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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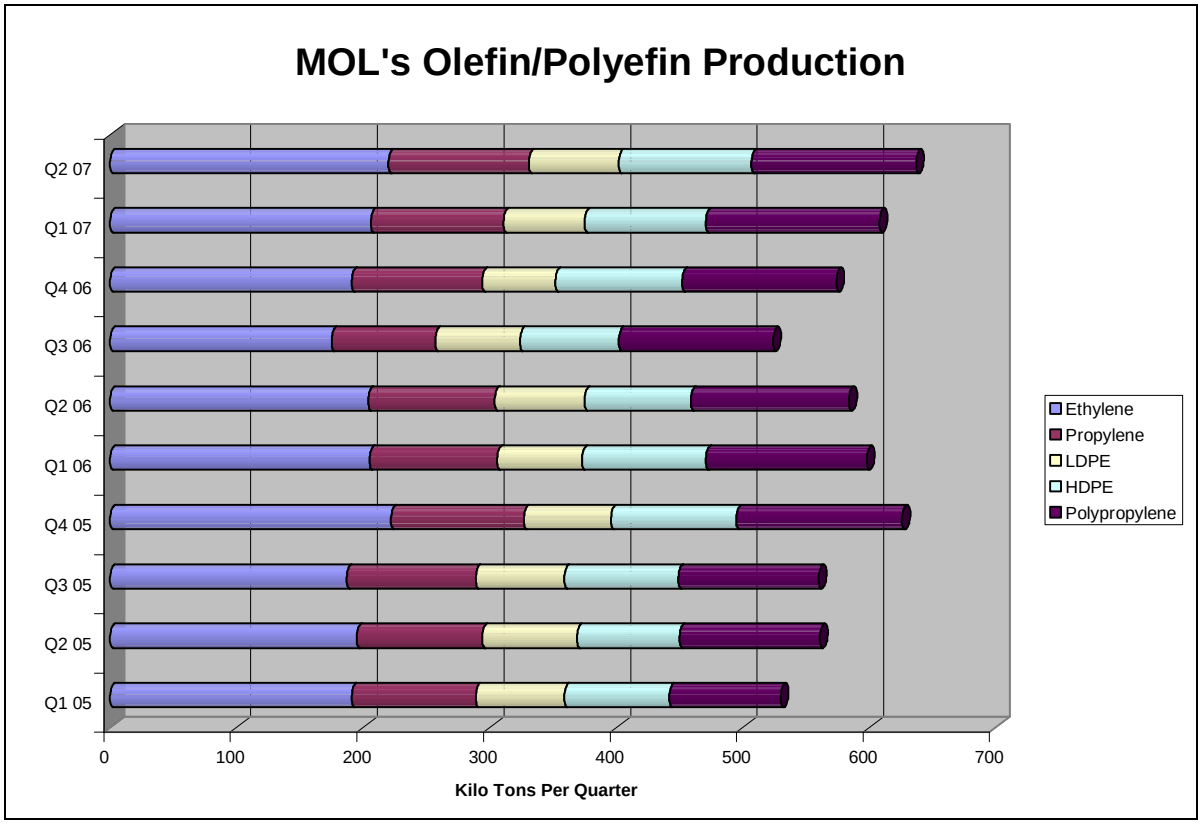
- PKN Orlen's petrochemical division saw revenue rise by 18.7% in Q2 2007 over the same period in 2006. The increase was driven by higher sales' prices coupled with a rise in the sales' volumes.
- Oltchim's bid for Arpechim's ethylene cracker, as part of Petrochemicals Arges, is expected to be started on 5 September.
- PKN Orlen has concluded an agreement with Mitsubishi Heavy Industries for a new PTA complex.
- Gazprom Neft (formerly Sibneft) and SIBUR-Holding have launched the joint venture Yuzhno-Priobskoye GPP for the processing of associated gas from the Yuzhno-Priobskoye field.
- Chemical production in Russia increased across the board in the first seven months of 2007, with polyethylene and polystyrene rising 17.4% and 11.1% respectively.
- Nizhnekamskneftekhim plans in 2008 to start the increase capacity of butyl and halobutyl rubber to 130,000 tpa, including 50,000 tpa of halobutyl rubber.
- In the first half of 2007, Kazanorgsintez and Nizhnekamskneftekhim saw a considerable increase in profitability and turnover.
- Shchekinoazot has signed an agreement with Camco International for a project to reduce CO2 emissions.
- SIBUR-Holding has selected licensors to develop the propane dehydration and polypropylene production complex at Tobolsk, to be located at the site of Tobolsk-Polymer.
- SIBUR-Holding has revived plans for Tomskneftekhim, after temporarily postponing project ideas earlier this year. I
- Kazanorgsintez has agreed credits arrangements with ABN Amro for €5.8 million for equipment purchases as part of the investment programme worth $755 million.
- Sayanskkhimplast suffered an explosion at its EDC plant on 14 August 2007, resulting in four workers being killed and five injured people.
- Domestic PTA sales from Polief increased again in the second quarter,
- Novocherkassk Synthetic Products Plant, the main owner of which is Rusnicor, is working on major investment plans involving a large-scale expansion of the methanol facilities.
- Khimprom at Pervomaisk in the Kharkov region has decided upon a new project for PVC, involving costs of around 20 million hryvnia.
- A substantial proportion of the output from the new petrochemical complex, to be managed by Kazakhstan Petrochemical Industries at Atyrau, will be shipped to China.

CENTRAL & SOUTH EAST EUROPE

Petrochemicals



MOL, H1 2007

MOL's petrochemical division's EBIT posted a 228% improvement to Ft 24.8 billion in H1 2007, driven mainly by higher production and sales' volumes. Also continuing favourable market trends experienced since Q3 2006 helped the integrated petrochemical margin which showed a 26% improvement to €529/ton in H1 2007. The dollar denominated naphtha quotation grew by 7%, whilst the euro-denominated polymer quotations increased between 3% and 12%.

Monomer production improved further by 5%, primarily due to the utilisation of the new olefin plant which surpassed its nominal capacity in H1 2007. Polymer production also increased by 5% as a result of higher capacity utilisation of the new HDPE and polypropylene plants. Higher volumes were achieved in the Czech, Polish, Italian and German markets. The composition of MOL's polymer sales changed; insofar the proportion of HDPE grew to 33% and polypropylene to 45% while the contribution of LDPE narrowed to 22%.

MOL's two petrochemical subsidiaries have made technical changes in the past year, which are helping performance. Slovnaft has introduced advanced process control and optimisation applications on its ethylene cracker to control severity and maximise furnace rates. Honeywell's technology enables Slovnaft to control severity and maximize furnace rates by as much as 5%, while maintaining physical constraints around the plant. In addition, it will improve operational efficiency by reducing energy consumption per ton of olefin produced.

The Olefin-2 Plant at Tiszaujvaros allowed TVK to increase ethylene sales to 137,000 tons in 2006 from 117,000 tons in 2005. The products from HDPE-2 Plant were successfully introduced to the market in 2006, allowing TVK to increase sales' volumes to 183,000 tons from 165,000 tons. TVK's older plants will in time also need upgrading.

