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Argus White Paper:

Four months into 2020: Curveballs, expectations and a murky future for marine fuels



Argus publishes more than more 80 IMO-compliant delivered marine fuel prices, covering the world's most important bunker hubs. **Learn more**.

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A confluence of events

International marine fuel markets have been subject to three waves of turbulence this year. First the International Maritime Organization (IMO) capped marine fuel sulphur emissions content at 0.5pc, down from 3.5pc on 1 January. In February, petroleum demand started to slide on the back of shutdowns in response to the Covid-19 pandemic. In March, the Saudi Arabia-Russia oil price war caused crude prices to drop. Despite a mid-April Opec+ agreement to reduce crude oil production, crude prices crashed as the coronavirus pandemic response intensified, prompting an oil glut and oil tank storage to fill up.

Marine fuel price differentials shift

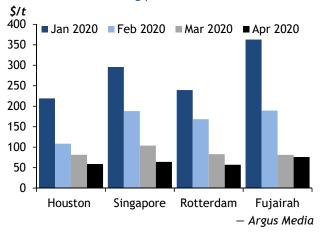
Prices of the three main types of marine fuels — very low-sulphur fuel oil (VLSFO) with 0.5pc sulphur, high-sulphur fuel oil (HSFO) with 3.5pc sulphur, and 0.1pc sulphur marine gasoil (MGO) — traced crude down from January to April.

But VLSFO losses outpaced HSFO losses and the VLSFO over HSFO premium narrowed. According to traders, US Gulf VLSFO stocks grew from mid-March to mid-April with a fair amount of low-sulphur vacuum gasoil (LS VGO) making its way into the US Gulf VLSFO blending pool. Demand for 0.5pc sulphur VGO as a fluid catalytic cracker (FCC) feedstock for the production of gasoline and diesel was down on coronavirus-related supply shocks. As a result, the Argus-assessed US Gulf VLSFO-LS VGO premium held at over \$5/bl during the onemonth period, with the premium spiking to as high as \$8-9/bl.

With crude collapsing in the second half of April, the VLSFO – LS VGO premium narrowed and then switched to a discount. But as road fuels demand is still muted, the premium could return and expand soon. In addition, international VLSFO

availabilities and delivery schedules were unpredictable in January, with suppliers still getting their footing after the start of the IMO 2020 regulation. But from February on, VLSFO availabilities and barge delivery schedules stabilised. VLSFO bunker supplier competition picked up. Thus the VLSFO-HSFO bunker price premium narrowed from \$296/t in January to \$64/t in April in Singapore, the biggest bunkering port in the world. The other international bunkering hubs — Rotterdam, Fujairah and Houston — saw similar narrowing.

VLSFO-HSFO bunkers differential at major international bunkering ports



The VLSFO-HSFO premium drop weakened shipowners' incentive to invest in scrubbers and lengthened the return on investment period for shipowners who had already invested in scrubbers. In addition, as suppliers cleaned out their storage tanks and barges from HSFO to make space for VLSFO prior to the IMO 2020 regulation, HSFO became difficult to source in some international ports, prompting shipowners with scrubber-fitted ships to plan spot purchases carefully.

Petroleum illuminating the markets

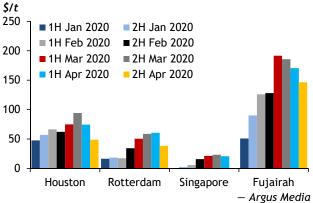
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The MGO over VLSFO premium widened from January to March with VLSFO declines outpacing losses in MGO, but the premium began to narrow in April as global economies slowed down on the back of Covid-19 responses. MGO is comprised exclusively of distillates such as diesel and gasoil, which are mainly used as road transportation fuels. VLSFO bunker demand was down but was not hit as hard as the market for road transportation fuels. In the Amsterdam-Rotterdam-Antwerp region, up until the first half of April, the differential to distillates was supported by diesel bulk purchases by the agriculture sector especially in Germany. Germany reopened slowly and demand for distillates went up, but it was drawing down on full oil storage tanks. The MGO-VLSFO price premium was nearly wiped out in Singapore in the second half of April to less than \$1/t after peaking at \$23/t average in the second half of March. Singapore middle distillates stocks climbed up in mid-April on the back of strong Chinese exports. In Houston the premium narrowed to \$49/t in the second half of April from a peak of \$94/t on average in the second half of March. The MGO-VLSFO premium could remain narrow in May as the pandemic lingers and widen in June if the pandemic begins to subside.

