CIREC monthly NEWS

Chemical industry reporting for Central and South East Europe
Supplemented by developments in Russia & neighbouring states

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Visegrad bloc including Czech Republic, Hungary, Poland, Slovakia
South East Europe & Baltic States
Eurasia Russia-Ukraine-Belarus-Kazakhstan-Uzbekistan-Azerbaijan
Product areas include Olefins, Aromatics, Polyolefins, Methanol, Organic Chemicals, Polyurethane Raw Materials, etc

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Features from this issue, including changing production and trade dynamics

Central European petrochemical markets

- MOL's petrochemical margins increased in the first quarter this year to €209 per ton against €149 per ton in the first quarter in 2023 and €132 per ton in the fourth quarter
- Orlen Unipetrol recorded an increase in ethylene and propylene imports in the first quarter to meet demand largely at Litvinov. Czech imports of ethylene amounted to 27,911 tons in January to March 2024, up from 16,034 tons in January to March 2023
- The olefins complex at Płock recorded a utilisation rate of 67% in the first quarter against 70% in the fourth quarter last year and 78% in the first quarter

Central European polymer and chemical trade

- Polish polypropylene imports, including homo grade and copolymers, rose in January to March 2024 to a total of 234,348 tons versus 225,266 tons in January to March 2023
- Polypropylene produced as part of the newly built installations at the Polimery Police plant has been successfully tested through the various stages and is now available for direct sale and distribution
- Polish imports of polyethylene totalled 334,407 tons in January to March this year against 297,491 tons in January to March 2023, with average prices falling from €1492.8 per ton to €1267.1 per ton

- **Central European polymer and chemical production**
- The MOL Group reduced polyethylene production at its two plants located in Hungary and Slovakia from 143,000 tons in the first quarter in 2023 to 119,000 tons in 2024
- HDPE production at Tiszaujvaros dropped from 86,000 tons to 74,000 tons. Polyolefin sales from the MOL Group amounted to a total of 211,000 tons in the first quarter against 265,000 tons in the same quarter in 2023
- Production of polyethylene in Poland increased from 77,300 tons in the first quarter last year to 80,400 tons in the same period in 2024. Polypropylene production increased from 72,500 tons in the first quarter in 2023 to 82,700 tons in January to March 2024
- MOL 's Polyol Complex at Tiszaujvaros was officially opened in May 2024, after a two-year delay caused partly by the market effects from firstly COVID and secondly the war in Ukraine
- Chimcomplex has completed its project for investing in innovative technology for environmentally friendly polyol production, adding another 17,000 tpa of capacity

Russian synthetic rubber production and trade

- Synthetic rubber production in Russia amounted to 376,847 tons in the first quarter this year against 373,254 tons in the same period in 2023 and 431,000 tons in 2022
- For synthetic rubber production the Volga region accounted for the largest share, amounting to 269,573 tons in the first quarter this year against 255,272 tons in the same period last year
- By volume Russian shipments of synthetic rubber to China amounted to 138,270 tons in the first quarter, which was up from 102,104 tons in January to March 2023. Butadiene rubber exports represented the largest category, rising from 11,528 tons last year to 28,438 tons
- Exports of halogenated butyl rubber showed the largest percentage increase

CENTRAL and SOUTH EAST EUROPE

Czech Crude Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Azerbaijan	595.8	523.7
Kazakhstan	333.9	142.5
Russia	909.2	1161.1
Total	1838.8	1827.3

Czech crude imports Jan-Mar 2024

Russia supplied 909,200 tons to the Czech Republic in the first quarter in 2024 against 1.161 million tons in the same period in 2023. Imports from Azerbaijan and Kazakhstan both increased in the first quarter, but Russia still accounted for nearly 50% of total crude imports.

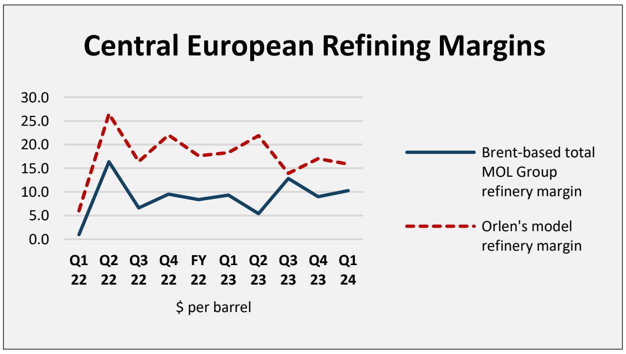
The main difference between 2023 and 2024 was that the price cap last year was much more effective, and the cost advantages of buying Russian crude this year have been minimal. By the start of 2025 the Czech Republic will need by sanction requirements to purchase all crude from non-Russian sources. Although the Czech Republic is striving to move away completely from Russian crude the second half of 2024 may be particularly difficult when the capacity of the TAL pipeline will be temporarily limited due to modifications.

