CHEMICAL MARKET ANALYTICS

BY OPIS, A DOW JONES COMPANY

Short-term and long-term market coverage for over 200 core building block chemicals



Foresight That Empowers Our Customers

For over 40 years, our experts have enabled thousands of clients to make transformative decisions through our integrated approach to data analytics and market foresight.

Chemical Market Analytics is the leading provider of global market insight across the petrochemical industry, offering integrated data, market analysis and advanced modeling across all major industry verticals, including – Olefins, Plastics and Polymers, Inorganics, Syngas, and Aromatics.

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Market Foresight You Can Rely On



Global and Integrated Industry view, technoeconomic analysis and Market Foresight

- a. Chemical Market Analytics has the expertise to support our clients through the entire process – from 'Crude oil to Costco."
- b. Our data models have been fine-tuned over a 40-year period and provided historical analysis, realtime scenarios, and predictive analytics with a proven level of accuracy
- c. Our approach intentionally goes
 above and beyond price reporting.
 Our experts can translate the data
 and provide analytic foresight with a
 high level of accuracy



Unparalleled Domain Expertise and Unmatched Industry Legacy

- a. Our experts are multi-skilled with industry expertise in data models across all major value chains, enabling us to support our customers in multiple market segments
- b. Chemical Market Analytics is made up of industry experts with deep knowledge in buying, selling, producing and trading, enabling our customers to achieve better success
- c. Commercial investors have relied upon our data models and market foresight since the early 1980s



- a. Chemical Market Analytics operates with integrity at the core; customers rely on the accuracy of our data
- b. Our clients value and trust our experts and maintain objectivity in data analysis
- Proven customer excellence through our long-term, retained client relationships
 - Our experts work with flexibility and responsiveness to client needs

Foresight That Empowers Our Customers

For over 40 years, our experts have enabled thousands of clients to make transformative decisions in the global markets through an integrated approach to data analytics and market foresight. As part of the OPIS Dow Jones family of companies, we understand how fundamental integrity and accuracy are in market coverage, and our customers rely on it. Our experts possess unmatched industry experience – empowering you with the market foresight you can rely on to make decisions.

Contact one of our experts today to discuss our many product options: chemicalmarketanalytics.com/contact/contact-us/

Energy & Feedstocks

The most integrated, tailored and relevant strategic energy market outlook that matters to the chemical industry.









A Holistic View of Market Forces

Gone are the days of fragmented data and siloed insights. Our service delivers a unified, integrated perspective, streamlining all the factors shaping NGL and naphtha markets.

You'll benefit from:

WEEKLY MARKET UPDATES

Stay informed with curated headlines, outage reports, key economic indicators, and forecasts for propane, butanes, and ethane, empowering timely action.

MONTHLY DEEP DIVES

Gain a deeper understanding with full fundamental assessments, regional inventory analyses, and strategic market evaluations for all components, equipping you for long-term success.

GLOBAL MARKET INTELLIGENCE

Track global trade dynamics, visualize trade flow maps, and assess arbitrage opportunities for confident trading decisions across regions.

Energy Macro Service

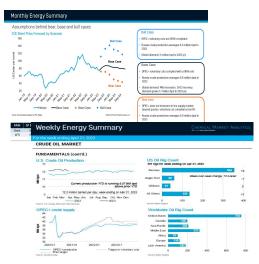
CHEMICAL MARKET ANALYTICS

Weekly Market Pulse

"Headlines & Highlights" of global oil and gas markets, accompanied by graphical analyses of weekly data releases Access regional weather forecast maps and keep track of global daily road traffic volumes from Rystad Energy

Monthly Deep Dives

- Gain insights into the essential market developments with a comprehensive overview
- Explore forecast highlights and the driving factors behind Brent, Henry Hub, and significant gasoline grades, with a focus on what has changed compared to the previous month and the underlying reasons.
- Receive a concise review of the supply and demand outlook for oil (global), gas, and gasoline in key regions such as NAM, WEP, and NEA, provided by Rystad Energy.
- ✓ Data access historical and forecast data for WTI,Brent, Dubai, Henry Hub, TTF, NBP, ZEEBRUGGE, NEA spot gas, JCC, as well as all gasoline grades.



