



The **Markets and Profitability** program provides accurate data, insightful analysis and dependable forecasts of the profitability, competitive position and supply/demand trends for over 60 petroleum, gas, petrochemical, polymers, chemical intermediates and fertilizer products.

Data Analytics and Insights for
a Sustainable Future

ContactUs@NexantECA.com



The **Markets and Profitability** program tracks over 60 feedstocks, gas, petrochemicals, polymers, chemical intermediates and fertilizers on an ongoing basis and provides regularly updated reports covering all commercial aspects of these global industries.

Markets

Market analysis is available through two report series:

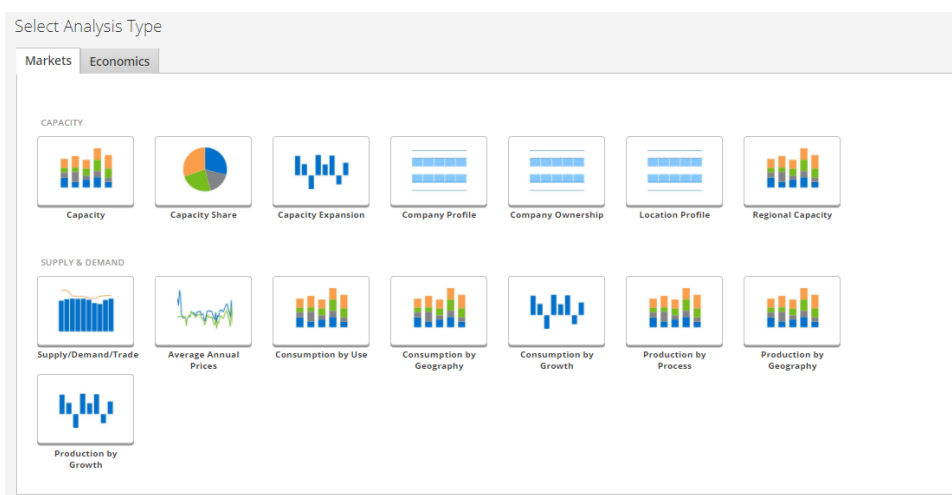
Market Analytics

These detailed reports provide long term market forecasts to 2045 using NexantECA's industry recognised Petrochemical Simulator. These reports identify the key issues shaping the industry, providing invaluable support for strategic decision making and business planning.

Analysis is segmented into three principle areas:

- **Consumption:** Assesses historic and forecast consumption; forecasts are based on projections of economic activity and diverse end use applications across key consuming industry sectors.
- **Supply:** Identifies all producers, the capacity, location, and process of all current production assets, along with discussion regarding the status of new projects and capacity under construction.
- **Supply, Demand and Trade:** Provides historical analysis and forecasts to 2045 of consumption, production, imports/exports, inventory build-up/decline, capacity and capacity utilisation. The analysis provides a key insight into the relative strength of regional markets.

NexantECA's Online Database provides a quick and easy way to access data from 2000 to 2045, with all results downloadable into Excel:



Capacity

- Analysis is updated monthly

Supply & Demand

- Analysis is updated annually on publication of the Market Analytics report

Market Insights

These new reports provide a comprehensive review of global industries focused by product and include:

- Discussion regarding key market drivers and constraints for each region, including: regulatory, environmental, consumer and technology trends
- Supply, demand trade for nine regions: North America, South America, Western Europe, Central Europe, Eastern Europe, Middle East, Africa, Asia Pacific, and China
- Competitiveness analysis, including competitive landscape, who's who of suppliers and cost competitiveness
- Pricing snapshot for publication year with commentary regarding latest trends
- Forecast period: 5 years history and 15 years forecast



Profitability

Profitability analysis is available for each key price setting region (Asia Pacific, Middle East, Western Europe and the United States) and presented in two report series

