Agenda

- Introduction to *The Market* and the fertilizer team
- About today’s webinar
- Market overview and summary of key fertilizers
- Conclusion
- Q&A
The Market

- Weekly and monthly reports
  - *The Market*
  - *World Sulphuric Acid Weekly*
  - *Outlooks* in conjunction with Integer Research
  - More than 100 price assessments each week

- Trade data sourced from IFA and GTIS

- Benchmarks
  - Physical and swaps markets – CME
# The Team

## Meet the fertilizer team

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Contact</th>
<th>Commodities covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia Meehan</td>
<td>Managing editor</td>
<td><a href="mailto:Julia.Meehan@icis.com">Julia.Meehan@icis.com</a></td>
<td>Urea and ammonium sulphate</td>
</tr>
<tr>
<td>Richard Ewing</td>
<td>Deputy managing editor</td>
<td><a href="mailto:Richard.Ewing@icis.com">Richard.Ewing@icis.com</a></td>
<td>Ammonia</td>
</tr>
<tr>
<td>Mark Victory</td>
<td>Senior editor</td>
<td><a href="mailto:Mark.Victory@icis.com">Mark.Victory@icis.com</a></td>
<td>Sulphur and sulphuric acid</td>
</tr>
<tr>
<td>Sylvia Traganida</td>
<td>Senior editor</td>
<td><a href="mailto:Sylvia.Traganida@icis.com">Sylvia.Traganida@icis.com</a></td>
<td>Phosphates</td>
</tr>
<tr>
<td>Deepika Thapliyal</td>
<td>Senior editor</td>
<td><a href="mailto:Deepika.Thapliyal@icis.com">Deepika.Thapliyal@icis.com</a></td>
<td>Urea</td>
</tr>
<tr>
<td>Mark Milam</td>
<td>Senior editor</td>
<td><a href="mailto:Mark.Milam@icis.com">Mark.Milam@icis.com</a></td>
<td>US urea, phosphates, ammonia and potash</td>
</tr>
<tr>
<td>Annalise Little</td>
<td>Markets editor</td>
<td><a href="mailto:Annalise.Little@icis.com">Annalise.Little@icis.com</a></td>
<td>US Sulphur and sulphuric acid</td>
</tr>
<tr>
<td>Andy Hemphill</td>
<td>Markets editor</td>
<td><a href="mailto:Andy.Hemphill@icis.com">Andy.Hemphill@icis.com</a></td>
<td>Potash and nitrates</td>
</tr>
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What is urea and why it is important?

- Solid fertilizer with 46% nitrogen, made from ammonia and carbon dioxide
- Nitrogen promotes leaf growth in plants, necessary for photosynthesis
- Sold in prilled and granular forms
- Largest volume nitrogen fertilizer traded
- More than 170m tonnes produced annually - 50m tonnes of which is traded
Major urea players and trade flows

- Urea supply has increased over the last few years, leading to a change in trade flows
- 40 new units have come/are planned to come on-stream in 2016-2021
- China has a huge urea capacity, but its share in the export market is falling

Exporters
- Russia
- Arab Gulf
- Iran
- Egypt
- Algeria
- Indonesia
- Malaysia
- US, Nigeria new exporters

Importers
- India
- West Europe
- Turkey
- Brazil
- Thailand
- US share dwindling
H2 2018 outlook for urea

- Urea demand static, but supply increasing
- US importing less on recent capacity additions
- Indian demand seems to be the only constant
- Brazilian market extremely competitive
- European demand has been lacklustre
- Iran sanction situation being watched closely
- Supply surplus at 20m tonnes in 2018 (IFA)
- Demand to grow 1.5% YOY to 187m tonnes by 2021
Ample supply continues to pressure prices
Outlook for the next few months is lower on pricing
Iran sanctions lead to speculation
Market expected to see more frequent periods of quiet and range-bound trade
Ammonia

- Made via an extremely energy-intensive chemical reaction involving hydrogen
- Ammonia is a fertilizer in its own right, and a key building block for other fertilizers
- Has agricultural and industrial uses, but is toxic so freight costs are very high
- Transported as a liquid at minus 33°C by LPG tankers, plus barges and rail cars

#Photos courtesy of Yara and EuroChem
Major ammonia players and trade flows

- Leading producing countries that also export are Trinidad, Russia, Saudi Arabia, and Indonesia
- Global ammonia capacity will hit almost 235m tonnes/year in the next three years
- Up to 45 new plants will come on-stream between 2017 and 2021 (IFA)
- Seaborne trade to reach 21m tonnes in 2021 – nearly 2m tonnes/month
- Key players: Yara, Trammo, Koch, Togliatti, CF Industries, Mitsui, OCI, and Mitsubishi

