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# Topical features from the January 2003 issue

- Spolana restarted its PVC plant in December, after the extended downtime following the combined impact of the floods in August and the plant accident back in June. The company suffered direct damage worth roughly Kc 680 million due to the floods. It lost another Kc 350 million in profit and is believed to need to invest about Kc 500 million to improve its safety and anti-flood measures.
- Chemopetrol commissioned its new Kc 2.2 billion polypropylene unit on 12 December. The new unit has
  a capacity of 250,000 tpa and is double the previous 125,000 tpa. Construction of the new unit started in
  June 2001 and was undertaken by Foster Wheeler.
- MOL announced in late 2002, that as part of its development strategy, it plans to become a more integrated producer from oil through to chemicals. However, the company needs to improve efficiency by something like \$175 million between 2003 and 2005 to be able to reach its strategic goals.
- PKN Orlen will have to spend at least zl 40 million to adjust to new bio-fuels regulation, should the Polish Sejm give its consent to the new Bio-fuels Bill, scheduled to take effect from 1 July 2003. Further cost increases up to zl 110 million-120 million could be possible.
- Nizhnekamskneftekhim recorded an 8% increase in turnover in 2002 over 2001, partly due to an increase in selling prices. In physical volumes, the company saw an expected increase in ethylene production in 2002, reaching 447,000 tons against 435,300 tons in 2001. Styrene also rose to 244,000 tons whilst butyl rubber reached 67,000 tons.
- LUKoil-Neftekhim finished 2002 with positive results, showing a 26% increase over 2001. In 2002, the company produced a total of 1.405 million tons of petrochemicals, including 360,000 tons of polyethylene, 218,000 tons of propylene, 150,000 tons of benzene, 120,000 tons of VCM, 30,000 tons of VAM, 137,000 tons of acrylonitrile, 30,000 tons of phenol, and 13,000 tons of fibres.
- Construction of units for ethylbenzene and styrene at the Salavatnefteorgsintez complex in Bashkortostan is reported to be now in the final stage. The capacity of the plants will include 230,000 tpa of ethylbenzene and 200,000 tpa of styrene.
- Plastkard at Volgograd is planning to construct a new unit for PVC, the cost of which is estimated at
  around \$50 million. The plant management put out a tender for the project with Japanese and German
  companies participating in the first stage. However, now there only German bidders which include Uhde
  Krupp and Linde KcA.
- Azot at Severodonetsk has proposed to LUKoil to create a jv for polyethylene production. A year ago
  Azot was in talks with SIBUR to create a similar venture, but the problems faced by SIBUR in the early
  part of 2002 effectively brought those talks to an end.

# New title

Welcome to the newly entitled report CIREC Monthly News, which is a direct continuation of the previous title of East Europe & CIS Chemicals Briefing. As it proved difficult to find a new singular name that met with universal approval I have used a different approach with the use of a more inventive masterhead. Any comments are welcome.

Also, there is an aim to bring the report into line with the website <u>www.cirec.net</u>, and the integrated database, which allows subscribers to search specific subjects and news from past copies. Thus far, all issues between 2000 and 2002 are searchable by keyword.

# **CENTRAL EUROPE**

# **Czech Republic**

(Czech crown, Kc, Jan 3, \$1 = 30.2291, €1 = 31.3446)

### Unipetrol

The Czech privatisation agency, National Property Fund (NPF), stated in late December that it had opened a tender to pick a government adviser on the sale of Unipetrol. It has set a deadline of 31 January 2003 for offers. After 31 January there will be a 90-day period during the course of which offers will be evaluated by an interministerial commission. The adviser's task will focus on giving a helping hand to the cabinet, and also the FNM, in preparing and evaluating the privatisation tender. It will also help in the subsequent signing of contracts with the winner of the tender. HSBC advised during the previous sale.

The government hopes to raise around Kc 10 billion (\$330 million) for its 63% stake in the group. The sale is expected to be completed in 2004, but the pressing issue remains the same as under the first effort to sell Unipetrol, i.e., whether to sell it as one group or in several parts. The Minister of Industry and Trade has said already that it will relax some of the previous sale conditions, in particular those banning the buyer from restructuring or selling some of the assets for up to eight years.

However, the government is keen to include guarantees covering the supply of raw materials between different parts of the company such as from Ceska Rafinerska (CeR) to Chemopetrol. The precise terms of the next privatisation tender will thus depend on whether some of the disputes between the IOC and Unipetrol regarding CeR are resolved.

Members of the IOC, Agip, Conoco and Shell, were given the option to buy out the government's majority share in CeR under their previous agreement. They chose not to exercise the right during the sale, although Conoco attempted to buy the Benzina gas station company and increase its shareholding in CeR.

Shareholders of CeR, Unipetrol and the IOC agreed at the extraordinary general meeting in December for the extension of supplies of inputs into Chemopetrol until the end of April 2003. This will coincide with the intended completion of CeR's transformation into a reprocessing refinery, subject to the approval of the Czech Anti-Monopoly Office (UOHS) and following a planned maintenance shutdown at the refineries. CeR's status change will help the owners to cover it costs in processing raw materials and trading activities being their business. The transformation should be kick-started in January 2003 and completed in 2004.

The owners decided to change the structure of the oil refinery division owing to the confusion over on the price of products supplied by CeR to Chemopetrol. The dispute divided the shareholders and resulted in a penalty by the UOHS which was appealed by CeR. CeR insists its conduct was correct because there were no contracts for inputs supplies in June.

The list of potential buyers for Unipetrol is quite extensive. OMV has reportedly asked the Czech government to sell Unipetrol without a tender. They say that after acquiring a potential option for Unipetrol, they would immediately pay Kc 7 billion into the state budget.

As of 1 January, Unipetrol has abolished its sales department and the activity will be transferred to its subsidiary Unipetrol Trade.

# Chemopetrol

Chemopetrol commissioned its new Kc 2.2 billion polypropylene unit on 12 December. The new unit has a capacity of 250,000 tpa and is double the previous 125,000 tpa. Construction of the new unit started in June 2001 and was undertaken by Foster Wheeler.