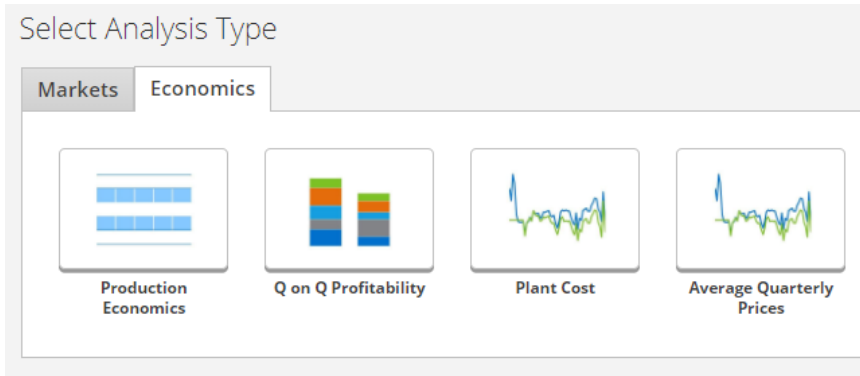
Historic Profitability Analysis

The Quarterly Business Analysis reports provide a key insight into production economics for a broad range of commodity petrochemicals. The analysis presents a review of costs, prices and margins for typical production assets, providing a valuable view of regional and value chain competitiveness. A quarterly report provides insightful commentary to illustrate current trends, related to recent market developments. The accompanying database is updated monthly.

Profitability (and Price) Forecast Analysis

Profitability Forecast Analysis provide long-term profitability and price projections to 2045 for the major price setting regions under three distinct crude oil scenarios. NexantECA's robust price forecasting methodology consolidates the many price influences in petrochemical markets. The methodology has been enhanced over 40 years of industry observations and associated price sets are used extensively to support investment decisions in capital intensive assets with a long production life cycle.

NexantECA's Online Database provides a quick and easy way to access data from 2000 to 2045, with all results downloadable into Excel:



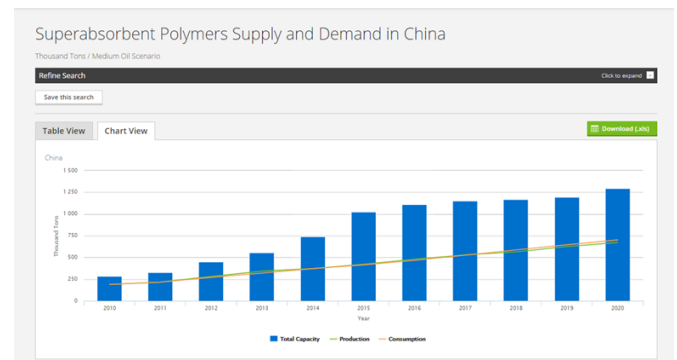
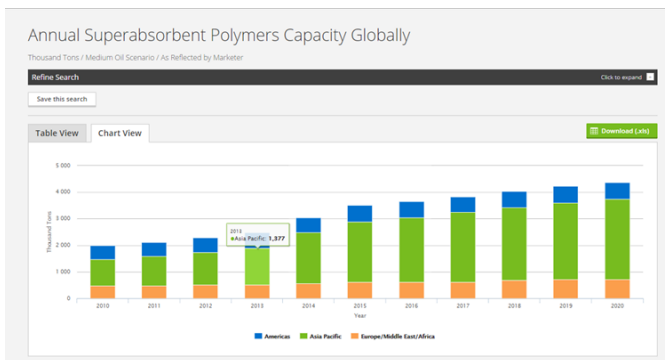
Production Economics

- Models are reviewed annually and pricing data is updated monthly to generate a quarterly average
- Report includes Total Cash Cost and Margin Analysis

Average Quarterly Prices

- Historic prices are updated monthly to generate the quarterly average
- Forecast prices are updated annually