#Photos courtesy of CF Industries and Yara
Market dynamics have undergone fundamental and permanent changes in recent years....
... as new US capacity displaces Caribbean tonnes to Asia-Pacific, North Africa, and Europe ...
... which in turn has led to a collapse in prices as suppliers struggle to place tonnes each month
The days of prices averaging above $400/tonne FOB Yuzhny seem a lifetime ago; not a few years
H2 2018 outlook for ammonia

- Global market is fundamentally oversupplied due to significant overcapacity and soft demand
- Start-up of the 700,000 tonne/year PAU plant in Indonesia likely to suppress prices further
- Producers may fight back by cutting capacity, or battle on and try to protect market share …
- … by taking a longer term view and hoping loss-making competitors exit the industry

#Photos courtesy of Acron
Phosphates

What are phosphates and why are they important?

- Phosphates are made from mined phosphate rock (BPL/P2O5 content determines quality). The rock is treated; processed with sulphuric acid to make phosphoric acid – makes DAP/MAP/TSP
- Applied to crops both at the time of planting and when it is growing, to increase nutrients in soil and boost plant growth
- Concentrated in two periods of the year, depending on soil temperature and availability of water

#Photo courtesy of PhosAgro
Phosphates producers are usually located close to phosphate rock sources

Global trade of processed phosphates in 2016 increased by 1.6% to 14.4m tonnes P2O5 (30.4m product tonnes), and is expected to have increased further in 2017

**Producers**
- Morocco
- Tunisia
- Saudi Arabia
- Russia
- USA
- China

**Consumers**
- India, Bangladesh, Pakistan
- Latin America (Brazil, Argentina)
- China
- Europe
- North America
H2 2018 outlook for phosphates

- MAP/DAP plants are being refurbished in favour of flexible granulation units (MAP/DAP/TSP/NPK) - especially in Africa and SE Asia
- Phosphates consumption is expected to increase as the world population grows
- New production expected in 2018 from Morocco and Saudi Arabia, with capacity growing globally from 47.8m tonnes in 2017 to 52.5m tonnes in 2021
- Chinese DAP/MAP supply to remain at low rates on environmental restrictions
- India expected to import around 5m tonnes of DAP in fiscal year 2018-2019 on expectations of good monsoon
New production capacity expected to keep prices under pressure

Focus of market on micronutrients and specialty fertilizers

India DAP/NPK demand is expected to increase this year on depleted stocks

Chinese DAP/MAP production pressured by environmental regulations, and expected to continue at lower rates

2018 phosphates price developments
Potash

What is potash and why is it important?

‘Potash’ – potassium-bearing fertilizers
Muriate of potash (MOP) / sulphate of potash (SOP)
Supports plant nutrition, improves yields, and fends off disease
Up to 67m tonnes required around the world

#Photos courtesy of Rex Features
Potash is a producer-driven industry

Six key players:
- Russia – Uralkali
- Belarus – Belarus Potash Company
- Germany – K+S
- Israel/Jordan – Israel Chemicals Limited / Arab Potash Company
- Canada – Canpotex (Nutrien/Agrium)

Key importers – China and India

Southeast Asia, Brazil, USA, Europe
2018 potash price developments
2018 potash price developments

MOP Price Comparison

- CFR Southeast Asia (Granular)
- CFR Southeast Asia (Standard)
H2 2018 outlook for potash

- Increased demand amid a growing population
- Continued bullish price pressure
- China / India contract settlements give fresh direction
- New capacity coming online
What is sulphur and why is it important?

- Sulphur is one of the 17 essential plant nutrients, and is crucial for crop growth.
- Sulphur is everywhere - not just for fertilizers, but when burnt it is used for:
  - Textiles
  - Tyres
  - Household products
  - Paints
  - Metal leaching – sulphuric acid
Major sulphur players and trade flows

Exporters
- Canadian Oil Sands
- Russia
- Saudi Arabia
- Kazakhstan
- Iran
- United Arab Emirates (UAE)
- Qatar

Importers
- China
- USA
- Morocco
- Brazil
- Mexico
- India
2018 sulphur price developments
2018 sulphur price developments
H2 2018 outlook for sulphur

- Russian waterways open again after winter closure
- OCP to begin next phase of phosphates project – demand to increase
- Kashagan begins exports from Kazakhstan
- Barzan material offered in the market
- South Pars Iran starts refining
By 2050 there will be nine billion people to feed on the planet

Potash possibly the best performer since less exposed to increased capacity

GM food

Precision agriculture techniques
Q&A