The company has invested a total of around Kc 8.5 billion in the modernisation programme, including a new polyethylene unit and the increase of ethylene production. From the end of 2002 Chemopetrol lowered its staff by 158 to 2,850 employees with its goal to have a staff level comparable with its European competitors whilst also increasing labour productivity and to reduce fixed costs.

Ethylene production capacity is being reviewed by Chemopetrol for further expansion, beyond possibly a level of 600,000 tpa, and a decision is expected to be taken by the company sometime this year.

#### **Spolana**

Spolana restarted its PVC plant in December, after the extended downtime following the combined impact of the floods in August and the plant accident back in June. The company suffered direct damage worth roughly Kc 680 million due to the floods. It lost another Kc 350 million in profit and is believed to need to invest about Kc 500 million to improve its safety and anti-flood measures. For 1-3Q 2002 Spolana saw a loss of Kc 213 million, due mainly to the floods. PVC production generates roughly one third of Spolana's proceeds, whilst the company exports nearly 75% of its production. Since 2001, Spolana has been part of Unipetrol.

Greenpeace has called for the government to cancel a public tender for dioxin decontamination at Spolana. The public order, worth Kc 3.5-4 billion, was allocated by the FNM, without a tender to SITA Bohemia. The fund argues that SITA is the sole company in the country equipped to use the only verified BCD technology, but Greenpeace activists argue that the FNM was well aware of the existence of other three technologies comparable with BCD. The Czech Academy of Sciences and the Institute of Chemistry and Technology have also been critical of the decision.

#### **AliaChem**

Synthesia Pardubice expects to record a loss of Kc 100 million, while revenues are likely to fall from Kc 4.9 billion in 2001 to Kc 4 billion. In 2003, revenues should reach Kc 3.6 billion although the company expects to return to profits.

Fatra Napajedla has launched a new production line for steam-permeable foils. The line cost Kc 400 million, of which Kc 80 million was a provided as a state subsidy. The company expects the production expansion will help it gain a favourable position on the rapidly developing market.

# Hungary

# (Hungarian forint, Ft, Jan 3, \$1 = 227.308 €1 = 235.659)

### MOL 2003-2005

MOL announced in late 2002, that as part of its development strategy, it plans to become a more integrated producer from oil through to chemicals. However, the company needs to improve efficiency by something like \$175 million between 2003 and 2005 to be able to reach its strategic goals, which include keeping its debt ratio below 40%.

MOL aims to increase upstream integration by doubling crude production and to grow the refineries' captive market through a focused expansion of the retail and petrochemical businesses. Capital expenditure of \$2.0 billion for the 2003-2005 period has been planned in order to achieve growth targets.

MOL plans to double its oil exploration and extraction rates between 2003 and 2005 and spend \$40-50 million on exploration in Hungary, with an expected 18% return on average capital employed during the same period.

In the petrochemical sector MOL intends to capture 7% regional polymer sales growth. MOL plans to meet this target by completing announced investments in new production capacity at existing petrochemical sites, and by the full exploitation of potential MOL-SN-TVK synergies in this area.

MOL intends to try and integrate the complexes at TVK and Slovnaft. Naturally, if there were an ethylene pipeline in place this objective would be made much easier. MOL's original interest in Slovnaft stemmed from the refining capacity at Bratislava which exceeds 5 million tpa.

At the end of 2002 MOL signed a deal to acquire a majority stake in Slovnaft, a transaction expected to strengthen MOL's role as one of the key strategic investors in Slovakia and the biggest foreign capital investment in Slovakia to date. The deal was penned with Slovakia's Slovbena and Slovintegra (companies set up and owned by Slovnaft's top managers) to buy their shares in Slovnaft.

The purchase will increase MOL's current 36.2% stake in Slovnaft to 67.8%. The final transaction is subject to the formal approval of both the Slovakian and Hungarian economic competition offices.

#### **TVK**

For TVK in 2003 the modernisation and expansion Olefin-2 programme, which started last year, is expected to see substantial progress. The timetable of the greenfield investment is that the company will spend roughly 80% of the total €430 million in the years 2003 and 2004. This is a totally stand-alone project by TVK.

TVK's new cracker is being built by Linde AG, installing around 4,300 tons of steel structures and 5,800 tons of pipelines. Ethylene capacity will be increased to 610,000 tpa. TVK intends to build a new high-density polyethylene (HDPE) plant, doubling its current HDPE capacity to 410,000 tpa by early 2005. With total costs of €129 million, the facility will be constructed and licensed by Mitsui & Co.

In the third project, TVK will expand the annual production capacity of its polypropylene facility by 40,000 tpa to 180,000 tpa by the end of this year. Supervised by Tecnimont, the expansion of the polypropylene plant will require an investment of approximately €3 million.

### **Poland**

(Polish zloty, zl, Jan 3, \$1 = 3.8542 €1 = 3.9964)

#### **PKN Orlen**

PKN Orlen has reached agreement with YUKOS, through its Swiss subsidiary Petroval S.A, regarding the supplies of oil to Poland until the end of 2009. YUKOS will supply 3 million tons in 2003, 3.6 million tons both in the years of 2004 and 2005, and between 2006-2009 this will rise to 5.2 million tpa. The contract could open the door to a Yukos-PNK Orlen alliance to take part in the upcoming privatisation of Rafineria Gdanska (RG).

PKN Orlen has made it clear recently that it wants to enter the neighbouring German and Czech markets to ensure it can sell a planned increase in refining and petrochemical output. As part of this process Orlen wants to put in an independent bid for Unipetrol. The regional acquisition push comes hand-in-hand with Orlen's bid for RG, which if successful will give it a strong exporting edge as well as boost its refining capacity above local market needs.

al Output (unit k	ilo tons)
Q1-Q3 02	Q1-Q3 01
126	104
104	92
186	182
287	270
974	1,146
403	378
69	66
	Q1-Q3 02 126 104 186 287 974 403

RG's coastal location offers export possibilities and access to the Baltic shelf. The Baltic coast refining location would also give Orlen an incentive to buy into Poland's Petrobaltic upstream group, which has oil wells in the Baltic Sea. The RG acquisition would boost Orlen's refining capacity to around 450,000 barrels per day and add around 400 stations to its 1,900-plus retail network.

