Exhibit I-46

Mosaic plans to idle Louisiana operations

By **10/12 Industry Report Staff**

Mosaic headquarters in Minnesota (The Associated Press)

Mosaic Co. is idling its Louisiana phosphates operations in St. James to cut production by about 500,000 tons this year, as imports into the country have pushed down prices.

The move is intended to accelerate the reduction of high phosphate fertilizer inventories, and the company expects "a more balanced global supply-and-demand picture to emerge by 2020."

Prices of the fertilizer ingredient have been have been under pressure since late 2018 as demand remains weak and capacity expansions in Morocco and Saudi Arabia have increased output and exports, Reuters reports.

"Phosphate prices have declined further through the summer, with excess imports continuing to enter the U.S. on top of high channel inventories," President and CEO Joc O'Rourke said in a statement. "We expect our move to idle production to tighten supply and rebalance the market. Mosaic will prioritize shipments to meet key customer needs through the idling period."

The company will also initiate $250 million in stock repurchases under its existing share repurchase authorization, which has $850 million of remaining capacity, according to the announcement.

Mosaic operates its Faustina and Uncle Sam facilities in St. James Parish. At the Uncle Sam Facility, a turbo generator harnesses excess heat from sulfuric acid production. The cogeneration process allows Mosaic to harness "clean and green" energy. Uncle Sam produces phosphoric acid, which is then shipped across the river to the company's Faustina facility, producing ammonia to make MAP, DAP and other products.

Read the announcement.

Exhibit I-47

Phosphate Fertilizer

Market Outlook

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JANUARY 2020

SUMMARY

Prices start 2020 with tentative recovery

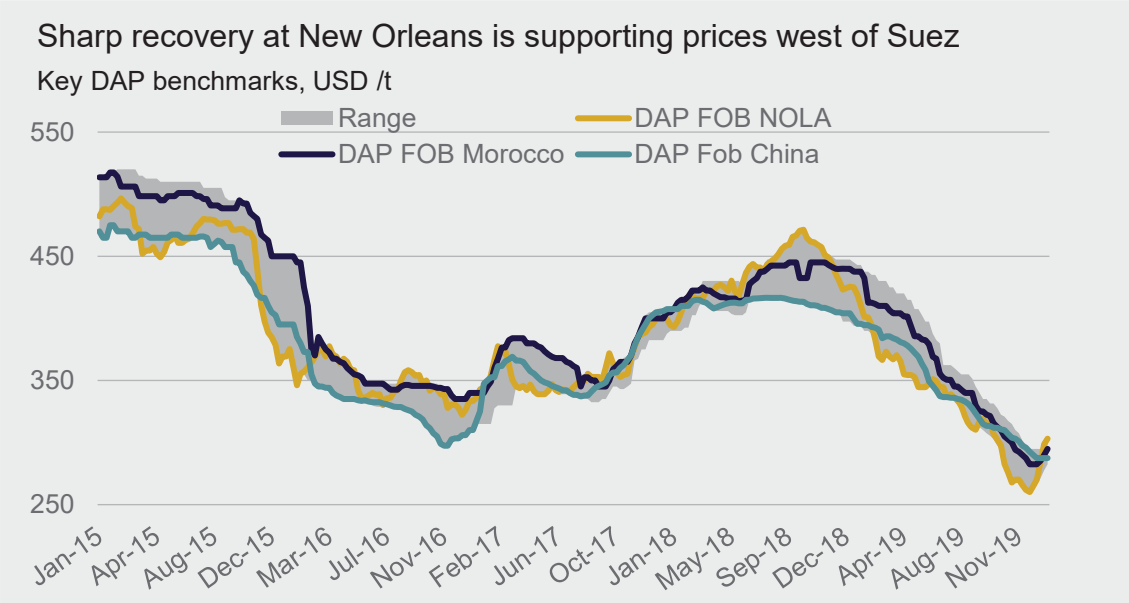
Since the October 2019 edition of this report, additional production/exports cuts have been announced and executed. China's 6+2 group of DAP producers, OCP, Mosaic and PhosAgro have all cut back in some form, and prices have finally turned upwards after a merciless downturn over 2019. DAP FOB New Orleans switched from the lowest-priced global DAP benchmark to the highest in January 2020. This has supported other price benchmarks west of the Suez Canal. Markets further east have stopped declining but remain stuck at long-term lows due to large inventories and a lull in demand. Rising demand in the Americas will more-than offset lower consumption in China and India in 2020, modestly tightening the supply and demand balance and supporting further price increases. However, price gains will be limited as OCP and Ma'aden continue to ramp up production. We expect demand to grow throughout the forecast period, gradually tightening the market and supporting further price gains. But with significant capacity expansions scheduled throughout the medium term, especially from OCP, these gains will be slow and face headwinds at the back end of our forecast.

► OUTLOOK SUMMARY

Table 1: Market Indicators

	2017	2018	2019	2020	2021	2022	2023	2024
DEMAND SIDE INDICATORS (million metric tonnes P_2O_5 unless otherwise specified):								
Global P_2O_5 fertilizer demand	47.7	46.6	46.6	47.5	48.2	48.9	49.7	50.4
Chinese DAP/MAP/TSP demand	9.5	9.4	8.8	8.5	8.4	8.2	8.2	8.0
Indian DAP imports	1.9	2.7	2.6	2.7	2.7	2.7	2.7	2.8
Brazilian MAP imports	2.0	1.8	2.3	2.1	2.1	2.2	2.2	2.3
SUPPLY SIDE INDICATORS (million metric tonnes P_2O_5 unless otherwise specified):								
Global phosphoric acid capacity	58.8	59.3	59.6	60.5	61.5	61.7	62.7	63.2
Global phosphoric acid utilization rates	78%	78%	77%	77%	77%	78%	78%	78%
Morocco phosphoric acid production	5.7	6.1	6.3	6.9	7.4	7.7	7.9	8.0
Chinese DAP/MAP/TSP exports	4.5	4.9	4.6	4.3	4.3	4.3	4.3	4.3
PRICE INDICATORS (USD/metric tonne product unless otherwise specified):								
MGA CFR INDIA (USD/t P_2O_5)	567	734	688	571	589	650	684	680
DAP FOB TAMPA	354	419	343	290	336	394	414	410
MAP CFR BRAZIL	369	438	358	308	355	410	432	425

Figure 1: Prices finally start to recover after punishing declines throughout 2019



DATA: CRU, Fertilizer Week; Note: DAP FOB price range includes Tampa, Saudi Arabia, Baltic/Black Sea, North Africa, Morocco, Tunisia, China, Mexico, Jordan, Australia, New Orleans (barge).

► CHANGES SINCE OCTOBER 2019

Key changes since the October 2019 edition of the CRU *Phosphates Fertilizer Market Outlook* include:

- Moroccan 2019 DAP/MAP/TSP production was revised up by 1.5 Mt to 8.6 Mt. Previously we had expected OCP's DAP/MAP exports to remain roughly flat in 2019 H2 compared to H1, reflecting a strategic shift towards increased acid exports as prices for granular phosphates continued to fall. However, OCP increased exports of granular phosphates in 2019 H2, especially targeting the Americas.
- OCP capacity forecast has been significantly revised, including the removal of three 450,000 t P_2O_5 of phosphoric acid lines from the base case forecast following a site

visit to Jorf Lasfar in November 2019. A Special Feature on OCP's capacity expansion plans is included after this executive summary.

- Consumption in India for 2019 was revised up by around 6% due to a robust Rabi season, causing an increase in our 2019 and 2020 consumption view. Total global consumption in 2019 was revised up by 0.5 Mt to 46.6 Mt, supported primarily by the revision to India and a 100,000 t P_2O_5 upward revision to Ukraine 2019 consumption.

- Indian 2020 DAP imports were revised up by 0.5 Mt to 5.8 Mt. This is because of the 1 Mt y/y increase in DAP consumption during 2019 Q4.

- Brazilian granular phosphate and phosphoric acid production was revised down for 2019 owing to Mosaic's production downtime following forced mine idling. Furthermore, Yara's Serra do Salitre phosphates facility was not commissioned as previously expected. The plant's commissioning has been pushed back until the beginning of 2021.

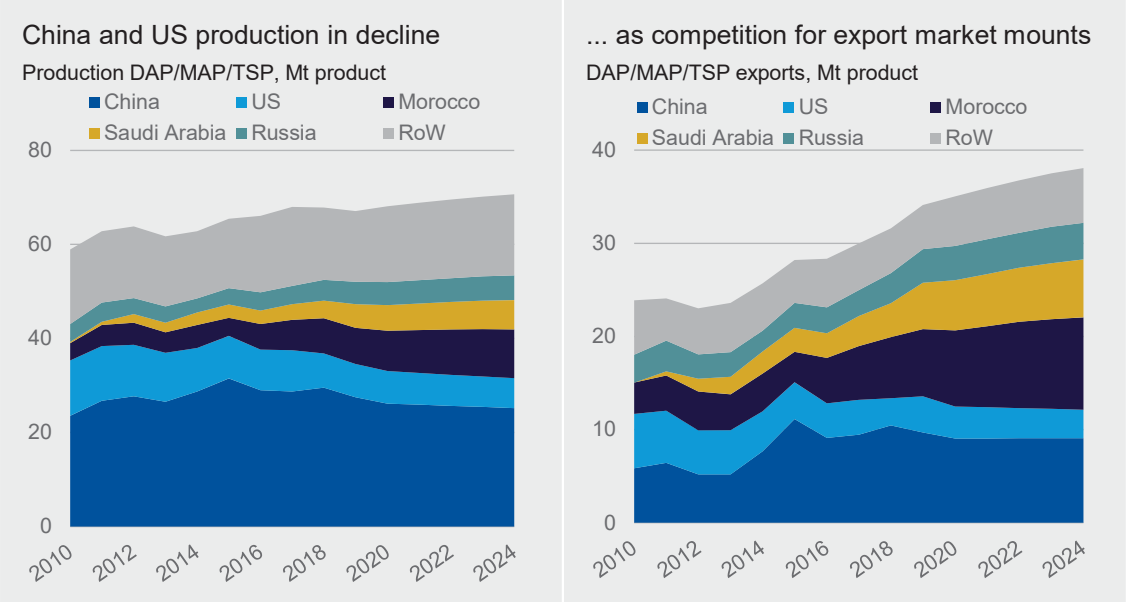
- Philphos has renovated its 396,000 t/y P_2O_5 phosphoric acid line at Isabel, which we have included in our base case capacity forecast. It will begin ramping up in 2020 Q2 and target the export market, especially India. We now include Philippines acid supply to India in our medium-term forecast.

Rising low-cost production to squeeze China and US

We forecast low-cost producers, especially OCP and Ma'aden, to continue ramping up production in 2020 and over the medium term. This will maintain pressure on Chinese and US producers, which we expect will result in lower production and exports from both of those countries throughout the forecast period.

OCP has begun the construction of 3 Mt granulation capacity at Jorf Lasfar, scheduled to commission by 2023. This will drive its growing production and exports over the medium term. Ma'aden has no new capacity scheduled to commission over the forecast period but it has considerable scope to ramp up production at Wa'ad Al Shamal, which was commissioned in 2017. Saudi DAP/MAP production increased by 1.3 Mt in 2019, to 5.0 Mt, with an additional 428,000 t expected to be produced in 2020. Production will continue to grow modestly thereafter across the medium term. Russian producers PhosAgro, Acron and EuroChem are scheduled to collectively increase capacity by 373,000 t P_2O_5 phosphoric acid and 780,000 t MAP over the forecast period. Russia will produce more over this time, but strong growth in domestic demand will limit growth in exports.

China and US producers face rising pressure from Morocco, Saudi Arabia and Russia

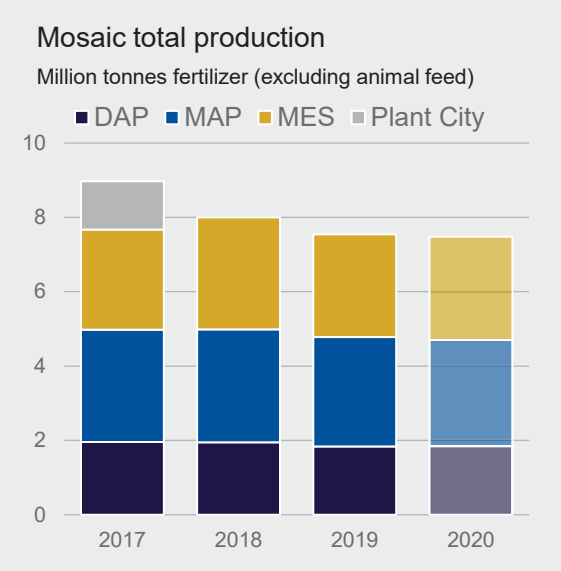


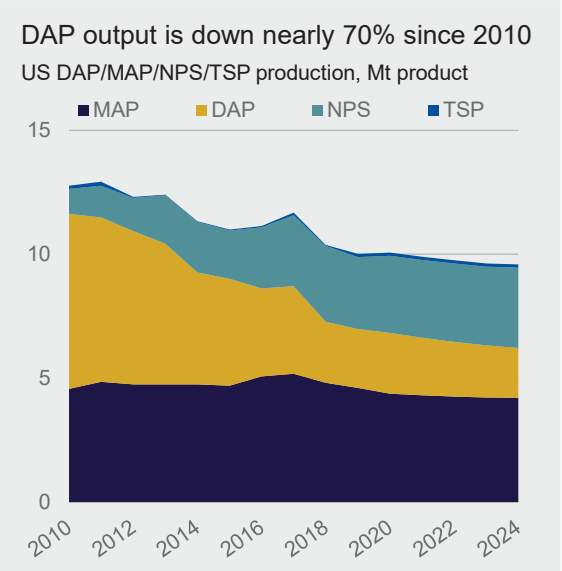
DATA: CRU

Indian DAP demand to dip in 2020, but imports to rise

Indian consumption was unexpectedly strong during the Rabi crop planting season, boosted by the above-average monsoon rains earlier in the year. We assume a normal monsoon in 2020, so we expect demand to decline slightly to reflect that. The late flurry of buying accelerated stock drawdown, reducing warehouse stocks by 900,000 t from its historic peak of 1.9 Mt in July 2019.

Mosaic's latest production cuts to have limited impact on 2020 US phosphates production



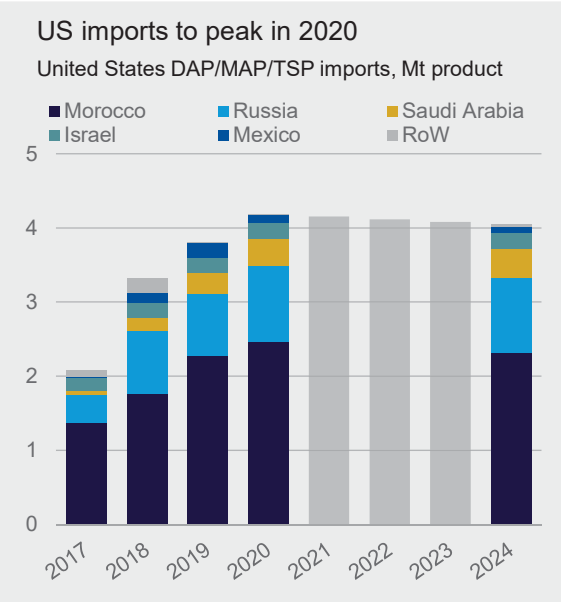


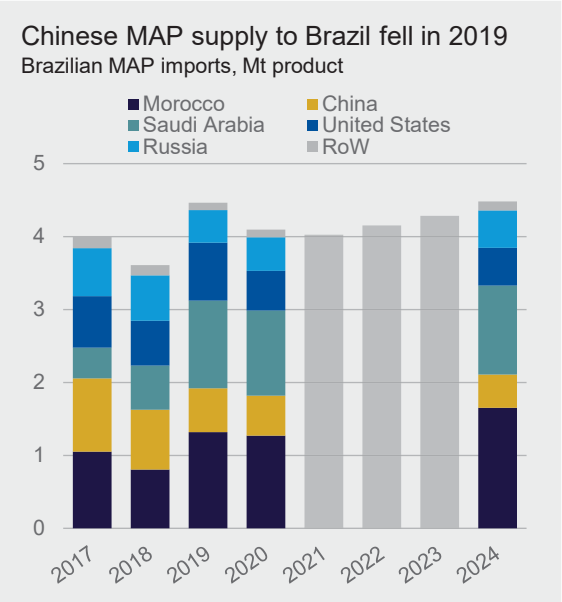
DATA: CRU, Mosaic company reporting, IFA, IHS Global Trade Atlas, TFI

US and Brazil see bumper year for trade in 2019

US and Brazilian imports were higher in 2019 as low-cost producers in Morocco, Saudi Arabia and Russia looked to increase their share of these markets. The idling of Mosaic's rock mines in Brazil in 2019 weighed heavily on Brazilian phosphates production, boosting its imports further.

US imports to rise further in 2020, Brazil to decline as Mosaic mines operating as normal





DATA: CRU, IHS Global Trade Atlas, IFA, Wilson & Sons, TFI, Datamyne, company reporting

Chinese MAP typically has a P_2O_5 concentration of 45%, compared to the 52% standard grade. This put pressure on Chinese exports to Brazil in the second half of 2019, as low prices disincentivised Brazilian buyers from choosing inferior product. Furthermore, costs or production for MAP in China was well above prices fetched in the export market.

US exports of DAP/MAP/TSP were at a five-year high in 2019, largely due to increased exports to Canada following the closure of Nutrien's Redwater facility in May 2019. MAP

► OCP CAPACITY SPECIAL FEATURE

OCP begins construction of 3 Mt more granulation capacity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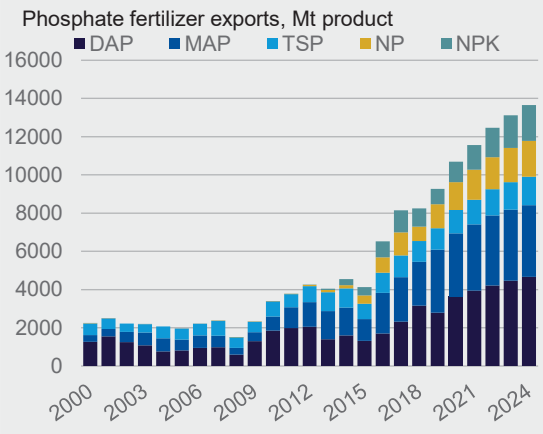
In a recent CRU primary research trip to Morocco, OCP confirmed its plans to expand its granular phosphate fertilizer production capacity from mid-2021 to 2023. This will come through the addition of a new wave of production units, already factored into our medium-term forecasts. However, there are some tweaks to our previous expectations on the structure of this capacity. In this analysis, we take a closer look at Jorf Lasfar expansion plans and how OCP is adjusting to evolving markets.

3 Mt of granular capacity to commission in 2021-2023

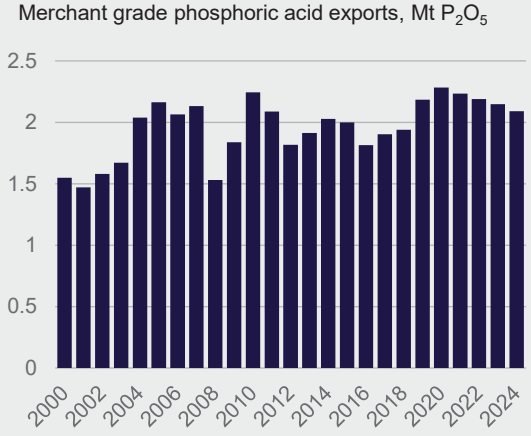
OCP first announced its ambitious and capital-intensive industrial development plan in 2008, which aimed to transform OCP into a global leader in phosphate fertilizer production. This development plan set out a staggered approach of introducing new state-of-the art fertilizer capacity to the global phosphate market. OCP's first wave of Jorf Lasfar hubs hit the market in 2015, following the commissioning of Jorf Lasfar Hub 1 (now known as the OCP Africa Fertilizer Complex). Three additional hubs were commissioned between then and 2018, totalling 4 million tonnes of granular phosphate. Associated phosphoric acid and sulphuric acid capacity was also commissioned within each hub, while existing production facilities continue to be upgraded and debottlenecked. Three more granulation units are currently under construction, totalling another 3 Mt of production capacity. All this capacity will be commissioned by 2023.

From 2015 to 2018 OCP's exports of granulated phosphate fertilizers doubled to over 8.2 Mt DAP/MAP/TSP/NP/NPK. We forecast OCP will increase exports of DAP/MAP/TSP/NP/NPK by another 4.4 Mt product to 13.7 Mt from 2019 to 2024. Around half of this growth will come from MAP and DAP, but OCP's exports of all downstream products will increase over the medium term. We expect OCP's phosphoric acid exports to fall slightly as its share in the market for downstream products grows.

OCP granular exports doubled within 3 years following Jorf hubs commissioning



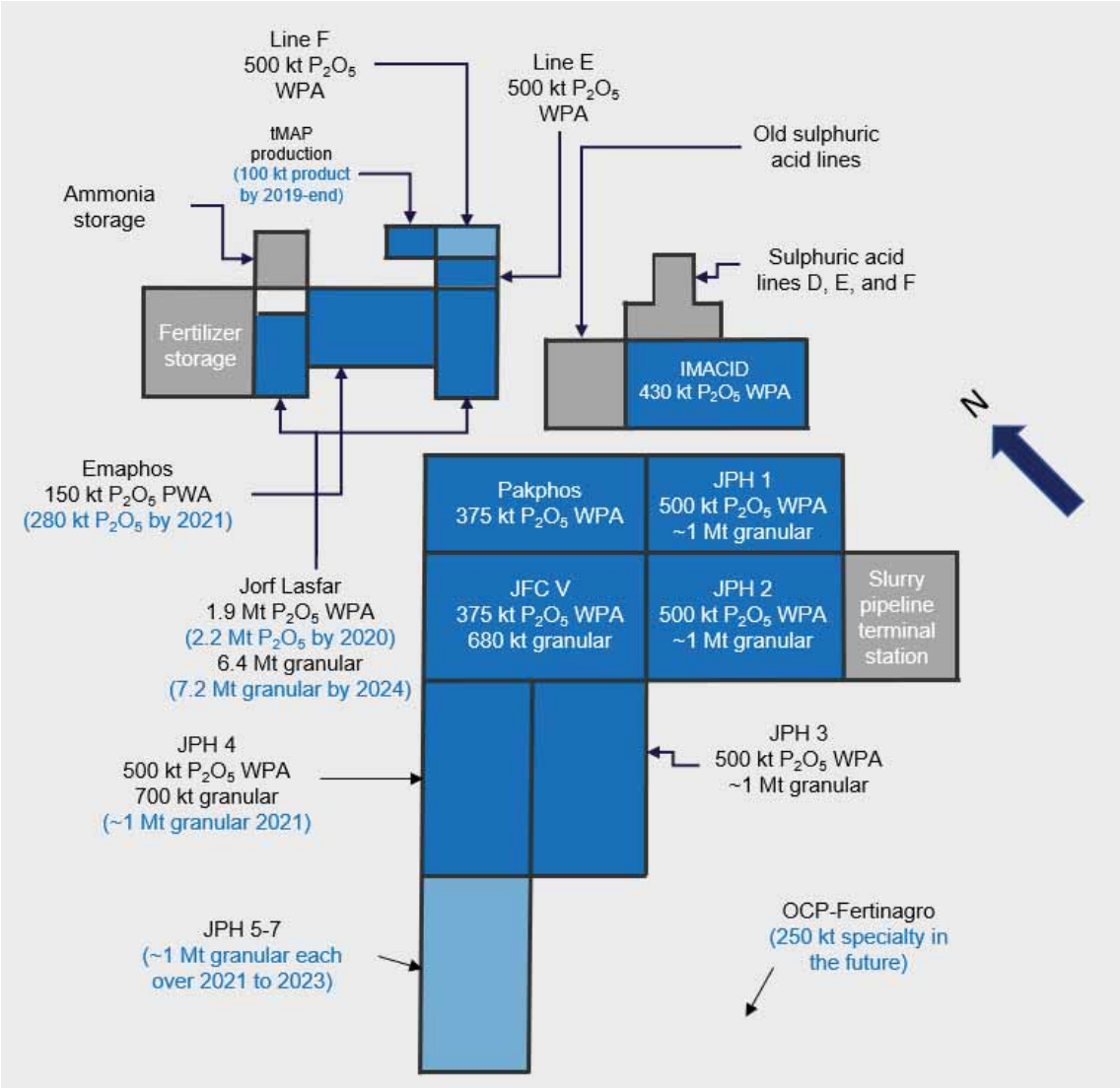
Phosphoric acid exports set to be a record in 2020



DATA: CRU, IHS Global Trade Atlas, IFA

OCP is now starting to build its second wave of capacity expansions. These expansions were already factored into our medium-term forecast before the primary research visit. The research confirmed the construction on the next wave of Jorf Hubs is in its early stages, giving us some confidence in the timing of our forecasts. Jorf Lasfar Hubs (JPH) 5-7 have all had concrete set. Each unit will have 1 Mt of granulation capacity and are due to commission in mid-2021, mid-2022 and mid-2023, respectively.

Figure 2: Diagram of OCP Jorf Lasfar phosphates facility



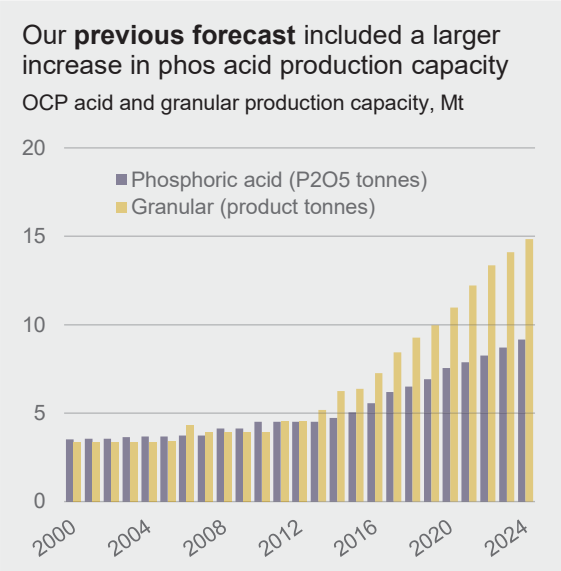
DATA: CRU primary research. PWA is purified wet acid, used by Emaphos to produce industrial products. WPA is wet phosphoric acid, made by reacting sulphuric acid with rock slurry sourced from Khourigba via the rock slurry terminal. Granular refers to all granular phosphates production capacity, including DAP, MPA, TSP, NPs and NPKs. Pipes and conveyors connect the units at Jorf Lasfar to move raw materials through the system and take finished products to the storage sites and export terminals. The facility has storage capacity of 1 Mt for dry phosphate rock and at least 1 Mt for granular phosphates.

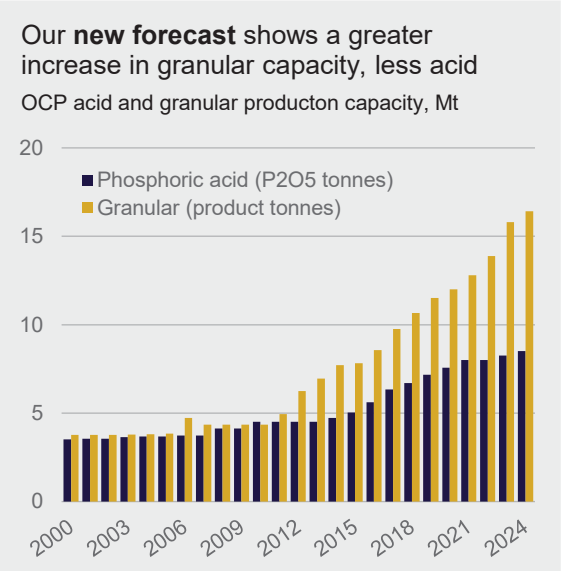
Unlike the operational Jorf Lasfar Hubs 1-4, which commissioned between 2015 and 2018, the new units will not be self-contained hubs with their own power generation, storage, sulphuric acid and phosphoric acid lines. This is a significant shift from our previous expectations, which assumed the next wave of hubs would be structured the same as Hubs 1-4.

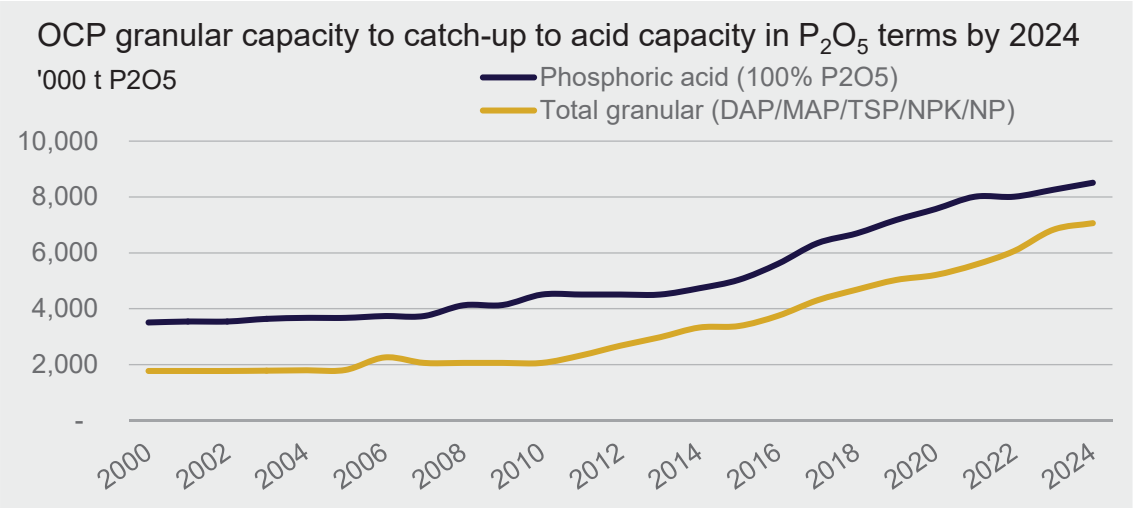
OCP will link the three new granular units with raw material supply from elsewhere at the Jorf Lasfar facility. This includes phosphoric acid, which will primarily be sourced from stand-alone phosphoric acid units, Lines E and F. By building separate phosphoric acid production

to feed the granulation units, OCP can incrementally build the required raw-material processing or granular production units as demand rises sufficiently.

The new 500,000 t/y P2O5 phosphoric acid unit, Line F, is currently under construction. It is ahead of schedule and could commission as early as 2020 H1. This, combined with the existing 500,000 t/y P2O5 phosphoric acid production capacity at Line E, will be used to supply Jorf Lasfar 5-7 once they are operational. Lines E and F will be serviced by the Line D sulphuric acid line, which reportedly commissioned earlier in 2019.







DATA: CRU site visit to Jorf Lasfar, November 2019, CRU Phosphate Fertilizer Market Outlook.

To run at full capacity, JPH 5-7 will require roughly the same amount of phosphoric acid per year as can be produced at acid lines E and F. Based on our current assumptions, OCP's granulation capacity will expand faster than its phosphoric acid production capacity through to 2024. OCP has plans for another stand-alone 500,000 t/y P2O5 phosphoric acid unit at Jorf Lasfar, which will add further flexibility. This new acid line has a lead time of 3-4 years, but a decision to progress the project will require sufficient demand signals. This means the timing is uncertain and it is therefore not currently included in our base case forecast. Either way, OCP will maintain its flexibility to adjust to market fundamentals and continue to adjust its volumes of phosphate rock, phosphoric acid and granular production.

Specialty phosphate production to increase

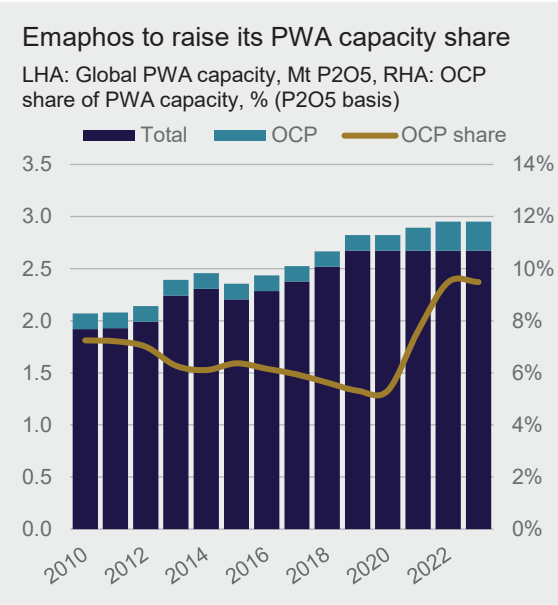
Although water-soluble fertilizers are common and growing in demand, OCP does not yet produce any in Morocco. That will change as it finally begins commercial scale technical-grade MAP (tMAP) production at Jorf Lasfar in 2020.

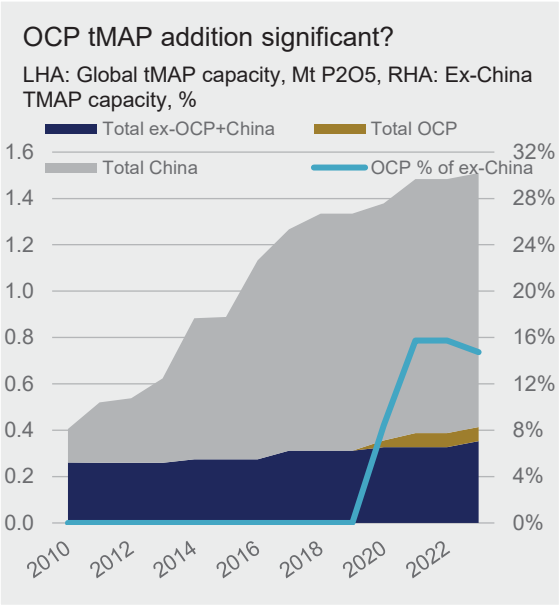
This project, which was mentioned in CRU's *Industrial and Food Phosphate Market Outlook*, is expected to commission late in 2019, delayed from 2017. It will have a tMAP production capacity of 100,000 t/y product with 61% P_2O_5 content. It will use Prayon technology and consume phosphoric acid produced at Jorf Lasfar.

OCP's new tMAP production may target growing demand in Europe, displacing higher-cost Chinese imports. Mexico is also likely to be a target market, following the opening of an OCP sales office there. It will also offset declining supply from Israel. In 2017, the Israeli government ordered the closure of a large ammonia storage tank in Haifa bay which has resulted in a significant fall in tMAP production. However, the tMAP market will be competitive, with additional capacity expansions, including Sinochem Fuling in 2023 and PhosAgro Metachem in 2023.

Jorf Lasfar will also begin to produce water-soluble NPK blends. This is expected to begin after tMAP capacity is commissioned as it will be incorporated into the blends. NOP (potassium nitrate) is a possible source of soluble potash and nitrogen. NPK blends could be exported to southern Europe where they are in demand for horticulture, fruits, and vegetable production. There are also indications that the blends (as well as tMAP) could be exported to destinations in Asia.

Additional water-soluble NPK production will likely begin at Jorf Lasfar when OCP's joint venture with Spain's Fertinagro is commissioned, which includes 250,000 t/y capacity for specialty fertilizers. However, construction had not yet started at the time of writing. More insight into the NPK markets will be available in the December 2019 edition of CRU's *NPK Market Outlook*.





DATA: CRU, Industrial and Food Phosphate Market Outlook.

Following commissioning of tMAP capacity, Emaphos is set to double its purified phosphoric acid capacity, to 280,000 t/y P_2O_5. Emaphos is a joint venture between OCP, Prayon, and Budenheim. It consumes phosphoric acid from OCP and produces purified acid for its joint venture partners and the merchant market. Emaphos' purified acid capacity share has been stagnant, though production has steadily increased over the years. It has

been building new capacity since the expansion was approved by Emaphos management in June 2018, and CRU expects that the expanded capacity will come online in 2020 H2.

We expect growth in traded purified acid will remain modest, with the Emaphos expansion being one of few purified phosphoric acid capacity expansions. As with the tMAP market, we expect Emaphos to increase its market share in Europe and North America with its low costs and more favourable freight rates. This will pressure China and other higher cost producers selling into those markets.

China will continue to dominate both tMAP and purified phosphoric acid capacities, but with the purified phosphate additions at Jorf Lasfar, OCP will begin to leverage its low costs more and steadily displace Chinese volumes.

Prices for tMAP and purified phosphoric acid prices generally follow their MAP and acid counterparts, though with premiums. As we forecast phosphate prices to begin recovering in late 2020 Q1, the tMAP unit is likely to begin production during a period of price support, with Emaphos following thereafter.

Capacity expansions beyond Jorf Lasfar

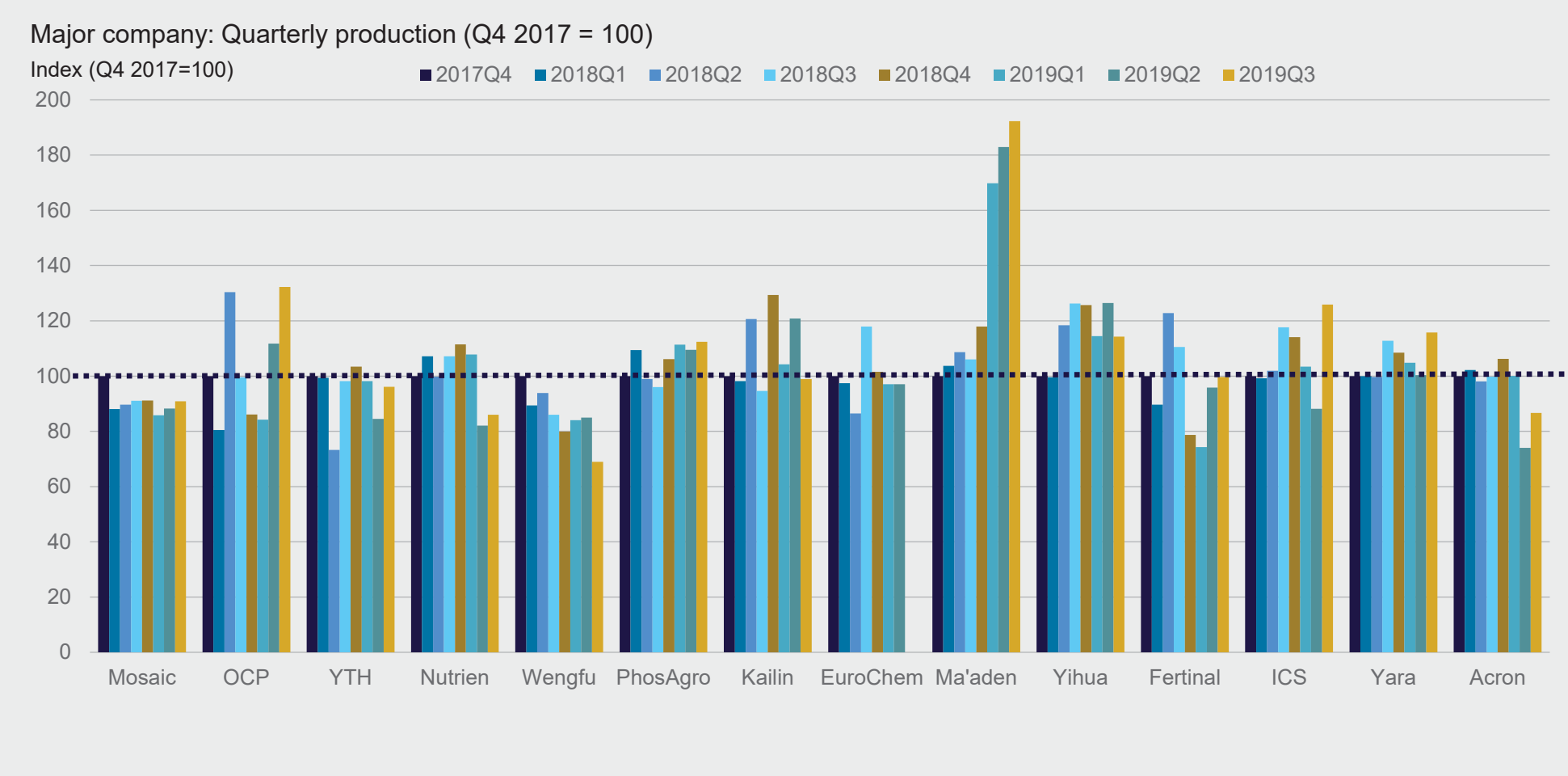
Outside of Jorf Lasfar, further capacity expansion will come through investments in both the Laayoune and Youssoufia regions. OCP plans to build a 1 Mt/y phosphate fertilizer unit in Laayoune, where it currently only exports phosphate rock. The Laayoune port facilities are being upgraded to enable imports of the raw materials needed for fertilizer production. The port's construction is expected to be completed by 2023. If the construction of Laayoune's phosphate granulation facility is undertaken in parallel to the port's, this facility could commission in 2023 as well, which is when we forecast the plant to come online.

