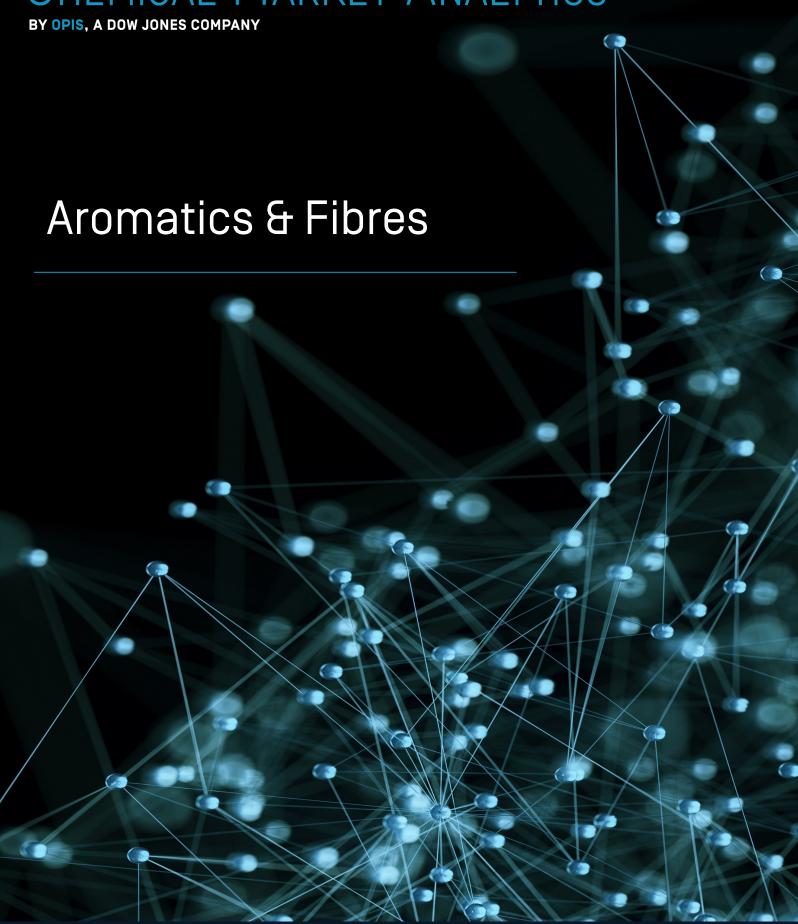
CHEMICAL MARKET ANALYTICS



Our solutions provide the cutting-edge research and forecasts necessary to gain a competitive edge

Near term outlook - Market analysis

Asia aromatics

North America aromatics

Global PET stream

Global ethylene oxide

Europe aromatics

& derivatives

Global polyester fibers &

Polyurethane feedstocks

feedstocks

Global nylon fibers

Global acetone

& feedstocks

- Market prices, costs, and/or margins (historical, current, forecast)
- Extensive expert commentary on prices, margins, trade, market conditions, operational issues and future trends impacting markets
- Quarterly supply/demand balances and trade flows

Long term outlook - World analysis

Benzene Styrene

Polyester Nylon feedstocks

Cumene/Phenol & Toluene & xylenes

acetone Nylon fibers

PTA/DMT

MDI and TDI Ethylene oxide &

derivatives Paraxylene

- Supply demand database updated bi-annually
- Real time capacity global database
- Detailed country-level trade grids updated bi-annually
- Forecasts for price, cost and margin updated quarterly
- Upside and downside sensitivities



Market Advisory Services

Provides Data-Based Analytics and Price Assessments

Chemical Market Advisory Services provide the industry's most comprehensive price and economics discovery, near-term analysis and forecasts of global chemical markets. Through continual, personal contact with key industry sources, our research experts gather and analyze the salient data, which they then translate into valuable insights and forecasting advice.

Clients receive the near-term outlook for major upstream and downstream market conditions and behavior fundamentals, including prices, costs, and/ or margins, supply/demand, and trade flows. In addition to a detailed analysis of the market data, the experts review the cause-effect of the behaviors, explaining not only what is occurring but why it is occurring as well as the forecast and logical basis of the future behavior of the market.