PKN Orlen is not only looking at Unipetrol for refining and retailing assets, but also for chemical units like Spolana. Much depends on whether Orlen secures RG, without which it is difficult to imagine the company venturing into the German market.

The consortium of Rotch Energy and PKN Orlen has started due diligence of the RG, but at the same time another informal offer has been placed by LUKoil and Konsorcjum Gdañskie (KG), which groups private owners of gas stations. Nafta Polska has asked Rotch Energy and PKN Orlen to provide further details of their joint bid for RG.

### PKN-Orlen/Basell jv

The petrochemical development plans of PKN Orlen are heavily interlocked with the jv with Basell which will effectively double capacity in olefins production. The initial agreement was signed at the end of September last year, followed up by another agreement on 18 November in Warsaw. The jv will be called Orlen Polyolefins. The so-called "win-win" formula means that Basell wins access to the Polish market whilst PKN Orlen wins access to state of the art technology.

Product from the new plant will be sold mainly in the domestic market, whilst exports will be conducted though the distribution network of Basell. Regional competition is intensifying in Central Europe with Chemopetrol having recently completed new units for both polyethylene and polypropylene. Slovnaft is also planning to increase the capacity of polyethylene, whilst TVK is expanding is capacity for ethylene and polyethylene.

Currently, PKN Orlen has capacities for 360,000 tpa of ethylene and 240,000 tpa of propylene. The construction of the new units are planned for 2005 which will include 320,000 tpa of HDPE, 400,000 tpa of polypropylene and an expansion in the LDPE plant to 280,000.

Finance for the construction of the polyolefin plants will be based on a combination of the funds provided by the partners in the jv and foreign capital. The full cost of the project is estimated in the range of €550 million. From 2006 when the plants will be fully operational the jv should be reap sales of around €600 million per annum.

#### **Biofuels**

PKN Orlen will have to spend at least zl 40 million to adjust to new bio-fuels regulation, should the Polish Sejm give its consent to the new Bio-fuels Bill, scheduled to take effect from 1 July 2003. Further cost increases up to zl 110 million-120 million could be possible. Around zl 40 million will be used to finance the first phase of adjustment that would involve installation of specialised gasoline production equipment and the construction of tanks to store fuel reserves.

In order to meet harsh quality requirements, PKN Orlen has begun investing in production of esters and is now carrying out an zl 80 million project for the construction of an ester processing installation in Orlen subsidiary Rafineria Trzebinia.

In a few years the production of biofuels in Poland is set to grow to 300 million litres annually from currently levels of around 50 million litres. The Agriculture Ministry has prepared a draft law under which the draft biofuels used as a component of diesel oil and gasoline will be exempted from excise tax. The production will be based on domestically produced raw materials.

Several producers of industrial chemicals have shown interested in producing biofuels. Krakow-based Bioneco intends to launch production of 60,000 tpa of methyl, a component that is used to produce biofuels. Currently the company is searching for a partner to join the project. Bioneco hopes to work together with the Trzebinia and Czechowice refineries as well as KGHM Metale.

The Police chemical works to the north of Szczecin will shortly have a \$25 million biofuel components line. The company has already signed a letter of intent with the company Canadian Pacific.

#### Zachem

Zachem at Bydgoszcz could see a start to the privatisation process in 2003 if Nafta Polska gives approval. Zachem comes under the government's restructuring programme and thus the fate of the company rests on a decision to be made by Nafta Polska. Nafta Polska can either sell the company or form new production units as subsidiaries of the plant. Zachem's organic synthesis plant is one of the five production plants of the company, with one the main products being TDI.

# **SOUTH EAST EUROPE**

# Croatia

An extra month has been given to the three remaining bidders for a 25% + 1 stake in INA. The bidders include Rosneft, OMV and MOL and the deadline has been extended to 22 January. The future strategic partner will be required to retain the workforce, to keep the oilfields and to invest in the Sisak and Rijeka

Croatian Chemical Output (unit-tons)				
Product	Q1-Q3 02	Q1-Q3 01		
Ammonia	194, 340	292, 912		
Nitric Acid	173, 296	206, 925		
Inorganic Acids	115, 895	130,348		
VCM	19,987	54,701		
Carbon Black	14,250	16,384		
Plant Agents	4,926	5,855		
Urea	166,272	262,500		
Fertilisers	327,158	294,141		
Polyethylene	81,352	81,808		
Synthetic Resins	46,599	45,440		
Detergents	40,581	40,616		
Printing Inks	662	633		
Coating materials	21,889	20,008		
1				

refineries. The INA privatisation does not include the polyethylene producer Dioki, which was founded in July 1995 as a merger of INA-OKI of Zagreb, DINA of Omišalj and INA-Naftaplin's ethylene production unit at Zagreb.

# **Druzhba-Adria Pipeline Integration Project**

A multilateral agreement was signed by six countries on 16 December in Zagreb that paves the way for up to 15 million tpa of Russian oil to pass through the Adria and Druzhba oil pipeline systems, which connect at the Slovak town of Šahy.

Of the 5 million tpa of oil to be shipped through the pipelines to the Croatian port of Omisalj next year, 3.5 million will be moved through Slovakia's 507-kilometre section of the Druzhba line, while the remaining 1.5 million

tons will go through Hungarian pipelines.

The new proposed oil pipeline in South East Europe, which links Romania, Yugoslavia and Croatia, could help to boost the region's economies by opening up lucrative trade routes from Central Asia to West Europe.

The Druzhba-Adria pipeline, which will start from the Russian town of Samara and the northern Croatian tanker port of Omisalj, will export Russian crude oil through Omisalj with quantities amounting to five, 10 and 15 million tons per year, during the first, second and third phase respectively.

There is also potential for the Constanta-Omisalj pipeline, which would have a capacity of 10 million tpa,, to be extended to Trieste in Italy and beyond. Financing remains a problem, as construction is expected to cost around one billion dollars.

The USA is a key supporter of the project for political reasons and Washington officials have said that they are prepared to provide \$200,000 to fund a study into pipeline routes.