Polish Crude Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Saudi Arabia	4565.2	3278.2
Nigeria	772.5	645.3
Norway	3222.1	1116.7
US	760.9	185.1
UK	94.2	408.4
Nigeria	772.5	645.3
UK	0.706	599.5
Total	9,415	6796.4

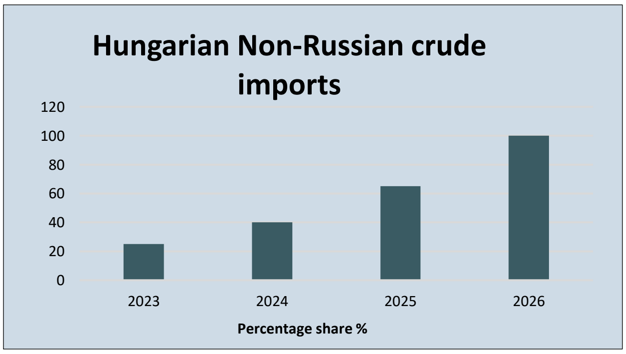
Polish-Hungarian oil imports

From the total of 9.415 million tons of crude imported into Poland in the first quarter in 2024, supplies from Saudi Arabia totalled 4.565 million tons followed by Norway which provided 3.222 million tons.

Orlen's refineries in Poland, the Czech Republic and Lithuania operated at 94% in the first quarter, processing 2.535 million tons of crude oil. Orlen has achieved consistently higher refining margins than MOL despite than the MOL Group despite receiving some Russian discount.



Despite pressure to change oil supply MOL purchased nearly all of its imported crude from Russia in the first two months this year. This trend is expected to change as the year progresses. Under MOL's deals, Janaf will transport 2.2 million tons of oil and will store 79,385 cubic metres of oil at the Omisalj terminal, on the island of Krk, as well as 70,000 cubic metres of crude oil at the Sisak terminal.



MOL aims to be completely free of Russian crude by the start of 2026. By the end of 2024 the group aims to have reduced crude purchases from Russia to around 50% of total supply, although in the first two months Russia was almost the sole supplier to Hungary.

Since 2022 MOL Group has tested eight different crude types to see how suitable they would be on the current refinery and what investments are required. MOL estimates that it needs to spend around $500 million for full diversification.

The Slovnaft refinery has not yet managed to fully prepare for a permanent transition to non-Russian oil. MOL has already started transporting crude oil from its oil field in Azerbaijan to Slovnaft in Bratislava via the Adria oil pipeline, but still require Russian supplies.

Central European Olefin Production, Trade & Projects

Polish Petrochemical Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Ethylene	90.1	91.8
Propylene	91.9	87.4
Butadiene	14.6	15.9
Toluene	0.0	0.4
Phenol	11.3	12.0
Polyethylene	80.4	77.3
PVC	45.2	59.5
Polypropylene	82.7	72.5

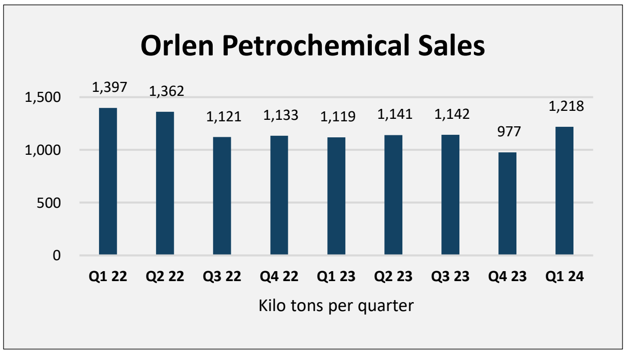
Polish petrochemical production Jan-Mar 2024

Ethylene production in Poland dropped from 91,800 tons in January to March 2023 to 90,100 tons in the same period in 2024, whilst propylene rise from 87,400 tons to 91,900 tons.

