CIREC MONTHLY NEWS
Chemical Industry News for Central Europe, South East Europe and Eurasia
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Czech Republic | Slovakia | Hungary | Poland | Bulgaria | Romania | Croatia | Slovenia | Yugoslavia | Baltic States | Russia | Belarus | Ukraine | Transcaucasus | Central Asia | Kazakhstan
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Features from this issue

- MOL Nyrt (the company renamed itself from MOL Rt on 7 July) has said that it may consider building a pipeline to connect its Slovakian and Hungarian petrochemical sites to improve efficiency. MOL is examining a plan to construct a link to carry ethylene, between Tiszaujvaros, northeast Hungary and Bratislava.
- From 1 July 2006, Slovnaft's petrochemical activities have been separated in full to create a 100% subsidiary entitled Slovnaft Petrochemicals. The new subsidiary will concentrate on production and sale of olefins and petrochemicals, mainly polyethylene and polypropylene.
- Unipetrol has entered into exclusive negotiations with Dwory over the sale of a 100% stake in Kaucuk. Unipetrol is in the final phases of tenders for Kaucuk and Spolana.
- Zaklady Azotowe Pulawy has agreed conditions with Aquafil for the creation of a jv for polyamide-6. ZA Pulawy has been considering options for several years regarding the production of downstream products, which would reduce the company's dependence from gas prices. The latter currently constitute around 30% of the company's costs.
- Rompetrol Petrochemicals plans to construct a PET plant by the end of 2007. The investment could amount to €80 million, about €50 million of which could come from a bank line of credit, according to a document issued by the company at the end of last year.
- In the first half of 2006, production volumes were down slightly at SIBUR-Neftekhim after a shutdown in April and May. Ethylene oxide volumes were up (see (www.cirec.net/report) following the expansion of capacity. During April, the ethylene oxide plant reduced production by 5.8% over April 2005 to total 6,072 tons. At the same time, the production of MEG rose by 38.2% to 18,602 tons.
- The government of Orenburg region has given more thought to the question about the construction of polyethylene and polypropylene plants at the Orenburg gas-processing plant of plants for the production of polyethylene and polypropylene. The local government is keen to convert the raw material base into finished products, rather than sending hydrocarbons to other regions such as Tatarstan and Bashkortostan for processing into olefins and polyolefins.
- Nizhnekamskneftekhim has started the construction of a new terminal called Yugchemterminal in the Krasnodar region at the port of Kavkaz. The cost of the new terminal will cost $22 million. The terminal will be used for the export of styrene from Nizhnekamskneftekhim and also production from Kazanorgsintez.
- SIBUR-Holding is expected to invest between 18–20.5 billion roubles on the proposed PVC project in the Nizhniy Novgorod region, including the expansion of the cracker at Kstovo. Other requirements besides raw materials include setting up the electrical energy system and development of the necessary infrastructure.

CENTRAL & SOUTH EAST EUROPE

Petrochemicals

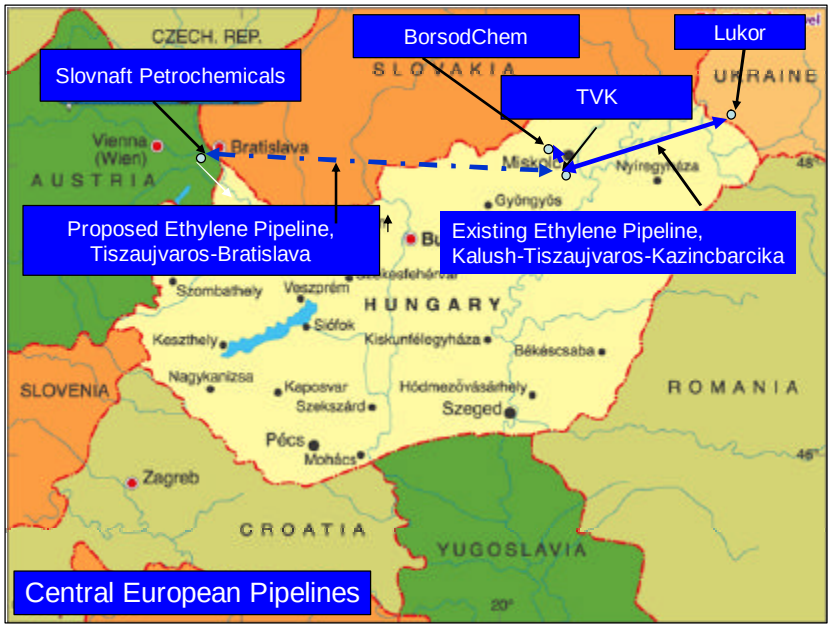
Slovnaft Petrochemicals

From 1 July 2006, Slovnaft's petrochemical activities have been separated in full to create a 100% subsidiary entitled Slovnaft Petrochemicals. The new subsidiary will concentrate on production and sale of olefins and petrochemicals, mainly polyethylene and polypropylene.

Slovnaft accounted for the name change as the result of the growing importance of petrochemical activities within Slovnaft and the MOL group. Part of this strategy involves continued consolidation of petrochemical activities in the group including Slovnaft and TVK. Another reason is the start-up of the new PP3 production unit at Bratislava that more than tripled the Slovnaft's polypropylene production capacity to 255,000 tpa.

Following the introduction of the new PP3 production unit at Slovnaft and the new HDPE unit at TVK, the MOL Group ranks as the largest producer of plastics in Central Europe in addition to being significant players on the European market.

MOL's Possible TVK-Slovnaft Ethylene Connection



MOL-Ethylene Pipeline

MOL Nyrt (the company renamed itself from MOL Rt on 7 July) has said that it may consider building a pipeline to connect its Slovakian and Hungarian petrochemical sites to improve efficiency. MOL is examining a plan to construct a link to carry ethylene, between Tiszaújváros, northeast Hungary and Bratislava.

MOL is developing a study on how the group could further harmonise the operations of their Hungarian and Slovakian units. MOL has been expanding the output of its Slovakian and Hungarian petrochemical units to satisfy rising demand for polyethylene and polypropylene, but is limited in terms of full integration due to the lack of a pipeline.

