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## Six-Month Price Forecasts

**Urea** prices will soften further in January owing to delays to India's import tender, lower European natural-gas prices and ample supply before they climb again in February/March on seasonal trends. US demand is expected to wane post April while other benchmarks will see an uptick in June on increased purchasing.

**UAN** prices are revised further down on ample supply and limited demand, with demand-driven support in late Q1 expected to be offset by seasonal declines through late-Q2 and lower natural-gas feedstock costs.

**Ammonia** prices in Europe will follow a downwards trajectory due to a slide in TTF gas prices and a reduction in European ammonia production costs.

**DAP/MAP** prices in most markets are expected to fall through June on decreased costs and limited demand, though the Americas should see some support during the first quarter 2023.

**Potash** spot prices are forecast to rebound slightly further in Brazil during Q1 before renewing declines in Q2. A fresh India MOP contract price is expected to be agreed in February at a price of \$475/t CFR.

**Sulphur** prices are expected to continue declining, reaching a low point in the second quarter as supply growth outpaces demand. Demand is unlikely to pick up until later in 2023, leading to downwards price pressure and keeping sulphur cheap relative to phosphates, despite price falls in the latter.

**Sulphuric acid** prices are expected to remain relatively stable through the forecast period, with some slight increases as H2 approaches. High freights and limited demand may push down FOB prices, particularly if China exports are strong.

## ► Monthly Forecast

Commodity/Type	Unit	DEC 2022 (Actual)	JAN 2023	FEB 2023	MAR 2023	APR 2023	MAY 2023	JUN 2023
<b>UREA</b>								
<b>Prilled Bulk FOB</b>								
Black Sea Spot	USD/t	444	400	420	440	420	380	390
Baltic Sea Spot	USD/t	448	400	420	440	420	380	390
China Spot	USD/t	494	420	440	460	440	400	410
<b>Granular Bulk FOB</b>								
Middle East (non US netback) Spot	USD/t	495	440	460	480	460	420	430
Middle East (all netbacks) Spot	USD/t	480	440	460	480	470	440	440
Egypt Spot	USD/t	548	480	500	510	480	440	460
US New Orleans barge Spot	USD/st	468	440	460	475	490	470	460
<b>UAN</b>								
<b>Bulk FOB</b>								
Baltic Sea 32% Spot	USD/t	608	576	581	592	576	566	555
US New Orleans barge 32% Spot	USD/st	491	480	490	505	510	490	475
<b>Bulk FCA</b>								
Rouen 30% Spot	EUR/t	599	590	595	605	590	580	570
<b>AMMONIA</b>								
<b>Bulk FOB</b>								
Black Sea Spot	USD/t		NOM	NOM	NOM	NOM	NOM	NOM
Baltic Sea Spot	USD/t		NOM	NOM	NOM	NOM	NOM	NOM
Middle East Spot	USD/t	896	795	745	720	645	620	595
Caribbean Spot	USD/t	988	840	790	765	690	665	640
Southeast Asia Spot	USD/t	811	730	680	660	580	560	530
<b>Bulk CFR</b>								
NW Europe duty paid Spot/Contract	USD/t	1,042	900	850	825	750	725	700
Far East Spot/Contract	USD/t	839	770	720	695	620	595	570
US Tampa Spot	USD/t	1,030	975	825	800	725	700	675
<b>DAP</b>								
<b>Bulk FOB</b>								
US New Orleans barge Spot	USD/st	626	605	615	615	605	595	565
US Gulf/Tampa Spot	USD/t	660	650	655	655	625	595	570
Baltic/Black Sea Spot	USD/t	687	660	660	645	625	600	575
Morocco Spot	USD/t	739	715	690	670	645	620	595
Saudi Arabia Spot	USD/t	711	680	660	640	620	595	560
China Spot	USD/t	705	680	NOM	NOM	615	590	565
<b>Bulk CFR</b>								
India Spot	USD/t	723	690	670	650	630	605	580
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Terneuzen/Ghent Spot	USD/t	827	805	780	755	735	710	680
<b>MAP</b>								
<b>Granular Bulk CFR</b>								
Brazil Spot	USD/t	621	660	680	680	650	625	600
<b>POTASH</b>								
<b>Standard Bulk CFR</b>								
China Contract	USD/t	590	590	590	590	590	425	425
India 180 days Contract	USD/t	590	590	475	475	475	475	425
Southeast Asia Spot	USD/t	560	515	495	490	472	447	442
<b>Granular Bulk FOB</b>								
US Midwest Spot	USD/st	570	520	505	515	500	470	435
<b>Granular Bulk CFR</b>								
Brazil Spot	USD/t	516	524	536	541	523	498	463
<b>SULPHUR</b>								
<b>Bulk FOB</b>								
Middle East Spot	USD/t	178	153	148	130	113	98	107
Vancouver Spot	USD/t	166	152	147	130	111	97	105
<b>Bulk CFR</b>								
China (crushed lump & gran) Spot	USD/t	193	170	167	150	132	118	128
Brazil Spot	USD/t	205	168	165	152	133	117	125
<b>SULPHURIC ACID</b>								
<b>Bulk FOB</b>								
NW Europe 30 days Spot	USD/t	36	35	33	32	30	33	35
<b>Bulk CFR</b>								
Chile Spot	USD/t	145	145	147	150	150	153	155

## Ample supply and lower gas costs dictate urea outlook

Delays to India's import tender, lower European natural-gas prices and ample supply will lead to a further softening in urea prices in January before they climb again in February/March on seasonal trends. US demand is expected to wane post April while other benchmarks will see an uptick in June on increased purchasing.

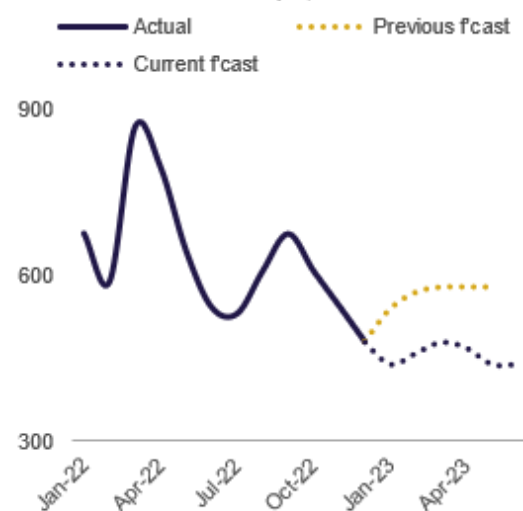
**Key risk: DOWNSIDE** Sustained lower natural-gas costs combined with ample supply and lifting of European duties on nitrogen fertilizer imports could result in even lower numbers.