In Youssoufia, OCP is considering building the Mzinda hub dedicated to phosphoric acid production. The phosphate rock feed for the hub will be supplied from the pre-existing Youssoufia wash-plant and the upcoming Bengerir wash-plant. No contractual commitments have been made by OCP and it remains a strategic option for the company. It is therefore speculative and falls well beyond the current medium-term forecast to 2024.

What does this mean for the phosphate price outlook?

The next wave of Jorf Lasfar production hubs changes our outlook for phosphate market balance and prices. By building the granulation component of JPH 5-7 only, the phosphoric acid balance in Morocco and the rest of the world will tighten compared to our previous estimates. This is mildly supportive to prices, as phosphoric acid utilisation rates are statistically a strong measure of phosphate market 'tightness'. This offers some relief for those in the market with perceptions of chronic oversupply. Nevertheless, 3 Mt of granular capacity is a significant volume of product to push onto a market with a merchant size of around 60 Mt (DAP/MAP/TSP/NP/NPK). This therefore caps our expectations for a price recovery beyond 2021.

► CAPACITY UPDATES



DATA: CRU, ANP, ANSD, CPFIA, INEGI, INS, co. reporting
Notes: Mosaic = total tonnes P_2O_5 produced; **OCP** = phosphate fertilizer exports; **YTH** = combined DAP-MAP production; **Nutrien** = total tonnes P_2O_5 produced by Nutrien or by PotashCorp prior to merger; **Wengfu** = combined DAP+MAP production; **PhosAgro** = combined DAP+MAP+NPK+NPS+APP+MCP production; **Kailin** = combined DAP+MAP production; **EuroChem** = combined DAP+MAP+NPK+NP sales; **Ma'aden** = combined DAP+MAP production; **Yihua** = combined DAP-MAP production; **ICL** = total phosphate fertilizer production (includes consolidation of Chinese assets from 2015Q3 thereafter); **Fertinal** = combined DAP+MAP production; **ICS** = total phosphoric acid production; **Yara** = total NPK production; **Acron** = total NPK production.

Key updates to the capacity forecast

Project updates:	
OCP	OCP's next wave of Jorf Lasfar facilities (JPH5-7) are scheduled to commission between 2021-2023. Details to the changes in this forecast are elaborated in detail in the special feature at the beginning of this report. The commissioning of the Laayoune's project has been pushed back in our forecast. The project relies on the upgrade of Laayoune port, to facilitate raw material imports and exports of finished products. The port's construction is expected to complete by 2023. If the construction of Laayoune's granulation capacity is completed in parallel to the port, the project could also commission in 2023. Further delays at Laayoune are a risk to this forecast.
NCIC Ain Sokhna	The El Nasr Co for Intermediate Chemicals (NCIC) phosphoric acid, TSP and DAP projects have been upgraded from *Firm* to *Operational,* starting in late 2019. However, NCIC DAP production was limited in 2019, and exclusively targeted the domestic market. The commissioning of NCIC's granular capacity was delayed due to an ammonia tank explosion at the facility in March 2019.
WAPHCO - El Wady	The phosphoric acid production capacity of Misr Phosphates Abu Qir Fertilizer JV (WAPHCO) has been upgraded from *Speculative* to *Firm* following recent investment and offtake agreements. However, the associated DAP/MAP/TSP projects remain speculative in our view, awaiting further development.
PhilPhos-Isabel	The Philippine Phosphate Fertilizer Corporation (PhilPhos) fully restored its 396,000 t/y P_2O_5 phosphoric acid capacity at its Isabel facility in the Philippines. This facility was shut in November 2013 due to damages caused by Typhoon Haiyan. Prior to this, Isabel had an operational DAP production line, but PhilPhos have not indicated that it has restored the DAP line. PhilPhos has indicated that it will focus on phosphoric acid production.
PPL- Paradeep	Paradeep Phosphates Ltd (PPL) phosphoric acid and DAP capacity expansion projects have been upgraded from *Speculative* to *Probable*. This upgrade follows the confirmation of engineering works with Thyssenkrup and Jacobs Engineering.
Xingfa Chemicals Group - Yidu	The Xingfa Chemicals Group announced the start of their start its Xingfa-Yidu phase II granular capacity expansion in June 2020. Subsequently, this project will increase Xingfa-Yidu DAP/MAP production capacity from 364,000 t/y to 548,000 t/y P_2O_5 and has been upgraded from *Speculative* to *Probable* in this market outlook.
Coromandel International Ltd	Coromandel International Ltd (CIL) expanded the phosphoric acid production capacity at its Visakhapatnam facility from 198.000 t/y to 318,000 t/y P_2O_5 in 2019.

Table 5: CRU's base case capacity forecast for probable and firm projects, 2020-2024, kt/y P_2O_5

Project	Country	Category	Start-up	MGA	DAP	MAP	TSP
OCP Line F	Morocco	Firm	2020	500	0	0	0
GCT M'dhilla	Tunisia	Firm	2020	200	0	0	171
OCP JPH 5	Morocco	Firm	2021	0	184	120	0
OCP JPH 6	Morocco	Firm	2022	0	184	120	0
OCP JPH 7	Morocco	Firm	2023	0	184	120	0
Phosagro Volkhov	Russia	Firm	2023	0	0	400	0
Subtotal *FIRM*	-	-	-	700	552	760	171
Xingfa Chemicals Group - Yidu	China	Probable	2020	400	184	0	0
PhilPhos-Isabel	Philippines	Probable	2020	396	0	0	0
OCP Jorf Lasfar	Morocco	Probable	2020	333	690	390	0
Yara Serra do Salitre	Brazil	Probable	2021	200	0	100	50
PPL Paradeep	India	Probable	2022	198	92	0	0
Pupuk Kaltim/JPMC	Indonesia	Probable	2022	200	0	0	0
Yichang New Yangfeng - II	China	Probable	2022	216	92	261	0
WAPHCO El Wady	Egypt	Probable	2023	518	0	0	0
OCP Laâyoune	Morocco	Probable	2023	500	115	130	0
Acron Dorogobuzh	Russia	Probable	2024	208	0	0	0
Subtotal *PROBABLE*	-	-	-	3,169	1,173	881	50

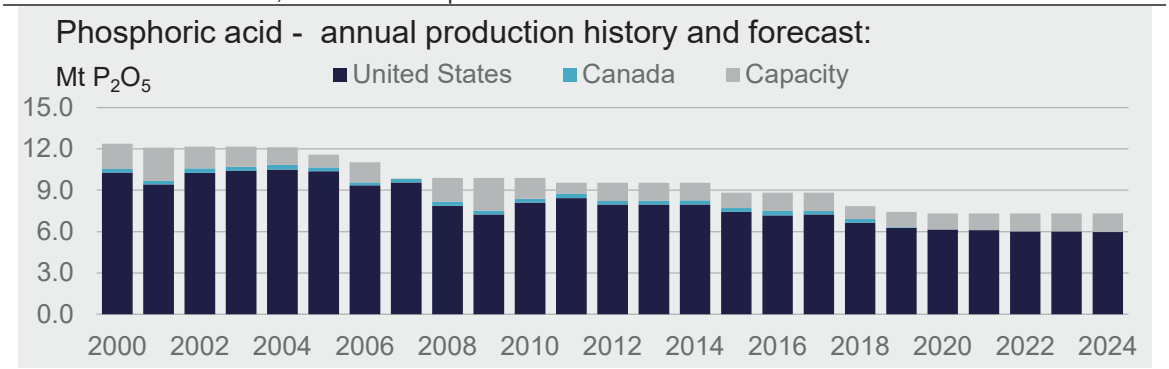
DATA: CRU

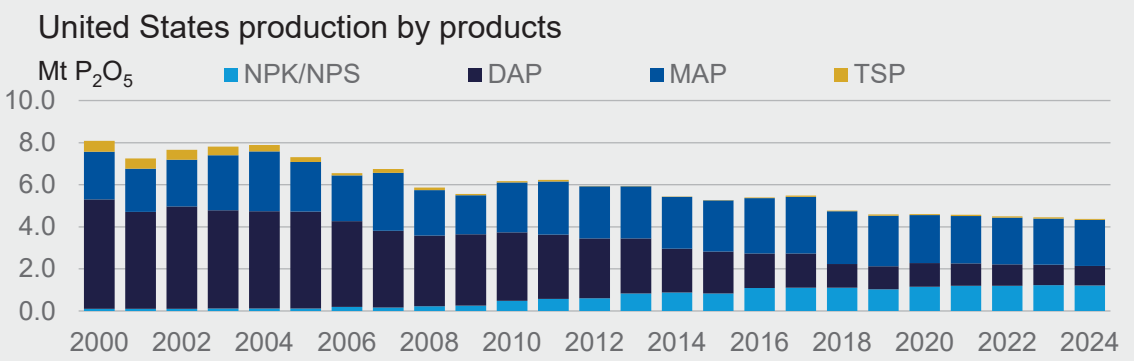
► REGIONAL OVERVIEW OF PHOSPHATE FERTILIZER SUPPLY

North America: phosphate fertilizer supply profile

Company tracker:

Mosaic	Total phosphate production volumes for 2019 Q3 were flat year-on-year (y/y) at 2 Mt, with operating rates reaching 87%. However, DAP/MAP sales increased by 4% y/y to 1.3 Mt in the same period. Sales of speciality products, including MicroEssentials and animal feed declined by 9% y/y to 883,000 t product. In December 2019, Mosaic announced its plans to reduce phosphate production at its Central Florida facilities by 150,000 t/month, amid low prices and high fertilizer stocks in North America. This stock build-up was caused by unfavourable weather conditions that limited fertilizer applications for three consecutive seasons. Mosaic also idled its Louisiana phosphate facility for 2019 Q4. The Louisiana idling cut as much as 500,000 t DAP/MAP/MicroEssentials production at the facility over the three months. Mosaic restarted the plant in late December 2019. Mosaic plans to return to normal phosphate production rates once North American fertilizer prices improve.
Nutrien	Nutrien's phosphate production declined by 20% y/y to 374,000 t P_2O_5 in 2019 Q3, due to the closure of its Redwater facility in May 2019. Excluding the 2018 Q3 output of Redwater, Nutrien's total phosphate production, during the same period, decreased by 4% y/y from 389,000 t P_2O_5 in 2018 Q3. 2019 Q3 operating rates (excluding Redwater) fell to 87% compared to 91% in 2018 Q3. The decommissioning of Redwater's phosphate operations and weak demand in the North American market has caused a 24% y/y fall in Mosaic's fertilizer sales to 492,000 t in 2019 Q3.
Itafos Conda	Superphosphoric acid (SPA) production declined by 14% y/y to 36,523 t product in 2019 Q3, while SPA sales flatted y/y at 28,636 t. The decline in SPA production was caused by an "increase in unfavourable ore elements, most notably magnesium oxide, resulting in evaporation capacity limitations", as well as a and a lack of sulphuric acid availability. MAP production declined by 3% y/y to 94,323 t in 2019 Q3, but its sales increased by 68% y/y to 108,243 t product. This increase in MAP sales was supported by Itafos' exclusive long-term MAP offtake agreement with Nutrien despite the current North American market conditions. In 2019 Q3, Itafos completed a pilot production run of its new semi-speciality fertilizer product and reached 9,000 t of MAP+S production.





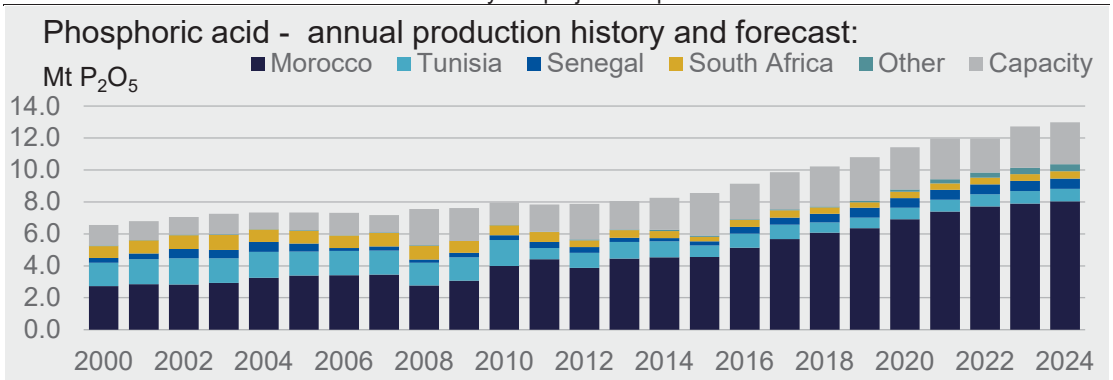
Medium-term forecast:

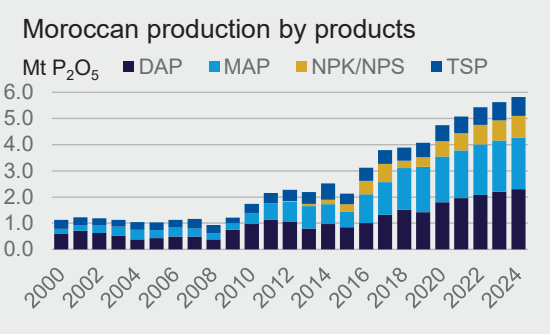
000 tonnes P_2O_5	2017	2018	2019	2020	2021	2022	2023	2024
Phosphoric Acid Capacity	8,816	7,859	7,427	7,312	7,312	7,312	7,312	7,312
Phosphoric Acid Production	7,494	6,923	6,323	6,158	6,115	6,023	6,011	5,973
Operating Rate	85%	88%	85%	84%	84%	82%	82%	82%
DAP, MAP & TSP Capacity	5,833	5,018	4,996	4,881	4,881	4,881	4,881	4,881
DAP, MAP & TSP Production	4,610	3,928	3,637	3,460	3,370	3,292	3,222	3,173
Operating Rate	79%	78%	73%	71%	69%	67%	66%	65%

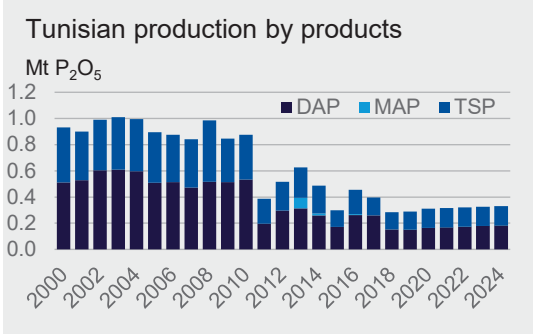
DATA: CRU, IFA, IHS-GTA, TFI, co. reporting.

Africa: phosphate fertilizer supply profile

Company tracker:	
OCP	According to the Office des changes, OCP's phosphate fertilizer and phosphoric acid exports increased by 11% and 8% y/y respectively to 8.3 Mt and 2 Mt product during Jan-Nov 2019. In Dec 2019, OCP announced a 500,000 t cut from its planned granular production from mid-December through February, due to disruptions at the Jorf Lasfar port. OCP is building an additional 3 Mt/y of granular phosphates production capacity. Further details on OCP's capacity expansion strategy is available in the OCP Special Feature.
GCT	The Tunisia Statistics Bureau reported a DAP and TSP production increase of 26% and 19% y/y respectively to 304,400 t and 206,200 t product. However, TSP production fell by 48% to 16,600 t product in Sep-19 compared to July-19. This reduction was due to the closure of GCT's Sfax facility in Aug-19. GCT plans to commission M'dhilla II (TSP: 171,000 t/y P_2O_5) project in 2020. This project is currently undertaking production testing.
Phosphate Misr Co.	In Dec-19, Phosphate Misr, the China State Construction Engineering Corporation (CSCEC), and Wengfu agreed on a contract to invest USD848 Million in the El Wady (WAPHCO) phosphoric acid project in Egypt. This project has a planned phosphoric acid production capacity of 518,000 t P_2O_5 and is forecast to commission in 2023. Wengfu signed an agreement to purchase 50% of 500,000 t/y phosphoric acid from the project once operational.
Industries Chimique du Senegal	Senegal's Agence National de la Statistique et de la Demographie reported a phosphate fertilizer production increase of 35% y/y to 153,000 t product in Jan-Oct 2019. Phosphate fertilizer exports during the same period decreased by 7% y/y to 123,000 t product.
Togo	In November 2019, the Nigeria based Dangote Industries and the government of Togo agreed to invest USD2 billion in a phosphate fertilizer project in Togo. Under the agreement, the government of Togo will supply the phosphate feed required for fertilizer production, and Dangote Industries will supply ammonia from its ongoing project in Lagos, Nigeria. Construction for the fertilizer project was set to start at the end of 2019, but its location remains unclear. We will classify this project as speculative until further details are confirmed.







Medium-term forecast:

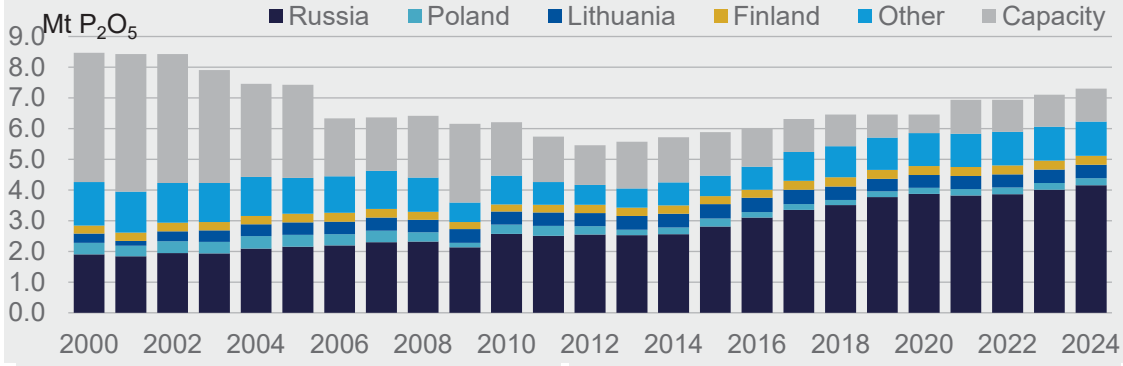
000 tonnes P2O5	2017	2018	2019	2020	2021	2022	2023	2024
Phosphoric Acid Capacity	9,867	10,217	10,810	11,416	11,957	11,957	12,725	12,975
Phosphoric Acid Production	7,540	7,712	8,055	8,788	9,418	9,845	10,133	10,369
Operating Rate	76%	75%	75%	77%	79%	82%	80%	80%
DAP, MAP & TSP Capacity	5,481	5,782	6,285	6,772	7,500	7,989	8,415	8,750
DAP, MAP & TSP Production	3,752	4,188	4,222	4,779	5,080	5,383	5,591	5,768
Operating Rate	68%	72%	70%	71%	68%	67%	66%	66%

DATA: CRU, AFA, ANP, ANSD, IFA, IHS-GTA, INS, co. reporting.

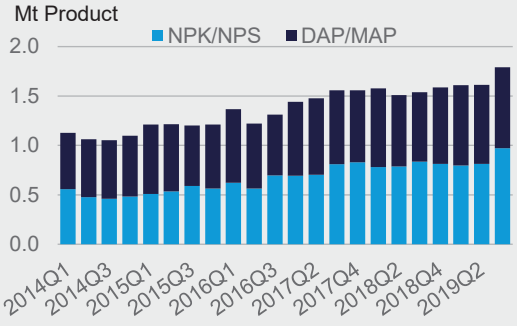
Europe & CIS: phosphate fertilizer supply profile

Company tracker:	
PhosAgro	DAP/MAP production and sales increased by 17% and 24% y/y respectively to 820,300 t and 907,100 t product in 2019 Q3. The increase in DAP/MAP production resulted from the completion of a technical overhaul at the Company's production sites in Cherepovets and Balakovo in late 2018. Additionally, Phosagro's decision to delay scheduled maintenance to 2019 Q4 to match demand trend provided further support for 2019 Q3 DAP/MAP production. NPS production and sales soared y/y by 110,700 t and 56,800 t respectively to 175,300 t and 151,900 t product in 2019 Q3. This increase resulted from PhosAgro's decision to raise production of fertilizer grades with lower phosphorus content, as well as an increase in the efficiency of production of sulphur-containing fertilizer grades following equipment modernisation. NPK production and sales also increased y/y by 3% and 2% respectively to 796,300 t and 768,500 t product.
Yara	MAP and SSP production declined by 13% and 28% y/y respectively to 35,000 t and 204,000 t product in 2019 Q3. Similarly, DAP/MAP deliveries declined by 18% y/y to 179,000 t product during the same period. NPK production increased by 3% y/y to 1.6 Mt, while total NPK sales declined by 5% y/y to 3 Mt in 2019 Q3. NPK sales decline was due to a 12% y/y reduction in blended NPK deliveries to 1.3 Mt. The impact of this decline was lessened by a 3% y/y increase in compound NPK sales to 1.6 Mt product.
EuroChem	In Dec 2019, Eurochem and Kazakhstan's Ministry of Industry and Infrastructure Development signed a USD1 billion investment agreement for the construction of a mineral fertilizer plant in Kazakhstan's Jambyl region. However, this facility remains speculative until further details are published by EuroChem.

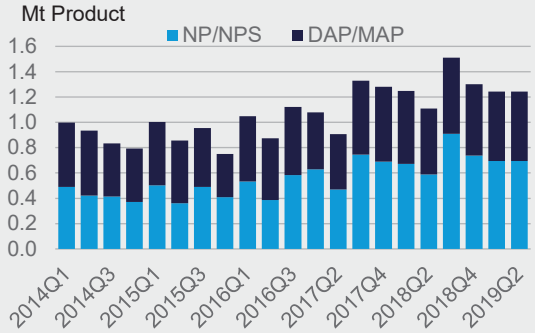
Phosphoric acid - annual production history and forecast:



Phosagro's production split



Eurochem's sales split



Medium-term forecast:

000 tonnes P_2O_5	2017	2018	2019	2020	2021	2022	2023	2024
Phosphoric Acid Capacity	6,315	6,454	6,454	6,454	6,934	6,934	7,099	7,307
Phosphoric Acid Production	5,238	5,428	5,711	5,856	5,835	5,891	6,063	6,225
Operating Rate	83%	84%	88%	91%	84%	85%	85%	85%
DAP, MAP & TSP Capacity	4,959	5,090	5,304	5,317	5,777	5,777	5,977	6,178
DAP, MAP & TSP Production	2,905	3,005	3,273	3,369	3,433	3,458	3,570	3,615
Operating Rate	59%	59%	62%	63%	59%	60%	60%	59%

DATA: CRU, Azotecon, BelStat, IFA, IHS-GTA, co. reporting. *Chart refers to NPK/NPS produced through phosphoric acid route only.

► TRADE

Jay Morrod
Analyst,
Phosphates

OCP and Ma'aden continue to increase export market share

Trade in 2019 increased despite China's production cuts

Global DAP/MAP/TSP trade increased by nearly 8% year on year in 2019 to 68.2 Mt product as low-cost producers in Morocco, Saudi Arabia, and Russia aggressively targeted export markets. China's 6+2 group of DAP producers announced plans to significantly cut production in 2019, weighing on Chinese DAP exports. However, this was offset by rising exports from elsewhere. Producers in China and the US saw their market share for most export destinations eroded. We expect these trends to continue, with rising traded volumes increasingly met by producers in North Africa, the Middle East, and Russia throughout the forecast period.

Figure 31: Global DAP/MAP/TSP trade to rise throughout the medium term

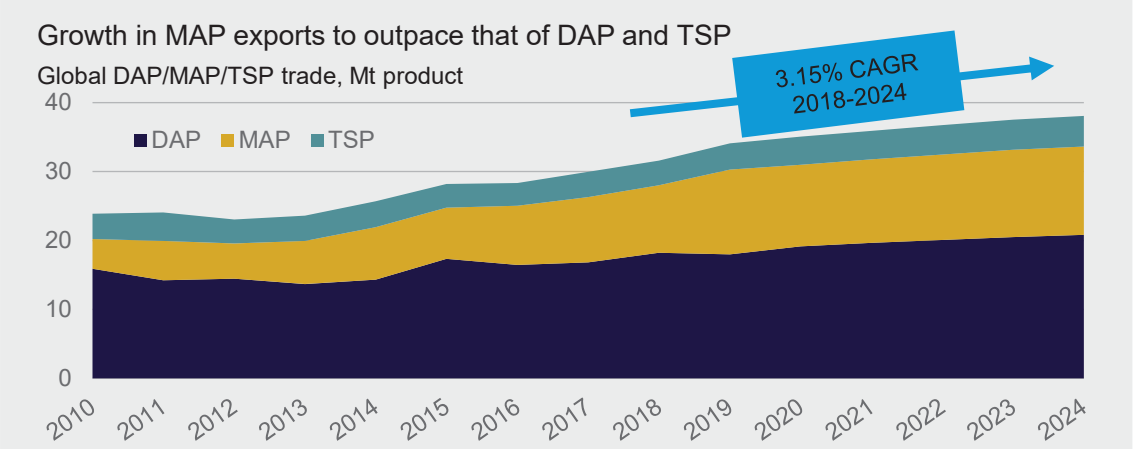


Table 8: Summary of global trade forecasts

000 tonnes product	2017	2018	2019	2020	2021	2022	2023	2024
World WPA Trade*	4,241	4,188	4,466	4,443	4,488	4,536	4,591	4,627
Indian WPA imports	2,398	2,329	2,628	2,536	2,578	2,620	2,662	2,703
Moroccan WPA exports	1,904	1,939	2,184	2,283	2,235	2,189	2,149	2,090
World DAP Trade	16,837	18,237	17,983	19,166	19,649	20,071	20,474	20,823
Indian DAP imports	4,139	5,779	5,741	5,838	5,874	5,909	5,944	5,980
Saudi Arabian DAP exports	2,591	2,682	3,298	3,666	3,799	3,932	4,065	4,197
Chinese DAP exports	6,399	7,467	6,425	5,983	5,967	5,952	5,937	5,921
World MAP Trade	9,434	9,770	12,306	11,831	12,115	12,405	12,675	12,805
United States MAP imports	962	1,619	2,005	2,338	2,280	2,221	2,163	2,105
Brazil MAP imports	3,863	3,499	4,382	4,019	4,024	4,153	4,282	4,421
United States MAP exports	2,065	1,920	2,489	2,221	2,201	2,180	2,159	2,139
China MAP exports	2,116	1,948	2,044	1,793	1,794	1,795	1,797	1,798
World TSP Trade	3,703	3,598	3,817	4,052	4,151	4,263	4,357	4,443

DATA: CRU NOTE: *WPA in this table is listed as 100% phosphorus pentoxide (P_2O_5), rather than in product tonnes. Throughout this report, for the purposes of conversions we assume P_2O_5 content of WPA at 53%, DAP at 46%, MAP at 52% and TSP at 46%. When referring to product tonnes, this includes all other content of the specified product. For example, one product tonne of DAP contains 460kg of P_2O_5.

Key revisions since the last Outlook

We have revised up Moroccan 2019 exports by 656,000 t for DAP and 797,000 t for MAP, to 2.8 Mt and 3.3 Mt respectively. Previously we had expected OCP's DAP/MAP exports to remain roughly flat in 2019 H2 compared to H1, as falling prices and its strategic shift to exporting more phosphoric acid weighed on downstream production and exports. However, OCP increased its exports of both products in 2019 H2, especially targeting the Americas.

Indian DAP imports for 2020 were revised up by 500,000 t to 5.7 Mt as DAP buying was especially high during December 2019. The above-average monsoon rains supported a boost to fertilizer demand during the Rabi crop planting season. We have also revised up our Indian DAP consumption view throughout the medium term, supporting higher Indian DAP imports throughout the forecast period.

We revised up Brazilian MAP imports for 2019 by 325,000 t to 4.3 Mt, reflecting a delay to the commissioning of Yara's Serra do Salitre MAP/TSP plant and the high volumes of imports from Morocco. However, we revised down our forecast Brazilian MAP imports for 2020-2024, largely due to a downward revision to our Brazilian MAP consumption forecast. We expect Brazilian MAP production to recover to around 2018 levels this year and then rise slowly as Yara finally commissions its Serra do Salitre facility in 2021.

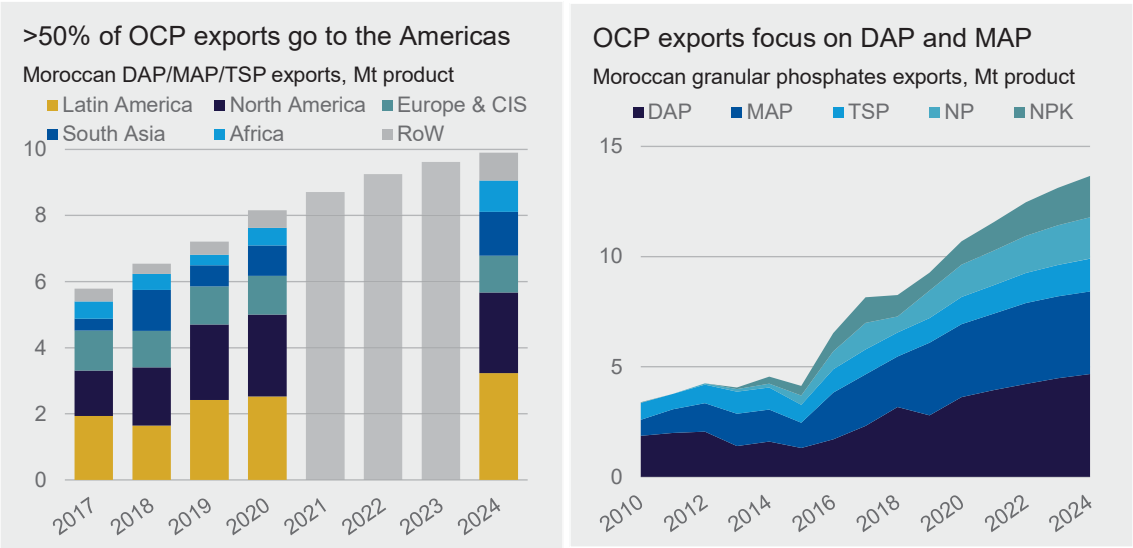
Jordan's DAP exports were revised up by 265,000 t to 846,000 t in 2019 due to higher exports to Indian than previously expected. We also increased our DAP export forecast for Jordan over the medium term, supporting a significant increase to Jordan's DAP and phosphoric acid utilisation rates.

We forecast the restart of Philippines producer Philphos' 396,000 t/y P_2O_5 phosphoric acid line at its Isabel facility in 2020 Q2. Following a ramp up phase we expect Philphos to begin exporting phosphoric acid over the medium term, reaching around 200,000 t P_2O_5 by 2024.

Moroccan exports will continually break records out to 2024

OCP DAP/MAP/TSP exports reached a new record high of 7.2 Mt in 2019 and we expect this trend to continue throughout the forecast period as OCP brings new capacity online. Another 1 Mt of granulation capacity is due to commission this year and we forecast OCP to increase its exports of DAP/MAP/TSP by around the same amount.

Figure 32: OCP DAP/MAP/TSP exports will continue to hit new highs over the medium term



DATA: CRU, IHS Global Trade Atlas, IFA, TFI, Wilson & Sons, NFDC, ANP, company reporting

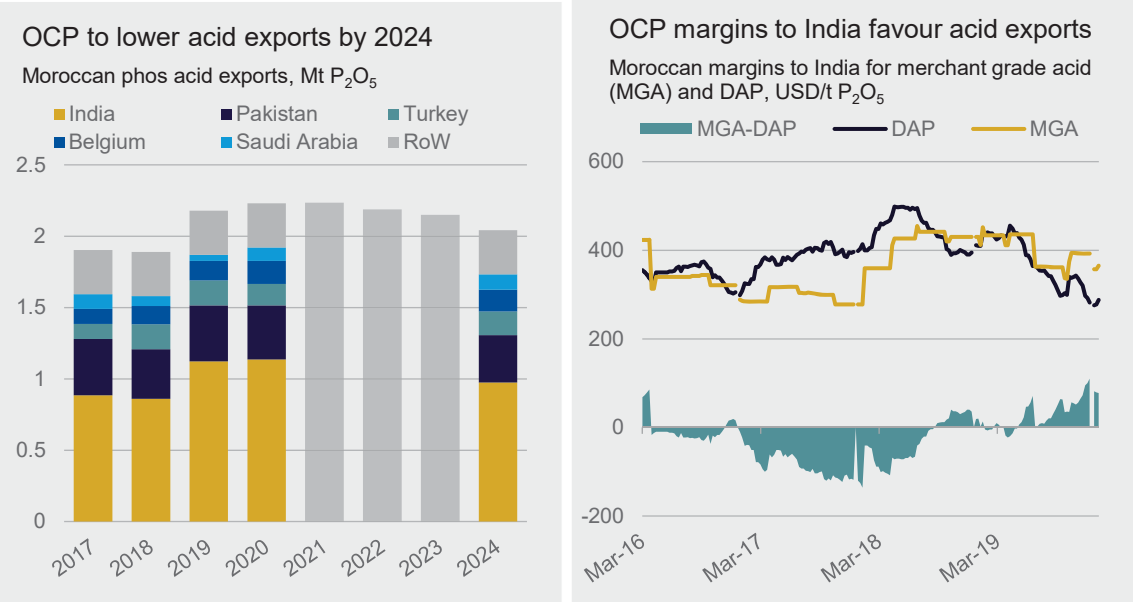
OCP has substantially increased its supply of MAP to Brazil and DAP/MAP to the United States. Other countries in Latin America such as Argentina and Colombia also imported significant volumes of product from OCP in 2019 and this is expected to continue over the medium term, though Brazil and the US will remain OCP's largest trading partners.

In 2019, 65% of OCP's DAP/MAP/TSP exports went to the Americas. Disruptions to MAP production in Brazil last year provided space for greater MAP imports, which OCP took advantage of. With the return of normal MAP production in Brazil, OCP is likely to see slightly lower MAP exports there this year, which is reflected in our 2020 forecast. But with strong demand growth forecast for Brazil, we expect OCP to increase MAP exports there over the medium term.

OCP also sent substantial volumes of both DAP and MAP to the United States, even during Q4 when prices were at 13-year lows. We expect OCP to continue to apply this pressure to the US markets especially as Mosaic has already cut production in Florida due to current low prices. To reflect this, we forecast OCP to increase MAP exports to the US in 2020, up by around 150,000 t to 1.2 Mt, while DAP exports are expected to remain flat at nearly 1 Mt.

OCP's phosphoric acid exports reached a nine-year high in 2019 as it lowered its phosphoric acid prices into India, pushing significantly higher volumes of acid into that market. Weak DAP prices in 2019 meant that OCP's netbacks from India were more favourable for acid exports than DAP, even after lowering the acid contract price.

Figure 33: OCP margins to India continue to favour phosphoric acid exports over DAP



DATA: CRU, IHS Global Trade Atlas, IFA, FAI, Indian Department of Fertilizers, NFDC, ANP, company reporting; Fertilizer Week

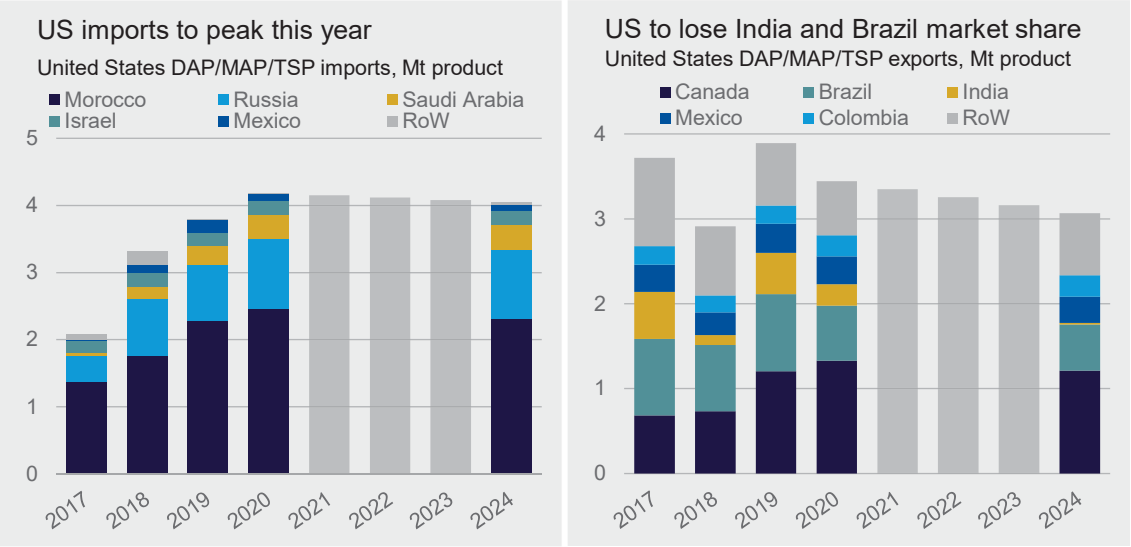
United States imports to rise further in 2020

The United States saw another significant increase in DAP/MAP/TSP imports in 2019, rising 15% year on year, as exporters in Morocco and Russia seek to expand their share of this market. We expect Morocco, Russia, Saudi Arabia and Israel to all increase their supply of downstream products to the US in 2020. This will maintain pressure on domestic producers and take advantage of Mosaic's production cuts in Q1. However, we forecast a slight decline in US imports over the medium term as total US DAP/MAP/TSP demand falls.

OCP pushed nearly 1 Mt of DAP and nearly 1.2 Mt of MAP into the US in 2019, up by 26% and 44% respectively year on year. Russian DAP supply increased by 9% year on year, and

its MAP exports to the US fell by 6%, as some MAP supply was displaced by the sharp increases in imports from Morocco. However, higher imports coupled with poor demand in the US last year led to a drop in domestic production and a collapse in the US FOB DAP New Orleans price, which led losses across global markets during 2019.