NGL & Naphtha Intelligence

Weekly Market Pulse

- ✓ **STAY INFORMED:** Curated OPIS headlines keep you ahead of the curve, while timely PDH and cracker outage reports minimize operational disruptions.
- ✓ UNCOVER PRICE DRIVERS: Interactive economic indicators, price driver charts, and forecast changes reveal the forces shaping propane, butanes, and ethane movements.
- ✓ OPTIMIZE PROCUREMENT & TRADING: Futures and forecast analysis empower confident buying and selling decisions, capitalizing on market fluctuations.
- ✓ MONITOR SUPPLY & TRADE: Track inventory and export data for propane, butanes, and ethane through insightful charts, optimizing logistics and regional opportunities.
- ✓ MASTER ETHANE TRADE: Dedicated export economics charts, cracker outage reports, and price driver analysis enable informed ethane trading strategies and maximum margins.
- ✓ UNLOCK NGL & NAPHTHA POTENTIAL: Analyze trade flows, arbitrage potential, and crack spreads for profitable trading across the value chain.

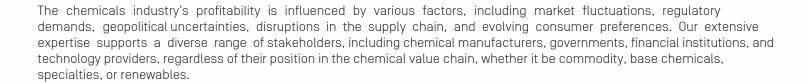
Monthly Deep Dives

- ✓ FULL FUNDAMENTAL ASSESSMENTS: Gain a comprehensive understanding of propane, butanes, ethane, and naphtha, driving strategic procurement and trading decisions.
- ✓ REGIONAL INVENTORY ANALYSIS & FORECASTS: Foresee
 the future with in-depth analyses of supply dynamics and
 Asian demand trends for each component.
- ✓ US & MDE SUPPLY LANDSCAPE: Gain granular insights into US and MDE supply chain dynamics, informing strategic sourcing and transportation decisions.
- ✓ ROBUST PRICE FORECASTING: Confidently navigate future market movements and price negotiations with advanced analysis, including butane integration.

- ✓ CHART YOUR COURSE: Identify key month-over-month changes (demand drivers, outages) and their underlying drivers, enabling proactive risk mitigation and profit maximization.
- ✓ HARNESS GLOBAL TRADE: Analyze aggregated global trade data and detailed trade flow maps by component, uncovering global arbitrage opportunities and optimizing logistics.
- ✓ GLOBAL SUPPLY & DEMAND PANORAMA: Gain a comprehensive understanding with regional breakdowns focusing on North America, the Middle East, and Asia, ensuring strategic market positioning.
- ✓ PRICE TRANSPARENCY: Stay informed with comprehensive global prices and differentials for each feedstock, securing optimal margins in every transaction.

Chemical Consulting Services

Harnessing unparalleled industry knowledge throughout the chemical value chains to elevate the process of decision-making.



Our Advantage

We specialize in bridging the gap between data and tangible outcomes.

What distinguishes us from other consulting firms is our longstanding dedication to the chemicals industry, along with its intricate ties to upstream oil, gas, and mineral operations, as well as downstream end-user markets. This wealth of experience equips us with a profound understanding of your most significant challenges, enabling us to work closely with you and uncover the optimal solutions.

At Chemical Market Analytics Consulting, we recognize that making critical business and policy choices goes beyond mere data analysis. By harnessing our collective expertise, we tackle your most substantial strategic and operational challenges. This unique approach distinguishes us in the global market and provides long-lasting value to your organization.

Our Core Capabilities

Our consulting team surpasses the commodity chemicals market with the collective expertise of more than 200 dedicated chemical experts. Together, they comprehensively cover over 200 core building block chemical products. With in-house expertise spanning the entire chemical value chain, and data from our new energy and economics partners, Rystad Energy and Oxford Economics, our team is uniquely equipped to deliver bespoke projects that meet each customer's individual requirements.

