



In Focus



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UK polyhalite availability to rise

Availability of polyhalite in the UK is set to increase since Sirius Minerals secured capital funding in November 2016 to construct phase one of its North York Moors Woodsmith mine. The mine will be capable of producing 10 million tonnes (140,000 tonnes K₂O) per year of polyhalite.

Polyhalite is an evaporate mineral containing potassium, which is currently used in a relatively small volume as a specialty fertilizer. It also contains important nutrients such as calcium, sulphur and magnesium and it is low in chloride.

The commissioning of the Sirius mine, plus the previously announced plans of ICL to expand polyhalite production at its Boulby mine, indicates that in the 2020s UK farmers can look forward to an abundance of polyhalite. The impact of Sirius Minerals achieving full production capacity of 20 million tonnes per year of polyhalite will undoubtedly have a significant impact on pushing global prices downwards in the chloride-free potash market, notably potassium sulphate (SOP).

Construction of the North York Moors mine is due to commence this year, with production planned to start in 2021. The project is due to ramp up to 10 million tonnes per year and fully complete phase one in 2024.

Steps for funding a second phase of the project will take place over the coming years. With the necessary financing, the project is scalable to 20 million tonnes of polyhalite per year, which is equivalent to 280,000 tonnes K₂O.

One of the key factors in the development of the site is the 3.6 million tonnes per year 'take-or-pay' agreements that are now in place. The agreements are for either five or ten year and guarantee annual volumes to the Chinese, North American and Latin American markets. Alongside other agreements, this leaves a minimum of 1.9 million tonnes polyhalite remaining for the open market. Most likely the volumes will be sold in markets close to the UK.

Key points

- UK urea buying season delayed compared to typical schedule
- OCI's nitrogen plant begins production in Wever, Iowa, USA
- Weak demand observed in Europe for nitrogen fertilisers in recent months
- Phosphate prices have begun to decrease following a short surge
- Chinese phosphate producers continue to reduce production
- New potash mines begin production in Canada and Turkmenistan



Nitrogen



Demand

Through April and May urea purchasing in the UK was reported to be lower than usual. This can be attributed dry weather through April and May and is correlated with decreasing price movements of urea in Europe since February.

In the UK, the pound also notably appreciated in recent months due to the call for a snap general

election. However, the slightly improved purchasing power for those suppliers buying fertiliser internationally in dollars has done little to stir buying interest.

It has been reported that year-on-year reduction in nitrogen prices are now filtering through to farm level which could spur some upticks in demand.



Supply

The global nitrogen market remains in a period of fundamental oversupply, as the gap between supply and demand widens.

The largest change in the global supply of nitrogen has come from the start-up of OCI's new nitrogen plant in Wever, Iowa, USA. The plant will produce 1.5-2 million tonnes per year of urea ammonium

nitrate (UAN) and ammonia and is the first greenfield nitrogen fertiliser facility to be built in the US in more than 25 years. The site highlights the continued investment in nitrogen capacity expansion in the US, which will continue to influence supply of nitrogen across the globe in the coming years.



Prices

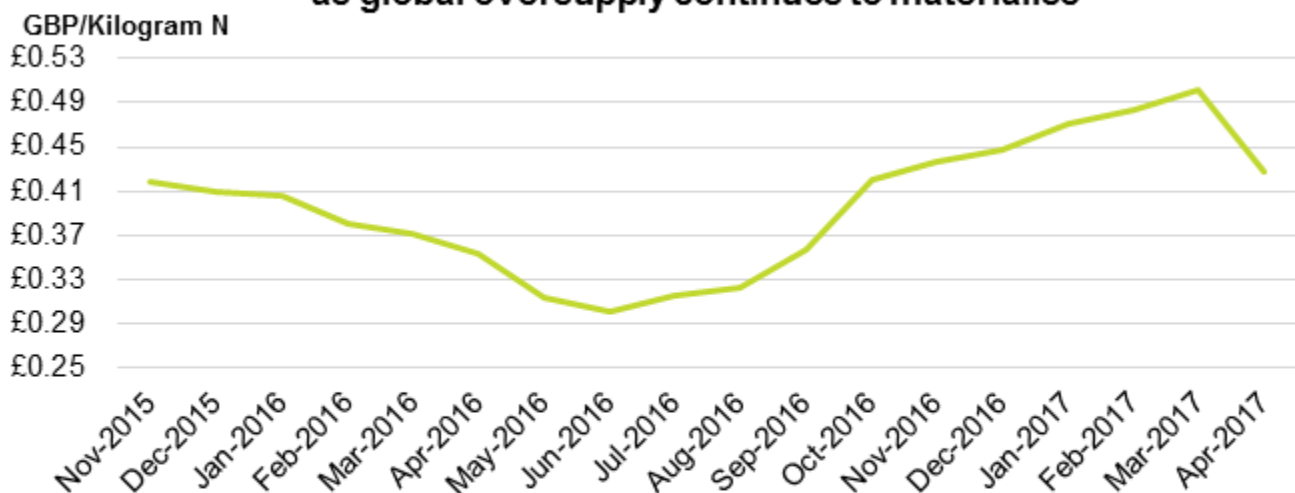
The Black Sea ammonium nitrate (AN) nitrogen benchmark has once again begun to come under pressure in recent months, averaging £0.47/kg N between February and April 2017. While this is up by £0.03/kg N when compared with the previous three months, this is only due to the support of increases in pricing from supply outages in February.