Figure 34: US DAP exports to India to end by 2024 as it shifts supply from Florida to Wa'ad Al Shamal



DATA: CRU, IHS Global Trade Atlas, IFA, TFI, Datamyne, company reporting

US exports were higher in 2019, partly facilitated by the idling of Mosaic's phosphate rock mines in Brazil which allowed the US to offload some of its excess product. However, as these mines are operational again, we expect Brazilian MAP and TSP production to return to normal levels, reducing the need for imports from the US. We also expect the US to lose market share in India as Ma'aden ramps up its Wa'ad Al Shamal fertilizer facility. Mosaic owns a 25% share in this asset, so lost DAP exports from the US to India are, from Mosaic's perspective, made up for by MWSPC.

Although US exports will fall in 2020 and throughout the medium term, exports to Canada will grow. Canada became the US's largest export destination for DAP/MAP/TSP in 2019, following the closure of Nutrien's Redwater facility. As Redwater operated for much of 2019 H1, we forecast US MAP exports to Canada to rise by around 106,000 t product in 2020. The main supply route to Canada is up the Mississippi river. This provides US producers—especially Mosaic whose plants are in or close to the mouth of the Mississippi—with a significant supply chain advantage over imported product. However, producers such as OCP and Ma'aden are still competitive with Mosaic even in those upriver markets, discussed in the supply chapter.

Brazilian MAP imports to fall as domestic production rises

The idling of Mosaic's phosphate rock mines in Brazil in 2019 Q2-Q3 weighed on domestic MAP and TSP production, allowing for a significant increase in imports from Morocco, Saudi Arabia and the United States. Mosaic was able to export around 250,000 t more MAP to Brazil year on year, to meet supply contracts in Brazil that it otherwise would have met with its local production. This also alleviated some of the oversupply issues in the United States.

However, all of Mosaic's Brazilian phosphate rock mines are now operating as normal, so we expect Mosaic's 2020 MAP and TSP production to return to pre-2019 levels. As much of this rock supply is used for MAP production, this will weigh on Brazil's MAP import demand.

Exhibit I-48

PROPRIETARY INFORMATION DELETED
CONTAINS RANGED DATA

Mosaic Average Netback on Tons Priced & Delivered from Faustina / Burnside

Pricing Month	Netback DAP STN	Netback DAP $/STN	Netback GMAP STN	Netback GMAP $/STN
201701	[			]
201702	[			]
201703	[			]
201704	[	$280		]
201705	[			]
201706	[			]
201707	[			]
201708	[			]
201709	[			]
201710	[			]
201711	[			]
201712	[			$396]
201801	[			]
201802	[			]
201803	[			]
201804	[			]
201805	[			]
201806	[			]
201807	[41,678			]
201808	[			]
201809	[			]
201810	[			]
201811	[			]
201812	[			]
201901	[			]
201902	[		4,019	]
201903	[			]
201904	[			]
201905	[			]
201906	[			]
201907	[			]
201908	[			$323]
201909	[			]
201910	[			]
201911	[			]
201912	[			]
202001	[			]
202002	[			]
202003	[			]

Pricing Quarter	Netback DAP STN	Netback DAP $/STN	Netback GMAP STN	Netback GMAP $/STN
2017 1Q	[			]
2017 2Q	[153,680			]
2017 3Q	[			$315]
2017 Q4	[			]
2018 Q1	[			]
2018 Q2	[		121,329	]
2018 Q3	[			]
2018 Q4	[			]
2019 Q1	[			]
2019 Q2	[			]
2019 Q3	[			]
2019 Q4	[			]
2020 Q1	[			]
1Q '19 to 4Q '19 Change		[		]

Exhibit I-49

PROPRIETARY INFORMATION DELETED
CONTAINS RANGED DATA

Mosaic Financials for Phosphates, Fertilizer Grade

					Jan.-Mar.		
		2017	2018	2019	2019 1Q	2020 1Q	
Total Sales Quantity (ST)	[						]
Total Sales Value ($1000)	[						]
COGS ($1000)	[					$556,011	]
Gross Profit ($1000)	[						]
SG&A ($1000)	[		$99,167				]
Other Operating Income/Expense ($1000)	[						]
Operating Profit ($1000)	[						]
Other Income/Expenses ($1000)	[	$6,982					]
Net Income/(loss) ($1000)	[						]
Total Sales Unit Value ($/ST)	[						]
COGS/Sales Ratio	[				106.0%		]
Gross Profit as % net sales	[						]
SG&A as % net sales	[			1.2%			]
Other Operating Income/Expense % of net sales	[						]
Operating Profit as % net sales	[						]
Net Income as % of net sales	[						]

Source: Mosaic.

Exhibit I-50

Phosphate Fertilizers from Morocco and Russia

Recommendations for the Collection of Pricing Data

Petitioner recommends that the Commission collect pricing product data from U.S. producers and U.S. importers as discussed below.

We recommend that pricing data be collected for two types of phosphates fertilizers:

1) Standard monoammonium phosphate (MAP), chemical formula $NH_4H_2PO_4$
2) Standard diammonium phosphate (DAP), chemical formula $(NH_4)_2HPO_4$

Phosphate fertilizers are a commodity product. There is no material difference in physical characteristics between MAP and DAP from different sources of supply. Standard DAP has a formulation of 18-46-0. The most common formulation for MAP is 11-52-0 (nitrogen content of 11% and P_2O_5 content of 52%). Other standard formulations for MAP are 10-50-0 and 12-52-0. High purity MAP has a P_2O_5 content of 61 percent, and should be excluded for reporting of pricing data. Moreover, DAP and MAP collectively account for a large share of total phosphate fertilizers, both in terms of U.S. phosphate production (approximately 70 percent) and subject imports (approximately 85 percent).

Because of significant price changes for phosphate fertilizers, particularly over the last three years, Petitioner recommends that data be collected on a monthly rather than quarterly basis. That is, changes in prices during a quarter, and timing differences in the relative volumes sold within a quarter could result in artificial price differences. The risk of such distortions is significantly reduced by collecting pricing data on a monthly rather than quarterly basis.

New Orleans, Louisiana (NOLA) is a key benchmark location for phosphates pricing in the U.S. phosphate fertilizer market.[1] As shown in Exhibit I-1, in 2019 at least 84 percent of

[1] *See* Argus Media, Argus North American Fertilizer: Methodology and Specifications Guide at 10 (July. 2019), attached as Exhibit I-71.

phosphate imports (by volume in short tons) from Morocco and Russia entered into the port of New Orleans. Mosaic utilizes distribution/warehouse facilities in the New Orleans area from which it sells barge-load volumes. Phosphate fertilizer supply in New Orleans serves the interior of the United States through barge shipments up the Mississippi River inland waterways to Ohio, Illinois, Arkansas, and rail shipments branching out from Mississippi River terminals.

While a large share of phosphate fertilizer imports enter the U.S. market through NOLA, a large share of U.S. phosphate production is located away from NOLA (e.g., Mosaic's Central Florida plants). To compete with imports, U.S. producers must absorb freight to make their prices competitive with import pricing at specific distribution locations. For competition with imports at NOLA, comparing f.o.b. port (for imports) and f.o.b. plant (for U.S. producers) prices would artificially reduce U.S. producers' prices due to freight absorption, and would not accurately reflect competitive pricing and underselling. Moreover, trade publications such as Argus normally collect phosphate pricing data on a barge-load (1,500/ST or greater) basis, and we recommend that the Commission collect pricing data on this basis as well.[2] For these reasons, we recommend that prices be collected on a landed, duty-paid, loaded-on-barge basis to customers in the New Orleans (NOLA) region.[3,4]

In addition, some of Mosaic's largest U.S. customers also import directly from Morocco and/or Russia. These include **[**

[2] *See* Argus Media, Argus Phosphates: Methodology and Specifications Guide at 6 (Apr. 2020), Exhibit I-20.
[3] We recognize that because some imports that enter NOLA are not sold to customers in NOLA, requesting NOLA-delivered pricing will result in less coverage than represented by share of subject imports into NOLA. However, we believe that there are still a sufficiently large number of arm's length sales to customers in the NOLA region by both subject imports and Mosaic for meaningful price comparisons.
[4] It is Mosaic's understanding that U.S. producer Nutrien is not active in selling along the Mississippi River, such that collecting price data for only NOLA may result in limited pricing data being reported by Nutrien.

].[5] For this reason, the Commission should collect from any importer that also buys directly from a U.S. producer their purchase prices (both U.S. and import), as these reflect the first level of price competition in the U.S. market with respect to imports by these importers. However, to reduce the reporting burden for purposes of the Commission's preliminary injury investigations, the purchase price data can be limited to reporting for only 2019 and 2020.

Most sales contracts between buyer and seller include volume-rebate provisions that are determined on a calendar-year basis, and paid at the beginning of the next calendar year. We understand that suppliers anticipate these rebates and accrue them on their books in the current year before payment. It is important that when reporting value data "net of rebates, discounts, and other adjustments" that these rebates be deducted from the total value, even if not yet paid. We provide suggested language below to account for this.

For all of the above reasons, Petitioner recommends the following specific language for collecting pricing data for phosphate fertilizers. Following our recommended language are two modifications to our proposed reporting requirements for the Commission to consider if it has concerns about questionnaire reporting burdens for the preliminary phase injury investigations.

PRICE DATA

This question requests monthly quantity and value data for your firm's commercial shipments to unrelated U.S. customers in the agricultural sector (exclude industrial or feed sector shipments) since January, 2017, for the following products produced (or imported) by your firm.

Product 1.—Standard-grade monoammonium phosphate (MAP), chemical formula $NH_4H_2PO_4$, excluding high-purity MAP.
Product 2.—Standard-grade diammonium phosphate (DAP), chemical formula $(NH_4)_2HPO_4$.

[5] *See* Names and Contact Information for Importers of Phosphates from Morocco and Russia, 2019, Exhibit I-16. Mosaic also competes with these importers/distributors further downstream. For example, **[ ]** also sell to **[ ]**, a major phosphate customer of Mosaic.

For U.S. Producers

Please note that shipments should be reported for MAP and DAP, bulk (i.e., barge-load), selling point to New Orleans (NOLA) area arm's-length customers, loaded-on-barge. Do not include shipments to customers outside the NOLA area. Do not include any U.S. inland freight from NOLA).. Total dollar values should reflect the *final net* amount paid to you (net of all deductions for discounts, rebates, or other allowances). If rebates are paid retroactively based on sales volume targets, base these deductions on estimates of rebates based on historical experience with customers.

For Importers

Does your firm purchase phosphates directly from U.S. producers? ____ Yes ____ No

If you responded "Yes," in the table below report data for both your sales into the U.S. market for imports, as well as data for your purchases of both U.S.-produced and imported phosphates for the period 2019 to 2020. If you reported "No," report only your sales of imported phosphates into the U.S. market, based on the following instructions.

For importers reporting "No", please note that shipments for MAP and DAP should be bulk (i.e., barge-load), selling point to New Orleans (NOLA) area arm's-length customers, landed, duty-paid, loaded-on-barge. Do not include any U.S. inland freight from NOLA. Total dollar values should reflect the *final net* amount paid to you (net of all deductions for discounts, rebates, or other allowances). If rebates are paid retroactively based on sales volume targets, base these deductions on estimates of rebates based on historical experience with customers.

{Insert pricing product monthly tables}

For importers reporting "Yes", please also report volume and value data for your purchases from U.S. producers, and imported from Morocco and Russia, for each month during 2019 to March, 2020. Report on a bulk (i.e., barge-load), receiving point New Orleans (NOLA) basis, loaded-on-barge. Total dollar values should reflect the *final net* amount paid by you (net of all deductions for discounts, rebates, or other allowances). If rebates are paid retroactively based on sales volume targets, base these deductions on estimates of rebates based on historical experience with your U.S. and foreign suppliers.

{Insert pricing product monthly tables—one for import purchases, one for U.S.-origin purchases}

Price data checklist.— Check that the pricing data in Question XX have been correctly reported:

Are the price data reported above:	X if Yes
In dollars (**not** $1,000)?	
Quantities reported in short tons?	
Are barge-load or greater, loaded-on-barge basis?	
Include only NOLA-origin (or destination) shipments?	

Excludes any U.S. inland freight from NOLA (for sales)?	
Is at NOLA location basis (for purchases)?	
Net of all discounts and rebates?	
Returns (if any) credited to the month in which the sale occurred?	
Includes only agricultural sector sales?	

Price Indexing.—In determining prices for your phosphate fertilizer imports and/or sales to your U.S. customers, do you rely on or refer to certain publicly available prices from trade publications as indices to affect price (e.g., Argus, CRU, Green Markets)? ____ Yes ____ No

If "Yes", please provide the following information:

Trade publications referenced	
Share of customers with price indexing	

Provide a description of how your price indexing works. For example, is there a base price set at time of contract, and if a lag between shipment and delivery the price can change when delivered to customer based on changes in a published price from time of shipment to time of delivery? Does your firm use different pricing formulas for different customers? If so, please describe in detail below, including formulas used.

_____
_____
_____

Rebates.—Does your firm provide rebates associated with phosphate fertilizer sales to your customers?
____ Yes ____ No

If "Yes", explain below how those rebates are determined, when they are paid to the customer, and how rebates were deducted from the quarterly pricing data reported above. For example, if rebates are determined based on an annual sales volume schedule, and paid in the subsequent year, describe how those rebates were applied in the pricing data above.

_____
_____
_____

Report in the table below the average rebate (on a $/ST basis) deducted to arrive at the net reported values in the pricing tables.

Average Unit Values of Rebates Excluded from Pricing Product Values ($/ST)		
	MAP	DAP
2017		

2018		
2019		
Jan.-Mar., 2020		

If the Commission has concerns about the burden of these recommended data collections for purposes of the preliminary phase investigations, we propose the following modifications. First, while monthly pricing should be more precise for price comparisons for the reasons stated above, the above recommendation can be modified to collect pricing data on a quarterly basis.

Second, the Commission normally collects selling price data from importers, not their purchase prices. As discussed above, collecting only sales price data from importers will omit price competition at the first level of trade, where imports compete with the domestic like product for sales to large U.S. customers who are also importers. However, this downside of collecting only sales price data from importers could be mitigated by the fact that **[**

]. The Commission may therefore want to consider collecting only sales price data from importers for purposes of the preliminary injury investigations.

Exhibit I-51

PROPRIETARY INFORMATION DELETED
CONTAINS RANGED DATA

Impact of Imports on U.S. Producers of Phosphates

	2017	2018	2019	2017-19 change absolute	2017-19 change %
Imports					
Subject Imports (1000 ST)	2,096	3,047	3,105	**1,008**	**48.1%**
Subject Imports ($/ST)	$326	$390	$343	**17**	**5.3%**
Subject Import Market Share (% of U.S. A.C.)	[				]
Impact on U.S. Producers					
Capacity (1000 ST)	[		13,647		]
Production (1000 ST)	[				]
U.S. Shipments (1000 ST)	[			-1,709	]
U.S. Shipments ($1000)	[				]
U.S. Shipments AUV ($/ST)	[				]
Total U.S. Producer Market Share (% of U.S. A.C.)	[				]
Production Related Workers	[				]
Hours worked (1000 hours)	[				]
Wages paid ($1000)	[				]
COGS ($1000)	[	$2,958,788			]
COGS/Sales Ratio	[				]
Gross Profit ($1000)	[			-140.3%	]
Gross Profit as % net sales	[	13.9%			]
Operating Profit ($1000)	[				]
Operating Profit as % net sales	[				]
Net Income/(loss) ($1000)	[				]

Sources: See supporting exhibits for imports, and U.S. producer trade and financial data.

Exhibit I-52

PROPRIETARY INFORMATION DELETED
CONTAINS RANGED DATA

U.S. Producer Stocks, Ending Inventories

1,000 st of product

				Jan.-Mar.			
		2017	**2018**	**2019**	**2019**	**2020**	**Source**
DAP	**[**					**]**	TFI
MAP	**[**					**]**	TFI
TSP	**[**		5			**]**	Mosaic estimate of Simplot TSP stocks
NPS	**[**					**]**	Mosaic estimate of Simplot stocks and actual Mosaic stocks
Total	**[**				1,727	**]**	

Exhibit I-53

PUBLIC VERSION
Proprietary Information Deleted

BUSINESS PROPRIETARY DOCUMENT
NOT SUSCEPTIBLE TO SUMMARIZATION

Exhibit I-54

Nutrien™

STORIES

Revamping Nutrien's Phosphate Operations, Now Self-Sufficient in Phosphate Rock

Published: Jun 11, 2019

Nutrien's phosphate operations are now fully integrated with respect to phosphate rock supply and no longer require imports of any offshore phosphate rock.

After the merger was completed in January 2018, the company conducted a thorough review on how to optimize its newly combined businesses. One of the key decisions that came out of that review was a rebalancing and repurposing of its North American phosphate assets.

The company closed its phosphate facility in Redwater, Alberta, which previously relied on imported phosphate rock from OCP (Western Sahara), to produce ammonium sulfate instead. Nutrien already operates a large nitrogen plant at the Redwater site, and this move is expected to double the site's ammonium sulfate capacity to 700,000 tonnes per year, by the third-quarter of 2019.

Nutrien closed its smaller Geismar, Louisiana phosphate facility at the end of 2018, which also relied on imported phosphate rock. We are increasing production of monoammonium phosphate (MAP) and other products at our phosphate facilities in Aurora, North Carolina and White Springs, Florida. Both of these facilities are supplied by their own rock mines.

"This increase in production is expected to offset the reduction in supply from our Redwater facility, and ensure a continued supply of phosphate products to our Western Canadian market," says Raef Sully, Nutrien's CEO of Nitrogen and Phosphate.

"These actions are also expected to reduce our per-tonne phosphate costs, which will strengthen our company and better enable us to continue to feed the future," Raef adds.

Exhibit I-55

The Ledger

Business

Mosaic will idle Bartow plant

By Kevin Bouffard

Posted Dec 19, 2019 at 5:11 PM
Updated Dec 23, 2019 at 1:07 PM

The action will affect about 360 workers, but the company does not anticipate making layoffs or furloughs during the down time.

LAKELAND – The Mosaic Co. announced Thursday it would idle indefinitely its Bartow fertilizer manufacturing plant until the market for phosphate fertilizers recovers.

The action will affect about 360 workers, but the company does not anticipate making layoffs or furloughs during the down time, according to a letter to workers from Bruce Bodine, the company's senior vice president for phosphates.

"We continue to confront the reality of current market conditions impacted by three consecutive weak fertilizer application seasons in North America," Bodine said in the letter. "High inventories coupled with further price declines have necessitated a need to further curtail the company's North American phosphates and potash production to help rebalance global supply and demand until the market improves."

The company announced in a press statement released Thursday morning that it would cut back its Central Florida phosphate fertilizer production by 150,000 metric tons per

month, but the Bartow plant was not identified specifically. The company also operates a much larger phosphate fertilizer plant at New Wales southwest of Mulberry.

Spokeswoman Callie Neslund confirmed the entire reduction would involve shutting the Bartow plant because of its higher production costs and because its primary product, diammonium phosphate fertilizer, has experienced the greatest decline in demand.

The plant was scheduled for a maintenance shutdown next month that normally takes several weeks, she said. But next year's shutdown, scheduled to begin in the first week of January, will last at least a month.

The company will make a decision on reopening on a monthly timetable depending upon market conditions, Neslund said.

"We hope the market turns around, and we can bring the plant back up in short order," she said.

The Bartow shutdown comes on top of Mosaic's decision to idle its Louisiana phosphate fertilizer plant for the second half of this year, reducing the company's production by 500,000 metric tons. In the third quarter ending Sept. 30, Mosaic sold 2.2 million metric tons of phosphate fertilizer products, essentially unchanged from a year earlier, but the average price fell 22% to $355 per metric ton over that time.

"A third consecutive disappointing application season in North America has led to continuing high inventories and price weakness. Mosaic will not produce at high rates when we are unable to realize reasonable prices," said Mosaic CEO Joc O'Rourke said in the statement. "We believe our extended production curtailments will contribute to balancing the global supply-and-demand picture as we move into 2020. With

fertilizer-depleted soils and rising agricultural commodity prices, we continue to expect robust demand and strong business conditions in the year ahead."

Mosaic's stock dropped by 26 cents, down 1.25%, to $20.60 per share at the close of trading Thursday on the New York Stock Exchange. That's a 39% decline from its peak during the year of $33.91 per share.

Kevin Bouffard can be reached at kevin.bouffard@theledger.com or at 863-802-7591.

Exhibit I-56

US bankrupt MissPhos to shut down DAP production, seeks buyers

Author: Mark Milam

2014/12/05

HOUSTON (ICIS)--Mississippi Phosphates (MissPhos) will shut down production of diammonium phosphate (DAP) as of early next week, which will result in the loss of 175 job, and it is seeking buyers for its assets while under bankruptcy protection, the US fertilizer producer announced on Friday.

The closure of MissPhos could have a significant effect on the domestic market since the company is the third largest phosphate producer in the US, behind Mosaic and PotashCorp.

When MissPhos announced its bankruptcy, market sources noted that it could affect North American buyers who prefer domestic product because of its technical specifications, especially for off-coloured and blondish DAP volumes.

MissPhos officials said that the employees being laid-off will be transitioned out over a two week period and that only 50 employees are being retained in order to bring down operations and perform the remaining core functions.

Beyond normal plant functions and logistical work at the facility, MissPhos said that its sulphuric acid operations will continue to run for several days in order to establish inventory needed to support on-going wastewater treatment needs.

The DAP granulation plant has a maximum annual production capacity of approximately 850,000 tons (771,000 tonnes) while the existing sulphuric acid plants have the capacity to produce acid sufficient for annual DAP production of approximately 600,000-640,000 tons.

“The company will continue with other aspects of its core operations, including ammonia terminaling operations, maintenance, security and environmental controls. At this time, we do not know when DAP production might resume. The company is actively seeking buyers for its assets while we continue to move forward with the other elements of our bankruptcy case,” said Steve Russo, MissPhos CEO.

On 27 October MissPhos filed for Chapter 11 protection in the US Bankruptcy Court, Southern District of Mississippi.

In response to the filing, the Pascagoula-based producer said it had pursued bankruptcy so it could gain some relief from creditors and also secure an updated funding facility in order return to normal operations as soon as possible. Company officials had declined to comment on possible layoffs or employee furloughs as a result of the filing for protection.

Mississippi Phosphates owns and operates manufacturing and distribution facilities and produces agri-chemicals and fertilizers with its manufacturing facilities consisting of two sulphuric acid plants, a phosphoric acid plant, a DAP granulation plant and ammonia terminal operations.

Formerly a part of Yazoo-City-based Mississippi Chemical, Mississippi Phosphates emerged from that bankruptcy in December 2004.

The company listed assets and debt of more than $100m in Chapter 11 papers filed in US Bankruptcy Court in Gulfport, Mississippi. Two smaller subsidiaries also sought creditor protection. The case number is 14-bk-51667.

In July the company announced it was consolidating all operations at its Pascagoula manufacturing facility and closing administrative headquarter in Madison, Mississippi, in order to increase efficiencies and eliminate some costs. In August Russo was named as CEO replacing interim CEO James Sherbert.

Exhibit I-57

https://www.suwanneedemocrat.com/news/local_news/potashcorp-lays-off-another-employees-suwannee-river-chemical-plant-to/article_6540f24d-2d39-5c4e-af37-b56dc083a30e.html

PotashCorp lays off another 56 employees-Suwannee River Chemical Plant to permanently close

Joyce Marie Taylor
Suwannee Democrat
Jun 2, 2014

The Jasper News

Suwannee Democrat

PotashCorp White Springs announced today that the second phase of layoffs at their Suwannee River Chemical Plant, which will be permanently closed, has been completed, according to Public Affairs Manager Mike Williams. A total of 56 employees, 45 wage and 11 salaried personnel, were notified personally by their supervisors or managers today that they were being laid off, which is 44 less people than what was initially predicted last December, Williams added.

Personnel impacted in this second round of layoffs are from the following counties: Hamilton, 11; Columbia, 18; Suwannee, 20; Madison, 1; Lafayette, 2; and Valdosta, Ga., 4. These employees will work through June and July and will be officially laid off in August with appropriate severance packages and job assistance programs.

Williams said the Hamilton County Commissioners were also personally notified today. An official announcement will be made at tomorrow's county commission meeting in Jasper.

“This is a difficult day for our employees, their families and our company,” said PotashCorp White Springs General Manager Bill Donohue. “These necessary changes do not reflect on the talents of people impacted by these decisions. We have an exceptional group of employees across the company, and these changes mean that we will lose a number of very capable and dedicated people who we sincerely thank for their contributions. We will do our best to assist those affected.”

History

On Dec. 3, 2013, PotashCorp announced company-wide operational and workforce changes at all of their facilities, including White Springs. The decision stemmed from a review of business and operational needs that affected all three segments (potash, nitrogen and phosphate) and the changes were undertaken to enhance the global competitive position of the company.

A press release at that time stated challenges in the global phosphate market and an increased regulatory burden were what made the move necessary and what forced the closing of the Suwannee River Chemical Plant. The new operating level is expected to extend the life of the existing phosphate rock mine by approximately five years. The Swift Creek Chemical complex, mine and mill will continue to operate and White Springs will maintain about 389 positions at the facility.

The Suwannee River Chemical Plant was one of two plants at the White Springs facility. The first round of layoffs last December resulted in a reduction of 248 people and a change in management with Bill Donohue taking over as general manager. The second round of layoffs on Monday, June 2, left another 56 people out of a job for a cumulative reduction of close to 50 percent from previous employment levels.

Williams said in January this year, “the effects on Hamilton County as a whole should be minimal.” He also said PotashCorp will still be a major employer for the county with about 350-400 employees, as well as be a major taxpayer and community contributor.

The original 248 personnel impacted by the layoffs were: Alachua County-1; Baker County-2; Columbia County-91; Hamilton County-68; Madison County-2; Suwannee County-71; and Echols/Lowndes County, Ga.-13. Of the 248 personnel laid off, 27 percent lived in Hamilton County and 28 percent lived in Suwannee County.

“I want to stress the importance of keeping the safety of our people at the forefront” said Donohue. “Nothing we do should jeopardize this, and I encourage all our employees to be extra diligent through this transition, so that everyone goes home safely at the end of each and every day.”

Exhibit I-58

argus

argusmedia.com

Argus Phosphates

Formerly Argus FMB Phosphates

Issue 19-1 | Thursday 3 January 2019

EXECUTIVE SUMMARY

Ethiopia part awards; US pulls in more

Activity east of Suez was confined to 6,000t of Chinese DAP sold to Vietnam at around $400/t fob. There is little demand for DAP imports on the Indian subcontinent following the large amount of tonnage received this fertilizer year in both India and Pakistan. Latest provisional data show that Indian DAP stocks were around 831,000t at the end of December.

West of Suez, the US remains the key outlet, with three more Moroccan vessels, plus one more Saudi for January. Also bullish was the part award of the Ethiopian NPS tender of 200,000t to OCP.

There was a tender issued in Turkmenistan for around 20,000t of MAP for January shipment.

MARKET DRIVERS

China scraps DAP export tax for 2019

The Chinese government has removed the export tax on DAP for this year, from a previous levy of Yn100/t of DAP in 2018.

Chinese DAP exports were healthy last year — despite the Yn100/t tax — at around 7.1mn t in January-November, latest provisional data show. This marks an increase of around 1.12mn t on the 5.98mn t exported in the period in 2017. November DAP exports were around 890,000t, according to the provisional data, down from a record 1.36mn t in October.

EABC part awards NPS tender

Ethiopian importer EABC has awarded Morocco's OCP lots totalling 200,000t of NPS under its 19 September tender. There are still around 425,000t of NPS to be awarded. But the decision will keep OCP's supply tight at the start of the year. A vessel was loaded in December and a further three will ship this month.

30-60 DAY OUTLOOK

Soft

The outlook for both DAP and MAP is still soft. There is little interest in further DAP imports in the major import markets of India and Pakistan, and Chinese domestic DAP offtake remains slow. Brazilian MAP 11-52 import demand could pick up at the end of the month. The US spring season looks promising for producers.

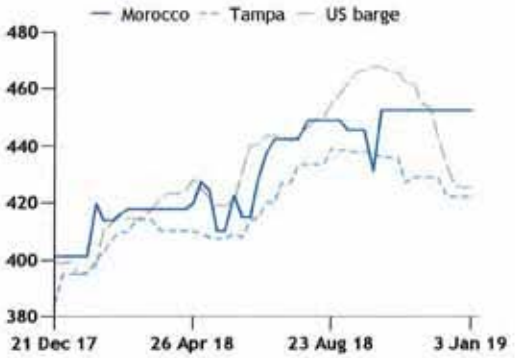
PRICES

Key price assessments	3 Jan	20 Dec	$/t
DAP/MAP - fob bulk			
DAP/MAP Tampa	422	422	↔
DAP China	400	403-405	-
DAP Saudi Arabia	407-415	407-415	↔
MAP Baltic	407-410	407-410	↔
DAP/MAP - cfr bulk			
DAP India	411-417	411-417	↔
DAP Pakistan	421-422	421-422	↔
MAP Brazil	438-440	438-440	↔
Phosphoric acid India/t P2O5	768	768	↔
DAP - fca			
DAP Benelux fot/fob duty paid/free	475-485	475-485	↔

See page 2 for full price table

Selected DAP/MAP/NPK supply balance - January	'000t	
Exporter	Sold	Unsold
OCP	422	78
Ma'aden	140	TBC

DAP fob prices $/t



View the methodology used to assess phosphate prices at www.argusmedia.com/methodology. Your feedback is always welcome at fertilizer@argusmedia.com

MARKET ANALYSIS

OCP awarded 200,000t NPS in Ethiopia

In a predictably quiet week, the major news was OCP's partial opening of l/cs under the Ethiopian NPS tender dating back to late 3Q 2018. In total, 200,000t have so far been opened, equating to roughly a third of the total tender. In all likelihood, the rest of the award should follow. This, plus two cargoes for Benin and yet another three panamaxes for the US in January should help keep the Moroccan producer occupied.

In truth OCP is in a minority. Most producers do not have much on their order books this month, waiting for a scent of market direction, or, in the case of Ma'aden, pushing tonnage on formula to Australia, the US and Brazil.

The Indian subcontinent is in no need of DAP just yet although one tender for by NFL was announced for 100,000t. But DAP stocks have climbed to over 800,000t as of end-December. Similarly, stocks in Pakistan are healthy (nearly 530,000t) and the market is dead. A couple of small deals were recorded in southeast Asia ex-China at around $400/t fob which seems plausible for small lots. The Chinese government cut the export tax on DAP to zero (from CNY100/t) for 2019. Yet for all the talk of limited supply, Chinese DAP exports for January to November 2018 are 7.1mn t, over 1mn t more than for the same period of 2017. Chinese producers are getting scant support from the domestic market, and time is running out to get tonnage into place before the Chinese New Year.

In the absence of other interest, of note was a tender in Turkmenistan for 20,000t MAP. Russian producers look best placed to take any award.

West of Suez, producers, facing limited spot market demand, are following the tried and tested route of pushing product in to the US domestic market or Brazil on formula.

The most notable development is the continued growth in the US import line up. In addition to the three OCP cargoes for January, Ma'aden will ship 45,000t DAP/MAP. The outlook for the US domestic market in 1Q 2019 is bullish, based mainly on increased anticipated acreage for wheat and corn and lower domestic production, despite the burgeoning import line up.

On the supply side, as we go to press, there are unconfirmed reports of production stoppages at GCT Tunisia due to Gabes port strikes affecting sulphur discharge. This has yet to be commented on by GCT.

Phosphates prices	3 Jan	20 Dec	±	
				$/t
DAP/MAP/TSP - fob bulk				
DAP/MAP Tampa	422	422	0.00	↔
DAP/MAP Tampa equivalent Brazil	414-416	413-415	1.00	-
DAP Tampa equivalent India	370-376	368-374	2.00	-
DAP Tunisia	450	450	0.00	↔
DAP Morocco	450-455	450-455	0.00	↔
DAP Morocco P2O5 equiv	847.35	853.26	5.91	-
DAP Morocco equivalent US terminals	423-428	423-428	0.00	↔
DAP Lithuania Baltic	430-435	430-435	0.00	↔
DAP Russia Baltic/Black Sea	402-405	402-405	0.00	↔
DAP China	400	403-405	4.00	-
DAP China P2O5 equiv	734.4	743.57	4.59	-
DAP Saudi Arabia (KSA)	407-415	407-415	0.00	↔
DAP Mexico	425-430	425-430	0.00	↔
DAP/MAP Australia	410-412	410-412	0.00	↔
DAP US Gulf domestic barge $/st	384-388	385-387	0.00	↔
DAP Central Florida railcar $/st	415	415	0.00	↔
DAP China ex-works	382-396	382-396	0.00	↔
DAP Benelux fot/fob duty paid/free	475-485	475-485	0.00	↔
MAP Baltic	407-410	407-410	0.00	↔
MAP China 11-44	338-343	338-343	0.00	↔
MAP China 10-50	393-400	393-400	0.00	↔
MAP China 11-52	420-425	420-425	0.00	↔
MAP Morocco	440-445	440-445	0.00	↔
TSP Tunisia	360-365	360-365	0.00	↔
TSP Morocco	350-360	350-360	0.00	↔
TSP China	280-315	280-315	0.00	↔
TSP eastern Med (Lebanon/Israel)	335-345	335-345	0.00	↔
DAP /MAP - cfr bulk				
DAP/MAP Argentina/Uruguay	460-463	460-463	0.00	↔
MAP Brazil 11-52	438-440	438-440	0.00	↔
MAP Brazil 11-52 P2O5 equiv	712.02	718.92	6.90	-
MAP Brazil 10-50 (ex-China)	407-414	407-414	0.00	↔
MAP Brazil 10-50 (ex-China) P2O5 equiv	696	702.52	6.52	-
MAP Brazil 11-44 (ex-China)	367-374	367-374	0.00	↔
MAP Brazil 11-44 (ex-China) P2O5 equiv	685.8	693.95	8.15	-
DAP India	411-417	411-417	0.00	↔
DAP India P2O5 equiv	741.94	741.94	0.00	↔
DAP Pakistan	421-422	421-422	0.00	↔
DAP Turkey	440-450	440-450	0.00	↔

Raw material contracts					±	
						$/t
Phosphoric acid/t - P2O5						
cfr India	4Q18	768	3Q18	758	10.00	-
cfr western Europe	3Q18	775-850	2Q18	755-850	10.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	4Q18	100-101	3Q18	98	2.50	-
cfr India (68-70)	4Q18	119-120	3Q18	116	3.50	-
cfr India (70-72)	4Q18	135-139	3Q18	135-142	1.50	-
fob north Africa (69)	4Q18	113-115	3Q18	116-118	3.00	-
Sulphur						
cfr Tampa	4Q18	140	3Q18	121	19.00	-
cfr north Africa	4Q18	145-175	3Q18	127-147	23.00	-
Ammonia						
cfr Tampa	Jan19	285	Dec18	325	40.00	-

Spot Sales Selection - 3 January 2019						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
China	Xiangfeng	TBC	Vietnam	6 DAP	$400/t fob	TBC
Morocco	OCP	TBC	Europe	20 DAP	$450-455/t fob	January
TBC	Valency	MoA	Sri Lanka	7 TSP	$317.74/t cfr	Q1
Morocco	OCP	Various	US	170 DAP/MAP	Formula	January
Saudi Arabia	Ma'aden	Various	Australia	65 MAP/DAP	Formula	January
Saudi Arabia	Ma'aden	Various	Brazil	30 MAP	Formula	January
Saudi Arabia	Ma'aden	Various	US	45 DAP/MAP	Formula	January

Follow us on Twitter @ArgusMediaFertz for market insights from our editors.

HIGHLIGHTS THIS WEEK

Supply

- OCP January line up bolstered by...
- ...150,000t to Ethiopia
- ...three panamaxes to US
- Indian DAP stocks climb to 831,000t end December
- Pakistan stocks rise to 528,000t
- Chinese export duty on DAP eliminated
- US to receive 225,000t Moroccan...
- ... and Saudi DAP/MAP in January
- GCT reported down due to Gabes port strike action

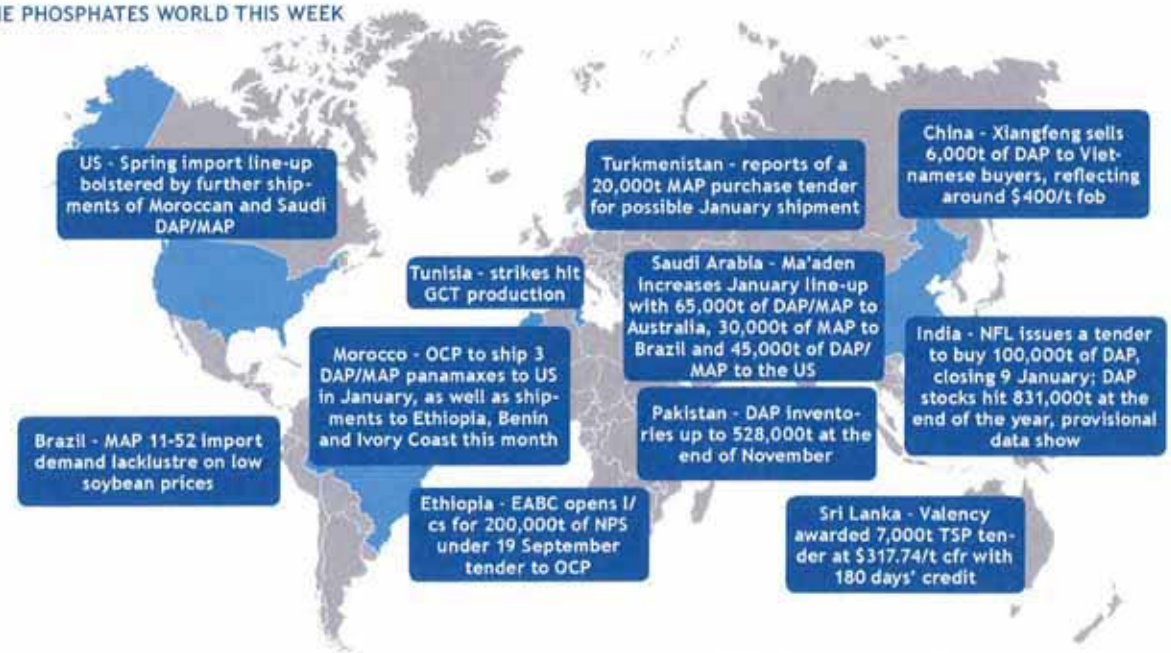
Demand

- NFL India issues DAP purchase tender for 100,000t
- Turkmenistan in market for 20,000t MAP
- Vietnam buys 6,000t Chinese DAP
- Chinese domestic market sluggish
- RCF issues 35,000t phosphate rock tender

Prices

- Chinese DAP trades in small lots around $400/t fob
- Valency awarded TSP tender in Sri Lanka at $317.74/t cfr
- Moroccan DAP/MAP prices roll over in Europe

THE PHOSPHATES WORLD THIS WEEK



Disclaimer: Argus depicts geo-political borders as defined by the United Nations Geospatial Information Section. For more information visit http://www.un.org/Depts/Cartographic/map/profile/world.pdf

Oustanding 2018 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
Ecuador/Agri, Fer, Ferm	DAP	7	24/10		Offers in, under negs
Nepal/KSCL	DAP	20	30/11	90-110 days after l/c establishment	Awarded
Sri Lanka/MoA	TSP	7	11/12	1Q 19	Awarded

NORTH AMERICA

US

Mosaic has not made any export sales this week.