The creation of a new pipeline link would clearly help cost structures and provide the group with a strong platform for long term strategic development. The idea of a pipeline network between all the petrochemical

plants was muted during the Comecon period, but never reached the planning stage due to a lack of finance. A pipeline connection between Tiszaujvaros and Bratislava would add to the existing connections between Tiszaujvaros, Kazincbarcika and Kalush. Thus, it would create numerous new opportunities for product flows between western Slovakia and western Ukraine.

NIS Serbia-Petrohemija

The Serbian government has adopted the final plan for the long-delayed privatisation of Naftna Industrija Srbije (NIS). The first phase of the privatisation process involves 37.5% of shares in NIS being offered to a strategic investor, and a further 25% would be distributed through a share issue. In the second phase, the company would undergo a recapitalisation worth €250-300 million, as well as the sale of shares up to the amount of 49% to the strategic partner. NIS"s production (extraction) meets about 18-19% of Serbian crude oil demand, and about 12-13% of Serbian natural gas demand. Overall capacity of two NIS's crude oil refineries (located in Pancevo and Novi Sad) is about 6.5 million tpa.

The privatisation affects HIP Petrohemija insofar as NIS is expected to incorporate the petrochemical plant in its structure. The general schedule is detailed below:

NIS Privatisation Strategy and Impact on HIP Petrohemija

1. Take-over of HIP-Petrohemija by NIS
2. Sale of 33-40% of the overall capital (NIS + HIP-Petrohemija) to the strategic partner
3. Investments of €700-800 million in modernisation by the strategic partner
4. Enabling that the strategic partner became a major shareholder (after 2010)

PKN Orlen-Agrofert

PKN Orlen could be faced with much higher costs than anticipated should Agrofert's legal action over the Unipetrol case succeeds in court. The total claims of Agrofert against PKN Orlen could exceed Kc 20 billion, or zl.2.8 billion, whilst in 2005 PKN Orlen only created reserves of zl.376 million for this purpose. Agrofert has submitted three lawsuits to the arbitration court and plans to submit a fourth.

Petrochemia Blachownia

BorsodChem increased the capital in Petrochemia Blachownia on 28 June by zl 8,000,000. The capital increase is in accord with the company's strategy, disclosed after the acquisition announcement of Petrochemia Blachownia in 2005. The capital increase will contribute towards the current capacity expansions on site involving benzene and toluene, whilst also strengthening plant safety. Other goals include improving the quality of Petrochemia Blachownia's aromatics' products.

Intermediates & Derivatives

Kaucuk-Dwory

Unipetrol is reported to have entered into exclusive negotiations with Dwory over the sale of a 100% stake in Kaucuk. Unipetrol is in the final phases of tenders for Kaucuk and Spolana. A reported 26 bidders initially expressed interest in Kaucuk when the tender was first announced in January 2006. In the Kaucuk tender, Dwory beat two other short-listed bidders for the chance to negotiate directly. The sale appears dependent on Dwory signing long-term contracts with Unipetrol, in particular for the supply of benzene.

If the sale price of Kaucuk is too low, there is the possibility that there could be some legal action. The Association of Unipetrol Minority Shareholders (SMAU) will consider legal action against Unipetrol if it sells Kaucuk, or Spolana for that matter, below what is described as the fair market value.

The highest bid accepted for Kaucuk during the tender was around Kc 4.3 billion (€151 million), a figure the company has yet to confirm. However, at least one of the bidders that were excluded from the final bid-process reportedly offered nearly Kc 1 billion more. A few guesses have placed the price for Kaucuk at something a little above Kc 5 billion. If it were lower, the sale would not be advantageous which is one theory. Strategically, the purchase of Kaucuk by Dwory would create a strong producer of polystyrene and synthetic

rubber in Central Europe, although the group will still be dependent on the larger petrochemical groups for feedstocks.

Polish Privatisation
With the privatisation of ZA Tarnow and ZA Kedzierzyn still incomplete, there is the creeping possibility that Petro Carbo Chem's agreement with Nafta Polska may not be legalised. Petro Carbo Chem (PCC) is currently waiting for the approval of competition authorities UOKiK to end the transaction. PCC is ready to pay zl 100 million and invest zl 360 million in the company. However, local interests say that selling Kedzierzyn for zl 100 million is short of the value, which could possibly be as high as zl 1.8 billion. Moreover, there is local pressure for ZA Kedzierzyn to be sold to Anwil, which was interested in the acquisition some time ago.

The Highest Chamber of Control (NIK) is currently finishing the investigation over the privatisation of the Kedzierzyn and Tarnow plants, and also Zachem and Sarzyna.

Zaklady Azotowe Pulawy-Polyamide-6
ZA Pulawy has agreed conditions with Aquafil for the creation of a jv for polyamide-6. ZA Pulawy has been considering downstream options for caprolactam for several years, helping to reduce the company's dependency on caprolactam exports. For the company as a whole, it would be another step towards helping to reduce the company's dependence from gas prices. The latter currently constitute around 30% of the company's costs.

On 18 July, ZA Pulawy signed a letter of intent with Aquafil owned by the Italian Bonazzi Group. The idea is to create a joint venture where both companies would have 50% of shares, with ZA Pulawy retaining management of the plant. The project capacity and costs will be decided by October or November, but early indications suggest a capacity level of either 25,000 or 50,000 tpa. The project is likely to cost between €30-50 million and ZA Pulawy believes that production could be launched in the second half of 2008.

BorsodChem-Ownership
Since early July, Permira**,** a UK venture capital company, has been in the process of taking significant share options and is planning to purchase BorsodChem R**t.** Permira holds options until the end of October to buy a combined 52% stake in BorsodChem from two investors. It wants to complete examining BorsodChem's books and make the bid for all shares in the company after another two months.

Permira stated that it wants to acquire BorsodChem in a takeover that would value the Hungarian company at about Ft 228.5 billion ($1 billion). Permira would make its offer through Luxembourg-based Kikkolux S.ar.l., which has the option to buy BorsodChem stakes from Firthlion Ltd, owned by Megdet Rahimkulov, and Vienna Capital Partners. Permira has options to buy the stakes from the two shareholders at a price of Ft 3,000 per share and may purchase remaining shares in the Hungarian company at the same price.