TVK wants to develop polymerisation capacities higher than the capacities of its competitors. As part of this strategy, the company is studying the various options of monomer transportation and storage.

PKN Orlen, petrochemical division H1 2007

PKN Orlen's petrochemical division saw revenue rise by 18.7% in Q2 2007 over the same period in 2006. The increase was driven by higher sales' prices coupled with a rise in the sales' volumes. Ethylene sales were up by 23%, propylene by 12.8%, phenol by 25.9% and paraxylene by 39.6%. Apart from good market conditions, higher sales' volumes of these products were achieved due to the Czech companies' sales to third parties.

The second quarter actually saw a decline in polyethylene and polypropylene sales due in part to technical problems at Chemopetrol. The factor which contributed to lower sales of polypropylene was the limitation of export sales by Basell Orlen Polyolefins (BOP), due to the Plock plant being temporarily BOP's only installation in Europe producing polypropylene.

The effect of higher margins is particularly visible in the results achieved by PKN Orlen and BOP, whose operating profits allocated to the petrochemical division went up by 179.9% and 125.6%, reaching zl 152.2 million and zl 45.8 million respectively.

PKN Orlen's Production (unit-kilo tons)

Product	*H1 2007*	*H1 2006*
Ethylene	249.17	200.16
Propylene	168.74	159.83
Polyethylene	248.13	243.37
Polypropylene	196.46	180.01
PVC	209.03	172.26
Ethylene Glycol	50.08	54.31

PKN Orlen, chemical division H1 2007

PKN Orlen's chemical division increased revenue by 14% in the second quarter over Q2 2006, due primarily to higher selling prices. Prices were higher for ammonium nitrate; PVC and PVC granulate by 3.6%, 1.4% and 7.7%, respectively. The sales' volumes of granulates and PVC remained high, reaching 81,000 tons, with a record-breaking sales of products in Q2 2006 exceeding 106,000 tons. Sales of caustic soda increased in Q2 2007 by 2,200 tons over Q2 2006. Another factor worth mentioning was the buoyant state of the caprolactam market and the continued strong sales of the product, despite the emergency shutdown at Spolana in the first half of June 2007.

The combined favourable effect of the above factors was reflected in the performance of the Anwil Group, where the operating profit in Q2 2007 rose by zl 28 million over Q1 2006, reaching zl 69 million.

Unipetrol, H1 2007

Petrochemical sales increased for Unipetrol by 15% in the first half of 2007 over 2006, accompanied by strong margins. The lengthy maintenance shutdown in September and October will affect this year's overall performance. Profitability has been affected slightly by Unipetrol's divestments of Kaucuk and Spolana, with the main effects in the second quarter being felt by lower polyolefin production at the end of April and start of May. The restructuring of respective petrochemical and refining divisions to form the new holding company Unipetrol RPA, valid from 1 August, is aimed at creating a far more integrated company capable of progressing strongly in the market.

A condition of the Kaucuk sale was the creation of a joint venture for a new butadiene production unit together with Kaucuk's new owner Dwory. Unipetrol has reached agreement to hold 51% in the joint venture. The Kaucuk divestment and the creation of the new unit is conditional on Dwory agreeing to long-standing supply contracts.

Unipetrol Product Sales (unit-kilo tons)

Product	*H1 2007*	*H1 2006*
Ethylene	99.0	84.8
Propylene	51.7	36.6
Benzene	103.8	102.8
Urea	99.6	75.5
Ammonia	100.7	99.8
Oxo Alcohols	32.6	32.6
HDPE	137.2	148.4
Polypropylene	103.5	112.5

Unipetrol's revenues increased by Kc 452 million, or 1% on the year to Kc 45.474 billion. The main driving force behind the growth in profits has been refining mark-ups due to petrochemical product prices rising faster than oil prices. In part this was due to strong demand caused by expansion of the Czech economy.

Operating profit amounted to Kc 4.490 billion in January-June, compared with Kc 2.8 billion in 2006. Provisioning for the sale of Kaucuk reduced Unipetrol's Q2 operating profit by Kc 439 million. In the first quarter, Unipetrol Group EBITDA was lowered due to this provisioning by Kc 449 million.

Chemopetrol was Unipetrol's most profitable unit in the first half of 2007, with sales of Kc 18 billion and net profit at Kc 1.8 billion. Unipetrol Rafinerie made a Kc 610 million profit on Kc 31 billion sales in the first half, while Ceska Rafinerska recorded sales of Kc 4 billion and profit of Kc 138 million. Kaucuk, which still was part of the group in the first half of 2007, had sales of Kc 7 billion and net earnings of Kc 828 million.

Second-half figures will be affected by planned shutdowns at Unipetrol's production facilities. The company will invest in expansion of its production capacities, and the investment will help extend the maintenance cycle to four years. The company estimates the impact of the shutdowns on its pre-tax profit at Kc 2 billion. Investment for this year is planned at Kc 5.5 billion after Kc 3.9 billion a year ago. Unipetrol also plans to sell the remaining non-key assets of Agrobohemie and Synthesia by the end of the year based on an agreement with Agrofert.

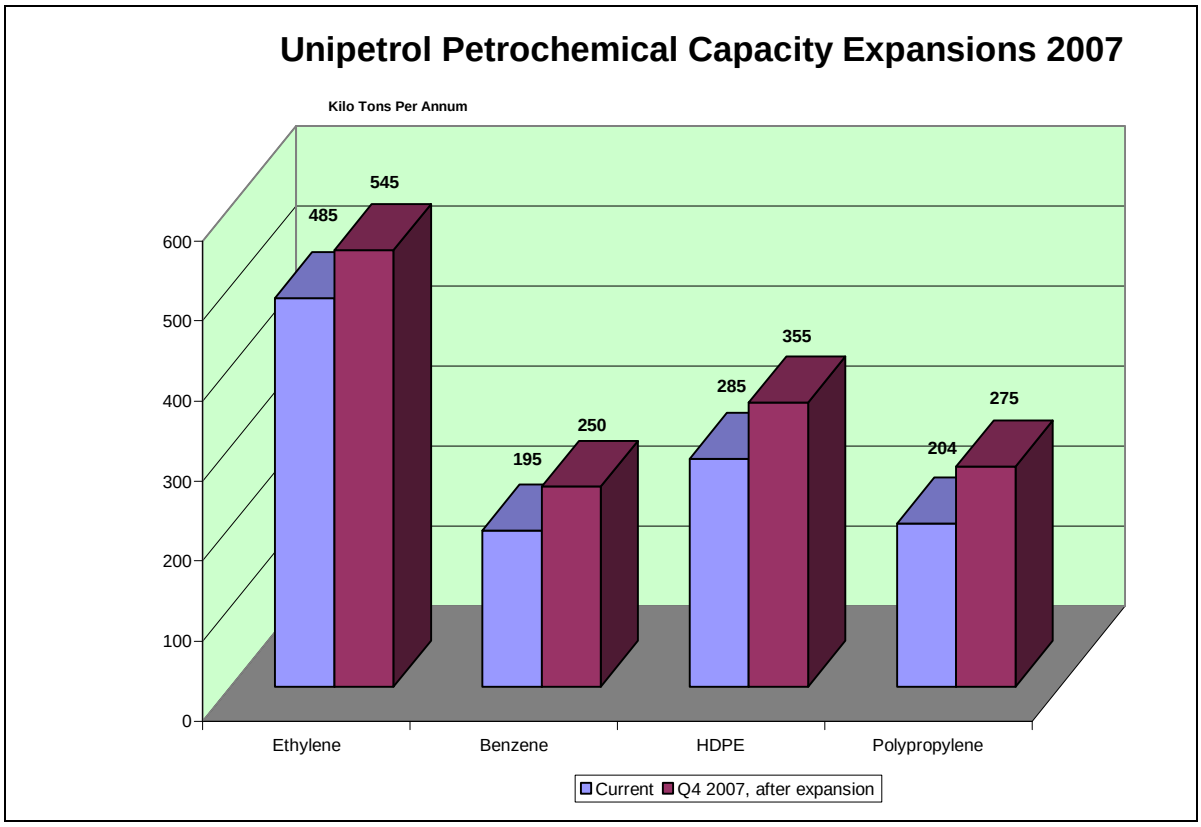
Unipetrol's Capacity Changes After Shutdown