### Monthly Price Forecasts

Urea FOB Prilled Bulk	units	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
		actual						
Black Sea	\$/t	444	400	420	440	420	380	390
Baltic Sea	\$/t	448	400	420	440	420	380	390
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### Natural gas prices fall improving affordability

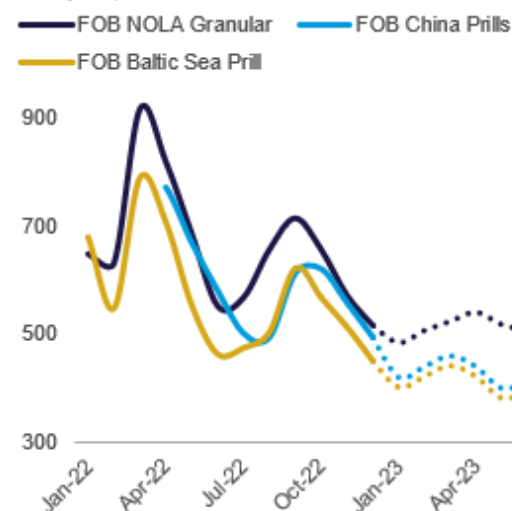
Urea Gran. FOB Mid. East spot, USD/t



DATA: CRU

### Ample supply impacting prices continues

Urea price, FOB USD/t

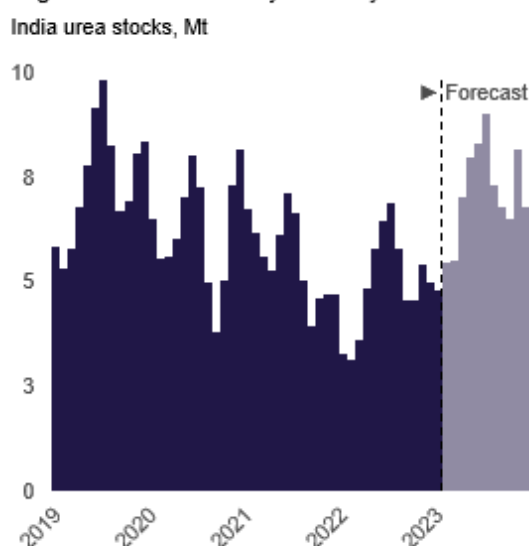


DATA: CRU

The European Commission's suspension of tariffs and duties for certain nitrogen fertilizers for at least six months (excluding Russia/Belarus) on 16 December was welcomed by most suppliers with high inventories ahead of Christmas holidays. Only North African producers who enjoyed duty-free access into Europe were disappointed by the decision.

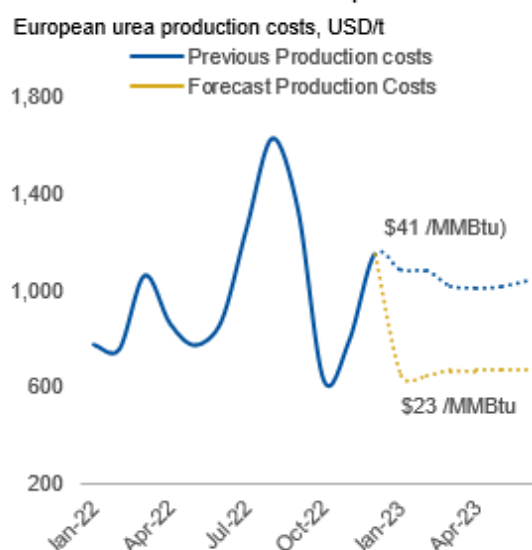
Europe is now receiving competitive spot offers for tonnage from Southeast Asia, the Middle East, Nigeria and North America, placing downwards pressure on Egyptian prices. January 2023 already saw prices dip to \$495/t FOB, the benchmark's lowest point since September, 2021. Further declines to \$480/t FOB are anticipated before European demand improves and helps suppliers get back over \$500/t FOB by March. Seasonally slow enquiries will see Egypt then fall to \$440/t FOB.

### High India stocks delay January tender



DATA: CRU Urea Market Outlook

### Warm weather causes fall in production costs



DATA: CRU

Middle Eastern non-US netbacks will continue to hover in the mid-\$400s/t FOB in January/February with ample availability a concern in India's absence. An improvement to \$480/t FOB is expected end Q1, with values then falling to a low of \$420/t FOB by May.

US NOLA granular barge prices dipped since the New Year due to a lack of interest, with an average \$440/t FOB predicted for January. Strong demand for urea is expected to return in Q1 given low stocks and its competitive price versus UAN, bringing prices to \$490/st FOB by April. Following the top dress season, seasonal trends point to prices falling to \$460/st FOB as buying wears off.

US urea imports for 2022/23 are projected to trail the prior market year through February 2021/22, according to US Department of Commerce import data through November and expectations among some US traders. The estimated import shortfall of about 1.3 M t for the current market year through February can be covered in subsequent months. The sharp decline in the average price for urea at New Orleans from the end of March 2022 at \$903/st FOB to \$583/st FOB at the end of May reflected brisk re-export business from the oversupplied US.

Chinese urea exports in 2023 will likely exceed those in 2022 with prices to follow the global trend. Prills prices are forecast to fluctuate within a \$50/t range peaking at \$460/t FOB. Following the spring planting season, additional stocks could be sold to the international market.

FSU tonnage continues to trade at a slight discount to the rest of the world due to more limited offtake options. Tonnage is expected to feature in future India tenders, with prills prices dipping below \$400/t FOB in May/June.

## UAN prices under demand, supply-side pressures

UAN prices remain under pressure on both sides of the Atlantic as limited demand and increasingly modest natural-gas prices conspire to steadily weaken market sentiment.

**Key risk: DOWNSIDE** Declining raw-material feedstock costs and more competitively priced urea may withdraw price support for UAN in both Europe and the US, with Q1 demand set to largely depend on the rate of switching from UAN to urea.

