

Консалтинговая компания Биммакон

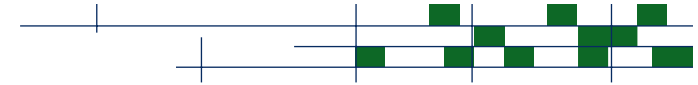
Consulting company Bimmacon

***Condition and Prospects
for the Development of the Industry
Producing Synthetic Resins and Plastics
in Russia in 1996-2010***

Review of the situation in the branch

Moscow, November 2006





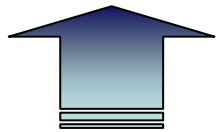
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Dynamics of the Development of Synthetic Resins and Plastics Industry in the Russian Federation in 1996-2006

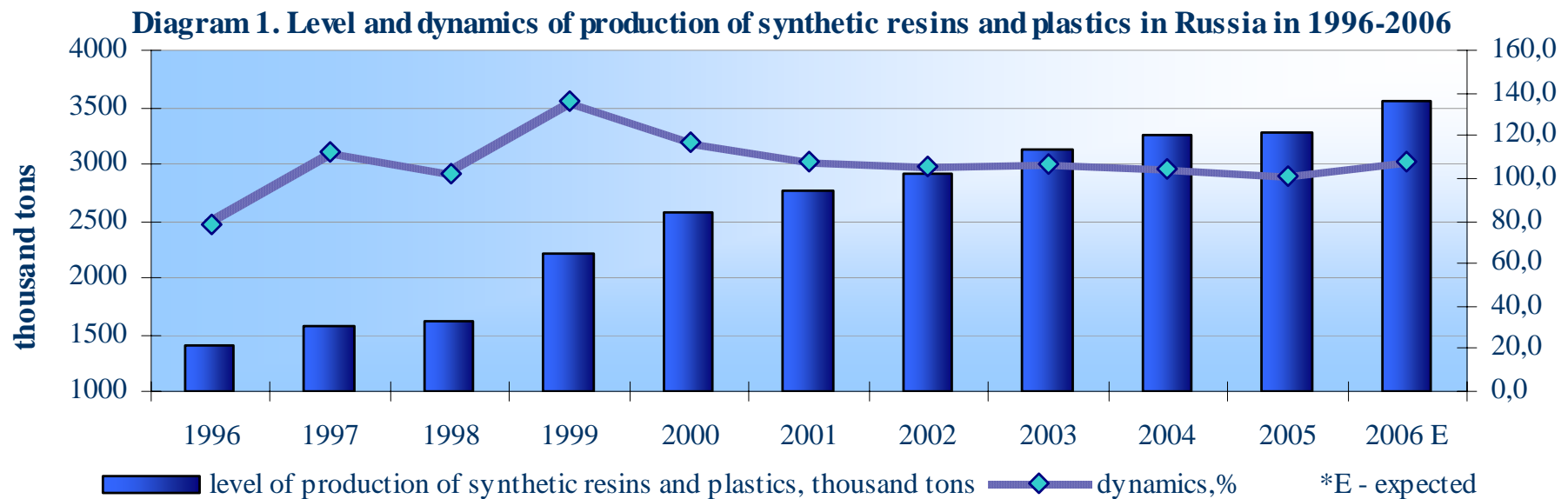
...level of production of synthetic resins and plastics in Russia ...

2006 – 3554 thousand tons



1996 – 1411 thousand tons

- ♦ The Russian industry of synthetic resins and plastics has been one of the most dynamically developing branches of the chemical industry over the last few years. From 1992 to 1996 the decrease in production of synthetic resins and plastics stood at 44,5 %: from 2544 thousand tons to 1411 thousand tons
- ♦ Turnaround in branch took place in 1997, when as a result of the growing demand in the Russian market the domestic companies started increasing deliveries of polymers to the home market and volumes of production





Dynamics of the Development of Synthetic Resins and Plastics Industry in the Russian Federation in 1996-2006

