

Business Advisory Services Representative Studies

CMAI's Business Advisory Services provides leading-edge solutions to the difficult problems facing clients operating in the extremely competitive and complex chemical industry. Our talented industry veterans collaborate with our clients leveraging CMAI's unparalleled industry knowledge, rigorous proprietary analytical techniques, and years of hands-on experience. Whenever you need reliable market analysis, robust strategic portfolio direction, legal or transaction support, think of CMAI as your trusted partner.

CMAI's Business Advisory Services; Deep Insights, Expertly Applied

▪ **Strategy - Corporate, Business Unit & Functional Strategies**

North American Polyolefin Market Entry Strategy – A major North American resin supplier engaged CMAI to develop a polyolefin market entry strategy capitalizing on shifting global trade patterns. CMAI developed an analysis of the global and regional polyolefin markets to determine the viability of overseas supply to the North American market. The market analysis included the supply, demand, and margin environment; detailed market segmentation; and the market opportunity for imported resins. A global cost analysis was developed to determine the cost competitiveness of potential polyolefin suppliers. This project also included a detailed analysis of the polyolefin value chain in North America. Key players and prevalent business models were identified with an emphasis on resin producers, plastics converters and distributors. Buying behavior and buyer decision criteria were determined for each end use market segment. Market entry options were determined, including addressable market segments and supplier requirements.

Packaging Resin Market Assessment, Competitive Positioning and Strategic Options – CMAI was engaged by a North American packaging resin producer to develop strategic options for maximizing shareholder value. Key options under consideration were continuation as a standalone company and potential M&A options for enhancing shareholder value. Project analysis included a competitive cost analysis for the North American packaging resin industry, including overseas suppliers to the market. CMAI also developed a detailed analysis of the packaging resin value chain in North America. Key players along the value chain were identified and profiled. Prevalent business models were defined. The packaging resin market was also segmented by major end uses. Market growth, industry trends, and competitor positions in each end use market were determined. Competitive positions were determined based on a combination of buyer behavior-oriented bases of competition as well competitive cost position and business portfolio considerations. Based on the packaging resin industry analysis, a competitive map for the North American packaging resin market was developed. Potential industry evolution along alternative paths was identified as well as the implications for shareholder maximization options.

Petrochemical Strategy Development – CMAI was retained by a large Middle East company to develop its initial entrée into the global petrochemicals business. Using proprietary planning and strategy techniques, CMAI presented a road map for development of the company's petrochemical business including developing and assessing strategic options and partner identification, financial analysis, financing plan support, information memorandum preparation support as well as organizational structure and processes alignment.

Competitive Business Model Benchmarking – CMAI was retained by an Asian client establishing a new sales company to market petrochemicals. CMAI performed an evaluation of competitor's business models for benchmarking purposes. CMAI focused on the collection of information around competitor's business models for polyolefins globally, but specifically within Asia and Europe, providing synthesis and application of this information for benchmarking purposes. The final results allowed for a rapid comparison between companies and discussion on customer perception of the strengths and weaknesses of the various approaches to sales.

▪ **Transaction - M&A, Due Diligence, Asset Valuations, Project Economics, Technical Analysis**

Independent Engineer – CMAI was retained by the Lead Arranger to act as Independent Engineer for a chlorine, caustic and calcium chloride facility in South America. CMAI performed technical due diligence to include reviews of project design, construction and operating plans, completion tests and guarantees, along with project operations and maintenance. CMAI visited the site to assess suitability and reviewed all project agreements as well as the status of project permits and licenses. Client provided project proforma and capital costs were assessed to confirm reasonableness of assumptions and accuracy of results. Project compliance was confirmed from an environmental and social standing. Phase 1 to be followed by monthly construction, performance and operations monitoring.

South Korea Petrochemical/Fiber Company Restructuring – CMAI was retained to advise a major Korean Bank on restructuring options with the objective of improving the economic performance of a non-performing loan that

had gone into receivership. CMAI advised the company on the expected future performance of aromatic and related businesses, the perspectives on the relative competitiveness of the company, and divestment options. CMAI provided petrochemical market analysis, competitive intelligence and petrochemical industry best practices.