US domestic

The US market has stabilized on thin trade and flat sentiment to begin the New Year.

The DAP barge price range widened to $384-388/st fob Nola this week, flat on a midpoint basis with the *Argus* previous assessment on 20 December. The low end was framed by a confirmed open-origin trade, while the high end was supported by a confirmed offer.

DAP/MAP import line grows

OCP will ship three more DAP/MAP panamaxes to the US in January. Ma'aden is also loading 45,000t DAP/MAP priced under formula.

Raw materials

The Tampa ammonia supply agreement between Yara and Mosaic fell by $40/t month over month to $285/t cfr for January shipments.

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Exhibit I-59

United States Share of Total Phosphate Exports from Morocco and Russia

	2015	2016	2017	2018	2019
Morocco			1,000 lbs., actual weight		
Total Exports	8,436,784	12,705,455	15,462,766	16,279,171	18,254,506
Exports to United States	1,401,139	2,379,380	3,287,738	4,604,073	4,110,476
Exports to Brazil	2,395,600	3,300,322	4,140,363	3,193,401	4,609,701
Exports to India	21	404,679	120,840	1,633,211	245,363
Exports to All Other	4,640,025	6,621,074	7,913,824	6,848,486	9,288,966
			Share of Total Exports		
Exports to United States	**16.6%**	**18.7%**	**21.3%**	**28.3%**	**22.5%**
Exports to Brazil	28.4%	26.0%	26.8%	19.6%	25.3%
Exports to India	0.0%	3.2%	0.8%	10.0%	1.3%
Exports to All Other	55.0%	52.1%	51.2%	42.1%	50.9%

	2015	2016	2017	2018	2019
Russia			1,000 lbs., actual weight		
Total Exports	9,088,802	9,927,324	9,879,052	11,591,314	11,372,938
Exports to Brazil	1,756,179	2,648,143	2,606,218	3,024,766	1,792,174
Exports to United States	1,168,073	740,782	853,268	2,079,739	902,165
Exports to China	0	135,355	58,935	85,055	205,051
Exports to All Other	6,164,549	6,403,044	6,360,632	6,401,754	8,473,548
			Share of Total Exports		
Exports to Brazil	19.3%	26.7%	26.4%	26.1%	15.8%
Exports to United States	**12.9%**	**7.5%**	**8.6%**	**17.9%**	**7.9%**
Exports to China	0.0%	1.4%	0.6%	0.7%	1.8%
Exports to All Other	67.8%	64.5%	64.4%	55.2%	74.5%

Sources: For Morocco, Office de Changes:
https://services.oc.gov.ma/DataBase/CommerceExterieur/requete.htm
For Russia, Federal Customs Services of Russia from HIS Market's Global Trade Atlas.

DAP is HS 3105.300000
MAP is 3105.4000000

For Morocco, All other phospates in HTS	3103100019, 3103100090, 3103110019, 3103110090, 3103190090, 3105510000, 3105590010, 3105590090.
For Morocco, All other phospates in HTS	3103101000, 3103109000, 3103110000, 3103190000, 3105510000, 3105590000.

Exhibit I-60

RESTRICTED

WT/TPR/S/329

7 December 2015

(15-6416) Page: 1/140

Trade Policy Review Body

TRADE POLICY REVIEW

REPORT BY THE SECRETARIAT

KINGDOM OF MOROCCO

This report, prepared for the fifth Trade Policy Review of Morocco, has been drawn up by the WTO Secretariat on its own responsibility. The Secretariat has, as required by the Agreement establishing the Trade Policy Review Mechanism (Annex 3 of the Marrakesh Agreement Establishing the World Trade Organization), sought clarification from Morocco on its trade policies and practices.

Any technical questions arising from this report may be addressed to Jacques Degbelo (022 739 5583), Catherine Hennis-Pierre (022 739 5640) and Alya Belkhodja (022 739 5162).

Document WT/TPR/G/329 contains the policy statement submitted by Morocco.

intensive fishing. Within the WTO, Morocco has submitted a proposal in the context of the rules negotiations on fisheries subsidies.[21] According to this communication, the Government considers that special and differential treatment should permit developing country Members to be exempt from any ban on subsidies.

4.3 Mining

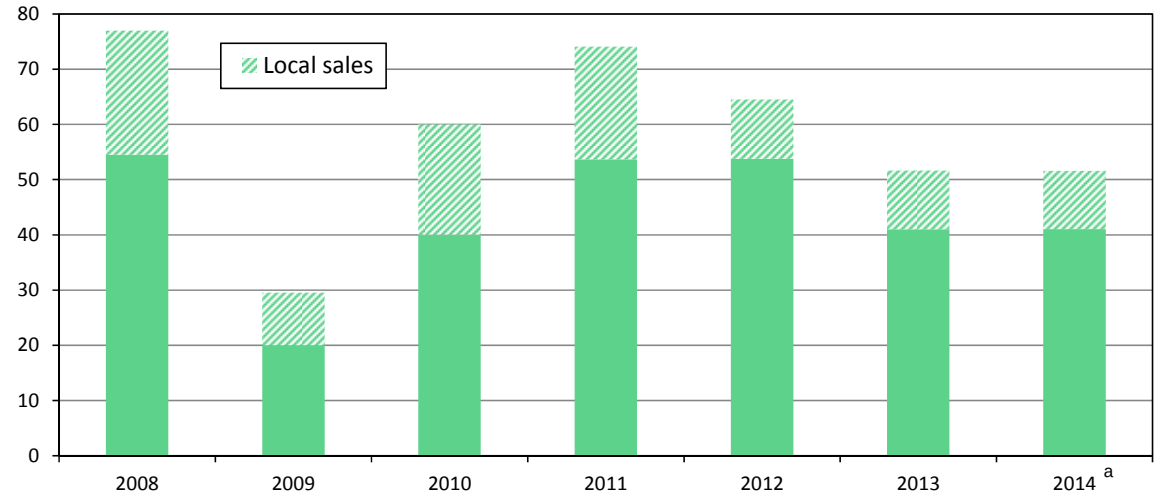
4.3.1 Overview

4.54. Morocco is the world's leading exporter and third-ranking producer of crude phosphate, and its second-ranking exporter of solid fertilizer, with 21% of the global market. During the period 2008-2013, the mining sector contributed 22-30% to the value of national exports and 10% of GDP. For comparison, the contribution of the extractive subsector to GDP fluctuated between 7.3% in 2008, 2.6% in 2009, 5.6% in 2011 and 3.9% in 2013.[22]

4.55. The decline in the performance of the extractive industries within the Moroccan economy mainly reflects the falling-off in world demand for phosphate and its byproducts since 2012, due to the sluggish global macroeconomic context and the reduced purchasing power of importing countries such as India and, to a lesser extent, Brazil, the main customers for Moroccan phosphate. As shown by Chart 4.3, domestic demand for these products has also fallen sharply; this demand relates mainly to fertilizers used in Moroccan agriculture.

Chart 4.3 Local sales and exports of mineral and processed products, 2008-2014

(DH billion)



a Provisional.

Source: Ministry of Energy, Mining, Water and the Environment (MEMEE), *Rapport d'activité 2013 du secteur des mines* (Mining sector activity report 2013).

4.56. The other mineral substances extracted from Morocco's subsoil include precious metals (gold and silver), base metals (copper, lead, zinc, cobalt, manganese, iron, etc.) and industrial substances and rocks (barite, salt, fluorite, bentonite and fuller's earth).

4.57. The Ministry of Energy, Mining, Water and the Environment (MEMEE) is responsible for mining policy.[23] The Government's strategy in this sector is to invest massively in upgrading the products locally prior to exportation. Except in the case of phosphate mining, which is a State monopoly, the Government is actively seeking foreign investors to develop the mining sector. To achieve this, Morocco has adopted a National Mining Sector Development Strategy for the period up to 2025.

[21] See, in particular, WTO document TN/RL/GEN/170 of 14 December 2010.
[22] Ministry of Energy, Mining, Water and the Environment (MEMEE) (2013).
[23] Viewed at: http://www.mem.gov.ma.

4.3.2 Phosphates

4.58. In 2013, phosphates accounted for more than 90% of the total domestic mining output of 29 million tonnes. Since it began in 1921 phosphate exploitation has been a State monopoly managed by the Moroccan Phosphates Board (OCP). In 2008, the OCP was converted into a public limited company with the State holding 95% of the shares. The OCP, a State-trading enterprise (Section 3.3.1), is one of the world's leading exporters of crude phosphate, phosphoric acid and phosphate fertilizer.[24] Since 2009, the OCP group has been pursuing a commercial strategy aimed at regulating supply and demand and controlling the prices of phosphates and their byproducts. The objective is to raise Morocco's share of the world market from 21% to 40% for all products (crude phosphate, phosphoric acid and fertilizer) under a policy aimed at extracting greater value-added from phosphate rock. Moroccan fertilizer exports rose from 2.6 million tonnes in 2006 to more than 4.3 million tonnes in 2013.

4.59. Major investments are being made to develop phosphate processing and include the chemical complex of Jorf Lasfar (DH 40 billion), owned by the OCP, which is planning to build a group of integrated fertilizer plants and a sea-water desalination unit. The OCP is offering foreign investors a turnkey infrastructure with industrial units designed to produce phosphatic products on the spot. At the same time, the Safi Phosphate Hub project envisages the investment of DH 30 billion over a ten-year period. The OCP is also planning to expand extraction capacity by about 20 million tonnes, to reach 50 million tonnes per year by 2025, as well as to develop ore treatment by building four high-technology washing plants to provide a capacity of 44 million tonnes per year.

4.60. Improved logistics and transport infrastructure and a substantial reduction in costs are envisaged following the entry into service, in 2014, of the Khouribga-Jorf Lasfar pipeline (235 km), the extension of the port of Jorf Lasfar and the construction of the new phosphate port of Safi, which will eventually handle 14 million tonnes per year.

4.3.3 Other mineral products

4.61. Unlike phosphate rock, other mineral products and their processing and phosphate processing are accessible to private (including foreign) investment. To engage in non-phosphate mineral exploration and exploitation it is necessary to obtain exploration and exploitation permits. Exploration permits can be obtained from the MEMEE.

4.62. In 2015, a new Mining Code was adopted to replace the 1951 legislation.[25] The principal measures introduced by this law are as follows:

- extension of the scope of the mining legislation to include other mineral substances for industrial use, such as calcite, feldspar, magnesite, and perlite, with the exception of construction and civil engineering materials;
- introduction of the exploration permit offering mining enterprises the opportunity to operate within large-scale areas ranging from 100 to 2,400 km^2;
- a mining title to cover all the mineral products present, instead of a specified category, as is currently the case;
- creation of new permits for the exploitation of underground cavities for storing natural gas and for the exploitation of tips and spoil;
- extension of the period of validity of the mine exploitation permit and its renewal until reserves are exhausted; and
- requirement of an environmental impact assessment and an abandonment plan to protect the environment and ensure sustainable development.

[24] Viewed at: http://www.ocpgroup.ma/fr.
[25] Law No. 33-13 on mining, published in the OJ on 1 July 2015.

4.63. The mining sector benefits from the incentives offered by the Investment Charter and by the General Tax Code, as amended by the annual Finance Laws, in particular a corporation tax rate of 17.5%. Apparatus and equipment used for prospecting are not exempt from VAT. The "depletion allowance" (PRG) was abolished by the 2008 Finance Law. This allowed mining enterprises to set aside funds, free of corporation tax, up to a maximum of 50% of their taxable profits (or 30% of their turnover). These sums were used to establish a social fund (20%) and to finance prospecting for new deposits (80%).

4.64. The National Hydrocarbons and Mining Board (ONHYM), which reports to the MEMEE, is a public agency responsible for carrying out, in the authorized areas, studies, surveys and prospecting work to discover hydrocarbon and other mineral deposits (apart from phosphates), developing and exploiting them, and engaging in any other related activity.[26]

4.65. Small-scale mining is in process of being restructured. This activity, carried on mainly in the mining region of Tafilalet and Figuig, is governed by the Dahir of 1 December 1960, which created the Purchasing and Development Co-operative for the Tafilalet and Figuig Mining Region (CADETAF). This public institution is responsible for the collection, purchase, transport and marketing of lead, zinc and barite ores mined in the mining region of Tafilalet and Figuig. Small-scale miners are required to deliver all their production to CADETAF, which has a monopoly on the purchase of the ore extracted. It is now acknowledged that small-scale mining cannot be developed further, given the ever-increasing depth of the mineral deposits, which calls for resources and technologies far in advance of those available to the small-scale miners.

4.4 Energy

4.66. About 95% of the energy consumed in Morocco is imported (average for 2009-2014). Energy policy has a preponderant influence on the development of the Moroccan economy. Since 2000, imports of energy products have increased steadily to meet the country's energy needs (Chart 4.4); they accounted for 24% of total import value in 2014. The main suppliers are listed in Table 4.12.

4.67. In 2014, the International Energy Agency (IEA) published a first report on Morocco.[27] This report stresses that Morocco's heavy dependence on fossil fuels is maintaining a relatively high level of greenhouse gas emissions and that Morocco is therefore confronted by a number of energy challenges also faced by the majority of members of the IEA, namely, how to ensure a reliable, affordable and sustainable energy supply. In 2010, Morocco sent the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) its second national communication concerning the measures taken to reduce greenhouse gas emissions in the energy sector.

[26] Law No. 33-01 creating the ONHYM; viewed at: http://www.onhym.com.
[27] IEA (2014).

Exhibit I-61

MIDDLE EAST

Morocco to hike phosphate output despite price drop

AFP Published September 12, 2013

Untreated phosphate is dropped off on a montain at the end of a conveyor belt at the Marca factory of the National Moroccan phosphates company near Laayoune on May 13, 2013. Morocco plans to nearly double its phosphate output over the next five years, despite a fall in global prices, at a planned cost of 15 billion dollars. (AFP/File)

SKHIRAT, Morocco (AFP) – Morocco plans to nearly double its phosphate output over the next five years, despite a fall in global prices, at a planned cost of 15 billion dollars, the state company said Thursday.

The North African country, the third largest producer of phosphates, holds more than 70 percent of global reserves and is the top exporter of the mineral used in agriculture and industry.

"Our annual production of treated phosphate now is 30 million tonnes, and by 2017 it will rise to 50 million tonnes," Mohammed Soual, chief economist at the Moroccan Phosphate Company (OCP), told AFP.

He said the state-owned company, which controls the Moroccan phosphate sector, would also raise its downstream fertiliser output from 3.5 million to 10 million tonnes per year over the same period.

"The total investment required is 130 billion dirhams (15 billion dollars)," Soual added, speaking on the sidelines of an industry conference near Rabat.

Morocco's sales of phosphates, which Soual said account for 28 percent of export earnings, amounted to 23.25 billion dirhams (2.8 billion dollars), according to official figures.

But that represented a fall of 18.3 percent compared with the same period in 2012, which Soual attributed to the drop in global prices.

He insisted, however, that the company would forge ahead with its investment plans, which he described as "very credible" and important in helping secure world food supplies, by enhancing agricultural productivity.

"The problem is not the price. The problem is that we need to guarantee world food supplies. We need to be more responsible," he said.
The extra production is expected to come from mines at Khouribga and Benguerir in central Morocco.

The kingdom has been battling an economic crisis over the past two years linked to the downturn in Europe, its top trading partner, with a sharp fall in receipts from the other main foreign currency earner, tourism.

In a bid to fix its ailing finances, Morocco's Islamist-led government is to begin implementing controversial reforms of the country's costly subsidies system, with a hike in fuel prices expected next week.

.../.,

From Our Partners

Site Index

Exhibit I-62

SUSTAINABILITY REPORT

2018

Working together for sustainable agriculture

OCP

OCP KEY FIGURES 2018

Management

31% The **increase in the number of women** in middle and senior management positions has more than doubled in recent years **up from 14% in 2008** to **31% in 2018**, thanks in particular to a hiring policy that guarantees fair treatment of applicants

57 external and internal stakeholders – from suppliers to employees going through projects partners, farmers, associations, etc. – participated to our 2019 consultation to build the materiality matrix defining our main sustainability priorities to manage and report on.

160 clients across 5 continents

1,95 The combined lost time injury frequency rate – including OCP's employees and subcontractors – has improved compared to 2,24 in 2016

224 new suppliers trained in 2018

61 average training hours per employee

8,000 employees involved in the Movement and Situations

19,413 **employees**

10,364 days of training provided to suppliers

31% Ebitda margin

$ 5,95 billion (equivalent to MAD 55,91 billion) in revenue

18,687 employees benefiting from training actions related to occupational health.

$ 21,3 billion(equivalent to MAD 200 billion) in infrastructure investments

14,45% share of expenditures with local suppliers

Production

707 ha of rehabilitated land

12,000 metric tons of waste recycled and recovered at all OCP sites in 2018.

100% of black steel scrap, wood, paper, cardboard, used oils, and batteries recycled

400 GWh annual volume of clean renewable energy reserved for OCP Group, which has now reached the target announced at the 2016 United Nations Climate Change Conference. This energy supplies all mining sites: Khouribga, Benguerir, Youssoufia, and Phosboucraa, with the last three being supplied at 100%.

$ 21,3 million (equivalent to MAD 200 million) additional will be invested in 2019 for energy-related research.

7.4% reduction in SO_2 between 2017 and 2018

$ 53,25 million (equivalent to MAD 500 million) committed for implementing Sulfacid technology on the Jorf Lasfar and Safi sites.

To learn more about how SDGs are integrated into our value chain, check out our integrated approach pages 32 & 33

Shared value creation

At least

930,000

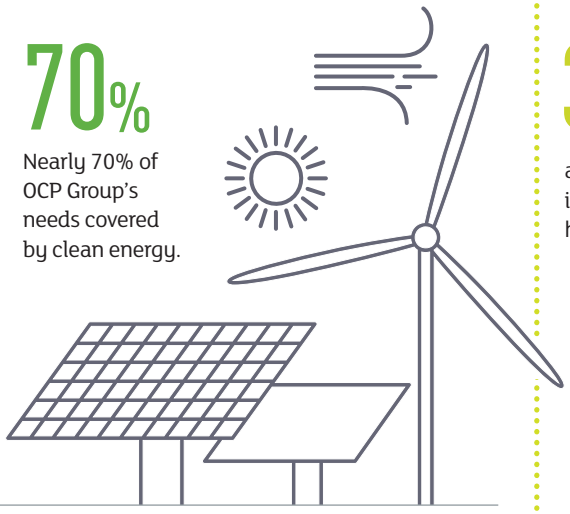
metric tons of CO_2 prevented and

3Mm³

of water saved through the Slurry Pipeline compared to conventional transportation.

70%

Nearly 70% of OCP Group's needs covered by clean energy.



30%

of OCP's water needs met by unconventional water resources, i.e. treated wastewater from the cities of Khouribga, Benguerir, and Youssoufia, as well as desalinated seawater from Jorf Lasfar and Laayoune.

53 JV and subsidiaries

13 Joint Ventures and 40 subsidiaries, including three key industrial partnerships with Dupont, Jacobs, and IBM, contributed to OCP's industrial excellence

4

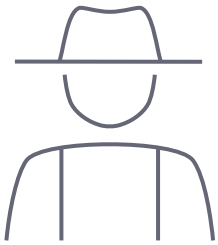
Incubation centers for local Micro and Small Entreprises (MSE) in Safi, Youssoufia, Benguerir and Laayoune.

127,000

farmers trained in OCP's School Lab program in Côte d'Ivoire, Guinea, Togo, Nigeria, Ghana, Kenya, and Burkina Faso.

10,000

Support for 10,000 farmers in India through improved infrastructure of 6 agribusiness centers and technical training.



51,000

farmers benefited from the Agribooster program in Côte d'Ivoire, Nigeria, Kenya, and Ghana

170

cooperatives supported through the Al Moutmir program in Morocco

3%

OCP invested 3% of its distributed value in communities in 2018. This includes partnerships with local associations and institutional stakeholders in youth training, education, culture, healthcare, and regional infrastructure.

225

associations used the capacity building program (finance, human resources, marketing, etc.) at the Khouribga, Youssoufia, and Rhamna sites.

145

micro-businesses and startups accelerated in Khouribga

2 069

young people trained and 816 young people integrated into the job market at the Khouribga, Youssoufia, and Rhamna sites.

112

local micro-businesses were trained on the purchase portal and QHSE standards and then registered on OCP's purchase portal for the Safi and Youssoufia sites.

1,000

beneficiaries of the Skills Acquisition program in Laayoune, Dakhla, and Boujdour

4,690

days of volunteering as part of the Community Service Program that facilitates skills transfer, thanks to 2,000 employees who gave their time to associations and communities.

and the summary table of our contributions by topic pages 118 & 119

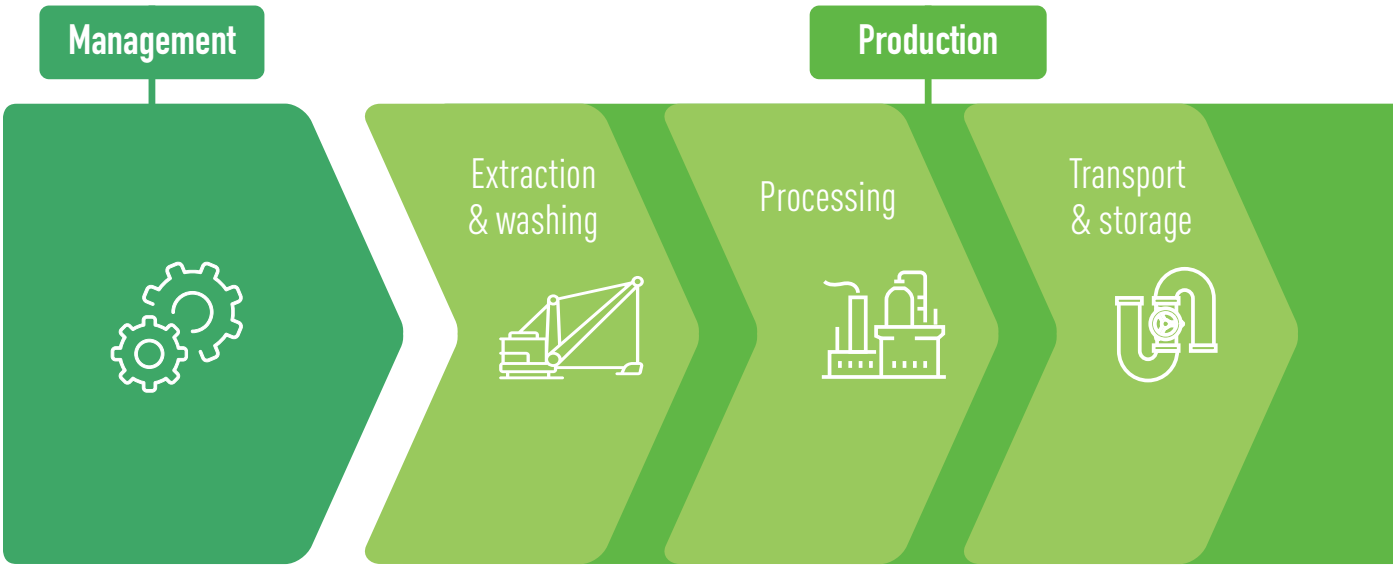
1 ABOUT OCP GROUP

> “OCP Group supports the world in its progress toward more prosperous, sustainable, and resilient agriculture.

As a major contributor in the global fertilizer market, OCP Group supports the world in its progress toward more prosperous, sustainable, and resilient agriculture. OCP is vertically integrated, covering every link of the value chain, from phosphate rock to fertilizer and phosphoric acid. OCP’s challenge: contribute to sustainably feeding a growing world population. Agricultural yields must be significantly increased and sustained for this to happen. Sound fertilizer production and use is therefore crucial to meeting the growing demand for food. In 2008, OCP launched an industrial processing strategy, requiring nearly $ 21,3 billion (equivalent to MAD 200 billion), to double its mining capacity and triple its processing capacity by 2027, while reducing its environmental impact. OCP places innovation, product development, and processes, along with supporting agricultural practices, at the heart of its strategy in order to provide a sustainable response to the challenge of food security. As an African company, our ambition is to position ourselves as a partner in the development of the continent’s agricultural ecosystem.

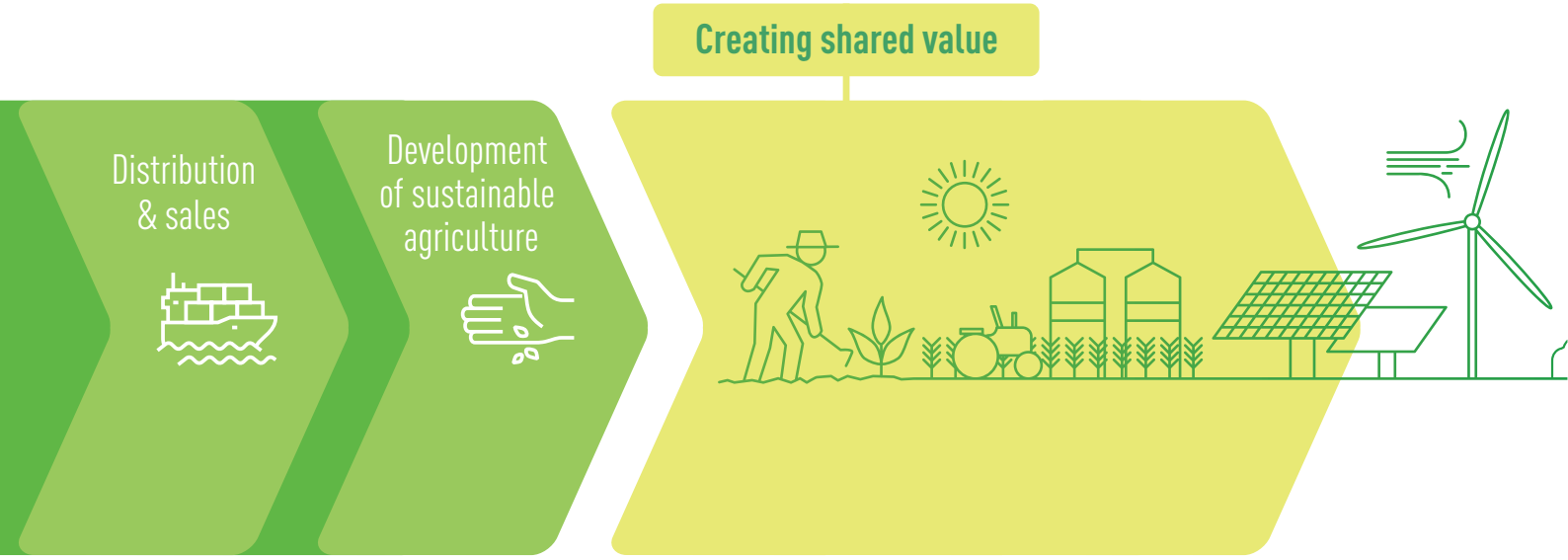
1.1

OCP'S ACTIVITIES



OCP'S VALUE CHAIN

As a global leader in the phosphate-based fertilizer industry, OCP promotes projects that positively impact society, strengthen skills and employability, and improve living conditions in the regions in which it operates. Its value chain is built with a view to creating shared value through its commitments to responsible and inclusive management and sustainable production.



GRI 102-9 | GRI 102-10

This value chain relies on a diverse supply chain. OCP purchases a wide variety of goods and services from over 3,500 suppliers worldwide. OCP's operating costs derive from mainly raw materials, energy, and transportation. In 2018, industrial activity costs amounted to $ 2,34 billion (equivalent to MAD 22 billion). The main changes in the supply chain in 2018 correspond to formalizing the new purchasing policy (see page 69).

GRI 102-1 | GRI 102-2 | GRI 102-7

Management

Key figures 2018

31% Ebitda margin

$ 21,3 billion (equivalent to MAD 200 billion) in infrastructure investments

$ 5,95 billion (equivalent to MAD 55,91 billion) in revenue

14,45% share of expenditures with local suppliers

19,413* employees

61 average training hours per employee

8,000 employees involved in the Movement

Highlights of 2018

Awards

OCP was awarded a gold medal by the International Fertilizer Association (IFA) for its Health, Safety, and Environment (HSE) practices.

The Social Responsibility Strategy of the Year award was presented to OCP in March for its commitment to Africa during the Africa CEO Forum in partnership with Bureau Veritas.

Innovation

With a focus on open innovation, OCP Group, Mohammed 6 University and Fraunhofer, european largest application oriented research organisation, entered into an R&D partnership in November 2018. Thus "FRAUNHOFER MAZAGAN LAB" a world-class research center had been created as to develop the next-generation sustainable production solutions.

"The research and innovation ecosystem, currently being developed by the Mohammed VI University, is reinforced by this first Center of Excellence. The Fraunhofer-Mazagan Lab aims to develop industrial solutions and implement innovative business circular projects for Africa with the support of our partners in Germany, "Mostafa Terrab, OCP Group CEO.

*scope including OCP SA, Phosboucraâ and Sotreg.

GRI 102-2 | GRI 102-7

Production

Extraction & washing

Phosphate is extracted at four open-pit mining sites. This involves exploration and feasibility studies, mine development and construction, mining, closure, and reclamation. The extraction phase includes two main operations: drilling and blasting. Phosphate rock is then transported by a conveyor belt system to washing facilities to be enriched and then readied for transport via Slurry Pipeline or rail to processing platforms. Phosphate rock can be exported directly or converted to phosphoric acid or phosphate-based fertilizers.

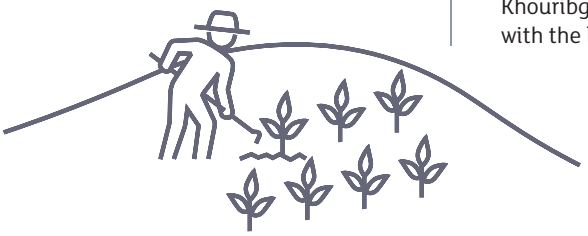
Phosphate rock

As the primary source of all phosphate products, phosphate rock is primarily used in agriculture to fertilize soil by either applying it directly or through the use of phosphate-based fertilizers. Phosphate rock is also used to produce animal feed supplements and for other industrial needs.

37,6 Mt produced | **11.3 Mt** exported

Key figures 2018

707 ha of rehabilitated land



400 GWh annual volume of clean renewable energy reserved for OCP Group, which has now reached the target announced at the 2016 United Nations Climate Change Conference. This energy supplies all mining sites: Khouribga, Benguerir, Youssoufia, and Phosboucraa, with the last three being supplied at 100%.

Highlights of 2018

Rehabilitation

An experimental farm project was launched in Youssoufia for 30 crop species in order to better adapt the planting during the rehabilitation of mining land.

Renewable energy

A new Power Purchase Agreement (PPA) was implemented to supply wind power to the two mining sites of Youssoufia and Khouribga for an additional annual volume of 260 GWh/year. The annual volume of renewable energy reserved for OCP has now reached the 400 GWh target announced at COP 22. This wind energy powers all mining sites: Khouribga, Benguerir, Youssoufia, and Phosboucraa, with the last three being supplied at 100%.

GRI 102-2 | GRI 102-7

Production

Processing

At the two processing platforms in Jorf Lasfar and Safi, phosphate rock is combined with sulfuric acid to produce phosphoric acid, which can then be directly exported for use or processed to obtain fertilizers. Processing sites have sulfuric acid and phosphoric acid production lines, as well as integrated fertilizer and granulation production lines.

Phosphoric acid

Two types of phosphoric acid are produced: purified acid, mainly used in the food industry (oils, lemonades, cheeses, preserves, yeasts, sugar, drinking water, etc.) and other sectors (pharmaceuticals, detergents, animal feed, metal processing, textiles, pigments, etc.), and phosphoric acid, used for fertilizer production and fertigation, a technique for fertilizing nutrients at the root level during irrigation.

Key raw materials: **phosphate rock and sulfuric acid either purchased locally, imported, or manufactured internally from imported sulfur.**

6,1 Mt
produced

2.1 Mt
exported

Types of products

- PPA: purified phosphoric acid
- H_3PO_4: merchant-grade phosphoric acid.

Fertilizer

Fertilizer can be applied directly or used as raw material for more complex fertilizers.

Key raw for complex fertilizers: **phosphate rock, phosphoric acid, ammonia, potash, and micronutrients (zinc, iron, copper, etc.).**

8,8 Mt
produced

8,4 Mt
exported

Types of products

- **DAP:** most commonly used binary fertilizer;
- **TSP:** phosphate fertilizer;
- **MAP:** a binary fertilizer consisting of two fertilizing agents– phosphorus and nitrogen;
- **NPK:** compound fertilizers composed of three elements– phosphorus, nitrogen, and potassium;
- **Performance Phosphate Products (PPP):** the latest generation of fertilizers developed with a view to sustainable and efficient agriculture;
- **Complex fertilizers (NP+):** nitrogen- and phosphate-based fertilizers enriched with secondary and micronutrients to improve agricultural yields, protect soil from degradation, and offer highly concentrated solutions to improve fertility;
- **Soluble fertilizers:** fertilizers for high-value-added and irrigated crops adapted to limited water resources and new micro-irrigation and watering systems;
- **DCP/MDCP:** phosphate- and calcium-based animal feed supplements used to manufacture mixed feed for farm animals. Feed phosphates strengthen bones and accelerate farm animal growth (cattle, sheep, poultry, goats, etc.).

* Million metric tons. ** IFA 2017, preliminary statistics (excluding purified and technical grade acid from China)

GRI 102-2

Highlights of 2018

Environmental footprint

Continued use of the Sulfacid system on new sulfuric lines at Jorf Lasfar and Safi to reduce SO_2 emissions.

Emissions

1. Launch of a project to collect and use CO_2 emanating from phosphate stacks;
2. Signing of a memorandum of understanding with Fraunhofer IMWS to develop a green hydrogen and green ammonia pilot project using renewable and clean energies.

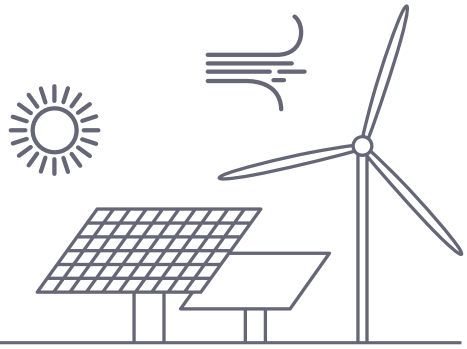
Industrial ecosystem

3. Extensive support for local small businesses in order to create a network of local industrial suppliers through the incubator pilot project in Khouribga;
4. Mohammed VI Polytechnic University (UM6P) inaugurated its Innovation and Entrepreneurship (I&E) space in December 2018;
5. Mohammed VI Polytechnic University and École des Ponts ParisTech signed a partnership in March 2018 to jointly develop teaching and research programs using innovative models that meet the needs of the Moroccan economy and, more broadly, those of the African economy.

Key figures 2018

70%

Nearly 70% of OCP Group's needs covered by clean energy.



30%

of OCP's water needs met by unconventional water resources, i.e. treated wastewater from the cities of Khouribga, Benguerir, and Youssoufia, as well as desalinated seawater from Jorf Lasfar and Laayoune.

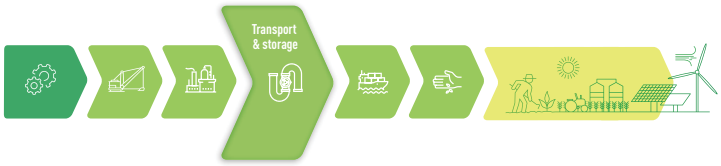
53 JV and subsidiaries

13 Joint Ventures and 40 subsidiaries, including three key industrial partnerships with Dupont, Jacobs, and IBM, contributed to OCP's industrial achievements

4 incubators for small and medium enterprise development in Safi, Youssoufia, Benguerir and Laayoune.

GRI 102-2

Production



Transportation & storage

Processing sites are supplied by mines via the slurry pipeline and railways. Railways are managed by the ONCF, the national railway operator.

Key figures 2018

At least

930,000 metric tons of CO_2 prevented and

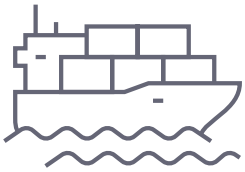
3Mm^3 of water saved through the Slurry Pipeline compared to conventional transportation - the train.

Highlights of 2018

Launch of two new phosphate lines Z and U after adapting them to phosphate slurry transported via Slurry Pipeline at the MP (Maroc Phosphore) III and IV plant in Jorf Lasfar.

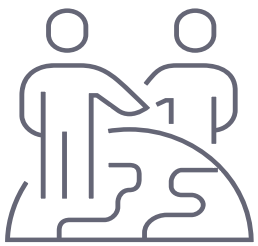
GRI 102-2 | GRI 102-6

Distribution & sales



Thanks to its well-established industrial and commercial presence, OCP is present in all major markets and closer to the needs of producers and operators with over 160 clients on 5 continents. All finished products, phosphate rock, phosphoric acid, and fertilizers are delivered by sea, by truck, or stored on site. Docks are managed by the National Ports Agency (ANP). Products are mainly sold to importers, processing industries, and wholesalers. OCP has deployed, primarily in Africa, a dense distribution network by developing partnerships with local, institutional, and private contributors in order to reach farmers at the lowest cost. OCP's supply chain in Africa relies on logistics centers, sales representatives, local subsidiaries, and also production plants dedicated to meeting the needs of regional markets.

