

CIREC

MONTHLY NEWS

Chemical Industry News for Central Europe, South East Europe and Eurasia

Edited by **Andrew Sparshott** | Tel **+44 (0)20 8669 5126** | Email **enquiries@cirec.net** | Web **www.cirec.net**

Czech Republic | Slovakia | Hungary | Poland | Bulgaria | Romania | Croatia | Slovenia | Yugoslavia | Baltic States | Russia | Belarus | Ukraine | Transcaucasus | Central Asia | Kazakhstan

Issue 186, 23 May 2006

Features from this issue

- ✍ Unipetrol wants to invest Kc 950.5 million in the modernisation and capacity increase in its major subsidiaries Chemopetrol and Ceska rafinerska this year. The group plans to invest Kc 584.1 million in the refinery Ceska rafinerska.
- ✍ PKN Orlen reached an agreement on 27 April with Mitsubishi Chemical Corporation for deliveries of 150,000 tpa of PTA for the period 1 July 2010 to 31 December 2014, with the possibility of the delivery quantity change at +/-10%.
- ✍ BorsodChem's has recently unveiled a new six year strategy, which focuses heavily on isocyanates and assuming the role of the leading player in the TDI market in Europe. With an orientation towards increasing revenue and profitability, the main part of this strategy is concentrated on expanding TDI and MDI capacity.
- ✍ In the first quarter of 2006, PKN Orlen's petrochemical division's gross profit increased by 14.8% due mostly to the consolidation of results from Unipetrol. Unipetrol's profit of zł 6 million helped offset loss of margin elsewhere in the group, particularly the fall in profits by 25% from Anwil.
- ✍ In the first quarter of 2006, Russian petrochemical output demonstrated a similar pattern to recent quarters, with most products showing little or no change. Methanol production saw a large increase, of 11.2% against 2005 due to capacity expansions at Tomsk and Novomoskovsk.
- ✍ In the first quarter of 2006 Kazanorgsintez reduced its net profit 2.2 fold to 257,480 million roubles. The fall in profits was attributed to a combination of high costs of raw materials and also a shortage of supply.
- ✍ Aniline production increased by around 15% in Russia in 2005 over 2004, and totalled 60,000 tons. The largest producer Volzhskiy Orgsintez saw an 8.7% fall in production to 35,600 tons but this was compensated by large increases at the other two producers Beratón at Berezniki and Khimprom at Novocheboksarsk.
- ✍ On 1 June, Sayanskkhimplast will cease chlorine production based on mercury electrolysis, after which preparations will commence for the start-up of the new membrane plant. Start up of chlorine and caustic soda is planned to take place at the beginning of August.
- ✍ In the first three months of 2006, Kuibyshevazot recorded a turnover of 3.4 billion roubles which was 13.6% up on 2005. Profits from sales rose 16.4% to 466.4 million roubles, which represented a 16.4% increase over 2005. Physical production volumes increased 8.1%. Caprolactam increased 7.1% in the first quarter, whilst ammonia rose 33.6%.
- ✍ Krasitel at Rubezhnoye, in eastern Ukraine, plans to restart the production of phthalic anhydride at the end of 2006, running the plant with a capacity of 60,000 tpa. The main technical problems at the site have been resolved, and trial product output is soon expected.

CENTRAL EUROPE

Czech Republic

(Czech crown, Kc, May 19 \$1= 22.214, €1 = 28.305)

Unipetrol

Unipetrol wants to invest Kc 950.5 million in the modernisation and capacity increase in its major subsidiaries Chemopetrol and Ceska rafinerska this year. The group plans to invest Kc 584.1 million in the refinery Ceska rafinerska. Among the main projects will be modernisation of the hydrocracking unit built in 1987, which is used for more efficient oil processing and is an important source of raw material for Chemopetrol. Money will also be invested in biofuel equipment.

A sum of Kc 366.4 million has been earmarked for Chemopetrol. The funds will be spent on raising the capacity of the polypropylene unit and expanding the polyolefin warehousing capacity.

The Unipetrol group plans to invest also in other subsidiaries. Investment in Paramo should reach Kc 240 million this year. The company also planned investment of Kc 280 million in Kaucuk and Kc 140 million in Spolana, but has decided to sell these two companies. Thus, the actual investment will depend on the sale talks and ideas of the new owners.

Chemopetrol is the group's most profitable company. It posted a net profit of Kc 894 million in the first quarter of this year, a year-on-year decline of Kc 204 million. Sales grew by Kc 1.1 billion to Kc 8.4 billion. The performance was helped by favourable mark-ups for polyethylene, polypropylene and ethylene, despite the fact that margins were lower than in 2005. Unipetrol

Overall, first-quarter net earnings at Unipetrol dropped by one-third on the year to Kc 814 million, the main reasons being shutdowns at refineries, high oil prices and losses from fuel sales. Sales' revenues increased by 12% to Kc 20.14 billion due to higher revenues in most Unipetrol units, especially Chemopetrol and Unipetrol Rafinerie.

Net earnings at Kaucuk dropped to Kc 211 million from Kc 288 million in the first quarter of last year. Sales decreased by Kc 247 million to Kc 2.6 billion, which was caused by lower demand and also seasonal swings in the demand for polystyrene. Spolana recorded net earnings of Kc 96 million, which was Kc 74 million lower than in the first quarter of 2005. Sales went up 1.5% to Kc 1.6 billion.

Final results for Unipetrol for 2005 showed an increase in sales by 14% to an audited Kc 80.95 billion, almost a quarter less compared with its preliminary results announced at the end of February. Chemopetrol reported the highest net profit of Kc 2.62 billion, which was the best result recorded for the company over the past ten years. In 2004, the company netted Kc 1.95 billion, a rise of 34% whilst sales were 7% higher at Kc 31.2 billion.

Kaucuk saw its net earnings rise by 58% in 2005 to Kc 439 million. Sales added 2% on the year to Kc 10.4 billion at end-2005 owing to higher prices of petrochemical commodities stemming from a growth in oil prices. Spolana netted Kc 183 million, up from 2004's Kc 82 million, which similarly to Chemopetrol was also the best result over the past ten years. The parent company Unipetrol made a net profit of Kc 1.02 billion compared with Kc 143 million in 2004.

Hungary

(Hungarian Forint, Ft, May 19, \$1 = 207.77, €1 = 264.74)

BorsodChem Strategy

BorsodChem's has recently unveiled a new six year strategy, which focuses heavily on isocyanates and assuming the role of the leading player in the TDI market in Europe. With an orientation towards increasing revenue and profitability, the main part of this strategy is concentrated on expanding TDI and MDI capacity. In addition to existing capacities, BorsodChem plans to commission a 150,000 tpa TDI plant by 1 July 2009, and also a 200,000 tpa MDI plant in 2010-2011. In spite of the strong focus on isocyanates the company

plans to hold on to the PVC sector due principally to synergy reasons. BorsodChem has set a target for annual sales of €1.5 billion in 2011.