Sample Charts





Product Scope

Petrochemical Feedstocks and Refined Products

Naphtha
Gasoline
Gas Oil
Residual Fuel Oil
LPG
Natural Gas
iso-Butane
n-Butane
Raffinate-1
Raffinate-2
Raffinate-3
Butane
Crude Oil – Dubai
Crude Oil – WTI
Diesel
Ethane
Fuel Oil
Fuel Oil – High Sulfur
Fuel Oil – Low Sulfur
iso-Butylene
Kerosene
Premium Gasoline
Regular Unleaded Gasoline
Propane
Refinery Propylene

Petrochemicals and Polymers

OLEFINS

Ethylene
Propylene
Butadiene
Mixed C₄s

ALPHA OLEFINS

1-Butene
1-Hexene
1-Octene
Higher Alpha Olefins

AROMATICS

Reformate
Pygas
Benzene
Toluene
Mixed Xylenes
Cyclohexane
Ethylbenzene

POLYOLEFINS

Low Density Polyethylene (LDPE)
Linear Low Density Polyethylene (LLDPE)
High Density Polyethylene (HDPE)
Polypropylene

BUTADIENE DERIVATIVES

Acrylonitrile Butadiene Styrene
Styrene Butadiene Rubber
Butadiene Rubber

PROPYLENE DERIVATIVES

Acrylic Acid
Super Absorbent Polymers
Acrylonitrile
Cumene
Phenol
Acetone
Bisphenol-A
Polycarbonate
Propylene Oxide
2-Ethylhexanol
n-Butanol
i-Butanol
Ethylene Propylene Diene Monomer

POLYESTER INTERMEDIATES

para-Xylene
ortho-Xylene
Ethylene Oxide
Mono-Ethylene Glycol
Purified Terephthalic Acid
Polyethylene Terephthalate

STYRENICS

Styrene
Polystyrene
Expandable Polystyrene

POLYURETHANE INTERMEDIATES

Aniline
Methylene Diphenyl Diisocyanate
Nitrobenzene
Toluene Diphenyl Diisocyanate

VINYLS

Chlor-Alkali
Vinyl Chloride Monomer
Polyvinyl Chloride

C1 Chemicals and Fertilizers

METHANOL AND DERIVATIVES

Acetic Acid
Formaldehyde
Methanol
Methyl Tertiary Butyl Ether

FERTILIZERS

Ammonia
Urea

Note: Markets and Profitability coverage varies by Product



Geographic Scope

Markets

Asia Pacific

Australia
China
India
Indonesia
Japan
Malaysia
New Zealand
Philippines
Singapore
South Korea
Taiwan
Thailand
Vietnam
Other Asia

Middle East

Iran
Iraq
Israel
Kuwait
Qatar
Saudi Arabia
Turkey
United Arab Emirates
Other Middle East

Africa

Algeria
Egypt
Libya
Nigeria
South Africa
Other Africa

North America

Canada
Mexico
United States

South America

Argentina
Brazil
Venezuela
Other South America
Central America and Caribbean

Western Europe

Central Europe

Eastern Europe

Russia
Other Eastern Europe

Profitability

China
Middle East
South East Asia
United States
Western Europe

Why Subscribe?

Our Market and Profitability reports and Online Database will help subscribers to:

- Understand changing industry dynamics throughout value chains regarding supply, demand, profitability and pricing
- Evaluate market opportunities and challenges with long term forecasts to 2045
- Support planning and development of long term business strategies

Subscription to Markets and Profitability includes:

- PDF reports including analysis and forecasts of the profitability, competitive position and supply/demand trends of global petroleum and petrochemical industry
- Access to the Online Database containing:
 - Up-to-date supply, demand and trade forecasts for over 60 products
 - Global capacity listings including process information and forecasts
 - Cost-of-production for over 50 chemicals and polymers (with over 500 models)
 - Pricing forecasts by key price setting region
- Support from our industry experts
- Subscriptions can be tailored, by region, product, or analysis, to meet your needs. Individual reports can also be purchased.