This price movement was echoed in urea markets,

where the Yuzhny granular urea price benchmark fell to £0.41/kg N over the same period.

A steady price increase in early 2017 was linked to a tight supply situation in the Black Sea region, which meant buyers needed to pay higher prices to secure volume. This upward movement was sustained through March, but has since fallen on the back of falling nitrogen fertiliser demand.

The Black Sea AN price benchmark has come under pressure as global oversupply continues to materialise



Source: ICIS Fertilizers

Note: AN = ammonium nitrate. Prices are FOB Black Sea and displayed in GBP per kilogram and in nutrient terms, assuming 33.5% nitrogen



Phosphates



Demand

The global phosphate market has continued to see weakness in the absence of strong demand as buyers in key markets have taken to the side-lines.

UK phosphate imports typically peak in Q1, when roughly 50-60% of imports take place, so buying for the coming months is likely to now be complete with buying likely to pick up again in Q3 and Q4. The means that availability of diammonium phosphate (DAP) and monoammonium phosphate (MAP) within the UK supply chain in the coming months should be good if it is required.

Global DAP demand is still fundamentally weak and the small amount of demand that exists is

mainly concentrated in India. It is likely that demand will emerge from North America in the summer months, as weather improves and summer demand takes hold.

MAP demand is also weak but some industry participants are optimistic that buying could improve in Brazil in June. That said, demand may be impacted by currency volatility associated with the current political situation in Brazil. Prior to this episode, the Brazilian real had increased against the US dollar, which was providing some support to demand for other for fertilisers, notably potash.



Supply

Roughly 885,000 tonnes of P₂O₅ capacity has been temporarily curtailed in China so far this year, due to environmental inspections by the Chinese government. Prior to the curtailments, China exported roughly one million tonnes of DAP from January-April 2017, around 150,000 tonnes more than in the previous year's period.

In Russia, major producer PhosAgro will undergo a planned maintenance schedule from May-October 2017 that will decrease its average capacity by 10% each month. This shouldn't affect supply into the UK, as typical import levels from Russia during this period are historically low.



Prices

Following a short period of small growth in the first few months of 2017, global DAP prices have begun to edge down once again.

From February through April 2017, the Baltic FOB DAP price benchmark averaged £0.65/kg P₂O₅,

down by 12% when compared with the previous three months. The price increase was off the back of lacklustre demand in the finished phosphates sector.



Potash



Demand

Latest import statistics for potassium chloride (MOP) indicate strong buying in the UK in Q1 2017. Imports have increased to 107,612 product tonnes in Q1 2017, equivalent to an increase of 70% compared to Q1 2016. The emergence of MOP volumes from Spain and Israel to the UK is clearly partially responsible for this increase. The

UK has imported greater volumes from Spain and Israel since MOP producer ICL reduced production in the UK in favour of polyhalite meaning that the MOP tonnes must be sourced from elsewhere. ICL has operations in Israel and Spain from which it has been able to source MOP to meet its UK customers' potash requirements.



Supply

The biggest news for supply in the potash market in Q2 2017 is the emergence of new production from two new greenfield projects. Namely, from the K+S Bethune mine in Canada and Turkmenhimiya's Garlyk potash mine in Turkmenistan.

The K+S Legacy Greenfield project in Canada was inaugurated on 2 May 2017. The site will begin commercial production in June and will continue ramping up to a targeted two million tonnes of capacity. The company has said production in 2017 is likely to be closer to 600-700,000 tonnes potash. The new mine will act as

replacement capacity for some of the company's high-cost German mines.

The Garlyk potash project in Turkmenistan was completed at the end of March and has a capacity of 1.4 million tonnes per year. The project will also be ramping up production over the coming year to reach capacity but it is unlikely that any significant volumes from the mine will appear in Europe.

The addition of new supply in an already oversupplied global market will undoubtedly impact on the global supply demand balance and will likely put pressure on global potash price benchmarks.