- Comprehensive analysis of global and regional markets, down to country level
- Detailed insights into various chemical segments, including commodities, specialties, and renewables
- Actionable near-term information and analysis on market dynamics, current and projected prices and margins, trade flows, as well as supply and demand balances
- Our coverage spans over 200 core building block chemicals.
- Long-term market outlook with in-depth coverage of 80 countries and all regions out to the year 2050
- Complete product balances, and fully integrated analysis of raw materials, intermediates, and end-use products

Consulting supports you to

- Maximize investment opportunities by effectively managing project and regulatory risks
- Establish a robust global presence and integrate operations across diverse feedstocks, industries, and geographies
- Identify innovative technologies and assess the performance of existing processes against industry benchmarks
- Deepen understanding of key market drivers influencing the supply, demand, and pricing of critical chemicals
- Protect your company's interests during legal proceedings and instances of business disruption

- Analyze new market opportunities to identify the best strategy
- Develop and implement robust strategies for long-term success
- Conduct comprehensive due diligence to facilitate wellinformed M&A transactions
- Evaluate your carbon footprint across the entire production process, comparing it with competitors and alternative technologies
- Perform pre-feasibility analyses to support strategic decision-making processes

Market Advisory Services

Provides Data-Based Analytics and Price Assessments

MAS provides accurate current and near-term market data and analysis for five basic chemical families. The service is distributed daily, weekly, bi-weekly, or monthly through reports and/or data supplements

Chemical Market Advisory Services include:

Olefins & Derivatives

- Asia C4 Olefins & Elastomers
- Asia Light Olefins
- Europe/Middle East Light Olefins
- Global Acrylates & SAP
- Global Acrylonitrile & Derivatives
- Global C4 Olefins & Elastomers
- Global Oxo Alcohols & Plasticizers
- Global Ethylene Oxide, Glycol & Derivatives
- Global Tire Raw Material Indices
- North America Light Olefins

Syngas

Global Acetyls
 Global Methanol

Aromatics & Fibres

- Asia Aromatics
- Europe Aromatics
- Global Acetone
- Global Ethylene Oxide & Glycol
- Global Nylon Fibers & Feedstocks
- Global PET Stream
- Global Polyurethane Feedstocks
- Global Polyester Fibers & Feedstocks
- North America Aromatics

Inorganics

- Global Bleaching Chemicals
- Global Chlor-Alkali
- Global Soda Ash
- Global Vinyls

Plastics & Polymers

- Asia Polyethylene
- Asia Polypropylene
- Asia, Middle East & India Plastics & Polymers
- China Polyolefins NEW
- Europe Plastics & Polymers
- Global Engineering Resins
- Global Plastics & Polymers
- North America Polyethylene
- North America Polypropylene
- Circular Plastics Service

Learn More





Subscribers receive access to Chemical experienced industry professionals for market advice related to the service's respective product coverage



Price Assessment

Customers use our critical data and technology for spot and contract pricing. We are the industry benchmark, creating inelastic demand for our key pricing data



Chemical Market Advisory Services offer monthly and weekly data, analytics, and service solutions (daily solutions are offered for products traded more actively). MAS covers five basic chemical families

Circular Plastics Service

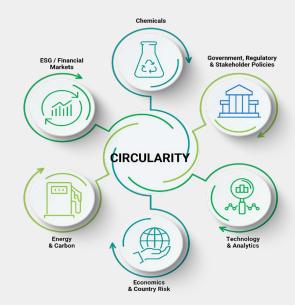
Expert source in providing data and addressing the critical questions being raised by the plastics transition to circularity



A comprehensive, scenario-based evaluation of how the plastics value chain is expected to transition from a linear to a circular economy. The service addresses the implications of carbon intensity and the impact on future capital investments within the context of energy transition and carbon valuation, amid changing policies and regulations.

This service quantifies the magnitude and timing of substantial market shifts, identifies key regulatory and societal risks, and provides ongoing tracking of fast-moving developments. Clients will understand government regulations and policies, prepare a plan to mitigate risk, determine which part of your company is most vulnerable, and assess opportunities for investment.

