

# Argus Monthly Sulphur Outlook



## Outlook

### The month ahead

While phosphate prices remain strong in China, supportive of production margins, it is hard to see the price rally slow. We expect China cfr prices to reach the low to mid-\$190s/t next month, with other price benchmarks following suit.

### The next 3-6 months

There are signs that phosphate prices are starting to reach the upper limit of what the market can support. And if phosphate prices drop, sulphur prices are expected to follow in the second quarter when phosphate demand starts to slow.

### 12 months forward

An increasingly positive sentiment around a recovery in the second half of this year from the oil sector suggests we should see added sulphur availability in the third and fourth quarters. This will ease the price volatility seen in recent months that has been exacerbated by extremely limited supply.

### Key featured developments

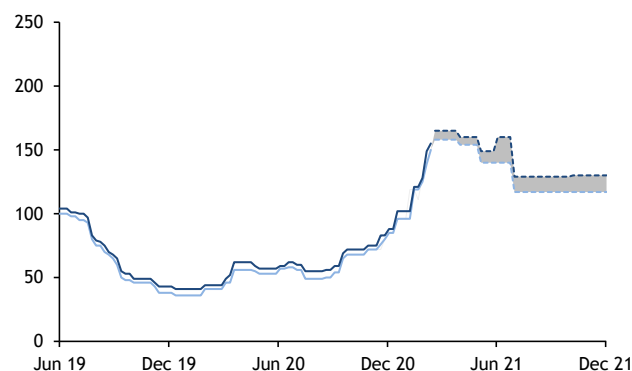
- China keeps phosphate production at high levels over the lunar new year period
- Run rates at US Gulf refineries increase amid improving margins
- India considers revising DAP maximum retail prices as global prices rise
- Ambatovy nickel operations in Madagascar to re-start in March

Forecast sulphur prices						\$/t
	Mar	Apr	May	2Q21	3Q21	4Q21
China cfr	100-195	98-190	90-176	85-190	80-150	80-150
Brazil cfr	183-190	173-183	158-168	155-183	125-138	127-140
North Africa cfr	156-170	152-165	142-155	140-165	111-126	115-130
Middle East fob	158-165	154-160	140-149	140-160	117-129	117-130
Black Sea fob	147-160	137-152	130-145	130-152	112-125	113-128
Vancouver fob	152-160	152-159	138-146	135-159	116-124	118-127

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### Middle East fob

\$/t



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## Outlook summary

- Lunar new year brings little relief to traders
- Strong MAP/DAP prices continue to support demand and affect sulphur prices. But for how long?
- Opec+ remains cautious, but refinery run rates hint at demand recovery for second half of 2021
- Freight rates firm further

Many traders eagerly awaited an expected break in the global price rally on the arrival of the lunar new year. The holiday period typically sees Chinese buyers step back from the market for up to three weeks, but a combination of high phosphate prices and travel restrictions across China has seen the fertilizer industry maintain higher-than-expected output levels. Sulphur prices have risen to **\$172-175/t cfr** China for granular product, up by about \$40/t from last month. And with global phosphate prices continuing to remain strong, it is likely that Chinese buyers will come back to the market in force in the post-holiday period, firming prices further. The imminent closure of the Qatari spot tender will shed some light on what the pricing sentiment is for March shipments.

Escalating phosphate prices have been one of the key drivers of the rising sulphur prices we have seen in recent months. But questions now are emerging over the longevity of the price rally, especially in the US. In the past week, Nola DAP and MAP prices fell for the first time in months, indicating phosphate producers' margins will start to be squeezed if sulphur prices do not drop in tandem. And with hints of sulphur supply from the US Gulf rising in the coming months as refinery run rates increase to recent highs of **85.3pc**, we may see a slowing in the price rally as we enter the second quarter. Phosphate prices in India are also expected to see a shake-up in the coming weeks as DAP importers contemplate raising the **DAP maximum retail price**, in line with global price firming. A shift to increased Indian domestic phosphate production would likely see greater Indian sulphur demand in the lead-up to application season later this year.

On the supply-side, refineries globally continue to operate at reduced rates, keeping supply tight. The agreement that Opec+ reached at the start of this year certainly has been supportive of prices as WTI reached **\$60/bl** for the first time in more than a year. But Opec+ is expected to remain cautious in the coming months as oil demand begins to

Price comparison					\$/t
	Feb average	Mar forecast	Apr forecast	May forecast	Market sentiment*
China cfr	90-171	100-195	98-190	90-176	▲
Brazil cfr	163-168	183-190	173-183	158-168	▲
North Africa cfr	150-169	156-170	152-165	142-155	▲
Middle East fob	145-152	158-165	154-160	140-149	▲
Black Sea fob	131-141	147-160	137-152	130-145	▲
Vancouver fob	130-138	152-160	152-159	138-146	▲

\*short term

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recover. The IEA expects a **rapid drawdown** on oil stocks in the second half of this year, which would likely see Opec+ ease quotas. But the recovery pivots on successful rollouts of Covid-19 vaccinations and continued fiscal stimulus to ensure travel and fuel demand bounces back in a post-pandemic world. On the assumption that refinery run rates will pick up as we enter the third quarter, we should start to see more reliable sulphur supply in the second half of this year.

Freight rates have firmed further this month, widening the spread between many destination markets. Cargoes from Middle Eastern ports headed to south China are being fixed at \$28-29/t, while deliveries to the River are \$31-33/t. Similarly, the increased use of expensive ice-class vessels from Russian ports has seen rates climb by \$3-5/t since January. Routes from Black Sea ports to Brazil now are in the low \$30s/t, while all major destination markets out of Baltic ports are priced in the low \$30s/t as well.

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## Regional outlook

### Africa

North Africa's spot price has risen in line with the global price rally, firming to \$150/t cfr for lump product and granular tonnes achieving prices in the low \$170s/t on the high end for small lots, with full-sized cargoes still holding in the mid-\$160s/t cfr. While most business remains under contract to OCP in Morocco, a bid on a smaller cargo in the past few weeks achieved \$172/t cfr. First-quarter contract prices for the north African region settled last month at \$78-94/t cfr – now a major discount on current spot prices.

In Morocco, adverse weather conditions have hindered port operations at Jorf Lasfar this month. After operations were initially suspended from 1-3 February, the port was closed for a [second time](#) this month from 11-15 February. It is understood that operations have since resumed.

Moroccan import volumes are expected to be down by 25-30pc this quarter as maintenance at OCP's production lines is carried out. But in January this year, just over 660,000t of deliveries were scheduled, up by 36pc on January 2020 totals. This increase on last year may be explained by OCP's increased 2020 sulphuric acid imports when acid prices were favourable relative to sulphur, but the increased deliveries may also indicate a clearing of backlogged cargoes from the fourth quarter of 2020. There is currently a freight check in the market for a [30,000t cargo](#) loading on 10-14 February from Taman, Russia, headed to either Jorf Lasfar or Safi. US shipments are also making their way to Morocco. A [west coast](#) shipment, originating from Long Beach, California, was expected to arrive at Jorf Lasfar on 14 February.

In Tunisia, TSP producer Tifert closed a purchase tender at the start of this month for a [30,000t granular cargo](#). A 30,000t [Kuwaiti cargo](#) is also expected to ship to either Tunisia or Morocco later this month. The company is now unlikely to come to the market for further first-quarter deliveries.

In Egypt, cfr prices have risen to \$150/t after a 10,000t cargo from Rabigh port to Abu Qir was confirmed. But short-term demand for product may ease a little as El Nasr Chemicals (NCIC) begins [planned maintenance](#) at Ain Sokhna. NCIC has reported that maintenance will be focused only on a portion of its 400,000 t/yr DAP unit, and the 1.1mn t/yr sulphur burner, which produces feedstock for phosphoric acid lines at the complex, may run at reduced rates if demand for DAP production drops. But NCIC aims to keep the shutdown period to a minimum amid high DAP prices, especially considering the fact that Egypt has avoided US duties on DAP/MAP

imports. In the recent round of business, a freight check was made for a 35,000t cargo loading at the end of this month in Dubai, UAE, to deliver to Ain Sokhna.

On the supply-side, Egypt's 100,000 b/d Midor refinery in Alexandria is set to raise its throughput capacity by 60pc in mid-2023, bringing the expansion project forward by a full year. The project has been long delayed, originally scheduled to come on line at the end of 2020. The expansion is thought to enable the refinery to produce Euro 5 specifications and will lift Egyptian sulphur supply by up to 140,000 t/yr, potentially easing Egypt's import reliance.

In South Africa, Foskor has tendered for a [50,000t delivery](#) for arrival at Richards Bay next month. The fertilizer producer is understood to have rejected what the buyer considers a high offer and remains in the market. Foskor had a troubled 2020 after a fire broke out at its acid unit in June followed by issues with phosphate production in November.

South African sulphur imports totalled 530,000t in 2020, down by 14pc on the year as Covid-19-related restrictions limited import operations at Richards Bay. A contraction in industrial-based sulphur demand last year from pandemic-induced disruptions also contributed to reduced import requirements. There is a freight check in the market for a 20,000t shipment to east Africa loading on 15-20 February, possibly headed for Beira, Mozambique, which will cover near-term demand from the Democratic Republic of the Congo.

Looking ahead, domestic South African sulphur supply is expected to dip as refineries remain closed and undergo maintenance. An investigation into the explosion and subsequent fire at Engen's Durban refinery continues to progress. The Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs (Edtea) rejected Engen's report after it was deemed to be inconclusive. Questions over the future of the plant now are mounting, particularly because Engen had considered closing the refinery before the accident. Nearby in Cape Town, [Astron Energy's 110,000 b/d refinery](#) now is expected to remain shut until 2022 after a fire halted all operations in July 2020. In the meantime, Astron Energy will rebuild damaged equipment to ensure the safety of the refinery once it restarts. And to add further disruption to South Africa's oil industry, BP-Shell's Sapref refinery is expected to close this May for scheduled maintenance. As domestic sulphur supply tightens, we will likely see South Africa continue to increase its reliance on sulphur imports.

Further north in Nigeria, the construction of a 2,000 b/d refinery has broken ground in the southern state of Bayelsa. No project timeline has been reported, and it is unknown what sulphur recovery facilities may be included. Sulphur production in Nigeria is currently minimal but the imminent arrival of Dangote's refinery should bring new sulphur production to the region. In October last year, the Lekki-based refinery sat at 70pc completion. We expect 32,000 t/yr of added sulphur supply from the Euro 5-specification refinery when it comes on line.

