

PROSPECTS FOR PETROCHEMICAL INDUSTRY

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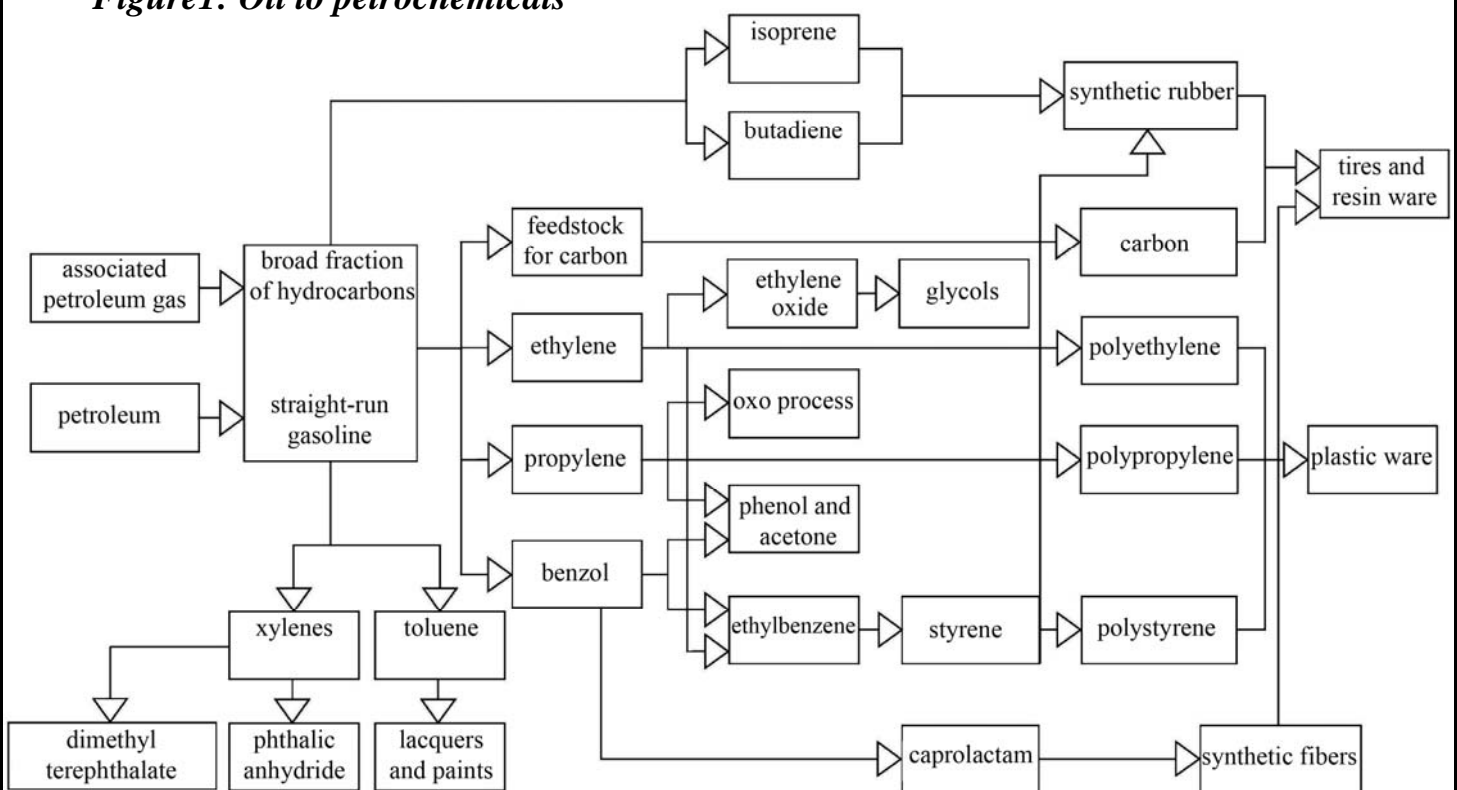
Russia's chemical industry has become one of the most robustly developing sectors over the past decade. The rapid growth was fired up by the booming market and availability of production facilities at the beginning of this period.

By 2005, production of a range of commodities (mainly, low value-added products) reached critical levels. It happened in a large part due to old equipment used for more than twenty years, on average.

Yet another specificity of the Russian chemical industry is old technology that does not allow Russian merchandise to be competitive internationally.