Product	*% Increase*
*E*thylene	+12%
Benzene	+28%
Polypropylene	+35%
Polvethvlene	+25%

Unipetrol shutdowns/expansion 2007

Unipetrol's maintenance shutdown will start in September and it should last for 6 weeks (steam cracker), 4 weeks (polyolefin units), concurrently with a shutdown at Ceska rafinerska that should take 8 weeks. The shutdowns will enable the modernisation of technology and a subsequent production capacity increase. The investment into maintenance and capacity expansion will lead to an improvement of the reliability of all units. Linde will carry out the cracker expansion.

While most capacity increases will be achieved at the end of the shutdown, the complete expansion will only be achieved in the course of 2008-2009. In the past, Unipetrol plants underwent shutdowns once every year, which was then extended to every two years and finally three years. In 2005, it was decided to switch to a four-year shutdown cycle, which is viewed as a better arrangement for both the producer and the customers. Unipetrol plans the next extensive shutdown for 2011.



PKN Orlen-Mitsubishi PTA agreement

PKN Orlen has concluded an agreement with Mitsubishi Heavy Industries for a new PTA complex. The agreement includes the delivery of raw materials, facilities and technical assistance for the construction of a PTA plant at Wloclawek. The agreement was concluded on the basis of a MEC license.

With this investment, PKN Orlen will extend its value creation chain in the petrochemical division and better utilise the processing capacities of the Plock refinery. It follows the recent contract with Technip to construct a new world-scale paraxylene plant at Plock.

The start of the PTA plant is scheduled for Q4 2010. Until then, the company plans to increase paraxylene production capacities in Plock, and energy generating facilities and sewage treatment plant in Anwil.

The construction cost of the production line is estimated at approximately €600 million, with the installation being undertaken by Polish company Polimex-Mostostal. The new PTA plant company is expected to employ more than 200 people, plus additional personnel providing maintenance and logistics services. The investment is located on PKN Orlen's premises adjacent to Anwil, and will require construction not only of the basic production lines but also the entire peripheral infrastructure necessary for the company's operations.

Rompetrol

KazMunaiGaz has agreed to acquire a 75% equity interest in The Rompetrol group, assessed at an enterprise value of $3.6 billion. Rompetrol Holding will continue to hold the remaining 25% equity in The Rompetrol group (TRG). The sale is conditional upon approval of the European Commission and other relevant competition authorities. TRG will be managed jointly by its two shareholders, KazMunaiGaz (KMG) and Rompetrol Holding. KMG will appoint a majority of TRG's board, which will reflect the new ownership

Oltchim-Arpechim

Oltchim's bid for Arpechim's ethylene cracker, as part of Petrochemicals Arges, is expected to be started on 5 September. Arpechim is currently the property of Petrom, which created Petrochemicals Arges to manage its petrochemical operations. Its acquisition would help stabilise Oltchim's feedstock position and provide a sound basis for future investment projects. There is no guarantee that that the assets will be transferred to Oltchim, but there are few other realistic options. Arpechim is Oltchim's sole ethylene supplier, and the only other alternative is truck deliveries.

Polish Chemical Production (unit-kilo tons)

Product	*Jul-07*	*Jul-06*
Ethylene	49.1	57.3
Propylene	32.9	38.2
Butadiene	4.3	5.4
Toluene	10.2	10.5
Phenol	4.4	2.4
Caprolactam	13.2	12.1
Polyethylene	31.7	22.5
Polystyrene	8.8	9.1
PVC	24.4	26.1
Polypropylene	22.0	25.1
Synthetic Rubber	9.5	9.8
Pesticides	1.0	1.6

Oltchim maintains that should an agreement is reached with Petrom on the takeover of Petrochemicals Arges, they are set to invest around €100 million to boost production capacity from 200,000 tpa of ethylene a year to 300,000 tpa, and to retool installations.

Retooling and boosting the production capacity of the pyrolysis installation are estimated to amount to €100 million, with the money to be secured through loans.

Oltchim in the first half derived turnover worth €266 million, up 7.7% from the same period of 2006, but slightly below the budgeted level. The company generated net income worth €2.91 million, up 32%. Expectations are that turnover reaches €600 million in 2007, rising to €800 million in 2008. Profitability would rise if the company succeeds in taking over Petrochemicals Arges, which would allow it to secure raw materials at better prices and adequate quantities.

Petrochemicals consumption has increased considerably in Eastern Europe, with the growth pace coming to around 20-25% a year. Oltchim is well positioned on the East European market, being the only producer of PVC and polyols in the region. Oltchim manager says the company could be ready for privatisation by mid-2008 if the EU accepts the proposal made by the Government regarding the annulment of the capital increase of 2003, through which the company's debt to AVAS was converted into shares, and the operation of another capital increase that should grant minority shareholders a pre-emption right.

Chemicals

Oltchim explosion

Oltchim estimates the output gap following an explosion on 14 August to €1.4 million. A polyether installation exploded leading to a temporary halt in activity. The explosion killed one and injured several others. Local authorities have started an investigation to find out why the accident occurred. The Authority for State Assets

Recovery (AVAS) which is the majority shareholder in Oltchim, promised to "re-analyse" the company's investment programme in order to prevent future accidents.

Ciech-H1 2007

Ciech's net profit for H1 2007 doubled to zl.194.1 million against 2006, and revenues came in at zl.1.7 billion, up by 86%. The company also revised upwards its revenue and profit forecasts for the year, to zl.3.5 billion and zl.251 million, respectively. Ciech, which is Europe's second-biggest producer of soda ash, has ambitious plans to grow its agribusiness division, most likely by acquiring the state-owned fertilizer plants in Pulawy and Police.

ZA Pulawy Sales by Product (million zl)

Product	Apr-Jun 07	Apr-Jun 06
Urea	70.5	40.8
Melamine	147.4	124.4
Caprolactam	117	105.9

ZA Pulawy

Zaklady Azotowe Pulawy (ZA Pulawy) met its increased performance forecast for the 2006/2007 financial year, which ended in June. In Q4, or April-June 2007, the company earned a net profit of zl 24.5 million, which was over 84% higher than in 2006. After the four quarters, its net profit exceeded zl 130 million, while the sales revenue was higher than forecast and exceeded zl 2.2 billion.