Key figures 2018



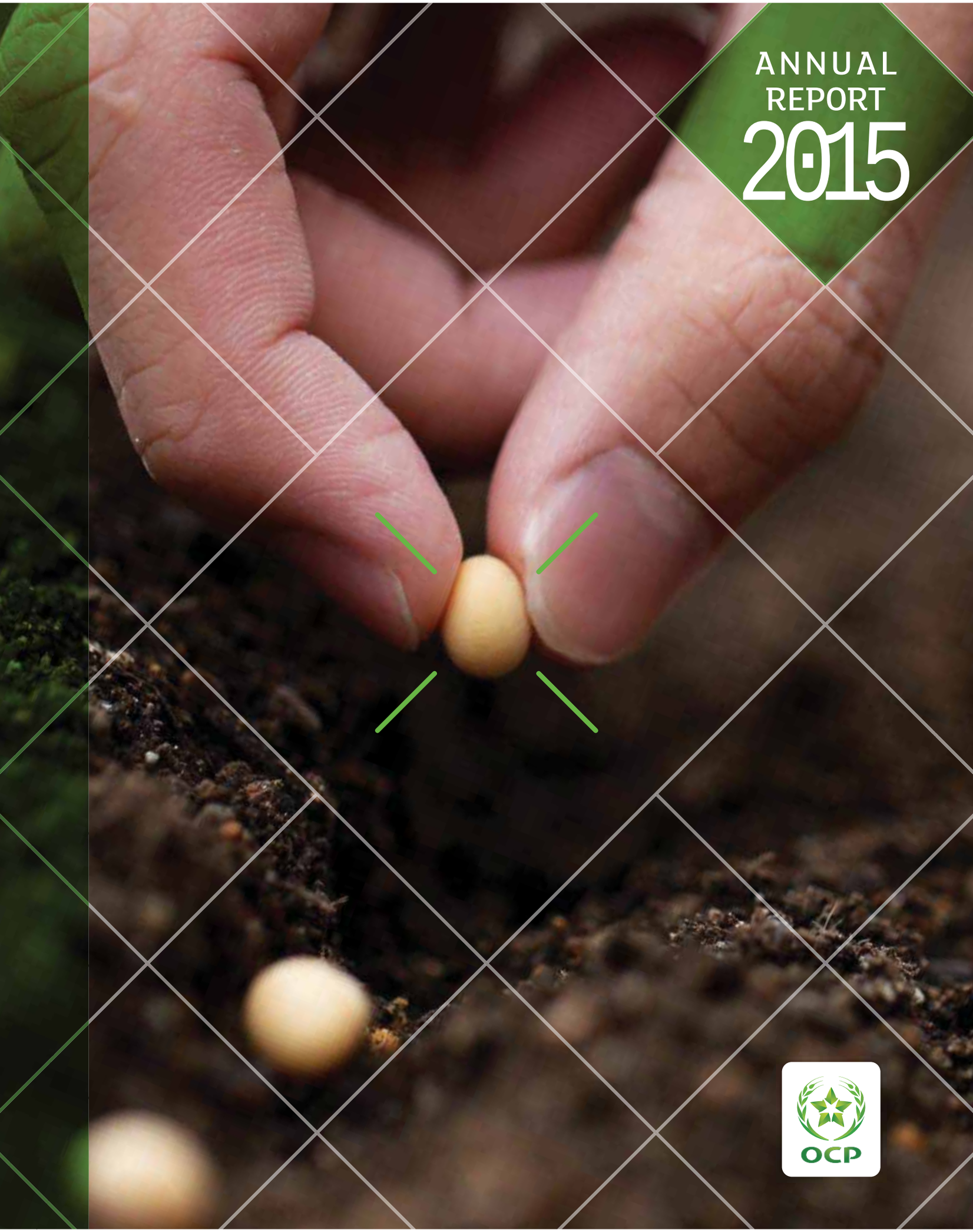
160

clients across
5 continents

Highlights of 2018

One additional integrated complex (JFC4), with a capacity of 1 Mt of fertilizer, at the Jorf Lasfar site leading to a total capacity of fertilizers of 12 Mt.

Exhibit I-63



ANNUAL REPORT 2015

OCP

HIGHLIGHTS

5.5 MT/year
PRODUCTION CAPACITY OF THE BENI 'AMIR MINE

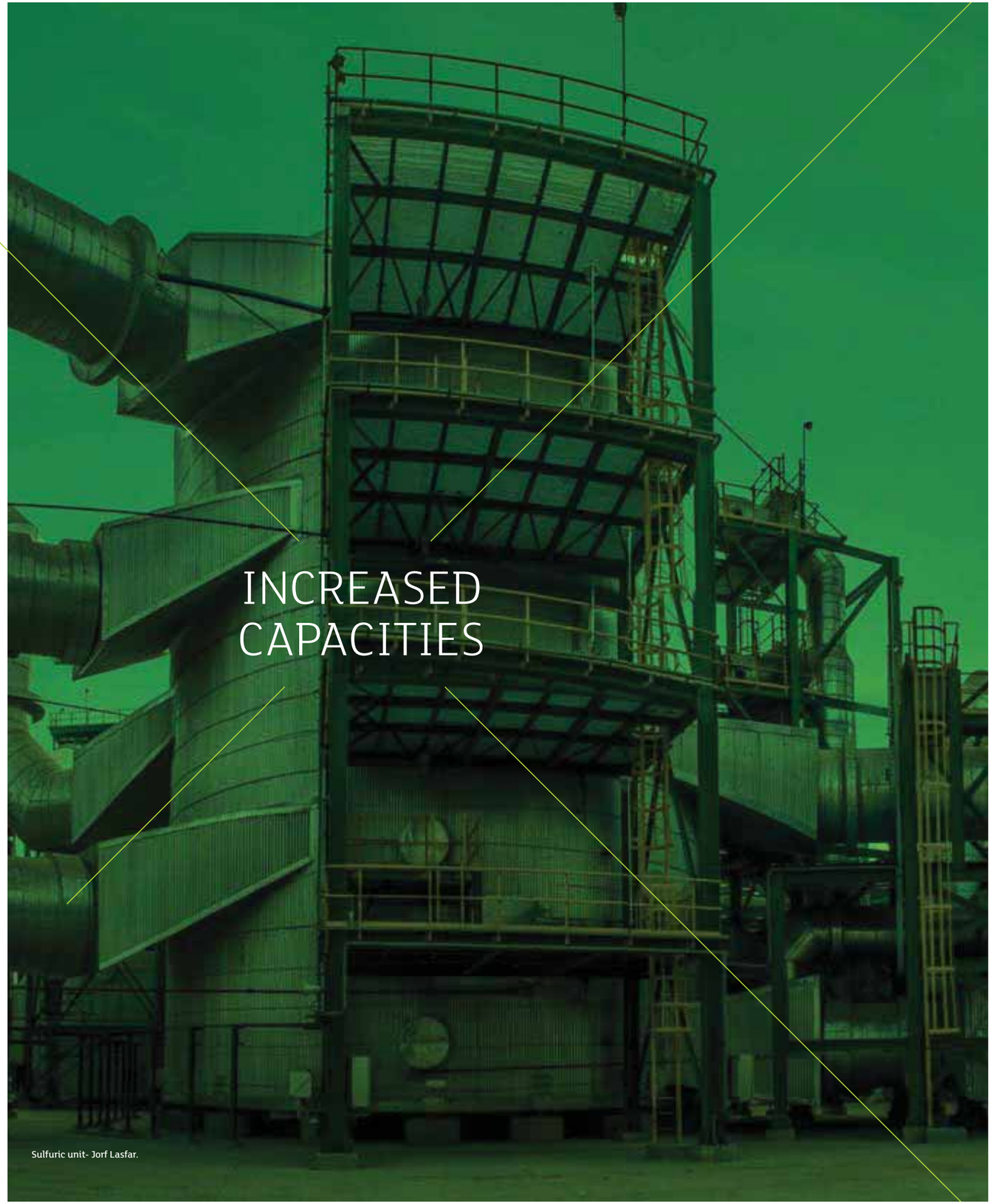
12 MT/year
SLURRY TREATMENT CAPACITY OF THE BENI 'AMIR WASHING PLANT

6.2
BILLION DIRHAMS INVESTED IN THE AFRICA FERTILIZER COMPLEX

1 MT/year
FERTILIZER PRODUCTION CAPACITY OF THE AFC

17
BILLION DIRHAMS INVESTED IN PHOSBOUCRAÂ

MT : Millions of tons



INCREASED CAPACITIES

Sulfuric unit- Jorf Lasfar.

INCREASED MINING CAPACITY OF THE BENI 'AMIR MINE

As per its strategy to double its mining production capacities by 2025, OCP began operating the Beni 'Amir mine and washing plant in 2015. The start-up of the new Beni 'Amir mine brings the nominal production capacity up to 5.5 million metric tons per year with an investment of 2.16 billion dirhams. The washing plant is intended to supply the head station of the slurry pipeline. This mining facility developed a processing capacity of 12 million metric tons per year of phosphate pulp originating from the Beni 'Amir and Sidi Chennane mines. During the operation phase, this washing plant, which required an investment of 4.3 billion dirhams, has created some 300 permanent jobs. It is also in line with our environmental vision, with over 80% recycled water being used by the washing plant, thereby minimizing the use of new water sources.

LAUNCH OF THE AFRICA FERTILIZER COMPLEX

The industrial infrastructure dedicated to Africa is taking shape. In December 2015, OCP launched the fertilizer production unit dedicated to the African continent, called the Africa Fertilizer Complex (AFC). The royal inauguration of this new unit is scheduled for early 2016. It is a new unit within the Jorf Lasfar industrial complex, with a capacity of a million metric tons of DAP per year. Entirely integrated, the AFC also includes a phosphoric acid production unit capable of producing 450,000 metric tons of P2O5 per year, as well as a sulfuric acid unit with a capacity of 1.4 million metric tons. The new unit is reinforced with a 62 MW thermoelectric power plant and different storage facilities with a capacity of 200,000 metric tons of fertilizer, which represent more than two months of self-sufficiency. It was a nearly 6.2 billion dirham investment, which resulted in 380 permanent jobs.

RECORD PRODUCTION ON ALL FRONTS

OCP observed record extracted tonnage from the Khouribga, Ben Guerir, and Mzinda mines. The volume carried by slurry pipeline reached 6.5 million metric tons (dry and marketable) at year ending 2015. As for fertilizer, the Group recorded a 43% increase in NPK* production compared with 2014. Port activity also set a cargo record in March 2015 with 80,000 metric tons of DAP/MAP** at Jorf Lasfar.

MAJOR INVESTMENTS FOR PHOSBOUCRAÂ

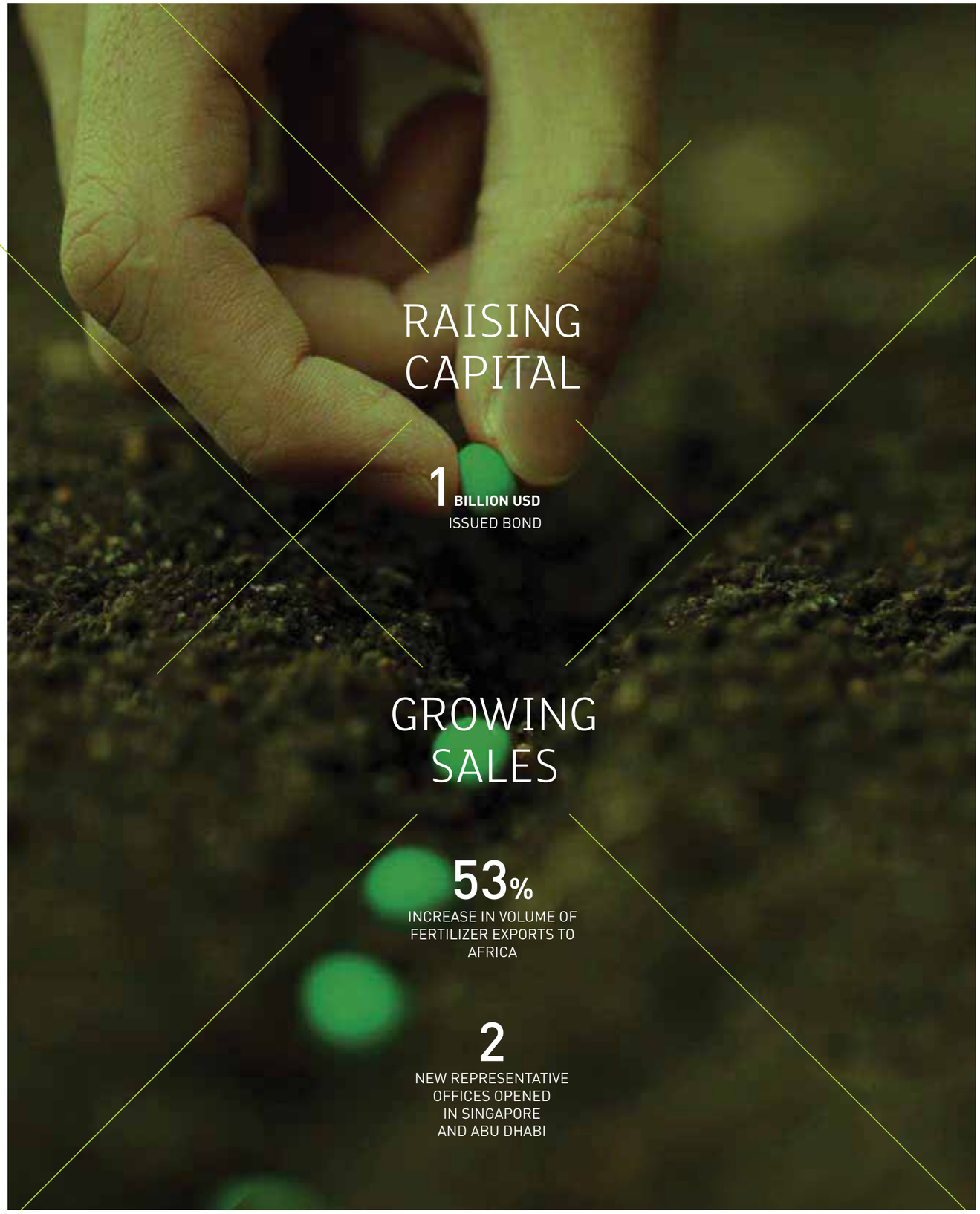
Nearly 17 billion dirhams were allocated for the industrial development of Phosboucraâ. The large-scale project is to be deployed from 2014-2020 in order to strengthen industrial activities, diversify the product portfolio, develop the region's business ecosystem, and contribute to the socio-economic development of the Southern regions*** of Morocco.

* NPK: a high-performance compound nitrogen-phosphate-potassium fertilizer including all nutrients required for plant growth.

** DAP: Di-Ammonium Phosphate, the most commonly used binary fertilizer.
MAP: Mono-Ammonium Phosphate, a binary fertilizer consisting of two fertilizing agents - phosphorus and nitrogen.

*** Guelmim - Oued Noun, Laayoune - Sakia El Hamra, Dakhla - Oued Eddahab.

HIGHLIGHTS



ONE BILLION DOLLARS RAISED ON THE INTERNATIONAL MARKETS

Bolstered by international investor confidence, OCP achieved a successful entry onto international markets. The Group issued a second bond issue of one billion USD with a 10.5-year maturity and a coupon of 4.5%. Raising this capital is part of the plan to diversify sources of financing, an approach adopted by the Group in support of its industrial development program.

DOUBLING OF SALES OF SPECIALTY PRODUCTS

As part of its differentiation strategy through a more diversified product portfolio of fertilizer and animal feed, OCP doubled its volume of sales of specialty products (NPS, NPK, DCP, and MCP)*, up from 796,000 metric tons to 1,193,000 metric tons in 2015.

Increase in volume
of specialty product sales

53% INCREASE IN VOLUMES EXPORTED TO AFRICA

OCP boosted sales in Africa with a 53% increase in volumes exported, up from ~648,000 metric tons in 2014 to 994,000 metric tons by the end of 2015.

Increase in volumes
exported to Africa

OPENING OF TWO REPRESENTATIVE OFFICES IN ASIA

OCP continued its development at the international level with the opening of two offices in Singapore and Abu Dhabi respectively to strengthen business intelligence and agricultural research activities in the growing East Asian markets.

*
NPS: Compound nitrogen-phosphoric fertilizer containing sulphur.

NPK: a high-performance compound nitrogen-phosphate-potassium fertilizer including all nutrients required for plant growth.

DCP and MCP : Dicalcium Phosphate and Monocalcium Phosphate, nutritional components enriched in phosphorus and calcium, used for livestock nutrition.

KEY FIGURES

PHOSPHATE RESERVES

73%
OF GLOBAL PHOSPHATE RESERVES KNOWN TO DATE ARE LOCATED IN MOROCCO*

MINING

26.3 MT
OF PHOSPHATE ROCK PRODUCED

36.6 MT
CAPACITY OF PHOSPHATE ROCK EXTRACTION

PROCESSING

4.5 MT
OF PHOSPHORIC ACID (P_2O_5) PRODUCED

4.7 MT
PHOSPHORIC ACID (P_2O_5) CAPACITY

5.2 MT
OF PHOSPHATE FERTILIZERS (MAP, DAP, TSP, SPECIALIZED FERTILIZERS) PRODUCED

7.4 MT
CAPACITY OF PHOSPHATE FERTILIZERS (MAP, DAP, TSP, SPECIALIZED FERTILIZERS)

EXPORTS

8.5 MT
OF PHOSPHATE ROCK EXPORTED

29%
MARKET SHARE OF PHOSPHATE ROCK

2 MT
OF PHOSPHORIC ACID (P_2O_5) EXPORTED

55%
MARKET SHARE OF PHOSPHORIC ACID

4.3 MT
OF PHOSPHATE FERTILIZER EXPORTED

16%
MARKET SHARE OF PHOSPHATE FERTILIZERS

* US Geological Survey, January 2016

INTERNATIONAL PRESENCE

5%
CONTRIBUTION TO NATIONAL GDP*

47.7
BILLION DIRHAMS IN REVENUES

20,7%
CONTRIBUTION TO NATIONAL EXPORTS**

8
BILLION DIRHAMS NET PROFIT

27%
GLOBAL MARKET SHARE OF PHOSPHATE IN ALL ITS FORMS***

OVER **20,700**
EMPLOYEES

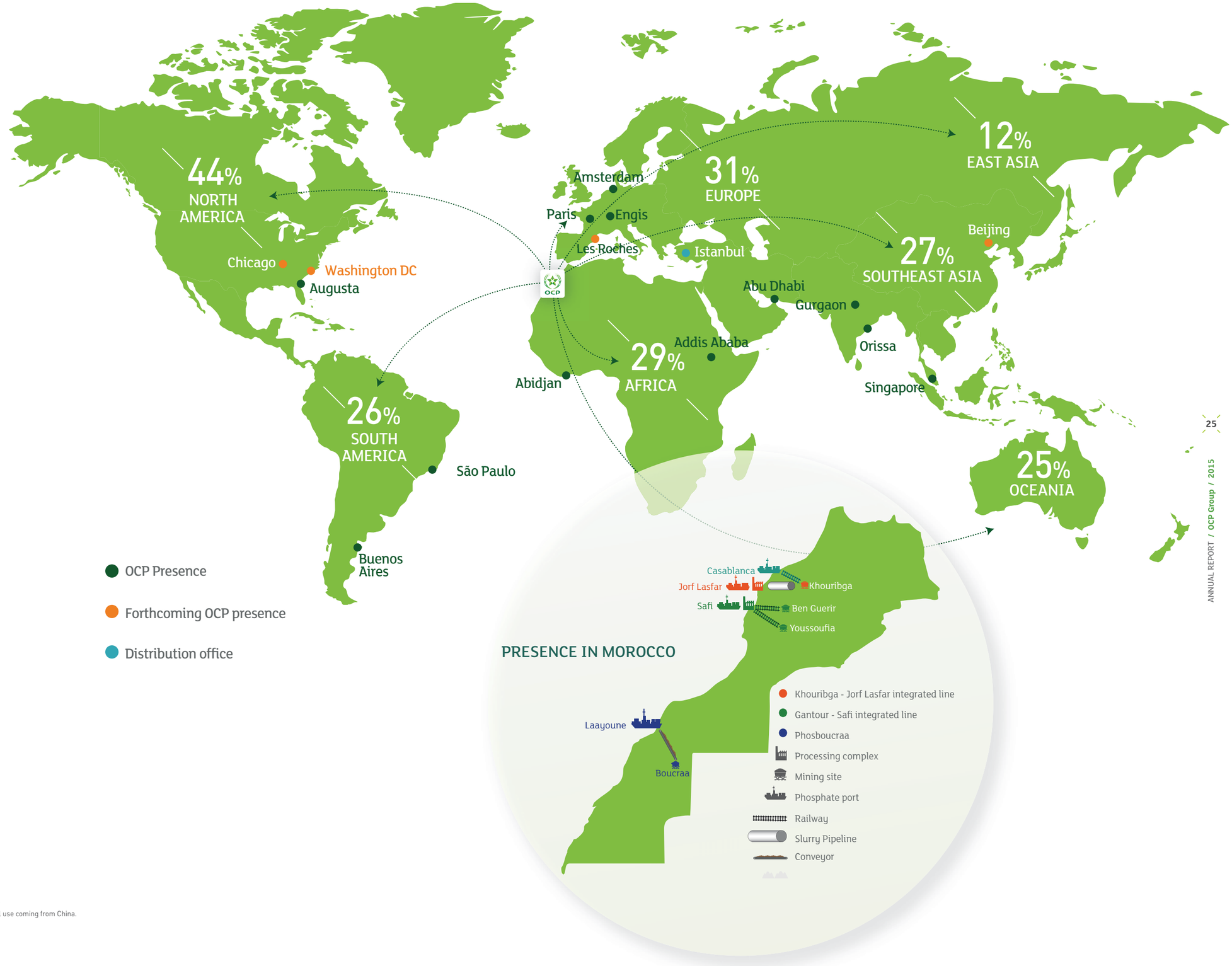
1st
WORLD PRODUCER AND EXPORTER OF PHOSPHATE IN ALL ITS FORMS***

160
CUSTOMERS ACROSS 5 CONTINENTS

199
BILLION DIRHAMS INVESTED IN THE INDUSTRIAL PROGRAM 2008-2025

27
SUBSIDIARIES & JVs

* Source : "La situation économique nationale des 4 trimestres 2015" – Haut-Commissariat au Plan, 2015.
** Source : "Indicateurs mensuels des échanges extérieurs - Année 2015" – Office des Changes, 2015.
*** Source : The most recent IFA annual statistics, 2014 - except for purified acid and acid for technical use coming from China.



2015 STRATEGIC REVIEW

-1-

OCP : A WORLD LEADER FOSTERING GROWTH

A global leader on the phosphate and phosphate derivatives market, OCP Group provides a concrete response to world agricultural needs while ensuring development that is sustainable and respectful of the environment

Increased demographic growth exerts pressure on the planet's natural resources, continuously redefining food security issues. Agricultural processes and the fertilizer industry are therefore constantly stimulated by buoyant conditions.

OCP Group, a world leader on the phosphate and phosphate derivatives market with nearly 30% of the global market share*, finds itself at the core of this issue. As the largest exporter of phosphate rock and phosphoric acid, as well as one of the world's largest producers of fertilizer, OCP is positioned as a major agricultural development player providing innovative solutions to important issues, such as agricultural output, the use of fertilizer suited to the needs of different soils and crops, and, especially, the unrelenting search for solutions that do not have an impact on the environment and natural ecosystems.

These commitments, inspired by the Group's values, are applied through its approach and the mobilization of significant financial and human resources in order to sustainably ensure the availability of competitively priced, quality raw materials while bolstering its derivative product offering thanks to its research and development program.

Such a mission requires significant investments in mining operations, the industry, and logistics. More than 199 billion dirhams of financial commitment are planned for the Group's upstream and downstream activities from 2008 to 2025.

1st
WORLD PRODUCER AND EXPORTER OF PHOSPHATE
(IN ALL ITS FORMS)

8.5MT
OF PHOSPHATE ROCK EXPORTED

2.0MT
OF PHOSPHORIC ACID EXPORTED (P_2O_5)

4.3MT
OF PHOSPHATE-BASED FERTILIZER EXPORTED

*In all its forms.

Mining : Responsible Development

Mining site - Khouribga.

OCP is the world's largest producer of phosphate rock, with an annual mining capacity of 36.6 million metric tons.
The Group's mining operations are focused in three regions in Morocco, with 6 mining sites in Khouribga (near Daoui, Merah El Ahrach, Sidi Chennane, and Beni 'Amir), 3 in Gantour (Ben Guerir, Bouchane, and Mzinda), and 1 in Boucraâ.

73%
OF GLOBAL PHOSPHATE RESERVES ARE LOCATED IN MOROCCO*

36.6 MT/year
PHOSPHATE ROCK CAPACITY

The quality of the rock mined at the Group's different sites grants it a prominent place on the world fertilizer stage. The concentration of P_2O_5 in the phosphate rock produced in Morocco varies between 5% and 45%. The average concentration has risen to 31.5%. According to the Group's estimates, the Khouribga reserves represent approximately 44% of the total available Moroccan reserves, whereas those of the Gantour and Boucraâ sites make up 36% and 2% respectively.

For its 2008-2025 industrial development program, the goal of which is to meet 50% of the growing global demand for fertilizers, OCP Group plans to double its production of phosphate so as to reach 57.4 million metric tons per year as opposed to the current 28 million metric tons.

In Khouribga, the Group expects a mining capacity of 28 million metric tons per year by 2017 and 39 million metric tons by 2025, compared with the current 26 million metric tons. More than just an ambition, the Group's development plan has already been executed, and several mining projects are in the works. As such, the operation of the new Beni 'Amir mine and washing plant began in 2015. Additional plans to open mines, build washing plants and drying units, and adapt mining facilities are included as part of the Group's investment program and will gradually become operational in the coming years.

* Source USGS, January 2016.

Phosphate processing: Structuring Partnerships in Response to a Global Issue

Terminal Station of the Slurry Pipeline & Africa Fertilizer Complex - Jorf Lasfar.

Fertilizers : Specialized Knowledge of soil for Sustainable Agriculture

In 2015, OCP Group produced over 5 million metric tons of fertilizer per year, with a nameplate capacity that reached 8 million metric tons over year.

With the Group's goal of increased integration in finished products, a program to triple processing capacities was launched in 2008. This goal will be reached by 2017, with nearly 12 million metric tons of fertilizer capacity, positioning the Group as a leader on all three stages of the value chain.

Four integrated fertilizer production units are planned for 2017 as part of the Group's development plan. The objective of increasing production capacity may, if required by the market, induce the opening of additional units.

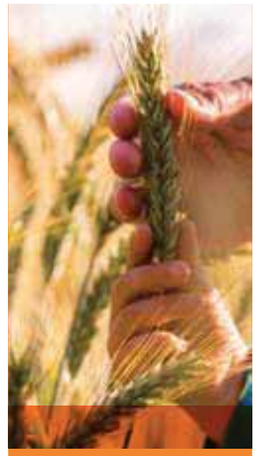
7.2 MT/year
FERTILIZER PRODUCTION CAPACITY AT THE JORF LASFAR INDUSTRIAL COMPLEX

4.7 MT/year
PHOSPHORIC ACID PRODUCTION CAPACITY (P_2O_5)

Phosphoric Acid : Strengthened Leadership

OCP Group is a world player in the production of phosphoric acid. This activity was undertaken early, either through local development, or through partnerships with foreign manufacturers. A profitable strategy, since OCP holds leadership in the production of phosphoric acid with an annual capacity of 4.7 million metric tons of P_2O_5. The majority of the Group's phosphoric acid production occurs at the Jorf Lasfar industrial operations sites, with 3.1 million metric tons of P_2O_5, and at the Safi site.

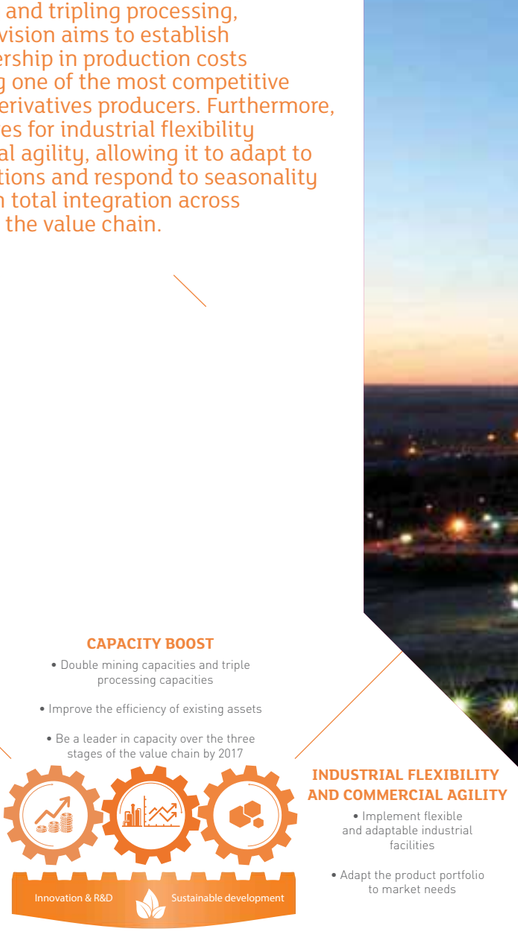
OCP expects to triple its phosphoric acid production, climbing from 4.395 million metric tons of P_2O_5 in 2014 to 6.6 million metric tons in 2017 and subsequently to 10.6 million metric tons of P_2O_5 by 2025.



OCP believes that investment in research & development will guarantee the Group the opportunity to target markets based on farmers' needs. The Group can then offer a wide range of diverse products, in particular solid and liquid fertilizers, nutritional supplements for livestock, basic components for creating derivative products, and a new line of specialty products for efficient and sustainable agriculture.

A Threefold Objective: Capacity, Flexibility, and Cost

Focusing on three major pillars, the Group's strategy centers initially on increasing production capacity by doubling mining and tripling processing, OCP's vision aims to establish its leadership in production costs by becoming one of the most competitive phosphate and derivatives producers. Furthermore, OCP strives for industrial flexibility and commercial agility, allowing it to adapt to market fluctuations and respond to seasonality through total integration across the value chain.



Beni Amir Washing Plant - Khouribga.

-1-
Capacity boost

With access to the world's largest phosphate reserves known to date according to the US Geological Survey (73% of world reserves), OCP expects to increase its production capacities, especially in terms of high value-added products, in response to growing world food needs. This increase will attract 50% of the growing demand by 2025 and strengthen its fertilizer market shares. The Group expects to double its mining capacities and triple its processing capacities. The Group intends to hold the leading position for phosphate fertilizer by 2017, with nearly 12 million metric tons of fertilizer.

Moreover, OCP is implementing innovative solutions, since it will cover the additional water needs of the Khouribga mining complex and the Jorf Lasfar industrial complex without any additional use of conventional water sources, notably through of the desalination unit, the wastewater treatment plants, and dam adduction projects.

-2-
Cost leadership

OCP maintains one of the industry's most competitive cost positions. Its industrial development program makes the most of this position. It works to improve operational efficiency and cost management across the value chain, especially of mining operations and transport, through the implementation of new technologies, processes, and modes of operation. In particular, the slurry pipeline connecting Khouribga to Jorf Lasfar was intended to convey more than 38 million metric tons of phosphate slurry annually and, as it increased in effectiveness, it has generated more and more considerable gains in terms of freight and energy costs thanks to the transport of pulp via pipeline.

Furthermore, the development of the Jorf Lasfar industrial complex allowed the Group to boost its capacities while optimizing costs by capitalizing on existing complexes and the centralization of certain activities. OCP continues to invest in the industrial infrastructure, in R&D, and in innovation to maintain the most competitive cash-costs internationally.

-3-
Industrial Flexibility and Commercial Agility

OCP holds a unique position in the industry with its strong presence in all three stages of the value chain (rock, acid, and fertilizer). The capacity to quickly adapt its product mix to produce different volumes of ore, acid, and fertilizer, and to adapt to the volatility and seasonality of the market, constitutes a genuine competitive advantage.

The Group's diversification of the product/region/customer portfolio, strong industrial presence, and strong sales allow for maximal agility and flexibility while reinforcing its leadership.

New Fertilizer Production Units

Sulfuric unit - Africa Fertilizer Complex - Jorf Lasfar.

Four integrated fertilizer production units are planned for the Jorf Lasfar industrial complex by 2017. They will each have a production capacity of a million metric tons per year.

The first production unit, namely "Africa Fertilizer Complex" (AFC), came on stream in late 2015. Its royal inauguration is planned early 2016. These new units are fully consistent with OCP's ambitious investment strategy, which aims to strengthen its position on the world fertilizer market by increasing its production capacity from 4.5 million metric tons per year in 2010 to 12 million metric tons per year by 2017, becoming the world's largest producer of fertilizer.

The production capacity of the first unit will be dedicated to the African continent. In Africa, 70% of the population earns their living through agriculture, 80% of arable land is not yet being exploited, and the population consumes 10 times less fertilizer than the world average. Along with other factors, OCP works to ensure phosphate fertilizer market supply in Africa in a sustainable manner, which will also enable African farmers to improve their output and rely on appropriate fertilizer for their soil and crops. The Group has therefore implemented an industrial strategy dedicating specific volumes to the needs of African agriculture.

OCP AFRICA

In 2015, the Group created a subsidiary to achieve its African objectives. OCP Africa is therefore the newest entity dedicated to transforming African agriculture. It expects to achieve this goal by offering African farmers a complete line of products and services enabling them to increase both their output and their income. It contributes by offering all the necessary means: adapted and affordable products, support services, as well as logistics and financial solutions.

OCP Africa's activities will begin in 2016, focusing on 4 priorities: improving the fertility and productivity of African soils through the use of tailored products, safeguarding the production of competitive fertilizers near major agricultural production regions, guaranteeing the transport of inputs to farmers, and contributing, alongside African farmers, to the development of sustainable agricultural ecosystems to the benefit of local economies.

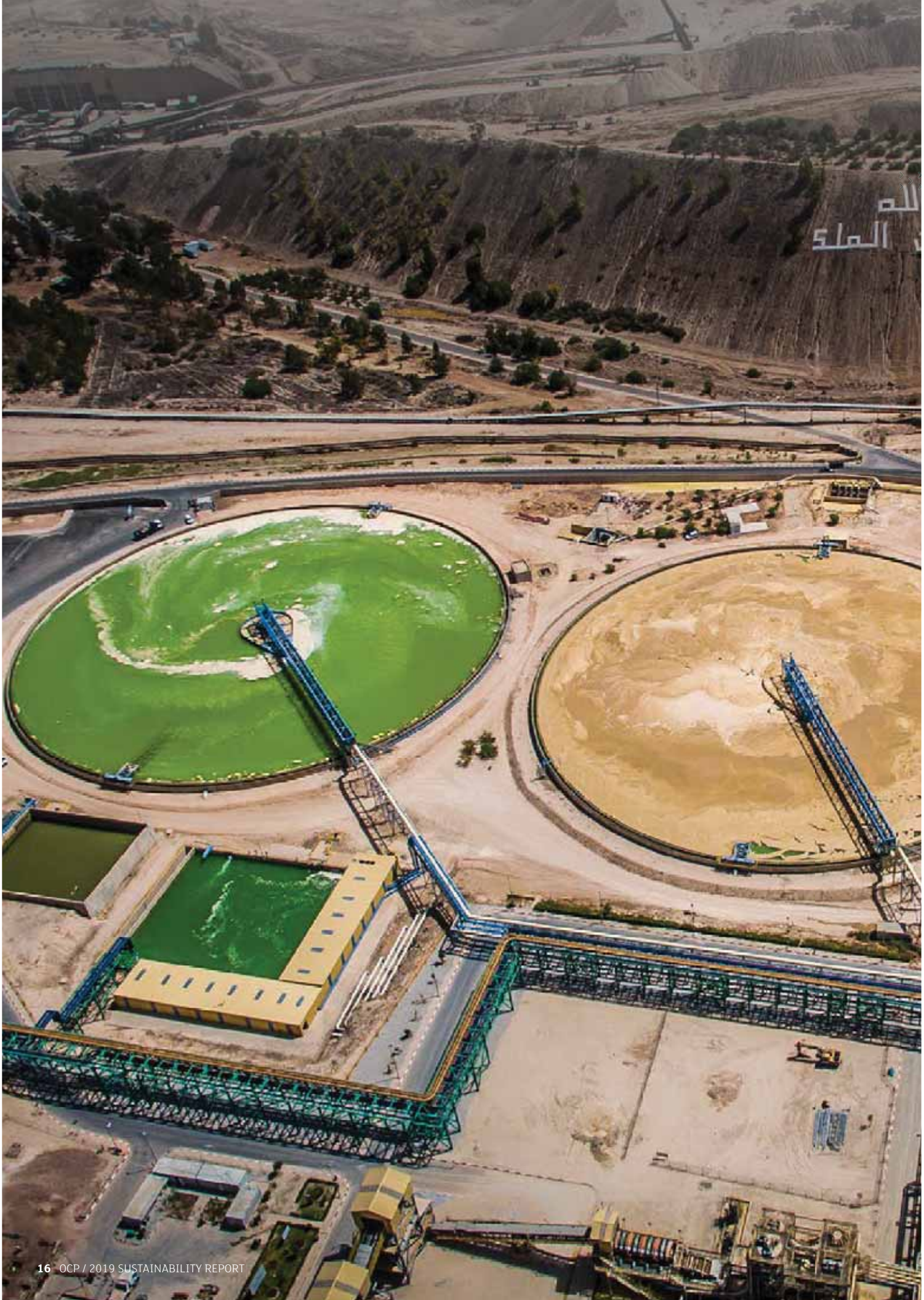
Exhibit I-64

ESG REPORT 2019

Working together for sustainable agriculture

REPORT IN GRI VERIFICATION PROGRESS

OCP



GRI 102-2 | GRI 102-7

Production

Extraction & washing

Phosphate is extracted at three open-pit mining sites. This involves exploration and feasibility studies, mine development and construction, mining, closure, and reclamation. The extraction phase includes two main operations: drilling and blasting. Phosphate rock is then transported by a conveyor belt system to washing facilities to be enriched and then transported via slurry pipeline or rail to processing platforms. Phosphate rock can be exported directly or converted to phosphoric acid or phosphate-based fertilizers.

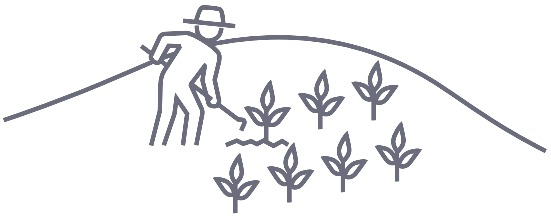
Phosphate rock

As the primary source of all phosphate products, phosphate rock is primarily used in agriculture to fertilize soil by either applying it directly or through the use of phosphate-based fertilizers. Phosphate rock is also used to produce animal feed supplements and for other industrial needs.

44 Mt production capacity | **35,3 Mt** produced | **9.5 Mt** exported

Key figures 2019

864 ha of rehabilitated land



Highlights of 2019

Carbon farming :

Tapping into arid zone to capture CO_2 emissions and halt climate change is one of the keys of our rehabilitation approach. Indeed, planting arid, semi-arid and former mining sites areas could provide an important sink of CO_2. The 'Carbon Farming' project in tripartite partnership with the UM6P and St1, a Finnish energy company has been further developed in 2019. The objective is to create a validated and approved tool for climate change mitigation through the establishment of carbon sinks via the rehabilitation of old mining sites and the afforestation of marginal lands in dry and semi-dry environments.

GRI 102-2 | GRI 102-7

Production

Processing

At the two processing platforms in Jorf Lasfar and Safi, phosphate rock is combined with sulfuric acid to produce phosphoric acid, which can then be directly exported for use or processed - with ammonia - produce fertilizers. Processing sites have sulfuric acid and phosphoric acid production lines, as well as integrated granulation lines.

Phosphoric acid

Two types of phosphoric acid are produced: purified acid, mainly used in the food industry (oils, lemonades, cheeses, preserves, yeasts, sugar, drinking water, etc.) and other sectors (pharmaceuticals, detergents, animal feed, metal processing, textiles, pigments, etc.), and phosphoric acid, used for fertilizer production and fertigation, a technique for fertilizing nutrients at the root level during irrigation.

Key raw materials: phosphate rock and sulfuric acid either purchased locally, imported, or manufactured internally from imported sulphur.

6,83 Mt
produced

2.1 Mt
exported

Types of products

- PPA: purified phosphoric acid
- H_3PO_4: merchant-grade phosphoric acid.

Fertilizer

Fertilizer can be applied directly or used as raw material for more complex fertilizers.