The plastics transition to circularity raises critical questions that must be addressed through shared goals and standards, with supporting data to determine the best path forward.



Regulations, Policy, ESG

Global regulations, stakeholder policies, alliances' & NGOs' targets, and initiatives

Demand Risk

Scenario demand modeling, visualization and insight for virgin and mechanically recycled plastics with regional and end-use segmentation

Waste Collection & Repositioning
Plastics Waste into

Valued Feedstock

Scenario modeling and insight for collection and disposition of plastics waste via landfill, incineration, mechanical recycling, and chemical recycling.

Analyses of plastics waste supply, including categories, volumes, specifications, and quality requirements.

Plastics Recycling Technology

Technology scanning and scenario-based economic modeling for recycling technologies.

Database of recyclers' capacities, alliances, inputs & outputs, and facilities commercialization progress.

Economic & Environmental Assessment

Scenario-based modeling and insight to evaluate the economics and emissions for circular plastics production compared to the incumbent, fossil-based linear model for producing plastics.

Strategic Issues & Implications

Semi-annual update of strategic conclusions derived from the detailed analyses targeted at identifying risks, investment opportunities, infrastructure needs, and recommended positioning $\boldsymbol{\theta}$ and actions for industry participants.

Gain a Tactical Advantage and Reformulate Your Company Strategy

- Track government regulations, policies and targets established by brand owners, industry alliances, NGOs and ESG investors and understand what this means for your business in the countries and regions where you have operations
- Prepare a plan to mitigate against major sustainability-driven shifts in downstream plastics consumption
- Determine which parts of the company's product offerings are most vulnerable to reductions in demand for virgin [non-recycled] plastic.
- Assess opportunities for investment collaboration in circularity
- Assess the relative value propositions of competing recycle technologies and anticipate where investments will be directed to scale infrastructure.
- Anticipate the timing and magnitude of the impact on feedstocks that will develop during the plastics transition to circularity.

Benefits of the Service



Anticipate future recycling volumes under different scenario

- Understand the evolving risk of resins, monomers, and feedstocks being replaced by recycling
- Assess opportunities for investment collaboration in circularity e.g., mechanical recycling



Quantify the timing and magnitude of impact on feedstock markets

- See how changing plastics consumption may impact feedstock requirements into chemicals
- Prepare a plan to mitigate against significant shifts in downstream consumption



Understand different regulatory regimes and track and anticipate changes globally

- See how regulations are likely to impact the plastics value chain and recycling rates
- Understand which sectors of the value chain are most likely to need additional support from government and associations



$\label{lem:compare} Compare competing mechanical/chemical process technologies and understand which may prevail$

- Understand how they will fit into the value chain
- Determine which recycling technology to invest in



Evaluate the level of societal demand in different markets

- Avoid being surprised by evolving consumer preferences
- Develop actionable policies for plastics use and waste to manage consumer perceptions
- See how consumer/system behavior is expected to change in the long-term



Technology and technology trends

• See when and where new chemical and mechanical recycling facilities are being built and who is building them



Understand which chemical companies might prevail

- Find out where new investments are likely in the future across the plastics value chain
- See which companies are most likely to be winners or losers



Calculate emissions and unit costs based on different infrastructure types

• See how unit costs compare across asset types and infrastructure types



World Analysis

World Analysis provides long-term chemical market trends, supports strategic planning, business reviews by adding robust operations support, with current actionable data and expert analysis





Supply & Demand

(Bi-annual updates and forecasts to 2050)

- Bi-annually updated supply and demand database
- Enables user to assess operating rates as a key driver of product financial performance
- Recognize the signals of shifting demand patterns and product substitution
- Learn about the impact of government policies and industry regulations



Global Capacity

- Understand how capacity additions change trade flows and destinations of incremental supply
- Real-time capacity database
- Dynamic and historical perspective of the global supply chains
- Compare integration levels of companies/shareholders and net surplus/
- Deficit positions of plant sites, countries, and regions
- Track geographic and portfolio changes of global and regional producers and consumers