MGO-VLSFO differential at major international bunkering ports



Retail prices for US Gulf VLSFO slipped to an unusual discount to wholesale VLSFO in late April as producers appeared to flood the retail market with wholesale volumes to free up storage space. Retail VLSFO typically sells at a premium to wholesale, a pattern that held in March — when US Gulf VLSFO retail was at a \$30.35/t average premium to wholesale — and from 1-16 April when it was at a 17.58/tpremium, according to Argus assessments. In the second half of April the retail-wholesale differential was at a discount of about \$14/t. US Gulf VLSFO retail deliveries typically range from about 500t to about 2,000t and are sold directly to end users — ship owners and ship charterers. Wholesale lots typically range from about 5,500t to about 16,000t and are sold to marine fuel suppliers. Residual fuel oil traders also purchase the barge-sized wholesale lots to store and aggregate in third-party oil terminals. The aggregated residual fuel oil is then bundled in cargoes ranging from about 50,000t

to 130,000t and exported, typically to Singapore, Malaysia and China. The VLSFO wholesale-retail premium narrowed in Fujairah and in Rotterdam but did not switch into a discount in April. By contrast, the premium widened in Singapore. This could be attributed to trading company Hin Leong filing for bankruptcy in April. Ocean Bunkering Services (OBS), Hin Leong's bunkering arm, was Singapore's third-largest bunker supplier in 2019, but it withdrew from the bunker market following the filing. OBS owns a fleet of 14 bunker barges licensed by the port authority of Singapore. This is about 10-15pc of Singapore's total bunker barge fleet, according to market estimates.

US Gulf VLSFO retail less wholesale



4Q bunker demand mixed but mostly down

Even though tanker freight rates spiked with strong utilization rates, tanker demand remains strong because of floating storage demand. Floating storage tankers burn less fuel than moving tankers — about 10 tonnes/day for a very large crude carrier (VLCC) used as floating storage versus seven times that amount for a laden VLCC travelling at 13 knots. Demand destruction arising from Covid-19 is keeping containerships utilization rates down. The number of twenty-foot equivalent units (TEU) shipped through US' biggest containership ports Los Angeles and Long Beach were down by 37pc to 2.55mn in the first quarter of 2020 compared with the same period in 2019. Cruise ship lines suspended operations in mid-March through 11-30 June, but the suspension could be extended. Three of the biggest publicly traded cruise ship companies — Norwegian Cruise Line, Carnival Cruise Line and Royal Caribbean burn total of about 477,400t of marine fuel each month.

Bunker sellers estimate marine fuel demand has fallen in Europe and in the US, but statistics are not yet available. In the US, sellers peg demand down by about 10-25pc, depending on the port, in March and April compared with the same period last year. In the Mediterranean traders estimate sales in the ports of Piraeus and Kali Limenes down by 45pc because of fewer passenger ships, Istanbul demand down by about 20pc, Las Palmas down by 25pc and Gibraltar and Algeciras

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sales down by 15-30pc. But sales in the biggest bunkering port in Europe – Rotterdam gained by 2.7pc in the first quarter to about 2.09mn t compared with 2.04mn t during the same period last year with competitive prices in Rotterdam.

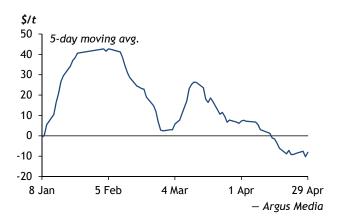
Panama marine fuel sales declined marginally by 0.4pc in March 2020 to 448,093t compared with 449,815t in March 2019. Sales defied trader's expectations, some of whom expected March sales to be down as much as 25pc. The flat March demand could be attributed to competitive VLSFO prices in Panama, which allowed it to hold a bigger share of the Latin American bunker markets. Panama first quarter bunker demand was up 8.9pc to 1.37mn t from 1.26mn t during the same period in 2019 with stronger demand in January and February. In the first four months of this year, Argus assessed Panamanian ports the second least expensive for VLSFO in Latin America after the ports of Santos and Rio de Janeiro in Brazil.

Marine fuel sales at Asia-Pacific bunkering hubs have largely held up, despite major turmoil. While there has been a drop in overall bunker sales since the start of the year, this has been attributed to a weakness in seasonal shipping activity and higher volumes than usual in January, following the transition to VLSFO bunkers from 1 January.

Singapore's marine fuel sales rose in March to 4.3m t, up by 442,600 t from February and up by 231,400 t from a year earlier.

China's refineries sell fuel oil to bunker suppliers at a cost lower than imports from the international market, mainly Singapore, allowing them to cut Chinese bunker prices to a lower level to boost volumes. Prices of VLSFO in Zhoushan, China's emerging bunker hub in Zhejiang province, fell to a discount to Singapore prices on 14 April, the first such discount since 6 January. The discount widened to \$14.42/t on 22 April, the widest since \$32/t on 27 December 2019. Bunker sales in Zhoushan, China's largest bunkers hub, also increased by more than 70,000t to 348,500t in March from February.

VLSFO Zhoushan less Singapore



Demand for fuel oil exports from the Mideast Gulf to east Asia have been falling, creating an overhang in Fujairah storage. Fujairah bunker suppliers reported an increase in sales during March over the previous month, despite various restrictions imposed by port authorities, including bans on passenger travel and crew changes. Fujairah VLSFO wholesale and retail demand was sustained until mid-April, but started to weaken significantly in the second half of April. Parcel sizes declined. VLSFO retail prices fell to historical lows amid rising supplies and weaker underlying crude and fuel oil wholesale values.

