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Report Abstract

Petrochemical Market Dynamics Polyester Intermediates

Polyester Intermediates industry overview, Markets, Supply/Demand, Plant Developments, Global trade patterns

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Petrochemical Market Dynamics: Polyester Intermediates

POLYESTER SHOWS RAPID RECOVERY

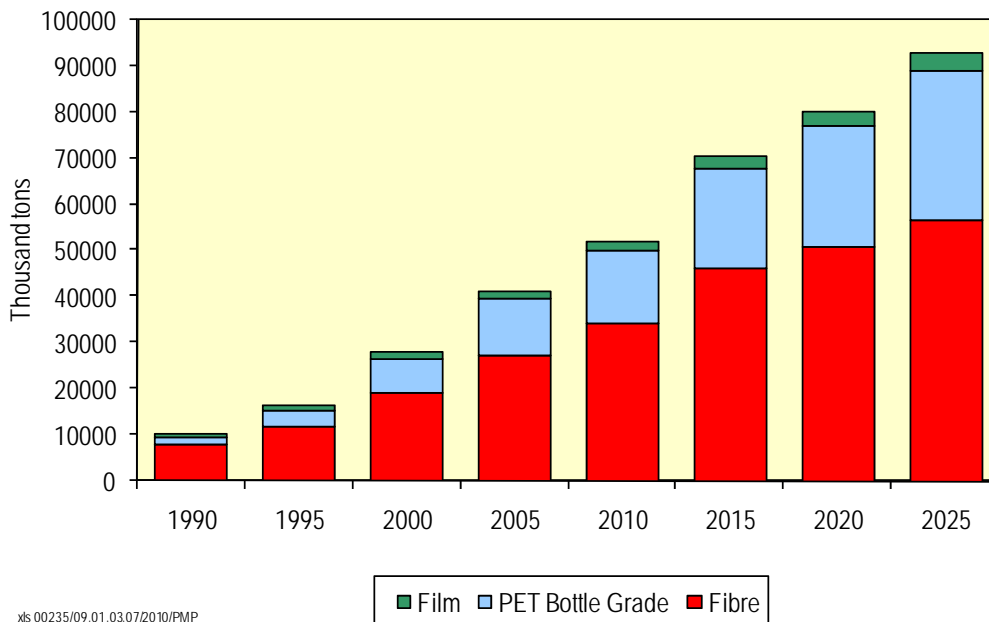
Following the unprecedented drop in demand in 2008, the PET chain recovered fairly strongly in 2009, supported by strong consumption growth for PET bottle grade in the Asian market. The development of coal based MEG in China could meanwhile cause significant disruption further up the value chain.

Fibre continues to account for around two-thirds of the overall PET market, and growth in China has come at the cost of production in all other regions, including parts of Asia. The surge in the fibre market in China has however been largely focussed on its domestic market, with exports of fibre and garments showing lower growth in recent years. The Chinese garment market itself is also maturing rapidly however, particularly in urban areas. As China now accounts for around 65 percent of global fibre production, the anticipated slowdown in fibre growth in China will strongly influence the overall global growth trend.

The ongoing tough market conditions in the PET bottle grade industry forced further closures and bankruptcies among Western producers in 2009. Market conditions have improved markedly in 2010 however. A combination of strong consumption growth and limited capacity development has sharply reduced the volume of exports on offer from Asia. Some of the major Asian producers such as Indorama and SK Chemical have been active in developing new capacity and acquiring distressed assets in Western markets, rather than developing export-oriented capacity in Asia. The main thrust of export-oriented capacity is now coming from the Middle East.

PET recycling showed minimal growth over 2009, following a rapid increase to around six million tons per year over the previous five years. An increasing focus on environmental responsibility by bottlers and retailers is generating increased interest in recycled PET grades for containers, although the volume of recyclate used in fibre and other miscellaneous applications is almost ten times that which is re-used a PET bottle grade resin. The mode of usage for the recyclate (RPET) in bottle applications is mainly in a blend of e.g. ten percent RPET along with 90 percent virgin resin. Use of pure RPET for bottling is constrained by high cost, poor performance, and regulatory requirements affecting its usage in food contact applications.

PET Melt Phase Consumption



While the downstream end of the PET chain is expected to show a steady recovery in operating rates, the PTA market faces at least three more difficult years as the market absorbs the massive capacity build which is still underway. Plant sizes for new builds have almost doubled over the past five years, with several projects of over one million tons per year capacity now underway. While the massive capacity development underway in China will mostly affect the PTA exporters in East Asia such as South Korea and Taiwan, the European market faces serious oversupply as a result of capacity developments which have pushed ahead despite the substantial loss of downstream capacity.

The DMT market continues to contract, mainly as a result of non-integrated, DMT-based PET fibre producers exiting the market. Applications such as PBT production in Europe have a comparatively stable footing, although conventional PET production from DMT is in inexorable decline.


MEG market dynamics remain volatile. Producers in other parts of the world enjoyed something of a reprieve in 2009 as a result of delays to new Middle Eastern plants, and relatively strong demand in Asia. While new capacities are now gearing up in 2010, some of the U.S. producers are benefitting from low gas prices. Rationalisation of ethylene and MEG capacity in the United States may therefore come more slowly than expected.

The availability of cheap coal in China is looking likely to encourage the production of MEG from coal. China's long-term strategy of diversifying chemical feedstocks to this domestically abundant resource will promote investment in coal-based MEG plants in the foreseeable future. Tongliao Jinmei's has just started operating a 200 000 tons per year using a coal based technology, and the potential for capacity development is enormous if the plant's economics

prove to be favourable. China has developed tens of millions of tons per year of capacity for chemicals such as VCM and methanol, and a widespread adoption of the new coal-based MEG process could have massive ramifications globally.

The markets for ethylene oxide derivatives other than MEG were affected by the widespread contraction in economic activity in 2008 and 2009, but have a strong potential for recovery. Some restructuring occurred in derivatives such as ethoxylates, although the overall production capability was not significantly reduced. The industries are highly consumer focussed, and will remain largely regional concerns, with the exception of some small export-based developments in the Middle East

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