Winners and losers

The effects of the IMO’s 0.5% cap on marine fuel sulfur are set to ripple across the global economy. Is this good or bad for the industries, countries and other groups affected?

The change in sulfur regulation for marine fuels in 2020 sounds like an obscure point that should have limited interest for those outside the bunker industry. But a major structural shift hitting both oil and shipping simultaneously has the potential to touch upon almost every market on the planet.

In this section we have gathered details on some of the industries, countries and other groups that stand to gain or lose the most in 2020.

Petrochemical buyers

Buyers of petrochemicals should be worse off as the ripple effect of IMO 2020 comes into contact with their market.

Increased refinery runs may grow the supply of naphtha – a key petrochemical feedstock – by as much as 150,000 b/d globally in 2020, according to S&P Global Platts Analytics. But refiners maximizing middle distillate production will deliver tighter gasoline supply, which should deliver a net draw on naphtha into gasoline blending and away from petrochemicals, increasing prices for petrochemical buyers.

In turn that could be expected to shift steam cracker feed preferences away from naphtha and towards LPG or ethane.

Power generation

The power generation industry in parts of the developing world with less strict emissions regulation will benefit from the option of switching to oil-fired capacity (see page 28).

Fuel oil prices are unlikely to drop to the same level as coal, but they are likely to be low enough to beat gas-fired generation, particularly for plants located near refineries with a fuel oil surplus.

The power industry will also face higher freight costs across all of its raw materials.

Saudi Arabia

Saudi Arabia will see a mixed impact from the specification changes in 2020.

In the short run, the oil-rich kingdom looks well placed to benefit. Its light, sweet crude exports will be in demand to produce low-sulfur fuels, its complex refineries will see strong demand for middle distillate
exports to plug Europe’s deficit and its desalination plants will see lower prices for the fuel oil they burn.

But it’s notable that the Saudi delegation at the IMO has been in regular opposition to the 2020 implementation date. In February the Saudi representatives told S&P Global Platts they were supporting an initial “transition period” for the 0.5% sulfur cap, giving the shipping and refining industries more time to prepare.

The longer-term impact of the lower sulfur limit may help to explain Saudi opposition. While the short-term advantages are clear, the longer-term consequences of refining capacity gradually shifting to the east after 2020 may be less beneficial to refiners in the Gulf. The regulation may also provide a boost to shale oil producers in the US.

And it can be argued that emissions regulation of any kind tends to accelerate the shift away from the use of oil over the longer term – a move that is not in Saudi Arabia’s immediate interests.

**Aviation and road haulage**

The largest buyers of middle distillates – the aviation and trucking industries – are set to see unwelcome cost rises as the shipping industry increasingly competes for access to the same pool.

Airlines are particularly sensitive to sharp movements in the price of jet fuel: rising crude prices in the first half of 2018 were one of the biggest factors that affected their earnings, according to company statements. A higher outright crude price in 2020, combined with wider distillate crack spreads, would put the airlines under significant pressure.

**Russia**

As the world’s largest producer of fuel oil, Russia’s loss from the marine market moving on to cleaner fuels is clear.

While the specification change has incentivized the country’s refinery modernization program, bringing down its fuel oil production, Russia was on track to export almost 35 million mt of the product in 2018. This number will not be reduced to zero in the near future.

Russia also faces the prospect of weaker demand for its heavy crude as refiners shift to lighter slates with a lower fuel oil yield.

**Consumers**

The general public can expect a hit to their wallets from several different directions in 2020, but the direct impact of higher shipping costs on consumers should be limited.

Denmark’s Maersk Line, the largest shipping firm in the world, currently burns on average around 0.874 mt of fuel for each forty-foot container it ships around the world, and with an initial spread of $425/mt between fuel oil and 0.5% sulfur bunkers that would give a price difference of around $370 per container. As an example, each of those boxes can hold about 10,000 pairs of shoes – so for a pair of trainers shipped from China to Europe, the consumer is looking at a price rise of less than 4 cents.

A car carrier shifting 6,500 new Mercedes from Hamburg to Shanghai will consume around 1,050 mt of fuel along the way – so with that $425/mt spread each of those cars’ buyers could expect to pay an extra $70 or so for their purchase.

A VLCC taking 2 million barrels of crude oil from northwest Europe to Singapore would get through about 4,500 mt of bunker fuel to get there – meaning a price increase of 96 cents/b.

All of that would seem manageable, even with several instances of these cost increases being repeated throughout various stages of supply chains and being passed on to consumers. But the financial impact won’t stop there.

An estimated increase of $7/b in the price of Brent crude driven by increased refinery runs in 2020 will be the impact most noticeable to consumers – at the pump as they refuel their cars, and in increased energy costs for industry. Some economists have gone as far as to suggest the changes in 2020, combined with other economic headwinds, may be enough to bring about a global recession.

**Public health**

While the general public will suffer financially, they can also expect to see health benefits. Trucost, part of S&P Global, predicts that reducing the marine fuel sulfur limit to 0.5% should deliver significant public health benefits (see page 50).
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Respiratory health in coastal communities in the developing world will see the strongest benefits – one study estimated that making the change in 2020 rather than postponing it to 2025 would result in as many as 200,000 fewer premature deaths.

Agriculture

The market for agricultural products is particularly reliant on low freight costs, and will feel the rise in fuel bills more than most as a result.

Arbitrage flows covering a longer distance are the most likely to come under pressure. Corn exports from Brazil and the US to Europe, Black Sea corn and wheat shipments to the Far East and biodiesel imports to Europe from China may all be under threat in 2020.

Metals

The metals industry is another group that will face pressure on its raw materials after 2020.

The supply of anode coke, a key component in the anodes used to produce aluminum, will be restricted as low sulfur residues are taken away from coking units to produce low sulfur fuels. Higher-sulfur residues cannot readily be used to produce the product.

Anode costs account for around 10-15% of aluminum manufacturing costs, and this change could add 1-2% to them, according to S&P Global Platts Analytics. That would add to the cost of increased freight rates for the transport of both finished metals and ore around the world.