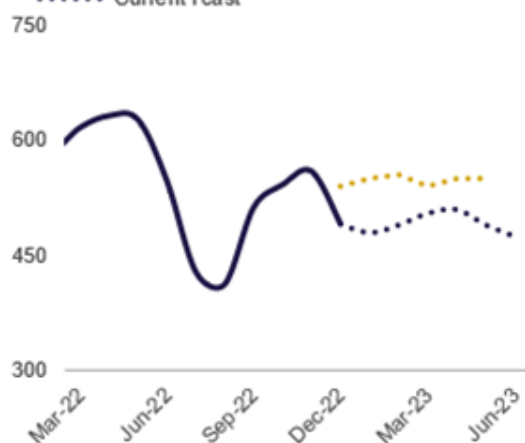
### Monthly Price Forecasts

UAN FOB	units	Dec-22 actual	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
US NOLA barge 32% Spot	\$/st	491	480	490	505	510	490	475
Baltic Sea 32% Spot	\$/t	608	576	581	592	576	566	555
<b>UAN FCA</b>								
Rouen 30% Spot	EUR/t	599	590	595	605	590	580	570

UAN NOLA prices revised down to account for increasingly affordable urea

UAN Bulk FOB US NOLA, USD/st

— Actual      ····· Previous fcast  
 ····· Current fcast

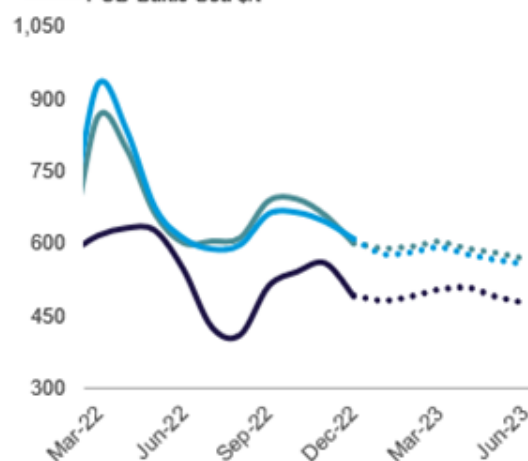


DATA: CRU

Prices to remain supported in 2023 Q1

UAN prices, local currency

— FOB NOLA \$/st      — FCA Rouen €/t  
 — FOB Baltic Sea \$/t



DATA: CRU

UAN-30 prices at Rouen are revised down further this month to account for a lull in market activity throughout December and into early January 2023.

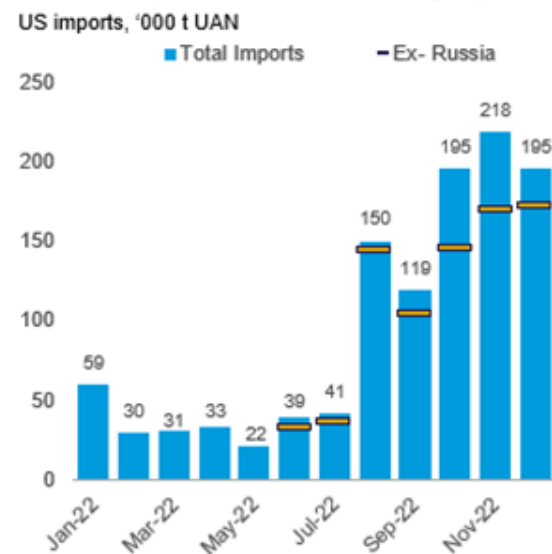
The expectation remains that there is still UAN purchasing to be done in Europe, with the next buying period likely to commence around late-January through to as late as March ahead of the spring application season.

There will still likely be some switching between UAN and urea, with some market participants suggesting that around 20% of traditional UAN buyers may opt for urea. This is prevalent in regions where there is significant N buying to be done, most notably Germany. Should switching occur, UAN demand – and subsequent support for prices – may be negatively impacted.

The extent to which prices will be supported by demand-side factors may be further limited by declining natural-gas feedstock costs in Europe, with average intraday gas prices at the Dutch TTF hub falling to as low as €65.02/MWh early 5 January, the lowest daily average since 20 January, 2022.

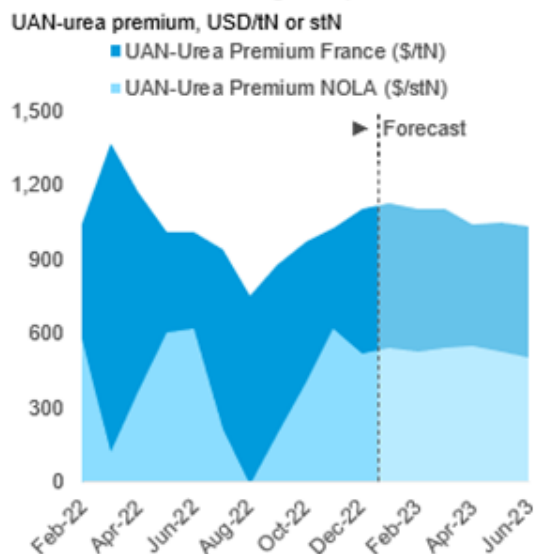
Prices should begin to tail off during Q2 in line with seasonal trends, with prices likely to move down towards the mid-€500s/t FCA ahead of the summer lull.

**US UAN imports from Russia have jumped**



DATA: Descartes Datamyne

**UAN to continue selling at a premium to urea**



DATA: CRU

Across the Atlantic, prices at New Orleans also remain under pressure on ample supply and currently limited demand. Demand should improve throughout February-March as buyers return to the market ahead of the side-dress application period in June-July, with prices peaking in early Q2 at around \$510/st FOB.

Latest reports suggest US UAN buying may be behind by around 20-30%, depending on the region. Still, like Europe, there may be some switching to more affordable urea, with urea likely to compete heavily with UAN for US wheat application.

Still, it is likely that urea prices need to improve before UAN can expect further increases, with switching between nitrogen products rarely occurring in significant volumes.

Nevertheless, UAN's recent US trajectory could affect top-dress choices for some growers this spring if its premium over urea does not narrow. A comparison of early January nitrogen costs to retailers shows granular urea just over \$11/unit versus UAN at \$15.16/unit.

On the supply side, despite severe winter weather conditions that enveloped the US during December and the subsequent temporary plant curtailments that ensued, most nitrogen producers are said to be running smoothly, with overall US stocks still reasonably high at both the producer and farmer level. With some plants still down there is some additional minor supply-side support for prices in the immediate term.

US prices should begin to decline in May-June to account for seasonal downturns, with an influx of Russian supply likely available throughout the duration of 2023 H1.