The new TDI plant planned for 2009 would raise BorsodChem's total product capacity to 250,000 tpa, which would make it the leading producer in Europe. Regarding MDI, the emphasis at present is aimed at ensuring that the new capacity, which was started on 1 December 2005, is running at maximum levels. This new unit increased total MDI capacity to 140,000 tpa, and total utilisation levels are currently running at around 95%. Plans for the 200,000 tpa plant are being reviewed which would also implicate an increase in aniline capacity at Ostrava. The company does not plan to add more PVC capacity at Kazincbarcika, and the main goal in this product sector is to be concentrated on cutting costs.

Key suppliers for BorsodChem in 2005:

Supplier	Raw Materials
TVK	Ethylene
BC-MCHZ	Aniline, nitric acid
Karpatneftekhim	VCM
MOL Rt.	Toluene
SALROM	Industrial salt

2005 was an important year for BorsodChem's investment strategy, most of which was derived from internal design development rather than technology license purchases from other companies. The cost of the TDI capacity expansion in 2005 totalled only about a quarter of that of a dedicated green field investment. Similarly, the 35,000 tpa PVC capacity addition was achieved from around half of the capital expenditures required in a green field PVC project.

Feedstock structure

BorsodChem Rt's main purchases include ethylene, benzene and toluene, prices of which all reached historical price heights in 2005 due to high oil prices. The full requirement for ethylene used for VCM production was purchased from TVK and amounted to 117,000 tons. Ethylene supply for BorsodChem was guaranteed by the commissioning of the new ethylene cracker at TVK in December 2004. Nearly 85% of VCM production was produced by the company's own plant, while the remaining 15% (43,000 tons) was purchased from Karpatneftekhim in Ukraine. The VCM purchases were in accordance to an annual supply agreement.

Around 50,000 tons of aniline was used by the company's MDI production unit, which was delivered to the Kazincbarcika site by BC-MCHZ at Ostrava. Regarding toluene for TDI, the company used a total of 44,000 tons in 2005 which was supplied by MOL, under a three-year contract valid until 2006.

The major share of chlorine demand in 2005 was covered by in-house production, while the remaining chlorine quantity (about 78,000 tons) was purchased mainly from Romanian source under a mid-term general agreement. The 184,000 tons of rock salt used annually by the company's electrolysis chain is purchased from its traditional Romanian partner, based on a three-year supply contract.

Carbon monoxide and hydrogen needed for isocyanates production was supplied by Linde Gáz Magyarország Rt, situated on the company's site, via a long-term agreement. Other industrial gases (oxygen, nitrogen) were also delivered by Air-Liquide, also operating on the Kazincbarcika site.

Production

In 2005, BorsodChem was not required to undergo any maintenance shutdowns which helped quarterly profit levels. The MDI/TDI/aniline chain increased its share in the company's sales' revenues, which came close to 50%. Out of the total Ft 7.7 billion gross profit increase, Ft 6.3 billion growth was derived from the MDI/TDI/aniline chain. As a result of the completion of capital expenditure projects in 2004/2005, the production of VCM, PVC resin, MDI, TDI and aniline all increased.

**BorsodChem's Aniline-Isocyanate
Production (unit tons)**

Product	2005	2004
MDI	62.934	57.558
TDI	73.842	64.903
Aniline	132.55	112.832
Cyclohexylamines	22.198	22.063

Acquisitions

Regarding acquisitions in 2005, BorsodChem opted to buy Petrochemia Blachownia from Ciech, a supplier of benzene and toluene. The possibility to purchase Zachem, which has a comparative TDI technology to BorsodChem, was declined due to concerns over the financial status of the company. Future acquisitions are possible but not imminent. Spolana seems an unlikely

prospect, whilst the appeal of Oltchim has declined as BorsodChem has embarked on a strategy aimed at isocyanates.

Poland**(Polish zloty, zl, May 19, \$1 = 3.1106, €1 =3.9626)****PKN Orlen Q1 2006**

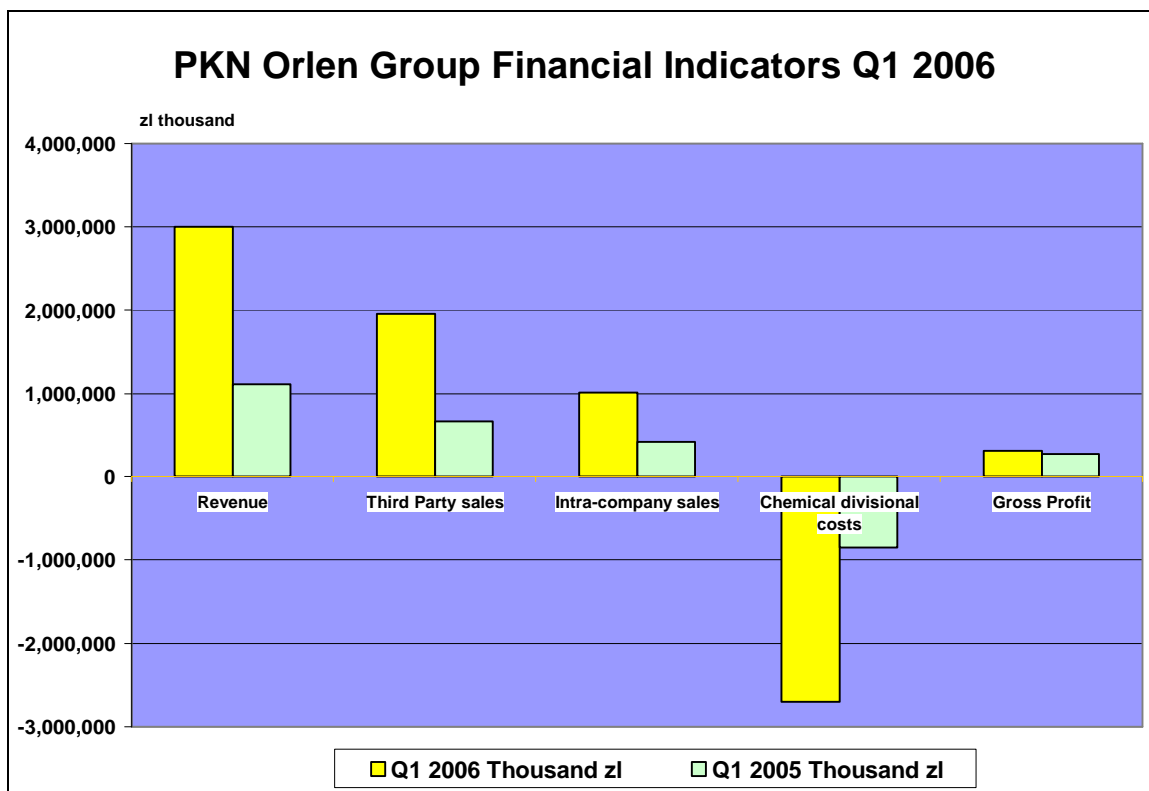
In the first quarter of 2006, PKN Orlen's petrochemical division's gross profit increased by 14.8% due mostly to the consolidation of results from Unipetrol. Unipetrol's profit of zl 6 million helped offset loss of margin elsewhere in the group, particularly the fall in profits by 25% from Anwil. As can be seen from the graphic, turnover has increased threefold, and so have costs, but the profit level remained broadly the same.