Oltchim-Privatisation
The privatisation process of Oltchim is now considered unlikely to take place before the end of 2006, as there are a few important steps that need to be undertaken before the company can be sold. The important annulment of the capital increase will only take place in August, and then Oltchim will have to solve disputes with minority shareholders in court, which is likely to take some time. Therefore, it seems probable that the privatisation process will start in 2007, although it is not clear which companies are likely to place bids. The Ministry of the Economy plans to sell 53% of Oltchim's shares, as well as the plant's debts to AVAS (The State Assets Resolution Authority) $95.2 million.

Rompetrol-PET
Rompetrol Petrochemicals plans to construct a PET plant by the end of 2007. The investment could amount to €80 million, about €50 million of which could come from a bank line of credit, according to a document issued by the company at the end of last year. Earlier this year Rompetrol concluded long term agreements with Dow regarding polyolefin production and sales. Rompetrol hopes to restart the Petromidia cracker in the mid-term future.

Environment

Draslovka
Draslovka from Kolin, Central Bohemia, has been required to pay a Kc 2 million fine for the leak of highly hazardous cyanides into the Labe river. The company will pay Kc 1.9 million for the illegal release of dangerous materials and Kc 100,000 for its failure to announce the leak in time. In January, a cyanide leak from Draslovka caused a serious environmental accident, which killed 10 tons of fish at the 83-kilometre section of the Elbe. Germany then complained that it received the information about the accident too late. Draslovka will be compelled to modernise its water treatment from the production of cyanide. The company will also have to modify and upgrade the regime of control of the quality of the discharged wastewater.

BorsodChem-EDC waste
A project is underway which aims to reduce the EDC contamination in the ground water exposed on the BorsodChem site below 0.5 mg/l specified in a decree by the North Hungarian Environmental Inspectorate. In order to facilitate implementation, BorsodChem submitted a tender under the Environmental and Infrastructure Operative Programme (KIOP) and was granted Ft 451 million subsidy.

The contamination dates back to the operations of BorsodChem's legal predecessor Borsodi Vegyi Kombinát, which affected the ground water in a limited area on the factory site. In order to protect the underground waters and drinking water base, BorsodChem is to launch a project encompassing a technology with a view to reducing contamination below the legally permissible limit.

Forthcoming Events

7-8 September 2006, Amsterdam
Chemical and Petrochemical Industry in CIS
Marcus Evans
12-13 October 2006, Budapest
1st Russia, Central, Eastern Europe (CEE) Rubber and Tire Conference
CMT
17-19 October 2006, Budapest
Central and Eastern European Refining and Petrochemicals 9th Annual Roundtable
WRA

EURASIA, COMMONWEALTH OF INDEPENDENT STATES

Russia Petrochemicals

Russian product duties
The Russian government has set a new record level for export duties of petrochemicals after announcing a new level of $158.1 per ton. According to the document signed on 18 July, the duties will rise from the current level of $146.9/ton to benzene, toluene, xylenes, propane, butanes, ethylene, propylene, butylene, and butadiene.

TAIF-Gas Condensate
TAIF-NK, a subsidiary of TAIF, started a unit in July for the processing of gas condensate with a capacity of 1.2 million tpa. Construction of the plant started in 2004, and will provide 500,000 tpa of naphtha and 400,000 tpa of diesel fuel. The naphtha will be consumed mainly by Nizhnekamskneftekhim. Project costs amounted to $38 million with an expected payback period of three years.

Nizhnekamskneftekhim
In late June, the ethylene cracker at Nizhnekamsk completed 30 years of production since its start-up. During this period the plant has produced 10.5 million tons of monomer. During this year's summer shutdown,

equipment is being replaced on the separation column for propane-propylene fractions, in addition to the introduction of new heat exchange equipment.

Nizhnekamsk first arose as an urban place in 1961, with the status of a workers' settlement, and progressed to a city status under the Autonomous Tatar Government in 1966. The basis for transforming Nizhnekamsk into a major petrochemical centre was laid in the 1960s by the completion of a natural gas liquids line from the Minnibayevo gas processing plant, located near Almetyevsk. The first volumes of isoprene and polyisoprene rubber were produced in 1970, with subsequent stages added through the 1970s and 1980s. The production of butadiene, based on the single stage dehydrogenation of butane, began in 1974, whilst butyl rubber production started in 1973. However, it was not until the opening of a 450,000 tpa ethylene cracker in 1976 when Nizhnekamskneftekhim started to assume a leading position in the petrochemical industry in the Volga-Urals region, or Privolzhskiy region.

As the largest single petrochemical complex in Russia, its turnover is way ahead of any other company. In the first five months of 2006, Nizhnekamskneftekhim's turnover increased 9.2% to total 18.2 billion roubles with a gross profit of 2.6 billion roubles. Financial data for Nizhnekamskneftekhim and other important chemical companies, including turnover, gross and net profits, will soon be available online at www.cirec.net/report.

Tomskneftekhim

Tomskneftekhim increased ethylene production by 3.04% in the first half of 2006, with propylene increasing by 1.08%. Formaldehyde production dropped by 70.3% to 41,652 tons and urea-formaldehyde resins increased by 2.6% to 54,284 tons. In addition, Tomskneftekhim exceeded plans for the production of consumer products.

The complex has recently completed the reconstruction of the nitrogen-oxygen unit using imported equipment based on contemporary software. The project has cost more than 100 million roubles, and the revamped plant will become active in September 2006. An increase in the nitrogen capacity of 18% will make it possible to satisfy the increased need for the production of ethylene, polyethylene, polypropylene and other products, where nitrogen is used in the process.

SIBUR-Neftekhim

In the first half of 2006, production volumes were down slightly at SIBUR-Neftekhim after a shutdown in April and May. Ethylene oxide volumes were up on 2005 (see www.cirec.net/report) following the expansion of capacity. The Kaprolaktam division of SIBUR-Neftekhim undertook maintenance in May at a number of units for the production of PVC, plastic materials, and, chlorine and caustic soda. During the shutdown, equipment was replaced in the VCM plant. Other units that underwent improvement included ethyl chloride and ethylene chlorohydrin.