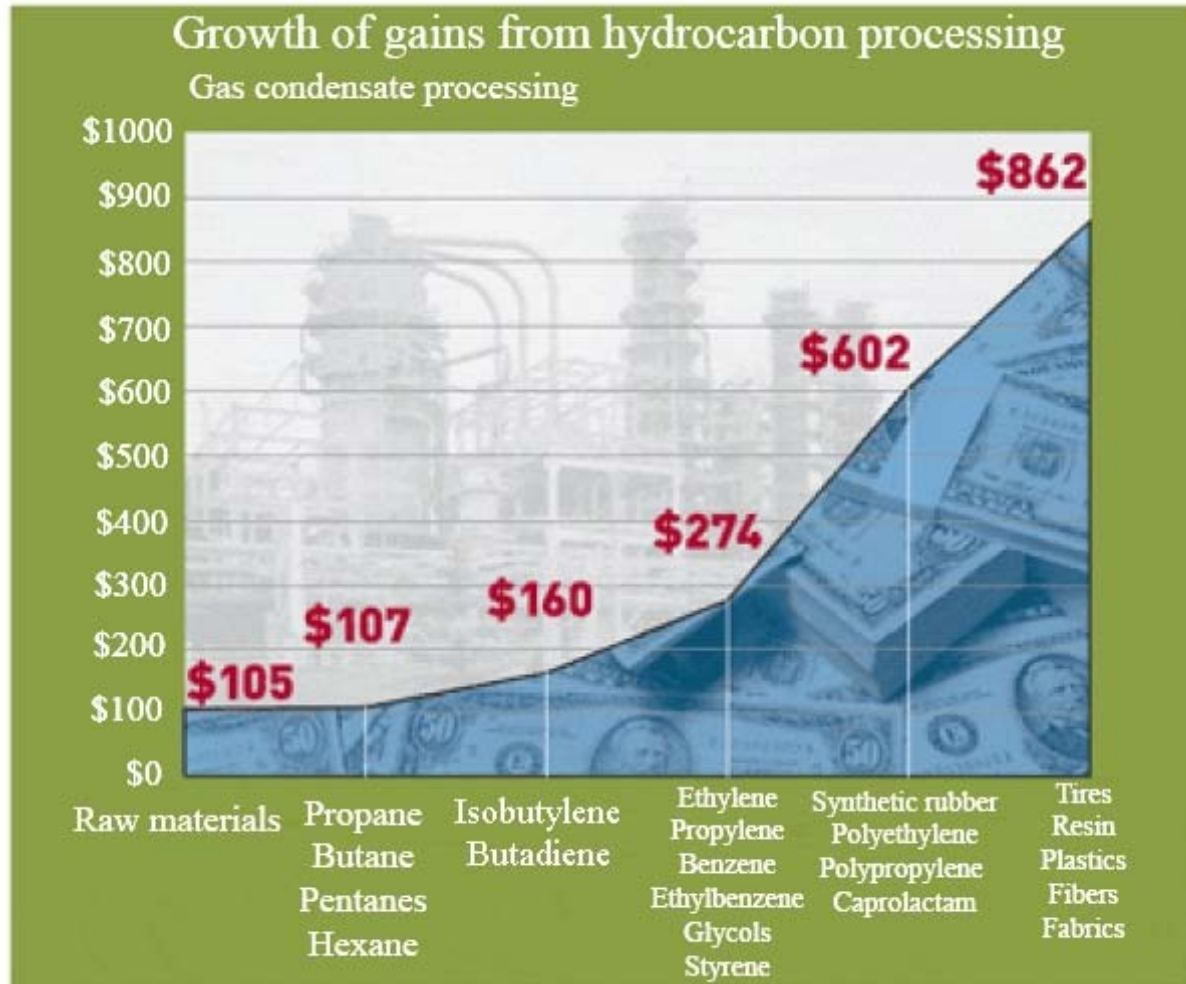
Petrochemicals are derived from petroleum and associated petroleum gas during the process of refining. Such products as plastics, synthetic rubber, tires, rubber ware, etc. are obtained from crude oil in a process that includes at least seven technological stages.

Figure1: Oil to petrochemicals



With further refining of primary petrochemicals, production efficiency grows, and in some cases the value of end-use goods could far exceed the cost of the used feedstock.

Figure 2: Gas condensate processing



Source: www.ruschemunion.ru

This specificity of petrochemicals has two consequences. First, even with high prices for feedstock, petrochemical production can bring profits. For example, China buys petroleum at market prices, yet it produces petrochemical products that are competitive in the Russian market.

Second, weak spots (that, if non-existent, can be created) make it possible to make profit at certain stages of oil refining. Low export duties on light oil products and yet lower for dark oil products, abolishing of tough car fuel and associated petroleum gas burning standards and the export duty on liquefied hydrocarbon gases all raise economic efficiency of primary petrochemicals and increase risks associated with end-use petrochemical production.

This in a large part explains why the petrochemical sector consolidates around feedstock producers (Sibur Holding, TAIF group including Kazanorgsintez and Nizhnekamskneftekhim, Salavatnefteorgsintez, Lukoil, Surgutneftegaz, Gazprom)

and their efforts to keep the entire technological chain within a single enterprise. This minimizes risks, yet raises the cost of manufacture.

This strategy, however, is in conflict with global trends – construction of giant enterprises to produce large volumes of a small range of products. This strategy is economically efficient due to the scale effect (consider China, Persian Gulf countries). Preconditions for that include a competitive market at all stages of the technological chain and consistent government policy aimed at developing high-tech production.

The global financial crisis had a strong impact on the chemical industry. In 2008, Russia's chemical production index totaled 95.8% of the 2007 index, in December the index reached just 71.1%.

Compared to 2007, the output of practically all major chemical products, such as synthetic ammonia, mineral fertilizers, polyvinylchloride resin, PVC copolymers, polystyrene and styrene copolymers, polypropylene, synthetic dyes, synthetic rubber and chemical fibers, dropped. Not all domestically produced goods can substitute imported goods because of poor quality.

Petrochemical companies restrict their investment activities. The crisis has had a serious impact on borrowing opportunities for new projects and caused problems with debt repayment.

How long the period of stagnation in the industry will last largely depends on the global economy. It is doubtful that the economy will start recovering in 2009–2010, all the more so if it is going to be totally renewed.

Meanwhile, now it is high time the industry underwent structural changes.

Russia needs to upgrade intermediate and end-use goods production facilities to enhance the industry's competitiveness in the international market.

Flexible tax and customs policies – including lowering of export duties and deepening of oil and gas processing – are needed for that.

Otherwise, Russia's petrochemical industry might suffer the same problems as the dying automotive industry that is only able to meet weak domestic demand with cheap goods.