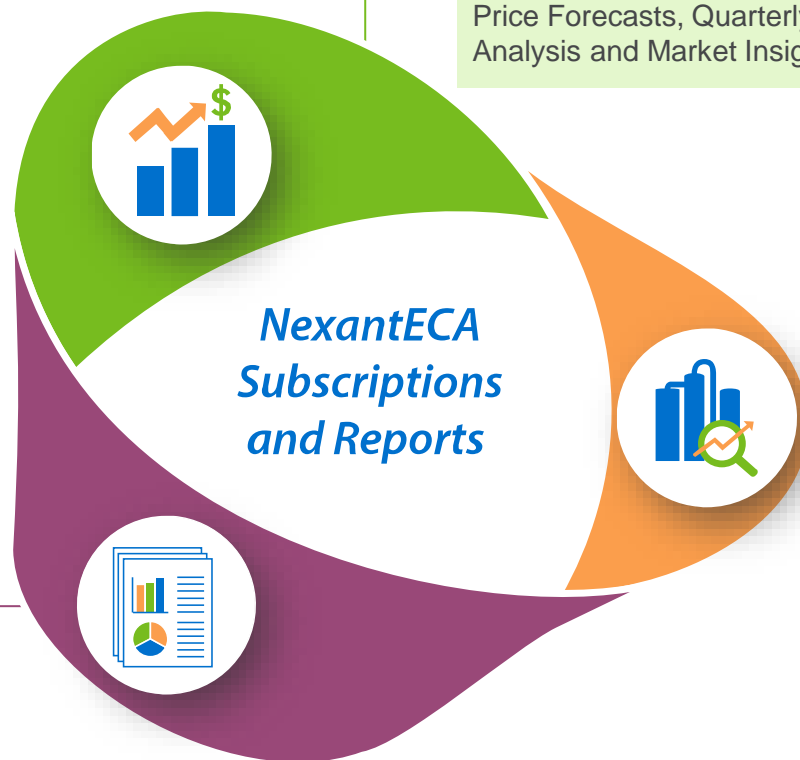
NexantECA Subscriptions and Reports provide clients with comprehensive analytics, forecasts and insights for the chemicals, polymers, energy and cleantech industries. Using a combination of business and technical expertise, with deep and broad understanding of markets, technologies and economics, NexantECA provides solutions that our clients have relied upon for over 50 years.

Special Reports

The **Special Reports** analyse issues of topical importance to the energy and chemicals industry. Each special report explores the subject matter in detail to provide an up-to-date and thorough understanding of the related issue allowing investment decisions and new business strategy to be formulated.

Markets and Profitability

The **Markets and Profitability** program provides accurate data, insightful analysis and dependable forecasts of the profitability, competitive position and supply/demand trends for over 60 petroleum, gas, petrochemical, polymers, chemical intermediates and fertilizer products. The Markets and Profitability program include Market Analytics, Profitability and Price Forecasts, Quarterly Business Analysis and Market Insights.