SIBUR-Neftekhim has brought into operation two new ethylene furnaces for pyrolysis at Kstovo. The Dutch company KTI developed the new furnaces. The thermal efficiency of the new furnaces is rated at about 95%, whilst the capacity of each plant is 24 tons of raw material per hour. The new furnaces are equipped with the contemporary automated control system from the Japanese company Yokogawa. This system simplifies the process of control of the production and increases the reliability of operation.

Polyolefins

Tobolsk-Neftekhim

Between $1.5-2 billion is being earmarked by SIBUR-Holding for investments into new production capacity at the Tobolsk Petrochemical Combine in the Tyumen region. The creation of a new processing facility at Tobolsk-Neftekhim involves the processing of gas in accordance with the company's expansion programme. Tobolsk-Neftekhim's mother company SIBUR-Holding is working closely with the local Tyumen administration on the development of the Tobolsk complex. Around 5,000 new jobs are expected to be created from the investments.

In the 2007-2009 time-frame, the schedule consists of constructing units for the dehydrogenation of propane and the production of polypropylene with a capacity of 450-500,000 tpa. In 2009-2012, additional plans exist

for the building of liquefied hydrocarbon gas units and the production of polyethylene with a capacity of 400-500,000 tpa. This will also include another polypropylene unit with a capacity of 300-400,000 tpa, which would make the company the largest producer of polyolefins in Russia.

Tobolsk-Neftekhim is currently undergoing a planned summer shutdown, involving the butadiene plant and also the central gas-fractionation installation.

Orenburg Polyolefins

The government of the Orenburg region in the south Urals has started to give more thought to the question about the construction of polyethylene and polypropylene plants at the Orenburg gas-processing plant. The local government is keen to convert the raw material base into finished products, rather than sending hydrocarbons to other regions such as Tatarstan and Bashkortostan for processing into olefins and polyolefins.

In March 2006, Gazprom and KazMunaiGaz (KMG) created a 50/50 jv for the processing of gas from Karachaganak at the Orenburg Gas Processing Plant (OGPZ). This jv was endorsed by President Putin and President Nazarbayev at the recent G8-Summit in St Petersburg. Both sides pledged to jointly develop the Karachaganak gas field in north-west Kazakhstan, and set up a joint gas-processing venture at Russia's Orenburg plant to process around 15 billion cubic metres per annum.

Karachaganak, which is located in north-west Kazakhstan and not far from the Russian border, has in the past been proffered as a potential site for petrochemicals. The distances from Karachaganak are roughly 400 km to Samara, 720 km to Saratov, 560 km to Ufa, and 1,440 km to Moscow.

Logistically, however, it is probably too remote to be able to make any real profit from product sales. Orenburg, although still not ideal, could be seen as a more likely location for new project developments but even then it would be necessary to examine the cost structure for raw materials and infrastructure. Due to the anticipated expansion of processing at the Orenburg Gas Processing Plant, tax revenues into the local budget will rise substantially. Thus, it will give the local government opportunities for developing the raw material base downstream and moving into areas such as polyolefins. A number of other companies are also considering similar projects, and this seems to be the most likely deterrent to taking these ideas further.

Ufaorgsintez

Ufaorgsintez is a company maintaining a relatively low profile in the Russian petrochemical industry, with little publicity and no known expansion plans. Located at Ufa, the capital of Bashkortostan, the company has seen a steady rise in turnover and profitability levels in the past few years which have been induced more by higher product prices than increased production volumes.

Ufaorgsintez Raw Material Processing

(Kilo Tons)

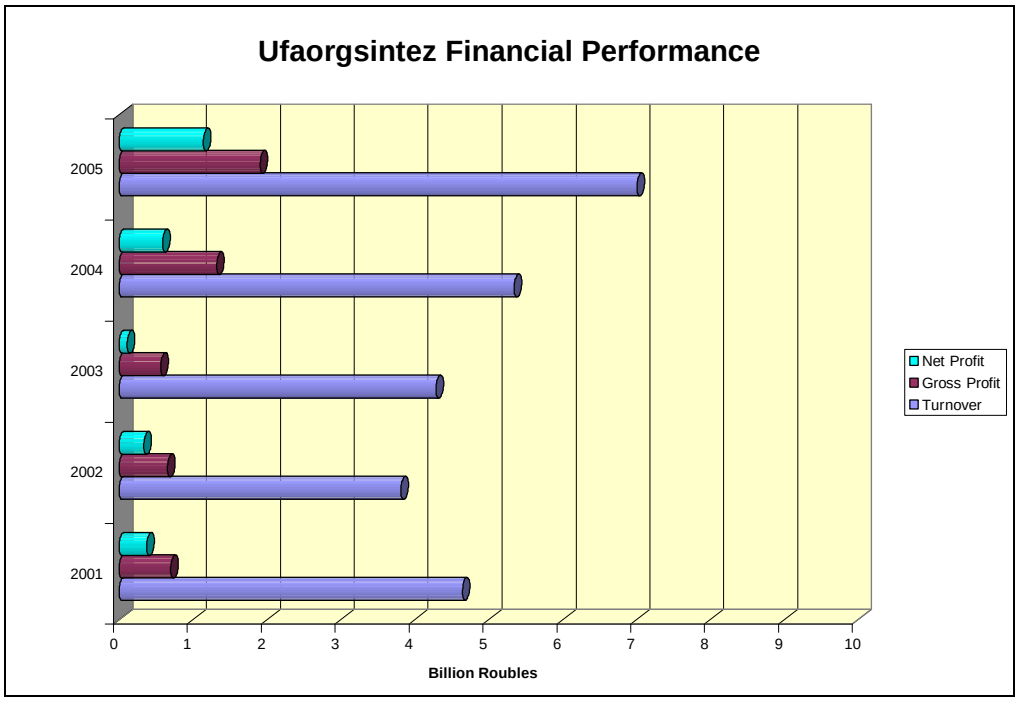
Period	*2002*	*2003*	*2004*	*2005*	*Q1 2006*
Feedstocks	317.4	378.4	391.7	362.1	84.0
PP Fractions	73.2	76.6	70.7	116.8	23.4
Benzene	53.9	75.0	78.2	84.7	21.5

Source: Ufaorgsintez Q1 2006 Quarterly Report

In fact, Ufaorgsintez has not seen any new product investments since the start-up of the polypropylene plant in 1996. This plant is managed on a jv basis entitled ZAO Polypropylene which was the result of an agreement signed in March 1996 between Ufaorgsintez, Ufimskiy Refinery and Surgut GPZ. However, there are increasing financial signs that ZAO Polypropylene is incurring higher losses which may ultimately force a change in the ownership structure.