... potentially the Russian polymers market can double by 2010

- ◆ Since 1996, manufacture of synthetic resins and plastics in Russia has increased more than 2,3 times: from 1411 thousand tons in 1996 to 3284 thousand tons in 2005. To the results of 2006 the output is likely to amount to 3554 thousand tons
- ◆ To satisfy a great demand inside the country domestic manufacturers are also increasing unloading of polymers in the home market and reducing export deliveries. On the average, over 85 % of the total production volume is being distributed in the home market*
- ◆ The growing demand for polymers in Russia results from both the increasing demand of industrial consumers (in particular, construction, motor industry, housing and communal services), and the increase in incomes of the population **
- ◆ The annual gain of polymers consumption volumes in Russia makes about 10 %
- ◆ By estimations, by 2010 the volume of the Russian market of polymers can grow practically twice. One of the reasons is the low consumption of polymers per person – on the average, twice less as the European standard

* At calculations volumes of output in the home market of polythene, polypropylene, polystyrene, PVC were considered

** So, to the results of nine months 2006 the volume of construction works in terms of value has increased by 11,4 % compared to the similar period of 2005, production of cars has grown by 12,2%. The incomes per capita in monetary terms have raised by 23,9%



Dynamics of the Development of Synthetic Resins and Plastics Industry in the Russian Federation in 1996-2006

- ♦ Along with the growth in demand for polymers in the Russian market the competition has increased. One of the development trends in the market is widening range of products produced by chemical enterprises. For example, in 2006 SAJANSKCHIMPLAST company* informed about the opportunity to organize polythene and polypropylene production using the facilities of the future gas distribution complex processing gas of KOVYKTYNSKY deposit. JSC NIZHNEKAMSKNEFTECHIM** planned by the end of 2006 to set up manufacture of polypropylene with the capacity 180 thousand tons per year and in 2007 to launch manufacture of polythene

New Projects in the Russian Polymer Industry

...most of the Russian manufacturers of polymers are working at maximum capacities

- ♦ Now the majority of the Russian enterprises are working practically at maximum capacities. The further increase in polymers production volumes is possible only due to the building new objects. In 2005-2006 Russian enterprises bid for a lot of projects to erect new facilities within 2006-2012

*SAJANSKCHIMPLAST is the leader in PVC production volumes in Russia. In 2005 the enterprise produced 240,6 thousand tons of PVC under the estimated capacity of 250 thousand tons

** NIZHNEKAMSKNEFTECHIM is one of the leaders in manufacturing synthetic rubbers and styrene in Russia

New Projects in the Russian Polymer Industry

Production	Building site	Investor	Capacity (thousand tons)	Preliminary commissioning period
Polythene	ASTRAKHAN GPK (Gas processing complex)	Gazprom	150	2009
Polythene	NOVYI URENGOI GPK	Gazprom	300	2010
Polythene	SALAVAT or ORENBURG	Gazprom	200-300	2010
Polythene	TOMSKNEFTECHIM	SIBUR	200	2010
Polythene	TOBOLSKNEFTECHIM	SIBUR	500	2012
Polythene	STAVROLEN	Lukoil-Neftechim	300-500	2010
Polythene	NIZHNEKAMSKNEFTECHIM	TAIF	230	2007
Polythene	KAZANORGSYNTEZ	TAIF	260	2007
Polystyrene	NIZHNEKAMSKNEFTECHIM	TAIF	40-50	2007
Polypropylene	ASTRAKHAN GPK	Gazprom	300	2009
Polypropylene	TOBOLSKNEFTECHIM	SIBUR	450-500	2009
Polypropylene	STAVROLEN	Lukoil-Neftechim	120	2006
Polypropylene	OMSK RUBBER	TITAN, NOVATEK	180	2007
Polypropylene	NIZHNEKAMSKNEFTECHIM	TAIF	180	2006
Polyethylene-terephthlate	POLYEF	SELENA	120	2006
Polyethylene-terephthlate	SOLNECHNOGORSK	EuroPLAST	180	2006-2007
Polycarbonates	KAZANORGSYNTEZ	TAIF	65	2007
PVC	DZERZHINSK or KSTOVO	SIBUR, Solvay	330	2010
PVC	SAJANSKCHIMPLAST	RENOVA	150	2010
PVC	KAUSTIK, STERLITAMAK	RENOVA	250	2010
ABS-PLASTICS	NIZHNEKAMSKNEFTECHIM	TAIF	70	2008