The company's revenue structure has undergone major changes in view of the consolidation of Unipetrol and related business of BOP. From the first quarter of 2006, PKN Orlen has divided its chemical division into two parts, petrochemicals and chemicals. The new petrochemical group includes PKN Orlen, Chemopetrol and Kaucuk, and Basell Orlen Polyolefins Sp. z o.o. The new chemical group includes the activity of Anwil, Spolana, and Unipetrol Trade.

During the 1st quarter of 2006, the combined chemical and petrochemical divisions' revenues were higher by 68.8% or zl 1.884 billion than in 2005. The consolidation of Unipetrol and the modernisation of the Olefin II installation at Plock, combined with the start-up of new polyethylene and propylene installations in BOP, meant that olefins and polyolefins saw a major increase in production.

The fall in sales of ethylene oxide and orthoxylene in Q1 2006 is a consequence of the emergency shutdowns of main customers during this period and the resulting smaller demand for these products.

Good results were generated by Chemopetrol. as a result of the time transition in the price formula between the refinery part and the petrochemical part of Unipetrol a.s. Partly due to market factors and the unplanned shutdowns of production installations at BOP, PKN Orlen's profits dropped in the first quarter.

**PKN Orlen PX & PTA Project**

PKN Orlen reached an agreement on 27 April with Mitsubishi Chemical Corporation for deliveries of 150,000 tpa of PTA for the period 1 July 2010 to 31 December 2014, with the possibility of the delivery quantity change at +/-10%. The estimated total value of the agreement in the entire contractual period amounts to approximately zl 2,800 million.

PTA deliveries are scheduled to start on 1 July 2010 and PKN Orlen is granted with the right to change the date once, but no more than by 9 months. After 5 years from the first delivery date, terms of the agreement can extend the contractual period.

The plan to construct the PTA plant was approved by the management of PKN Orlen in 2005. The production chain includes the construction of a paraxylene plant at Plock, with a capacity of 400,000 tpa, and a PTA plant at Wloclawek with a capacity of 600,000 tpa. The projected deadline for the completion of the investment in both units is estimated for January 2009. The objective of the investment is to extend the production chain towards petrochemical products with a high market value.

Romania

Rompetrol

Rompetrol Petrochemicals plans to invest \$400-450 million in the petrochemical sector in the following three years. Around \$200 million will be assigned to upgrade the existing installation, and the remainder will be used to build more units. The petrochemical complex at Midia-Navodari platform recorded a turnover of €130 million in 2005; a 28% increase compared to the previous year, but is still a relatively small sector for the company compared to oil. Recently, Rompetrol Petrochemicals signed a 14 year contract with Dow Chemicals, to produce and supply polymers under the Dow brand.

Oltchim

Oltchim recorded a net profit of €862,316 in the first quarter of 2006, which was ten times less than the EUR 8.7 million in 2004. The company saw a gross profit of €3.1 million, €1.2 l million less than the €4.3 million that had been estimated. The company's forecast at the start of the year was that net profit would post €12 million, almost double compared to 2005 although that now seems in doubt. The turnover forecast is €511 million, a 23% increase compared to 2005.

In a renewed effort to sell Oltchim the Romanian Economy Ministry has emphasised that the future buyer would take over Oltchim's debts to the budget, totalling around €75 million, as well as be obliged to complete overdue payments on external loans.

EURASIA, COMMONWEALTH OF INDEPENDENT STATES

Russia

(Rus rouble May 19, \$1 = 27.091, €1= 34.499)

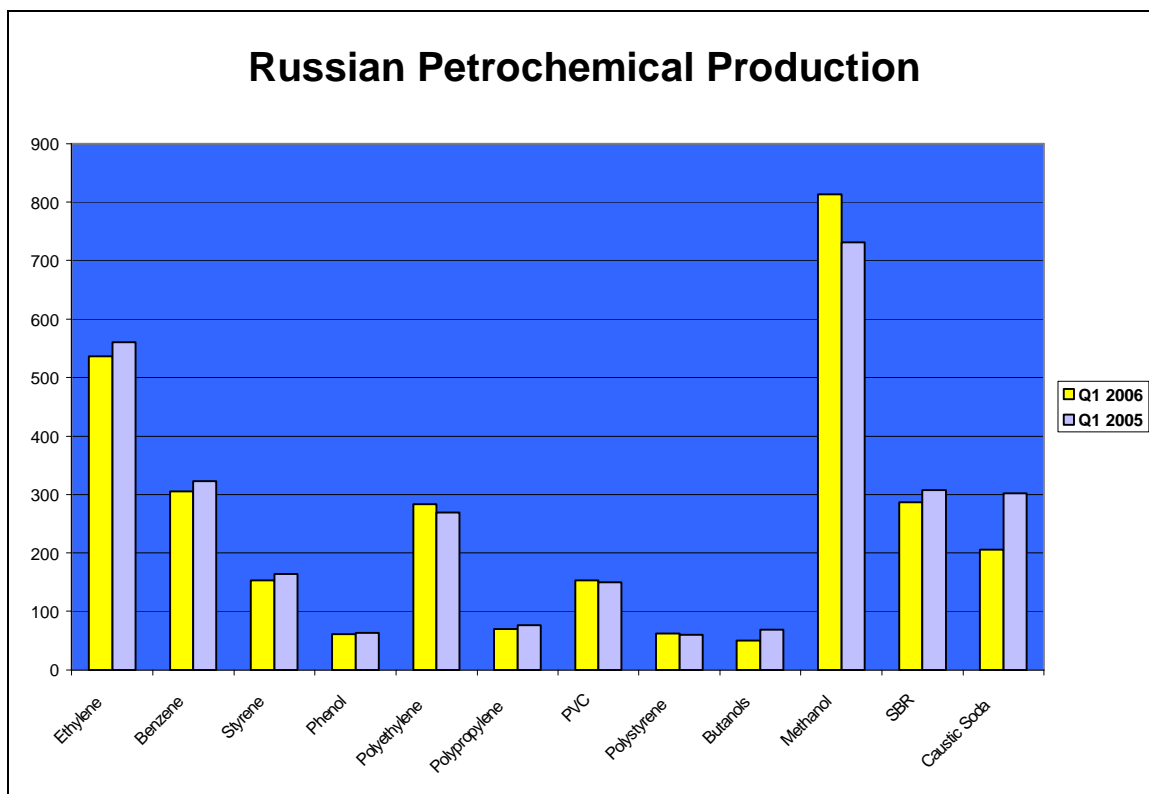
Production trends

In the first quarter of 2006, Russian petrochemical output demonstrated a similar pattern to recent quarters, with most products showing little or no change. Methanol production saw a large increase, of 11.2% against 2005 due to capacity expansions at Tomsk and Novomoskovsk. Ethylene production saw a fall of 4.2% against the first quarter last year due mainly to planned maintenance, although polyethylene production was unaffected. Benzene production fell 5.2% in the first quarter to 103,000 tons, thus impacting on availability. Phenol production was also down 5.1%.