The raw material consumption patterns for propane-propylene fractions are shown in the table above. The category feedstocks refers to olefin raw materials, mainly naphtha. Benzene is used by Ufaorgsintez for cumene-phenol production.

Ufaorgsintez claims to be continuing with its modernisation programme and improvements in safety practices. One of the main aims is improving the ecological programme regarding the Shugurovka river in Bashkortostan.



The main source of turnover for the company comes from the processing of raw materials into petrochemical products. With the aim of maintaining the competitiveness of the company greater attention is being paid to technical developments. In the short term future, the company plans the introduction of ASUTP for the production of phenol and acetone, and the polymerisation of ethylene. Other projects include the combining of polymerisation equipment into one system for the production of polyethylene and polypropylene.

Kazanorgsintez

The annual report for Kazanorgsintez for 2005 emphasises the significance of being granted an international rating last year from the Standard & Poor and Fitch Agencies. This in short, makes it easier to attract finance to support future projects. The chief investment priority of the company is focused on expanding its ethylene production, in order to reduce dependency on Nizhnekamskneftekhim for ethylene purchases.

Even before the HDPE expansion started, Kazanorgsintez was in deficit for ethylene so there is some urgency to finish the first stage of the ethylene plant expansion. The olefin plant of ethylene consists of four lines for the production of ethylene and phenol. The first stage of the modernisation of the HDPE plant was completed in November 2005, which will eventually increase capacity from 200,000 tpa to 300,000 tpa. The company also last year produced the first small shipment of linear low-density polyethylene and obtained ISO certificates for ecological management.

The main problem for the company in 2005 was a shortage of raw materials from Orenburg. As a result, the ethylene plant ran at only 61.3% of capacity. Propane fractions increased by 17.7% to 274,000 tpa. As a result of increased usage of propane-butane fractions, propylene production increased by 14.8% over 2004.

Although the shortage in ethane was compensated by deliveries of propane-butane, this change in feedstock mix increased total production costs by a total of 17.3%. Costs per ton of production increased by 5.4% to reach 78 kopecks.

Last year, was noticeable for the start-up of benzene production as a by-product of ethylene production. The capacity for benzene production is rated at 35,000 tpa, but the plant has not reached anywhere near full capacity. Thus, in order to meet the complete requirements for cumene it is still necessary to make purchases of benzene on the open market. Initially, bisphenol A production is planned to start at 500 tons per month, before rising to the next stage of 1,000 tons.

Capacity utilisation for all plants in Kazanorgsintez reached 69.3% in 2005, against 79% in 2004. Total production capacities increased by 1.2%, and amounted to 1,225,000 tpa.

Energy Consumption

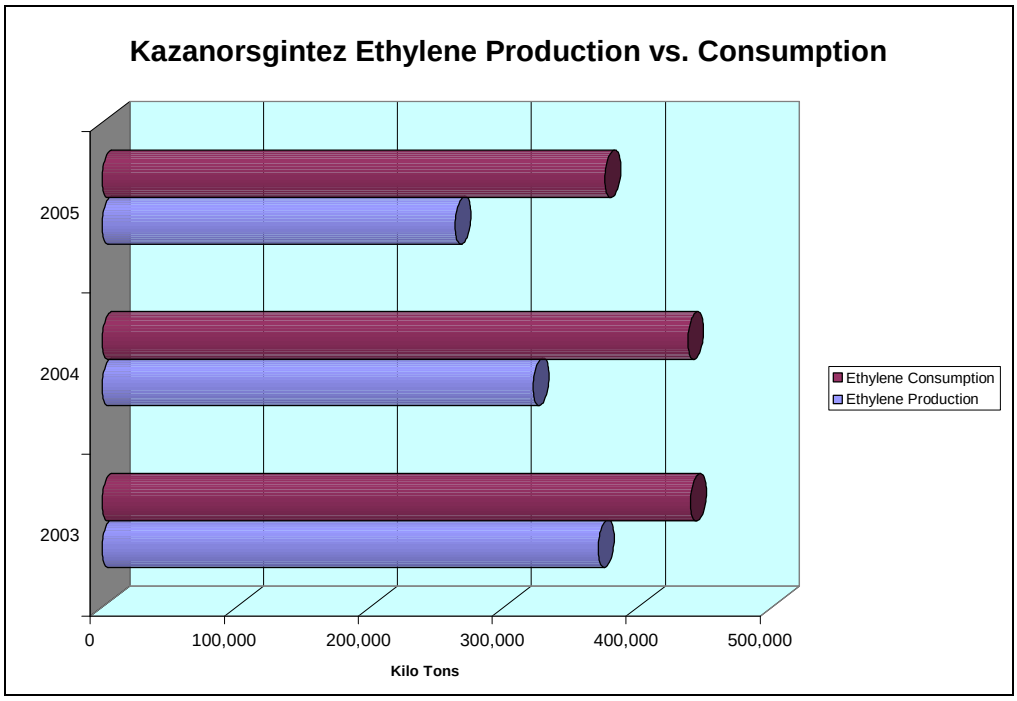
After spending considerable sums in the past five years, Kazanorgsintez is continuing to invest in its energy infrastructure. The main aims are to maximise the use of its own resources. The modernisation programme is designed principally to reduce the amount of energy consumption, with particular efforts being attached to an increase the volume of secondary energy resources in the production process. In 2005, Kazanorgsintez reduced heat consumption by 4.6% and electrical energy by 9%. The programme for energy saving efficiency for the period 2006-2010 is detailed as follows.