Key raw materials for complex fertilizers: phosphate rock, phosphoric acid, ammonia, potash, and micronutrients (zinc, iron, copper, etc.).

12 Mt	10 Mt	9.06 Mt
production capacity	produced	exported

Types of products

- **DAP (Di-Ammonium Phosphate):** most commonly used binary fertilizer;
- **TSP (Triple Super Phosphate):** phosphate fertilizer;
- **MAP (Mono-Ammonium Phosphate):** a binary fertilizer consisting of two fertilizing agents– phosphorus and nitrogen;
- **NPK:** compound fertilizers composed of three elements– phosphorus, nitrogen, and potassium;
- **Performance Phosphate Products (PPP):** the latest generation of fertilizers developed with a view to sustainable and efficient agriculture;
- **Complex fertilizers (NP+):** nitrogen- and phosphate-based fertilizers enriched with secondary and micronutrients to improve agricultural yields, protect soil from degradation, and offer highly concentrated solutions to improve fertility;
- **Soluble fertilizers:** fertilizers for high-value-added and irrigated crops adapted to limited water resources and new micro-irrigation and watering systems;
- **DCP/MDCP (Di-calcium Phosphate/ Mono Di-calcium Phosphate):** phosphate- and calcium-based animal feed supplements used to manufacture mixed feed for farm animals. Feed phosphates strengthen bones and accelerate farm animal growth (cattle, sheep, poultry, goats, etc.).

* Million metric tons. ** IFA 2017, preliminary statistics (excluding purified and technical grade acid from China)

GRI 102-2

Highlights of 2019

Development of additional clean and renewable energy capacities

Development of additional non-conventional water capacities – STEP & desalinisation units

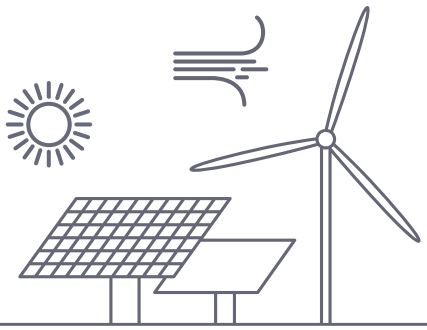
Strengthening of the R&D projects:

- Green ammonia and hydrogen
- Green methanol
- Carbon capture and valorisation
- Solar energy
- Renewable energy storage
- Sustainable mobility

Key figures 2019

86%

OCP Group's needs covered by clean energy. (cogeneration and renewable energies) against 70% in 2018.



30%

of OCP's water needs met by unconventional water resources, i.e. treated wastewater from the cities of Khouribga, Benguerir, and Youssoufia, as well as desalinated seawater from Jorf Lasfar and Laayoune.

$ 61

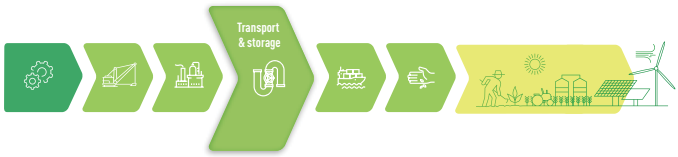
million (equivalent to 587 MDH) dedicated to Research & Development – tripled compared to 2017

40 strategic partnerships – including Fertinagro, Fraunhofer, Forbon, MIT, Polytechnic Montreal, etc.

160+ Research & Innovation projects are being implemented in partnership with UM6P internationally renowned partners

GRI 102-2

Production



Transportation & storage

Processing sites are supplied by mines via the slurry pipeline and railways. Railways are managed by the ONCF, the national railway operator.

Key figures 2019

620,000 metric tons of CO_2 prevented by year through the Slurry Pipeline compared to railway conventional transportation.

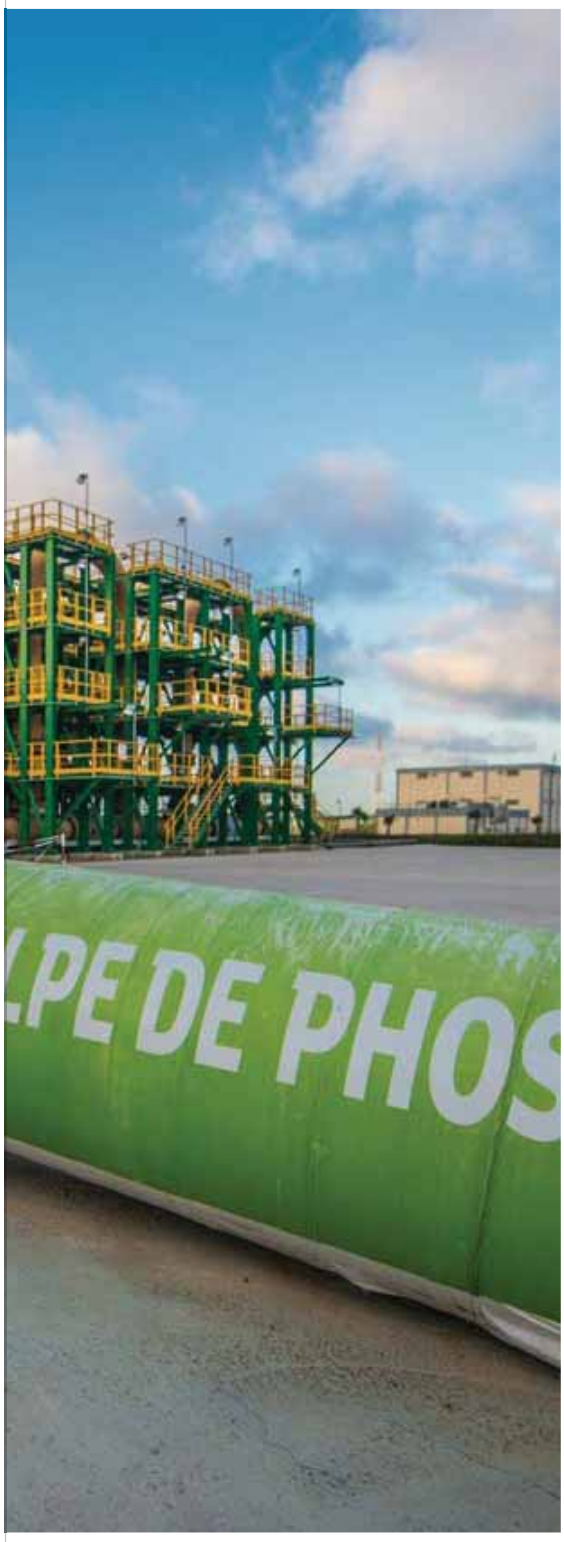
3Mm^3 of water saved through the Slurry Pipeline compared to conventional transportation - the train.

Highlights of 2019

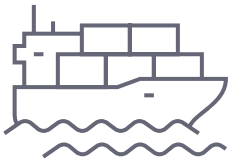
Among the key flagship innovation is the slurry pipeline, which transports washed phosphate as slurry to the main processing platform. With a total transport capacity of 38Mt, the slurry pipeline allows to transport more phosphate rock than the traditional transport by train, remove all intermediary processing like drying at the mine level and re-adding water at the chemical platform level, resulting in significant CO_2 emissions reduction. The process will be developed for all our processing sites by 2030.

Replacement of phosphate transport by trucks at Gantour by a conveyor – fuelled with renewable energy – over a 28 km section between the M'Zinda mine and the washing plant.

GRI 102-2 | GRI 102-6

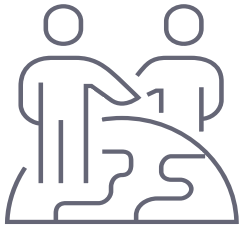


Distribution & sales



Thanks to its well-established industrial and commercial presence, OCP is present in all major markets and closer to the needs of producers and operators with over 350 clients on 5 continents. All finished products, phosphate rock, phosphoric acid, and fertilizers are delivered by sea, by truck, or stored on site. Docks are managed by the National Ports Agency (ANP). Products are mainly sold to importers, processing industries, and wholesalers. OCP has deployed, primarily in Africa, a dense distribution network by developing partnerships with local, institutional, and private contributors in order to reach farmers at the lowest cost. OCP's supply chain in Africa relies on logistics centers, sales representatives, local subsidiaries, and also production plants dedicated to meeting the needs of regional markets.

Key figures 2019



350

clients on 5 continents

Exhibit I-65

ASHARQ AL-AWSAT (/english)

(https://www.facebook.com/asharqalawsat.e) (https://twitter.com/aawsat_eng) English

Business (/english/home/international/section/Business)

Morocco's Fertilizer Industry Receives $3 bln Investment Boost

Saturday, 25 November, 2017 - 09:45

Heavy machinery is seen at a phosphate mine at Boucraa factory of the National Moroccan phosphate company (OCP) situated in the southern provinces, 100 km southwest of the town of Laayoune February 18, 2016. REUTERS/Youssef Boudlal

Casablanca - Lahssen Moqana

Amin Qaph, director of the Fertilizer Industrial Complex in Jorf Lasfar (south of Casablanca) announced on Friday of officially operating the fourth production unit this upcoming January.

He said that the new factory is the fourth of its kind established by Morocco since 2014, with a production capacity of about one million tons per plant.

During the media tour of the facilities, Qaph added that the four factories will increase the total production capacity of Morocco to 12 million tons.

"During the second phase, we plan to build six new plants to raise our total production capacity to 18 million tons in 2025," he added.

He pointed out to the investment plan exceeding $3 billion.

The fertilizer industrial square (Jorf Lasfar) is located on an area of 1,800 hectares, which later on can see further expansion.

It is supplied with phosphates through a pipeline extending from Khouribga mines in the center of the country, some 187 kilometers away.

The complex takes advantage of the geographical slope of the Jorf Lasfar site compared to the Khouribga mines site.

"Prior to 2014, we used to transport phosphates through trains," says Qaph.

"The operation was very expensive. But with these new industrial units, using trains is not efficient due to the new size of production."

"Consequentially, we invested in a phosphate transport pipe."

The large industrial complex is located 2 km from the port of Jorf Lasfar. It is linked to the export berths of the port through rubber bands for the transport of fertilizers.

As Morocco moves to raise its production capacity to 18 million tons, its consumption needs are limited to 500,000 tons—an equation which eventually boosts the kingdom's export capacity, Qaph explained.

"We can easily adapt to all demands, both in size and quality, as we can now produce over 40 kinds of fertilizers," he said.

The first unit within the new generation of plants, which started operating in 2015, was tasked with solely supplying African markets, which are characterized by strong growth in demand for fertilizers.

Qaph said that the Moroccan fertilizer industry has mapped out demand in African partner countries and will attend it wherever it's found.

"We have launched a plan to map fertility in African partner countries, as we did in Morocco," he said.

He explained that the map of fertility has covered all Moroccan soil and can be accessed through an electronic database of the OCP Group.

One of the leading exporters of phosphate mining in Morocco, the OCP Group is found mainly in 4 mining sites and two chemical complexes.

"Any land slot on Morocco's drafted map includes detailed data which can be used to match the type of agriculture the investor intends to use," Qaph said.

Related News

Banks in Sudan to Introduce Visa Payment Systems (/english/home/article/2161101/banks-sudan-introduce-visa-payment-systems)

(/english/home/article/2161101/banks-sudan-introduce-visa-payment-systems)

Exhibit I-66

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Argus Phosphates
Formerly Argus FMB Phosphates

Issue 20-1 | Friday 3 January 2020

EXECUTIVE SUMMARY

MAP stabilises on formula business

Argus identified a likely 450,000t of DAP/MAP business concluded, the vast majority of it west of Suez and also on a formula basis. Brazil took over 200,000t of business of which spot trade accounted for 20pc. Argentina and other markets are linked with perhaps 100,000t of Moroccan DAP/MAP business over the past month.

China is still holding out for $290/t fob against any new DAP business. There has been a bounce in US domestic prices with Mosaic announcing DAP sold at $250/st fob Nola. DAP prices have stabilised in some northern European markets, with levels settling at around $320/t fca Ghent/Rouen this week.

MARKET DRIVERS

China cuts more supply in 1Q20

Chinese suppliers will reduce output by 700,000t in the first quarter. Guizhou Phosphate will cut production by 300,000t, YUC will reduce output by 200,000t and Yihua will limit DAP production by 100,000t. Another 100,000t of DAP will be cut by Xiangfeng and other phosphate producers.

Indian acid deal/lower stocks could temp India

Indian DAP stocks fell by nearly 1mn t. And a $35/t P2O5 drop in acid prices was unexpectedly small, prompting some early and more economical DAP import business in 1Q.

Brazil relies on formula business

The heavy line up of MAP imports under formula (some estimate Brazil has taken 500,000t for 1Q) could well cap spot prices in the region basis plentiful supply.

Australia could be disastrous

Horrendous drought conditions are likely to hit MAP imports hard. Australian MAP imports averaged just over 510,000t in over the last five years during the first quarter.

30-60 DAY OUTLOOK

Flat to soft

The floor is near basis a decent baseload of MAP business in Brazil. But DAP in the east is untested.

PRICES

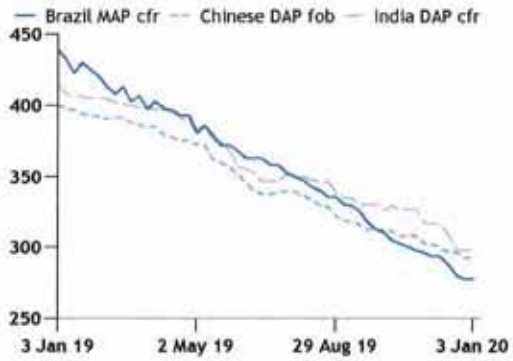
Key price assessments	3 Jan	19 Dec	$/t
Argus DAP index	82.305	82.624	-
DAP/MAP - fob bulk			
DAP/MAP Tampa	270	270	• •
DAP China	290-295	290-295	• •
DAP Saudi Arabia	290	290-297	-
MAP Baltic	253-257	253-257	• •
DAP/MAP - cfr bulk			
DAP India	295-300	295-300	• •
DAP Pakistan	300-305	300-305	• •
MAP Brazil	275-280	275-280	• •
Phosphoric acid India/t P2O5	590	625	-
DAP - fca			
DAP Benelux fot/fob duty paid/free	320	315-320	-

See page 2 for full price table

ANNOUNCEMENT

The holiday calendar showing which Argus reports are not published on which days is now available online https://www.argusmedia.com/en/methodology/publishing-schedule

Key Indicative Prices — USD/t



View the methodology used to assess phosphate prices at www.argusmedia.com/methodology. Your feedback is always welcome at fertilizer@argusmedia.com

MARKET ANALYSIS

MAP prices west stabilise; but much on formula

Production cuts east and west, lower stocks in India and some price stabilisation west of Suez have some market participants speculating on whether the floor of the market has been reached.

Reasons to be cheerful?

The market globally was quite active. Argus identified a likely 450,000t of DAP/MAP business concluded, the vast majority of it west of Suez and also on a formula basis. Brazil continues to be active, Argus identifying over 200,000t of business of which spot trade accounted for 20pc. This a) provides a base load particularly for Saudi producers but b) gives little room for spot prices to move upwards. Argentina, Uruguay and Paraguay likewise are linked with perhaps 100,000-110,000t of Moroccan DAP/MAP business in December/January.

An early return for India?

The substantial draw down in stocks in India by around 900,000t at the end of December is significant. The fact that phosphoric acid prices for 1Q did not fall as much as anticipated to $590/t P2O5 cfr also make DAP imports more attractive. But official DAP stock levels still total more than 2mn t, Argus calculates.

Prices east of Suez are mostly untested. Pakistan unexpectedly stepped in for light-coloured DAP in late December from Saudi Arabia. But the price and colour of the cargo are not deemed representative under *Argus* methodology and no real inference can be gleaned from a deal in the low-$290s/t cfr. China is still holding out for $290/t fob against any new DAP business.

Mosaic's announcement that it would curtail production in Central Florida essentially offsets the restart of Faustina with the impact negligible. There has been a bounce in US domestic prices with Mosaic announcing DAP sold at $250/st fob Nola. The market has reacted to Mosaic's announcements in similar vein before, but the price hike needs to be firmly established and repeatable. Ultimately it is OCP's export plans to the US that define the market.

Jury still out

In Australia, unprecedented hot weather/bush fires will destroy fertilizer demand. One trader estimated east coast import demand could be down 50pc this year. Brazil and the US need to both pull in MAP for prices to rise. Pakistan's stocks ended November at an unprecedented 555,000t. The floor is in sight, but the market is not there yet.

Phosphates prices					$/t
		3 Jan	19 Dec	±	
Argus DAP index		82.305	82.624	0.319	-
DAP/MAP/TSP - fob bulk					
DAP/MAP Tampa		270	270	0.00	↔
DAP/MAP Tampa equivalent Brazil		248-253	248-253	0.00	↔
DAP Tampa equivalent India		247-252	247-252	0.00	↔
DAP Tunisia		295	295	0.00	↔
DAP Morocco		280-285	280-290	2.50	-
DAP Morocco P2O5 equiv		504.25	512.29	8.04	-
DAP Morocco equivalent US terminals		268-275	268-275	0.00	↔
DAP Lithuania Baltic		285-295	285-295	0.00	↔
DAP Russia Baltic/Black Sea		260-270	260-270	0.00	↔
DAP China		290-295	290-295	0.00	↔
DAP China P2O5 equiv		520.09	518.9	0.60	-
DAP Saudi Arabia (KSA)		290	290-297	3.50	-
DAP Jordan		285-290	285-290	0.00	↔
DAP Mexico		255-260	255-260	0.00	↔
DAP/MAP Australia		285-290	285-290	0.00	↔
DAP US Gulf domestic barge $/st		245-252	232-240	12.50	-
DAP Central Florida railcar $/st		295	295	0.00	↔
DAP China ex-works		301-330	300-328	1.50	-
DAP Benelux fot/fob duty paid/free		320	315-320	2.50	-
MAP Baltic		253-257	253-257	0.00	↔
MAP China 11-44		255-260	255-260	0.00	↔
MAP China 10-50		270-280	270-280	0.00	↔
MAP China 11-52		305-310	305-310	0.00	↔
MAP Morocco		261-265	261-265	0.00	↔
MAP Saudi Arabia (KSA)		250-255	250-255	0.00	↔
TSP Tunisia		290-295	290-295	0.00	↔
TSP Morocco		260	260	0.00	↔
TSP China		260-265	260-265	0.00	↔
TSP eastern Med (Lebanon/Israel)		280-285	280-285	0.00	↔
DAP /MAP - cfr bulk					
DAP/MAP Argentina/Uruguay		283-290	295	8.50	-
MAP Brazil 11-52		275-280	275-280	0.00	↔
MAP Brazil 11-52 P2O5 equiv		424.9	427.19	2.29	-
MAP Brazil 10-50 (ex-China)		252-262	252-262	0.00	↔
MAP Brazil 10-50 (ex-China) P2O5 equiv		411.17	413.35	2.18	-
MAP Brazil 11-44 (ex-China)		225-234	225-234	0.00	↔
MAP Brazil 11-44 (ex-China) P2O5 equiv		393.06	395.78	2.72	-
MAP South Africa		335-340	335-340	0.00	↔
DAP India		295-300	295-300	0.00	↔
DAP India P2O5 equiv		525.36	528.65	3.29	-
DAP Pakistan		300-305	300-305	0.00	↔
DAP Turkey		290-297	290-297	0.00	↔
DAP east coast Africa		310-315	315-320	5.00	-

Raw material contracts						$/t
					±	
Phosphoric acid/t - P2O5						
cfr India	1Q20	590	4Q19	625	35.00	-
cfr western Europe	4Q19	735-760	3Q19	765-790	30.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	4Q19	80-85	3Q19	80-85	0.00	↔
cfr India (68-70)	4Q19	96-105	3Q19	96-105	0.00	↔
cfr India (70-72)	4Q19	120-125	3Q19	120-130	2.50	-
fob north Africa (69)	4Q19	70-75	3Q19	70-75	0.00	↔
fob Algeria (65-68)	4Q19	50-60	3Q19	na	na	↔
Sulphur						
cfr Tampa	4Q19	46	3Q19	75	29.00	-
cfr north Africa	4Q19	52-66	3Q19	80-101	31.50	-
Ammonia						
cfr Tampa	Jan20	250	Dec19	250	0.00	↔

Spot Sales Selection - 3 January 2020						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
Russia	Phosagro	TBC	Brazil	10 MAP	$283-285/t cfr TBC	December-January
Russia	Eurochem	TBC	Brazil	15 MAP	$287/t cfr TBC	January
Mexico	Trader	TBC	Brazil	15 MAP	$277/t cfr	January
Saudi Arabia	Ma'aden	TBC	Brazil	80 MAP	Formula	February
Saudi Arabia	Sabic	TBC	Brazil	90 DAP/MAP	Formula	Jan-Feb
TBC	Trader	Importer	Argentina	6 DAP/MAP	$283/t cfr	Mid-February
Morocco	OCP	Importer	Argentina	6 DAP/MAP	$290/t cfr Necochea	February

HIGHLIGHTS THIS WEEK

Supply

- Brazilian import line up grows for 1Q...
- ...25,000t Russian MAP plus 170,000t Saudi MAP
- OCP shipping over 100,000t DAP/MAP to Arg in Dec-Jan
- Moroccan DAP now arriving in Kenya
- China 2+6 meeting agrees more DAP cuts
- Russian DAP/MAP sold into US
- Indian DAP stocks drop 900,000t in December
- Pakistan DAP inventories heavy at over 550,000t
- Beige DAP from Saudi Arabia sold in Pakistan

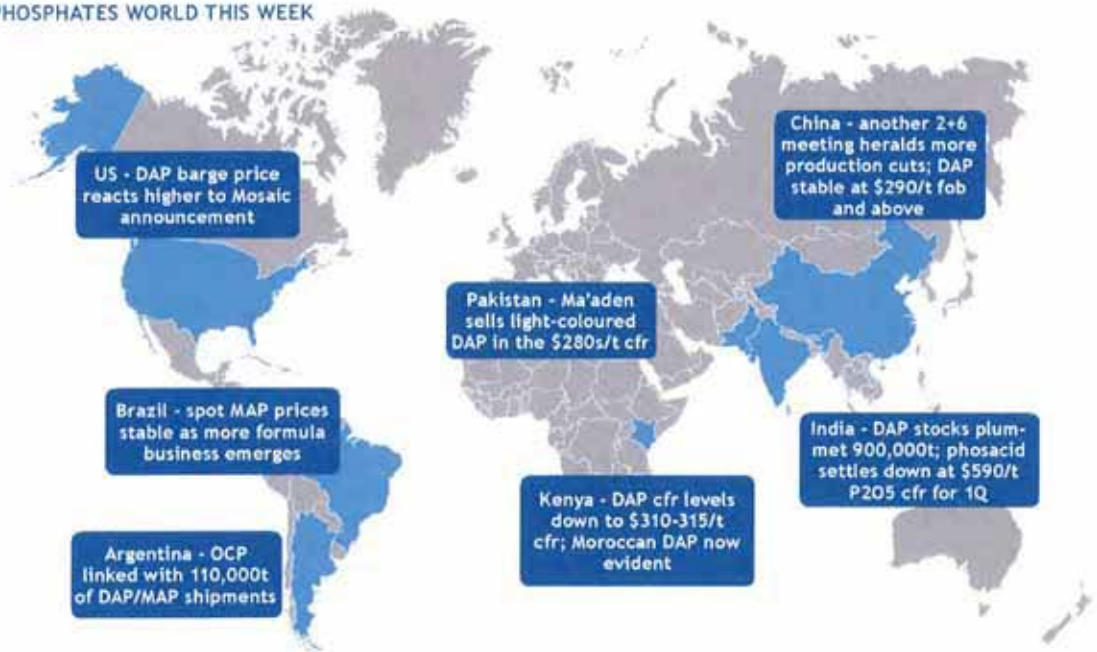
Demand

- Pakistan imports Saudi DAP for first time in two years
- Argentinian buyers purchase further 12,000t of DAP/MAP
- Eight offers received in India RCF DAP/MAP tender

Prices

- OCP agrees 1Q phosacid in India down by $35/t P2O5
- Brazilian MAP prices stabilise in $275-280/t cfr range
- Brazilian offers rise to $295-300/t cfr
- Chinese DAP steady in the $290s/t fob
- DAP in northwest Europe sold higher at $320/t fca
- East African DAP cfr values drop to $310-315/t cfr

THE PHOSPHATES WORLD THIS WEEK



Disclaimer: Argus depicts geo-political borders as defined by the United Nations Geospatial Information Section.
For more information visit http://www.un.org/Depts/Cartographic/map/profile/world.pdf

Oustanding 2019-20 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
KSCL/Nepal	DAP	20	15/10	Delivery to KSCL's warehouses	Offers in
Bangladesh/BCIC	Phosphoric acid	10	30/9	30 days after l/cs	Offers in
Iran/ASSC	DAP	2 x 35	18/12		Delayed
India/Fact	Phosphate rock	40	5/12	5-17 January	Offers in
Iran/ASSC	TSP	3 x 30	6/1		Open
India/RFC	DAP 10-50/MAP 16-44	20	27/12	30 days after issue of purchase order	Offers in
India/NFL	DAP	500 -600	28/1	2020-21	Open

NORTH AMERICA

US

Mosaic loaded 50,000t of DAP for its Indian distribution network in mid/late December on the ***Alam Molek***.

US domestic

Phosphate barge values continued to rise this week, and market participants are optimistic for stabilization at Nola following production cuts from major global producers over the past two weeks.

Two prompt domestic DAP barges traded at $252/st fob Nola to frame the high end of this week's $245-252/st fob Nola range, which rose by $12.50/st from the most recent price assessed by ***Argus***. Market indications framed the low end and supported a premium to MAP at Nola.

A January MAP barge traded at $240/st fob Nola on Wednesday to frame the low end of this week's $240-250/st fob Nola range, while indications framed the high end. Participants doubted the replicability of a $240/st fob Nola phosphate trade this week.

Production cuts announced in mid-December are expected to amount to nearly 350,000 t/month early this year, helping prevent additional supply buildup as buyers work through carryover inventories, still estimated ample.

Moroccan producer OCP will reduce output by approximately 500,000t through the end of February because of poor weather at its Jorf Lasfar, Morocco, port. North American producer Mosaic followed with the decision to extend the current production cut at its Faustina, Louisiana, phosphate complex into 2020 by transitioning the curtailment to its central Florida facilities.

Canada

Canadian MAP imports reached 1.1mn t in the first 10 months of 2019, compared to 868,000t in 2018, probably reflecting the shut down of the Nutrien Redwater facility earlier last year. Of the 2019 total, the US accounted for 85pc and Morocco 12pc. October imports reached 147,000t of which the US accounted for 139,000t.

Exhibit I-67

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Argus Phosphates
Formerly Argus FMB Phosphates

Issue 19-10 | Thursday 7 March 2019

EXECUTIVE SUMMARY

India DAP purchases push cfr levels lower

Indian importers bought a further 156,000t of Chinese DAP under tenders, as trading firms lowered cfr offers this week.

India's RCF awarded a total of 96,000t of DAP to Aries at a range of $397-402/t cfr, a drop of around $4/t at the low end. And fellow importer NFL bought 60,000t from Ferttrade at just under $400/t cfr. The RCF DAP will likely be sourced from China, reflecting the mid-$380s/t fob at the low end.

West of Suez, Incofe bought 7,000t of DAP in the low/mid-$400s/t cfr, which is widely reported as US product. This sale would net around $380/t fob Tampa, down by $11-15/t on previously reported business. OCP sold 40,000t of DAP/MAP to Argentina's Cofco priced on formula this week. Phosagro sold its remaining DAP/MAP at around $410/t cfr Argentina, reflecting around $380/t fob. Mosaic sold 5,000t of MAP 11-52 at $405/t cfr Brazil this week.

MARKET DRIVERS

OCP and Mosaic schedule turnarounds

Moroccan producer OCP reports that it will undertake substantial turnarounds at its DAP and TSP plants next quarter. Production losses will total around 200,000t of DAP/MAP/NPKs and 100,000t of TSP, OCP projects. And US supplier Mosaic will cut phosphates output by 300,000t in the spring, citing concerns about weather conditions in key domestic growing regions.

India DAP stocks increase further

India DAP inventories rose to their highest level this fertilizer year, hitting 1.2mn t at the end of February, latest provisional data show. The rise marks an increase of around 96,000t through last month, as imports and domestic output outweighed sales to end users.

30-60 DAY OUTLOOK

Softer west of Suez, DAP flat-to-soft east

A record DAP/MAP surplus and weak end user demand in the US will likely soften prices further this month. Mosaic will cut output, which will reduce availability this quarter. But Chinese DAP fob levels will be tested further by Indian bids.

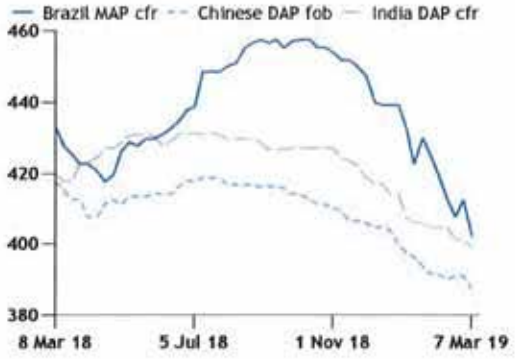
PRICES

Key price assessments	7 Mar	28 Feb	$/t
Argus DAP index	113.482	114.413	-
DAP/MAP - fob bulk			
DAP/MAP Tampa	380-388	391-395	-
DAP China	385-390	387-395	-
DAP Saudi Arabia	390-425	395-420	• •
MAP Baltic	380-385	395-400	-
DAP/MAP - cfr bulk			
DAP India	397-402	400-402	-
DAP Pakistan	407	407	• •
MAP Brazil	400-405	410-415	-
Phosphoric acid India/t P2O5	750	750	• •
DAP - fca			
DAP Benelux fot/fob duty paid/free	455-460	465-470	-

See page 2 for full price table

Selected DAP/MAP/NPK supply balance - March		'000t
Exporter	Sold	Unsold
Ma'aden/SABIC	238	162
GCT	38-51	-
OCP	370-420	80-180

Key Indicative Prices — USD/t



View the methodology used to assess phosphate prices at www.argusmedia.com/methodology. Your feedback is always welcome at fertilizer@argusmedia.com

MARKET ANALYSIS

India buys more DAP but below $400/t cfr

India has awarded 156,000t of DAP tenders this week and was by far the most active country. But prices dipped as low as $397/t cfr. This is almost certainly traders shorting the market, but Chinese DAP fob levels are heading towards the low/mid-$380s/t fob as a result.

The continued buying is extraordinary given provisional data this week indicating end-February stocks at 1.2mn t and over 400,000t of port stocks. This may yet blunt India's appetite for DAP early in the second quarter. An April slowdown in buying seems likely. Moreover, will Modi's populist moves designed to woo Indian farmer voters still be as relevant assuming he wins in May?

The rest of the Asian market is very flat. Pakistan has no appetite for more DAP. There are signs of life in Vietnam with Russian and Jordanian material under discussion.

In Latin America, Incofe's deal in the low-$400s/t cfr for a 7,000t DAP lot is now widely reported as being of US origin. This would net around $380/t fob, hence Tampa has been assessed lower this week. The Brazil market was quiet because of the Carnival holiday, but Mosaic reported a sale of 5,000t of MAP at $405/t cfr Brazil, pulling the range down at the high end. Sales of DAP/MAP by OCP and Phosagro to Argentina also emerged this week.

On the supply side, Mexico's Pemex restarted DAP/MAP granulation earlier this week following the electricity fault that halted output since mid-February. But OCP confirmed it would carry out substantial turnarounds next quarter, reducing DAP production by 200,000t and TSP by 100,000t. Output will still be around 500,000t/mth in the next quarter.

The weak fundamentals west of Suez were highlighted by further supply-side developments in the US this week. Mosaic announced today that it will reduce its phosphate output by 300,000t for the spring season at its Florida and Louisiana facilities, citing weather concerns in key domestic growing regions. The US DAP barge price fell further to $430-435/st fob Nola this week, as latest trade data showed that the US market has a record surplus of phosphates entering the spring. Mosaic will also continue shipments to its India distribution system this month, despite the high India stocks, highlighting further the lack of demand from key buying regions in the Americas.

Phosphates prices				$/t
	7 Mar	28 Feb	±	
Argus DAP index	113.482	114.413	0.931	-
DAP/MAP/TSP - fob bulk				
DAP/MAP Tampa	380-388	391-395	9.00	-
DAP/MAP Tampa equivalent Brazil	377-382	387-392	10.00	-
DAP Tampa equivalent India	362-367	367-369	3.50	-
DAP Tunisia	430	430	0.00	• •
DAP Morocco	390-425	390-425	0.00	• •
DAP Morocco P2O5 equiv	768.9	766.07	2.83	-
DAP Morocco equivalent US terminals	393	421-426	30.50	-
DAP Lithuania Baltic	425	425	0.00	• •
DAP Russia Baltic/Black Sea	380-415	395-415	7.50	-
DAP China	385-390	387-395	3.50	-
DAP China P2O5 equiv	708.88	718.15	4.63	-
DAP Saudi Arabia (KSA)	390-425	395-420	0.00	• •
DAP Mexico	390-400	390-400	0.00	• •
DAP/MAP Australia	410-412	410-412	0.00	• •
DAP US Gulf domestic barge $/st	330-335	330-338	1.50	-
DAP Central Florida railcar $/st	375	415	40.00	-
DAP China ex-works	388-395	389-403	4.50	-
DAP Benelux fot/fob duty paid/free	455-460	465-470	10.00	-
MAP Baltic	380-385	395-400	15.00	-
MAP China 11-44	320-325	320-325	0.00	• •
MAP China 10-50	360-385	360-385	0.00	• •
MAP China 11-52	405-410	405-410	0.00	• •
MAP Morocco	440-445	440-445	0.00	• •
TSP Tunisia	360	360	0.00	• •
TSP Morocco	330-350	330-350	0.00	• •
TSP China	310-315	300-310	7.50	-
TSP eastern Med (Lebanon/Israel)	335-345	335-345	0.00	• •
DAP /MAP - cfr bulk				
DAP/MAP Argentina/Uruguay	410-420	415-425	5.00	-
MAP Brazil 11-52	400-405	410-415	10.00	-
MAP Brazil 11-52 P2O5 equiv	660.22	679.45	19.23	-
MAP Brazil 10-50 (ex-China)	371-381	380-390	9.00	-
MAP Brazil 10-50 (ex-China) P2O5 equiv	644.39	662.39	18.00	-
MAP Brazil 11-44 (ex-China)	334-344	343-352	8.50	-
MAP Brazil 11-44 (ex-China) P2O5 equiv	635.94	655.26	19.32	-
DAP India	397-402	400-402	1.50	-
DAP India P2O5 equiv	734.74	738	3.26	-
DAP Pakistan	407	407	0.00	• •
DAP Turkey	440-450	440-450	0.00	• •

Raw material contracts						$/t
					±	
Phosphoric acid/t - P2O5						
cfr India	1Q19	750	4Q18	768	18.00	-
cfr western Europe	3Q18	775-850	2Q18	755-850	10.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	4Q18	100-101	3Q18	98	2.50	-
cfr India (68-70)	4Q18	119-120	3Q18	116	3.50	-
cfr India (70-72)	4Q18	135-139	3Q18	135-142	1.50	-
fob north Africa (69)	1Q19	70-110	4Q18	113-115	24.00	-
Sulphur						
cfr Tampa	1Q19	109	4Q18	140	31.00	-
cfr north Africa	1Q19	103-134	4Q18	145-175	41.50	-
Ammonia						
cfr Tampa	Mar19	275	Feb19	285	10.00	-

Spot Sales Selection - 7 March 2019						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
Tunisia	GCT	TBC	East Europe	2-4 DAP	$430/t fob	Mar
Tunisia	GCT	TBC	Ireland	4-5 DAP	$430/t fob	Mar
Tunisia	GCT	Gubretas	Turkey	100 DAP	Formula	Mar-Sept
Saudi Arabia	Ma'aden	TBC	Kenya	35 DAP	mid-$440s/t cfr	Mar
US	Mosaic	TBC	Brazil	5 MAP 11-52	$388/t fob	Mar
US	TBC	Incofe	Central America	7 DAP	low/mid-$400s/t cfr	Apr
Russia	Phosagro	TBC	Argentina	14 DAP/MAP	$410/t cfr	Mar
China	Aries	RCF	India	46 DAP	$401.69/t cfr	Mar
China	Aries	RCF	India	50 DAP	$397.27/t cfr	Mar
TBC	Ferttrade	NFL	India	60 DAP	$399.71/t cfr	Mar
Morocco	OCP	Cofco	Argentina	40 DAP/MAP	Formula	Mar

HIGHLIGHTS THIS WEEK

Supply

- Indian DAP stocks top 1.2mn t at end February
- Mosaic to cut phosphate output by 300,000t
- GCT signs deal for 100,000t of DAP with Gubretas
- Port stocks rise to over 400,000t
- Ma'aden sells 35,000t of DAP to Kenya
- Pemex restarts DAP/MAP production at Lazaro Cardenas
- OCP to take substantial DAP/TSP 2Q turnarounds
- Phosagro sells remainder of DAP/MAP vessel to Argentina

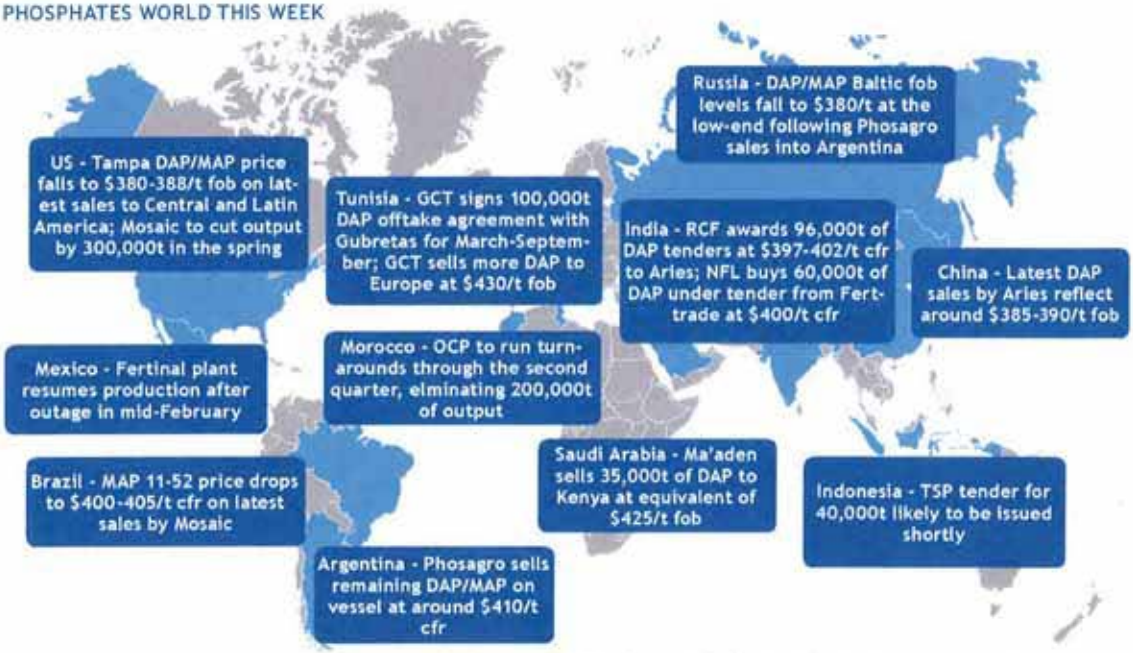
Demand

- India buys 156,000t DAP under tenders
- RCF expresses interest for DAP/MAP lite
- Incofe buys 7,000t DAP for Central America
- Vietnam in market for DAP in combination
- Ireland buys 4,000-5,000t of Tunisian DAP

Prices

- India DAP cfr levels fall below $400/t cfr
- Brazil MAP 11-52 price drops to $400-405/t cfr
- Tampa falls to $380-388/t fob on Latin America sales
- Argentina buys Russian DAP/MAP around $410/t cfr

THE PHOSPHATES WORLD THIS WEEK



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Oustanding 2019 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
India/RCF	DAP	46	21/2	30 days from l/cs	Awarded
Indonesia/Pupuk	DAP	175	22/2	80kt for Gresik, 40kt for Kujang, 40kt for Kaltim, 15kt for Pusri	Likely awarded
India/RCF	DAP	50	25/2	30 days from l/cs	Awarded
C America/Incofe	DAP	14	TBC	Atlantic ports	Partially awarded
India/NFL	DAP	100	27/2	March	Partially awarded
Mauritania/Gov	DAP	8	5/3		Closed
India/RCF	DAP/MAP lite	2 x 20	14/3	To Mumbai	Open
Iran/ASSC	TSP	3 x 30	6/4		Open

NORTH AMERICA

US

Mosaic has sold 5,000t of MAP to Brazil this week at around $388/t fob for March loading.