Over 30 product-specific services and industry experienced consultants in the major regions of the world provide objective, quantitatively rigorous, independent perspectives on the market. Benefits include client access to our weekly updated pricing and economics database, including forecasts, and to our research experts for market advice directly related to the respective service.

Who uses this service?

Producers, Consumers, Traders, Logistics companies, End-users, and Financial entities depend on our Market Advisory Services to obtain accurate and unbiased near-term intelligence on the world's major chemical markets. Personas using the services include, Procurement, Sales & Marketing, strategic planners, product managers, business leaders, financial analysts.

Program Scope

The Market Advisory Services provide accurate current near-term market data and analysis for five basic chemical families. Depending on content and client needs, the services distribute daily, weekly, bi-weekly or monthly reports and/ or data supplements.

Report Contents

- Market prices, costs, and/ or margins (historical, current, forecast)
- Extensive expert commentary on prices, margins, trade, market conditions, operational issues and future trends impacting markets
- Quarterly supply/demand balances and trade flows

Inquiry & Consulting Privileges

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

Market Advisory Services

Chemical Market Advisory Services offer monthly and weekly services. For products that are more actively traded, we have daily services. Together, they cover five basic chemical families.

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

Features	Time Horizon	Format	Emphasis	Buyer Benefits	Producer & Seller Benefits	Financial Client Benefits
Capacity Additions & Closures by Producer & Location	1990-2031	Excel spreadsheet	Secondary	Supply Opportunity	Threat Assessment	Threat Assessment
Capacity by Producer & Locations	2017-2050	Excel spreadsheet	Primary	Alternate Source Opportunity, Supplier Selection	SWOT Analysis	Supply / Demand Analysis
Demand by Country & Region	2017-2050	Excel spreadsheet	Primary		Sales Strategy, Market Share Assessment	Revenue Projections
Demand by Market Segment for Each Country	2005-2050	Excel spreadsheet	Primary		Marketing Strategy, Resource Planning	Revenue Projections, SWOT Analysis
Imports & Exports by Country & Region	2005-2050	Excel spreadsheet	Secondary	Strategic Supply Planning	Competitive Planning	Threat Assessment
Online dashboard providing visualization of capacity, supply/ demand and trade forecasts		Online	Primary	Personalized Analysis	Personalized Analysis	Personalized Analysis
Operating Rates by Country	2005-2050	Excel spreadsheet	Primary	Price Negotiation Leverage Assessment, Price Leverage Inflections	Price Negotiation Leverage Assessment, Price Leverage Inflections	Margin Assessment
Supply by Country & Region	2005-2050	Excel spreadsheet	Secondary	Anticipate Shortages & Abundance		
Supply-Demand Balance	2005-2050	Excel spreadsheet	Primary	Pricing Leverage Assessment	CAPEX Decisions	Margin & Cash Flow Projections
Tools for Online Data Drilldown	Data Drilldown	Online	Primary	Data Visualization by Personalized Criteria	Data Visualization by Personalized Criteria	Data Visualization by Personalized Criteria

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Explanatory Notes detailing data sources, methodologies, unit and conversion factors, and World Analysis deliverables

Product Features



Capacity Database

- Frequency: updated daily
- Time Frame: 10-year forecasts (available from periods 1990-2033)
- Nameplate capacity on individual plant locations by producer and by shareholder for main study products
- Top producer and consumer ranking tables (includes net surplus/deficit)



Price & Cost Forecasts

- Frequency: quarterly
- Timeframe: up to 2050
- Forecasts for the US, Europe and Asia with qualitative sensitivities



Trade Grids

- Frequency: Bi-annual
- Timeframe: 1 year of history, up to 10 years of forecast
- Between partner countries and by region



Supply/Demand Balances

- Frequency: Bi-annual
- Timeframe: 2005 2050
- By country/region: include "hypothetical" capacity changes in the forecast period



Additional Features

- Access to our global team of subject matter experts
- Interactive data visualization module (dashboard)
- Standard supply/demand graphs



Report With Strategic Insights and Executive Overview

- Frequency: Annual
- **Timeframe**: 5-year history, forecast to 2050
- Regional market summaries:
 Production economics/snapshots
 for selected regions/processes.
 Production process/technology
 overview

Benefits

- Maximize negotiating leverage with forward-looking country-specific supply-demand data.
- Develop a winning strategy based on growth projections of market segments worldwide.
- Gain clarity evaluating investment opportunities and analyzing market leadership out to 2050.
- Mitigate risk with data about emerging international trade flows.