## Ammonia price expected to slide as gas falls

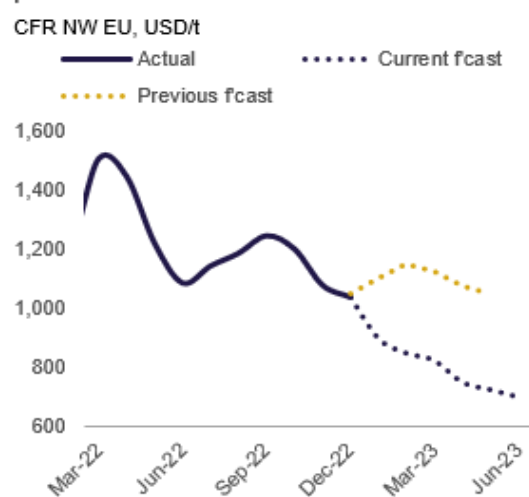
Ammonia prices in Europe will follow a downwards trajectory due to a slide in TTF gas prices and a reduction in European ammonia production costs.

**Key risk: UPSIDE** The current forecast could change again if cold weather returns to Europe and gas prices move back up again.

### Monthly Price Forecasts

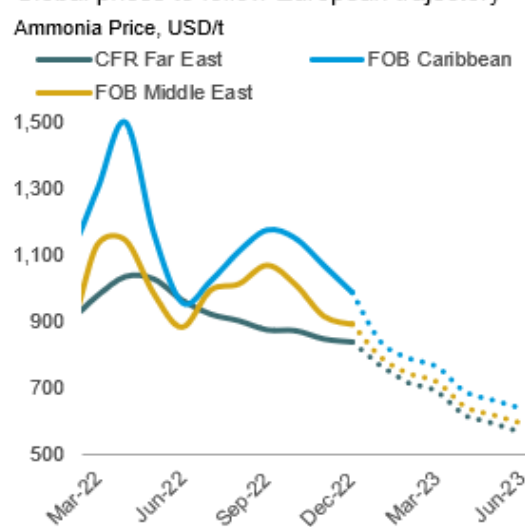
Ammonia FOB	units	Dec-22						
		actual	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Black Sea Spot	\$/t	NM	NM	NM	NM	NM	NM	NM
Baltic Sea Spot	\$/t	NM	NM	NM	NM	NM	NM	NM
Middle East Spot	\$/t	896	795	745	720	645	620	595
Caribbean Spot	\$/t	988	840	790	765	690	665	640
Southeast Asia Spot (FOB)	\$/t	811	730	680	660	580	560	530
<b>Ammonia CFR</b>								
Far East Spot/Contract (CFR)	\$/t	839	770	720	695	620	595	570
US Tampa Spot		1,030	975	825	800	725	700	675
NW Europe DDP Spot/Contract	\$/t	1,042	900	850	825	750	725	700

### European prices pressured by falling gas prices



DATA: CRU

### Global prices to follow European trajectory



DATA: CRU

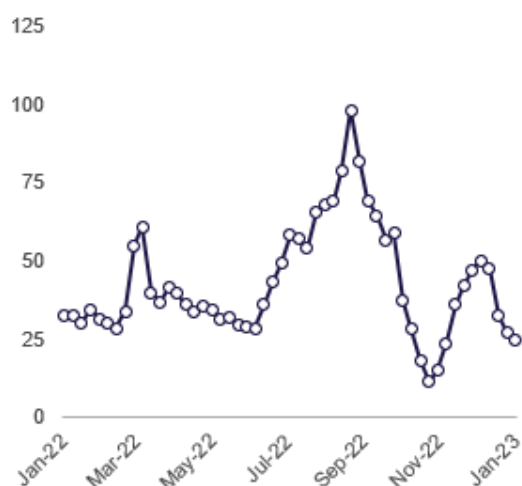
TTF gas prices changed direction as we moved into 2023 and, based on the futures gas curve, we expect ammonia prices in Europe to follow a downwards trajectory.

The ammonia price for January 2023 is expected to slide to \$900/t CFR NW Europe duty paid/free with the average for December 2022 recorded at \$1,042/t CFR. The price is expected to stay soft during the first quarter. Ammonia prices were struggling to move up even before the gas price trend reversed and the perceived oversupply in the global market is expected to weigh on prices with March forecast to slide to \$825/t CFR Northwest Europe. Further reductions are expected in the second quarter as fertilizer demand in Europe wanes. At this point, the forecast in the first half of 2023 does not anticipate the return of any significant Russian exports to the market.

Middle East prices are expected to slide as a result of this fall in Europe and no support for higher numbers is foreseen in either India or the Far East. A price of \$745/t FOB Middle East spot is forecast for March with further falls in the second quarter reaching \$595/t FOB by June.

## European gas prices falling amid low demand

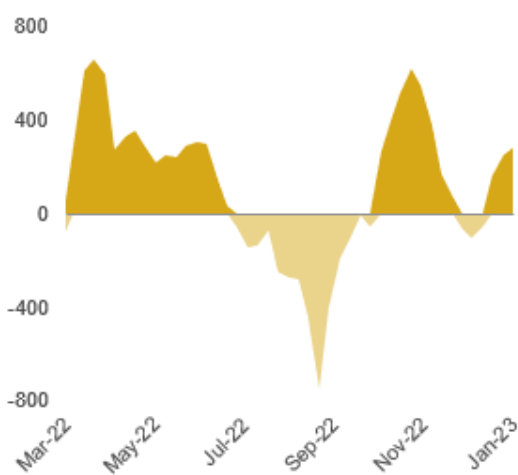
Weekly average day ahead TTF gas price, \$/MMBtu



DATA: ICE

## European AN profitability

Weekly European AN profitability, USD/t AN



DATA: CRU

Southeast Asian prices are also expected to dip with more product available and less support from Europe. The February price is forecast to fall to \$680/t FOB.

With lower Middle East and Southeast Asia prices, contract levels will ease in the Far East and, with reports that fewer contracts have been signed for 2023, even lower numbers are expected as buyers pick off spot tonnes. The Far East price is forecast to reach \$695/t CFR by March.

Domestic prices in China are a little firmer but they remain way below replacement CFR values so import demand is unlikely to improve to any great extent. The reduction in global values is expected to lead to fewer exports from China.

Tampa will slide alongside Europe. Without the support of strong European demand at elevated prices, Tampa is expected to reflect activities closer to home. Urea and UAN prices have fallen dramatically in the last few months and phosphates also struggled to find a floor. There has yet to be a very positive reaction to winter fill/spring pre-pay ammonia prices in the US and lower numbers are expected in the coming weeks. Crop prices continue to offer support but oversupply in global nitrogen fertilizer markets is expected to be too great to sustain current ammonia prices. Tampa is forecast to reach \$800/t CFR by March with further erosion in the second quarter.