In Q4 2006/2007, ZA Pulawy approved a long-term business strategy providing for new investment projects designed to expand the product portfolio and acquire cheaper raw materials for production.

The prevailing favourable prices of urea and the overhaul period will have a positive impact on the melamine prices in Q1 of the 2007/2008 financial year. Further increases in the melamine prices are expected, both in Europe and on the Asian markets. In Q2 2007, the European caprolactam plants were running at almost full production capacity, while customers purchased any quantity of the product available on the market, which may result in higher prices of caprolactam in the future.

Press reports have linked a bid by ZA Pulawy for DSM's fertiliser assets, but the approval from the Ministry of the Treasury is required for any approach is made.

RUSSIA

Russian chemical production-trade

Chemical production in Russia increased across the board in the first seven months of 2007, with polyethylene and polystyrene rising 17.4% and 11.1% respectively. Synthetic fibre production increased 0.6% by 88,800 tons, whilst synthetic rubber production rose 3% to 721,000 tons. Lorry tyre output rose 3% in the January-July period to 6.5 million pieces, whilst car tyre output rose 5.4% to 16.5 million pieces. Caustic soda production rose 5.7% to 760,000 tons.

The second quarter saw a drop in petrochemical production over the first quarter due mainly to shutdowns. Ethylene production fell from 608,000 tons in Q1 2007 to 499,000 tons in Q2 2007. Compared against the same quarter in 2006, plastics production rose with increases recorded for polystyrene (12.6%) and polyethylene 14.3%. Products made from plastics saw an increase of 26.5%, with PVC plasticizers rising 9.9%.

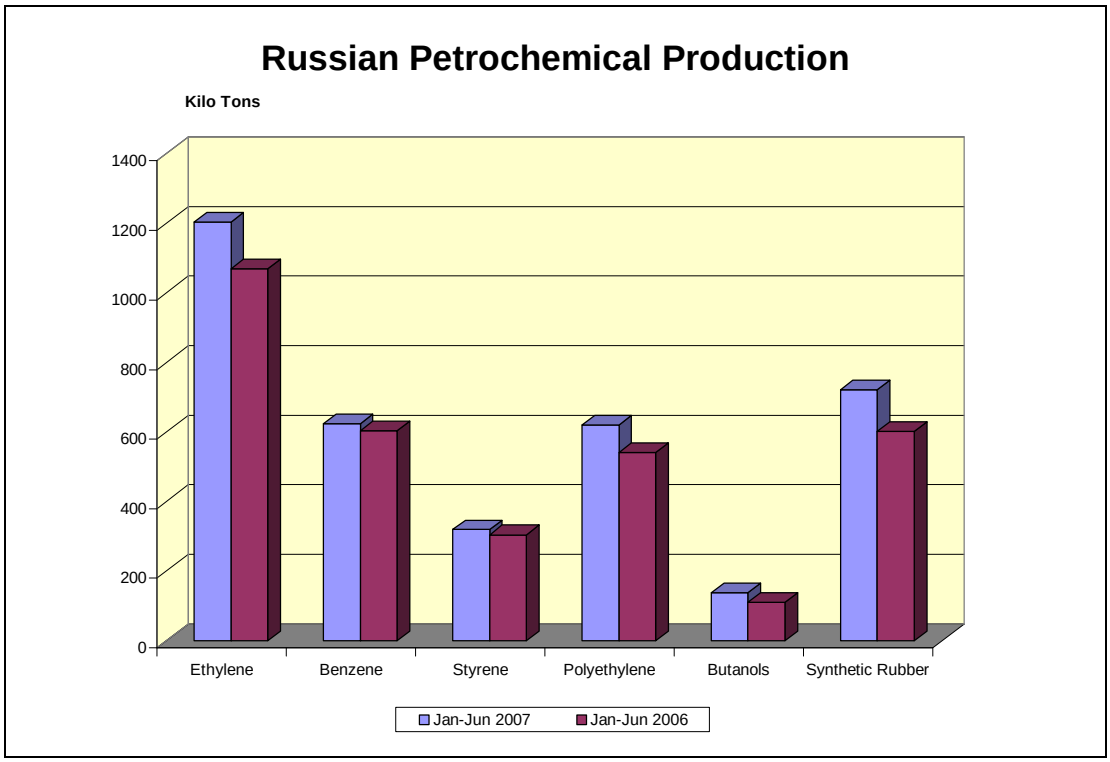
Exports of synthetic rubber increased 5.1% in the first seven months of 2007 to 360,200 tons. This translated into a revenue increase of 15.9% to $649.9 million. Methanol exports increased by 18.5% to 944,000 tons, or 56.7% up on 2006 in terms of revenue which totalled $258.7 million. Ammonia exports fell 13.3% to 1.701 million tons.

Russian petrochemical explosions

The government safety ministry Rostekhnadzor does not plan to carry out a full comprehensive check of Tomskneftekhim and Sayanskkhimplast, following the explosions in mid-August. However, local examination is underway of the incidents, which involved one fatality at Tomsk and four fatalities at Sayansk, but a thorough review of each plant is not considered necessary by the government authority.

The number of explosions at refineries and petrochemical plants in Russia has been already been greater this year than in 2006. The accident at Sayanskkhimplast on 14 August was the ninth such incident. This was

followed by a fire at the Slavneft-Yaroslavlnefteorgsintez refinery at Yaroslavl on 26 August, although thankfully no fatalities were reported. This trend may be a sequence of unlucky coincidence, or alternatively serious signs that investment is required simply to update technology irrespective of capacity expansions. Both Tomskneftekhim and Sayanskkhimplast suffered the accidents after or during planned shutdowns.



Feedstocks

Gazprom Neft, SIBUR-Holding

Gazprom Neft (formerly Sibneft) and SIBUR-Holding have launched the joint venture Yuzhno-Priobskoye GPP for the processing of associated gas from the Yuzhno-Priobskoye field. Subsidiaries of the partners, Gazprom-Khantos and SIBUR-TyumenGaz acted as jv founders. Each party will hold 50% of the joint venture authorised capital. At the first stage, the jv will act as the owner of the project for the construction of new facilities that will process about 1 billion cubic metres of associated gas per annum.

Additionally, Gazprom Neft and SIBUR-Holding are considering a large-scale investment project for the construction of a new processing plant. This will have an annual capacity of 3 billion cubic metres of associated gas and will be located at the SIBUR-owned Vyngapurovsky compressor plant.

Efforts on associated gas utilisation complies with the national strategy aimed at the increase of processing, as well as reduction of environmental impact. Currently, SIBUR-Holding is undertaking an integrated programme on gas processing plant upgrades, and an increase of associated gas processing up to 22 billion cubic metres per annum by 2011.