Energy Programme Kazanorgsintez 2006-2010

- Organisation of production in accordance with demand
- Development of processes which can reduce the effects on the environment
- Reduction of costs on raw materials energy and water

Ecological Policy

The sums invested in ecological investments in 2005 were 849,700 roubles or 33.4% higher than in 2004. The aim of the company is to create an integrated system of management and to create a transition to the introduction of resource saving technologies. In 2005, harmful emissions totalled 71.8% of the legal limit against 80% in 2004. The aims of the company are the provision of water.



Kazanorgsintez-Outage

On 18 July 2006, the LDPE plant at Kazanorgsintez suffered a minor outage with no injuries production interruptions reported.

Aromatics & Derivatives

Paraxylene-Omsk Refinery

UOP will start the modernisation of the aromatics unit at the Omsk refinery from 1 August, which will last for around one month. The main aim of the project is to increase the quality of paraxylene production to 99.9%, which meets international standards and will allow sales to more end-users.

Benzene-Konsomolsk

Rosneft-Komsomolsk NPZ is examining the possibility of constructing a petrochemical complex at the Komsomolsk-on-Amur refinery site in the Russian Far East. The main initial aim of the complex will be to produce 400,000 tpa of benzene. The final decision on the project is expected to be made before the end of

the year. Research is being conducted into export opportunities in South East Asia, where benzene could be sold. The distances to the European part of Russia are too far to consider product sales.

Around $200 million is estimated to be needed for the project with a payback period of 4.5 years. Another possibility being considered is polyethylene and polypropylene, but similarly to benzene exports would form an integral part of the company's strategy. Rosneft could also increase the capacity of the refinery to 12 million tpa, compared against 6.5 million for 2006. Rosneft made its debut on the London Stock Exchange on 19 July, despite last minute opposition from YUKOS under the pretext that Rosneft had appropriated the assets illegally. The dispute is seen in many circles as dating back to the 1990s, when the privatisation process of Soviet industrial assets was effectively bungled under Yeltsin.

New styrene terminal-Nizhnekamskneftekhim
Nizhnekamskneftekhim has started the construction of a new terminal called Yugchemterminal, in the Krasnodar region at the port of Kavkaz. The cost of the new terminal is estimated at $22 million. The terminal will be used initially for the export of styrene from Nizhnekamskneftekhim, and also production from Kazanorgsintez. The capacity of the terminal will be 210,000 tpa, including 70,000 tpa of styrene, 30,000 tpa of glycols, 30,000 tpa of alcohols, and other products. The terminal will be constructed on two sites, with the main site on the shores of the Dinsk gulf in the Krasnodar region in the Black Sea

Nizhnekamskneftekhim-ABS
On 5 July, Nizhnekamskneftekhim signed an agreement with Polimeri Europa for technology licensing for the new ABS project. The capacity of the plant will be 50,000 tpa which will be located next to the polystyrene plant. Nizhnekamskneftekhim is also in the preparation stage for constructing a 50,000 tpa plant for suspension polystyrene.

Benzene Sulphonic Acid
At the end of June 2006 Orgsintez-Novomoskovsk, which belongs to the Nitol group, restarted the production of benzene sulphonic acid. Orgsintez-Novomoskovsk is the sole producer of benzene sulphonic acid in Russia.

Monomethylaniline
In August 2006, Volskhiy Orgsintez will complete the improvement of the monomethylaniline unit. This will facilitate an increase in production by 47% with capacity rising to 55,000 tpa. Volskhiy Orgsintez specialises in the production of additives for motor gasolines, rubber accelerators, etc.

PET-Tatarstan
The proposed PET project in Tatarstan, resulting from the aromatics/PTA investment in the new Tatneft petrochemical complex at Nizhnekamsk, will be constructed in the Alabuga special economic zone. The estimated cost of the project, with a capacity of 150-200,000 tpa, will amount to €100-200 million, including license technology and construction.

The payback period is estimated at 5-7 years. The PET unit would be dependent on raw materials provided by the proposed PTA unit at Nizhnekamsk, which is part of the Tatneft petrochemical project. The only other source of PTA in Russia is Polief, which sells on the open market at present but with start-up of its own PET plant projected for 2007

PVC-Chlorine

SIBUR-Holding
SIBUR-Holding is expected to invest between 18–20.5 billion roubles on the proposed PVC project in the Nizhniy Novgorod region, including the expansion of the cracker at Kstovo. The construction of the new unit will enable the closure of the current PVC plant at Dzerzhinsk, which is considered environmentally unsafe. However, the completion of the new PVC project will only be possible with the appropriate support of the government of the Nizhniy-Novgorod region. Thus, a final decision on the project will not be available until the end of 2006.

Kaustik-Sterlitamak
Following a decision at the shareholders extraordinary meeting on 19 June, Kaustik will transfer from its status as a closed joint-stock company to an open joint stock company. The change has been made in order to attract finance for investment into the company. More than 90% of shares in Kaustik are owned by Bashkiria Khimya.

Kaustik increased turnover by 31.8% in the first half of 2006 to reach 4.789 billion roubles. Exports accounted for 707 million roubles. Production volumes for Kaustik for the first half of 2006 can be seen at www.cirec.net/report.

Plastkard-PVC expansion
Plastkard at Volgograd, which is part of the Nikos group, has increased its capacity by around 10,000 tpa following the start on 18 July of the production of PVC-S mark 6669JC. The product is intended for preparation of high-strength window profiles and door blocks. Ongoing modernisation is being planned by the company to increase capacity to between 125,000-130,000 tpa of PVC by 2008. Aside the capacity increases, Plastkard aims to increase product quality in order to conform to West European standards.

Sayanskkhimplast
In late June, public hearings took place at Sayansk in the Irkutsk Oblast for the evaluation of the environmental effects from projects being undertaken by Sayanskkhimplast. The company intends to increase chlorine capacity through new technology to 260,000 tpa, whilst increasing VCM/PVC capacity to 400,000 tpa. The reconstruction of the VCM/PVC units will undergo four stages, which should be completed by 2010.