The sulphur market in Madagascar has been on hold since nickel HPAL operations at Ambatovy entered care and maintenance in March last year because of Covid-19-related restrictions. But Sumitomo, now the majority shareholder

after Sherritt exited the joint venture last year, announced earlier this month that operations are set to restart next month. Sumitomo plans to ramp up nickel output to pre-closure levels from April 2021-March 2022, but it speculates nickel output this fiscal year will be negligible compared with the company's 17,100t share of production from the complex in 2019-20. Maintenance has been undertaken during Ambatovy's closure. While Covid-19 was blamed for its closure, it is known that Ambatovy has struggled to keep operating margins positive in recent years. When operations restart next month, the nickel price will be substantially higher than in March 2020, when LME nickel was trading at \$11,870/t. Nickel prices now are 52pc higher, with this month's average LME price currently at \$18,053/t.

## Price changes from previous report

### China cfr

Prices have continued to firm as expected in the run-up to the lunar new year. But the usual slowdown in buying activity did not materialise. Demand for cargoes has remained elevated, driving prices higher than expected. To add to the price rally, freight rates from Middle Eastern ports to China have firmed by \$5/t since January. Buying activity after the holiday period is expected to remain elevated until the end of this quarter. We expect the price rally to slow in the second quarter, as phosphate production margins begin to tighten and phosphate demand eases.

### Brazil cfr

While spot buying activity has not been as frequent as in other destination markets, following the recent round of business in Brazil, prices currently stand at \$170-178/t cfr. Now CMOC is covered and Mosaic is not expected to return to the market until it starts buying for the next quarter, prices will likely be less volatile as in other markets. But prices are expected to firm in line with rising Middle East fob prices, while Russian product remains limited to contract volumes.

### North Africa cfr

Although some smaller cargoes have recently achieved higher prices, settlements for larger cargoes will firm in line with global prices. But the increased availability of Russian product from Black Sea ports in the second quarter should result in prices easing for delivered product to the region in the spring.

### Middle East fob

As expected, Middle East fob prices have risen in line the China cfr benchmark. Supply continues to remain tight, and it is unlikely that we will see any major supply changes until the second half of this year when demand for transport fuel slowly returns. The imminent closure of the Qatari spot tender will set the sentiment for prices in the region for the remainder of this month, and as demand from China will remain strong in the coming weeks, prices are expected to firm towards the low \$160s/t fob in March.

### Black Sea fob

Opportunistic spot sales out of the region have seen the Black Sea spot price increase by more than \$50/t since early January. The price is currently assessed at \$140-150/t fob. As most cargoes leaving Black Sea ports remain under contract, further price rises are expected to be less significant than in other fob markets. The usual pick-up in prices towards the end of March, as increased Russian product arrives, is to be expected.

### Vancouver fob

Low supply has limited Vancouver fob week-on-week increases as experienced in the Middle Eastern markets. Rising freight rates have also offset price rises on a netback basis from China. Looking into March, prices are expected to rise further in line with global pricing, but improved weather as the Canadian winter begins to ease should see increased volumes reaching Vancouver by rail, easing prices into the second quarter.

## Asia-Pacific

Many global buyers and traders were eagerly awaiting the typical lull in buying activity as China entered the lunar new year holiday period. But robust phosphate prices, alongside strong domestic fertilizer demand, has encouraged phosphate producers to maintain higher-than-average production rates. **DAP operating rates** currently sit at 65-70pc in Yunnan, 70pc in Guizhou and 65-70pc in Hubei. Travel restrictions remain enforced across many regions in China to limit the spread of Covid-19, which has reportedly led to many industries incentivising employees to continue working over the holiday period, limiting the usual seasonal industry slowdown.

Prices for spot granular product have been assessed at **\$172-175/t cfr** most recently, up by 32pc on the month. Limited availability of molten product has stabilised prices at \$90/t cfr, but higher settlements are likely. Traders with available cargoes are offering granular product in the low \$180s/t cfr, while a south-end off-taker reportedly bought an 8,000t Vietnamese cargo at \$185/t cfr. And it is hard to see prices plateauing, let alone softening, by the end of this month as supply from the Middle East, where a vast majority of Chinese granular product currently ships from, remains tight as oil and gas run rates remain low. We await the conclusion of the Qatari spot tender that closed on 16 February to set the price level for after the lunar new year period.

Rising freight rates have only added to the price rally since the start of this year. Dry bulk product from the Middle East to south China ports is up from \$23/t in January to \$28/t this month, while freight to river ports is fixing at \$32/t, widening the spread between Middle East fob and China cfr over the past month.

Deliveries from Iran to China have been offered on par with the current price assessment at \$172-177/t cfr. In the domestic market, prices have firmed in line with import pricing, with quotes at 1,370 yuan/t or higher, equating to the low \$180s/t cfr. Refiner Sinopec raised ex-works pricing at Dazhou and Wanzhou to Yn1,100/t and Yn1,300/t, respectively. Chinese port inventories fell to 2.27mn t as of 9 February.

In India, pricing has been assessed at \$171-174/t cfr, making it some of the most expensive product currently on a Middle East netback basis. Prices have risen sharply since the start of February, when fertilizer producer PPL purchased a 35,000t cargo for \$159/t cfr. Smaller cargoes have reportedly settled at close to **\$180/cfr** because of lower discharging rates at Haldia port, which inflated the small cargo price.

Domestic refiners in India continue to operate at reduced rates, limiting domestic sulphur availability. Reliance and Nayara Energy revised **domestic prices** upwards to 1,495-1,496 rupees/t from the start of the February. Following the announcement of the 2021-22 fertilizer subsidy, Indian DAP importers are contemplating raising the DAP maximum retail prices (MRPs) in line with the global phosphates price rally. Currently, importers are absorbing significant losses, with DAP import prices now in the **mid/high \$440s/t cfr**, significantly higher than the current MRP, which equates to roughly \$330/t at today's exchange rate. With domestic producers achieving optimal production margins importing sulphur and sulphuric acid over phosphoric acid in current market conditions, if the MRP is raised, we could see Indian domestic phosphates production rise, boosting demand for sulphur in the coming months ahead of application season later this year.

Availability of Japanese molten product remains tight as refiners continue to operate at reduced rates, but prices out of the country have remained steady, at \$90/t cfr China. Refineries ran at 76.5pc on average in the first week of February, down by 0.6pc on the month. Turnarounds are expected at Japan's 129,000 b/d Chiba refinery for most of February through to mid-April.

Last year, molten sulphur **exports fell by 16pc** but China remained the top customer, receiving 84pc of deliveries. Cargoes to Indonesia fell by 46pc on the year, although the country remained Japan's second-highest export partner. There is currently a freight check in the market for a 30,000-35,000t cargo headed to Indonesia that is thought to be linked to PT Gresik.

Australian sulphur imports rose by 82pc in 2020, to 1.1mn t, from 2019 levels. The increase coincides with the restart of nickel operations at First Quantum's Ravensthorpe mine in Western Australia at the start of last year. Canada supplied 68pc of sulphur deliveries, while Qatar entered trade with Australia after being absent in 2019, delivering 335,000t of sulphur in 2020. The restart of operations at the HPAI operation lifted Australian sulphur demand last year by 22pc on 2019 levels, as Ravensthorpe's 1.6mn t/yr sulphur burner restarted. In 2020, First Quantum produced 13,000t of nickel but expects the mine to produce 23,000-27,000t of nickel this year as operations complete their ramp-up. First Quantum will be looking to capitalise on the favourable nickel prices. This month, LME nickel surpassed \$18,000/t for the first time since the third quarter of 2019.



The nickel price rally we have seen since the start of 2020 has been linked to the Indonesian nickel ore export ban in January 2020 and compounded by recent hype surrounding the electric vehicles sector, in which the metal is used extensively in batteries. On the back of the price rally, other stagnant Australian nickel-cobalt HPAL projects that have been in development for years have resurfaced, looking to capitalise on the more attractive valuation metrics provided by today's nickel market.

Over in New Caledonia, nickel mine operator Vale has stopped operations at its HPAL site as protests over the sale of the mine to consortium Prony Resources have continued into this year. The Kanak and Socialist National Liberation Front political parties, which have pressured for independence from France, are at the centre of the protests. Protesters blockaded various nickel mines in the country, arguing that only New Caledonia should benefit from the country's resources. But Vale has struggled to keep operating margins positive at Goro – a common issue among HPAL sites, where operating costs often escalate – and has planned to close the mine at the end of this year. Final conclusions on the sale of the mine are expected imminently. New Caledonia imported 257,000t of sulphur last year for sulphur burner consumption.

### Eastern Europe

Pricing out of the Baltic has risen to **\$140-145/t fob**, although spot cargoes leaving the region remain limited. Freight rates out of Ust-Luga have reached annual highs, with rates to most major export markets being fixed in the low \$30s/t as expensive ice-class vessels are required. Further south, prices out of the Black Sea have been assessed at \$140-150/t fob. Trade activity currently comprises contracted volumes to Safi and Jorf Lasfar for OCP.

Freezing conditions in Russia at this time of year limit supply to ports as the rail network slows. But the port of Taman, in the Black Sea, recently had a sulphur car dumper commissioned for the transshipment terminal, which should allow logistics provider Oteko to raise its discharge rate of sulphur cargoes. As we approach April, cargoes leaving the region will increase as usual, adding much-needed supply to the region. In January, **Gazprom transported 335,000t of sulphur by rail**, down by 10pc on January 2020. But product carried by rail to Ust-Luga was hit harder, declining by 65pc to 35,000t, as higher Russian fertilizer-based demand took supply away from the export market.

In Kazakhstan, volumes carried by rail in January were reasonably steady on the previous year, totalling 311,000t. Ex-

ports from the country **increased** marginally on 2019 levels, rising by just 3pc on the year to 3.39mn t. Morocco remained the main off-taker and took an additional 25pc of product. Brazil also increased its imports of Kazakh product, by 31pc on 2019 levels, replacing the reduced imports from Russia.