Financial Due Diligence for Bankruptcy – CMAI was retained by a financial institution in its evaluation of a petrochemical company's assets for the purpose of valuing its business for bankruptcy. After completing technical and commercial due diligence, CMAI evaluated future cash flow potential for various restructuring options. CMAI's consultants served as independent advisors to the bank throughout the bankruptcy proceedings.

▪ **Legal – Litigation Strategy, Expert Analysis, Reports, Testimony, Damage Assessment**

Bankruptcy/Restructuring Support – CMAI was retained by the Unsecured Creditor's Committee (UCC) of a large petrochemical/refining company. As part of the engagement, CMAI developed detailed valuation models to forecast the current financial outlook of the business. CMAI also developed a forward outlook of financial performance of the entity from the date of the merger, in support of a fraudulent conveyance claim by the UCC. The team submitted expert reports and provided oral testimony.

Market and Technical Expert for a Nitrogen Fertilizer Plant Dispute – This work included detailed analysis and submission of expert and rebuttal reports concerning the technical viability, marketability and profitability of a Nitrogen Fertilizer (i.e., ammonia, nitric acid, and ammonium nitrate) facility in East Europe. This matter was adjourned successfully prior to arbitration.

Consulting Expert on the Breakup of Two Mega Chemical Company Mergers – A CMAI team of consultants focused on providing market, technical and commercial forecasts for a client attempting to avoid the breakup fees of two aborted merger agreements. Consulting expertise included assessments of the major business segments of the acquisition targets, their competitive positions in the market and the current state of their businesses. This work also included locating, prepping and assisting industry specialists for coverage of specialty business segments not normally tracked by CMAI including expert report generation.

Market Expert Support for Contract Dispute – CMAI was retained by a law firm and worked closely with a certified public accountant to determine the fair market value of a commercial contract. CMAI provided market expertise and commercial review of the contracts and court documents to support the fair market value determination. CMAI prepared expert reports and provided expert testimony during court proceedings.

▪ **Commercial - Planning Support, Market & Competitive Analysis, Benchmarking, Feasibility**

Cost Competitiveness Benchmarking for LAB and n-Paraffins – CMAI was retained by a company that successfully achieved start-up of commercial operations of a n-Paraffin and Linear Alkyl Benzene (LAB) plant. With 100 percent utilization levels, the client wanted to assess its position versus major competitors in its target markets and identify new market opportunities under the changed market conditions. CMAI performed a cost competitive benchmarking evaluation as well as a market update. CMAI evaluated cash costs and full costs based on each LAB producer's regional economics, integrated or non-integrated position and scale, with focus on the impact of feedstock cost. The study included analysis of the impact of GTL paraffins on the cost structure of LAB.

North American Ethylene and Derivatives Industry Analysis – CMAI was retained to conduct a North American industry analysis centered on the long-term evolution of the ethylene industry. An ethylene cost curve and scenario analysis was performed to assess the competitive position of individual producers' plants and provide an indication of where production costs are advantaged and disadvantaged under various economic and energy scenarios. The study included apparent portfolio strategies of the major producers of Ethylene Glycol (MEG), Ethylene Oxide (EO) and EO derivatives i.e. MEG, Ethanolamines, Glycol Ethers, and Surfactants. A summary of the apparent strategies of the North American EO, MEG and other EO Derivatives was offered as well as a qualitative assessment of the potential costs and benefits of selecting one strategy over another.

Advisory on Polymer Sourcing – CMAI was engaged to provide advice concerning a client's polymer sourcing for its China operations. Our in-house Chinese polyolefins experts worked closely with the client to assess the client's polymer requirements as well as its current polymer sourcing program. This study involved a price benchmarking exercise to assess the client's current spot pricing practice and to recommend an appropriate alternative purchasing strategy and new regional supply sources as well as recommendations for a more effective regional purchasing team structure.

Methanol Feasibility Study - CMAI was engaged to review the feasibility of a proposed new methanol facility in the Commonwealth of Independent States. The review included supply and demand outlook, marketing plan, netback pricing, cost competitiveness and cash flow modeling. As part of this assignment, CMAI participated in meetings with Lenders in an advisory capacity.