#### **Petrom**

The Ministry of Industry and Resources has chosen the consortium of Credit Suisse First Boston and ING Bank as the advisor for the privatisation of Petrom. In the next two months a final report will be drawn up, including the privatisation strategy, which will have to be endorsed by the government. Probably 51% in Petrom will go to a key strategic investor, and smaller stakes will reach the company's employees (10%) and the EBRD (5%). The privatisation process will be probably launched at the end of the first quarter of 2003, and the government hopes it will be completed by the end 2004.

#### **Petrotel**

LUKoil plans to resume oil processing at the Petrotel refinery, which has been closed since April 2002. The Ploiesti refinery has a capacity of 3.5 million tpa and was acquired by LUKoil in the early part of 1998.

# Bulgaria

Chimco's owners have said that they will move production abroad and will participate in the construction of fertilisers plants in Nigeria, Jordan and United Arab Emirates.

A contract for the construction of a plant for chemical components has been signed between MLT of Italy with the region of Kula in Bulgaria. The founding capital of the jv is €2 million.

# **Eurasia/Commonwealth of Independent States**

Russian Chemic	al Production	(unit-kilo tons)
Product	Q1-Q3 2002	Q1-Q3 2001
Ammonia	7,980	7,832
Caustic Soda	848	892
Soda Ash	1,743	1,215
Methanol	1,543	1,436
Acetic Acid	124	112
Ethylene	1,461	1,382
Propylene	747	713
Benzene	707	670
Orthoxylene	160	199
Paraxylene	112	163
Styrene	271	239
Phenol	112	100
Acetone	76	78
Phthalic Anhydride	75	71
Butadiene	287	229
Isoprene	231	237
Synthetic Rubber	712	684
Polyethylene	718	681
Polypropylene	186	183
Polystyrene	77	77
PVC	387	359
Caprolactam	195	199
Aniline	33	39
Plasticizers	75	91
Carbon Black	389	367
Aggregate Tonnage	19,248	18,246

# Russia

(Rus rouble Jan 3, \$1 = 31.7825, €1= 32.9553)

Russian chemical output improved in the third quarter last year improved slightly with ethylene production being around 80,000 tons higher than in the same period in 2001. This was due largely to a reduced number of shutdowns in the months between July-September 2002. Overall the industry increased production by 4% over the first three quarters of 2001.

Polyolefin and commodity polymer production grew by 5% over 2001, with the largest increase seen in PVC. Sayanskkhimplast and Kaustik at Sterlitamak increased production of PVC by 15.7% and 11.1% respectively.

# Oil refining

Sibneft and TNK won a tender for Slavneft in December. There are now two options, either the two oil majors would split Slavneft's assets down the middle, or one of the two would integrate Slavneft into their own structure.

Sibneft and TNK jointly snapped up the government's 75% Slavneft stake for \$1.86 billion, just 10% above the starting price that many observers felt would have been as high as \$3

billion had the playing field been level. With just one party bidding, many observers concluded that asset sales in

Russia are still an insiders' game, confirmed by the events leading up to the auction. In the week leading up to the auction, LUKoil and Surgutneftegaz pulled out of the race, while others, like Rosneft, were barred by obscure court rulings. China's CNPC came to the table in the last few days of bidding but did not submit a final bid.

This deal tends to indicate that Russia is extremely reluctant to allow any sort of competition at all, and would welcome foreign oil majors only as equity investors. That sort of attitude, however, is seen in many circles as being not helpful at all for Russia.

Russian Exports (unit-kilo tons)			
Product	Q1-Q3 02	Q1-Q3 01	
Ammonia	2 054	1 711	
Soda Ash	318	351	
Methanol	643	686	
Acetone	20	17	
Synthetic Rubber	258	321	
Polyethylene	274	298	
Polypropylene	38	55	
Polystyrene	5	11	
PVC	197	210	
Caprolactam	125	137	

Russian Imports (unit-kilo tons)			
Product	Q1-Q3 02	Q1-Q3 01	
Polyethylene	90,2	112,3	
Polypropylene	12,2	19,4	
Polystyrene	72,6	94,5	
PVC	21,8	22,9	
Fibres & Threads	127,5	101	
Synthetic rubber	26,9	25,2	

## **SIBUR**

SIBUR has started to take steps towards implementing the modernisation programme for the gas processing plants included in SIBUR-Tyumen. During the course of 2003 SIBUR hopes that these measures will result in an increase in petrochemical feedstock production by up to 500,000 tpa.

For the Muravlenkov gas plant in the Yamal Nenets region the intermediate stage of modernisation has been completed, and the daily production of wide fractions of hydrocarbons has increased by 540 tons. Previously, the plant produced about 120 tons of wide fractions of hydrocarbons, and 90 tons of stable gas gasoline per day which amounted to no more than 20% of its design capacity.

Modernisation of facilities in SIBUR-Tyumen this year is planned for the Bakhilovsk and

Vingrapusk compressor stations, and the Gubkinsk, Nizhnevartovsk and Belozern gas processing plants.

### **Azot Kemerovo**

In the period January to November 2002 Azot exceeded ammonia production levels from 2001 by 120,000 tons, urea production by 41,000 tons, ammonium nitrate production by almost 200,000 tons, and sulphuric acid production by 16,000 tons. The average loading of the production capacities during the eleven months was 85.9%, while the same index equalled 76% in 2001.

SIBUR-Neftekhim	Production	n (unit-tons)
Product	Nov 2002	Planned target
Ethylene	15,650	14,764
Ethylene Oxide	4,813	4,082
MEG	13,257	13,023
DEG	1,679	1,484
TEG	137	83
Propylene	8,476	7,063
Benzene	4,445	4,358
BBF	4,573	3,518
C5	2,416	1,539
C9	920	893

#### SIBUR-Neftekhim

The business plan of SIBUR-Neftekhim for 2003 is aimed at restructuring and an increase of capacity. In November, SIBUR-Neftekhim met its planned production targets processing 46,344 tons of raw materials. The plant produced 15,650 tons of ethylene (6% up), 8,476 tons of propylene (20% up) and 4,573 tons of butylene-butadiene fractions, 30% up. SIBUR-Neftekhim managed to lower its consumption of power due to an increase of its own sources.