Source: «Expert», Companies' own data, Bimmacon

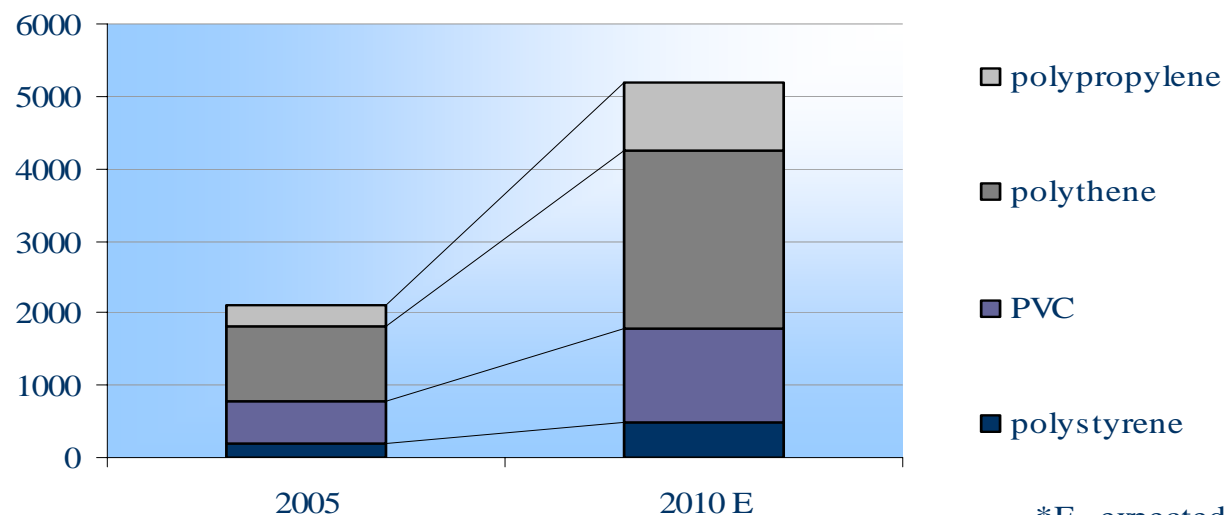


Prospects for the Development of the Branch till 2010

... the share of polythene in the total volume of polymers production in the Russian Federation will grow from 30.5% up to 40% by 2010

- ♦ In case of realization of the declared projects, the volume of polymers production in Russia will exceed 6 million tons per year
- ♦ At present polythene is leading in the total volume of polymers production, providing about 30,5 % of the total output of polymers. Taking into account the realization of new projects the share of polythene will grow up to 40 %
- ♦ The share of polypropylene will increase up to 15 % by 2010
- ♦ Production of PVC resin, in our estimation, will exceed 1,2 million tons by 2010. Thus, in 2008 there can be a PVC resin deficiency in the Russian market caused by consistent high demand for this polymer, whereas new capacities are planned to be introduced in operation mainly in 2010

Diagram 2. Level of production of polymers in Russia in 2005 and 2010, thousand tons



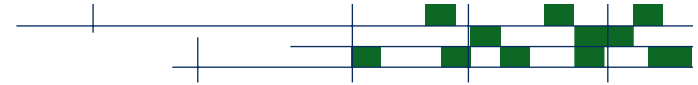
*E - expected



Deterrents

*... annually exporting
on the average 150
million tons of crude oil
Russia produces nearly
2,1 million tons of
ethylene*