The main problem is that fixed prices in Russia prevent companies from specifying a long-term formula for the cost of associated gas in their contracts. The good news is that the government is expected to come up with a liberalisation decision for associated gas prices later this year. For SIBUR-Holding, it will represent an important breakthrough ensured by guaranteed supplies of gas to its facilities. The decision could be made in the fourth quarter of 2007. At a minimum estimate, Russia annually burns over 20 billion cubic metres of associated gas. Prices for associated gas were fixed in 2002, from 100 to 45 roubles per thousand cubic metres, depending on the content of liquid fractions.

SIBUR-Holding-Rosneft jv

In June this year, SIBUR-Holding and Rosneft signed a memorandum of understanding over associated gas processing in the Samara region at the Yuzhno-Balyksky Gas Processing Plant. This will help to solve the problem of raw material costs that have more doubled since the start of 2007. This has led to a considerable

reduction in the profitability of SIBUR-Holding's end-product of isoprene and synthetic rubber at Novokuibyshevsk.

Petrochemicals-Tatarstan

Kazanorgsintez Raw Material Purchases H1 2007, (unit-kilo tons)

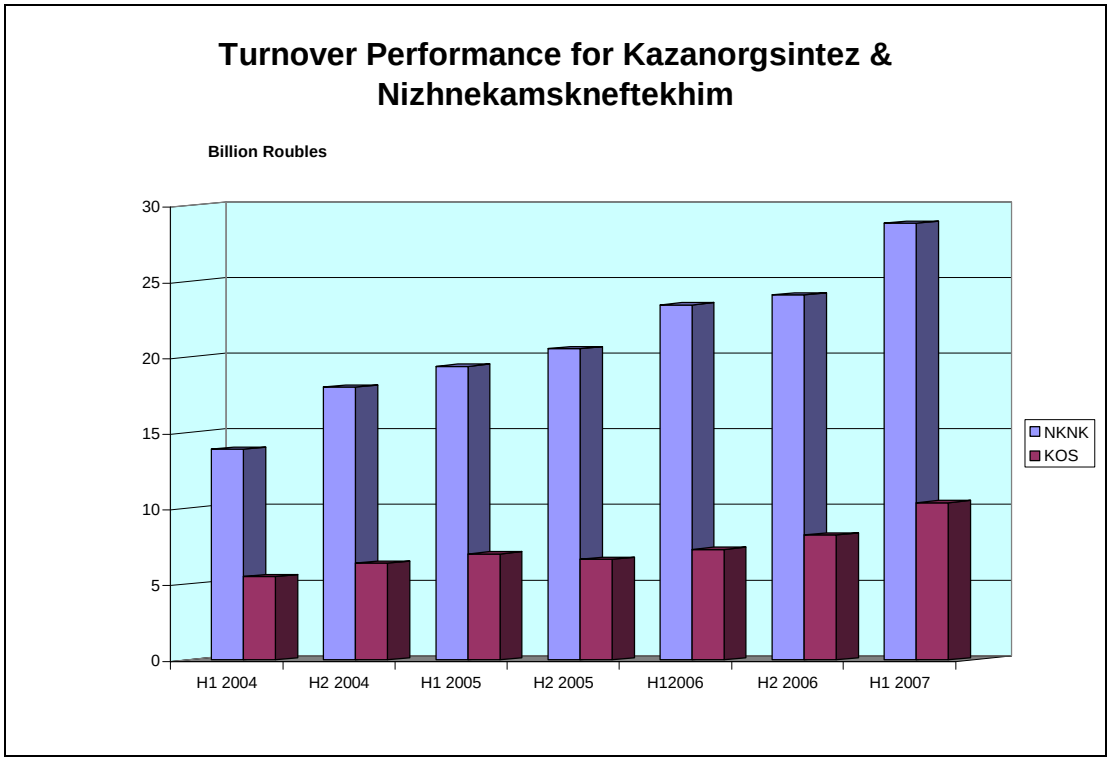
Ethane	***Q1 2007***	***Q2 2007***
Gazprom	64.484	24.569
Tatneft	22.151	22.659
Total	86.64	47.23
Ethylene	***Q1 2007***	***Q2 2007***
Nizhnekamskneftekhim	17.258	35.893
Salavatnefteorgsintez	33.957	21.474
Total	51.22	57.37
Propane-Butane	***Q1 2007***	***Q2 2007***
SIBUR-Holding	33.74	0.00
Imexneftekhim	21.60	17.22
Tatneft	0.00	11.27
Ekoplastik	0.00	4.39
Others	12.30	16.66
Total	67.64	49.54
Benzene	***Q1 2007***	***Q2 2007***
Belis	3.05	2.18
SIBUR-Holding	4.57	2.80
Megapride	1.01	0.61
Severstal	1.32	1.29
Kinef	1.82	0.00
Imexneftekhim	0.00	0.73
Salavatnefteorgsintez	0.00	1.20
Others	7.60	1.88
Total	19.38	10.67

A new gas turbine has been introduced by Nizhnekamskneftekhim at a cost of 2.120 billion roubles. This is a modern electric power station with a combined production cycle for electric power and heat generation. The station is integrated with the system of Nizhnekamsk Heat Plant and is to cover 25% of the needs of Nizhnekamskneftekhim in electric power and 10% in heating. The projected economic benefit is estimated to be over 437 million roubles.

Haldor Topse has reached agreement with TAIF to design a module hydrogen unit with a capacity of 30,000 cubic metres per hour. The contract includes the supply of equipment and catalysts and assembly. Tatneft has signed a contract with the Russian railway company Roszheldor regarding infrastructure investments in connection with the new refinery and petrochemical complex at Nizhnekamsk (Taneko).

In the first half of 2007, Kazanorgsintez and Nizhnekamskneftekhim saw a considerable increase in profitability and turnover. Kazanorgsintez increased its gross profits by 53.6% to $395 million, whilst the EBIDTA rose two-fold to $116.6 million.

Nizhnekamskneftekhim saw an increase of EBITDA and net profit by more than one and half times. As with Kazanorgsintez, the increase in the turnover by Nizhnekamskneftekhim is down to increased production levels, particularly including the polypropylene plant started in October 2006.



Nizhnekamsk Industrial Zone
Nizhnekamskneftekhim has approved a proposed strategy of the development of the association of the Nizhnekamsk industrial region, and further extension of the number of participants in the association for purposes of the development of the productions of auto-components. The zone is being developed to provide outlets for petrochemical production at nearby Nizhnekamskneftekhim and the processors of polymers.

Polyolefins

SIBUR-Holding, Tobolsk Polymer
SIBUR-Holding jointly with Fluor has selected licensors to develop the propane dehydration and polypropylene production complex at Tobolsk, to be located at the site of Tobolsk-Polymer. After a comprehensive feasibility study, UOP's process was selected for propane dehydration and the process of INEOS for polypropylene production. The new dehydration unit will reportedly be the largest in the world and will have a capacity of 510,000 tpa pf polypropylene.

SIBUR-Neftekhim's Production (unit-kilo tons)

Product	*Jul-07*	*Jul-06*
Ethylene	20.1	23.1
Eth Oxide (merchant)	6.4	6.3
Eth Oxide (captive)	17.9	18.8
MEG	18.8	19.9
DEG	2.0	2.2
TEG	0.1	0.1
Propylene	9.2	10.3
Benzene	5.4	5.3
BBF	3.6	5.4
C9	2.1	1.3
EDC	7.9	8.1
PVC	3.8	3.0
Plasticizers	3.5	3.7
Eth chlorohydrin	1.6	1.2

Tobolsk-Polymer is part of SIBUR-Holding and was created as a legal entity in April 2006. In February this year SIBUR-Holding selected Novatek as a feedstock partner in the project. The source of gas for the polypropylene plant will be extracted from wide fractions of light hydrocarbons from within SIBUR-TyumenGaz.