Polystyrene production increased 22.7% in the first quarter, by far the largest rise, due to the new production capacity at Nizhnekamskneftekhim which was introduced in mid-2005. Polypropylene production fell by 8.3% against the first quarter of 2005 due to a lack of propylene. In June, export duties will be increased again for petrochemicals, including ethylene, propylene and benzene. This time the rate will be \$146.9/ton.

Investment

In 2005, the Russian chemical sector assumed the leading role of industrial sectors in terms of capital investments. The total investment in the chemical industry amounted to 53.1 billion roubles. The volume of foreign investments according to the results of 2005 was \$1.7 billion, which was 80% higher than in 2004. The impact of these investments will take a few years before production levels are affected. In 2005, the output of chemical production grew only by 2.9% over 2004. Rubber and plastic articles saw slightly higher growth of 5.5%.



Petrochemicals/Olefins

SIBUR Holding

ING Bank N.V. has granted SIBUR-Holding credit in the range of €27 million for a period of eight years for the purchase of imported equipment. A credit of \$200 million is under talks with ABN AMRO and Citibank, which could be agreed in June. In September, SIBUR-Holding plans to issue bonds worth 1.5 billion roubles (through Gazprombank for a period of up to six years).

SIBUR-Holding plans to invest \$40-50 million into the construction of a terminal at the Ust Luga port in the Leningrad region for the transshipment of liquefied hydrocarbon gas. Construction of the first stage of the terminal will have a capacity of 400,000 tpa for propane-butane, mostly from Tobolsk-Neftekhim. This will rise to 1 million tpa eventually.

Tatneft Petrochemical Project

The first tender has been concluded for the Tatneft petrochemical project at Nizhnekamsk. Haldor Topsoe became the first victor of the closed tender process, having worked closely with Foster Wheeler France. The Nizhnekamsk NPZ signed a license contract with Haldor Topsoe for the installation of a hydrogen unit. In total, there will be 25 license agreements for the petrochemical complex.

Nizhnekamskneftekhim

TAIF

At the end of April 2006, Nizhnekamskneftekhim selected a new board of directors, in which for the first time the majority of places have been taken by TAIF. Thus TAIF holds the key position in determining economic strategy and future direction of the company.

In November 2005, SINKH transferred its control rights in Nizhnekamskneftekhim to TAIF-Invest, the daughter company of group TAIF, for a period of five years. Taking into account that TAIF controls 25.6% already, through Telecom-Management, and that the SINKH shares are worth 28.6% TAIF controls a total of 54.2% in the complex.

Performance Q1 2006

The net profit for Nizhnekamskneftekhim in the first quarter totalled 816,271 million roubles, which reflected a 9.2% increase over the fourth quarter in 2005. However, it was a similar result to Q1 2005. The main reason for the fall include the increase in prices for raw materials. The percentage of expenditure in total variable costs increased in Q1 2006 against the aggregate figure for 2005.

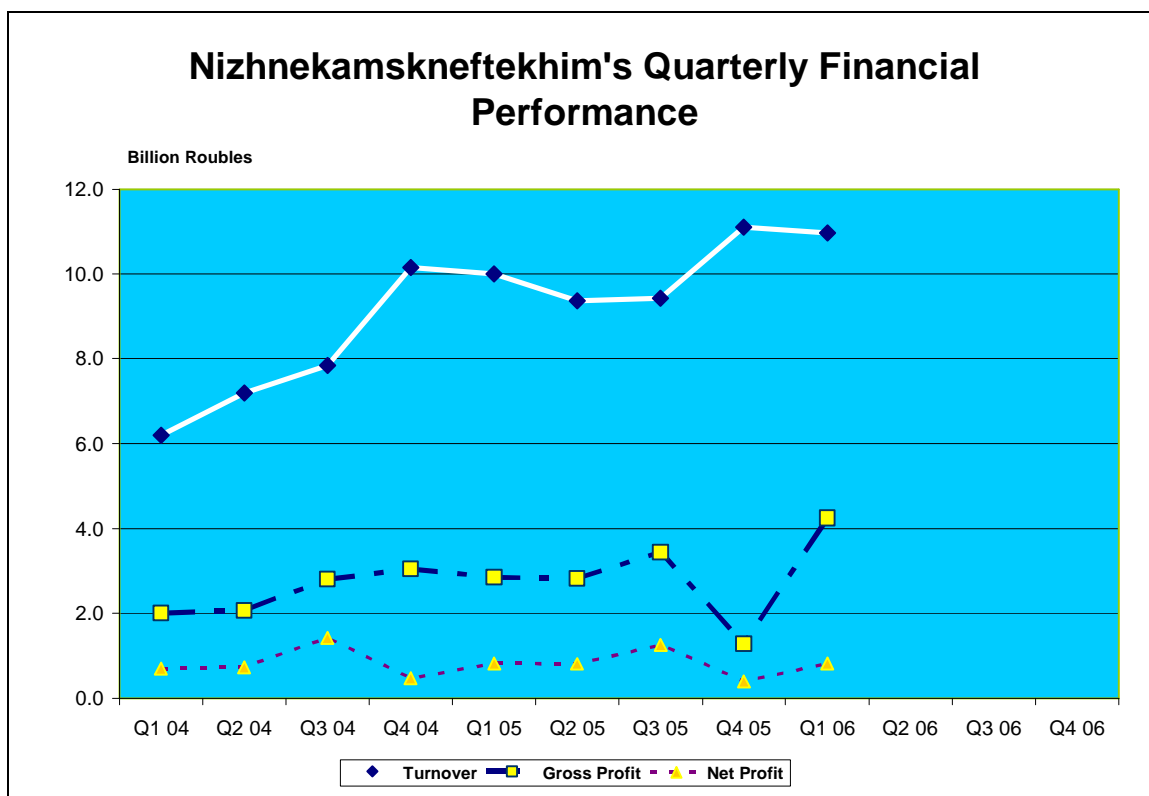
Nizhnekamskneftekhim % Breakdown of Total Cost Outlay

	2005	Q1 2006
Raw Materials/Feedstocks	55.65	57.01
External service contracts	6.05	3.73
Fuel	2.1	2.18
Energy	14.78	15.34
Wages/Salaries	9.32	8.86
Others	<u>12.1</u>	<u>12.88</u>

Source: NKNK

The main supplier of raw materials to Nizhnekamskneftekhim is TAIF-NK, a subsidiary of TAIF, having provided 52.61% of feedstocks in the first quarter of 2006. Other feedstock sources are provided by such companies as LUKoil-Neftekhim. The main type of feedstock is naphtha, which accounts for more than 10% of total feedstock deliveries. The price of naphtha increased in 2005 by

79.6% over 2004, although there was a fall of 10.7% between Q1 2006 and Q4 2005. TAIF-NK will be able to supply Nizhnekamskneftekhim with 1.5 million tpa of naphtha after construction at the gas condensate plant. This will allow Nizhnekamskneftekhim to increase the supply of ethylene to Kazanorgsintez which is experiencing a shortfall for the production of polyethylene. Furthermore, TAIF-NK will ensure that Nizhnekamskneftekhim has sufficient butane-butylene and propane-propylene fractions.