Butadiene production at Plock dropped to 14,600 tons from 15,900 tons. In the plastics sector polyethylene production rose to 80,400 tons in January to March 2024 versus 77,300 tons in 2023. Polypropylene production at Plock increased from 72,500 tons to 82,700 tons. PVC production fell from 59,500 tons to 45,200 tons with the plant at Wloclawek idle restarting in February after a four-month shutdown.

Orlen Group Jan-Mar 2024

Orlen's first-quarter net profit dropped by 70% to zl 2.77 billion (€650.7 million) due to the impact of a windfall tax and a weaker refining performance. Orlen's payment of a windfall tax used to stabilise gas prices rose by zl 4.2 billion to zl 7.7 billion in the first quarter. First-quarter operating profit in the refining business dropped by 52% to zl 1.9 billion (€446 million), due to weaker margins and volumes. Refining volumes were stable, Orlen's division in Poland processing 5.595 million tons in the first quarter, Orlen Unipetrol processed 1.836 million tons and in Lithuania Orlen processed 2.035 million tons.



For the petrochemical sector the main plus in the first quarter results came from an increase in physical sales to 1.218 million tons. This was the highest amount since the second quarter in 2022 and a rebound from the 977,000 tons sold in the fourth quarter last year. Several product areas, particularly plastics and PTA saw increased activity.

Orlen Petrochemical Divisional Performance (€ million)						
€ million	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**Q1 24**
Sales revenues	1,446	1,271	1,071	1,044	869.0	1131.0
External revenues	1,150	1,002	826	784	699.1	894.9
Inter-segment revenues	296	269	245	260	169.9	236.1
Total operating expenses	(1,419)	(1,365)	(1,194)	(1,158)	-1001.4	-1168.1
Profit/(Loss) from operations	42	-46	-100	-91	-151.4	-189.1
Sales (thousand tons)	255	1,119	1,141	1,142	977.0	1218.0

Despite the rise in volume sales, revenues from petrochemicals dropped from €1.271 billion (€298.2 million) in the first quarter last year to €1.131 billion (€265.3 million). Although operating costs dropped from €1.365 billion (€320.3 million) to €1.131 billion (€265.4 million), the loss from petrochemical sales dropped from €46.0 million to €189.1 million. This was the largest operating loss recorded in the last six quarters, with only the fourth quarter in 2022 recording a small positive value.

Orlen Petrochemical Margins (€ per ton)						
Product	**Q4 22**	**Q1 23**	**Q2 23**	**Q3 23**	**Q4 23**	**Q1 24**
Ethylene	487	464	433	353	381	433
Propylene	438	432	429	345	353	392
Toluene	606	668	664	547	621	616
Benzene	514	564	554	421	484	495
Butadiene	428	413	455	530	348	399
PX	115	312	393	233	331	454

Margins for petrochemicals in the first quarter were largely in line with recent quarterly figures, with ethylene recording €433 per ton and propylene €392 per ton.

Butadiene margins amounted to €399 per ton in the first quarter this year, after peaking at €614 in the third quarter in 2022. Since then, the range has been between €348 and €530 per ton. In the aromatics sector benzene and paraxylene margins were stable in the first quarter, whilst toluene margins continued good performance at €616 per ton. Paraxylene margins recorded €454 per ton against €312 per ton in the first quarter last year and €115 per ton in Q4 2022.

Orien Petrochemical Plant Utilisation Rates%			
Division	***Q3 23***	***Q4 23***	***Q1 24***
Olefins (Plock)	67	37	60
BOP (Plock)	67	38	67
Metathesis (Plock)	0	0	30
Fertilisers (Wloclawek)	75	81	78
PTA (Wloclawek)	65	55	80
Olefins (Orlen Unipetrol)	82	84	86
PPF Splitter (Orlen Lietuva	82	78	71

Orlen Group utilisation rates

The olefins complex at Płock recorded a utilisation rate of 60% in the first quarter against 37% in the fourth quarter last year and 67% in the first quarter. Lower utilisation was seen in the first quarter due to a deficit in feedstock (CDU VI and Hydrocracking shutdowns at the Refinery). Basell Orlen Polyolefins at Plock recorded the same utilisation rates as in the first quarter last year but much higher than in the fourth.