## Lower costs and poor demand to weigh on DAP/MAP prices

The majority of global DAP/MAP prices are expected to be lower through June on decreased costs and limited demand, though the Americas should see some support during the first quarter of the year.

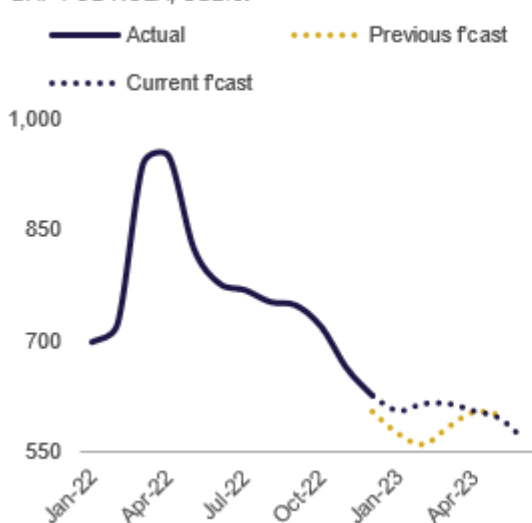
**Key risk: UPSIDE** that better affordability draws a larger-than-expected price rise in the Americas during Q1.

### Monthly Price Forecasts

		Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
<b>DAP FOB Bulk</b>	<b>units</b>	<b>actual</b>						
US Tampa Spot	\$/t	660	650	655	655	625	595	570
Baltic/Black Sea Spot	\$/t	687	660	660	645	625	600	575
Morocco Spot	\$/t	739	715	690	670	645	620	595
Saudi Arabia Spot	\$/t	711	680	660	640	620	595	560
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### US DAP prices revised up in the near term

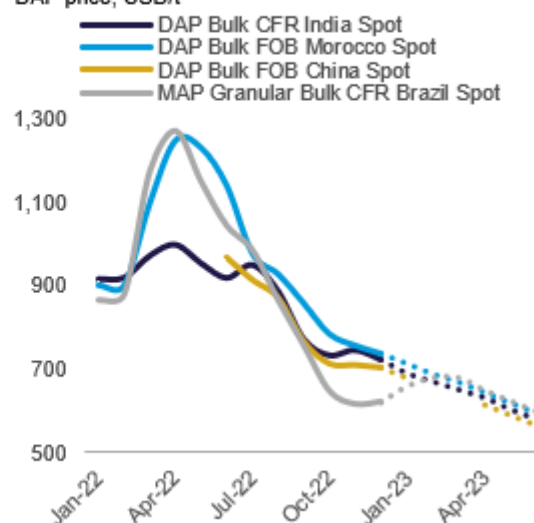
DAP FOB NOLA, USD/st



DATA: CRU

### DAP/MAP price declines to largely continue

DAP price, USD/t



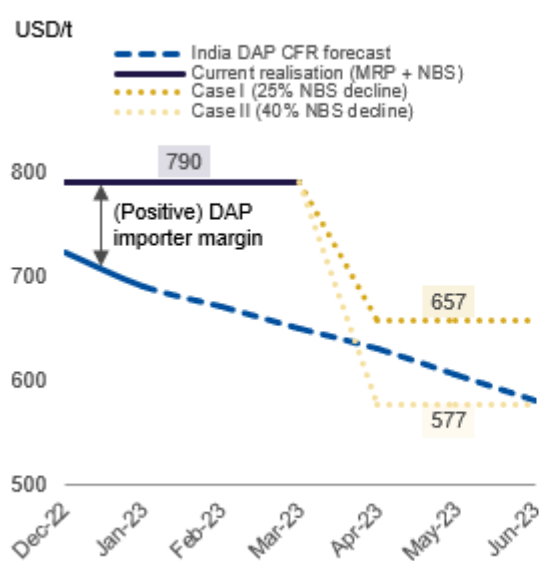
DATA: CRU

Demand remains weak across a number of markets, particularly Europe and east of Suez, though seasonal buying has picked up in Latin America and the US should follow soon.

Low DAP/MAP imports in the Americas during 2022 H2 have depleted stocks and affordability has greatly improved on lower fertilizer prices and strong crop prices.

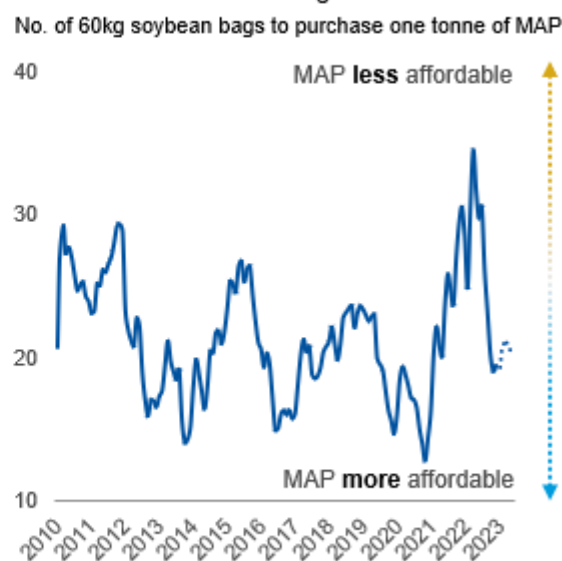
Supply is also likely to remain limited in the near-term with no indications Morocco is yet ramping up exports from very low rates in Q4 and strong export controls still in place from China.

## India scenarios at 25-40% DAP NBS decline



DATA: CRU, India DoF, S&amp;P Global

## MAP barter ratio becoming more favourable



DATA: Agrolink, CRU

Brazil MAP prices have gained \$50/t to \$645-655/t CFR since the start of December and are expected to extend gains to \$680-700/t CFR in February. Recent prices at New Orleans are expected to stabilise around \$600-610/st FOB after recent declines and may see a slight increase to \$615-620/st FOB by the end of Q1.

Still, cost expectations have dropped since the last forecast, particularly for ammonia, on a slump in natural-gas prices. Gradual and limited declines in global crop prices are expected through the forecast.

DAP/MAP availability from China is expected to surge from April/May after the spring domestic season while OCP is forecast to transition back to higher export volumes through 2023 as new capacity comes online (15 Mt granular phosphates in 2023 against roughly 9.5 Mt exports in 2022).

India and Pakistan are both now expected to have higher comparable DAP stocks entering April while India is seeking to cut its fertilizer subsidy support by as much as 25-40% for the Kharif season. If transferred directly to the DAP subsidy this reflects a \$133-213/t cut, bringing the breakeven to import and sell inland down to a high of \$657/t CFR and possibly as low as \$577/t CFR.