Factors, which affect margins and turnover for Nizhnekamskneftekhim, include a drop in demand, a fall in global prices, and strong competition from SIBUR in isoprene and butyl rubber sales, and styrene, etc. According to the company's quarterly report, Nizhnekamskneftekhim is focused on applying greater effort in understanding the development of market, including the activity of competitors, and the determination of possibilities and strategic possibilities of partnerships.

Nizhnekamskneftekhim finished 2005 with a turnover of 39.8 billion roubles, which comprises more than half of the production of entire petrochemical complex of the republic of Tatarstan. Physical production increased by 10.2% in 2005. The company has set 41 billion roubles as the turnover target in 2006, taking into account the new polypropylene project. Other projects that will drive turnover upwards in the next few years are listed below.

Nizhnekamskneftekhim Projects 2006-2008

1. Expansion of ethylene complex to 600,000 tpa in 2008. New furnace to be constructed May 2007
2. Construction of DSSK rubber plant, based on butadiene and styrene. First stage in 2006, involves 50,000 tpa and the second stage in 2007 will be 100,000 tpa
3. New polypropylene plant of 180,000 tpa, start-up planned for 2006
4. New HDPE plant of 230,000 tpa, start-up is planned for 2008
5. Construction of a polystyrene suspension plant with a capacity of 40-50,000 tpa. Start-up 2008
6. ABS plastics plant, capacity 60-70,000 tpa, to start up in 2008
7. Sulphonated liquid alcohol and alpha olefins, capacity 25,000 tpa, start-up in 2007
8. Increase of butyl rubber capacity to 120,000 tpa, 2007 completion
9. Increase in polybutadiene capacity to 100,000 tpa, to be completed in 2007.
10. Joint energy project with Tatneft and TAIF for gas pipe block
11. Isoprene plant of 160,000 tpa from formaldehyde and isobutylene

Kazanorgsintez

In the first quarter of 2006 Kazanorgsintez reduced its net profit 2.2 fold to 257,480 million roubles. The fall in profits was attributed to a combination of high costs of raw materials and also a shortage of supply. In the first quarter, the company's share capital increased by 22.6% which is designed to support investment projects.

Kazanorgsintez has completed the installation of a short-cycle absorption unit which will guarantee hydrogen production for ethylene. Kazanorgsintez is part of TAIF, created in 1995.

Kazanorgsintez is preparing to start the construction of polyethylene cables at the LDPE plant. The technology for the equipment was developed internally by Kazanorgsintez together with a Russian institute called VNIKP. The main customer for the new cables is the Almeteyevsk Tube Plant. Kazanorgsintez has started the three year programme for the revamping of the polyethylene pipe facilities. By 2009, it is planned to modernise the facilities, including the replacement of extrusion lines, and technology for producing new types of pipes. An agreement has been reached with Battenfeld to supply two lines for the production of pipes with a diameter of 315-500 mm and 630-800 mm. The capacity of each line is 1,150 kg per hour. Kazanorgsintez produced 29,557 tons of pipes in 2005, and plans to reach 30,000 tons in 2006.

Orenburg Helium Plant

In early May Gazprom stated that reconstruction of the third unit in the Orenburg Helium Plant (OGZ) had been completed. Most of the complex was badly affected by a fire in August 2004 resulting in ethane shortages for Kazanorgsintez. Of the four units belonging to OGZ the first was restarted in April 2005, with the second reactor not too long afterwards. The fourth reactor should be restarted in the second half of 2006.

In the first four months of 2006 OGZ increased the production of ethane by 67.8% over the same period in 2005, whilst production of wide fractions of light hydrocarbons increased 2.3 fold. Gazprom has invested around 10 billion roubles into the reconstruction of OGZ, including 4 billion roubles on the third reactor. The capacity of OGZ includes 340,000 tpa of ethane, 820,000 tpa of light fractions of hydrocarbons and 6.5 million tpa of helium.

Salavatnefteorgsintez

Salavatnefteorgsintez increased turnover for the first quarter by 3.4 billion roubles to reach 17.3 billion roubles. However, net profits fell by 860.5 million roubles to 201.2 million roubles. During the course of 2006 Salavatnefteorgsintez will outlay considerable investment into the construction of the new 120,000 tpa polyethylene plant and also the units for visbreaking and catalytic cracking. Other plans exist for investments into the refinery and the fertiliser plant, and the replacement of one ethylene furnace.

Aromatics & derivatives

Benzene

Total benzene production in the CIS amounted to 1.5712 million tons in 2005, around three quarters of which was produced in Russia. Production grew in 2005 due to increased output at petrochemical plants rather than refineries.

Exports of benzene from Russia are small, whilst the only real source of imports is Ukraine which exports around 60% of its production. A number of Russian petrochemical producers have taken their own measures to expand capacity for benzene production rather than depending on the refineries. Further new capacity additions are planned for the next few years for the growing market, the largest of which is the Tatneft project at Nizhnekamsk.

Aniline

Aniline production increased by around 15% in Russia in 2005 over 2004, and totalled 60,000 tons. The largest producer Volzhskiy Orgsintez saw an 8.7% fall in production to 35,600 tons but this was compensated by large increases at the other two producers Beraton at Berezniki and Khimprom at Novocheboksarsk. Korund at Dzerzhinsk is planning a new aniline project, which would double Russian production from 2005 levels. Securing long-term contracts for benzene supply is the main challenge for aniline producers, particularly as the merchant market for benzene is becoming smaller with increased captive consumption.

Volzhskiy Orgsintez

The holding structure Renova has recently had an offer to purchase Volzhskiy Orgsintez (VOS), the largest producer of aniline, rejected by the company's shareholders. Renova offered \$100 million for 100% of the shares in VOS, and there is a suspicion in certain circles that as the offer has been rejected other means may be tried to secure control by Renova. VOS is of particular interest to Renova, as it could become an important link in the production of additives for increasing the octane number of gasoline. VOS already consumes nitrobenzene, which it buys from Renova subsidiary Promsintez at Chapayevsk in the Samara region. Renova may have underestimated the value of VOS at \$100 million, but at the same time it has become very difficult in the past year or two to judge the value of Russian chemical companies.

In addition to the production of aniline additives for the motor gasolines, VOS also specialises in rubber accelerators, etc. In 2005, the total volume of sales was 3.6 billion roubles, with a net profit of 530 million roubles. Current investment plans are aimed at the production of another grade of sulphenamide, with a volume of 10,000 tpa. Furthermore, the company plans an expansion of aniline based products.

Kuibyshevazot

In the first three months of 2006, Kuibyshevazot recorded a turnover of 3.4 billion roubles which was 13.6% up on 2005. Profits from sales rose 16.4% to 466.4 million roubles, which represented a 16.4% increase over 2005. Physical production volumes increased 8.1%. Caprolactam increased 7.1% in the first quarter, whilst ammonia rose 33.6%.