### Voronezhkautschuk

SIBUR's incumbent President has visited Voronezh to tighten the links between the local administration, Voronezhkautschuk and SIBUR itself. The business plan intends to integrate Voronezhkautschuk's synthetic rubber production more into the SIBUR structure. SIBUR's business-plan for 2003 envisages considerable growth of Voronezhsintezkauchuk production capacities. According to the management plans, the production of synthetic rubber in 2003 will increase by something like 17% to be around 198,000 tons. Roughly one third of the plant's production will be exported to destinations in Europe and Asia.

# **Tobolsk-Neftekhim**

On December 24 SIBUR reaffirmed its business plan for Tobolsk-Neftekhim for 2003. In February this year this will be followed by Gazprom determining the main sources of finance for the plant's development and

modernisation of the gas processing unit. In addition, the butyl rubber project will be decided soon which will require in the range of \$53.9 million to \$70 million.

Tomsk Petrochemical Combine Production (unit-tons)			
Product	Q1-Q3 02	Q1-Q3 01	
Ethylene	325,100	83,600	
Propylene	78,200	56,500	
Polyethylene	104,100	86,900	
Polypropylene	71,100	57,600	

#### **Tomsk Petrochemical Combine**

In the first eleven months of 2002 Tomsk Petrochemical Combine produced 89,416 tons of polypropylene, 13,695 tons more than in the same period in 2001. Production of polyethylene amounts to 133,580 tons that is 16,156 tons more than last year.

Ethylene production totalled 142,659 tons, against 126,386 tons in 2001, whilst propylene amounted

to 79,860 tons in 2002 against 71,440 tons. Formaldehyde production was 93,011 tons in 2002 against 85,045 tons.

These increases are the result of the restructuring by the creditors in 1999. The creditors committee suggested a plan for offsetting credit indebtedness by transforming the methanol and polymer productions of the company into separate and independent entities. Following the plan, in June-October 2000 the production assets of methanol and polymer productions were withdrawn from the ownership and control of the combine and handed over to Gazprom subsidiaries. Siberian Chemical Combine has now lost its control over the stock of Tomsk Petrochemical Combine, which it first acquired in 1997 and placed as a share into the registered capital of Apparat Upravleniya in August 1998.

### SIBUR-Khimprom

SIBUR-Khimprom's turnover for 2002 totalled 2.3 billion roubles, with investment amounting to more than \$4 billion. For 2003, the company plans to invest \$5 billion which will be directed towards the expansion of styrene capacity from 50,000 tpa to 120,000 tpa. Other plans include the reconstruction of the butanols plant which will require a total of around \$10 million.

# **Tatarstan**

### Nizhnekamskneftekhim

#### **Production levels**

Nizhnekamskneftekhim produced 3.7 billion roubles worth of commodity products for the first 9 months of this year.

In comparable prices, the increase in commodity products output amounted to 119.1% of the volume reached in

Nizhnekamskneftekhim Production (unit-tons)			
Q1-Q3 02	Q1-Q3 01		
125,100	329,600		
169,700	177,100		
112,700	115,900		
178,200	175,700		
42,300	41,700		
118,900	120,700		
	it-tons) Q1-Q3 02 125,100 169,700 112,700 178,200 42,300		

the same period of 2001. The balance sheet profit totalled to 974 million roubles, which comprised 39.8% of the total balance sheet profit of Nizhnekamskneftekhim. The share of plant's export in the total volume for the whole company accounts for 30%.

Styrene 178,200 175,700
Butadiene 42,300 41,700
Isoprene 118,900 120,700

Nizhnekamskneftekhim recorded an 8% increase in turnover in 2002 over 2001, partly due to an increase in selling prices. In physical volumes, the company saw an expected increase in ethylene production in 2002, Styrene also rose to 244,000 tons whilst butyl rubber

reached 67,000 tons.

Nizhnekamskneftekhim introduced eleven power-saving operation improvements in 2002 at the ethylene plant, which equated to power savings of 1.04 million roubles.

The power cost share in the total cost of the product increased up to a level of 9% (6% in 2001) due to the increase in power tariffs.

Apart from the company's transition to less power-intensive technologies in 2002, other developments last year included the introduction of a single step process for isoprene production. The modernisation of furnaces at the ethylene plant continued, whilst at the ethylene oxide plant saw a turnaround in the water supply. Inhibitors were introduced with the aim of lowering the rate of corrosion of metal heat-exchangers.

# Oligomer division at Nizhnekamskneftekhim

For 2002 Nizhnekamskneftekhim's oligomer division increased the production of propylene trimers by 11%, propylene tetramers by 18.4%, alkylphenols by 6.3%, and neonols by 9.5% from 67,700 tons in 2001.

#### Antifreeze

Currently there are two units at Nizhnekamsk for the production of antifreeze which supply almost 30% of total Russian consumption. The demand for antifreeze in Russia normally starts from August and does not start to fall until February. The major areas of consumption include Moscow, St Petersburg, and Novosibirsk.

#### **EPDM**

The polymer group in Nizhnekamskneftekhim have facing an increasing number of requests for more sophisticated polymer and rubber products for the Russian market. As part of these demands Nizhnekamskneftekhim has started to use antioxidants and other stabilisers in greater volumes.

One of the specialised products where demand is growing is EPDM and Nizhnekamskneftekhim is subsequently attempting to enhance the plant that was started up in 1994. An evaluation of EPDM competitiveness was given at Neftekhimya which suggested that the quality of product from the Nizhnekamsk plant favoured well against world standards. The dienes used are dicyclopentadiene (DCPD), and 5-ethylidene-norbornene-2 (ENB).

### Nizhnekamsk refinery

The opening of the Nizhnekamsk refinery in December represented an important step in the development of the regional petrochemical industry. The complex is designed for processing 7 million tpa of oil with a depth of 46%.

During construction 10.8 billion roubles has been spent of which Tatneft provided 6.67 billion roubles. The Nizhnekamsk refinery will provide needs of Tatarstan and other regions of Russia for high-quality road bitumen (350,000 tpa), jet and diesel fuel of European standards, boiler fuel, vacuum gasoil. Besides Nizhnekamskneftekhim will be provided with more raw materials for the production of ethylene. The refinery will produce up to 1 million tpa of naphtha.

# **Irkutsk**

#### Sayanskkhimprom

YUKOS decided not to take part in the auction for a 38.5% stake in Sayanskkhimprom, which took place on 30 December. This decision was reached after an analysis of the company which showed the need for a major restructuring.

