

Introducing the New Argus Fertilizer Analytics



Fertilizer illuminating the markets

Market Reporting

Consulting

Events



Understand more. Connect more.

Argus Fertilizer Analytics connects you with the clearest insights, written by experienced analysts drawn from across the global fertilizer markets. To help you better interpret the fertilizer markets, we've improved the ways you can access Argus fertilizer data, analysis and insights. Making the future easier to understand.

Our new Argus Fertilizer Analytics services cover nitrogen, phosphate, potash and sulphur markets and include quarterly analysis alongside an annual report, an innovative and interactive data visualisation tool and the underlying data in excel - giving you the essential mid-long-term analysis and outlook for global fertilizer markets.

These are underpinned by our robust and deep market knowledge which is backed with rigorous analytical methodology to help you understand the impact of economic and political events on future market and price developments.

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We're excited to introduce our new Argus Fertilizer Analytics portfolio, backed by the insights, market forecasts and strategy from our acquisition of Integer Research. The specialist economic and financial analysis complements Argus' renowned global expertise in commodity markets, indexation, analytics and technology platforms to provide you with a truly innovative industry-leading solution.



Lauren
Williamson
Senior Vice President,
Argus Fertilizer

Our key methodologies include:

A demand forecasting model based on calorie and crop forecasts providing a view of future fertilizer consumption and our Long Run Marginal Costs (LRMC) multi-factor model to assess the level of prices beyond the current investment cycle.

- Short-term forecasts by month and quarter linked to energy and raw material prices, crop prices, FX changes and the merchant supply/ demand balance
- Short-Run Marginal Costs forecast and supply/demand balance, with project gateway assessment for the current investment cycle (5-7 years ahead).
- Our longer-term forecast is based on LRMC analysis (updated annually) taking you beyond the current investment cycle.
- The medium- and long-term forecasts are connected using a mean-reversion model.

Bringing together unique benefits and features in a compelling new format



Quarterly reports

With a clear view of what's driving the fertilizer markets and how it's likely to evolve, clients can be more confident in making critical decisions



Annual long-term report

Understand the connections between underlying market drivers and use these insights to develop more robust strategies



Data visualisation

We're taking our analysis even further with an interactive dashboard enabling you to visualize and analyse dynamics that shape markets



Underlying excel datasets

Explore and integrate data into your models - saving time for more in-depth analysis

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Key Features

Quarterly reports

Fundamentals analysis

Access analysis of the impact of recent events on our view of future prices in a narrative and graphical way.

Supply | Demand | Cost | Trade | Forecasts | Annual S/D forecast | 15yrs History | 15yrs Forecast



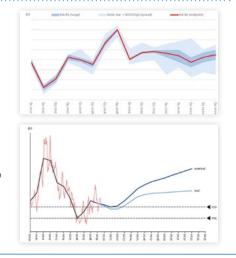
Price forecasts time horizons

Near-term focus for 12-18 months

Variables driving prices include energy prices, crop prices, FX changes, and seasonal S/D and trade imbalances.

Cyclical outlook linked to long-term forecast

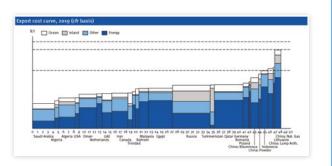
Driven by the investment cycle and other influences on the S/D balance. Beyond the investment cycle for plants or mines, we use a Long-Run Marginal Cost (LRMC) model to predict price levels required to incentivise investment in new capacity. A statistical mean reversion model is used to connect the medium and long term forecast.



Production cost analysis

Cost Curves

Access country-level cost curves (and in some cases plant-level costs) to export fob or global benchmark location. This allows us to focus on marginal producers and their impact on price formation to balance the market.



Project screening

Project progress is assessed using a traffic light system for development milestones, categorising as Firm, Probable, Possible and Speculative (along with forecast of startup date).