Detailed Country Level Trade Grids

- Bi-annually updated trade data
- Trade volume patterns
- Data on import and export volumes per country
- Scrutinize volume patterns of trade
- Discover which countries are the biggest importers and exporters



Multi-year Forecasts (to 2050) for price, Cost & Margin

- Sync your long-term price forecast more closely with ongoing changes in global energy and economic markets
- Changing domestic market price structure & margin pressures
- Evaluate and align investment project planning with future cost and margin swings
- Updated price, cost and margin data helps users sync long-term
- price forecast with on-going changes in global economic markets



Upside / Downside Sensitivities

- Sensitivities assessment on the upside and downside price drivers
- Assessment of underpinning forces capable of driving price behavior and corresponding margins away from the Base Case trend line
- Closely align long-term price forecast while identifying potential drivers of inflection points



Interactive User Interface

- Quickly and efficiently visualize and analyze the data
- Personalize the way you view the information in the way you need it
- Analyze multiple chemicals at the same time

Learn More

Critical data and dynamic tools to accelerate your planning process

Production Supply Chain Upside and Supply Market Demand **Exports** and Margin Opportunity Downside Trade Grids Analysis Assessments Sensitives and Growth Balances

Long-term Market Validation - World Analysis service

Olefins & Derivatives

- Acrylates & SAP
- Acrylonitrile
- Butadiene
- Butylenes
- Ethylene Oxide & Ethylene Glycol
- Ethylene
- Nitrile Latex NEW
- Oxo Alcohols
- Propylene
- Propylene Oxide
- Rubber
- Methyl Methacrylate [MMA] NEW

Aromatics & Fibres

- Benzene
- Cumene. Phenol & Acetone
- Nylon Feedstocks
- Nylon Fibers
- Paraxylene
- Polyester
- PTA/DMT&Isophthalic Acid
- Pygas NEW
- Styrene
- Toluene & Mixed Xylenes
- MDI
- TDI

Plastics & Polymers

- ABS Resins
- Expandable Polystyrene (EPS)
- Nylon Engineering Resins
- Polybutylene
 Terephthalate (PBT) NEW
- Polycarbonate
- Polyethylene
- Polypropylene
- POM Polymers (Polyacetal resins) *NEW

Syngas

- Acetyls
- Formaldehyde & Resins
- Methanol
- MTBE
- Ammonia & Urea * Upcoming 2024 NEW

Inorganics

- Chlor-Alkali
- Soda Ash
- Vinyls
 - Sodium Sulfate NEW

Full version Abbreviated version Data-only

World Analysis product features segmented into three versions

Product Features	Update Frequency	Format	Full Version	Abbreviated Version	Data Only
Supply/demand balances (global by region & country)	Bi-annual	online	✓	✓	✓
Plant capacity by company/shareholder	Continuous	online	✓	✓	✓
Capacity expansions/closures	Continuous	online	✓	✓	✓
Top producer/consumer capacity ranking	Continuous	online	✓	✓	✓
Capacity Integration (major derivatives)	Continuous	online	As available	As available	As available
Interactive data visualization module (dashboard)	Quarterly/ Bi-annual	online	✓	✓	✓
Standard supply/demand graphs	Bi-annual	Excel	✓	✓	✓
Trade grids [global by region & country]	Bi-annual	Excel	✓	✓	✓
Data appendix with supply/demand and capacity tables	Annual	Excel	\checkmark	✓	✓
Price, cost, margin forecasts for key regions*	Quarterly	Excel	✓	✓	
Base case assumptions*	Quarterly	PDF	\checkmark	✓	
Sensitivity assessments*	Bi-annual	PDF	✓	✓	
Price assessment methodology including price definitions across all regions*	Annual	PDF	\checkmark	✓	
Report with key strategic insights and executive overview	Annual	PDF/online	✓	✓	
Production process/technology overview	Annual	with report	✓	✓	
Production economics/snapshots for selected regions/processes	Annual	with report	✓	Selected	
Regional market summaries	Annual	with report	✓		
Global overview of major derivatives	Annual	with report	Selected		