A major part of the Sayanskkhimprom's production is exported to China, but the development of petrochemical projects in China could potentially threaten sales. Moreover, in June last year Sayanskkhimprom was declared bankrupt with more than fifty creditors. Despite this appraisal YUKOS still plans to proceed with the modernisation of its own polymer units at the Angarsk Polymer Plant.

The sale of a 38.51% stake in Sayanskkhimprom was awarded to Renova, a banking group. A price of 25,432 million roubles was paid for the stake. The new owners re expected to invest \$13 million in the company's modernisation programme. Sayanskkhimprom consists of subsidiaries Sayanskkhimplast, Khimsoda, Khimtrans, and Sayanskkhimenergo.

### Sayanskkhimplast

Sayanskkhimplast plans to use credit of \$60 million provided by the bank Sberbank for the conversion of chlorine from mercury. The credit agreement is yet to be finalised owing to a question on interest rates which has not yet been resolved. However, if negotiations are successful, the project could start in the near future.

The switch of the company's chlorine production from mercury electrolysis to the membrane method will have a positive effect upon the ecological situation in the region. This year Sayanskkhimplast plans to coordinate the project aimed at the reconstruction of the whole complex. Foreign companies are expected to be involved in the project as suppliers of equipment. Completion of the entire project will take 2.5-3 years.

Apart from the chlorine conversion the company is considering an expansion of PVC capacity from 250,000 tpa to 400,000 tpa. This may be a risky move, as although it makes sense in terms of economies of scale Sayanskkhimplast is heavily of on the Chinese market. If China decides to stop buying from the Irkutsk region it would be difficult to find other markets in reasonable proximity.

Sayanskkhimplast is expected to complete the acquisition of land occupied by its industrial objects in December. The company plans to spend 10 million roubles to acquire about 1.5 thousand hectares of land. This purchase

will undoubtedly affect the profits of the enterprise, since land acquisition was not envisaged by 2002 plans. Hence, the profit of Sayanskkhimprom in 2002 is anticipated to be lower than in 2001.

Sayanskkhimplast saved around 10 million roubles in 2002 from improved energy measures. The company is now exclaiming the usage of alternative sources of heat.

# Usolyekhimprom

The Irkutsk department of the Fund of Federal Property has put up for auction 26.81% of the equity in Usolyekhimprom, with an initial price of this block of shares placed at 46.5 million roubles. Requests will be accepted until 28 January 2003 and the results of auction will be known by 30 January.

Regarding production, Usolyekhimprom was faced by propylene shortages in the latter part of the year, which restricted the production of epihydrochlorin. The chlorination of propylene was halted on 17 December.

### **Angarsk**

Angarsk Petrochemical Company plans to process around 8 million tons of crude in 2003. A new line for the production of lubricants will be introduced in May this year

Angarsk Polymer Plant recorded a 11.9% increase for the first nine months of 2002, reaching 835.6 million roubles.

# LUKoil

LUKoil-Neftekhim finished 2002 with positive results, showing a 26% increase over 2001. In 2002, the company produced a total of 1.405 million tons of petrochemicals, including 360,000 tons of polyethylene, 218,000 tons of propylene, 150,000 tons of benzene, 120,000 tons of VCM, 30,000 tons of VAM, 137,000 tons of acrylonitrile, 30,000 tons of phenol, and 13,000 tons of fibres. LUKoil-Neftekhim made more than 13 billion roubles in 2002.

LUKoil-Neftekhim combines Stavrolen, Saratovorgsintez LUKOR, and Vars, the petrochemical terminal in port Ventspils, Latvia.

LUKoil-Neftekhim's subsidiary Saratovorgsintez increased raw material processing rates by 23% in 2002, with acrylonitrile production increasing by 42% and fibres by 15% over 2001. LUKOR at Kalush in western Ukraine also improved its working rates in 2002 in comparison with the previous year. The volume of pyrolysis processing increased in comparison in 2001 by 67%. VCM processing increased by 63%.

In 2003, LUKoil-Neftekhim plans to improve efficiency in production. The largest increase is expected in synthetic fibre production, by as much as up to 60%. VCM production is forecast to grow by 38% and VAM by 65%. A 20% increase of sales is expected in comparison with 2002. The profit will allow to a significant increase of funds for the financing of investment projects, one of which in 2003 is the introduction of a complex control system.

### Stavrolen

Stavrolen ran overall at 90% utilisation in 2002, with the VAM plant being restarted after a long shutdown. Stavrolen is the main industrial plant in the town of Budyennovsk in the Stavropol region. The construction of the Prikumsk plastics plant (as it was known originally) was a major step forward for the town of Budyennovsk. The construction process involved domestic and foreign companies. The polyethylene unit was started in May 1975 and polyethylene powder on 4 January 1981

Stavrolen's units were developed with the technologies of Linde, Union Carbide and Bayer. The company's main production is HDPE with 300,000 tpa of capacity, based on ethylene capacity at 350,000 tpa and benzene capacity at 95,000. There is also 50,000 tpa of VAM capacity.

Stavrolen employs around 3,500 people and since being integrated into LUKoil production levels have improved significantly. Plans for the complex in the medium term future include the completion of a longstanding polypropylene project, and facilities for oil processing.

# **Product News**

# **PVC**

Plastkard at Volgograd is planning to construct a new unit for PVC, the cost of which is estimated at around \$50 million. The plant management put out a tender for the project with Japanese and German companies participating in the first stage. However, now there only German bidders which include Uhde Krupp and Linde KcA.

The project is scheduled to start in the first quarter of 2003 and the construction period has been estimated to take 28-30 months. The facility will include two buildings and will permit to double the Plastkard capacity, i.e. the new installation will be able to produce annually over 200,000 tpa of PVC, including both conventional suspension PVC and high-impact suspension PVC. Thus, Plastkard will become the first Russian producer of high-impact PVC.

Plastkard already controls around 50% of the European part of the Russian market. However, the consumption per capita of PVC in Russia is estimated by local sources to be 5-7 times lower than in the majority of European countries.