Last month, we saw Russia and Kazakhstan oppose the Opec+ decision to restrict crude production, and the two countries were granted an **additional 75,000 b/d** of production between them. And it seems Russia is continuing to hold a firm stance on maintaining crude output to avoid damage from prolonged refinery shut-ins. The Russian energy minister instructed refiners to ramp up crude runs in February through to April to add gasoline supply. Russian gasoline output rose for a fourth consecutive week in the preceding week to 9 February, while imports of gasoline also rose by close to 6pc. With Russian refiners seemingly facing fewer restrictions than those in western Europe and the Mediterranean, we could see a greater-than-normal impact when Russian product finally arrives in greater supply at the end of March and early April.

### Latin America

Following a recent round of business in Brazil, prices in the Latin America region stand at **\$170-178/t cfr**, in line with netbacks to the Middle East, where most delivered cargoes currently originate. Fertilizer producers in Brazil are mainly covered until the end of this quarter following CMOC's purchase of a spot cargo for early-April arrival. The cargo will load in March at Vancouver, Canada. At the start of this month, Mosaic booked several cargoes in the **mid-\$140s-147/t cfr**, picking up product before the \$30/t price rise in recent weeks, which leaves it covered until it returns to the market to pick up supply to cover the next quarter.

Brazil has bolstered its sulphur imports since the start of 2021. Sulphur deliveries in January totalled **203,000t**, representing a 60pc rise on the year. Kazakhstan has stepped in and provided most of this rise, delivering 137,000t of sulphur last month. Other notable import partners include the UAE and Qatar, while the US notably fell out of Brazil's top three import partners as US Gulf product remains in extremely short supply. Brazilian sulphur demand is expected to increase by 34pc by 2022 from 2019 levels as Yara's Serra do Salitre SSP and phosphoric acid lines ramp up in the east of the country.

In Mexico, Fertinal has reportedly resolved issues with one of its two **sulphur burners**. The unplanned maintenance began **last month**.

In Venezuela, the government is eager to gain support from the US' new Biden administration. The country has been restricted by US financial sanctions since late 2017 and more recently, oil-related sanctions since January 2019, following allegations of statewide corruption. US president Joe Biden is currently reviewing the sanctions, which could drop restrictions on crude-for-diesel swaps by non-US companies and less restrictive operating terms for Chevron and US oil service companies. The Venezuelan oil industry has been crushed by sanctions and lack of investment in recent years, which has seen output consistently fall. But despite the Venezuelan oil sector struggling to keep output consistent in recent years, there is an unusual freight check in the market for a 50,000t cargo from Jose, Venezuela, to Zhenjiang, China, departing imminently. It would seem the global price rally has urged Venezuelan producers to return to the market after a long period of absence. The move could also suggest that some Chinese demand that the Middle East may have supplied has now been absorbed by Venezuelan supply. With 50,000t of product sourced from outside the Middle East, the expected Middle East fob price firming in the coming weeks could be limited. But high freight on the Venezuelan cargo will likely be supportive of China cfr prices.

After long delays, the St Croix Limetree Bay refinery in the US Virgin Islands has finally commenced output of low-sulphur transport fuels after being idled since 2012. The future of the refinery was placed in jeopardy after crude supplier and fuel off-taker BP threatened to exit the supply agreement made with the refinery's owners, EIG Global Energy Partners. Sulphur supply in the region is unlikely to be significantly affected in the short term while refinery operations stabilise, but once it reaches full capacity, the refinery will add 216,000 t/yr of sulphur supply to the Caribbean region.

### Mediterranean

In the Mediterranean, prices have continued to rise as supply continues to tighten. Product out of the region has been assessed in the \$140-156/t fob range, while delivered cargoes have settled at \$155-172/t cfr. In the recent phase of business, Greek refiner Motor Oil sold a 7,000t cargo at \$156/t fob – a \$20/t rise on the refiner's tender last month. On the buy-side, there is a freight check in the market for a 20,000-28,000t cargo loading on 10-15 February in the Mideast Gulf, likely for delivery to a Middle Eastern off-taker in the east Mediterranean.

Refining activity in Greece faced a setback earlier this month when two of Hellenic Petroleum's refineries at Elefsis and Aspropyrgos were temporally shut down after a fire at a

power station caused widespread power shutdowns. Disruption is expected to last just a few days. Output from Greece has been the most consistent in the region in recent weeks, while other refiners have had extremely limited sulphur output. There are currently two freight checks in the market, both for 6,000t cargoes loading a week apart at the port of Elefsis. Both cargoes are expected to head to Israel.

In Italy, molten supply has been scarce, with local producers favouring domestic deliveries as Italian demand remains high. Turkish producer Bagfas was tied to a delayed Italian delivery of 7,000t. But there now is some positivity for the Italian oil sector. A 450,000 b/d supply of Iraqi crude is waiting offshore at Falconara that is expected to provide feedstock to the idled 80,000 b/d API refinery, which is scheduled to restart on 20 February. Italian crude production increased in the second half of last year, reaching 120,000 b/d, from 80,000-100,000 b/d in the first half of that year. Some of this increase is undoubtedly from the start-up of the Tempa Rossa field, which reportedly began crude output in December last year. The facility, operated by Total, will produce up to 29,000 t/yr of sulphur when it reaches operating capacity.

Turkish trade contracted last year, with imports and exports falling by 20pc and 34pc, respectively. Much of the reduced import requirement has been attributed to increased domestic production after the SOCAR Star refinery was commissioned in early 2020, but some lost volumes were also because of tighter supply from Turkey's import partners. The new SOCAR refinery will raise Turkey's domestic sulphur supply by 158,000 t/yr when it reaches full operating capacity. In particular, delivered volumes from Bulgaria fell by 50pc and Kazakh imports by 80pc, to 49,000t and 10,000t, respectively. Russia provided most product last year, accounting for 40pc of Turkish imports. But it is expected that as demand from Turkey continues to recover throughout 2021, imports will pick up from levels seen last year.

Exports totalled 93,000t last year, down by 34pc from 2019 levels. Shipments to Tanzania halved on 2019 volumes. But deliveries to Egypt is increasing as the country's fertilizer-based demand ramps up.

In recent trade news, Turkish fertilizer producer Toros has booked a 15,000t cargo for early-March shipment from the Black Sea. It was priced in the low \$170s/t cfr, in line with firming Mediterranean prices.

In Turkish refining news, Tupras' Izmir refinery remains shut after it reduced output amid demand contraction caused

by the Covid-19 pandemic. But while other countries in the Mediterranean and Europe have continued to see low fuel demand as lockdowns remain in place, Turkish diesel demand looks to be recovering. Preliminary data from Turkey's energy ministry reveal that road fuel sales rose slightly in late January compared with the same period a year earlier.

Further west in Spain, crude deliveries to Cepsa's 220,000 b/d Huelva refinery dropped to a three-year low in January, further lowering the previous rolling 12-month total we saw in December. Cepsa shut its [100,000 b/d crude distillation unit](#) in September last year as demand for refined products fell away when western Europe re-entered lockdowns. The Spanish refiner has since cut its workforce temporarily.

### Middle East

Supply out of this region remains tight, but Middle Eastern cargoes remain the source of most spot liquidity globally, while Russian volumes remain restricted predominantly to contracted deliveries. Spot prices out of the Middle East have followed the global price rally driven by a boost in Chinese buying since the final quarter of last year. Prices now stand at \$150-155/t fob. In recent trade news, [two vessels for February arrival](#) are tied to Chinese deliveries, while a third will dock in Beria, Mozambique, later this month. Spot pricing is now up by \$25-\$30/t on February official selling prices from the major suppliers, which were set in the \$125-128/t fob range at the start of this month.

We expect buying activity after the lunar new year to determine fob pricing for the remainder of this month. Strong phosphate prices have encouraged fertilizer producers in China to continue production through the holiday period, which has meant the typical drop-off in demand has not been as noticeable as usual. If Chinese buyers come back to the market with strong demand – which is likely while phosphate prices remain elevated – we are likely to see prices firm further into the \$160s/t fob. The imminent award of the latest Qatari spot tender will set the post-lunar new year pricing sentiment, but it is understood that in recent weeks, there are February-loading cargoes yet to be tied to customers, which may reign in near-term pricing.

Following Saudi Arabia's voluntary 500,000 b/d production cut in February and March, increased supply still looks to be a few months off. And with Saudi Arabia [extending its Covid-19 restrictions](#) by another 20 days, it would seem the government's sentiment is one of caution. Even with the impending start-up of the Barzan gas fields in Qatar and Kuwait's Clean Fuels Project, the cautionary stance that Opec+

is currently taking on balancing low fuel demand with steady oil prices, it is becoming increasingly unlikely that we should see any major shifts in availability, even as new supply comes on line.

Interestingly, fertilizer producer Ma'aden was in the market for spot sulphuric acid cargoes, which is unusual. Ma'aden usually produces all acid requirements from its integrated burners and receives sulphur directly from Aramco. But an [unplanned shutdown](#) at one of Ma'aden's burners has pushed the producer into the spot market, where it is understood to have bought two acid cargoes from PPL.

Iraq's oil minister believes Opec+ is unlikely to change crude quotas in the group's meeting this March, but he has speculated that Saudi Arabia may end its voluntary output cut. Iraq has recently been criticised for producing nearly [18mn bl](#) above its quota since the current deal began in May 2020.

Over in Iran, US sanctions are not expected to be lifted anytime soon. Biden's pledge to rejoin the Iran nuclear deal remains a priority, but there is currently [no timeline](#) for re-engaging with Tehran. While the deal remains unaddressed, the US will likely hold off on lifting any sanctions imposed on the Iranian oil sector. But Iranian foreign minister Mohammad Javad Zarif has said it is ["inevitable"](#) that the US will rejoin the deal. Following the US' withdrawal from the deal in 2018, under former US president Donald Trump, Iran has been forced to keep almost 2mn b/d of oil off the export market. But tensions are rising between Iran and countries in western Europe that remain part of the nuclear deal. France, Germany and the UK issued a joint statement criticising Iran's uranium production as [undermining the agreement](#). As conditions stand, it seems unlikely that crude output will shift significantly, especially as Opec+ remains vigilant about controlling supply. But looking further ahead, beyond oil quotas imposed by the Covid-19 pandemic, a relaxation of Iranian oil and trade restrictions could see increased sulphur output from the country and off-takers other than China receiving Iranian product. Depending on tariffs, the discount at which Iranian product currently trades may close, to fall in line with the rest of the market.