Continued slow demand has also meant that the Metathesis plant at Płock has not operated anywhere near full capacity in the past year. This impacted on propylene production for the Orlen Group which rose only slightly from 87,000 tons in the first quarter in 2023 to 91,200 tons in the same period in 2024. Other Orlen Group plants in Poland reported lower utilisation rates in the first quarter due predominantly to demand side factors, including the PVC plant and PTA plant at Wloclawek. Outside of Poland, Orlen Unipetrol achieved improved utilisation rates at the Litvinov olefins complex after recovering from 49% in the second quarter last year. In Lithuania Orlen Lietuva's PPF splitter was lower in the first quarter due to maintenance downtime.

Orlen Summary Q1-2024

- *Windfall taxes affect first quarter performance*
- *Refining profits down in first quarter*
- *Group refineries ran at 90% in Q1-2024*
- Improved sales volumes of petrochemicals

Czech Olefin Imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Ethylene	0.222	9.058
Propylene	8.516	13.741
Butadiene	12.906	24.759

Czech olefin monomer trade, Jan-Mar 2024

Czech imports of ethylene amounted to only 222 tons in January to March 2024, down from 9,058 tons in January to March 2023. This was to meet demand at Litvinov. Ethylene exports from the Czech Republic amounted to 3,135 tons in against 3,306 tons in the first quarter in 2023.

Czech Olefin Exports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Ethylene	3.135	3.306
Propylene	3.054	0.011

Propylene imports into the Czech Republic dropped from 13,741 tons in January to March 2023 to 8,516 tons in 2024, with Germany supplying nearly all the product. Average prices for propylene imports in the first quarter in 2024 dropped to €888.0 per ton against €960.1 per ton in the same quarter in 2023. Exports of propylene at the same increased to 3,054 tons, up from an insignificant amount in the first quarter in 2023.

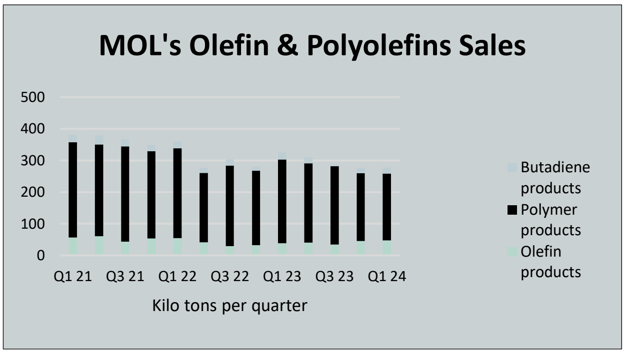
Czech imports of butadiene dropped in the first quarter in 2023 from 24,759 tons to 12,906 tons in January to March 2024, all of which was supplied by Germany and Hungary. Butadiene prices dropped from €1178 per ton to €831.9 per ton. Nearly all the butadiene went to Kralupy for conversion into synthetic rubber.

Czech imports of ethylene amounted to 27,911 tons in 2023, up from 16,034 tons in 2022. Ethylene exports from the Czech Republic amounted to 9,386 tons versus 10,298 tons. Propylene imports into the Czech Republic rose from 29,512 tons in 2022 to 33,210 tons in 2023, with main suppliers including Germany, Romania and Poland. Average prices for propylene imports dropped in 2023 to €943.7 per ton against €1436.5 per ton.

MOL's Olefin Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Ethylene	141	178
Propylene	73	95
Butadiene	20	21
Raffinate	48	30

MOL's petrochemical division Jan-Mar 2024

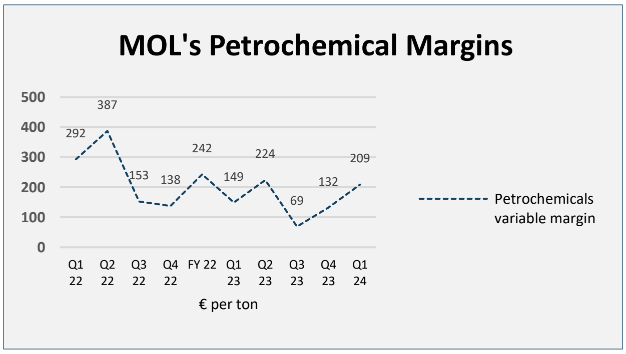
MOL's petrochemical margins increased in the first quarter this year to €209 per ton against €149 per ton in the same quarter in 2023 and



€132 per ton in the fourth quarter. MOL's petrochemical sales for olefins and butadiene continue to be lower than levels pre-COVID. External olefin sales for MOL comprise ethylene shipments to BorsodChem for PVC production and internal group sales involve propylene to Slovnaft for polypropylene production.