Technology and Costs

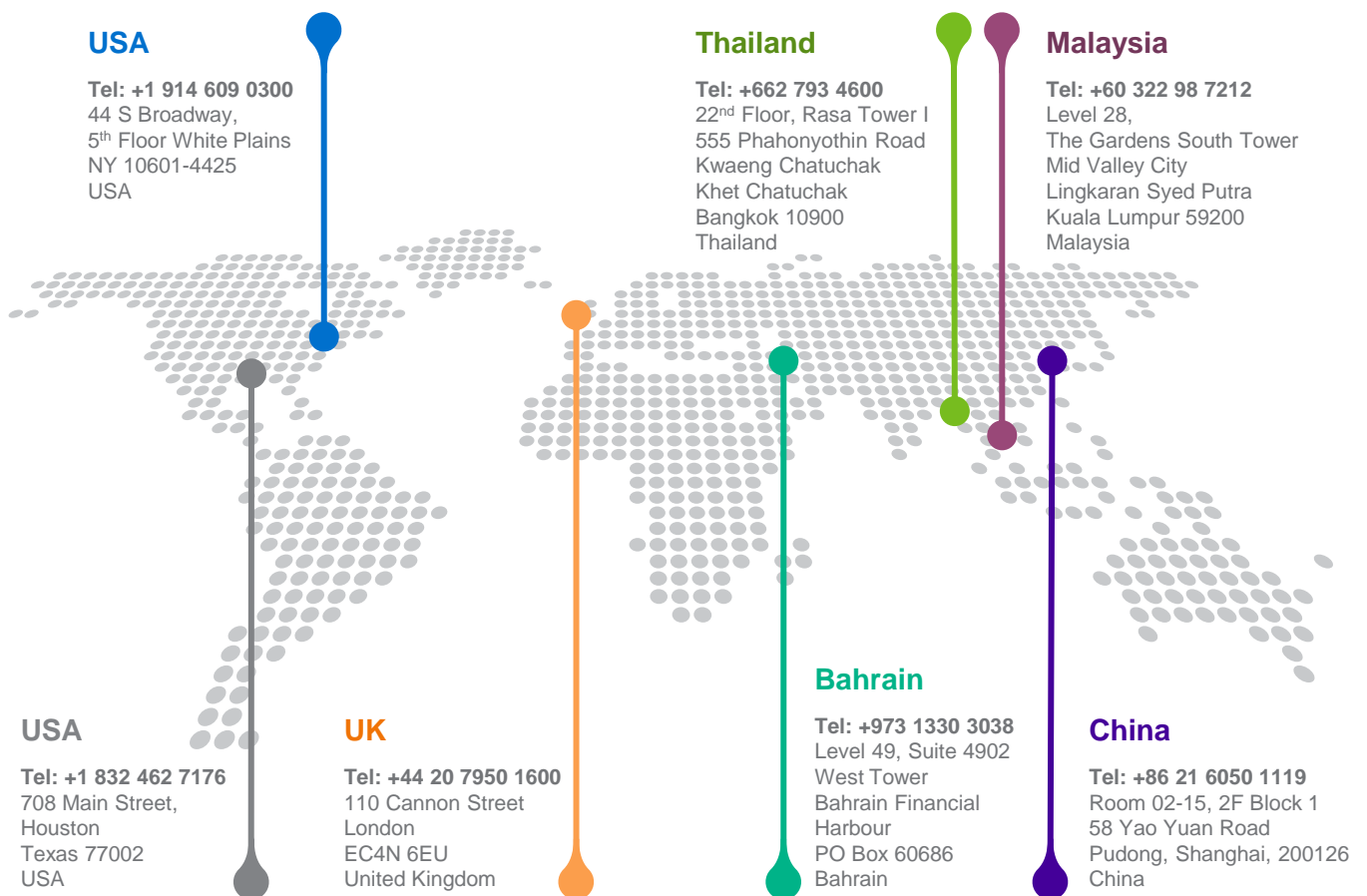
The **Technology and Costs** programs examine the impact of new, emerging and improved industrial technologies on the comparative economics of different process routes in various geographic regions, as well as the cost competitiveness of individual production plants.

The Technology and Costs programs include:

- Technoeconomics – Energy and Chemicals (TECH)
- Biorenewable Insights (BI)
- Cost Curves.



NexantECA partners with clients to help them navigate the big global energy, chemicals and materials issues of tomorrow. We provide independent advice through our consulting, subscriptions and reports, and training businesses using expertise developed in markets, economics and technology through our fifty years of operation. We are entirely dedicated to supporting sustainable development of the industry and provide expert advice with efficiency, speed, and agility.



Disclaimer

This Report was prepared by NexantECA, the Energy and Chemicals Advisory company. Except where specifically stated otherwise in this Report, the information contained here is prepared on the basis of information that is publicly available, and contains no confidential third party technical information to the best knowledge of NexantECA. Aforesaid information has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility. Neither NexantECA, Client nor any person acting on behalf of either assumes any liabilities with respect to the use of or for damages resulting from the use of any information contained in this Report. NexantECA does not represent or warrant that any assumed conditions will come to pass.