### North America

Supply in the Gulf coast remains tight, with low liquidity limiting spot price movement compared with benchmarks in east of Suez markets. On a fob basis, spot prices have risen in recent weeks to \$140-150/t, after prices held flat in the first week of February. Supply is being sold mainly domestically. But there is some optimism as the demand outlook for crude



products has shifted to a positive sentiment in recent weeks. Last week, Ice Brent climbed back up to more than \$60/bl, boosting optimism. Refining margins in the Gulf coast have been at their highest level since the viral pandemic struck the US almost a year ago, supportive of refiners beginning to increase run rates. Utilisation, in fact, has risen to [85.3pc](#) in the first week of February. Some of this rise is likely tied to the restart of the 136,000 b/d Calcasieu refinery in the US Gulf at the start of this month that had been idled since the end of July amid low fuel demand.

Elsewhere in the Gulf coast, Marathon Petroleum will carry out maintenance at its 585,000 b/d Galveston Bay refinery in Texas this quarter, while ExxonMobil reported a problem on the [sulphur recovery unit](#) on 5 February at its 362,000 b/d Beaumont refinery, also in Texas. Nearby, Valero reported an upset at its 275,000 b/d Corpus Christi refinery after increased emissions were reported.

Demand for sulphur from the phosphates sector is holding strong as purchases made before the US planting season continue. But with the new import duties placing increased reliance on domestic phosphates supply and barge rates almost doubling on the year, there is now mounting concern about the sustainability of rising inland prices as some inland fertilizer retailers continue to sell at [less than cost](#). In the past week, prices for Nola MAP and DAP decreased to \$555-560/st fob and \$535-540/st fob, respectively, indicating phosphate prices have possibly reached a ceiling. We could see a trickle-down effect on US sulphur prices in the coming weeks, depending on how far phosphate producers are willing to absorb the lower market prices.

Over on the west coast, price rises in destination markets have been offset on a fob basis by rallying freight rates to Asian markets. While east coast refiners look to increase run rates in the mid-term, the sentiment seems a little duller in California. Refiners reduced gasoline production in recent weeks to their [lowest level in almost two months](#). But other products took up the slack, with diesel output rising. Crude throughputs remain 29pc lower than levels in February 2020.

Provisional US Geological Survey data suggest sulphur imports totalled just over 2mn t in 2020 as US production contracted on the back of low refinery run rates. This is a significant rise on the 1.85mn t of imports in 2019.

Biden has wasted no time implementing policy changes during his one month in office. After taking attention-grabbing actions on his first few days in office, including the cancella-

tion of the Keystone XL permit and re-signing the US to the Paris Agreement, his next focus is on rolling out a \$1.9 trillion stimulus package that is hoped to fuel a post-pandemic recovery. If we see a recovery in travel in the second half of this year, it will certainly help crude throughputs recover and we should see an easing in the tight sulphur supply of the past few quarters.

In Canada, fob prices out of Vancouver have risen in line with global pricing on a netback basis to destination markets. Current spot prices are assessed in the \$135-144/t fob range. Canadian refinery run rates have held steady in recent weeks but remain 231,000 b/d lower than last year. Heartland's second forming unit in Alberta began producing last month and is reportedly [producing satisfactorily](#).

### Western Europe

There has been little change in western Europe since the start of this year. Refining activity remains low, and supply is becoming increasingly tight. First-quarter northwest Europe molten contracts jumped by \$17.50/t on the high end over the previous quarter, settling at \$157-174/t cpt. But market liquidity is extremely limited. In the most recent round of business, a 12,000t Mediterranean granular cargo was sold to France at an [undisclosed price](#). Lockdown restrictions remain in place in many western European countries, keeping fuel demand low as travel is much reduced.

Many refiners have taken the opportunity to perform maintenance while margins remain low and, in many cases, unworkable. In France, strikes continue to interrupt production at Total's refineries. Following the strikes at the Grandpuits refinery in the wake of Total's announcement that crude refining will cease at the site, [strikes](#) over impending job losses have broken out at the company's 135,000 b/d Feyzin refinery, 222,000 b/d Donges refinery and 240,000 b/d Gonfreville refinery, as well as its Flandres storage and logistics depot near Dunkirk.

In Germany, high water levels on the Rhine river have restricted shipments to refineries. Access to the 301,000 b/d Miro refinery at Karlsruhe was restricted at the end of January, but the refinery is currently undergoing [maintenance](#) throughout February until next month. Elsewhere on the river system, congestion is present in some stretches, but wide availability of crude has made feedstock available if required. As well as Miro's refinery entering a period maintenance, Klesch's Heide refinery has shifted its focus to green hydrogen and cut 20pc of its staff in a cost-cutting bid to weather out the pandemic. Many small refiners in Europe are

plagued by high overheads and limited economies of scale compared with those of larger refineries outside the region. It is no surprise that we have seen so many cut staff and pivot and divert investment towards green alternatives to maintain some kind of future for their sites.

Low molten supply and maintenance shutdowns at burners in Belgium and France have tightened sulphuric acid supply across northwest Europe, which has resulted in a double-digit increase in acid prices. Northwest Europe spot acid prices have firmed by \$22.50/t since the start of February to **\$50-60/t fob**. This has eased demand for sulphur slightly, but with supply so limited, pricing is unlikely to be affected.

## New capacity

New capacity 2021-22					
Company	Project	Location	Date expected	± Capacity '000 t/yr	Notes
KNPC	Al-Ahmadi; Abdullah	Kuwait	2021-22	1,700	Large-capacity project as part of a major push by Kuwait to increase refining capacity focused on the Clean Fuels Project. Several units at Mina Abdullah were commissioned in 2020, while works at Mina al-Ahmadi were completed in 2Q20. The project is expected to reach full capacity by 2021-22
Qatargas	Barzan	Qatar	2021	800	Start-up is expected to be imminent, following successful test runs. <i>Argus</i> expects operations in 2Q21, with 400,000 t/yr coming on line for 2021. The project is expected to reach full capacity from 2022
CNRL	Horizon	Canada	2021	570	Expansion at existing oil sands project. Second forming unit ready in late October, with start-up targeted for 1Q21
Saudi Aramco	Jazan	Saudi Arabia	2021	260	Commissioning is under way. The refinery started up in January/February but it is running at low rates, and sulphur output is likely to be low while it ramps up
Limetree Bay Refining	St Croix	US	2021	220	Revival of Limetree Bay Refinery. Commissioning faced delays but crude processing restarted in February
KNPC	Al-Zour	Kuwait	2021	600	Al-Zour commissioning has been pushed back to 2Q21 originally from 4Q20 amid start-up delays owing to Covid-19
Petronas	Rapid	Malaysia	2021-22	480	Crude refinery and petrochemicals complex capable of processing 300,000 b/d. The refinery should be able to produce 480,000 t/yr of sulphur at full capacity. Production is expected to begin in 3Q21 because of Covid-19-related delays. It is expected to reach full operating rates in 2022
Zhejiang Petroleum and Chemical (ZPC)	Zhoushan	China	2019-22	1,150	ZPC's refinery is designed to run medium sour crude from the Mideast Gulf. Project to come on line in phases until reaching full capacity in 2023. First phase of 550,000 t/yr came on line in 2019. Second phase of 600,000 t/yr due for completion in 2022
Shenghong Petrochemical	Lianyungang, Jiangsu	China	2021-22	600	Start-up expected by the end of 2021, with full capacity to be reached by 2022
PetroChina	Jieyang, Guangdong	China	2022	780	Start-up originally expected in 2020, but <i>Argus</i> believes it will be operational in 2022
Hindustan Petroleum	Visakhapatnam	India	2023	260	Project under way, expected in 2023
OQ8	Duqm	Oman	2023	500	Construction under way, with 60pc completed. Operations are scheduled to begin in 2023
PetroVietnam	Dung Quat	Vietnam	2023	200	Expansion of existing refinery, with crude processing capacity to be increased by 30pc. Originally scheduled to start up in 2021, but <i>Argus</i> believes launch may be delayed until 2023
Sinopec	Gulei	China	2022-23	500	Project under way, expected in 2022-23

## Production maintenance

Maintenance of sulphur producers				
Country	Company	Event	Period	Reason
Spain	Repsol	Maintenance at 130,000 b/d Cartagena refinery	February	Six-week turnaround that started in mid-January at Repsol's 130,000 t/yr Cartagena refinery
Turkey	Tupras	Maintenance at 400,000 b/d Izmir	February	The Izmir refinery remains shut for maintenance until at least 28 February
US	Citgo	Maintenance at 157,500 b/d Corpus Christi refinery	February	Planned maintenance on an FCC unit started on 15 January. The works are expected to last for an extended period of time
US	ExxonMobil	Maintenance at 560,000 b/d Baytown refinery	February	Maintenance that started in January, expected to last for 70 days
Germany	Miro	Maintenance at 301,000 b/d Karlsruhe refinery	February-March	Shutdown at Miro's Karlsruhe refinery that will affect all facilities, scheduled to start at the end of February and last until late March or early April
France	Total	Donges	March	Extensive scheduled maintenance lasting until March 2021
Hungary	Mol	Maintenance at 160,000 b/d Szahalombatta refinery	May	One-month maintenance at Szahalombatta refinery. It is uncertain to what extent sulphur output from the refinery will be affected during these works
South Africa	Sapref	Maintenance at 180,000 b/d Durban refinery	May	The BP-Shell Sapref venture's 180,000 b/d Durban refinery in South Africa will be shut in May because of a planned maintenance halt at Durban oil terminal's Single Buoy Mooring facility
Italy	Eni	Low refinery run rates at 200,000 b/d Sannazzaro	Ongoing	Lower output rates at Sannazzaro leading to lower molten sulphur output
Italy	API	Maintenance at 80,000 b/d Falconara refinery	Ongoing	Maintenance at API Falconara. The works will involve taking a desulfurisation unit off line for maintenance and upgrade works
South Africa	Astron Energy	Shutdown at 110,000 b/d Cape Town refinery	Ongoing	Astron Energy's 110,000 b/d Cape Town refinery will remain shut until sometime in 2022, two years after a fire forced it to halt operations
US	Marathon Petroleum	Shutdown at 585,000 b/d Galveston Bay refining complex	1Q21	Planned maintenance at Galveston Bay
Taiwan	Formosa	Lower refinery rates at 540,000 b/d Mailiao refinery	1H21	Reduced refinery run rates during the first half of this year, with the plant's operating rates expected to remain at 55-60pc. Formosa is expected to keep one of its three 180,000 b/d crude distillate units off line during the first half of this year

Maintenance of sulphur consumers				
Country	Company	Event	Period	Reason
New Caledonia	Vale	Shutdown at Goro nickel mine because of strikes	February	The Goro nickel mine in New Caledonia was off line because of strikes in February. The mine is a large consumer of sulphur, largely Canadian and US
Madagascar	Ambatovy	Restart in operations at nickel mine	March	Resumption of operations at nickel mine expected in March. The mine has been closed for nearly a year because of the Covid-19 pandemic
Morocco	OCP	Lower granulation rates at phosphate plants	1Q21	OCP will be reducing its phosphates and NPKs granulation rates in 1Q21. As a result, OCP is understood to have booked 25-30pc less product for first-quarter arrival than usual
Egypt	NCIC	Maintenance at DAP plant	April	NCIC is to undergo planned maintenance on a portion of its 400,000 t/yr DAP Ain Sokhna plant in the coming months

## Trade outlook

### China

China's sulphur imports totalled 8.54mn t in 2020, a sharp decline of 27pc from 2019. The drop is largely because of Covid-19-related lockdowns imposed in early 2020 and domestic refiners upgrading their units to process low-sulphur crude.