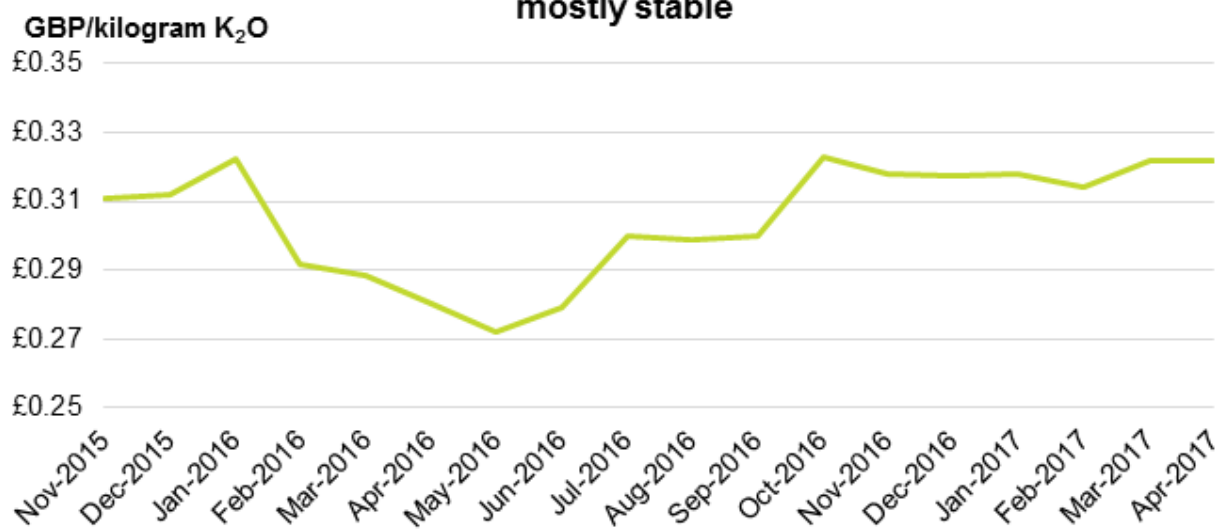


Prices

MOP prices remained largely unchanged from December 2016 through to the year to date in 2017. The MOP Vancouver FOB granular benchmark has averaged £0.32/kg K₂O since the beginning of the year.

The continued period of price stability is due to the market balancing since the end of 2016. However, it still reflects a fundamental weakness in the market, as prices are still resting at some of their lowest levels in nearly ten years.

MOP prices in 2017 are low in an historical context but are mostly stable



Source: ICIS Fertilizers

Note: MOP = Muriate of Potash. Prices are FOB Vancouver and displayed in GBP per kilogram and in nutrient terms, assuming 16% K₂O

Explanation of pricing

Black Sea AN, Yuzhny Urea, Vancouver MOP and Baltic DAP prices are international benchmark prices. Prices in which the prices are originally reported. The price is into the UK will vary from those shown in the report, also converted from product tonnes into nutrient kilogram depending on local market conditions and additional (kg) terms. An example of how the nutrient and kg freight and taxes. adjustment adjusts the price is shown in the table below.

Spec. of Product Product Price	AN	Urea	TSP	MOP
	33.5%	46.0%	46.0%	60.0%
	Nitrogen	Nitrogen	Phosphate	Potash
	335 kg N/t	460 kg N/t	460 kg P ₂ O ₅ /t	600 kg K ₂ O/t
GBP/t	GBP/kg N	GBP/kg N	GBP/kg P ₂ O ₅	GBP/kg K ₂ O
£400/t	£1.19/kg	£0.87/kg	£0.87/kg	£0.67/kg
£375/t	£1.12/kg	£0.82/kg	£0.82/kg	£0.63/kg
£350/t	£1.04/kg	£0.76/kg	£0.76/kg	£0.58/kg
£325/t	£0.97/kg	£0.71/kg	£0.71/kg	£0.54/kg
£300/t	£0.90/kg	£0.65/kg	£0.65/kg	£0.50/kg
£275/t	£0.82/kg	£0.60/kg	£0.60/kg	£0.46/kg
£250/t	£0.75/kg	£0.54/kg	£0.54/kg	£0.42/kg
£225/t	£0.67/kg	£0.49/kg	£0.49/kg	£0.38/kg
£200/t	£0.60/kg	£0.43/kg	£0.43/kg	£0.33/kg
£175/t	£0.52/kg	£0.38/kg	£0.38/kg	£0.29/kg
£150/t	£0.45/kg	£0.33/kg	£0.33/kg	£0.25/kg
£125/t	£0.37/kg	£0.27/kg	£0.27/kg	£0.21/kg
£100/t	£0.30/kg	£0.22/kg	£0.22/kg	£0.17/kg

Source: AHDB



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