Sales of 7,000t of US DAP have taken place in Central America under Incofe's tender, thought to be priced at the equivalent of around $380/t fob Tampa for 1-10 April loading.

US domestic

The US DAP values narrowed this week as an announced production curtailment and subsequent uptick in buying activity kept the market from falling further.

Nola DAP barges narrowed to $330-335/st fob Nola, down nearly $2/st from last week's midpoint, amid a spike in market activity.

MAP values dipped below DAP this week as the Nola range fell to $325-330/st with multiple trades setting the low end and confirmed physical offers underpinning the top.

Central Florida rail pricing fell by $40/st to $375/st on new offers.

In the Twin Cities market, prompt DAP fell to $400/st fot from last week's $425-430/st. River open DAP offers have fallen by $10/st from last week to $370-380/st fot.

Mosaic to curtail spring phosphate output

Mosaic will cut its spring phosphate production by 300,000st in an attempt to balance the US market, where prices have declined steadily since October.

The reduction will be accomplished through changes in maintenance schedules and operational production plans at its facilities in Florida and Louisiana. Mosaic's quarterly phosphate output has averaged around 2.1mn t since the idling of its Plant City facility in Florida in December, according to the company's operation statistics.

Continue reading >>

Exhibit I-68

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Argus Phosphates

Formerly Argus FMB Phosphates

Issue 19-37 | Thursday 12 September 2019

EXECUTIVE SUMMARY

Prices fall further

DAP prices in China fell further this week, as indications from suppliers and trading firms dropped lower. Activity in India was quiet, but NFL issued a tender to buy up to 45,000t of DAP, closing 17 September. Pupuk Indonesia reissued its tender for increased volumes of DAP, up to 135,000t, closing on 13 September. Chinese suppliers will likely dominate.

In Africa, there was further buying of phosphates this week for Kenya. In Europe, GCT bolstered its September exports with DAP sales to Turkey and Italy in the $335-340/t fob range. West of Suez, Mosaic announced its idling of its Faustina plant, which boosted DAP/MAP barge prices. But prices of 11-52 in Brazil fell to $325-333/t cfr.

MARKET DRIVERS

US barge prices up on Faustina closure

Mosaic's decision to cut 500,000t of phosphates output from the US, as of 1 October, has supported barge prices this week. Mosaic reported DAP/MAP barge sales up by $5/st this week for September/October-loading, following the announcement that the supplier will close its Faustina plant.

African DAP demand continues

Two fresh DAP deals into east Africa took place this week. Kenyan importers bought around 20,000t of Russian DAP in the $350-355/t cfr range. And Saudi producer Ma'aden sold a further 7,000t of DAP to east Africa to various buyers, priced in the same range. DAP demand is picking up ahead of the short rainy season in Kenya.

30-60 DAY OUTLOOK

Soft

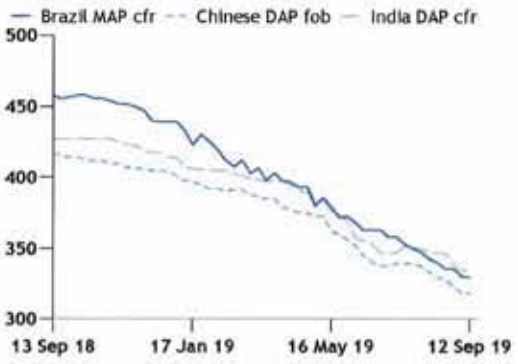
DAP prices east of Suez are set to remain soft, as Indian buyers continue to grind down cfr levels. Pakistan DAP demand had picked up, but quietened again this week after the previous round of purchases. Australia will offer Chinese suppliers a much-needed outlet in the face of standard demand in the domestic autumn season. West of Suez, the rising barge price is bullish for suppliers, but the Faustina idling is likely too late to have an effect on Brazil prices in the short-term.

PRICES

Key price assessments	12 Sep	5 Sep	$/t
Argus DAP Index	92.627	92.864	-
DAP/MAP - fob bulk			
DAP/MAP Tampa	324-326	324-326	↔
DAP China	316-320	318-320	-
DAP Saudi Arabia	328-333	330-335	-
MAP Baltic	305-310	305-310	↔
DAP/MAP - cfr bulk			
DAP India	334-335	334-335	↔
DAP Pakistan	341-343	341-343	↔
MAP Brazil	325-333	325-335	-
Phosphoric acid India/t P2O5	655	655	↔
DAP - fca			
DAP Benelux fot/fob duty paid/free	360-365	360-365	↔

See page 2 for full price table

Key Indicative Prices — *USD/t*



View the methodology used to assess phosphate prices at www.argusmedia.com/methodology. Your feedback is always welcome at fertilizer@argusmedia.com

ANNOUNCEMENT

The holiday calendar showing which Argus reports are not published on which days is now available online https://www.argusmedia.com/en/methodology/publishing-schedule

MARKET ANALYSIS

Prices remain under pressure

The DAP market slowed east of Suez as participants awaited pricing clarity, and Mosaic took some measures to redress oversupply in the US.

There was little activity in India this week, but NFL issued a tender to buy up to 45,000t of DAP. The tender, closing next week, will offer some much needed clarity, as pricing levels remain unclear since the last purchases a few weeks ago.

Traders are looking to push prices below $315/t fob in order to work cargoes into the Indian subcontinent, but no new deals at this level have been concluded. The major Chinese suppliers have reiterated their commitments to supply cuts, citing average levels around 60pc of capacity, but this has done little to offset the wider lack of demand in the region. Pupuk Indonesia's retendering for 135,000t of DAP, up by 40,000t on its previously scrapped enquiry, has offered Chinese producers one key outlet for October-March. And the growing demand in Australia, where around 100,000t of Chinese/US phosphates has already been lined up for shipment in September-October, will offset supply in the face of weak demand on the subcontinent.

Pakistan DAP buying has slowed after the vessels booked through the past month, and Indian buyers are content to push for lower and lower prices. The latest Indian provisional data for this fertilizer year indicate that DAP sales to end-users have dropped on year earlier, down by 3.7pc, to 2.94mn t in the April-August period. But domestic output is up by over a fifth to 1.82mn t in the period, highlighting the market's increasingly insulated position with inventories still high.

Mosaic's Faustina pact

Mosaic announced earlier this week that it is idling its Faustina phosphate complex at the start of next month, cutting US production by 500,000t. Prices of DAP/MAP barges at Nola rose accordingly, hitting $290/st fob for September-October, up by $5/st on last week's sales, and $300/st fob for November-December. This supply cut will indeed go some way to offsetting the substantial build up of stocks in the US. But there are still plenty of import vessels on the horizon, with OCP loading another DAP panamax for Nola this week. In terms of export prices, the ripples caused by the announcement did not reach as far as Brazil or Argentina, where prices have dropped further this week.

Phosphates prices	12 Sep	5 Sep	±	$/t
Argus DAP index	92.627	92.864	0.237	-
DAP/MAP/TSP - fob bulk				
DAP/MAP Tampa	324-326	324-326	0.00	• •
DAP/MAP Tampa equivalent Brazil	295-303	298-308	4.00	-
DAP Tampa equivalent India	278-279	280-281	2.00	-
DAP Tunisia	335-340	355-365	22.50	-
DAP Morocco	315-345	315-345	0.00	• •
DAP Morocco P2O5 equiv	593.57	594.75	1.18	-
DAP Morocco equivalent US terminals	297-310	294-299	7.00	-
DAP Lithuania Baltic	325-335	325-335	0.00	• •
DAP Russia Baltic/Black Sea	305-310	305-310	0.00	• •
DAP China	316-320	318-320	1.00	-
DAP China P2O5 equiv	567.01	571.31	2.15	-
DAP Saudi Arabia (KSA)	328-333	330-335	2.00	-
DAP Mexico	325-330	325-330	0.00	• •
DAP/MAP Australia	315-320	315-320	0.00	• •
DAP US Gulf domestic barge $/st	282-290	280-285	3.50	-
DAP Central Florida railcar $/st	310	310	0.00	• •
DAP China ex-works	346-367	350-371	4.00	-
DAP Benelux fot/fob duty paid/free	360-365	360-365	0.00	• •
MAP Baltic	305-310	305-310	0.00	• •
MAP China 11-44	265-270	265-270	0.00	• •
MAP China 10-50	305	305	0.00	• •
MAP China 11-52	310-325	310-325	0.00	• •
MAP Morocco	313-395	313-395	0.00	• •
TSP Tunisia	310-315	310-315	0.00	• •
TSP Morocco	305-317	305-317	0.00	• •
TSP China	270-275	270-275	0.00	• •
TSP eastern Med (Lebanon/Israel)	310	310	0.00	• •
DAP /MAP - cfr bulk				
DAP/MAP Argentina/Uruguay	335-345	340-342	1.00	-
MAP Brazil 11-52	325-333	325-335	1.00	-
MAP Brazil 11-52 P2O5 equiv	510.14	512.06	1.92	-
MAP Brazil 10-50 (ex-China)	300-312	300-314	1.00	-
MAP Brazil 10-50 (ex-China) P2O5 equiv	496.13	498.13	2.00	-
MAP Brazil 11-44 (ex-China)	269-281	269-282	0.50	-
MAP Brazil 11-44 (ex-China) P2O5 equiv	480.16	481.3	1.14	-
DAP India	334-335	334-335	0.00	• •
DAP India P2O5 equiv	595.79	595.79	0.00	• •
DAP Pakistan	341-343	341-343	0.00	• •
DAP Turkey	350-355	350-360	2.50	-

Raw material contracts					±	$/t
Phosphoric acid/t - P2O5						
cfr India	3Q19	655	2Q19	728	73.00	-
cfr western Europe	4Q18	785-860	3Q18	775-850	10.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	3Q19	80-85	2Q19	88-105	14.00	-
cfr India (68-70)	3Q19	96-105	2Q19	120-132	25.50	-
cfr India (70-72)	3Q19	120-130	2Q19	135-140	12.50	-
fob north Africa (69)	2Q19	70-80	1Q19	70-110	15.00	-
Sulphur						
cfr Tampa	3Q19	75	2Q19	88	13.00	-
cfr north Africa	3Q19	80-101	2Q19	80-103	1.00	-
Ammonia						
cfr Tampa	Sep19	225	Aug19	215	10.00	-

Spot Sales Selection - 12 September 2019						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
Saudi Arabia	Ma'aden	Various	East Africa	7 DAP	$350-355/t cfr	September
Russia	Phosagro TBC	Various	South Africa	20 DAP	$350-355/t cfr	September
Tunisia	GCT	Various	Turkey	40 DAP	$335-340/t fob	September
Tunisia	GCT	Various	Italy	20 DAP	$335-340/t fob	September
Tunisia	GCT	Various	France, Greece	6-7 TSP	$310-315/t fob	September
China	Producer	2 importers	Pakistan	30 DAP	low-$340s/t cfr	September

HIGHLIGHTS THIS WEEK

Supply

- Mosaic to idle Faustina plant from 1 October
- GCT sells 40,000t of DAP to Turkey...
- ...and 20,000t of DAP to Italy
- Trader brings more Moroccan MAP into Argentina
- OCP ships another DAP panamax to the US
- Chinese Hubei producer loads 30,000t of DAP for Pakistan
- Chinese producers hold output at 60pc of capacity

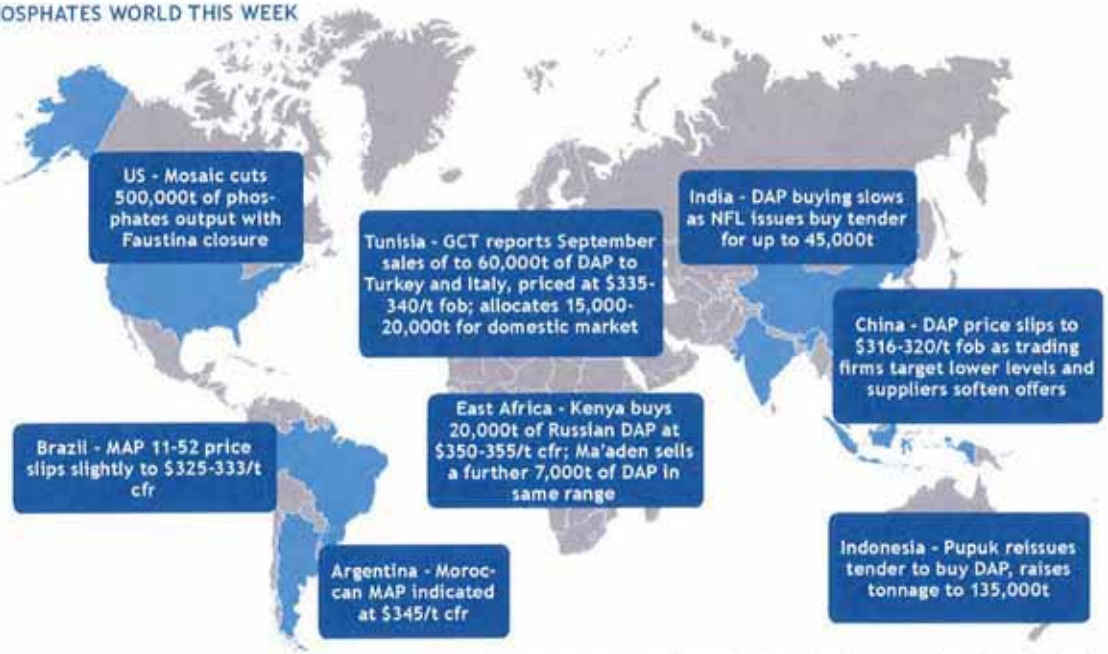
Demand

- Pupuk Indonesia reissues tender for 135,000t of DAP
- NFL India tenders for up to 45,000t of DAP
- East African buyers take 20,000t of Russian DAP...
- ...and another 7,000t of Saudi DAP
- Pakistan DAP demand quietens following recent buying
- Constantza DAP offtake remains slow

Prices

- China DAP price softens to $316-320/t fob
- Saudi DAP drops to $328-333/t fob range
- Tunisian DAP price falls to $335-340/t fob
- Brazil 11-52 drops to $325-333/t cfr
- Argentina DAP/MAP cut to $335-345/t cfr on indications

THE PHOSPHATES WORLD THIS WEEK



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Oustanding 2019 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
One Acre/Kenya	DAP	13	20/8	4Q	Closed
Iraq	DAP	5 x 50	20/8	4Q to Umm Qasr	Closed
Fertial/Algeria	DAP	4		TBC	Delayed
Atlas/Philippines	DAP	8	19/8	August shipment	Likely awarded
KSCL/Nepal	DAP	20	26/7	TBC	Awarded
Zuari/India	DAP	40	27/8		Awarded
Pupuk/Indonesia	DAP	135	13/9	October-March	Open
NFL/India	DAP	25-45	17/9	Ship by 20 October to EC India	Open
EABC/Ethiopia	NPS	888	19/9	50kt lots, priced on a fob basis	Open
KSCL/Nepal	DAP	20	15/10	Delivery to KSCL's warehouses	Open

NORTH AMERICA

US

Mosaic has no new export sales to report this week.

US domestic

Phosphate barge prices increased this week for the first time since early-June following Mosaic's announcement to idle the Faustina, Louisiana phosphate plant in the fourth quarter. The closure will reduce domestic phosphate production by an estimated 500,000 t/yr, which Mosaic expects will tighten supply and rebalance the market.

The high end of this week's DAP barge range increased by $5/st following the news as 11 DAP barges traded at $290/st fob Nola. A barge trade at $282/st fob Nola on Friday framed the low end, representing a $2/st increase from last week's low.

MAP barge values increased from last week by $7/st when two barges traded at $285/st fob Nola to frame the low end of this week's range. Twelve MAP barge trades at $290/st fob Nola framed the high end, which increased by $5/st from the previous week.

Mosaic to idle Faustina phosphate complex

Mosaic will idle operations at its Faustina phosphate complex on 1 October, reducing total domestic production by 500,000t.

Mosaic said idling the 1.6mn t/yr capacity DAP/MAP plant will help lower domestic phosphate inventories as fall application demand strengthens throughout the fourth quarter. Mosaic anticipates strong post-harvest application demand, potentially leading to a more balanced market.

The producer raised its DAP and MAP offers to $295/st fob Nola for September and October shipment, while November and December orders are offered at $300/st fob Nola.

Argus estimates offshore DAP imports reached 123,000t in August, with another 63,000t scheduled for first-half September arrival. Seaborne MAP imports are estimated at 102,000t in August and 118,000t for September.

Mosaic's announcement comes nearly three months after it formally closed its Plant City phosphate facility in Florida.

Corn crop maturity lags behind recent years: USDA

The US corn crop last week showed more signs that it is maturing more slowly than recent historical averages as a result of delays in the planting season amid heavy rainfall earlier in the year.

The nation's corn crop reached 11pc maturity during the week ending 8 September, according to the United States Department of Agriculture (USDA). This is 22 points behind last year, and 13 points behind the average recorded since 2014.

The upper Midwest continued to lag, with both Illinois and Indiana at 8pc mature — 27 and 18 points behind their five-year averages, respectively. Corn maturity in Illinois lagged 45 points behind last year's crop, while Ohio's crop fell 20 points behind last year at 4pc mature.

Continue reading >>

CENTRAL AND LATIN AMERICA

Brazil

11-52 prices softened at the high-end this week on weaker sentiment. *Argus* assessed 11-52 at $325-333/t cfr, amid slowing demand and a lack of spot activity.

Soybean sales at 31pc of Mato Grosso harvest

Sales of soybean produced in Brazil's west-central state of Mato Grosso reached 31pc of anticipated 2019-20 production in the latest month, up from 25.3pc a month earlier, according to the state Institute of Agricultural Economics (Imea).

A year ago at this time, soybean sales accounted for 28pc of the state's expected seasonal production of 32.5mn t.

Exhibit I-69

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Argus Phosphates
Formerly Argus FMB Phosphates

Issue 19-7 | Thursday 14 February 2019

EXECUTIVE SUMMARY

Brazil MAP still under pressure

Phosphate prices have continued to fall west of Suez, as a build-up of stocks amid a lack of demand has pushed MAP 11-52 prices down further this week.

In Brazil, a trader has sold two lots of Mexican 11-52 to a Brazilian buyer at $400-410/t cfr. But offers from suppliers remain around $425/t cfr. In Argentina, there have been sales of DAP/MAP around $430/t cfr, but offers have fallen to $420-427/t cfr.

East of Suez, Indian buyers issued tenders for a total of 196,000t of DAP. Meanwhile, Indonesia's Pupuk scrapped its 175,000t DAP purchase tender. Sales of Chinese DAP into Thailand reflect the high-$380s/t fob.

MARKET DRIVERS

Importer economics support India DAP demand

The current value of the dollar against the Indian rupee - around Rs71.1/$ - and the maximum retail price (MRP) of Rs29,000/t gives importers a significant margin. The cost of importing DAP in India is around Rs25,033/t, leaving a margin of Rs3,967 ($56/t) from the MRP. Accordingly, Indian import demand remains strong - with another 196,000t of DAP tendered for this week.

Australian demand up on plant closure

The closure of Incitec Pivot's Phosphate Hill plant because of disrupted rail links caused by heavy rains has boosted phosphates import demand. Two Chinese DAP/MAP 10-50 cargoes were sold to buyers, following the progressive shutdown of plants at the 975,000 t/yr facility since the weekend.

30-60 DAY OUTLOOK

Bottom could be close

Demand for fertilizer inputs remains weak in Brazil as it is still too early to buy MAP for the upcoming soybean season. The cold weather and record surplus in the US has stifled purchases and there is little support. But Brazil will have to buy soon and an improvement in US weather could see both markets buy simultaneously.

East of Suez, Chinese DAP suppliers are attempting to hold levels flat, but Indian buyers are bidding lower.

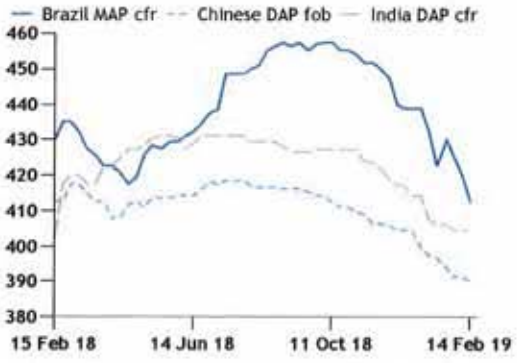
PRICES

Key price assessments			$/t
	14 Feb	7 Feb	
Argus DAP index	114.756	114.952	-
DAP/MAP - fob bulk			
DAP/MAP Tampa	391-395	391-395	↔
DAP China	387-393	390-393	-
DAP Saudi Arabia	395-420	395-420	↔
MAP Baltic	395-400	395-405	-
DAP/MAP - cfr bulk			
DAP India	404-405	404-405	↔
DAP Pakistan	409-410	409-410	↔
MAP Brazil	400-425	410-430	-
Phosphoric acid India/t P2O5	750	750	↔
DAP - fca			
DAP Benelux fot/fob duty paid/free	465-475	465-475	↔

See page 2 for full price table

Selected DAP/MAP/NPK supply balance - February		'000t
Exporter	Sold	Unsold
Ma'aden/SABIC	240	160
Eurochem	155	-
GCT	39-41	4-21

Key Indicative Prices — USD/t



View the methodology used to assess phosphate prices at www.argusmedia.com/methodology. Your feedback is always welcome at fertilizer@argusmedia.com

MARKET ANALYSIS

India and Australia provide support

The bottom of the market may be close as Brazilian and US demand kicks in eventually, weather permitting. Prices east of Suez are generally flat basis Indian demand.

An outage at IPL's Phosphate Hill facility in Australia due to heavy rain and flooding has seen IPL in the import market for DAP and MAP in order to augment supply. Chinese material has been secured around $385/t fob with at least two cargoes agreed. DAP is under discussion.

India meanwhile continues to express interest in DAP. Tenders from RCF and NFL issued over the last week total nearly 200,000t of DAP demand. The market expects that these non-DAP producers will buy. This is because importer economics at the current cfr, MRP and subsidy levels are favourable. Moreover, the government wants to ensure adequate DAP supply in election year and has allowed free movement of DAP from the ports inland (unlike in previous years). Lastly, there is an expectation that DAP prices will firm in 2Q so it is better to step in now lest prices rise later.

Two deals in India emerged this week, for a diverted Saudi cargo originally headed for east coast Africa. The sale to IFFCO, at $402/t cfr, is considered a distressed cargo under *Argus* methodology, and is not included in our range. Ma'aden sold 50,000t DAP to west coast India for March shipment in the mid-$400s/t cfr.

Much of the eastern hemisphere is still returning from the Chinese Lunar New Year holiday. In general, Chinese DAP continued to be talked around $390/t fob or just below. In Indonesia, Pupuk scrapped its tender for 175,000t having failed to secure lower prices. It will likely re-tender soon.

West of Suez, illiquidity in the Brazilian market was again apparent and there was much debate as to price levels. Both a trader and a buyer confirmed buying 10,000t MAP from Mexico in a $400-410/t cfr range. However, prices discussed spanned a very large range with offers in a $420-425/t cfr range with Chinese material at the low end. *Argus* assessed the range at $400-425/t cfr, the low end basis confirmed deals, the high end basis what is consistently being offered. The price is further evidenced by deals in Argentina in the upper-$420s/t cfr for Russian MAP.

Overall, 230,000t DAP/MAP traded this week, although much was under formula. Once the weather improves, US spring demand should flush imports through the system bringing an uptick in prices.

Phosphates prices	14 Feb	7 Feb	±	$/t
Argus DAP index	114.756	114.952	0.196	-
DAP/MAP/TSP - fob bulk				
DAP/MAP Tampa	391-395	391-395	0.00	↔
DAP/MAP Tampa equivalent Brazil	379-404	386-406	4.50	-
DAP Tampa equivalent India	373-374	374-375	1.00	-
DAP Tunisia	440-445	440-445	0.00	↔
DAP Morocco	390-445	390-445	0.00	↔
DAP Morocco P2O5 equiv	788.28	780.95	7.33	-
DAP Morocco equivalent US terminals	420-426	419-425	1.00	-
DAP Lithuania Baltic	425-430	430-435	5.00	-
DAP Russia Baltic/Black Sea	395-415	395-415	0.00	↔
DAP China	387-393	390-393	1.50	-
DAP China P2O5 equiv	714.56	715.93	0.69	-
DAP Saudi Arabia (KSA)	395-420	395-420	0.00	↔
DAP Mexico	390-400	390-400	0.00	↔
DAP/MAP Australia	410-412	410-412	0.00	↔
DAP US Gulf domestic barge $/st	356-359	362-365	6.00	-
DAP Central Florida railcar $/st	415	415	0.00	↔
DAP China ex-works	382-396	382-396	0.00	↔
DAP Benelux fot/fob duty paid/free	465-475	465-475	0.00	↔
MAP Baltic	395-400	395-405	2.50	-
MAP China 11-44	338-343	338-343	0.00	↔
MAP China 10-50	385	385-390	2.50	-
MAP China 11-52	405-410	405-410	0.00	↔
MAP Morocco	440-445	440-445	0.00	↔
TSP Tunisia	360	360	0.00	↔
TSP Morocco	330-350	330-350	0.00	↔
TSP China	300-305	300-315	5.00	-
TSP eastern Med (Lebanon/Israel)	335-345	335-345	0.00	↔
DAP /MAP - cfr bulk				
DAP/MAP Argentina/Uruguay	425-430	430-432	3.50	-
MAP Brazil 11-52	400-425	410-430	7.50	-
MAP Brazil 11-52 P2O5 equiv	674.85	686.98	12.13	-
MAP Brazil 10-50 (ex-China)	371-400	380-405	7.00	-
MAP Brazil 10-50 (ex-China) P2O5 equiv	659.04	670.87	11.83	-
MAP Brazil 11-44 (ex-China)	334-361	343-365	6.50	-
MAP Brazil 11-44 (ex-China) P2O5 equiv	649.83	661.88	12.05	-
DAP India	404-405	404-405	0.00	↔
DAP India P2O5 equiv	745.6	746.08	0.48	-
DAP Pakistan	409-410	409-410	0.00	↔
DAP Turkey	440-450	440-450	0.00	↔

Raw material contracts					±	$/t
Phosphoric acid/t - P2O5						
cfr India	1Q19	750	4Q18	768	18.00	-
cfr western Europe	3Q18	775-850	2Q18	755-850	10.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	4Q18	100-101	3Q18	98	2.50	-
cfr India (68-70)	4Q18	119-120	3Q18	116	3.50	-
cfr India (70-72)	4Q18	135-139	3Q18	135-142	1.50	-
fob north Africa (69)	4Q18	113-115	3Q18	116-118	3.00	-
Sulphur						
cfr Tampa	1Q19	109	4Q18	140	31.00	-
cfr north Africa	1Q19	103-134	4Q18	145-175	41.50	-
Ammonia						
cfr Tampa	Feb19	285	Jan19	285	0.00	↔

Spot Sales Selection - 14 February 2019						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
Mexico	Nitron	TBC	Brazil	5 MAP	$400/t cfr	February
Mexico	Nitron	TBC	Brazil	5 MAP	$410/t cfr	February
Saudi Arabia	Sabic	TBC	Brazil	40 MAP	Formula	March
Saudi Arabia	Ma'aden	TBC	Brazil	40 MAP	Formula	February
Russia	PhosAgro	TBC	Argentina	15 MAP	$430/t cfr	February
China	Xiangfeng	Traders	Australia	45 MAP 10-50	$385/t fob	February
Saudi Arabia	Ma'aden	TBC	India	50 DAP	Mid-$400s/t cfr	March
Mexico	Nitron	TBC	Brazil	20 TSP	$330/t cfr	February

HIGHLIGHTS THIS WEEK

Supply

- IPL Phosphate Hill shuts due to flooding
- India allows DAP port stocks to move freely
- Indian DAP February line up strong at 400,000t

Demand

- Fresh tenders in India for 200,000t DAP
- Pupuk cancels 175,000t DAP purchase tender
- Australian demand boosted by IPL outage
- 10,000t Mexican MAP trades in Brazil

Prices

- Mexican MAP trades at $400-410/t cfr Brazil
- Argentina pays high-$420s/t cfr for Russian MAP
- Distressed cargo sold in India at $402/t cfr

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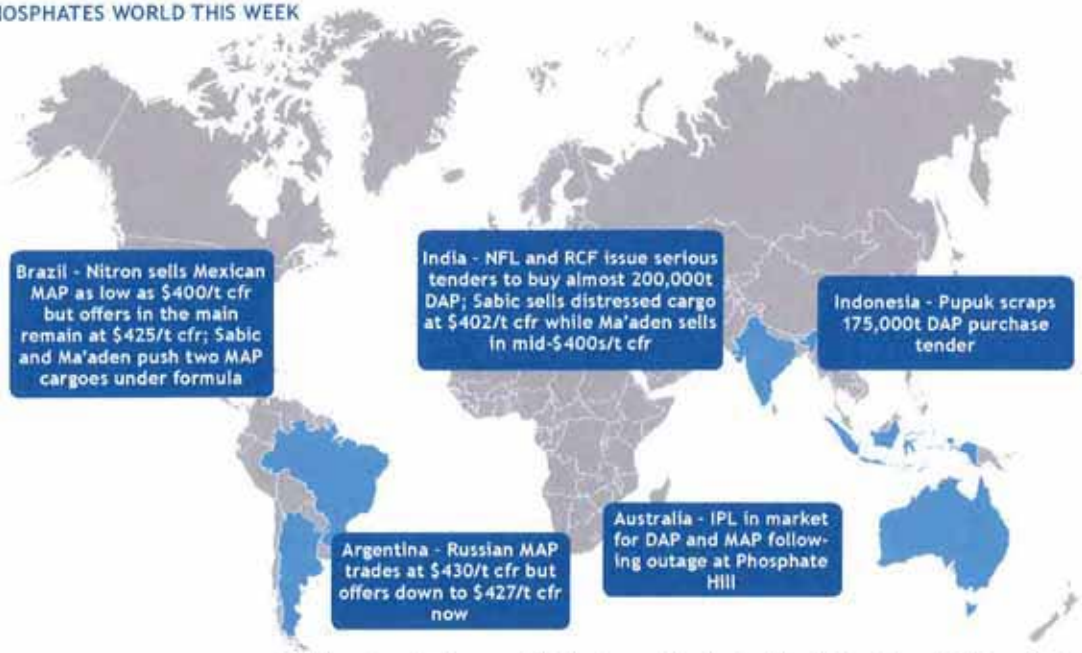
THE PHOSPHATES WORLD THIS WEEK



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Oustanding 2018 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
Sri Lanka/MoA	TSP	10	22/1		Prices opened
Indonesia/Pupuk	DAP	175	1/2	80kt for Gresik, 40kt for Kujang, 40kt for Kaltim, 15kt for Pusri	Scrapped
C. America/Incofe	DAP	10	14/2	TBC	Closing today
India/RCF	DAP	46	21/2	30 days from l/cs	Open
India/RCF	DAP	50	25/2	30 days from l/cs	Open
India/NFL	DAP	100	27/2	March	Open

NORTH AMERICA

US

Mosaic has made no export sales this week.

US domestic

The continual downward pressure of heavy stocks and lack-lustre demand pushedUS phosphate prices to their lowest point since the fourth quarter of 2017.

The phosphate barge market was inactive this week, as heavy warehouse supplies continue to keep buyers on the sidelines. Physical offers for February and March DAP barge garnered little interest despite falling to $356-359/st fob Nola this week. MAP barge pricing was notionally adjusted downward to $359-364/st fob Nola on market sentiment that the MAP premium to DAP ranged from $0-5/st. Both DAP and MAP values have declined by 16pc since peaking in October 2018.

Although the current tone of the market suggest a further depression of phosphate values, participants remain confident that the market will recover with return of spring demand.

In the Twin Cities market, prompt DAP was unchanged from last week at $425-430/st fot. River open DAP offers are also steady at $405-410/st fot.

ANNOUNCEMENT

The holiday calendar showing which Argus reports are not published on which days is now available online https://www.argusmedia.com/en/methodology/publishing-schedule

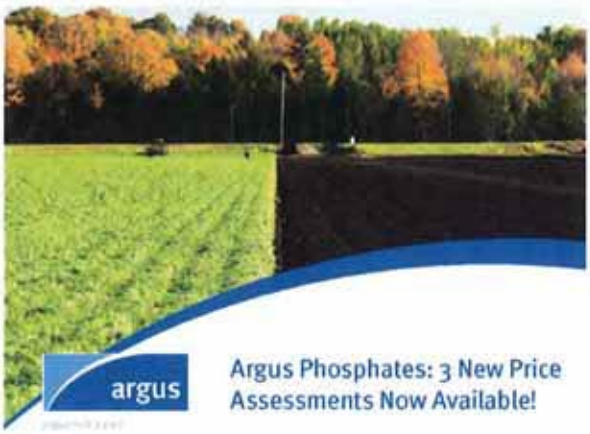

Exhibit I-70

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Argus Phosphates

Formerly Argus FMB Phosphates

Issue 19-36 | Thursday 5 September 2019

EXECUTIVE SUMMARY

DAP price decline continues

Phosphate prices across most major markets fell this week, as trading firms continue to pressure cfr levels.

Chinese DAP slipped into the high-$310s/t fob, following a trader sale of 50,000t of DAP to east coast India, equivalent to $334-335/t cfr east coast. Pupuk Indonesia has scrapped its 95,000t DAP purchase tender, but should reissue shortly. In Africa, Ma'aden sold 18,000t of DAP to Kenyan buyers at $350-355/t cfr, as well as 25,000t of MAP 11-52 to South Africa at $340/t cfr. West of Suez, 11-52 activity has slowed and there is little purchasing above $330/t cfr Brazil.

MARKET DRIVERS

Australian demand begins

Australian importers are now looking to secure shipments from various origins and price-checking is taking place. Contract cargoes will begin shipping this month. On the west coast, a trader has booked a 20,000-30,000t spot cargo of MAP 11-52 from south China for various buyers, loading next month. And, another importer has a 40,000t MAP contract combination shipment loading in Tampa next month.

Brazil remains key outlet for producers

Suppliers shipped 2.4mnt of MAP 11-52 to Brazil in January-August, up by over 530,000t on the year, highlighting the market's importance in the face of weak demand elsewhere.

Increased capacity saw OCP ship nearly 680,000t, and Saudi suppliers Ma'aden and Sabic accounted for over 550,000t in the period.

30-60 DAY OUTLOOK

Weaker still

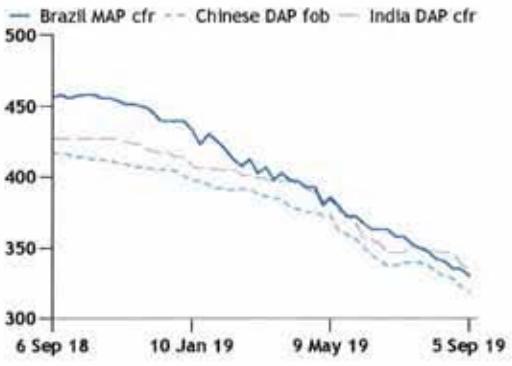
Indian buyers can continue to command lower and lower cfr levels, buoyed by the still-high DAP inventories. Pakistan DAP buying has spurred in the past couple of weeks, but imports will remain comparatively low to the end of the year. Suppliers will look to Australia from this month on as a key outlet, particularly the southern Chinese producers. The US remains well-stocked and there is little purchase demand in Brazil. The recent rise in ammonia prices may add some support, but there is no upside for phosphate prices currently.

PRICES

Key price assessments	5 Sep	29 Aug	$/t
Argus DAP index	92.864	94.138	-
DAP/MAP - fob bulk			
DAP/MAP Tampa	324-326	324-326	↔
DAP China	318-320	321-323	-
DAP Saudi Arabia	330-335	332-335	-
MAP Baltic	305-310	305-310	↔
DAP/MAP - cfr bulk			
DAP India	334-335	338-339	-
DAP Pakistan	341-343	341-343	↔
MAP Brazil	325-335	330-340	-
Phosphoric acid India/t P2O5	655	655	↔
DAP - fca			
DAP Benelux fot/fob duty paid/free	360-365	360-365	↔

See page 2 for full price table

Key Indicative Prices — *USD/t*



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ANNOUNCEMENT

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MARKET ANALYSIS

Some liquidity but prices fall further

Around 300,000t DAP/MAP traded this week, most of it in India. But DAP cfr levels fell lower in India towards the mid-$330s/t net of credit on two spot/tender sales. Around 120,000t of Saudi DAP was reported sold at $340/t cfr. The spot sales pushed Chinese fob levels below $320/t fob. OCP sold its second cargo of the year to Pakistan in the mid-$340s/t cfr although this is a week-old deal. Other deals for Chinese DAP also look likely in Pakistan as it gears up for the rabi season. West of Suez, Brazil was most talked in the $330s/t cfr range.

Africa interest emerges

Demand emerged in Africa. Ethiopia's bold NPS tender covering 3 years totalling over 3mn t is headline grabbing and potentially lucrative for OCP. Mali issued a tender for 190,000t of NPSKB/NPKs while Ivory Coast issued a tender for 116,000t of NPKSB. This will all benefit OCP significantly. Ma'aden sold 25,000t MAP to South Africa around $340/t cfr, slightly higher than Russian sold last week. Kenya took another 18,000t of Saudi DAP in the low-$350s/t cfr, restoring some premium over netbacks in India.

Australia the next battleground...

The Australia market outlook is sharply divided heading into spring. Western Australia and Victoria have been running well. But parts of New South Wales and Queensland are suffering from the worst drought in years. Import business has begun. CSBP has a 40,000t MAP contract combination shipment loading in Tampa for October loading and a 20,000-30,000t spot 11-52 MAP combo cargo from south China was booked via a trader for several buyers, loading during October, priced under formula.