Europe is seeing particularly weak DAP demand on premium prices against global markets while Lithuania's Lifosa should add more availability to the region through the forecast.

Ongoing price declines in the Indian subcontinent and Europe should extend through the forecast. India's DAP prices are expected to fall from \$690-705/t CFR entering January down to \$580-600/t CFR in June while Northwest Europe DAP is expected to drop from \$810-830/t FCA Terneuzen/Ghent down to \$680-700/t FCA.

Europe's DAP price premium on the lowest-priced DAP/MAP import market has already declined to \$170/t from more than \$300/t in mid-2022. This is expected to keep falling to around a \$100/t premium by June.

As seasonal demand in the Americas slows entering Q2, prices in the US and Brazil are also expected to drop. US NOLA DAP is forecast to fall roughly \$50/st to \$565/st FOB while Brazil MAP should drop \$80/t to \$600/t CFR during Q2.

## India potash contract forecast at \$475/t CFR

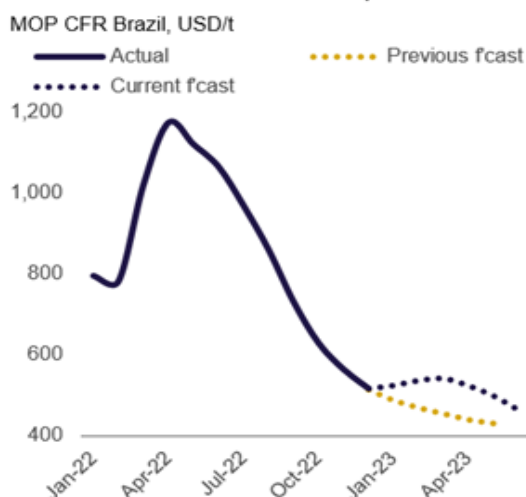
CRU expects a fresh India potash contract price to be agreed in February at a decline of \$110/t while spot prices in Brazil and Southeast Asia are forecast to move in opposing directions through Q1.

**Key risk: DOWNSIDE** If Chinese and/or Indian MOP contracts are settled later than expected, then prices for both the contracts and spot markets would likely be lower than forecast.

### Monthly Price Forecasts

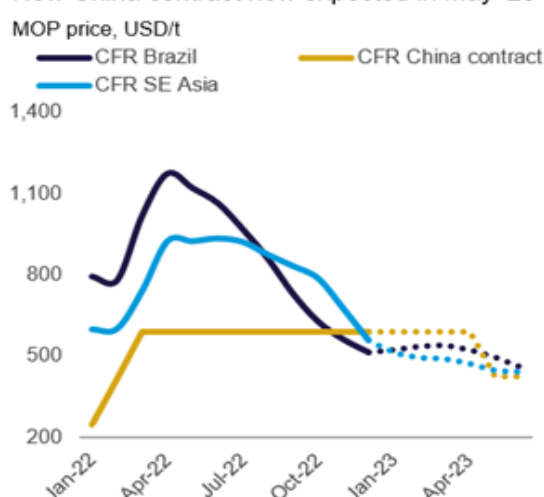
	units	Dec-22 actual	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
<b>MOP Standard CFR</b>								
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### CFR Brazil to see short-term uptick



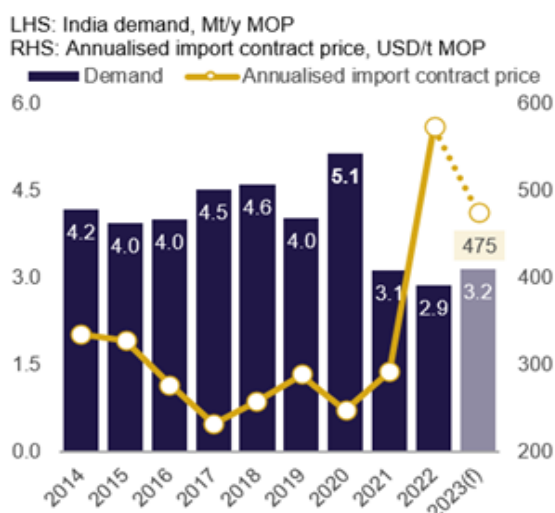
DATA: CRU

### New China contract now expected in May '23



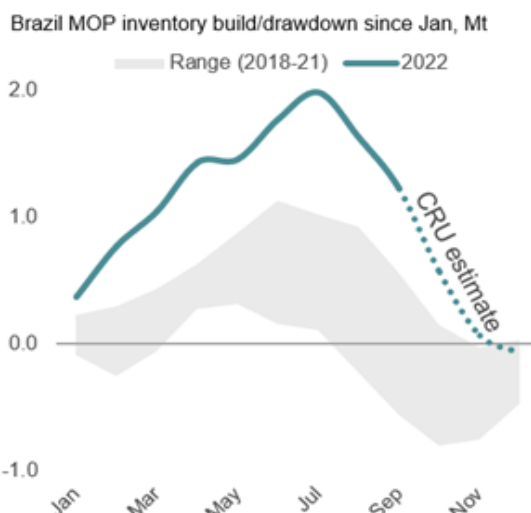
DATA: CRU

### India MOP demand to remain weak in 2023



DATA: CRU Potassium Chloride Market Outlook

### Brazil potash stocks have fallen fast in H2



DATA: ANDA, CRU

The latest market gossip has suggested that a new India standard MOP contract will be agreed during January at a price of around \$450-500/t CFR, though confirmation of formal negotiations is lacking. Despite negative import margins, India likely does require product and is forecast to agree contracts for 2023 supply with producers at a price of \$475/t CFR in February, down from \$590/t CFR in 2022.

India's forecast contract price is largely based on the forecast for standard MOP spot prices in Southeast Asia. This market is expected to fall further over the short term due to weak demand and greater sales competition, reaching \$442/t CFR in June compared with \$560/t CFR in December.

By contrast, China is expected to delay a fresh import contract settlement while global spot prices are declining. Chinese contracts for 2023 are forecast to be signed in May at a price of \$425/t CFR, down \$165/t year on year. China's MOP port inventories were estimated at around 2.5 Mt at the end of December. The country's supply is expected to be sufficient to allow importers to delay a settlement for a few months in hopes of agreeing a more favourable price.

India is then expected to renegotiate its contract price down to the same level as China. This scenario most recently occurred in 2021 when India also initially settled a higher price than China. Demand in India through 2023 is expected by CRU to remain weak as the country grapples with affordability issues which are reportedly set to exacerbated by a subsidy cut from 1 April.

