



Insight into a changing competitive environment



The Converging World – Every Decision Matters

Competitive Cost and Margin Analytics leverages in-depth, independent technical and economic evaluations of commercial technologies for the chemical industries with a comprehensive view on chemical production costs and margins, utilizing IHS Markit global expertise and comprehensive databases.

Saving You Time, Cost and Effort

If your analytical work hours were better leveraged, what else could you get done?

We understand the importance of making timely decisions. When working on strategic initiatives such as your strategy refresh, too much time spent collecting data and information from several sources can negatively impact your efficiency. With CCMA, you can begin your working day with exactly the data you need.

Instantly access:

- Detailed Capacity Database & Supply/Demand Balances
- Process Economics Program (PEP) & Downstream Capital Cost Service (DCCS)

CCMA Decision Support

Operational

- Price setting
- Regional price stability
- Export opportunities
- Import threats
- Purchasing tactics
- Validation of internal models

Strategic

- Impact of new capacity
- Impact of new technology
- Capital project support
- Sales management strategy
- Purchasing strategy
- Long Term Price Forecasts: Energy & Chemical
- Technology & Feedstocks By Plant
- Integrated Economics Across Value Chains

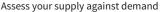
Add to the rewards of margin improvement

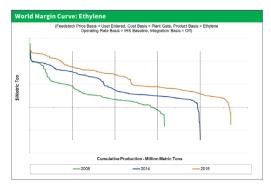
Building your own cost curves is not only a time consuming but costly initiative. CCMA helps you to better manage the capital costs associated with formulating various production scenarios. Our models utilize detailed information on current and expected production facilities globally, for a deeper, consistent insight into the changing market dynamics.

How confident are you about mitigating risk within your product portfolio?

Validating your assumptions is important. CCMA has reliable data which is used by a significant number of the largest financial institutions in the chemical industry. It is a flexible tool with integrated and non-integrated curves which removes the hassle of having to reconcile varying data from disparate sources, whilst allowing you to easily understand the cost drivers and supply/demand of a specific chemical, including how macroeconomic trends will impact cost, supply and demand.







Assess profitability with margins by curve

Key Functionalities

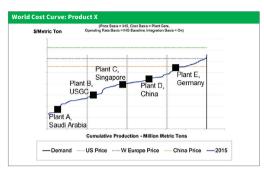
Individual Plant Identification – Insight Into Each Unit's Global Competitiveness

The CCMA model includes identification of individual producer pro-forma plant costs and margin positions along the global cost curve.

Total cost of production is identified.

For Plant Identification:

- Price setting
- Regional price stability
- Export opportunities
- Import threats
- Purchasing tactics
- Validation of internal models



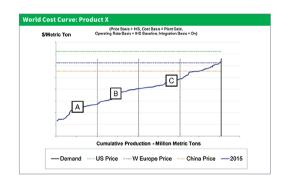
Benchmark competitiveness of each asset globally

Fully Customizable Plant Economic Snapshots

The CCMA model includes the option to estimate economics for a customizable hypothetical plant or real plant economic inputs, and overlay the plant's position on the global cost & margin curves to compare with real currently operating units.

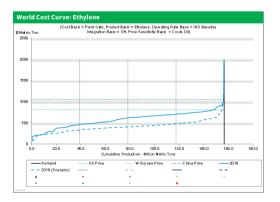
For Hypothetical Plants, view:

- Detailed cost breakdowns using any commercially operating technology
- Cost estimates comparisons of up to three hypothetical plants simultaneously
- IHS Markit economics or customized yield and price sets based on user scenarios



Oil Price Scenarios

ccmA includes an integrated econometric model that adjusts all feedstock, intermediates, co-products, product prices and utility costs for an input oil price for modeling the changes in industry dynamics due to oil price changes.





CCMA - Products Covered

Available Now Coming Soon* Paraxylene Expandable Polystyrene Acetic Acid PET Acrylic Acid **HMDA** Acrylonitrile Phenol Caprolactam Ammonia Polybutadiene Rubber Adipic Acid Benzene Polyethylene (HDPE, LDPE, LLDPE) Polycarbonate Butadiene Polypropylene Butanediol Polystyrene Chlor-Alkali Polyvinyl Chloride Cumene Propylene Dimethyl Ether Propvlene Oxide Ethylene Soda Ash Ethylene Dichloride Styrene Ethylene Oxide, High-Purity Terephthalic Acid Formaldehyde Styrene-Butadiene Rubber Methanol Toluene Methyl Methacrylate Urea Mixed Xylenes Vinyl Acetate Monomer Monoethylene Glycol Vinyl Chloride Monomer Nylon 6 & Nylon 6,6

We currently we have 24 product models covering over 6,000 plants.

For products of interest not listed above, please contact us about custom requests.

For a list of all products covered go to www.ihs.com/newccma www.ihs.com/chemical

For more information www.ihsmarkit.com

AMERICAS

- **T** +1 800 447 2273
- E ChemicalSalesAmericas@ihsmarkit.com

EUROPE, MIDDLE EAST, AFRICA

- T +44 1344 328 300
- **E** ChemicalSalesEMEA@ihsmarkit.com

ASIA PACIFIC

- T +604 291 3600
- E ChemicalSalesAPAC@ihsmarkit.com

About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.