A major shipping fuel change is coming, and so are higher prices



Bloomberg/ London

A defining moment in the history of the oil-refining and shipping industries is at hand.

In fewer than two weeks, thousands of ships the world over will be forced to use fuel containing less sulphur in order to comply with global rules set out by the International Maritime Organization. Those who don't could face penalties and even imprisonment. Ports are deploying drones to — literally — sniff out wrongdoers. The regulations are having a profound effect on oil refineries and the cost of seaborne trade looks set to rise.

What's the big deal?

For decades, shipping has been the oil market's dumping ground for a pollutant blamed on aggravating human health conditions including asthma and causing acid rain. That's because refineries have struggled to eradicate it when turning crude into fuels. Even so, when the regulations were mandated back in October 2016, they came as a shock to many observers who had expected a later start date. While a panic about getting ready has subsided, there's clearly still work to do - as a slump in the price of non-compliant fuel demonstrates.

"IMO 2020 is the most fundamental and dramatic product specification change the oil industry has experienced, with an impact on both shipping and refining," said Torbjorn Tornqvist, the chief executive officer of Gunvor Group, one of the world's largest oil and gas traders. "It has the potential to change every product and crude differential out there."

The cost of shipping a twenty-foot box-load of goods from Latin America to Europe could rise by \$26, according to IHS Markit, a consultancy. A week-long ship cruise could go up by \$130 per cabin, the firm estimates. Add 5 cents onto a crate of bananas.

It's still too early to say exactly who the biggest winners and losers will be among refineries because there are thousands of variables that shape their profit — more than 600 grades of crude, and many ways of setting up the plants.

Safety concerns

The shipping industry has been consistent in flagging a safety concern about the rules. As yet, there's no single global standard. The new fuel must simply have certain properties — including sulphur and other important metrics — that don't exceed specified levels.

But the lack of a single global product means refineries can make a compliant fuel in different ways. It's thought that some will essentially be low-sulphur crudes that are carefully mixed with other oils, for example. Another way of making the product is to mix the residues from crude that have gone through what's known as vacuum processing in a refinery with other material. These different approaches mean the ships' chief engineers will need to be vigilant so as to avoid mixing incompatible fuels.

Proof of the greater risks have emerged in northwest Europe, where supplies of the new fuel have been found to contain too much sediment. If such fuel found its way onto ships, it could potentially clog filters and lead to engine problems.

"We still have concerns over safety and availability of compliant fuels," said Guy Platten, secretary general of the International Chamber of Shipping, an umbrella group for maritime trade associations. "This is a pressing issue."

Trade impact

There are already signs that the changeover is having an impact on maritime logistics.

In Singapore, the world's biggest refuelling centre, vessels have had to wait longer than normal to collect bunker fuel. Likewise, the government of Gibraltar said that a lack of refuelling barges has emerged.

"When you consider that 90% of global trade is carried out by seas, it is very important," said Robert Hvide Macleod, the chief executive officer for the management unit of Frontline Ltd, one of the world's biggest supertanker owners. "It will surely be disruptive and create some supply chain bottlenecks in the early goings and logistics constraints when it comes to sourcing marine fuels."

In broad terms, fuel represents shipping's single biggest expense and the new types are trading at several hundred dollars per tonne more than the old variety. So the cost of seaborne trade could creep up if owners manage to pass on the higher prices.

"I think we will see its impact on global trade in terms of waiting days and increased costs," said Sadan Kaptanoglu, president of BIMCO, the world's largest shipping association. "There could even be chaos in extreme situations, where fuel shortages could delay cargo deliveries and non-compliance by ships ending in port state punishments and court cases."

Compliance complications

It's important to remember that oil refineries and shipping

companies have spent billions getting ready.

Some ship owners installed scrubbers, units that can cost several million dollars each and allow carriers to remove sulphur from fuel as it's burnt. This enables them to keep using today's cheaper product. Likewise, refineries have invested in technology to convert sulphur-rich crude into higher-quality fuels.

For compliant companies, cheating by others is a problem. Yet there could be non-compliance, at least initially. Industry estimates are that something like 10%-15% of the fleet won't comply with the rules at the start.

Not every country in the world signed up to the regulations, including some large coastal states with significant refining capacity. Even among those that did, not all look likely to start with strict enforcement. There's also a disparity between what penalties will be imposed from one nation to the next.

South Africa, which sits on a shipping lane connecting eastern and western hemispheres, doesn't yet have the domestic laws in place to punish non-compliant vessels.

Bottom line

Nevertheless, these rules should work.

Full enforcement may happen more slowly than the IMO and some in the shipping and refining industries would like. There's a big financial incentive to cheat, and an opportunity to do so on selected trades.

Barring any obvious safety concerns though, the overriding view of analysts is that there should nonetheless be substantial compliance.

That means less airborne pollution and be a positive for those companies that invested in conforming.

"There's almost certainly never been a simultaneous global specification change in the oil industry," said Spencer Welch, oil markets and downstream director at IHS Markit. "For the whole world to change specification of a product on the same day is almost unheard of."