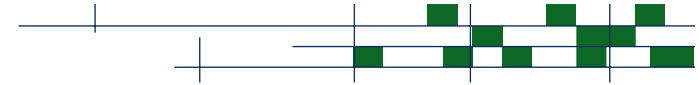
- ◆ In our estimation, the realization of all declared projects of the polymer industry demands the corresponding development of the raw-material base, as the present base monomer deficiency is one of the major factors constraining development of the polymer industry in Russia. In particular, there is an ethylene and propylene deficiency in the country, whereas the output of these monomers is decreasing. Thus, in 2005 the production volume of ethylene has fallen by 2,5 %, to the results of nine months 2006 - by 2 % more
- ◆ In midterm estimation the prospects for the dramatic change in the raw materials supply to the polymer industry is improbable. Projects on creating new processing manufactures in Russia are practically not announced. Besides that, it is necessary to consider that manufacturers of the basic organic synthesis production (for example, ethylene glycol) also request hydrocarbon raw material in the home market



Deterrents

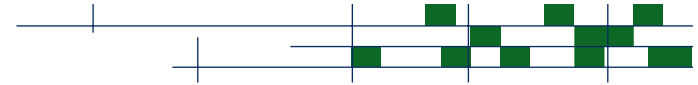
*...in the long term,
Russian manufacturers
will face a fierce
competition of Asian
countries*

- ◆ Another problem of the branch is very high degree of the equipment wear and tear. In estimations, the share of the capacities which were put into operation less than 10 years ago does not exceed 11 % in manufacture of polythene, in manufacture of PVC – 30 %, in manufacture of polypropylene – 38 %. At the same time the share of the equipment, which is in operation more than 30 years, stands at about 28 % in manufacture of polythene, 18 % - in the PVC industry
- ◆ The environment also affects the Russian market of polymers. In the long term, one more negative factor should be considered - escalating capacities in manufacture of ethylene, with the subsequent processing into polythene, PVC, polystyrene, in Asian countries such as Qatar, Iran, Saudi Arabia, China. If domestic producers are not able to provide the necessary volume of polymer production in the country, the increase in the share of import production on the Russian market is highly probable



The Resume

- ◆ Owing to the development of consuming branches the demand for polymers in Russia goes up. The annual rate of the increase in volumes of polymers consumption amounts to about 10 %
- ◆ As a result of high demand for polymers, domestic companies raise their volumes of production and distribution of polymers on the home market
- ◆ As for the specific kinds of polymers, Russian enterprises work at the maximum capacities. To satisfy the growing demand domestic companies plan to launch in 2006-2012 a lot of new projects, providing practically the double increase in polymers production in Russia
- ◆ Basic monomers deficiency on the Russian market remains one of the main negative factors, hindering development of the national polymer industry
- ◆ Rates of the growing demand for polymers outpace the growth of production volumes in Russia. In the long term, a threat of increase in import deliveries of polymers on the Russian market strengthens. Middle East countries, in particular Qatar, Saudi Arabia, Iran, which are aggressively increasing capacities of the polymer industry, can become the basic suppliers



About Bimmacon

- ◆ Bimmacon is the Russian consulting company having been acting since February, 1998.
- ◆ Specialization of the company in the field of consulting are services in the field of management consulting and corporate finance. Besides that the company actively operates in the market of marketing, branch and macroeconomic researches.
- ◆ We have wide experience, our researches are published in the leading editions of Russia. We actively work not only with the enterprises in the Russian Federation, but also in CIS-countries, with international companies and trade agencies of foreign countries.
- ◆ More than 1000 Russian and foreign industrial corporations and institutions have appreciated our approach to quality of work. They are: Chamber of Commerce and Industry of Switzerland, Polish company Comintex, The Moscow Branch of John Deere Agricultural Holdings, Inc., Embassy of Sweden in the Russian Federation, BASF, JSC Norilsk Nickel , JSC GUM Trading House, JSC Kirovkhleb, ZAO Arcada, JSC Avtoelektronika, JSC Podolsk Battery Factory, ZAO Prommontazh, JSC NPO Saturn (Rybinsk Motors), JSC The Glushko Energomash and many other companies representing practically all industries.