The new chlorine plant will use contemporary energy-saving technologies. Capacity of the new chlorine plant will be 150,000 tpa, but further plans exist for the expansion to 260,000 tpa. Sayanskkhimplast stopped production at its PVC plant for maintenance on 7 July, which will last for 25 days.

Renova-Orgsintez
Renova-Orgsintez has created a 100% owned subsidiary called Promkhimya to control sales from its group companies Khimprom at Volgograd and Promsintez at Chalaevsk. Already from July Promkhimya has started the sales of caustic soda and finished products. Renova-Orgsintez is a 100% daughter company of Renova.

Khimprom-Kaustik
The creation of the new Renova subsidiary Promkhimya has impacted on relations between Khimprom and Kaustik at Volgograd. Kaustik ended deliveries of brine to Khimprom in late June due to outstanding debts of 80 million roubles, and this has affected Khimprom's ability to produce chlorine and caustic soda. After the failure of Kaustik to supply raw materials, Khimprom turned to the arbitration of the Volgograd province, which enforced Kaustik to renew the delivery of brine.

The brine source was constructed in the Soviet era and when the USSR broke up the chlorine/caustic facilities were privatised into Khimprom and Kaustik, the latter taking charge of the brine supply.

One theory is that is the conflict is linked to the sales' prices for caustic soda, as both Khimprom and Kaustik are involved in the market. Khimprom believes that the stoppage by Kaustik was more to do with the marketing strategy of Khimprom which from 1 July has transferred caustic sales from the United Trade Company (ETK) to Promkhimya. Renova holds 35% of shares in Khimprom.

ETK previously bought caustic soda from Khimprom at 5,400 roubles per ton, whilst Renova-Orgsintez through Promkhimya is paying 5,800 roubles per ton. This brings an additional 3 million roubles to plant per month which is helpful to Khimprom. Khimprom sees the conflict the result of ETK's desire to recover the lost source of caustic soda production.

Epichlorohydrin anti-dumping
China has introduced anti-dumping duties to epichlorohydrin imports from Russia, Korea, Japan and the USA. This decision was made by the Ministry of Trade following an anti-dumping investigation. The new duties are established for a period of five years, with 5.4% for Usolyekhimprom and 17.9% for Kaustik at Sterlitamak.

Usolyekhimprom-epoxy resins
Usolyekhimprom has completed the modernisation of the epoxy resins plant. Currently the company produces three types of epoxy resins ED-20, ED-22 and ED-16. The company uses its own epichlorohydrin, but purchases bisphenol A from other sources.

Usolyekhimprom is part of the Nitol group and with a new resin plant under construction at another subsidiary Azot at Novomoskovsk, the Nitol group is planning to become the main player for epoxies in Russia. Consumption of epoxy resins in Russia reached 17,700 tons for 2005, with considerable further potential for growth. The other main player for epoxy resin production in Russia is Ufakhimprom, which produces its own bisphenol A, but buys epichlorohydrin from Kaustik at Sterlitamak. The new 12,000 tpa epoxy resin plant at Novomoskovsk is planned by Nitol to start in 2008.

Plastics

Plastics equipment jv
MPM Group companies Berstorff and Krauss-Maffei are setting up a joint subsidiary in Russia called BKM GmbH, with registration in Moscow. With the foundation of a joint subsidiary, both companies aim to extend and improve the range of services for their customers in Russia and the neighbouring states. BKM will concentrate on services, such as assembly and commissioning as well as modernisation and repairs. A spare parts stock will be installed at a future date. The Berstorff sales and service office in Moscow was established in 2001, whilst a joint office with Krauss-Maffei has existed since 2002.

Methanol/Ammonia

Siberian Chemical Methanol Company
Gazprom has taken the decision to combine its shareholdings in methanol production plants under one management. The idea was developed in 2005 and is being based at Tomsk as a result of combining the methanol assets of SIBUR-Holding and Vostokgazprom. The new company is called Siberian Methanol Chemical Company (SMKHK) which has started with a capital of 5.43 billion roubles. It will become the most important producer of methanol in Russia. The significance of the new company is that it combines the production facilities at Tomsk and Gubakha under one management.

Vostokgazprom was created in 1999 as a daughter company of Gazprom, whilst SIBUR-Holding took a 33.46% share in Metafrax in 2005. In 2006, Metafrax plans to increase methanol capacity at Gubakha to 1 million tpa. One consequence of the new company SMKHK will mean that Metafrax will receive gas at the same price as Metanol.

The consolidation of the Russian methanol business occurs against the background of increased global supply and lower prices. In order that Russian companies can compete with foreign producers it is seen by Gazprom as necessary to work together rather than compete head to head. Also the new company will make it possible to centralize management of the entire methanol production operations.

SIBUR holding has transferred its block of shares in Metafrax into SMKHK. However, the management of Metafrax has stated that the transfer of shares to SMKHK will not influence the policy of company.

With Gazprom planning to charge $60 per thousand cubic metres of gas the prime cost of Russian methanol raw material is on the rise. Other factors such as an increase in transport expenditures and tariffs for gas and electric power are also weakening the competitiveness of Russian exports.

Metafrax sees the new company as a means of minimizing expenditures rather than a complete co-ordination of strategy. Whilst exports play an important role, the main aim of Metafrax is directed towards developing its market position inside Russia and expanding new areas of consumption.

This year Metafrax has started up an industrial resins plant under the jv MetaDynea with a capacity of 30,000 tpa. Under the same jv, construction is currently ingoing for a new formaldehyde plant with a capacity of 270,000 tpa. Metafrax itself will add a new line before the end of the year with a capacity of 18,000 tpa. This year Metafrax plans to process around 300,000 tons of methanol.

Metanol-Tomsk
In the first half of 2006 Metanol at Tomsk increased methanol production by 33% over the same period in 2005. The increase was facilitated by capital investments last year, which increased capacity by 70,000 tpa, or 9%.

Togliattiazot
Togliattiazot has successfully completed the start-up of the unit for the production of urea-formaldehyde resins with a capacity of 25,000 tpa. In the autumn, Togliattazot plans to start up its second methanol plant with a capacity of 550,000 tpa. This will increase total capacity to 1 million tpa.