Brazil's granular MOP spot prices are forecast to rebound slightly further through Q1 on the back of improved demand, firming to an average of \$541/t CF for March before starting to soften again thereafter. Improved demand is being temporarily encouraged by early purchases for the Safrinha season, stock draw-down, better affordability, and Brazilian MAP price rises.

US Midwest granular potash prices are similarly forecast to rebound briefly in March, though further declines are likely in the meantime and thereafter in Q2. Prices in the Midwest are forecast to fall to an average of \$435/st FOB in June – \$135/st below the December average. Some market participants suggest that increases are possible, though they concede that higher prices would yield increased supply.

Potash supply from Russia and Belarus is expected to continue to improve through 2023, more than offsetting initially lower output from Canada. Demand is set to improve as prices correct lower, though not to the extent that price declines will be halted.

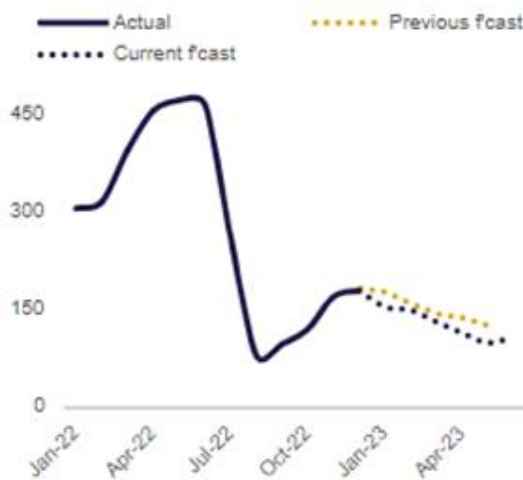
## Sulphur price falls likely to continue into Q2

Sulphur prices are expected to continue declining, reaching a low point in the second quarter as supply growth outpaces demand.

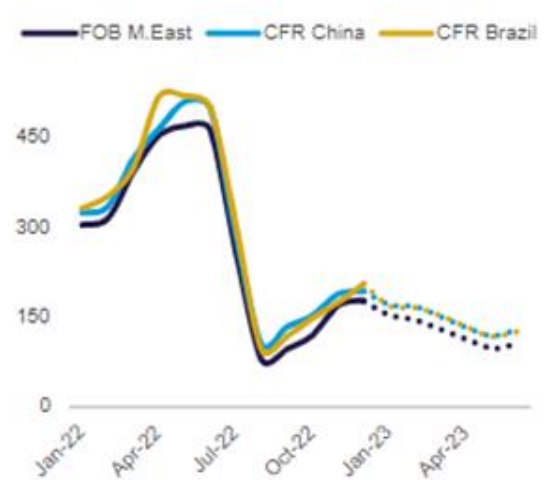
**Key risk: UPSIDE** Morocco and China may provide additional support if fertilizer production is stronger than expected.

### Monthly Price Forecasts

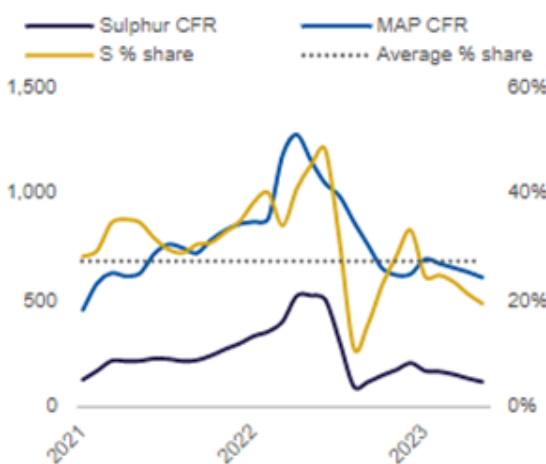
		Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
<b>Sulphur FOB Bulk</b>	<b>units</b>	<b>actual</b>						
Middle East Spot	\$/t	178	153	148	130	113	98	107
Vancouver Spot	\$/t	166	152	147	130	111	97	105
<b>Sulphur CFR Bulk</b>								
China Spot *	\$/t	193	170	167	150	132	118	128
Brazil Spot	\$/t	205	168	165	152	133	117	125



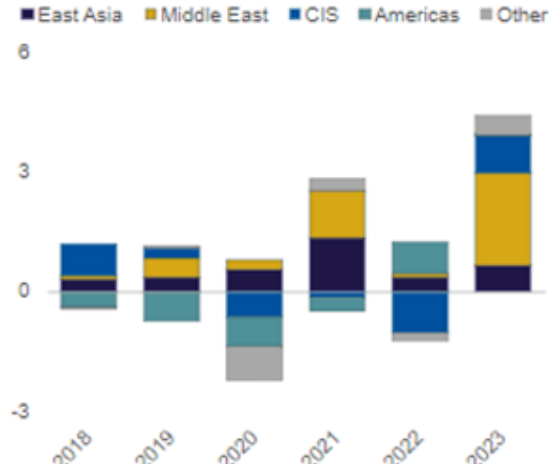
DATA: CRU



DATA: CRU



DATA: CRU Sulphur Market Outlook



DATA: CRU Sulphur Market Outlook

Sulphur prices plunged in late July and early August at rates never seen before. During Q4, prices more than doubled from those lows despite weakness in downstream markets, but prices in recent weeks have started falling as expected, with the pace of declines to date more rapid than forecast.

The Middle East spot FOB is 68% below the \$470-485/t FOB of mid-June 2022, which represented the highest average since September 2008. The benchmark has now fallen 15% in less than a month, though it is still up 114% from the early-August 2022 low of \$70/t.

Phosphate producers in China, the largest importer of sulphur, have cut production rates amid fertilizer export restrictions, limiting raw materials requirements. Continued export restrictions during the forecast period will keep a lid on demand.

Demand from Morocco's OCP is likely to be steady at best for the next few months, as it has bought more than required for production to date. The company is expected to increase its output later in the forecast period, but the scale of any production increase is uncertain, and the company likely has good stocks of finished fertilizer and/or sulphur.

Phosphates prices are expected to continue falling, but this is partly due to expected increases in production.

Non-fertilizer demand sectors have also weakened, particularly in industrial sectors, though affordability for metals markets remains good given high downstream prices.

Indonesia bought large volumes at the market bottom and then bought more at the highest prices in Q4. Overall sulphur demand in Indonesia for nickel is set to increase further next year.

On the supply side, Russian export restrictions limited the volume of sulphur leaving the country in Q4, but restrictions have recently eased and Russian exports have picked up.