By 2011, consumption per capita of polypropylene in Russia is forecast to have risen to 4.9 kg compared to 3.2 kg at present. Based on a population of around 140 million, growth of around 9-10% can be expected over the next few years. Major growth areas will be in polypropylene fibres, which is a market in its infant stages, and films where per capita consumption of films is recorded at just 0.3 kg.

Tomskneftekhim-revised project plans
SIBUR-Holding has revived plans for Tomskneftekhim, after temporarily postponing project ideas earlier this year. Investments of up to 800 million roubles are planned prior to 2012, involving an increase in olefin capacity. However, plans have been scaled back due to gas feedstock problems, and thus instead of building a new 240,000 ethane based ethylene plant, the naphtha based EP-300 will be increased to 380,000 tpa. Polypropylene capacity will be increased to 200,000 tpa, whilst the LDPE plant will be converted to an HDPE plant.

The gas chemical complex is not a cancelled project, as both SIBUR-Holding and the Tomsk local administration hope that it will be revived at some stage. However, in order for the gas-chemical complex to work SIBUR-Holding needs to be able to guarantee feedstock supply to the region, from the main gas pipeline Nizhnevartovsk-Parabel-Kuzbass. Yet SIBUR-Holding is still in the negotiation stages for gas supply, which means the new gas refinery cannot be constructed and the subsequent gas-chemical complex.

Aside expansion of the existing petrochemical facilities, the SIBUR group also plans to invest 400 million roubles in the Tomsk industrial zone in 2007 and 600 million roubles in 2008. New production facilities could be up and running by 2011.

Tomskneftekhim-explosion
One person was killed and two others suffered injuries as a result of an accident at Tomskneftekhim on 12 August in start-up after a planned shutdown. An accidental release of ethylene during the testing of a compressor facility led to an explosion and fire. The facilities were damaged and production halted temporarily. Production of ethylene was restarted over a week after the incident, on 21 August, and polyethylene on 24 August. Thus, the effects have been short term but will reduce production volumes in the third quarter. The local administration for the Tomsk province has concluded that the accident was due to the incorrect design of the polymerisation unit.

Kazanorgsintez
Kazanorgsintez has agreed credits arrangements with ABN Amro for €5.8 million for equipment purchases as part of the investment programme worth $755 million. Other banks providing finance include Sberbank, and the Japanese Bank of International Co-operation. The polycarbonate and bisphenol A plants at Kazan are close to start-up, but further ethylene and polyethylene investments are planned for the longer term.

The table above illustrates raw material sources for Kazanorgsintez in the second quarter of 2007. The company has recently started producing bimodal pipe resin based on Unipol technology, for PE-100 applications. The expansion for the HDPE plant involved modification of two lines by increasing their capacity to 220,000 tpa each.

Aromatics

Russian caprolactam market
Domestic demand in Russia for caprolactam is expected to rise over the next few years on the back of polyamide consumption. Caprolactam capacity is projected to rise in Russia by over 60% in the next few years, whilst demand is estimated to jump from 180,000 tons in 2006 to around 300,000 tons by 2010. This will mean exports dropping from 63% of total production in 2006 to around 45% by 2010.

Kuibyshevazot's third polyamide plant, with 23,000 tpa capacity, is due onstream in 2008, increasing the company's granulate capacity to 95,000 tpa. Construction of another plant is being studied and could result in a rise in capacity to 140,000 tpa by 2010. Azot is to rebuild its caprolactam plant at a cost of $29.6 billion, with completion slated for 2009. A large part of production is exported, but domestic demand is also expected to rise.

Production of polyamide-6 totalled 49,400 tons in 2006, with 21,900 tons consumed in the domestic market. Demand from the construction sector is fuelling growth in polyamide-6 applications, although exports account for more than 50% of production. In the first half of 2007, Kuibyshevazot increased turnover by 32.7% to reach 8.4 billion roubles. Profits rose by 87% to 1.0 billion roubles, with profitability rising from 14.2% to 20.3%. Production increases accounted for the increase in turnover. Caprolactam production rose 7.9% to 82,400 tons, whilst polyamide-6 rose 187% to 33,900 tons. KuibyshevAzot aims to construct a new benzene plant, but at the same time toluene has been identified as a cost-effective route to caprolactam production.

Azot at Kemerovo stopped caprolactam production in August, due to a planned maintenance outage in other parts of the complex. This is connected with the annual planned preventive and repair work by Tomsktransgaz on the gas pipeline.

Polief's PTA Sales (unit-kilo tons)

	Q4 05	*Q1 06*	*Q2 06*	*Q3 06*	*Q4 06*	*Q1 07*	*Q2 07*
Domestic	-	5.7	15.0	28.5	34.0	36.1	42.9
Export	14	14.9	35.0	6.4	21.2	14.8	8.7
Total	14.0	20.6	50.0	34.9	55.2	50.9	51.6

Polief-PTA domestic sales rise
Domestic PTA sales from Polief increased again in the second quarter, as Russian PET producers increase production loads. With start-up of Polief's new PET plant expected in the near future, Russia should start to import PTA in reasonable volumes. Some small quantities have been received from South Korea this year, but for the most part Polief has been controlling the domestic market. .

PVC

SIBUR-Holding, SolVin
Documentation for the new PVC plant at Kstovo will start to be examined in September. Public hearings will be carried out by the ecological centre Dront on 2 September. PVC production is expected o start in 2010 under the jv RusVinyl. Opposition to the project's location is still evident from the local Kstovo region, which is argued is a green city. However, it may be very difficult to move the project after so much thought has gone into the location, whilst also it is stressed that the construction will have minimal impact on the environment.

SIBUR-Holding plans to increase ethylene capacity at Kstovo up to 430,000 tpa, which represents the cornerstone of the eventual expansion of PVC capacity to 500,000 tpa. However, in the first phase ethylene capacity will be expanded to 360,000 tpa by Q3 2010, which will provide sufficient ethylene for the 330,000

tpa of PVC. Both projects will be constructed in tandem. The PVC capacity of 330,000 tpa will consist of 300,000 tpa of suspension grade PVC and 30,000 tpa of paste. PVC processing will be carried out at Dzerzhinsk, where capacity stands at 34,000 tpa.

Russian PVC paste market

The factor behind the introduction of 30,000 tpa of PVC paste capacity as part of the total 330,000 tpa at Kstovo is the strong growth rate of around 10% per annum combined with limited domestic availability. PVC paste is produced in Russia by Khimprom at Volgograd, Usolyekhimprom and Azot at Novomoskovsk, with all plants having been constructed in the 1960s. None of these plants are being expanded, and whilst part of the new capacity at Kstovo will be used captively, the paste market is likely to see a growing deficit in the years to come. PVC paste consumption in Russia is expected to reach 200-220,000 tpa by 2015.