#### **Carbon Black**

The volume of production ion Russia for the first three quarters grew by 5.8% against 2001, with the Omsk Carbon Plant increasing output by 26.4%. Omsk Carbon Plant expects to produce a total of 148,000 tons of carbon black in 2003.

After the Omsk Carbon Plant sent a delegation to Poland and Hungary, at the end of November, sales are expected to increase to Central Europe.

#### **Fibres**

Krasenergo and the trade company Unicorn have signed an agreement for the restart of production at Silvinit. Unicorn has agreed to underpin the energy costs of between 20-25 million roubles per month. The next stage of the recovery programme will cover the payment of taxes.

Moscow based company Unicorn has worked in the chemical fibre market for around ten years. By the start of July this year Unicorn expects to be producing 700-730 tons/month of viscose at the Silvinit plant which will later increase to 1,000 tons/month.

Balakovskoye Khimvolokhno has started modernisation of its production process for viscose fibres.

### Styrene

Construction of units for ethylbenzene and styrene at the Salavatnefteorgsintez complex in Bashkortostan is reported to be now in the final stage. The capacity of the plants will include 230,000 tpa of ethylbenzene and 200,000 tpa of styrene.

This project is the result of co-operation between Salavatnefteorgsintez and Lurgi. The construction of the new facility was stimulated by the need for the renovation of the existent lines for the production of the impact strong and foamed polystyrenes, ABS, etc. The modern technologies used in this facility will permit an increase in production based on the company's own raw materials.

#### **Methanol**

Methanol prices have helped push up MTBE prices in Russia. Also the irregularities of isobutylene supply have

**Russian Methanol Production (unit-kilo tons)** Producer Q1-Q3 02 Q1-Q3 01 Shchekinoazot 221,7 183,6 Metanol, Tomsk 282,6 372,5 Metrafrax 525,1 542.7 **NSPP** 43,1 98,3 Akron 67 53,5 Azot (Novomoskovsk) 134,8 145,8 Angarskneftorgsintez 16,5 18,3 Nevinnomyssk Azot 73,5 58,3 Togliattikauchuk 142 129 Total 1542,9 1565,4

had an impact on the level of prices. Uralorgsintez is about the only producer that has free volumes of MTBE available at present.

# **Aromatics**

On 30 December a serious fire occurred at the Omsk refinery, which belongs to Sibneft. No casualties were reported but more than 40 divisions of fire-prevention service of the Omsk area and the company. Extinguishing the fire was made more difficult by the – 35 C temperature in the Omsk area. According to the refinery the fire started as the result of a failure on the gasoline pipeline. Aromatic monomer production is

expected to be affected for a few weeks.

# Acrylic acid

According to LUKoil the company management is not considering the acquisition of Akrilat at Dzerzhinsk. LUKoil also said that it is generally not interested in acquiring petrochemical enterprises in the Nizhegorodskaya region.

At present the Ministry of Industry of Nizhegorodskaya regional government is seeking possibilities to cut the cost of the completion of the construction of the acrylic acid complex by changing the equipment supplier. The regional Ministry of Industry sees cooperation with one German company as a possibility.

### Caprolactam

A final judgement of the anti-dumping investigation in China has been postponed until 7 July 2003. However, the preliminary decision is expected sometime in the period between December 2002 and February 2003. The prognosis for the Russian domestic caprolactam price is that it will fall in January-February due to seasonal factors.

KuibyshevAzot produced 76,500 tons of caprolactam in the first nine months of 2002 compared to 81,600 tons in the same period in 2001. For the full year the company produced 97,000 tons against 106,700 tons in 2001 and this was due to maintenance work. The production capacity for caprolactam was revamped completely in 2002.

KuibyshevAzot achieved 4.2 billion roubles turnover for the first eleven months of 2002, which is 0.5% down on the same period last year. Ammonia production totalled 480,000 tons (13.3% down), ammonium nitrate 272,000 tons (8.5% down), and urea 176,000 tons (83.8% down).

#### **Orthocresol**

Uralkhimplast (Nizhniy Tagil, Sverdlovsk region) this year plans to start reconstructing its orthocresol unit and to install steam boilers. The design capacity of the orthocresol plant is 7,000 tpa and will be increased to 14,200 tpa.

#### **Plastics**

Technopack, a Saint-Petersburg producer of polypropylene bags for the food industry, has started construction of a line to manufacture a multilayer film for vacuum packaging. The project capacity of the line is 600 tons/month. This is broken down into 250 tons/month of multiplayer film, the equipment supplied by Italian company Luigi Bandera, and 350 tons/month of a seven-layer film for vacuum packaging. The cost of both lines exceeds \$3.4 million.

ZAO Rusoil-Moscow, wh8ich is a daughter company of Slavneft, has started the production of polyethylene products at the Slavneft-Yaroslavl refinery. The equipment was supplied from Italy and includes two lines for the production of household products.

### Ukraine

(Ukr hryvnia Jan 3, \$1= 5.2900, €1= 4.716035)

### **LUKOR**

LUKOR in the first nine months of 2002 increased output of propylene at Kalush by more than twice against 2001, to total 64,754 tons and polyethylene to 71,734 tons. The company processed 535,802 tons of pyrolysis raw materials, which was down 8% against the previous year.

### **Styrol**

Chemical plants in Ukraine in January-September 2002 reduced ammonia production by 6% compared to the same period of the last year, to 3,238,730 tons. The largest producer of this product, Styrol, decreased production by 9% to 895,110 tons, Severodonetsk Azot by 22% to 439,630 tons, Cherkassy Azot by 1% to 588,700 tons, Odessa State Port Plant by 3% to 752,340 tons. At the same time Rivneazot increased ammonia production by 17% to 201,090 tons, and Dneproazot by 1% to 361,860 tons).

In 2002, Styrol increased its total turnover by 10% over 2001. Apart from ammonia, Styrol controls around 3% of the world market for urea.

Styrol, Ukraine's sole producer of polystyrene, has finally overcome the polystyrene external deliveries crisis, observed over the whole first half of the year, and is rapidly making up the lost positions. The company released its plans for the next year, aiming for a three to four-fold upturn in polystyrene production up to 12,000 tons.

The additional volume would come from the recently installed production lines for foodstuff packaging, allowing to expand the capacities from 100 million items to 150-200 million items of packages per year.