Looking forward into 2021, imports will continue to slow down because of the addition of significant oil-based capacity projects expected this year.

Sulphur demand in China has remained fairly strong this month, supported by firm phosphates demand and tighter availability of sulphur. With the fertilizer market active and production rates high, the Chinese lunar new year holiday is shorter than usual.

### India

India's sulphur imports reached 1.29mn t during January-November 2020, representing a decline of 11pc from the same period in 2019.

Shipments from Qatar totalled 483,000t over the period, a sharp increase of 40pc over the same period in 2019. Shipments from the UAE fell by more than half to 280,000t over the period amid lower refinery rates. Oman's shipments to India rose sharply to 113,000t over the period, from just 12,000t in 2019.

India's sulphur imports are forecast to fall from last year's levels as domestic sulphur production is expected to see continued growth from oil-based capacity projects. In addition, new finished fertilizer projects scheduled to come on line this year will support demand for raw materials.

### Brazil

Sulphur imports totalled 203,000t in January this year, a jump of more than 50pc compared with the same time last year.

Kazakhstan supplied about 67pc of the tonnage to Brazil in the first month of this year, with 137,000t arriving in January. This was followed by shipments from the UAE, which totalled 42,000t in January, and from Qatar, totalling 21,000t.

Looking into the first quarter of 2021, Santos port is undergoing maintenance at Tiplam terminal, affecting fertilizer operations, with berth 1 off line until 19 February, and berth 4 for 12 days from 1-12 March. Most sulphur import tonnage will be scheduled for arrival from February and second-half March onwards.

Sulphur imports from Brazil are expected to rise by 12pc on the year, estimated at 2.7mn t in 2021, as new finished fertilizer projects starting up this year lead to increased demand for raw materials.

### Canada

Canadian sulphur exports totalled 2.87mn t last year, at an increase of 6pc on 2019, according to GTT trade data. Sulphur exports out of the port of Vancouver totalled 2.65mn t in 2020, an increase of 8pc on 2019.

Canadian exports for this year are forecast to increase by 7pc on 2020 export volumes, according to *Argus Analytics*. Sulphur production is expected to improve this year as new oil sands capacity comes on line at CRNL's Horizon project.

### US

US sulphur exports fell to 1.22mn t last year, a sharp decline of 25pc on the year, owing to a reduction in refinery rates as Covid-19-related lockdown measures substantially reduced refined product demand. Looking forward, exports are expected to see a 15pc increase on 2020's reduced levels, as output from the refining sector is expected to rise in line with economic recovery and increased demand for crude.

On the other hand, US sulphur imports rose by a third on the year, to 1.7mn t in 2020, with Canada remaining the dominant supplier. The increase in US sulphur intake resulted from low production at domestic refineries, alongside a decline in gasoline demand and a shift in refinery feedstocks towards lighter, sweeter crudes.

### Russia

Russia exported 3.49mn t in 2020, a drop of 12pc from 2019. The decline comes from a combination of lower refining rates as a result of OPEC+ cuts to limit the slide of crude oil pricing amid the global pandemic, and high domestic sulphur consumption. These factors are expected to continue to weigh on production this year – at the very least in the first half of 2021 – while lockdown measures and movement restrictions remain in place in many regions. But in the second quarter, we expect an increase in export volumes resulting from the seasonal opening of the Volga Don barging route for Russian product to the Black Sea port of Kavkaz.

Morocco was the largest export market last year, having received 966,000t in 2020, down by 17pc on 2019 levels. Exports in the first quarter of 2021 have not been committed

under contract to Morocco, and any spot exports are likely to be negligible as the buyer favours contract supply and supply-side is also mostly committed. Russian exports will be directed mainly to Brazil in the first quarter of this year. On the fundamentals side, oil-based sulphur production is expected to remain relatively stable, with total output for this year estimated at 7mn t/yr, according to *Argus Analytics*.

### Kazakhstan

Kazakh's sulphur exports rose to 3.39mn t in 2020, an increase of 3pc from 2019. Sulphur production continued to

operate at high capacity levels last year, outside of maintenance periods, which supported increased availability for the export market. Looking forward, Kazakhstan's sulphur exports are expected to increase to 3.4mn t/yr in 2021 and to 3.8mn t/yr next year.

Morocco remains the leading trade partner for Kazakh sulphur, having received 1.07mn t of the product last year, with supply delivered on both a spot and quarterly contract basis. Brazil received 820,000t of sulphur, with Kazakh material displacing Russian volumes.

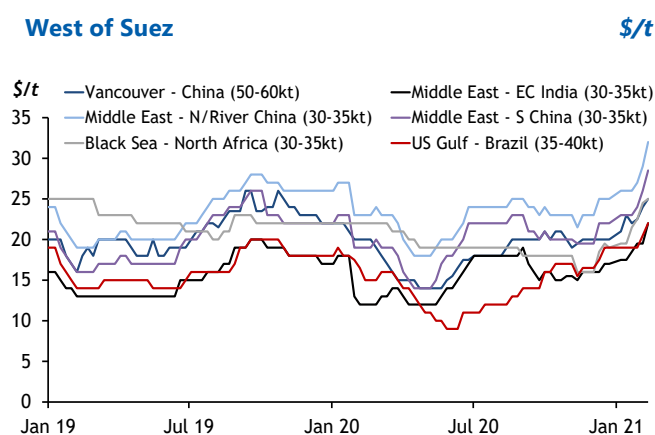
Summary of trade				'000t
	Period	Volume '000t	±% y-o-y	Outlook
Imports				
China	Jan-Dec	8,539	-27	A bullish fertilizer market will support sulphur demand in 1Q21. Looking into 2021, imports will continue to slow down, a trend that started last year, as domestic refining capacity increases
India	Jan-Nov	1,141	-11	New fertilizer projects coming on line in 2021 will support demand for raw materials such as sulphur
Brazil	Jan	203	59	Demand for sulphur will remain strong, leading to high import levels in 2021 as demand for phosphate products is supported by a strong agricultural sector
Exports				
US	Jan-Dec	1,228	-25	Low refinery rates and shutdowns will continue to limit sulphur availability in 1Q21
Canada	Jan-Dec	2,869	6	Exports are expected to increase in 2021 as a result of capacity additions from Heartland sulphur in Alberta
Russia	Jan-Dec	3,495	-12	Russian sulphur availability will be reduced in 1Q21 because of a combination of lower refinery rates and winter logistical restrictions
Kazakhstan	Jan-Dec	3,392	3	Exports to remain robust in 1Q21 as a result of increases in refinery output agreed for Kazakhstan

## Freight

Fertilizer freight rates have continued to firm across the board in the past month, with the largest price increases seen on routes from the Middle East and Black Sea. Bunker fuels price indications have risen on the back of firmer crude prices, supporting higher freight rates.

Rates for 30,000-35,000t sulphur cargoes from the Middle East to North River China are \$31-33/t in mid-February. Rates for a similar tonnage from the Black Sea to north Africa have firmed by \$6/t on a midpoint basis, to range from \$24-26/t on 11 February, the increase comes amid the usage of ice class vessels supporting higher freight indications.