Where appropriate, deep dives into especially influential projects are provided, including full economic cost build up, position on cost curve, NPV heat map and DCF forecast.

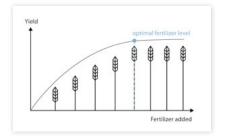
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Annual long-term forecast report

Fundamentals analysis

Focused on changes to long term trends.

Overview of market fundamentals | Long run supply trends and gaps | Long run demand forecast driven by diet changes, and calorie consumption and food production projections | New formulations | Long-term use efficiency improvements | 15yrs History | 15yrs Forecast of demand, supply and trade.

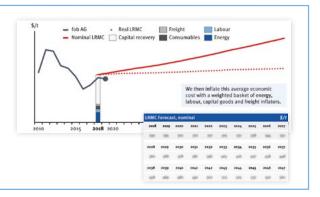


Price forecasts time horizon

25 years price forecast

Based on our Long Run Marginal Cost (LRMC) model. LRMC methodology is independent from Supply/Demand allowing us to forecast further ahead (for strategy definition and investment cash flow modelling purposes).

25yr LRMC forecast updated annually.





Data Visualisation













Connect with the Argus Fertilizer Analytics team



Alistair Wallace
Head of Fertilizer Research, Argus
Consulting Services

With over 13 years of experience in commodity market analysis, Alistair is the editor of *Argus Urea Analytics* and *Argus Ammonia Analytics*. He also supports the company's research on the wider fertilizer industry, focusing primarily on cost competitiveness and mid to long-term price forecasting for the N, P and K markets. Alistair presents at major conferences on fertilizer market trends.



Aida Idrissi Principal, Argus Consulting Services

With over 13 years' experience in both capital markets and the fertilizers industry, Aida is the editor of *Argus Phosphate Rock Analytics* and *Argus Processed Phosphates Analytics*. She specialises in providing market due diligence analysis in the fertilizer markets, helping clients to plan investment, acquisition and market entry strategy. Prior to joining Argus in 2014, she worked for 5 years in strategy and market intelligence roles for OCP, contributing to strategic projects in the phosphate sector. Earlier in her career, she worked for Goldman Sachs as a structured interest rates derivative salesates derivative sales.



Rebecca Hayward
Research Manager, Argus
Consulting Services

With six years of experience tracking MOP and SOP markets, Rebecca is the editor of *Argus Potash Analytics*. She has lead bespoke consultancy assignments covering potash mine feasibility studies, producer cost studies and regional market studies.



Meena Chauhan Research Manager, Argus Consulting Services

With over 12 years of experience in sulphur and sulphuric acid market analysis, Meena edits Argus Sulphur Analytics and Argus Sulphuric Acid Analytics. She regularly presents on the sulphur and sulphuric acid markets at major industry events around the world.



Lauren Williamson Senior Vice President, Argus Fertilizer

Lauren's information services career has spanned numerous roles since 2003 with a particular focus on fertilizers since 2011. She previously covered global fertilizer markets and short term forecasts before launching Argus' Americas fertilizer coverage from its Houston office. Her in-industry experience includes regional marketing management and business/market development roles at major oil and petrochemical entities. As SVP she is responsible for the sector's global strategy as well as product innovation and management.



Tim Cheyne
Vice President, Argus Fertilizer and
Analytics Product Manager

Tim has worked in fertilizers since starting as a process engineer at an ammonia/urea plant in 1994. He moved into fertilizer analytics in 1998 and has covered production cost analysis and market forecasts for ammonia, urea, processed phosphates and NPKs. He also developed a team covering non-fertilizer markets such as AdBlue and DEF. Tim was Managing Director at Integer Research when it was acquired by Argus in 2018. He is now responsible for the revamped Fertilizer Analytics portfolio at Argus.



Supported by the industry's largest and most experienced consulting and editorial teams.

Our dedicated Fertilizer Analytics team are supported by the industry's largest and most experienced team of consultants, analysts, editors and reporters from around the world giving you a regional and global perspective of the markets.