Aromatics and Fibers Strategic Insights



Sustainability

Although more pressing crises are focusing attention for aromatics producers, sustainability remains a key objective to avoid plastic recycling taxes and anticipated future emissions charges.

Development work is progressing in the polyester, styrenics, polyurethane and nylon chains, as well as other areas. Long term this will impact virgin demand for intermediate products or feedstocks



Mainland China growth

The covid pandemic has softened demand growth in the largest petrochemical market in the world which represents an important outlet for many aromatics producers, but this has created uncertainty about future growth and the consequent utilization of aromatics quality



Mainland China self-sufficiency

Mainland China has undergone a period of rapid capacity expansion in aromatics over recent years, moving the country significantly closer to self-sufficiency for benzene, styrene, phenol and paraxylene, which will reduce imports from other locations by half or more over the next five years



Crude to chemicals capacity investments

Also located in mainland China have been new integrated refinery petrochemical sites with a high yield of naphtha and reduced fuels production. These sites continue to be constructed and represent low-cost production capacity relative to other units across Asia



Refinery rationalization

Refinery rationalizations are expected to threaten aromatics feedstock availability in the long term and this has been evident in the summer of 2022 through the sudden tightness in octane boosters such as mixed xylenes and toluene, increasing costs for downstream aromatics derivatives



Carbon emission allowance

The launch of a CEA (carbon emission allowance) scheme for petrochemicals is anticipated over the next 4-5 year period in mainland China, changing cost structures of aromatic producers

How can this service help you

Strategic Planning	Purchasing	Selling & Marketing	Business Management	Financial Analysis	Engineering and R&D
Deliver a credible business strategy	Source chemical raw materials	Identify the right selling opportunities	Determine realistic targets and budgets	Complete accurate and timely competitor analysis	Benchmark chemical process competitiveness
Validate - investment plans	Negotiate effective supply contracts	Negotiate more profitable contracts	Identify growth opportunities	Evaluate success of projects & business units	Select process technology for new plants
Identify market opportunities and risks	Optimize supplier portfolio	Optimize your customer and product portfolio	Optimize pricing strategies	Provide confident evaluations of future investments	Diminish the risk of your capital investment plans
Access the competitive landscape	Make informed buying decisions	Cultivate better customer relationships	Build value- based commercial strategies	Understand the best method to deploy capital	Estimate capital costs



Meet the Aromatics & Fibers Global Team



Duncan Clark Global Aromatics & Fibers Team Lead



Ashish Pujari

Asia Aromatics

Global Polyurethane Feedstocks

Polyester Fibers & **Feedstocks**

Polyester Stream



Alan Lu

China Aromatics & Fibers Lead



David Potter EMEA Benzene, Pygas



Peter Feng Americas Styrenics





Marcelo Wasem Americas Purified Terephthalic Acid Polyethylene Terephthalate



Meiko Woo Global Nylon Fibers & Feedstocks



Roberto Ribeiro Global Ethylene Oxide & Ethylene Glycol



Prem Chitkara EMEA Polyester & EOEG



Tobias Spyra EMEA Styrenics & Polyurethane Feedstocks



See Yan Wong Polyurethane Feedstock



Phil Smee North America Polyurethane



Megan Brenchley Aromatics & Fibres



James Nicholson America Benzene, Pygas, Reformate



Wei Ding Asia PTA, Polyester



Brian Lee Asia Benzene, Styrene



Matthew Hamilton Aromatics & Fibres



Anthony Tso Asia Aromatics



Steven English Europe Acetone



Terence Peh Asia Aromatics

About Chemical Market Analytics by OPIS, a Dow Jones Company

provides stakeholders in the global chemical industry with nextgeneration analytics, deep insights, future outlooks and price

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

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