...but IPL mulls its options

As the Australian market begins to stir, Incitec Pivot simultaneously announced a strategic review of its fertilizer business and slashed its earnings guidance for the current financial year. A sale, demerger and retention are all under consideration but the cabotage of two sulphuric acid cargoes in September would tend to indicate Phosphate Hill is running at lower levels. That may point to slightly elevated import demand.

Seasonal norms do not apply

The phosphates market no longer observes seasonal norms. The market will see further price erosion over the medium-term basis fundamental oversupply and stagnating demand.

Phosphates prices					$/t
	5 Sep	29 Aug	±	
Argus DAP index	92.864	94.138	1.274	-
DAP/MAP/TSP - fob bulk				
DAP/MAP Tampa	324-326	324-326	0.00	••
DAP/MAP Tampa equivalent Brazil	298-308	303-313	5.00	-
DAP Tampa equivalent India	280-281	283-284	3.00	-
DAP Tunisia	355-365	355-365	0.00	••
DAP Morocco	315-345	335-360	17.50	-
DAP Morocco P2O5 equiv	594.75	633.03	38.28	-
DAP Morocco equivalent US terminals	294-299	299-304	5.00	-
DAP Lithuania Baltic	325-335	325-335	0.00	••
DAP Russia Baltic/Black Sea	305-310	305-310	0.00	••
DAP China	318-320	321-323	3.00	-
DAP China P2O5 equiv	571.31	578.31	3.50	-
DAP Saudi Arabia (KSA)	330-335	332-335	1.00	-
DAP Mexico	325-330	325-330	0.00	••
DAP/MAP Australia	315-320	315-320	0.00	••
DAP US Gulf domestic barge $/st	280-285	281-285	0.50	-
DAP Central Florida railcar $/st	310	325	15.00	-
DAP China ex-works	350-371	350-371	0.00	••
DAP Benelux fot/fob duty paid/free	360-365	360-365	0.00	••
MAP Baltic	305-310	305-310	0.00	••
MAP China 11-44	265-270	265-270	0.00	••
MAP China 10-50	305	310-315	7.50	-
MAP China 11-52	310-325	310-315	5.00	-
MAP Morocco	313-395	313-395	0.00	••
TSP Tunisia	310-315	310-315	0.00	••
TSP Morocco	305-317	305-317	0.00	••
TSP China	270-275	270-275	0.00	••
TSP eastern Med (Lebanon/Israel)	310	310	0.00	••
DAP /MAP - cfr bulk				
DAP/MAP Argentina/Uruguay	340-342	340-342	0.00	••
MAP Brazil 11-52	325-335	330-340	5.00	-
MAP Brazil 11-52 P2O5 equiv	512.06	523.52	11.46	-
MAP Brazil 10-50 (ex-China)	300-314	304-319	4.50	-
MAP Brazil 10-50 (ex-China) P2O5 equiv	498.13	508.87	10.74	-
MAP Brazil 11-44 (ex-China)	269-282	273-287	4.50	-
MAP Brazil 11-44 (ex-China) P2O5 equiv	481.3	493.7	12.40	-
DAP India	334-335	338-339	4.00	-
DAP India P2O5 equiv	595.79	604.49	8.70	-
DAP Pakistan	341-343	341-343	0.00	••
DAP Turkey	350-360	350-360	0.00	••

Raw material contracts						$/t
					±	
Phosphoric acid/t - P2O5						
cfr India	3Q19	655	2Q19	728	73.00	-
cfr western Europe	4Q18	785-860	3Q18	775-850	10.00	-
cfr Brazil	1Q18	835-855	4Q17	650-670	185.00	-
Phosphate rock (% BPL)						
fob Jordan (68-70)	3Q19	80-85	2Q19	88-105	14.00	-
cfr India (68-70)	3Q19	96-105	2Q19	120-132	25.50	-
cfr India (70-72)	3Q19	120-130	2Q19	135-140	12.50	-
fob north Africa (69)	2Q19	70-80	1Q19	70-110	15.00	-
Sulphur						
cfr Tampa	3Q19	75	2Q19	88	13.00	-
cfr north Africa	3Q19	80-101	2Q19	80-103	1.00	-
Ammonia						
cfr Tampa	Sep19	225	Aug19	215	10.00	-

Spot Sales Selection - 5 September 2019						
Origin	Seller	Buyer	Destination	Volume ('000t)	Price	Delivery Period
Saudi Arabia	Ma'aden	Various	India	120 DAP	$340/t cfr	September
Saudi Arabia	Ma'aden	Various	South Africa	25 MAP	$340/t cfr	September
Saudi Arabia	Ma'aden	Various	Kenya	18 DAP	$350-355/t cfr	September
China	Trader	IPL	India	50 DAP	Mid-$330s/t cfr	September
China	Agrifields	Zuari	India	40-50 DAP	Mid-$330s/t cfr	September
Morocco	OCP	Fauji	Pakistan	40-50 DAP	Mid-$340s/t cfr	September

HIGHLIGHTS THIS WEEK

Supply

- Brazilian MAP imports up 530,000t Jan-Aug
- OCP fire has no impact on production
- OCP ships seven vessels to US since July
- Incitec Pivot mulls phosphate future
- Phosagro to run maintenance on Cherepovets in Sept
- NCIC's Ain Sokhna to focus on TSP currently
- Ma'aden sells 120,000t of DAP to India for September
- Trader takes a Panjin loading DAP cargo for India's IPL

Demand

- Pupuk Indonesia scraps 95,000t DAP tender
- West Australia takes US phosphates
- But east coast drought hits demand
- Kenya buys 18,000t of Saudi DAP
- Zuari India awards DAP tender
- IPL buys DAP from trader
- Fauji buys DAP from OCP
- Bangladesh 160,000t DAP award still outstanding

Prices

- Chinese DAP prices pushed below $320/t fob
- India pays mid-$330s/t cfr for DAP net of credit
- US barges slip below $280/st fob Nola
- Traders struggle to sell MAP in Brazil at $330/t cfr
- Kenya pays $350-355/t cfr for Ma'aden DAP

THE PHOSPHATES WORLD THIS WEEK

Disclaimer: Argus depicts geo-political borders as defined by the United Nations Geospatial Information Section. For more information visit http://www.un.org/Depts/Cartographic/map/profile/world.pdf

Oustanding 2019 phosphate tenders					
Country/Holder	Product	Volume ('000t)	Closing date	Shipment	Status
One Acre/Kenya	DAP	13	20/8	4Q	Closed
Iraq	DAP	5 x 50	20/8	4Q to Umm Qasr	Closed
Algeria/Fertial	DAP	4		TBC	Delayed
Atlas/Philippines	DAP	8	19/8	August shipment	Likely awarded
KSCL/Nepal	DAP	20	26/7	TBC	Offers in
Pupuk/Indonesia	DAP	95	23/8	September-February	Scrapped
Zuari/India	DAP	40	27/8		Awarded
Ethiopia/EABC	NPS	888	19/9	50kt lots, priced on a fob basis	Open
Nepal/KSCL	DAP	20	15/10	Delivery to KSCL's warehouses	Open

NORTH AMERICA

US

Mosaic reports that its first DAP vessel from Central Florida to Mosaic India is completing and the second is about to start loading.

It is also shipping around 40,000t mostly powdered MAP to Australia for October shipment under contract.

There are no additional spot sales reported at this time.

US domestic

MAP and DAP barge values sank to new lows this week amid higher year-over-year imports. Two MAP barges traded at $278/st fob Nola for September/October shipment, a $3/st dip from last week's low, to mark the lowest confirmed trade since Argus launched the MAP Nola assessment in 2012. Another MAP barge traded at $285/st fob Nola to frame the high end of this week's $278-285/st fob Nola range.

One DAP barge traded to a new decade low at $280/st fob Nola this week, framing the low end of the $280-285/st fob Nola range. Two trades at $285/st fob Nola supported the high end, unchanged from the previous week.

Argus estimates 118,000t of MAP will arrive at Nola in first-half September. Approximately 140,000t of MAP arrived at Nola during September 2018.

The *Qu Shan Hai* is delivering 53,000t Moroccan DAP to Nola on 14 September. This is the seventh OCP vessel containing DAP or MAP to ship to Nola since the start of July.

Exhibit I-71

METHODOLOGY AND SPECIFICATIONS GUIDE

argus

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ARGUS NORTH AMERICAN FERTILIZER

Contents:

LAST UPDATED: JULY 2019

The most up-to-date Argus North American Fertilizer methodology is available on www.argusmedia.com

Methodology overview

Methodology rationale

Argus strives to construct methodologies that reflect the way the market trades. Argus aims to produce price assessments which are reliable indicators of commodity market values and are free from distortion. As a result, the specific currencies, volume units, locations and other particulars of an assessment are determined by industry conventions.

In the North American fertilizers markets, Argus publishes prices as laid out in the specifications and methodology guide. Argus uses the trading period deemed by Argus to be most appropriate, in consultation with industry, to capture market liquidity.

In order to be included in the assessment process, deals must meet the minimum volume, delivery, timing and specification requirements in our methodology. In illiquid markets, Argus assesses the range within which product could have traded by applying a strict process outlined later in this methodology.

Survey process

Argus price assessments are informed by information received from a wide cross-section of market participants, including producers, consumers and intermediaries. Argus reporters engage with the industry by proactively polling participants for market data. Argus will contact and accept market data from all credible market sources including front and back office of market participants and brokers. Argus will also receive market data from electronic trading platforms and directly from the back offices of market participants. Argus will accept market data by telephone, instant messenger, email or other means.

Argus encourages all sources of market data to submit all market data to which they are a party that fall within the Argus stated methodological criteria for the relevant assessment. Argus encourages all sources of market data to submit transaction data from back office functions.

Throughout all markets, Argus is constantly seeking to increase the number of companies willing to provide market data. Reporters are mentored and held accountable for expanding their pool of contacts. The number of entities providing market data can vary significantly from day to day based on market conditions.

For certain price assessments identified by local management, if more than 50pc of the market data involved in arriving at a price assessment is sourced from a single party the supervising editor will engage in an analysis of the market data with the primary reporter to ensure that the quality and integrity of the assessment has not been affected.

Market data usage

In each market, Argus uses the methodological approach deemed to be the most reliable and representative for that market. Argus will utilise various types of market data in its methodologies, to include:

- Transactions
- Bids and offers
- Other market information, to include spread values between grades, locations, timings, and many other data.

In many markets, the relevant methodology will assign a relatively higher importance to transactions over bids and offers, and a relatively higher importance to bids and offers over other market information. Certain markets however will exist for which such a hierarchy would produce unreliable and non-representative price assessments, and so the methodology must assign a different relative importance in order to ensure the quality and integrity of the price assessment. And even in markets for which the hierarchy normally applies, certain market situations will at times emerge for which the strict hierarchy would produce non-representative prices, requiring Argus to adapt in order to publish representative prices.

Verification of transaction data

Reporters carefully analyse all data submitted to the price assessment process. These data include transactions, bids, offers, volumes, counterparties, specifications and any other information that contributes materially to the determination of price. This high level of care described applies regardless of the methodology employed. Specific to transactions, bids, and offers, reporters seek to verify the price, the volume, the specifications, location basis, and counterparty. In some transactional average methodologies, reporters also examine the full array of transactions to match counterparties and arrive at a list of unique transactions. In some transactional average methodologies, full details of the transactions verified are published electronically and are accessible to subscribers. The deals are also published in the daily report.

Several tests are applied by reporters in all markets to transactional data to determine if they should be subjected to further scrutiny. If a transaction has been identified as failing such a test, it will receive further scrutiny. For assessments used to settle derivatives and for many other assessments, Argus has established internal procedures that involve escalation of inquiry within the source's company and escalating review within Argus management. Should this process determine that a transaction should be excluded from the price assessment process, the supervising editor will initiate approval and, if necessary, documentation procedures.

Primary tests applied by reporters

- Transactions not transacted at arms length, including deals between related parties or affiliates.
- Transaction prices that deviate significantly from the mean of all transactions submitted for that day.
- Transaction prices that fall outside of the generally observed lows and highs that operated throughout the trading day.
- Transactions that are suspected to be a leg of another transaction or in some way contingent on an unknown transaction.
- Single deal volumes that significantly exceed the typical transaction volume for that market.
- Transaction details that are identified by other market participants as being for any reason potentially anomalous and perceived by Argus to be as such.
- Transaction details that are reported by one counterparty differently than the other counterparty.

- Any transaction details that appear to the reporter to be illogical or to stray from the norms of trading behaviour. This could include but is not limited to divergent specifications, unusual delivery location and counterparties not typically seen.
- Transactions that involve the same counterparties, the same price and delivery dates are checked to see that they are separate deals and not one deal duplicated in Argus records.

Secondary tests applied by editors for transactions identified for further scrutiny

Transaction tests

- The impact of linkage of the deal to possible other transactions such as contingent legs, exchanges, options, swaps, or other derivative instruments. This will include a review of transactions in markets that the reporter may not be covering.
- The nature of disagreement between counterparties on transactional details.
- The possibility that a deal is directly linked to an offsetting transaction that is not publicly known, for example a "wash trade" which has the purpose of influencing the published price.
- The impact of non-market factors on price or volume, including distressed delivery, credit issues, scheduling issues, demurrage, or containment.

Source tests

- The credibility of the explanation provided for the outlying nature of the transaction.
- The track record of the source. Sources will be deemed more credible if they
  - Regularly provide transaction data with few errors.
  - Provide data by Argus' established deadline.
  - Quickly respond to queries from Argus reporters.
  - Have staff designated to respond to such queries.
- How close the information receipt is to the deadline for information, and the impact of that proximity on the validation process.

Assessment guidelines

When insufficient, inadequate, or no transaction information exists, or when Argus concludes that a transaction-based methodology will not produce representative prices, Argus reporters will make an assessment of market value by applying intelligent judgment based on a broad array of factual market information. Reporters must use a high degree of care in gathering and validating all market data used in determining price assessments, a degree of care equal to that applying to gathering and validating transactions. The information used to form an assessment could include deals done, bids, offers, tenders, spread trades, exchange trades, fundamental supply and demand information and other inputs.

The assessment process employing judgment is rigorous, replicable, and uses widely accepted valuation metrics. These valuation metrics mirror the process used by physical commodity traders to internally assess value prior to entering the market with a bid or offer. Applying these valuation metrics along with sound judgment significantly narrows the band within which a commodity can be assessed, and greatly increases the accuracy and consistency of the price series. The application of judgment is conducted jointly with the supervising editor, in order to be sure that guidelines below are being followed. Valuation metrics include the following:

Relative value transactions

Transactions may occur which instead of being an outright purchase or sale of a single commodity, are instead exchanges of commodities. Such transactions allow reporters to value less liquid markets against more liquid ones and establish a strong basis for the exercise of judgment.

- Exchange one commodity for a different commodity in the same market at a negotiated value.
- Exchange delivery dates for the same commodity at a negotiated value.
- Exchange a commodity in one location for the same commodity at another location at a negotiated value.

Bids and offers

If a sufficient number of bids and offers populate the market, then the highest bid and the lowest offer can be assumed to define the boundaries between which a deal could be transacted.

Comparative metrics

The relative values between compared commodities are readily discussed in the market and can be discovered through dialogue with market participants. These discussions are the precursor to negotiation and conclusion of transactions.

- Comparison to the same commodity in another market centre.
- Comparison to a more actively traded but slightly different specification commodity in the same market centre.
- Analysis of prices in forward markets for physically deliverable commodity that allow extrapolation of value into the prompt timing for the commodity assessed.
- Comparison to the commodity's primary feedstock or primary derived product(s).
- Comparison to trade in the same commodity but in a different modality (as in barge versus oceangoing vessel) or in a different total volume (as in full cargo load versus partial cargo load).

Volume minimums and transaction data thresholds

Because of the varying transportation infrastructure found in all commodity markets, Argus typically does not establish thresholds strictly on the basis of a count of transactions, as this could lead to unreliable and non-representative assessments. Instead, minimum volumes are typically established which may apply to each transaction accepted, to the aggregate of transactions, to transactions which set a low or high assessment or to other volumetrically relevant parameters.

For price assessments used to settle derivatives, Argus will seek to establish minimum transaction data thresholds and when no such threshold can be established Argus will explain the reasons. These

thresholds will often reflect the minimum volumes necessary to produce a transaction-based methodology, but may also establish minimum deal parameters for use by a methodology that is based primarily on judgment.

Should no transaction threshold exist, or should submitted data fall below this methodology's stated transaction data threshold for any reason, Argus will follow the procedures outlined elsewhere in this document regarding the exercise of judgment in the price assessment process.

Minimum transaction thresholds

Assessment	Minimum trade volume for inclusion in assessment
UAN E coast cfr t	5,000t
DAP Nola barge fob	1,500st
Granular urea Nola barge fob	1,500st
UAN Nola barge fob	1,500st

Transparency

Argus values transparency in markets. As a result, we publish lists of deals in our reports that include price, basis and volume information. The deal tables allow subscribers to cross check and verify the deals against the prices. Argus feels transparency and openness is vital to developing confidence in the price assessment process.

Publications and price data

Argus North American fertilizer prices are published in the Argus North American Fertilizer report. Subsets of these prices appear in other Argus market reports and newsletters in various forms. The price data are available independent of the text-based report in electronic files that can feed into various databases. These price data are also supplied through various third-party data integrators. The Argus website also provides access to prices, reports and news with various web-based tools. All Argus prices are kept in a historical database and available for purchase. Contact your local Argus office for information.

Corrections to assessments

Argus will on occasion publish corrections to price assessments after the publication date. We will correct errors that arise from clerical mistakes, calculation errors, or a misapplication of our stated methodology. Argus will not retroactively assess markets based on new information learned after the assessments are published. We make our best effort to assess markets based on the information we gather during the trading period assessed.

Ethics and compliance

Argus operates according to the best practices in the publishing field, and maintains thorough compliance procedures throughout the firm. We want to be seen as a preferred provider by our subscribers, who are held to equally high standards, while at the same time maintaining our editorial integrity and independence. Argus has a strict ethics policy that applies to all staff. The policy can be found on our website at www.argusmedia.com. Included in this policy are restrictions against staff trading in commodities or related stocks, and guidelines for accepting gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and deal lists used in the price assessment process. Argus publishes prices that report and reflect prevailing levels for open-market arms length transactions (please see the Argus Global Compliance Policy for a detailed definition of arms length).

Consistency in the assessment process

Argus recognises the need to have judgment consistently applied by reporters covering separate markets, and by reporters replacing existing reporters in the assessment process. In order to ensure this consistency, Argus has developed a programme of training and oversight of reporters. This programme includes:

- A global price reporting manual describing among other things the guidelines for the exercise of judgment.
- Cross-training of staff between markets to ensure proper holiday and sick leave backup. Editors that float between markets to monitor staff application of best practices.
- Experienced editors overseeing reporting teams are involved in daily mentoring and assisting in the application of judgment for illiquid markets.
- Editors are required to sign-off on all price assessments each day, thus ensuring the consistent application of judgment.

Review of methodology

The overriding objective of any methodology is to produce price assessments which are reliable indicators of commodity market values and are free from distortion. As a result, Argus editors and reporters are regularly examining our methodologies and are in regular dialogue with the industry in order to ensure that the methodologies are representative of the physical market being assessed. This process is integral with reporting on a given market. In addition to this ongoing review of methodology, Argus conducts reviews of all of its methodologies and methodology documents on at least an annual basis.

Argus market report editors and management will periodically and as merited initiate reviews of market coverage based on a qualitative analysis that includes measurements of liquidity, visibility of market data, consistency of market data, quality of market data and industry usage of the assessments. Report editors will review:

- Appropriateness of the methodology of existing assessments
- Termination of existing assessments
- Initiation of new assessments

The report editor will initiate an informal process to examine viability. This process includes:

- Informal discussions with market participants
- Informal discussions with other stakeholders
- Internal review of market data

Should changes, terminations, or initiations be merited, the report editor will submit an internal proposal to management for review and approval. Should changes or terminations of existing assess-

ments be approved, then formal procedures for external consultation are begun.

Changes to methodology

Formal proposals to change methodologies typically emerge out of the ongoing process of internal and external review of the methodologies. Formal procedures for external consultation regarding material changes to existing methodologies will be initiated with an announcement of the proposed change published in the relevant Argus report. This announcement will include:

- Details on the proposed change and the rationale
- Method for submitting comments with a deadline for submissions
- For prices used in derivatives, notice that all formal comments will be published after the given consultation period unless submitter requests confidentiality

Argus will provide sufficient opportunity for stakeholders to analyse and comment on changes, but will not allow the time needed to follow these procedures to create a situation wherein unrepresentative or false prices are published, markets are disrupted, or market participants are put at unnecessary risk. Argus will engage with industry throughout this process in order to gain acceptance of proposed changes to methodology. Argus cannot however guarantee universal acceptance and will act for the good order of the market and ensure the continued integrity of its price assessments as an overriding objective.

Following the consultation period, Argus management will commence an internal review and decide on the methodology change. This will be followed by an announcement of the decision, which will be published in the relevant Argus report and include a date for implementation. For prices used in derivatives, publication of stakeholders' formal comments that are not subject to confidentiality and Argus' response to those comments will also take place.

Publication frequency

Argus North American Fertilizer publishes 51 weeks a year on a Thursday evening. A report is not published the week of 25 December-1 January, depending on how the Christmas and New Year holidays fall.

In the event of a federally-recognized US holiday falling on a Thursday, Argus North American Fertilizer will assess all prices on the Wednesday and publish on the Wednesday. When this happens, previous-week data will be used for constructed assessments which are based on international prices.

A full publication schedule is available at www.argusmedia.com.

General methodology

Argus surveys a wide variety of market participants during the course of the week including producers, trader, buyers, sellers and other market analysts. This survey seeks to confirm what trade has been done, by whom, as well as firm bids and offers. The goal is to cross check market transactions from all participants wherever possible. The survey also seeks to ascertain fundamentals data, tender news and supply and demand information. Argus will contact and accept market data from all credible market sources including front and back office of market participants and brokers.

The report determines ranges in which actual transactions are taking place or in which transactions could have taken place between a willing buyer and seller.

Assessing price ranges

Price assessments for standard grades of fertilizer will represent a range in which a deal between a willing buyer and seller could have been done from Friday at 6am Houston time until the following Thursday at 11am Houston time.

Deals done, bids and offers and other relevant information over the course of the entire trading week prior to publication may be considered when setting prices.

When there is sufficient liquidity and deals data are deemed reliable and representative, the price range will be defined on the low and the high end of confirmed deals concluded throughout the trading week. These deals must meet the minimum volumes and strict delivery timing, as well as specifications as laid down in this methodology.

Information on transactions, bids and offers that lie outside the specifications of timing, size, location and quality may be used in assessing price ranges, but deals that lie within these specifications are given most weight.

In markets that periodically lack liquidity, Argus may assess price ranges based on a range of other market information including netbacks to more liquid markets and market fundamentals.

The price guide reflects the last seven days of business Friday through to Thursday — market information will be collected up until 5pm London time on the Thursday of publication. However, while all information and trades are taken into account, in periods of high volatility, assessments are weighed towards trading activity later in the week or at the end of the Thursday of the assessment.

Lot and cargo sizes

For international trade, the minimum lot size used for consideration and inclusion in the relevant price range is 5,000t of a particular product (this includes part cargoes on larger vessels including other fertilizers). The exception is prices quoted in the US domestic

market for which the price is indicative of one barge, assumed to be carrying a minimum of 1,500st, with no set maximum number of barges.

Average truck load size out of terminals is 20t. Two truckloads is the minimum transaction volume for relevant assessments.

Unit trains can vary in size, but generally consist of 85 to 110 cars, all carrying the same commodity. The minimum transaction volume for relevant assessments is 70 cars.

Markets snapshot

Please see the individual product methodology for each fertilizer and freight rate quoted in the markets snapshot.

Crop Fundamentals — This is a calculated five-day average (Friday through Thursday) for corn, wheat and soybean contracts based on Chicago Mercantile Exchange (CME)/Chicago Board of Trade (CBOT) settlement prices.

Argus publishes prompt month and new crop settlement prices. Prompt month refers to the monthly contract nearest to the publication date. New crop refers to the nearest year-end monthly contract following the prompt month. The year-end monthly contract is December for the corn and wheat contracts and November for the soybean contract.

Related market prices include WTI crude, Henry Hub natural gas, ethanol, ethanol crush spread and copper.

WTI — This price is the five-day average (Friday through Thursday) of the New York Mercantile Exchange's Light Sweet Crude contract (Nymex WTI). More information can be found in the Argus Crude methodology.

Henry Hub — This price is a calculated five-day average (Friday through Thursday) of the spot natural gas price as assessed by Argus. See the Argus Natural Gas Americas methodology.

Ethanol — This price is a calculated five-day average (Friday through Thursday) of the Chicago (Argo) prompt price as assessed daily for the Argus Americas Biofuels report. See the Argus Americas Biofuels methodology.

Crush spread — This price is a five-day average (Friday through Thursday) of the Chicago ethanol crush spread, which measures the profitability of producing ethanol corn and provides a hedging tool. See the Argus Americas Biofuels methodology.

Copper — This price is a calculated five-day average (Friday through Thursday) of the COMEX HG Copper front month price based on settlement prices reported by CME.

In all references:

- t = metric tonne
- st = short ton
- lt = long ton
- eq = equivalent
- cfr = cost and freight
- del = delivered
- fob = free on board
- fot = free on truck
- Nola = New Orleans, the river area at Baton Rouge, Louisiana, and south

Freight

The freight rates table for dry bulk fertilizer barges shows the week's spot rates for northbound barges originating from miles 90-184, or what is commonly referred to as New Orleans (Nola). This will include northbound rates for covered barges from New Orleans to various points listed in the table along the Mississippi, Arkansas, Ohio and Illinois rivers. All references to Nola in this document refer to New Orleans.

The price is indicative for a minimum of one barge, assumed to be carrying a minimum 1,500st, with no set maximum number of barges.

The freight rates are established by surveying barge freight providers and buyers of spot freight, maintaining a balance between both parties. The assessment will be for barges that will load and move within the next 30 days. Argus makes an assessment of the range between the low and high prices provided. Market information will be collected through 11am Houston time on a Thursday.

Northbound barge rates are assessed from Nola to points along the Mississippi river including Old River, Arkansas, through Cairo, Illinois; St Louis, Missouri; Louisiana, Missouri, through Clinton, Iowa; Dubuque, Iowa; Winona, Minnesota; and St Paul, Minnesota.

Northbound barge rates are assessed from Nola to points along the Arkansas river including Pine Bluff through Little Rock, Arkansas; and Inola through Catoosa, Oklahoma.

Northbound barge rates are assessed from Nola to points along the Ohio river including Paducah, Kentucky; Mt Vernon, Indiana, through Owensboro, Kentucky; Jeffersonville, Indiana, through Louisville, Kentucky; Cincinnati, Ohio; East Liverpool, Ohio.

Northbound barge rates are assessed from Nola to points along the Illinois river including Naples through Peoria, Illinois; Hennepin through LaSalle, Illinois; Ottawa, Illinois; and Joliet, Illinois.

Demurrage is also assessed, using a range of high-low demurrage rates charged by operators.

Seasonal freight rates

Winter weather prompts lock closures along the upper Mississippi river system as determined by the US Army Corps of Engineers. Argus suspends seasonally affected assessments in the autumn when operators stop loading barges ahead of the closures to prevent equipment from being left north of the closed locks during the winter and reactivates the assessments in the spring when operators resume loadings ahead of the locks officially reopening.

Seasonal rates

- Dry urea New Orleans-Louisiana to Clinton barge
- Dry urea New Orleans-Dubuque barge
- Dry urea New Orleans-Winona barge
- Dry urea New Orleans-St Paul barge

North American fertilizers

Nitrogen

Urea (granular)

Granular urea is a dry bulk fertilizer containing 46pc nitrogen by weight, with typical granulation size of 2-4mm and a standard white coloring. Urea is produced using liquid ammonia and carbon dioxide and requires a hydrocarbon energy source. The granular urea assessed in Argus North American Fertilizer will be for agricultural purposes only.

Nola barge fob

This assessment includes prices for trades of barges loaded at Nola or to load in Nola prompt to 40 days forward from when the sale has taken place.

If a particular origin of product is treated by the market differently because of specification or quality concerns, trades of this urea may be excluded from any assessed ranges. For instance, if product from a non-traditional source is trading at a $10/st discount to other product, it would be excluded. Alternatively, if a speciality buyer requirement prompts a premium price outside of the range of other trades collected during the assessment period, such a trade may also be excluded.

Nola barge prompt fob

This assessment includes prices for moving and loaded barges still at Nola and barges to load at Nola within seven days of the transaction date. In the absence of relevant prompt trade, bids and offers, or other market information, the Nola barge prompt fob price may be assessed equal to the Nola barge fob price assessment described above.

If a particular origin of product is treated by the market differently because of specification or quality concerns, trades of this urea may be excluded from any assessed ranges. For instance, if product from a non-traditional source is trading at a $10/st discount to other product, it would be excluded. Alternatively, if a speciality buyer requirement prompts a premium price outside of the range of other trades collected during the assessment period, such a trade may also be excluded.

Nola barge volume-weighted average (VWA)

A single average price derived from trades concluded for barge business collected during the week for loading within a 30-day window. Argus will publish transaction information collected during the week including the volume (number of barges), price, loading and product spec for deals in table format. Trades collected during this week but not necessarily included in the VWA will be published.

A minimum of three trades must be collected in order to establish a VWA. If the minimum threshold for deals is not met, the price will default to a midpoint value derived using a combined high-low range between the upriver/prompt price and the Argus Nola barge price.

Nola cfr t import eq

Calculated by deducting from the Nola fob barge assessment a fixed amount for the cost of discharge into a barge, shrinkage and other costs and dividing the result by 0.90719 (or multiplying by 1.1023) to convert from short tons to metric tonnes.

Inola/Catoosa fot

The price of granular urea sold out of non-production point warehouses in Inola/Catoosa, Oklahoma and all terminals falling within a 50-mile radius, including those in Tulsa.

Terminal assessments are the price for prompt sales, or sales with intended loading within two weeks to 30 days of the transaction.

St Louis fot

The price of granular urea sold out of non-production point warehouses within a 50-mile radius of St Louis, Missouri.

Cincinnati/Jeffersonville fot

The price of granular urea sold out of non-production point warehouses in Jeffersonville, Indiana, and Cincinnati, Ohio. Prices from warehouses within the 100-mile diameter between the two cities will be included.

Twin Cities fot

The price of granular urea sold out of non-production point warehouses in Minneapolis and St Paul, Minnesota, and other warehouses within a 50-mile radius, including Pine Bend.

Southern Plains producer fot

The price of granular urea sold by truck from production points in Texas and Oklahoma. Assessments include activity for intended loading within 30 days on the transaction.

Corn Belt producer fot

The price of granular urea sold by truck from production points in Iowa, Illinois and Ohio. Assessments include activity for intended loading within 30 days on the transaction.

Northern Plains rail delivered

The price of granular urea sold on a delivered basis via unit train to wholesale and retail locations in North Dakota, South Dakota and western Minnesota. Assessments include activity for intended loading within 30 days of the transaction.

Corn Belt fot
The price for ammonium sulfate sold from warehouses in the Corn Belt. Corn Belt is defined as Iowa, Missouri, Illinois, Indiana and Ohio, in line with US Department of Agriculture guidelines.

Twin Cities fot
The price of granular ammonium sulfate sold via truck out of warehouses within a 50-mile radius of the Minneapolis and St Paul, Minnesota, area for shipment within 30 days.

Ammonia

Anhydrous ammonia is a gas but is transported and sold in a refrigerated state, or minus 28 degrees Fahrenheit. It is injected as a liquid into the soil as a fertilizer and is also used globally as a feedstock for the industrial sector. Ammonia is produced using steam (water), air and energy feedstock, which is typically natural gas in the US.

Ammonia trades are highly seasonal, whereby faster shipment is required during spring and fall application seasons but product movement and refill programs occur throughout the year. There are various tiers of pricing as the market shifts from fill to prepay to prompt.

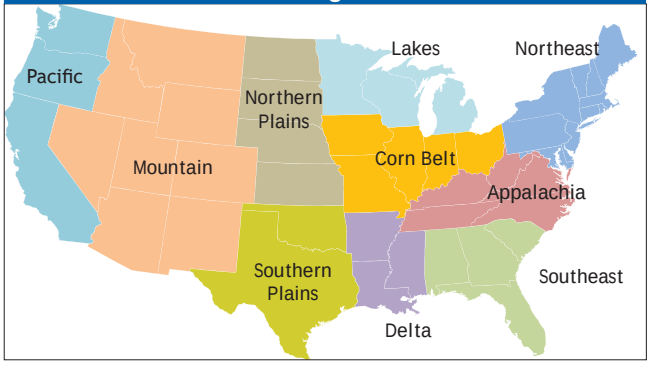
Tampa cfr t contract
See the Argus Ammonia methodology.

Caribbean fob t (Tampa netback)
See the Argus Ammonia methodology.

Nola barge fob
The price for ammonia barges loaded or to load in Nola. The assessment will include netbacks from delivered barge business concluded further upriver but will exclude netbacks from other transport methods.

In periods of illiquidity, weak demand and minimal market price signals, an equivalent price based on the Tampa cfr contract price (the price agreed for imported cargoes) will be used. An equivalent price is calculated by taking the Tampa cfr price, adding additional freight for a theoretical import cargo to Nola, converting to short tons and adding throughput costs to transfer product from vessel to barge.

USDA Farm Production Regions



Ammonia cost of production
A cost of production calculation based on a formula using the calculated average for the Henry Hub gas price and factoring in additional processing and operations costs. This calculation is reviewed annually.

US Gulf cfr t
This US Gulf price is assessed on a $/t cfr basis for imports to any port within the US Gulf from Texas to Florida. This price is linked to the Tampa contract settlement, allowing for a freight differential between the ports of an additional $5/t.

Oklahoma ex-works
The price of ammonia sold from production facilities in Oklahoma. This includes information gathered regarding plants in Verdigris, Woodward (CF Industries), Pryor (LSB Industries) and Enid (Koch).

E Corn Belt fot
The price of ammonia sold from tanks in the east Corn Belt, defined as Illinois, Indiana and Ohio, in line with US Department of Agriculture (USDA) guidelines. Sales ex-pipeline will also be considered in the assessment.

W Corn Belt fot
The price of ammonia sold from tanks in the west Corn Belt, defined as Missouri and Iowa, in line with USDA guidelines. Sales from Beatrice, Nebraska and other Nebraska terminals east of Beatrice will also be included. Ex-pipeline sales will also be considered in the assessment.

Price ranges for both east and west Corn Belt typically present a wide high-low spread because of the large geographic expanse covered and the limited number of suppliers operating in small localized regions.

Phosphate

DAP

Diammonium phosphate (DAP) is a dry bulk fertilizer containing 18pc nitrogen and 46pc P2O5 (nutrient phosphate), by weight. It is produced by combining ammonia with phosphoric acid. For all phosphate fertilizer assessments, Argus will only consider trades for use by the agricultural sector.

Nola barge fob
The price for DAP barges loaded at or to load in Nola within 30 days of assessment. Trades of domestically-produced and import product business are included.

Nola fob t export eq
This is a calculated assessment of the producer export equivalent price out of New Orleans or Tampa based on current barge prices. This calculation factors in processing costs. This provides a reference for producer profitability in the domestic versus offshore markets.

Tampa fob t (exports)
See DAP/MAP Tampa in the Argus Phosphates methodology.

Nola barge import eq (ex-Mor)
This is a calculated assessment using the Moroccan fob price published in the Argus Phosphates weekly report on a Thursday (see the Argus Phosphates methodology) and adding freight and throughput costs then converting to short tons to reach a New Orleans barge fob equivalent price.

Central Florida rail
Prices for DAP sold on 100st railcars in Central Florida. In the absence of railcar business, prices for truck (fot) sales will be considered.

Inola/Catoosa fot
The price of DAP sold out of non-production point warehouses in Inola/Catoosa, Oklahoma and all terminals falling within a 50-mile radius, including those in Tulsa.

Terminal assessments are the price for prompt sales, or sales with intended loading within two weeks to 30 days of the transaction.

St Louis fot
The price of DAP sold out of non-production point warehouses within a 50-mile radius of St Louis, Missouri.

Cincinnati/Jeffersonville fot
The price of DAP sold out of non-production point warehouses in Jeffersonville, Indiana, and Cincinnati, Ohio. Prices from warehouses within the 100-mile diameter between the two cities will be included.

Twin Cities fot
The price of DAP sold out of non-production point warehouses in Minneapolis and St Paul, Minnesota, and other warehouses within a 50-mile radius, including Pine Bend.

MAP

Monoammonium phosphate (MAP), also known as ammonium dihydrogen phosphate, is a dry bulk fertilizer containing typical 10-11pc nitrogen by weight and 50-52pc P2O5 by weight. It is produced by adding phosphoric acid to ammonia solution until the solution becomes highly acidic and crystallizes. Assessments reflect material containing a minimum 52pc P2O5 by weight.

Nola barge fob
The price of MAP barge trades for loading within 30 days from the date of the assessment. Transaction specifications include a minimum quantity of one barge, or 1,500st. This will only include barges that are loaded or to be loaded at Nola. Netbacks of trades for barges placed further upriver will be excluded.

Nola fob t export eq
This is a calculated assessment which gives the producer export equivalent price out of New Orleans or Tampa based on current barge prices. This calculation factors in processing costs. This provides a reference for producer profitability in the domestic versus offshore markets.

Nola barge import eq (ex-Russ)
This is a calculated assessment using the Russian fob price published in the Argus Phosphates weekly report on a Thursday (see the Argus Phosphates methodology) and adding freight and throughput costs then converting to short tons to reach a New Orleans barge fob price equivalent.

Inola/Catoosa fot
The price of MAP sold out of non-production point warehouses in Inola/Catoosa, Oklahoma and all terminals falling within a 50-mile radius, including those in Tulsa.

Terminal assessments are the price for prompt sales, or sales with intended loading within two weeks to 30 days of the transaction.

St Louis fot
The price of MAP sold out of non-production point warehouses within a 50-mile radius of St Louis, Missouri.

Cincinnati/Jeffersonville fot
The price of MAP sold out of non-production point warehouses in Jeffersonville, Indiana, and Cincinnati, Ohio. Prices from warehouses within the 100-mile diameter between the two cities will be included.

Twin Cities fot
The price of MAP sold out of non-production point warehouses in Minneapolis and St Paul, Minnesota, and other warehouses within a 50-mile radius, including Pine Bend.

Potash

MOP

Granular muriate of potash (MOP) is a dry bulk fertilizer containing 60-62pc K2O by weight. It is initially extracted from underground potash ore deposits, either via solution mining or traditional mining, and then further processed to achieve typical product specifications and granulation of 2-5mm.

Nola barge fob
The price of potash sold from offshore imports onto barges for loading in 30 days from the date of the assessment. Normalized Nola netbacks from barge trades of domestic product (that previously loaded upriver) will also be included, but netbacks from other transport modes will be excluded.

Corn Belt fot
The price of potash sold from warehouses in the Corn Belt. Corn Belt is defined as Iowa, Missouri, Illinois, Indiana and Ohio, in line with US Department of Agriculture guidelines.

Vancouver fob t std (exports)
See the Argus Potash methodology.