

NEW IAL GLOBAL MARKET REPORT

OPPORTUNITIES IN THE GLOBAL PROPYLENE OXIDE MARKET

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IAL Consultants, the leading supplier of market and competitor intelligence information to the Global Polyurethanes Industry, has prepared the most detailed commercial analysis of **Propylene Oxide (PO)** and its derivatives since the global recession. The study is now available and includes coverage of the industry's recovery in 2010. No other published study covers the PO industry in this type of detail, covering world supply and demand and production cost economics. The report comprises 310 pages and covers the period 2007 to 2020, including capacity and future projects.

The study focuses on new technology, investments and process cost reductions since the major expansions of the key PO players in 2004, on the 2010 recovery and on recent developments in the PO derivatives markets including poly ether polyols, propylene glycol ethers and propylene glycol. These key derivatives represent the engine for future growth of PO. The methodology for the new report is based on in-depth market analysis, competitor intelligence techniques and develops IAL's process benchmarking work completed by ex-industry operational and senior management, as well as skilled intelligence professionals in IAL's worldwide network.

This study supplies insight into the supply, demand and commercial drivers in the markets in 2010 for PO derivatives, including: polyester polyols used in various polyurethane formulations; propylene glycol used in resins, paints/coatings, personal care, heat transfer fluids and runway de-icers; butandiol (BDO); glycol ethers, as used in a variety of coatings and functional fluids and in propoxylated products including speciality surfactants. These are areas where the background of IAL's team with over 40 years of expertise in researching speciality chemicals, coatings and performance products has enabled a comprehensive analysis of the market opportunities.

The PO technology and CAPEX position has altered considerably since the start-up of large POSM (propylene oxide /styrene monomer) and hydrogen peroxide based technology investment in the past decade. Co-product technologies still dominate the business and this report discusses strategies given the overcapacity in the market. Management issues with co-product credits or marketing other monomers or refinery raw materials are reviewed.

The report is examines the value chain such that PO customers may find the best supply strategies in an ever increasing technological and investment driven industry. IAL see this report as first step in developing a supply chain strategy for a vital raw material input and for clients examining negotiation and sourcing policies based on realistic costs and demand drivers.

Coverage

The PO industry has suffered from the global economic downturn and the volatile markets for propylene and styrene but is now poised to recover. This report is world-wide in scope and is designed to cover the established markets and the growing Latin American, Asian and Middle East demand for PO derivatives, as well as showing cost curves for world PO production technologies on world scale plants, many with different philosophies of CAPEX allocation and the treatment of outside battery limits (OSBL) investments. The cost of production of the competing technologies is compared with other marketing, construction and feedstock supply issues, such as the problems of propylene in 2010.

The direct experience of recent highly complex site integration projects, including concepts for disposing of co-production TBA and styrene and sourcing of propylene is reviewed.

IAL draws on its recent fieldwork on markets for PU products, including an explanation of recent market developments and comments on activities during the recent recession. Our research provides inputs on the major interest the non co-product routes and in smaller scale PO-based technologies designed to support PU growth in emerging regions such as the Middle East.

Process Technology

IAL Consultants has been covering the PU market chain since 1989 and employs skilled market intelligence professionals, some of whom who have built or operated PO and derivative plants, as well as a number of industry experts in related upstream and downstream markets.

Process costs are shown and because of IAL's benchmarking experience, less reliance was placed on patent information and feedstock indexation models and more on experience of plant construction valorisation. Process cost curves for typical world class plants are supplied, as well as the potential for integration in other sites. The study concentrates on the total cost of technology to supply a market.

Strategy

PO investment and market strategies vary according to the market participants. There are those who see the investment driver as PO, whilst others see the PO co-products as the basis for other investments in developing markets. IAL discusses how such strategies developed and the position of various producers, such as BASF, Dow, Lyondell/Bayer, Huntsman, Repsol, Rokita, Sumitomo, SKC, Shell and others.

The styrene producers also have a keen interest in POSM technology, as POSM plants now supply 22% of the world market. A discretionary scoping service (up to one hour per subscriber) for developing a sourcing policy consultancy, as a follow up to the study and a similar follow up study on price evaluation scoping is included for the subscribers to this report; in which IAL will evaluate client needs and present possible services to meet challenges, using our technical team of PO, BDO and PU experts and assisted by the marketing teams in PU, personal care and coatings.

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