Fertilizer services from Argus

Argus Fertilizer Analytics

Our **revamped Argus Fertilizer Analytics services** deliver quarterly updates alongside an annual report, a new and powerful data visualisation tool and the underlying data in excel to provide subscribers with essential mid-long-term analysis and outlook for global fertilizer markets.

Our Fertilizer Analytics services include:

- Argus Urea Analytics*
- Argus Ammonia Analytics*
- Argus Processed Phosphates Analytics
- Argus Phosphate Rock Analytics
- Argus Potash Analytics

- Argus Sulphur Analytics
- Argus Sulphuric Acid Analytics
- Argus Technical Grade Urea Analytics (Quarterly reports and Excel datafile)
- Argus NPKs Analytics (Annual report)

Argus Fertilizer Monthly Outlooks

Our **monthly Outlook services** provide short-term intelligence on market prices, and supply and demand for the major fertilizer exporting and consuming regions. Essential datasets can easily be exported into excel and used in internal reports.

Services include:

- Argus Monthly Urea Outlook
- Argus Monthly Ammonia Outlook
- Argus Monthly Phosphates Outlook
- Argus Potash Outlook (released quarterly)
- Argus Monthly Sulphur Outlook

Argus Fertilizer Market Pricing, News and Analysis

Our **price reporting services provide** coverage of key prices, news and analysis for the major fertilizer products straight to your desktop. Essential datasets can easily be exported into excel.

Services include:

Nutrient focused

- · Argus Nitrogen
- Argus Ammonia
- Argus Phosphates
- Argus NPKs
- Argus Potash
- Argus Sulphur
- Argus Sulphuric Acid

Region/country focused

- Argus Fertilizer Europe
- Argus Fertilizer Brazil
- Argus North American Fertilizer
- Argus North America Sulphur and Sulphuric Acid
- Argus Russian Fertilizer Netbacks
- Argus Fertilizer Africa
- Argus Asia Fertilizer and Agriculture Supplement

Argus Fertilizer Specialist Reports and Bespoke Projects

With **global and regional reports** to choose from our specialist reports provide a comprehensive view of emerging markets with exciting potential to help you seize new opportunities and maximise your profit margin. We also offer fully bespoke consulting solutions including market-specific research and analysis.

Reports include:

- Argus Briefing Report: Speciality Fertilizers
- Argus Strategy Report: Micronutrients
 Key to Growth
- Argus Strategy Report: Water Soluble Fertilizers
- Argus Strategy Report: Enhanced Efficiency Fertilizers
- Argus Fertilizers in Sub-Saharan Africa
- Argus Focus Report: The Global UAN Market Outlook

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^{*} Includes our Cost and Margin services – a web based interactive tool for analysing cost curve data



Contact Us



Contact Information

Houston

2929 Allen Parkway, Suite 700 - Houston, Texas 77019 +1 713 968 0000

New York

500 Fifth Avenue, Suite 2410 New York, NY 10110 + 1 646 376 6130

Sao Paulo

Av. Angélica, 2.220 - Rooms 112 and 113 - Consolação -São Paulo, SP - Brazil Tel: + 55 11 3231 0237

London

Lacon House, 84 Theobald's Road, WC1X 8NL

Tel: + 44 20 7780 4200

Singapore

50 Raffles Place, 10-01 Singapore - Land Tower Singapore, 048623 Tel: + 65 6496 9966

Moscow

7 Nastasyinsky pereulok -Moscow

Tel: + 7 495 933 7571

Dubai

Office 2803-2804, 28th floor, Shatha Tower, Dubai Media City, P. O. Box 502821 Tel: + 971 4365 8667

Please visit <u>www.argusmedia.com/contact-us</u> for the full list of our offices.

www.argusmedia.com | fertilizer@argusmedia.com | 🔰 @argusmedia



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