Kaustik-PVC expansion plans

Kaustik's current capacity of 135,000 tpa for VCM production was started in December 1996, having started construction in April 1994. Full capacity was achieved in December 2007. This was the first plant in Russia to use the balanced process between oxychlorination and high concentrated hydrogen. The plant capacity has been expanded since the original start-up, producing 167,446 tons of PVC in 2006. The company currently aims to increase capacity to 200,000 tpa by 2009. Further expansions will depend on ethylene availability in the Volga-Urals region.

Nikokhim-investment projects

Nikokhim remains committed to its investment ideas for a new petrochemical complex in the Volgograd region, which itself is dependent on the creation of a large-scale industrial park. The mother company Nikos has issued share coupons with a view to finding capital to support investment plans. The plans do appear ambitious and despite support from Moscow may prove difficult to implement without a partner.

To recap, Nikokhim wants to construct a petrochemical complex at the Kaustik site at Volgograd. This would include 500,000 tpa of PVC, 450,000 tpa of polyethylene and 400,000 tpa of polypropylene. The project concept is driven by the aim to construct a large PVC plant, but this itself is dependent on the availability of ethylene. In order to make ethylene costs competitive the olefin complex has to be much larger than the needs for the PVC plant, hence the ideas to construct polyolefin facilities.

Sayanskkhimplast-EDC explosion

Sayanskkhimplast suffered an explosion at its EDC plant on 14 August 2007, resulting in four workers being killed and five injured people. The incident was put under control quickly, but it is not known yet what impact it will have on production. Sayanskkhimplast stated that the explosion resulted in the EDC section.

A full examination of the incident is already underway, and results should be known in early September. Sayanskkhimplast belongs to Renova-Orgsintez, and is the largest Russian producer of PVC. Production of VCM and PVC was actually down for annual maintenance at the time of the accident, and although it was expected, the plants were to resume in early September this may now be delayed into October. Chlorine and caustic soda capacity is running normally. The cause of the explosion was cited due to safety lapses in the EDC unit, although according to reports there is no threat to the environment and population from the explosion.

Methanol & gas based chemicals

Novocherkassk Synthetic Products Plant

Novocherkassk Synthetic Products Plant, the main owner of which is Rusnicor, is working on major investment plans involving a large-scale expansion of the methanol facilities. Rusnicor invested $10 million into maintenance and reconstruction in 2006, which helped increase methanol production to 160,000 tpa. However, expansion plans are starting to be formed where methanol capacity could be increased to 400,000 tpa, with the addition of 100,000 tpa of acetic acid.

The feedstock for the methanol plant is intended to be coal, with design works currently in progress and likely to last 3-4 years. The Novocherkassk plant of synthetic products was started in 1952 and was purchased by Rusnicor in January 2006.

Shchekinoazot-CO2 emissions
Shchekinoazot has signed an agreement with Camco International for a project to reduce CO2 emissions. This project will make it possible to reduce the consumption of natural gas on 22 million cubic metres per annum, which is part of Russian conditions outlined by the Kyoto protocol.

Camco is a leading climate change group with one of the world's largest portfolios of carbon credits. Camco works closely with industrial companies to identify and develop projects that reduce greenhouse gas emissions and then arranges for the sale and delivery of credits into the international market.

Shchekinoazot specialises in the production of methanol, caprolactam, urotropin, ammonium sulphate, etc. The shareholders of company include TranzitGazResource with 5.6785% and privately held company Nitro Industries with 90.4%. The gross profit of Shchekinoazot increased 32% in the first half of 2007 to 3.943 billion roubles.

Duties for fertilisers
The European Union has removed a tariff on urea from Russia, ending more than a decade of protection for producers in the EU. The EU said that Russian urea exporters, including Evrokhim, sell the farm product significantly above a minimum price on which the duty is based. The EU introduced the levy, the difference between the price floor of 115 euros ($159) per ton and the import price when this is lower, in 1995 to punish the Russian industry for selling in Europe below domestic prices or below the production cost, a practice known as dumping.

Synthetic Rubber/C4

SIBUR-Holding, Krasnoyarsk Synthetic Rubber Plant
SIBUR-Holding has taken control of the Krasnoyarsk Synthetic Rubber Plant, by increasing its shareholding from 14.6% to 95%. The price was set at 200 million roubles for the stake. In 2006, the Krasnoyarsk Synthetic Rubber Plant produced 34,400 tons of synthetic rubber. SIBUR-Holding controls around 60% of the Russian market for synthetic rubber, with Nizhnekamskneftekhim controlling around 30%.

Regional Distribution of Sales from Kazan Synthetic Rubber Plant (%)

Region	*Q1 2007*	*Q2 2007*
Tatarstan	28	14
Moscow	12.4	12
Germany	12.7	7
Latvia	11.1	7
Poland	-	14

Kazan Synthetic Rubber Plant
SKB butadiene rubber sales more than doubled in the second quarter over the first quarter of 2007 due to strong demand. Kazan Synthetic Rubber Plant is the sole producer in Russia of SKB butadiene rubber, which is used in a wide range of industries. The product is faced by strong competition from other natural rubbers, SBR, etc, but the advantage of SKB on the Russian and foreign market is its lower price.

Kazan Synthetic Rubber Plant produces over 160 products including about 80 types of rubber, over 30 types of Thiokol and silicone sealants, and a wide range of various products used in medical industry, instrument-making, electrical industry, aircraft construction, space-system engineering, motor industry, food processing, shoe industry, housing and industrial construction.

Raw Material Suppliers for Kazan Synthetic Rubber Plant

Product	Supplier	% of purchases
Butadiene-1,3	Nizhnekamskneftekhim	75
E Chlorohydrin	SIBUR-Neftekhim	100
ParaformaldehydeUralkhimplast		100
Caustic Soda	ETK, Moscow	70
Caustic Soda	Khimprom, Novo'ark .	30

The main competitors on the Russian market for Thiokol include Akzo Nobel and Toray. For silicones, the Russian market is faced by competition from Wacker, Dow Corning, and GE Bayer Silicones.

Nizhnekamskneftekhim-butyl rubber expansion plans
Nizhnekamskneftekhim plans in 2008 to start the increase capacity of butyl and halobutyl rubber to 130,000 tpa, including 50,000 tpa of halobutyl rubber. By 2012, the company hopes to achieve 200,000 tpa of capacity. In 2006, Nizhnekamskneftekhim produced 107,700 tons, including 28,100 tons of halobutyl rubber.

The halobutyl rubber plant was started in April 2004 as part of the butyl rubber division which has become an increasingly important part of the company's synthetic rubber production.

In 2006, Nizhnekamskneftekhim exported 618,900 tons of synthetic rubber, which was 54% of total; production. Polyisoprene exports amounted to 150,500 tons, with HBR exports amounting to 21,400 tons. Polybutadiene exports were 50,300 tons. Important goals for the company include improvements in quality and the range of production. The production of isoprene in 2006 was divided in market shares into SIBUR-Holding 45%, Efremov Synthetic Rubber Plant 26% and Nizhnekamskneftekhim 29%.