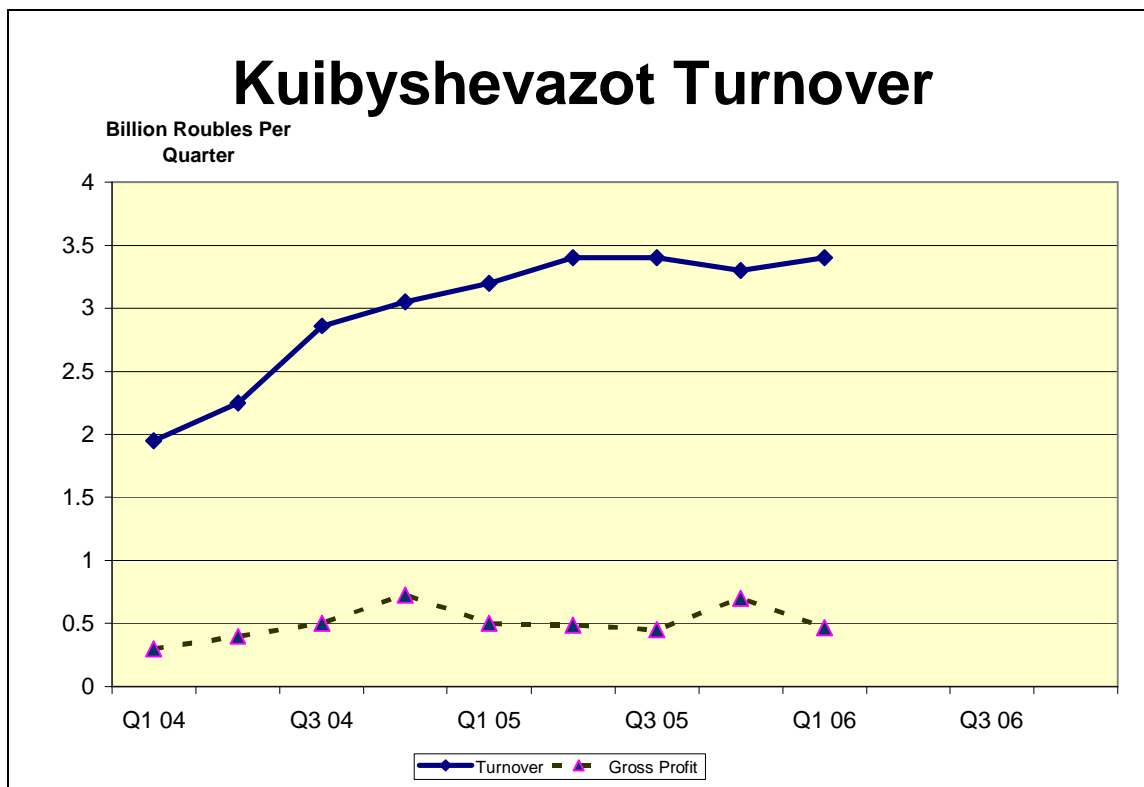
Turnover history is shown in the graphic below. A major investment programme planned by the company should ensure that turnover continues to see continued increases. Kuibyshevazot plans to invest a total of 2 billion roubles in production facilities which are directed not only toward the expansion of capacities, but also aimed at the reduction in production costs and an increase in industrial and ecological safety. The next capacity additions at the Samara site include the installation of the second line for polyamide-6 and the construction of a new unit for air separation. However, the main focus of investment is currently attached to the engineering plastics project in China.

The construction of the second stage of the polyamide-6 unit at Togliatti, with a relative viscosity of 2,4-2,8 should be finished and ready to start in the third quarter of 2006. The capacity of the unit is 150 tons per day, with Uhde Inventa Fischer providing the equipment.

Plans to construct the new engineering plastics plant at Shanghai have been held back from April to June-July 2006. The project is being undertaken on a Sino-Russian jv basis, with Kuibyshevazot as the dominant partner. Delays have been incurred by alterations to the project plans, and waiting for certain Chinese permits that are necessary. The jv has been concluded by Kuibyshevazot with the right to the long-term lease of land up to 49 years. The selection of Shanghai was made in response to the high Chinese demand for compounds.

Production at Shanghai will be based on Kuibyshevazot's own raw materials. The capacity of the new plant is 9,900 tpa, and Kuibyshevazot expects to supply up to 7,000 tpa of polyamide-6 from its plant in Samara. Investments into the project will amount to around \$9 million. The equipment is being provided by Berstorff (Germany).

In other project areas, Kuibyshevazot plans to increase the capacity of caprolactam in two stages; from 145,000 tpa to 180,000 tpa firstly and then to 240,000 tpa by 2010. In 2008, the company expects to raise polyamide-6 capacity from 22,750 tpa to 95,000 tpa which takes into account the second and third lines.



To provide the feedstocks for the caprolactam and polyanide-6 plants, the company is preparing the conditions for the construction of its own benzene plant. Not all the questions have been resolved regarding the plans for a benzene plant, but producing in-house benzene (in light of the tight structural balance in Russia) is an important part of the strategy.

Bisphenol A/Polycarbonate at Kazanorgsintez

Kazanorgsintez received the first equipment on 15 May for its new bisphenol A (BPA) and polycarbonate projects, which are planned for start-up in June 2007. Four reactors are being supplied from the engineering plant N.S Artermov, at Tambov in Central Russia. Equipment for the two projects will be supplied to Kazan up to November 2006, including the catalyst from Japan. The preparation of reactors is expected to be completed by December. The project capacity for BPA will be 65,000 tpa and polycarbonate 70,000 tpa. The contracts for the plants were signed by Kazanorgsintez and TAIF in 2004 with the Japanese companies Idemitsu Kosan for BPA and Asahi Kasei Chemicals Corporation for polycarbonate. The design for both production units has been carried out by the Japanese company Toyo Engineering Corporation. The delivery of license equipment for production of BPA has been channelled through Tsukishima Kikai for BPA, and through Asahi Kasei Chemicals Corporation for polycarbonate.

The BPA technology being used in the project has only been used elsewhere in Taiwan. The new technology will allow Kazanorgsintez to convert phenol and acetone into a valuable commodity product. Kazanorgsintez states that it should be capable of providing all raw materials required for the production of BPA and polycarbonate, including ethylene oxide.

Paraxylene

The reconstruction of the paraxylene plant at the Omsk refinery will result in improving production quality to world standards. The reconstruction of the plant is being undertaken by UOP. The revamp will start in the autumn of 2006 and will last for around 60 days, whilst at the same time production will be stopped. The modernized unit will be capable of producing paraxylene at 99.9% purity, compared against 99.75% at the Ufaneftkhim plant.

PET

A project for the production of polyester fibres and threads is under planning for the Stavropol region at Novopavlovsk at a cost of \$62 million. Initially, raw material for the plant is intended to be sourced from South Korea.

PET has been introduced for beer bottling in 2 litre containers at Rostov, Chelyabinsk and Krasnoyarsk. Production started on 29 April at Krasnoyarsk, and Chelyabinsk and Rostov in the middle of May.