Japanese bunker suppliers said they managed to secure higher sales in March than in the previous two months. But they were expecting a dip in demand in April, as commercial vessels' activity may be affected by Japan declaring a Covid-19 state of emergency from April 7 until May 6. This has particularly affected vehicle producers, forcing some of the assembly factories to halt production. Bunker suppliers indicated that bunker inquiries from car carriers vessels were down.

Fuel oil arbitrage movements

Rotterdam experienced a slowdown in residual fuel oil cargo throughputs in the first quarter. The drop was mainly owing to fewer HSFO cargoes in transit from Russia to Singapore as the arbitrage economics closed after the lower sulphur cap came into effect.

The US replaced Singapore as the largest cargo buyer of HSFO from Russia as more of the product goes to feed US refiners' coking units as an alternative to heavy crude grades. Flows of HSFO from Russia to the US are likely to increase further after Russian export duties on dirty products such as HSFO were slashed to \$6.80/t for May from \$52/t in April.

VLSFO has been in ample supply in Europe, particularly northwest Europe, and increasingly in the Mediterranean region. European producers exported 65,000t of fuel oil to Fujairah in April, flat from a month earlier.

VLSFO wholesale: Fujairah less NW Europe

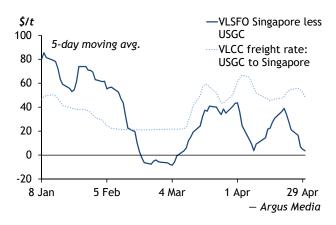


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Fujairah was short of VLSFO at the beginning of the year, but as local production of the fuel ramped up and bunker demand slumped, the port has become oversupplied with the grade. Wholesale VLSFO barges peaked at a \$171/t premium in Fujairah to northwest Europe at the beginning of January, but the price spread narrowed and even switched to a discount for several days in April. This has weakened the incentive for European and Russian producers to export VLSFO to Fujairah.

The VLSFO US Gulf to Singapore VLSFO arbitrage was open in January and early February. The US Gulf-Singapore VLSFO premium widened to over \$40/t in March. But VLCC freight rate on the US Gulf-Singapore route climbed to over \$50/t in March and April, closing the arbitrage.

VLSFO cargo arbitrage: US Gulf to Sinagpore



China allowed fuel oil exports through the bunkers sector in December 2019. In the first quarter, China exported 2.66mn t of fuel oil, up by 345,000t or 14.9pc higher compared with the same period in 2019. At the end of April, China's commerce ministry issued the first batch of VLSFO bunker export quotas for 2020 comprised of 10mn t (65.5mn bl) to five domestic refiners. Another 5mn t for 2020 will be issued later this year.

The murky future

The international VLSFO-HSFO and the MGO-VLSFO price premium narrowing trends observed in the first four months of 2020 are likely to linger until the coronavirus pandemic subsides, which may be well into the third quarter.

In the third quarter a combination of improving oil demand and some refiners slashing runs will gradually reduce tank storage levels. As the global economy recovers, lower refinery runs could cause short-lived tightness of VLSFO at some of the smaller bunkering ports, causing in turn a short-lived spike in bunker prices at the end of the second quarter.

Even if Covid-19 subsides in June and July, marine fuel demand may not return to normal. A new "normal" demand may emerge with container lines and cruise ship lines operating at lower utilization rates and keeping bunker demand soft in the second half of 2020 compared with the second half of 2019.

Argus' coverage of global bunker markets

Argus is a leading independent provider of energy and commodity price benchmarks. We publish more than 150 daily international marine fuel price assessments, covering the world's most important bunker locations.

Our global portfolio of assessments accurately captures price movements and take into consideration different specifications. In the most liquid benchmark hubs, we seek to use a volume-weighted average (VWA) methodology based on confirmed bunker deals. We also assess smaller hubs with lower liquidity, where trade is often weighted towards long term-contracts with low spot volumes. For these locations where a VWA methodology is not appropriate, we use a range of daily deals, firm quotes and market indications received from marine fuel suppliers, traders, brokers, ship owners and ship charterers to inform our price assessments. These prices are then tested in the market.

Our robust approach to assessing markets is critical in periods of extreme volatility like we are currently experiencing. You can have confidence when you buy or sell bunker fuel based on an Argus price assessment.

The Argus Marine Fuels report provides a global portfolio of price assessments, including more 80 IMO-compliant delivered bunker prices. In addition, the report features daily fuel oil and distillates supply, demand and arbitrage analysis, along with industry news and a detailed scrubber database. Learn more about Argus' coverage of the global bunker markets.

Argus IMO 0.5% fuel oil assessments



Delivery sizes: 🚐 Bunker (100-3,000t) | 🚍 Barge (1,000-16,000t) | 🚍 Cargo (20,000-40,000t)

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- *Posted prices
- Trafigura, Bahia Blanca
- Petrobras, Brazil
- Saudi Aramco, Saudi Arabia

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