Close collaboration between Nizhnekamskneftekhim and important rubber consumers (Michelin, Pirelli, Goodyear, Continental, and Bridgestone) has facilitated plans to increase the volume of production of synthetic rubber. This includes butyl and halobutyl natural rubber, and the new forms of natural rubbers ([DSSK] and SKD-L), which have potential on the world market.

Russian isoprene market

The production of isoprene in 2006 was divided in market shares into SIBUR-Holding 31%, Kautschuk-Sterlitamak 24% and Nizhnekamskneftekhim 45%. Demand for isoprene monomer seems to have seen a slight decline in demand from the producers of mechanical rubber goods and Russian tyre plants. Kautschuk at Sterlitamak is constrained by feedstock scarcity, whilst Nizhnekamskneftekhim has increased production following the introduction of the one-stage process.

Nizhnekamskneftekhim-maleic anhydride, BDO

Ideas are being considered for the possible construction of units for the production of maleic anhydride and 1-4 butanediol at Nizhnekamskneftekhim. Availability of butane, combined with the possibility to export butanediol, are the main factors behind the project idea. Initially, it is necessary to examine some complex questions about such a project, in terms of capacity and whether or not it should be fully integrated. .

Although maleic anhydride is imported into Russia from Japan and China, overall demand is very low due to the absence of a large unsaturated polyester resin sector (which accounts for a major share in maleic consumption). Moreover, the export of maleic anhydride is a complicated process, at least in liquid form, and product margins are tight on sales of solid product. Thus, it would suggest that the most cost-efficient operation would consist of a fully integrated maleic to BDO complex.

Ukraine

Karpatneftekhim's Product Sales (unit-kilo tons)

Product	*2003*	*2004*	*2005*	*2006*
VCM	173.2	236	190.2	179.2
Polyethylene	92.3	98.1	93.9	108
Propylene	104.1	109.4	91.7	105.6
Caustic Soda	81.6	115.9	100.6	91.6
Benzene	79.8	80.9	64.5	72.7
Ethylene	52.6	19.6	13.8	40.1

Karpatneftekhim

Karpatneftekhim plans to stop production for a planned shutdown from 1-30 September, which will also include the production facilities of Lukor. At the start of September, local company Ukrstalkonstruktsiya (Ukrainian Steel Construction) will install the steel for the new chlorine and caustic soda plants. The project consists of 180,000 tpa of chlorine and 200,000 tpa of caustic soda. A PVC plant is also planned with a capacity of 300,000 tpa. The introduction of membrane technology at Kalush will be the first of its kind in Ukraine. Karpatneftekhim currently contrails around 25% of the Ukrainian market.

Khimprom Pervomaisk

Khimprom at Pervomaisk in the Kharkov region has decided upon a new project for PVC, involving costs of around 20 million hryvnia. The project has been scaled back vastly from 113 million hryvnia which was planned to be invested into new units for chlorine and caustic soda production. Khimprom restarted production of chlorine and caustic soda at its existing units, but has decided not to build new units. It decided that it cannot compete against the other two producers in Ukraine, Karpatneftekhim and Dniproazot, and it has been decided to concentrate solely on PVC.

Azot Severodonetsk

Azot increased acetylene production in the first half of 2007 by around 50% over last year, with VAM rising by 58% and acetic acid by 4%. The company this year has carried out a number of measures, which are designed to reduce production costs. Vinyl acetate currently enjoys good demand in Europe, Turkey and the Middle East.

Azot has recently taken the decision regarding the construction of a waste-heat boiler in the acetylene shop, which would further reduce the cost of acetylene and vinyl acetate production. .Methanol production costs are controlled by gas prices, which have been rising in the past two years from Russia. These costs now make Azot uncompetitive against Russian methanol producers.

Rivneazot-adipic acid
Rivneazot's 28,000 tpa adi[pic acid plant remains shut down following an explosion and fire at the site last month. One worker died and another was seriously injured by the explosion, which took place on 31 July during regular maintenance and repair of the adipic acid plant. The subsequent fire was extinguished within 40 minutes, and there was understood to be no environmental damage as the adipic acid facility was shut down for maintenance at the time. A preliminary investigation suggested that the accident was caused by breaches of safety rules. No official comment has been made yet regarding the effect of the accident on the plant's adipic acid production, though it seems likely that the plant will be shutdown for a prolonged period.

Rivneazot-methanol
Rivneazot is considering investment of $100-120 million in a methanol plant. The company is one of the largest producers of fertilisers in Ukraine and therefore already receives natural gas. The size of the methanol plant could be between 600-1000 tons per day, and could be important for Rivneazot to preserve its income level. Methanol is produced in Ukraine only at Azot at Severodonetsk, which consumes nearly output captively in the production of acetic acid and formaldehyde.

Belarus

Belneftekhim production H1 2007
Belneftekhim increased production by 8.8% in the first seven months of 2007 based on physical terms, and 17.3% in turnover. Mineral fertiliser production rose 31.4% to 3.615 million tons over the same period in 2006, whilst synthetic resins and plastics rose 3% to 300,100 tons, Cord fabric production rose 2.7% to 42.9 million cubic metres, chemical fibres and threads 11.9% to 131,200 tons, tyres for agricultural use 30.7% to 279,600 pieces, automobile tyres by 30.9% to 1.919 million pieces, lorry tyres by 28.6% to 538,000 pieces, and paints 33.7% to 36,400 tons.

Belneftekhim has proposed a new strategy involving the introduction of new technology for the production of polymers and composite materials, fibres and threads in the 2008-2011 timeframe. The programme will be finalised by the end of 2007, with work starting in 2008. Finance will be provided from the state budget

Svetlogorsk Khimvolokhno
Khimvolokhno at Svetlogorsk has introduced a new line for non-woven materials, with a capacity of 2,000 tpa. In 2007, Khimvolokhno at Svetlogorsk has also introduced a new line for the production of combined fibres with a capacity of 45 tons per annum.

Kazakhstan

Kazakhstan Petrochemical Industries
A substantial proportion of the output from the new petrochemical complex, to be managed by Kazakhstan Petrochemical Industries at Atyrau, will be shipped to China. Construction of the gas chemical complex is expected to start before the end of 2007. Only around 10% of production is expected to be sold domestically, with exports divided between China, Russia and Turkey.

Construction of the petrochemical complex will start this year, and will be based initially on gas from the Tengiz deposits and secondly gas from the Kashagan deposits. The total costs of the project amount to $5.2 billion, in which $838 million will be directed to investment in the infrastructure. The entire complex will comprise two separate gas-chemical units, two units for the production of olefins and two units for the production of polyolefins. Ethylene capacity will reach 800,000 tpa, which will be directed towards 400,000 tpa of LDPE and 400,000 tpa of HDPE. The polypropylene plant will consists of 400,000.

Relevant Currencies

(Czech crown, Kc, $1= 20.461, €1 = 27.974)
(Hungarian Forint, Ft, $1 = 185.20, €1 = 250.77)
(Polish zloty, zl, $1 =2.7876, €1 =3.8112)
(Ukrainian hryvnia, $1 = 5.0065, €1 = 6.726)
(Rus rouble, $1 = 25.578, €1= 34.807)

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