PET bottles account for an estimated 12.5% of the Russian 2 litre beer container market. For 2.5 litre containers the market share of PET is 5.3%. It has been only in the past year that containers of 2 litres and higher have been considered suitable for the Russian beer market, and growth has been rapid. The beer brand Arsenal is the market leader in beer consumed in PET bottles, taking 19% of the market at present. Agreements for PET preforms for the Arsenal brand have been agreed with NB Retal until the end of 2006.

PVC-Chlorine

Sayanskkhimplast

On 1 June, Sayanskkhimplast will cease chlorine production based on mercury electrolysis, after which preparations will commence for the start-up of the new membrane plant. Start up of chlorine and caustic soda is planned to take place at the beginning of August. During the shutdown period, the company will make use of chlorine reserves for the production of PVC. Between 10-30 May, the company has been modernising the caustic soda and sulphuric acid plants.

As a result of the new chlorine plant Sayanskkhimplast will be capable of providing itself with its full chlorine requirement. It will also represent an important step in the expansion of PVC capacity to 400,000 tpa. In 2006, Sayanskkhimplast plans to produce 245,000 tpa of PVC.

Sayanskkhimplast is considering the production of bromine. The company has identified that the content of bromine in the brine exceeds more than 5%. This is considered to be very high by world standards.

Solvay PVC project

Solvay is reported to be in preliminary talks with SIBUR-Holding to undertake a joint project for the construction of a PVC plant in the Nizhny Novgorod region. At present, both partners are seeking a possible location for the new plant, which could either be at Dzerzhinsk or Kstovo. In 2004, Solvay planned to undertake a similar project at the Kaustik site at Volgograd in conjunction with Nikos, but the absence of ethylene in the Volgograd region hindered the project from going forward. As a result, Solvay has been seeking other potential ethylene partners in Russia which has led to the discussions with SIBUR-Holding.

Although still in the early stages of talks, a potential jv between Solvay and SIBUR-Holding could prove a good mix. SIBUR-Holding would gain access to foreign experience and capital, not to mention Solvay's technology, whilst Solvay would guarantee its feedstock source and at the same time have strong Russian partner.

SIBUR-Neftekhim's ethylene production is focused mostly on ethylene oxide, with some ethylene being shipped by pipeline to the Dzerzhinsk EDC/VCM plant. At present, the Kstovo cracker is undergoing expansion by Technip, and capacity will rise in stages from 262,000 tpa to 430,000 tpa. The expansion is designed principally to deal with a new HDPE plant Kstovo of 120,000 tpa, which is under construction, and also a new PVC plant with a capacity of 200,000 tpa. The existing plant is the oldest in Russia, but the PVC project planned by SIBUR-Holding could now be shelved if a jv with Solvay goes ahead.

Investments in the construction of the new PVC plant could account for anything in the range of €400-€500 million, with a capacity of 330,000 tpa. Solvay's first jv in Russia was established in 2001 with Vladimir Chemical Plant, to be later disbanded, and this was followed in 2003 with a jv with Nikos, now Nikochem. The jv Soligran is based at Volgograd, where Nikos owns Plastkard and Kaustik, and also at Tver.

Regarding location, if the proposed jv constructs a new PVC plant at Dzerzhinsk then it would require investment into an additional ethylene pipeline from Kstovo. The existing pipeline is being fully utilised, mainly for EO. The location of Kstovo has an advantage as it would be next to the cracker, but then would necessitate shipments of chlorine.

Nitol

Nitol has started the modernisation of the epichlorohydrin plant at Usolyekhimprom which improve quality of production. As a result of the modernisation capacity will be increased whilst emissions will also be reduced. The project has been undertaken in line with higher demand for epichlorohydrin in the global market. Financing will be undertaken from Nitol's own sources and credit from the Baikal division of Sberbank.

At the end of March, Usolyekhimprom produced its fifth million ton of calcium carbide since the start of the unit. Currently, Nitol produces around a half of the calcium chloride in Russia. The Usolyekhimprom plant was built originally as a result of limestone deposits nearby, the accessibility of electric power and available water resources. Calcium carbide is used captively for the production of acetylene.

PVC plasticizers

Production of PVC plasticizers in Russia rose by about 40% in 2005 and totaled 209,500 tons. Exports accounted for 11.8% of production, whilst imports took a 5.9% share of total consumption. The most dominant form of plasticizers in Russia is cables, which account for 70% of the market. The share of shoe plasticizers accounts for 25.8% of total consumption.

The main suppliers of plasticizers for the domestic market Kaustik at Sterlitamak, SIBUR-Neftekhim and Vladimir Chemical Plant. In recent years, Vladimir Chemical Plant has lost market share due to the fact that it depends on buying PVC rather than producing it, compared to Kaustik and SIBUR-Neftekhim. As PVC supply in Russia has become very tight in Russia, prices have risen and also PVC producers are less willing to allocate supplies to other consumers.

PVC films

Plastik at Dzerzhinsk, one of the largest producers in Russia of PVC films, has started the production of seven-layer barrier film for food packaging. The design capacity of the new unit is 3,200 tpa of film. Demand for this type of film is estimated to be in the range of 30,000 tpa in Russia.

Methanol/Ammonia

Yamal methanol project

The start of the construction of the first line of the methanol unit planned by Yamal Gas Chemical Plant at Labitnang is scheduled to take place at the start of 2007. The capacity of the plant will be 500,000 tpa, with completion reported for 2010-2011. The construction of the plant will be financed by independent investors, both domestic and foreign as reported from the Yamal region.

Togliattiazot

Togliattiazot claims that it could become the most important Russian producer of ammonia and methanol in 2006 following the company's investment into modernisation and expansion. At the beginning of the summer the company plans to increase the production of methanol two fold, and also will start processing methanol into urea-formaldehyde resins.

During May 2006, Togliattiazot will introduce a new fourth line for the production of urea-formaldehyde resins, and during June a second line for the production of methanol is scheduled to be completed. The design capacity of the new methanol unit is 550,000 tpa. It is hoped that the production will be started in the second half of 2006.

Launching the new line will increase total production capacity of methanol to 1 million tpa. The capacity of the fourth urea-formaldehyde line will be 25,000 tpa, which will be followed by a fifth line in March 2007 with a capacity of 150,000 tpa. Togliattiazot expects that methanol sales from the new complex will initially be divided 50/50 between domestic and export.

Currently, Togliattiazot operates three lines for the production of urea-formaldehyde resins with a total capacity of 37,000 tpa. Total capacity will reach 212,000 tpa in 2007 after the start-up of the fourth and subsequent fifth lines.

New terminal at Visotsk, Leningrad region

The shipping company Baltic Initiative has announced plans to build a terminal at Visotsk, near Vyborg in

the Leningrad region, for the export of 450,000 tpa of methanol from Russia. Construction is planned to start in 2007 and could take a period of 2-2.5 years, with investments of around \$25 million. The terminal is planned to be capable of dispatching vessels with a dead weight of up to 30,000 tons for export to ports of Europe and south-east Asia.