Angarsk Petrochemical Company
Angarsk Petrochemical Company plans to start operation of a small MTBE plant in October 2006, after several months of construction. The foundations for the plant have been completed and technology installed. The capacity of the new plant is 6,000 tpa compared against the current unit of 1,500-2,000 tpa. The target production volume for 2006 has been set at 2,035 tons. After installation, Angarsk will supply the Achinsk refinery with MTBE. The costs of building the plant amounted to $3 billion, with the construction managed by Angarskneftekhimremstroy.

New project at Mendeleyevsk Azot
Technip could participate in a new project at Mendeleyevsk Azot in Tatarstan for the construction of a complex producing ammonia, urea and methanol. Technip is preparing to study the plan to construct an ammonia plant with a capacity of 450,000 tpa, a urea plant with a capacity of 580,000 tpa and a methanol plant of 120,000 tpa. The total cost of project has been estimated at €360 million. Technip also plans to become the general contractor in the new Tatneft refinery project with a capacity of 5 million of tpa.

Belarus

Itera-Belpak
Itera has offered the Belarussian government its 50% share in the jv Belpak. Itera would be seeking around $15 million for the package, which from initial accounts may be too high for the Belarussian side. The shares itself would fetch around $2.7 million, but this would be supplemented by €11.45 million for the liquidation of debt for the equipment and a further €2.9 million on debts from the credit.

Belpak was created in 1991 to produce PET granular and raw materials for preforms and plastic bottles. 50% of the jv was held by Itera Polyester Holding, 45% byMoglievkhimvolokno, and 5% by Mogliev Mogotex. The net profit in 2005 was $79,000

Belpak has been the residency card of Itera in Belarus, but friction developed between the two sides over Itera's inability to provide sufficient paraxylene and MEG. Running sometimes at only 30% of capacity, the shortage of finished product from Belpak has affected production at Mogilevkhimvolokhno.

If Itera succeeds in selling its share in Belpak it will hold only one small PET perform plant in Belarus at Minsk. As this plant has not been very successful it will probably be sold after Belpak.

Polimir
Belneftekhim has been in negotiations with LUKoil and Rosneft regarding possible participation in the construction of a new petrochemical complex at the Polimir site at Novopolotsk. The Russian investors have so far proposed different working conditions for Polimir.

Polimir's main plan consists of building an ethylene plant with a capacity of 250,000 tpa. Derivative plans include three additional production units, consisting of 150,000 tpa of polyethylene and a 100,000 tpa of polypropylene.

At present, Belarus produces its own HDPE, but MEG and polypropylene are both imported. Other targets for Belneftekhim include the possible modernisation of Naftan, with the cost of the reconstruction evaluated at $650 million

Ukraine

Karpatneftekhim
Uhde concluded contracts with Karpatneftekhim in July for the new membrane plant, which will increase caustic soda capacity to 200,000 tpa. The detailed design of installation should be completed in February 2007, with the construction and start-up planned for December 2007 and January 2008.

Karpatneftekhim has recently encountered chlorine shortages which has restricted the production of VCM. At the same time, ethylene stocks have been building whilst the VCM plant. Another problem is that in June the Hungarian side did not import the agreed ethylene supplies which remain in storage.

To produce polyethylene from the available ethylene is not possible as the polyethylene plant is running at full capacity. Karpatneftekhim has examined the possibility of purchasing extra chlorine, but it found that there are free volumes in Russia and in Ukraine. Product from Romania could be available but not immediately. The Kalush cracker cannot continue for long operating without an outlet for VCM and so there is certain urgency about undertaking the construction and starting up the new chlorine plant.

Other projects currently under review include the construction of a 300,000 tpa PVC plant at Kalush, which is expected to start in the spring of 2007. Recent announcements have stated that Vinnolit technology has been selected for the plant.

Stirol Gorlovka
Stirol plans to introduce a second line for the production of foam polystyrene with a capacity of 25,000 tpa which will raise total capacity to 50,000 tpa. The technology being used is from PSTI in the USA. The amount of investment in the project amounts to $8 million. In the long term, the company plans to build a third line with a capacity of 25,000 tpa raising total capacity to 75,000 tpa.

Azot Cherkassy
Azot at Cherkassy is investing 1.2 billion roubles this year in the expansion and modernisation of the production facilities. Ammonia capacity will be increased to 1,700 tons per day and urea to 1,500 tons per day. Also caprolactam capacity will be increased to 60,000 tpa.

Chernigov Khimvolokhno
Chernigov Khimvolokhno has opened a new line for the production of 3 million square metres of cord fabric per month. The cost of the building of shop is evaluated approximately into €7 million.

Chernigov Khimvolokhno is the chief producer of cord fabric in Ukraine. The new line is equipped with equipment supplied by BENNINGER ZELL GMBH of Germany. The capacity of the new line composes 3 million square metres of cord fabric per month. Energy consumption from the new equipment is roughly five times less in comparison with the lines of the impregnation of Soviet production, which equipped practically all tire plants of the CIS.

Zarya-Rubezhnoye
The Lugansk provincial state administration has requested the Ministry of Economy of the Ukraine to take measures for the limitation of the import of pentaerythritol. Thus, regional authorities are attempting to protect the interests of Zarya at Rubezhnoye where the pentaerythritol capacity is 10,000 tpa against a domestic market of 4,500-5,000 tpa.

Zarya fell into difficulties in 2005 after the government reduced import duties for pentaerythritol from 50% to 5.5%. The reason for the reduction of import duty was due to the requirements of Ukraine joining the World Trade Organisation. However, after the reduction Zarya could not compete with the Chinese suppliers. Production in the first half of 2006 was only around half of the volume in 2005. In mid-July, Zarya suffered a fire at the orthonitrotoluene plant after lightning struck.

Currencies

(Czech crown, Kc, $1= 22.400, €1 = 28.409)
(Hungarian Forint, Ft, $1 = 211.1, €1 = 276.39)
(Polish zloty, zl, $1 =3.117, €1 =3.9953)
(Ukrainian hryvnia, $1 = 5.0252, €1 = 6.7370)
(Rus rouble, $1 = 26.890, €1= 34.103)

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