Production issues at Kashagan have limited Kazakh supply in Q4, but the site is once again producing and sulphur exports are resuming, adding substantial volume to the market.

Production at refineries in other regions has been high to meet demand for refined products, and many have been using relatively sour refinery inputs, leading to more sulphur output per barrel, particularly in the US and Europe. European refineries are expecting to use sweeter crude over the coming months.

New project commissions and expansions are expected to accelerate during the forecast period. New capacity in Saudi Arabia, Kuwait, and Malaysia can access the market with low logistics costs, adding to the surplus over the coming months. Domestic production in China is also set to continue increasing.

Logistics costs for supply from origins with high costs to port were not covered at spot prices following the Q3 collapse, but prices are now high enough to draw out such supply, bringing additional tonnes to the market. Lower freight rates are also making such sales easier.

Overall, the growth in sulphur production is expected to outpace demand over the coming months, particularly as demand is unlikely to pick up until later in 2023, leading to downwards price pressure and keeping sulphur cheap relative to phosphates, despite price falls in the latter.

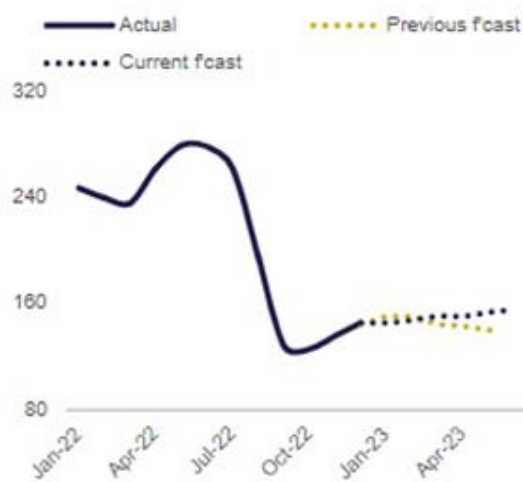
## Acid prices expected steady as freights maintain pressure

Sulphuric acid prices are expected to remain relatively stable through the forecast period, with some slight increases as H2 approaches.

**Key risk: DOWNSIDE** High freights and limited demand may push down FOB prices, particularly if China exports are strong.

### Monthly Price Forecasts

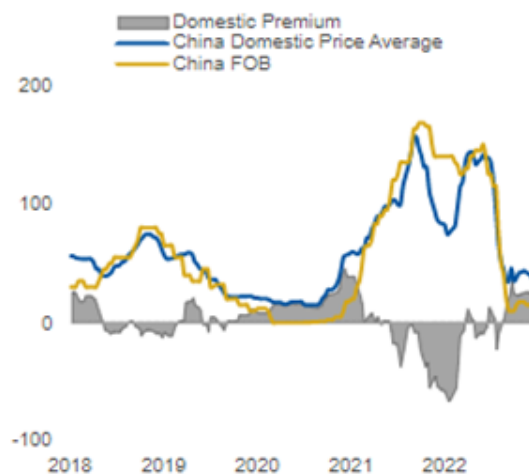
		Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
<b>Sulphuric Acid FOB Bulk</b>	<b>units</b>	<b>actual</b>						
NW Europe Spot	\$/t	36	35	33	32	30	33	35
<b>Sulphuric Acid CFR Bulk</b>								
Chile Spot	\$/t	145	145	147	150	150	153	155



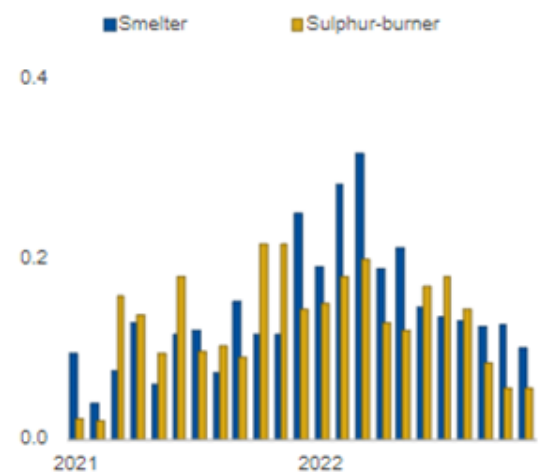
DATA: CRU



DATA: CRU



DATA: CRU Sulphuric Acid Market Outlook



DATA: CRU, S&P Global

China, which in recent years has swung from a net importer to the world's biggest exporter, is able to export even more acid than it did last year, but is only likely to do so if demand creates a price incentive, while softer demand would likely reduce this key source of seaborne availability as sellers focus more on domestic demand.

Smelters in Japan and South Korea are also pushing for higher prices, but appear to have some excess availability for early 2023 at least.

Recent and upcoming smelter maintenances and shutdowns in Chile tightened the domestic market, supporting import requirements, while affordability relative to copper is good. Still, a range of forward purchases were made at low prices for 2023 along with annual contract deals, and buyers are well covered for Q1 and, to some extent, Q2.

Annual contracts settled in a \$143-152/t CFR range, which marks a sharp fall from 2022's \$230-250/t CFR but is still higher than every other annual contract range of the past 10 years.

India import demand should remain firm as fertilizer production rates are likely to be high and buyers cannot support all phosphates production with sulphur. Still, affordability is an issue, and sulphur is an attractive alternative to acid, as it is in many other import destinations.

Persistently high freight rates make it difficult for buyers to secure lower CFR prices even at very low FOBs.

In Europe, sulphur burners have been running strongly due to high margins on acid as well as high energy prices, while European demand is constrained, leading to improving acid availability within Europe, although this is partially offset by production cuts at zinc smelters because of high energy costs.

Morocco's imports increased to a new record high in 2021, and OCP's requirements remained strong over the first few months of 2022, but acid purchases by the world's largest buyer have since dried up, removing a key outlet for European surplus. OCP's imports are still expected to be around 1.2 Mt this year, but this is uncertain and would already be well below recent imports of over 2 Mt/year.

Improving availability of smelter acid and sulphur in the US Gulf is limiting merchant acid import requirements there, though West Coast demand should remain firm due to production issues.

Other import destinations such as Brazil had to purchase more acid from Asia in 2022 H1 due to the lack of European availability, but lower fertilizer demand and greater European availability has added downwards pressure there.

Overall, high freights provide some support to CFRs and there is sufficient overall demand to push up delivered prices slightly, particularly as affordability remains good relative to downstream commodities. Still, limited spot appetite from buyers, improved sulphur availability, and softening downstream markets will limit price upside and keep downwards pressure on some benchmarks.





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# Fertilizer Week



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