others, deserve serious attention from your executive management team so that you can determine how best to develop, implement and manage a proper fuel hedging program.

Fuel oil swaps are the most commonly used hedging instrument in the maritime transportation industry. In short, fuel oil swaps are contracts in which two companies (one of the two is often a bank or major oil company who offers such products) agree to exchange periodic payments based on the spot market price of fuel oil in a specific market i.e. Singapore, Rotterdam or US Gulf Coast.

In the most common type of fuel oil swap, one party (the fixed price payer) agrees to pay a fixed price for fuel oil for a specific period of time, often one month, to the other party (the fixed price seller) who, in turn, agrees to pay a floating price that references a spot market, or futures contract, price published by an independent publication such as Platts or Argus. Given the basic nature of swaps, they are regularly utilised by numerous participants across the industry – consumers, producers, refiners, suppliers and traders.

Which benchmark(s) a company should use for fuel hedging must be determined on a company-by-company basis based on a number of factors such as the ports where the company buys or sells fuel, the company's tolerance for risk or lack thereof, the correlation between the major market prices and the available forward markets, etc.

Options, either on fuel oil or crude oil, are the second most commonly used hedging instrument in the marine transportation industry. A call option (cap) gives the holder of the option the right, but not the obligation, to buy a specified amount of fuel (or as is more often the case, the financial equivalent of the specified volume of fuel) at a specified price within a specified time, in exchange for paying an upfront premium. In simple terms, a call option on fuel oil is essentially an insurance contract which pays out if fuel oil prices rise above the 'strike price' of the option contract.

A put option (floor) gives the holder of the option the right, but not the obligation, to sell a specified amount of fuel (or as is more

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\$70

\$68

\$66

\$64

\$62

\$60

\$58

\$56

\$54

\$52

\$50

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contract which pays out if fuel oil prices fall below the 'strike price' of the option contract.

Much like an insurance contract, the buyer of the option (both call options and put options) pays an upfront premium to the seller of the

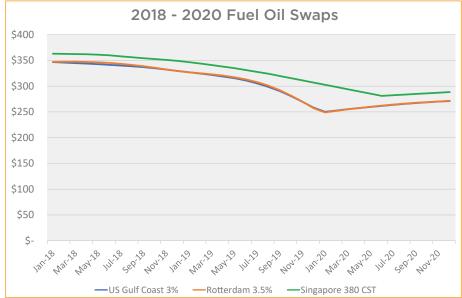
option, regardless of whether or not the buyer ultimately receives a payout from the option.

In addition to swaps and call options, there are numerous other strategies available to companies who need to hedge their exposure to volatile fuel oil prices. For example, many companies utilise a hedging strategy known as a costless collar, a combination of buying a call option and selling a put option, or vice versa, a strategy which effectively provides them both a cap and a floor without an upfront premium cost as the cost of buying the call (put) option is offset by selling the put (call) option.

The development and implementation of a proper fuel oil hedging program allows companies not only to mitigate their exposure to fuel prices but also to more accurately forecast their future fuel economics and (potentially) obtain a competitive advantage. As we near 2020 and the requirement for 0.5% sulphur fuel oil, it is safe to say that the impact of volatile fuel prices will have an even larger impact on the industry in the years to come. As the accompanying charts indicate, while forward crude oil prices are backwardated (spot price is higher than forward price) for the foreseeable future, this is not the case for forward fuel oil prices, which shift into a contango in early 2020, in line with the shift towards lower sulphur marine fuels.

While changing economics and regulations are likely to always lead to volatility and uncertainty in the global oil markets, if you are willing and able to develop and implement a robust fuel hedging program based on sound analysis, volatile fuel prices should no longer be on the list of business uncertainties that might keep you awake at night.





2018 - 2020 Crude Oil Swaps

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