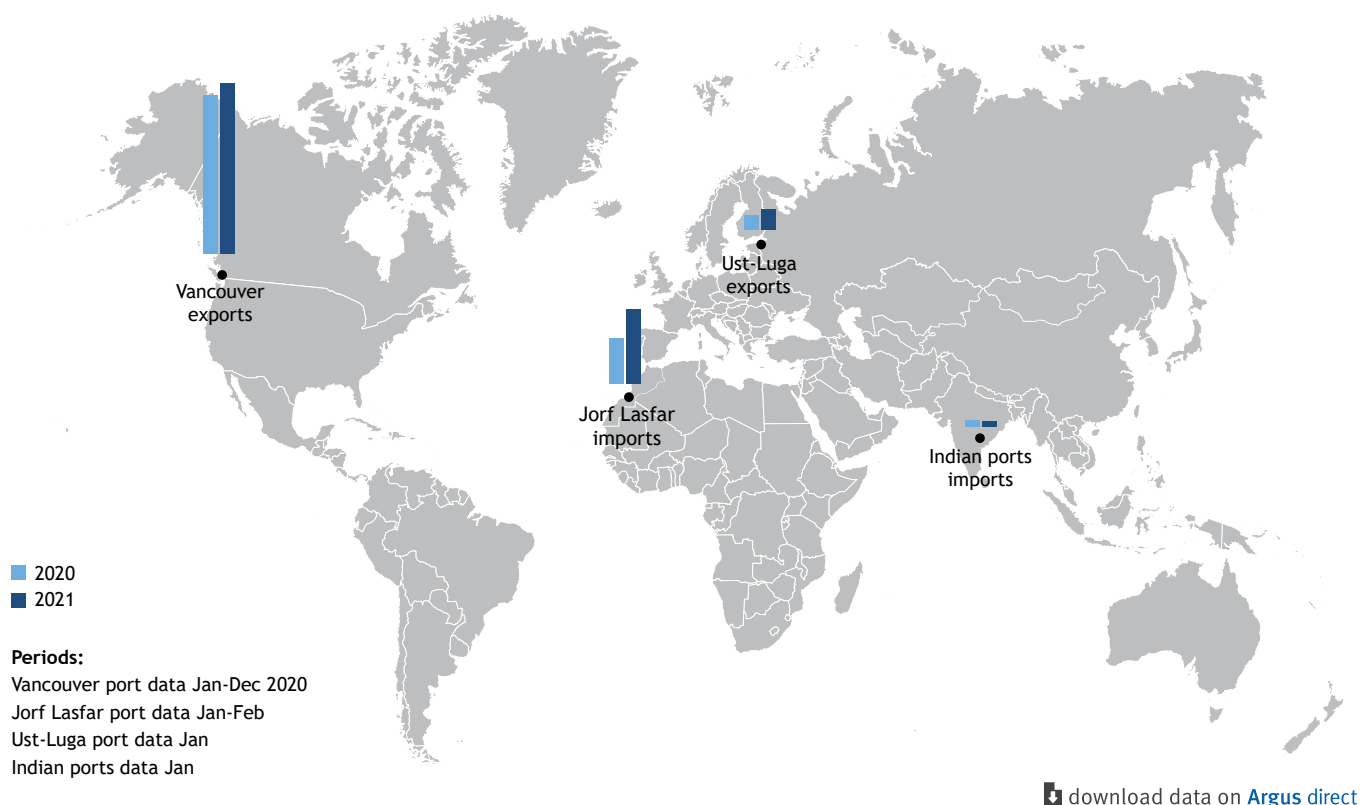
### West of Suez





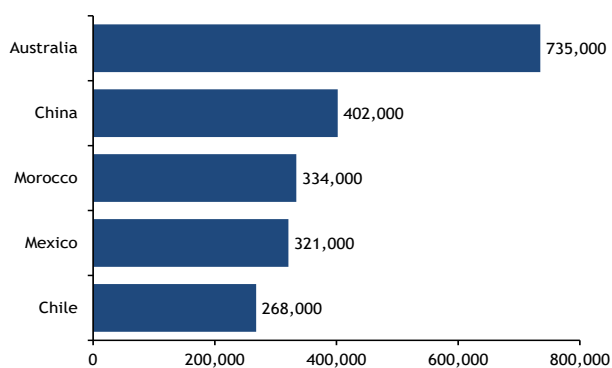
## Sulphur trade at key ports

'000t



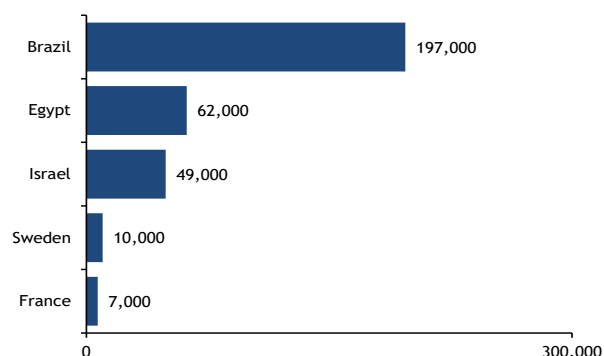
## Vancouver exports (Jan-Dec)

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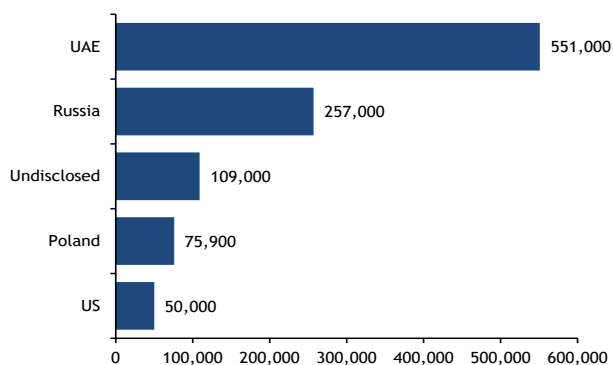
## Ust-Luga exports (Jan)

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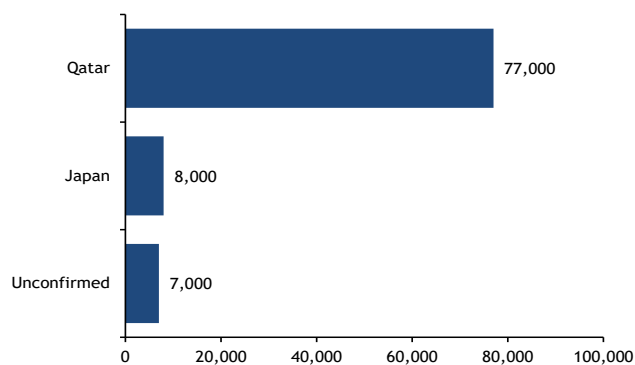
## Jorf Lasfar imports (Jan-Feb)

t



## Indian ports imports (Jan)

t



## Related markets

### Phosphates

The US Department of Commerce published its final ruling on import duties on Russian and Moroccan phosphates, shaking up the market yet again. It reduced the tariff on Russian producer Phosagro to 9.19pc, from 20.94pc, meaning Russian MAP will likely feature on US import line-ups in the future, but not this spring season. Moroccan producer OCP will be charged an import duty of 19.97pc and Eurochem's Russian phosphates a duty of 47.05pc. Phosphates prices in the US started to drop following the ruling.

In Brazil, MAP prices have stagnated. They increased to \$575-580/t cfr early last week from \$545-560/t cfr in early February, but have since remained unchanged on a lack of activity.

Prices are set to remain firm in the first quarter. But following the conclusion of the European spring campaign in March and the end of OCP's NPS commitments for Ethiopia's EABC, it is probable that steady DAP exports to India and Pakistan will return. OCP shipped 1.4mn t of DAP to India last year and is likely to match or exceed this figure in 2021. The return to shipments in India in March-April will prove a considerable headwind to the current price rally.

### Sulphuric acid

Sulphuric acid prices continued to see sharp increases over the past month, supported by strong market fundamentals – continued tight supply, increased sulphur prices and strong copper prices. This has created a bullish market sentiment for acid, with further price rises likely in the short term.

In Chile, delivered spot prices remained steady on the month, with prices ranging at \$100-110/t cfr on 11 February, unchanged since 14 January. Supply remains tight in the region, owing to unloading delays at the port of Mejillones, after an extended closure that tightened local supply. Demand for acid remains strong, supported by robust fundamentals, with bullish market sentiment in copper after prices reached \$8,251/t on 12 February, a 6.5pc increase from the end of December.

Brazilian spot prices firmed slightly to \$115-125/t cfr on 11 February, from \$110-120/t cfr on 14 January, on strong acid demand, with trade continuing at the levels seen since the beginning of this year. A strong fertilizer and sulphur market were the underlying reasons for stable and firm prices.

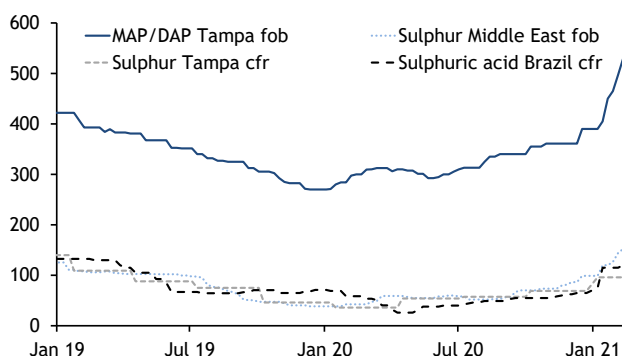
US vessel import prices firmed further, by \$10/t on a mid-point basis over the month, with the range at \$80-85/t cfr on 11 February, from \$70-75/t cfr on 14 January. US trade has slowed, with buyers showing some resistance to higher prices.

Northwest European fob prices rose sharply to \$50-60/t fob on 11 February, from \$27-35/t fob on 14 January, on the back of tight supply. Producers in Europe have little to no spot available in the first quarter of this year but are still receiving enquiries. Consumers, for now, are running at full capacity. Sulphur-burner acid availability is expected to remain tight in the European market, as three sulphur burners are expected to come off line in the next few months, which will tighten the acid supply situation further.

Mediterranean prices firmed to \$50-60/t fob on 11 February, from \$25-30/t fob on 14 January, in tandem with prices across Europe.

In South Korea and Japan, export prices firmed by \$25/t fob on a midpoint basis, with the price range rising to \$40-50/t fob on 11 February, from \$15-25/t fob on 14 January. Deliveries out of Japan have been affected by unfavourable weather conditions, which have tightened the market further.

**Sulphur, sulphuric acid and DAP price comparison \$/t**



Chinese spot prices narrowed to \$60-70/t fob in mid-February, from \$40-65/t fob in mid-January. The start of the lunar new year holiday last week led to limited trade out of China.

Southeast Asian delivered prices rose by \$25/t on a midpoint basis, to range at \$75-85/t cfr in mid-February, from \$50-60/t cfr in mid-January.

Delivered prices in India rose further, ranging at \$75-85/t cfr on 11 February, from \$50-65/t cfr on 14 January.

### Natural gas

US natural gas futures ended lower on 11 February on a US government report showing a smaller-than-expected draw from gas storage and forecasts showing that the recent cold weather would begin to fade in late February.

Nymex gas for March delivery at the Henry Hub settled at \$2.868/mn Btu on 11 February, down by 1.5pc from the previous week.

Prices fell after the US Energy Information Administration (EIA) released its weekly inventory report. US gas stockpiles in the week ended 5 February fell by 171bn ft<sup>3</sup> (4.8bn m<sup>3</sup>/d) because of cold weather along the east coast, year-over-year declines in gas production and gains in demand for US LNG. The draw topped the five-year average decline for the week of 121bn ft<sup>3</sup> and the year-earlier draw of 125bn ft<sup>3</sup>.