Upcoming NEW Services



Cost Curve Service

Enhancing client satisfaction with a cost curve service through the development of a user-friendly online dashboard and an interactive module, enabling clients to personalize their cost data modeling

- Initial Product coverage*: Ethylene, Propylene, Polyethylene, Polypropylene, Chlor-Alkali, Soda Ash, Methanol, Benzene
- Frequency: Quarterly updates
- **Features** include selections for historical or forecast years. geography with regional averages, integration, delivered cost. etc., future scenario capability

Products scheduled to be added in year two include:

Para/Mixed xylenes, Styrene, Polystyrene, EPS, PET Resins, Butadiene, Acrylonitrile, PVC, ABS, Ethylene oxide / MEG, Ammonia, MTBE, MDI/TDI, Acrylic acid.

Expected Launch: 2024

NGL & Naphtha Service



Expanded analysis and commentary on the current market dynamics and market outlooks

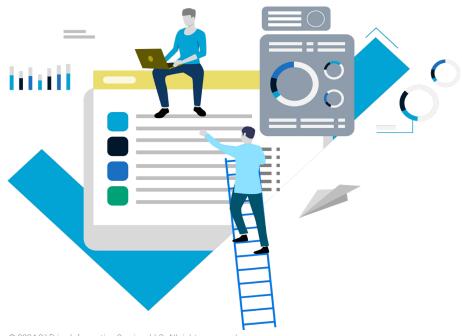
Data browser access to ethane, propane, butanes, and naphtha forecasts

Frequency: Weekly/Monthly update service + quarterly topical focus pieces

Focus on Commodities:

- Fthane
- Propane
- Butanes
- Naphtha

Expected Launch: Launched



Ammonia & Urea Service



Supply-demand balances on ammonia and urea to enable:

 World Analysis -Ammonia/Urea

Expected Launch: 2024

Consulting projects on ammonia and methanol/ammonia is available now

Chemical Market Analytics Events

WORLD CHEMICAL FORUM Houston, Texas | 9 - 11 September 2024

Global Plastics Summit Houston, Texas | 27 – 29 February 2024

Global Chlor-Alkali & Vinyls Conference 2024 Lisbon, Portugal | 7-8 May 2024

32nd Annual Polyethylene and Polypropylene (PEPP) Conference Amsterdam, Netherlands | 17 - 18 June 2023

World Soda Ash Conference 10 - 12 October 2024

World Methanol Conference September 2024

Event Enquiries

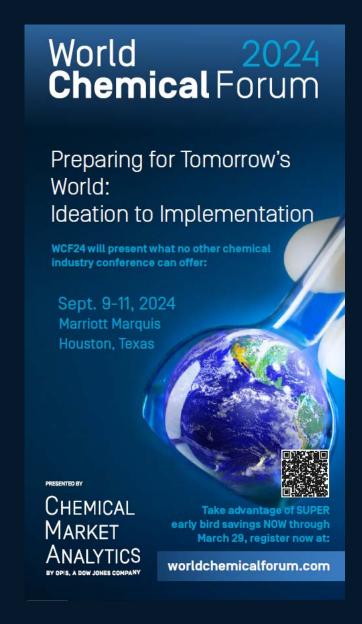
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Partnership Opportunities

E dcoates@opisnet.com



Visit our event page



About Chemical Market Analytics by OPIS, a Dow Jones Company

Chemical Market Analytics by OPIS, a Dow Jones company, provides stakeholders in the global chemical industry with next-generation analytics, deep insights, future outlooks and price discovery to improve operational efficiency.

The company offers short- and long-term market coverage for more than 200 core building-block chemicals via Market Advisory Services [MAS], World Analysis [WA], Circular Plastics Service, Chemical Advisory Service and educational and networking conferences such as World Chemical Forum.

CUSTOMER SERVICE

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FMAI

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