The project involves the construction of a railroad and a sea terminal, and also a storage-distribution complex. It will be located between the carbon port at Visotsk, and the oil product terminal which belongs to LUKoil. The intention is that it will be oriented to methanol exports from Metanol at Tomsk, Metafrax and Akron. However, this may not be such a practical idea and there is scepticism whether the terminal is necessary and whether there will be sufficient demand. Metafrax, for example, sends most of its methanol to Finland for which only rail transport is required. Evrokhim, which owns two methanol plants at Novomoskovsk and Nevinnomyssk, is constructing its own terminal at Sillamae in Estonia. Akron is also taking care of its own terminal facilities, but even so only exports small volumes of methanol. Regarding the Tomsk plant, there are question marks over how much product it would be able for export in the future.

Possibly the main interest might come from Togliattiazot, which until now has largely used Odessa for methanol exports. With the expansion of capacity it could mean that the Visotsk terminal could be of interest to the company. Also it is worth noting that Renova (through the Synttech group) could be keen to purchase Togliattiazot. Renova is thought to be behind Baltic Initiative which is building the terminal at Visotsk,

However, it seems that methanol producers will have other choices for export terminals. In 2008 the Ust-Luga project on the south side of the Leningrad region, where the river the Luga falls into the Gulf of Finland, is scheduled to be completed. The project is being built by the Transgroup.

Metadynea

Metadynea started the production of phenol resins on 10 May in the Perm region. The capacity of the new plant is 50,000 tpa. MetaDynea also recently started the construction of a plant in the Moscow region with the aim of providing sufficient product for the central and north western regions of Russia. The plant is located at Orekhovo-Zuyevo and will possess a capacity of 400,000 tpa of resins and 200,000 tpa of formalin. The plant is scheduled for a start-up in 2007.

Evrokhim

Azot at Novomoskovsk reduced ammonia output for the first quarter of 2006 by 0.9% to reach a total of 394,180 tons, whilst urea grew 3.2% to 200,870 tons. Methanol production increased by 0.9% to total 103,030 tons. Azot at Nevinnomyssk reduced ammonia output for the first quarter of 2006 by 4.09% to reach a total of 275,000 tons, whilst urea fell 6% to 213,000 tons. Methanol production stayed the same at 30,000 tons for the first quarter.

Azot Kemerovo

In January 2006, an agreement was signed between the administration of the Kemerovo Oblast and SIBUR-Holding regarding the first stage of the new investment programme which is planned for Azot. The main focus of the investment will be on the redevelopment of the ammonia-2 and urea plants. Contracts have been signed already with such foreign companies as: Haldor Topsoe and Yokogawa (Japan). As a result of the investment, Azot will increase the production of ammonia in the fourth quarter of 2007 from 1360 to 1700 tons per day. In addition to improving productivity, the investment programme will also allow the company to reduce costs for electrical and thermal energy, and to reduce emissions into the atmosphere.

Azot Cherepovets

Azot at Cherepovets plans to modernise its ammonia unit in 2006, which will lead to an increase in capacity and at the same time see a reduction in production costs through lower natural gas consumption. In the first quarter of 2006, Azot produced 237,280 tons of ammonia, around 2,000 tons higher than in 2005.

Ukraine

Karpatneftekhim

Karpatneftekhim halted VCM production on 11 May, together with the caustic soda and chlorine plants. The VCM plant restarted on 20 May with the other units restarting on 29 May. The reason for halting production was accepted by the mother company LUKoil-Neftekhim to be due to high raw material prices. The shutdown will mean that the planned shutdown in August will not be necessary. Production volumes for

May were expected to total 48,500 tons of pyrolysis raw material, 17,000 tons of ethylene, 10,000 tpa of VCM and 6,100 tons of caustic soda. In terms of capacity utilisation, ethylene was planned to run at 73% in May.

Rubezhnoye Krasitel

Krasitel at Rubezhnoye, in eastern Ukraine, plans to restart the production of phthalic anhydride at the end of 2006, running the plant with a capacity of 60,000 tpa. The main technical problems at the site have been resolved, and trial product output is soon expected. Krasitel is now in the process of conducting negotiations with different suppliers of orthoxylene. The consumption of phthalic anhydride is relatively small in Ukraine, thus meaning that the largest part of phthalic production will be exported to Russia, or to other destinations.

Azot

In the first three weeks of April Azot at Severodonetsk undertook a maintenance shutdown at the acetic acid plant, which included equipment upgrades. Around \$4.5 million will be invested in 2006 and 2007 at Azot's acetic acid plant, aimed at reducing production costs and improving product quality. Following the shutdown Azot has started the production of VAM copolymer dispersions with a capacity of 500 tpa. However, the unit's utilisation level will depend on demand and at present is running less than full capacity.

Azot plans to start a new air separation unit at the end of 2007. The purchase of the new equipment has been undertaken in response to a significant increase in costs for electricity. The use of the new unit will save the company substantial energy costs by 2008.

Crimean Titan

Important measures for the modernisation of titanium dioxide production at Crimean Titan were carried out in the past year at the plant, including the installation of an automatic diaphragm pressure filter and the introduction of a new compressor station. In 2006, the company has started the construction of Titan-3, which will make it possible to increase the production of titanium dioxide pigment. The company plans to increase titanium dioxide production to 91,000 tpa by the end of 2006, rising up to 120,000 tpa by 2010. In 2005, Titan produced 87,200 tons of titanium dioxide, 12% higher than in 2004. In the first quarter of 2006 production totalled 21,850 tons.

Contents Issue No 186

Czech Republic.....	2
Unipetrol.....	2
Hungary.....	2
BorsodChem Strategy.....	2
Poland.....	4
PKN Orlen Q1 2006.....	4
PKN Orlen PX & PTA Project.....	4
Romania.....	5
Romp petrol.....	5
Oltchim.....	5
Russia.....	5
Production trends.....	5
Investment.....	5
Petrochemicals/Olefins.....	6
SIBUR Holding.....	6
Tatneft Petrochemical Project.....	6
TAIF.....	6
Performance Q1 2006.....	7
Kazanorgsintez.....	8
Orenburg Helium Plant.....	8
Salavatnefteorgsintez.....	8
Aromatics & derivatives.....	8
Benzene.....	8
Aniline.....	9
Volzhskiy Orgsintez.....	9
Kuibyshevazot.....	9
Bisphenol A/Polycarbonate at Kazanorgsintez.....	10
Paraxylene.....	10
PET.....	11
PVC-Chlorine.....	11
Sayanskkhimplast.....	11
Solvay PVC project.....	11
Nitol.....	12
PVC plasticizers.....	12
PVC films.....	12
Methanol/Ammonia.....	12
Yamal methanol project.....	12
Togliattiazot.....	12
New terminal at Visotsk, Leningrad region.....	12
Metadynea.....	13
Evrokhim.....	13
Azot Kemerovo.....	13
Azot Cherepovets.....	13
Ukraine.....	13
Karpatneftekhim.....	13
Rubezhnoye Krasitel.....	14
Azot.....	14
Crimean Titan.....	14