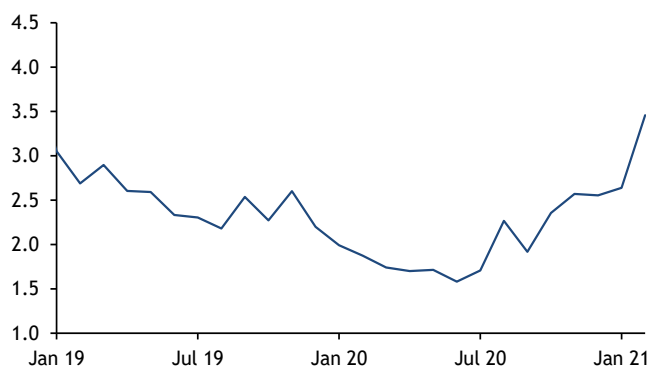
US gas inventories in the week ended 5 February fell to 2.518 trillion ft<sup>3</sup> – 6.4pc higher than the five-year average but 0.4pc below year-earlier levels. Stockpiles last week were below year-earlier levels for the first time since April 2019. Inventories remained at high levels last winter because of mild weather and high US output. But production has been falling this year as last year's low prices spurred producers to rein in the development of gas-rich fields.

Cold weather in the coming weeks could help draw inventories closer to average levels.

The EIA this week said it expects inventories to exit the winter heating season on 31 March at 1.8 trillion ft<sup>3</sup>, or roughly in line with the five-year average. High inventories can keep a lid on gas prices by easing concerns about spikes in demand and supply shortfalls.

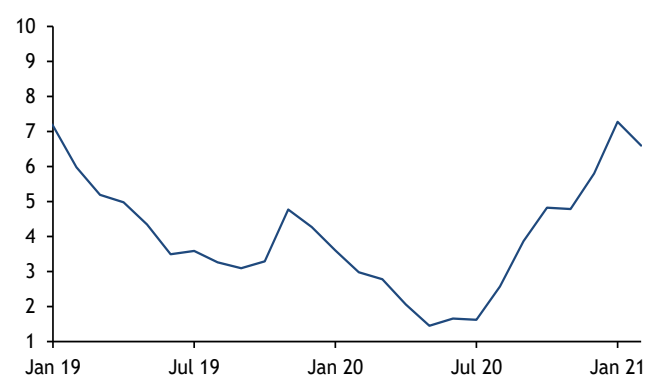
### Henry Hub (US) day ahead

\$/mn Btu



### TTF (Europe) day ahead

\$/mn Btu



### Crude

Oil prices have continued their upward momentum into February, with Ice Brent futures at 13-month highs as a result of the continued progress of Covid-19 vaccine rollouts, crude output cuts from Saudi Arabia, a recovery in Chinese demand and a winter cold snap.

Brent prices gathered further support on 15 February from a potential shutdown in the North Sea. Crude production from the largest regional field, Johan Sverdrup, and of key benchmark grade Troll could be shut in by strike action this week if today's mediation talks fail.

Globally, prices are underpinned by the continued rollout of vaccines. The US has agreed to buy 100mn more doses of the Moderna vaccine and 100mn doses of the Pfizer vaccine, according to US president Joe Biden. By July, the US should have enough vaccines to treat 300mn Americans, nearly its entire population.

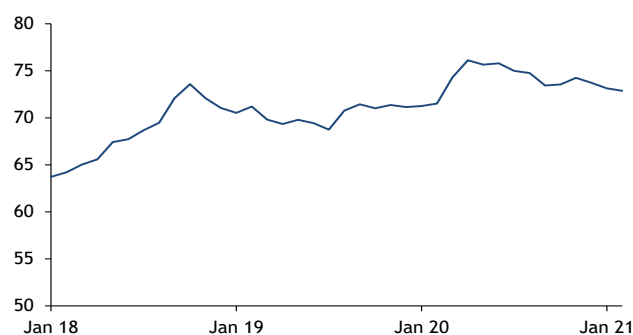
## Currencies

**Indian rupee** – The rupee has remained relatively steady over the past month, with the currency trading at Rs72.90:\$1 in February, from Rs73.10:\$1 in January. Despite the steadiness, the rupee remains 2pc weaker compared with the levels seen a year ago. A weak rupee has affected the affordability of fertilizers imported, reducing margins for importers.

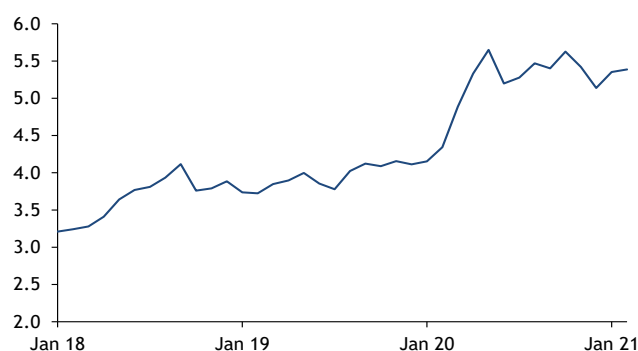
**Brazilian real** – The real has weakened further, by 1pc over the past month, with the currency at R5.40:\$1 in February, from R5.30:\$1 in January. The real remains sharply down, by 24pc, since February 2020. Continued uncertainty regarding the Covid-19 pandemic has continued to weigh on the value of the real compared with the US dollar this year.

**Chinese yuan** – The yuan has remained unchanged over this month, at Yn6.50:\$1. It has held relatively steady since December last year and is 8pc firmer than the values seen a year ago. The IMF expects the yuan to continue strengthening against the US dollar this year as China has encouraged its enterprises to invest overseas after the Regional Comprehensive Economic Partnership free trade agreement was signed by 15 Asia-Pacific nations.

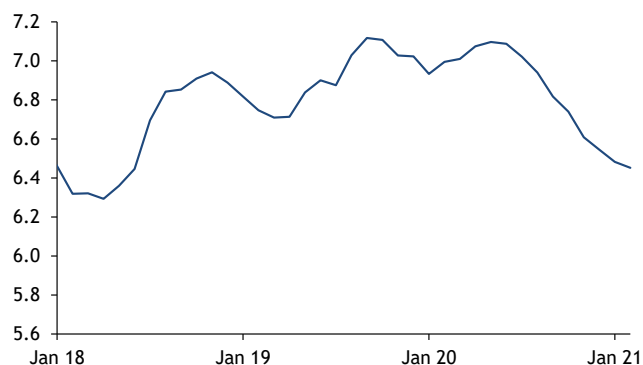
### Indian rupee: \$ exchange rate



### Brazilian real: \$ exchange rate



### Chinese yuan: \$ exchange rate

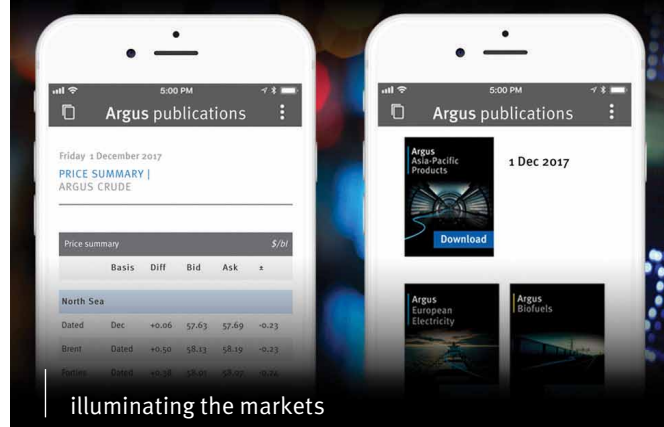


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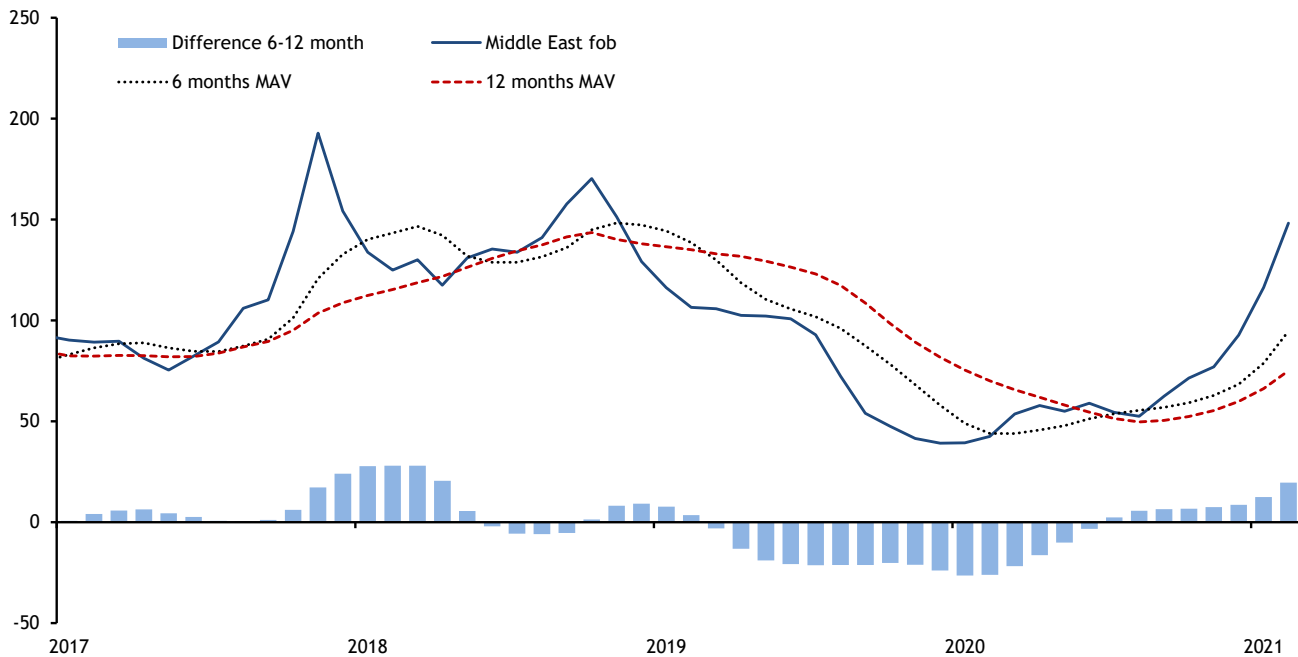