In 2003, Styrol plans to develop the production of pharmaceuticals and biotechnology. The company's subsidiary Stirolbiotech, which is engaged in the production of lysine-protein nutrient supplements, is aiming for 60% upturn in production volumes this year.

#### **Azot Severodonetsk**

Azot has proposed to LUKoil to create a jv for polyethylene production. A year ago Azot was in talks with SIBUR to create a similar venture, but the problems faced by SIBUR in the early part of 2002 effectively brought those talks to an end.

Azot is offering to restart the idle facilities for polyethylene production, with 55,000 tpa of annual capacity. As the resumption of activity depends on ethylene supplies, Azot has asked LUKoil for ethylene deliveries to be made from Kalush by LUKOR.

In the third quarter of 2002, Azot recorded 2.93 million hryvnia in net losses (\$0.55 million), s worse position compared to the second quarter of this year, when the company's after-tax profit reached 3.214 million hryvnia (\$0.6 million). Despite the losses Azot increased its production in July-September 2002 by 21.8% (over 2001) to 169.2 million hryvnia (\$31.75 million). In the third quarter, the company increased its ammonia production by 3.35% to 166,700 tons, whilst reducing its output of ammonium nitrate by 1.5% to 84,900 tons.

The economic court of the Lugansk region has included the local energy company Luganskoblenergo on the list of creditors for Azot. Azot produced 17% and 13% respectively of Ukrainian ammonia and mineral fertiliser production last year.

### **Dneproazot**

In the third quarter of 2002, Dneproazot, one of the largest domestic producers of ammonia and nitrogen fertilisers, reduced its production by 6.4% to 112.77 million hryvnia (\$21.16 million). Over this period, the company produced 125,359 tons of ammonia (down 3.6%), 174,295 tons of urea (down 6.4%), 11,100 tons of sodium hydrate (down 32.5%), 8,070 tons of liquid chlorine (down 31.2%), and 6,750 tons of hydrochloric acid (down 21.2%). Over the first nine months of 2002, the company's production totalled 333.152 million hryvnia (\$62.5 million).

#### Khimvolokhno-Amtel

Amtel-Amtel at Chernigov, Ukraine's largest producer of cord fabric, is planning to restart the production of Kapron cord with the support of the Russian Amtel Group. The production capacities of Khimvolokhno are capable to produce up to 60 tons/day of Kapron cord fabric and up to 27 tons/day of cord fabric.

### **Belarus**

The major Belarussian chemical producers met in late 2002 to consider several projects, which are seen as important for the sector's development. More than 30 investment projects were proposed through Belneftekhim.

Some of the projects include the renovation of the benzene plant at the Mozyr refinery, the reconstruction of the Azot complex at Gomel and the tyre producer Belshina. Azot is proposing four projects valued at \$71.5 million and is trying to attract the interest of foreign investors.

### **Transcaucasus**

# Sumgait

At a forthcoming conference, taking place in Baku in May 2003, the modernisation of the Sumgait cracker will be reviewed. The conference is called "Investing in Azerbaijan Gateway to the Newly Independent States"

The project is titled "Increasing Production Capacity of Ethylene-Propylene Plant through Reconstruction of Existing Kilns". The EP-300 constitutes the basis of the petrochemical complex of Azerbaijan. The production unit was put into operation using Soviet and Czech technology.

At present the EP-300 unit cannot operate at full capacity. The main product yield on the basis of local feedstock is low because of inadequate processing and marketing of output. Current customs and transportation costs are high and energy provision is unreliable. These factors result in unsafe and unprofitable operations of the EP-300 production plant.

Reconstruction of the kilns is aimed at changing from naphtha to gas condensate. The Shahdeniz gas field will be a source for gas condensate.

The aim of the project is to improve a number of production flaws: poorly operated plant machinery, wrong choice of raw materials, deterioration of equipment, fall in production of completed products. The payback period will be 10 years from the start of the project.

Along with EP-300 production, construction of a by-product (pyrolysis resin) processing facility, a propylene unit and autonomous energy unit is also planned.

After the first stage of the energy block project reconstruction will take place of the EP-300 production unit. ABB Lummus Global of the Netherlands is conducting a feasibility study of the project.

To serve the demand of a wide number of chemical plants in the Sumgait region Azerkhimya has taken the decision to build a new steam-gas unit at the power plants. The construction of the new steam-gas unit, which will have a capacity of 400-500 MW, has already been agreed with Azerenergo. Several foreign companies have already made presentations for the project, including Alston, Mitsui, and Siemens. The project is a priority for Azerbaijan and construction is expected to start in the second half of 2003. The new generating capacity will be ready by 2005.

### Georgia

The sale of Azot at Rustavi to Itera seems to have hit a hurdle over investment strategies. Georgia had agreed to sell a 90% block of shares in Azot but the deal ran into domestic opposition. The government considered the business plan of Itera and rejected it due to the investment proposals.

Previously Itera expressed readiness to invest \$14 million for the development of this chemical enterprise. As a result, Azot will now be offered for sale by international auction. Itera has been invited to take part in the auction as it is still considered as a strategic partner of Georgia and a potential buyer.

### **Central Asia**

Chinese CITIC International Cooperation Co. Ltd has started construction of Kungrad Soda Plant (Karakalpakstan) with a total cost of \$100 million, Uzkimyosanoat (Uzbek Chemical Industry)

Uzkimyosanoat was established at the beginning of 2001, based on the old Uzbek Chemical Industry Association Uzkhimprom. At the present time there are 9 state owned chemical plants (which are planned to transfers to joint stock type companies in near future), 9 joint stock companies and 2 joint ventures in the organisational structure of Uzkimyosanoat.

Uzkimyosanoat does not have any production faculties of its own and only co-ordinates operations of its subsidiary companies. The main producers include Navoiazot and Elektrokhimprom.

# Forthcoming events

2nd Annual CEE Chemical and Petrochemical Industry 2003, 18-19 February 2003

Location: Budapest, Hungary.

Conference organiser : Marcus Evans

The Chemical and Petrochemical Industries of Russia, the CIS and CEE, 22-23 May 2003

Location: Frankfurt, Germany

Conference organiser : Global Business Forums

Web links for both events can be found at www.cirec.net

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