illuminating the markets

## Technical analysis

### Moving averages (MAV)

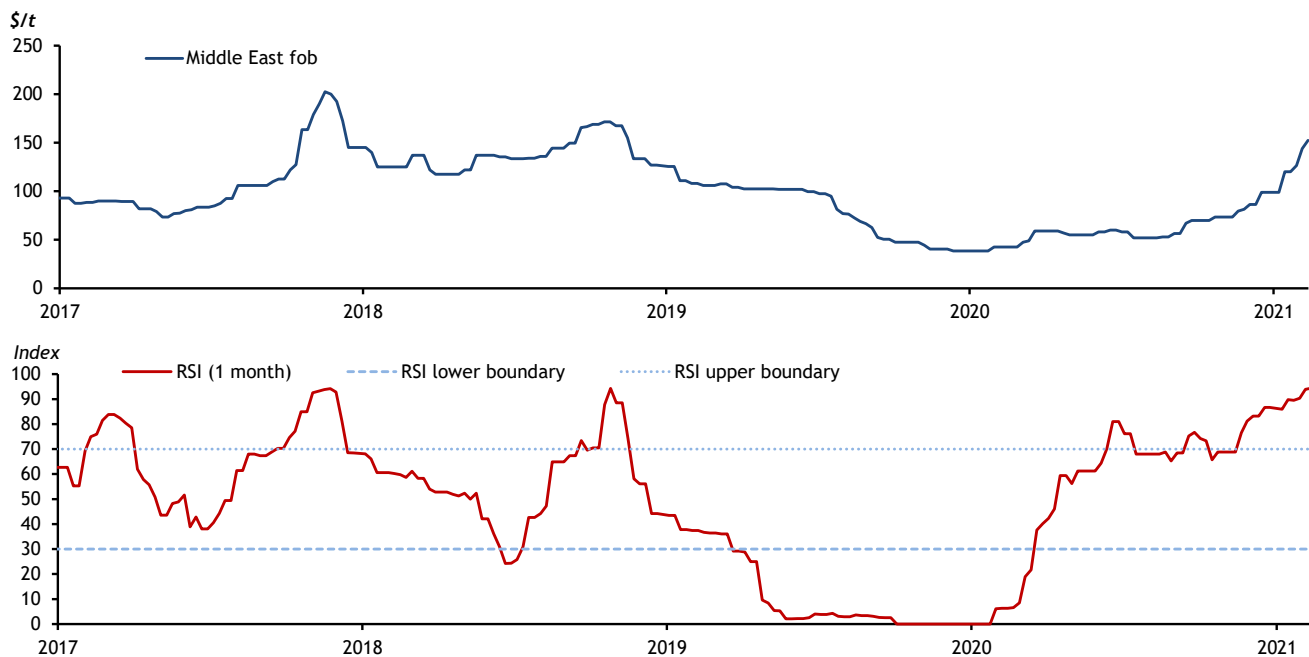
\$/t



**Moving averages (MAV)** – The six and 12 month's MAV have continued to trend upwards over the month, reflecting latest firmness in the market. Moving averages help identify trend direction and they may act as a resistance or support level.

**Relative strength index (RSI)** – The current RSI index for Middle East fob prices has remained above the upper boundary threshold in the past month amid continued price firmness. The RSI oscillates between zero and 100. The RSI is considered to reflect over-buying when above 70 and over-selling when below 30.

### Relative strength index (RSI)



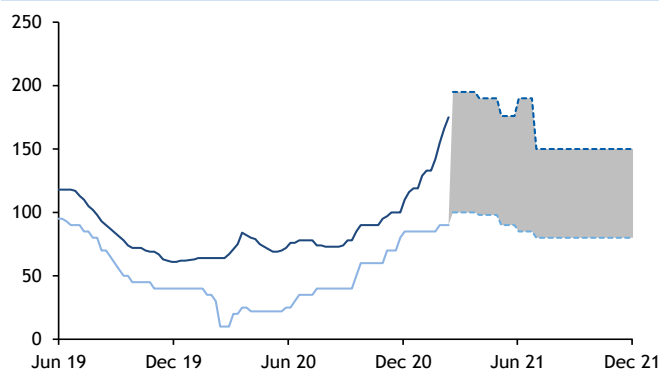


## International pricing series

Charts show high-low range, actual and forecast prices in \$/t

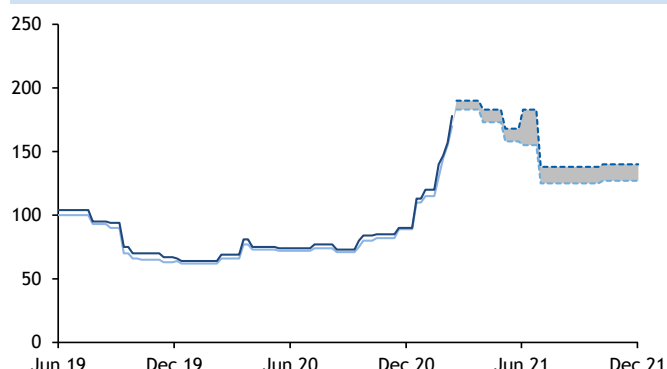
### China cfr: Firm

Granular prices are forecast at \$195/t cfr in March and molten prices at \$100/t cfr, as demand for cargoes remains high and availability is tight.



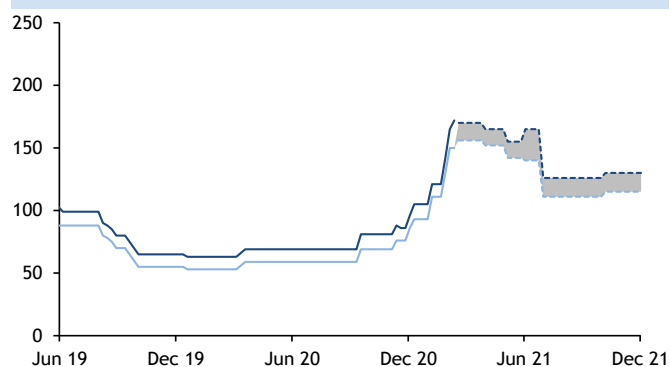
### Brazil cfr: Firm

Delivered prices are forecast to firm to \$183-190/t in March, in line with rising Middle East prices, while FSU tonnage remains limited to contract volumes.



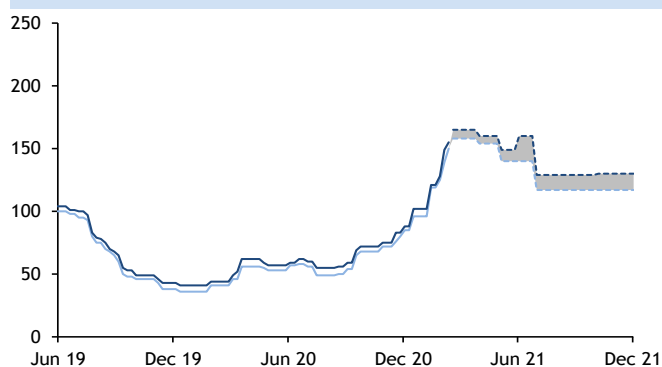
### North Africa cfr: Firm to stable

Delivered prices are forecast at \$156-170/t cfr in March, but some easing is expected in the second quarter of this year amid increased availability from the FSU.



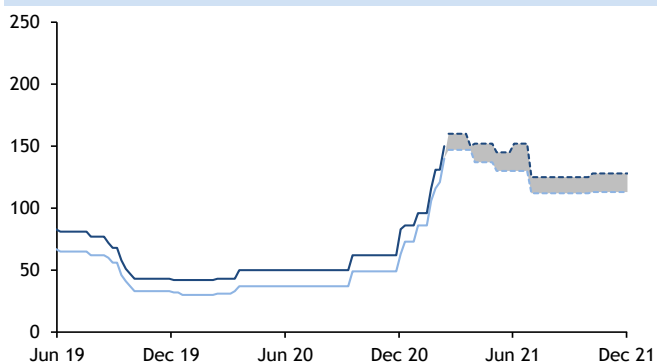
### Middle East fob: Firm

Prices are expected to remain firm into March, ranging at \$158-165/t fob, amid tight supply from the region and strong demand from China.



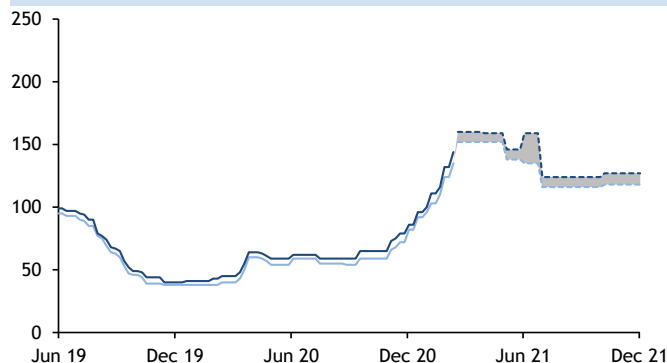
### Black Sea fob: Firm

We expect fob prices to range at \$147-160/t in March, in line with global market sentiment. Winter logistical restrictions will ease in the second quarter.



### Vancouver fob: Firm

Prices are forecast to range at \$152-160/t fob in March, but we expect prices to ease into the second quarter as increased volumes reach the port.



## Legislation update

### IMO 2020

The pandemic that broke early last year went a long way towards obscuring the impact of the IMO marine fuel specification change.

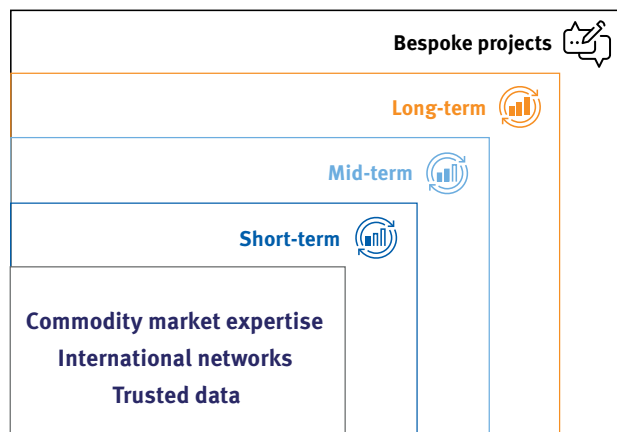
We still do not know how easily the system can support 0.5pc-sulphur bunker product to the shipping industry in a market with a normal level of demand for refined fuel products.

As markets return to normal, it will be interesting to see the extent to which Covid-10 delayed the full impact of IMO 2020.

Demand for high-sulphur fuel oil (HSFO) bunkers has started to rebound as more vessels use scrubbers – HSFO sales in the three main bunker hubs were almost 50pc up on January-March in the fourth quarter of last year. But this is still just 30pc of typical levels in 2019.

*For more information on IMO developments, please see Argus Marine Fuels Outlook.*

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