MOL's ethylene production in Hungary and Slovakia rose to 141,000 tons in the first quarter in 2024 against 178,000 tons in the same period in 2023. Propylene production dropped from 95,000 tons to 73,000 tons, whilst butadiene decreased from 21,000 tons to 20,000 tons. Despite the small drop in butadiene production, raffinate production increased from 30,000 tons to 48,000 tons.

MOL Group's most significant commitments in Hungary relate to a polyol project of MOL Petrochemicals (€105.8 million), which aims to become a major producer of polyether polyols. The plant was officially opened in May 2024. Another €106.9 million is being invested in the construction of the metathesis project, which is a greenfield investment providing propylene for the polyol complex. For the expansion of the maleic anhydride plant at the Danube refinery, which is located at Szazhalombatta, €30.7 million has been allocated. Other projects being undertaken by MOL in Hungary include a revamp of the PP3 unit and modernisation of the ethylene. In Croatia the Rijeka refinery, belonging to MOL subsidiary INA is undergoing an upgrade project.



HIP Petrohemija Q1 2024

HIP Petrohemija at the Pancevo petrochemical complex produced 80,200 tons of petrochemicals in the first quarter. The refining of virgin naphtha in the first quarter amounted to 99,800 tons, while the petrochemical product sales in the first quarter of 2024 amounted to 60,900 tons. HIP Petrohemija recorded a slight loss in both EBITDA and net profit in the first quarter. The decline in operational indicators is largely due to the undertaking of the capital overhaul within Petrohemija.

Petrohemija Production Indicators Q1 2024	
Product	***Jan-Mar 24***
Petrochemical products	80,200 tons
Naphtha processed	99,800 tons
Petrochemical sales	60,900 tons

The strategy of further development of HIP Petrohemija will be based on the modernisation of basic production capacities and the construction of new facilities, then on increasing energy efficiency and business efficiency, as well as on the implementation of projects in the field of environmental protection. Key investment activities have been carried out in the ethylene and polyethylene plants. The aim is to increase the reliability of the plant, as well as increase operational and energy efficiency. In addition to investment activities, the overhaul of process equipment in other plants has been carried out.

Polish Monomer Import Costs (€ per ton)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Propylene	829.3	972.5
Butadiene	721.2	916.3
Styrene	1349.6	1198.6

Polish propylene & butadiene imports, Jan-Mar 2024

Propylene producers in Europe are maintaining low operating rates, with production levels operating significantly below average. Due to a lack of a clear picture on demand, spot purchases for Grupa Azoty this year have become more prevalent. Some market players believe that structural demand improvements can be expected in the second half of 2024, if interest rates are relaxed and a revival occurs in certain market sectors.

Polish Imports of Propylene (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Bulgaria	1.005	2.976
Czech Republic	3.104	0.000
Germany	23.592	16.460
Ukraine	0.722	0.000
Serbia	0.000	1.917
Netherlands	0.000	4.076
Others	0.190	0.005
Total	28.613	25.435
Av price	829.3	972.5

Propylene supply to Grupa Azoty Kedzierzyn is secured under contracts with suppliers, which are supplemented by spot purchases as needed. Propylene is bought mainly by Grupa Azoty Kedzierzyn's Oxoplast Segment, Grupa Azoty Kedzierzyn focuses on expanding the portfolio based on a new product platform diversifying from the currently used aldehydes towards oxo alcohols. The segment's major strategic objective is to reduce exposure to the market downturn risks by enhancing flexibility of production and balancing production volumes of aldehyde derivatives. There are also business development plans to enter the bio-plasticizers market.

Polish Butadiene Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Austria	9.632	10.191
Germany	4.381	0.913
Hungary	10.248	6.740
Others	0.910	0.002
Total	24.263	17.846
Av € per ton	721.2	916.3

The decline in prices has been driven in part by lower average prices of crude oil as well as the demand and supply dynamics. Polypropylene demand has proved relatively stable but other derivative areas such as oxo alcohols and propylene oxide for the polyol industry continue to experience lower consumption than normal. European crackers and refineries operated at their minimum technical loads in the early part of the third quarter, which helped to minimise the oversupply of propylene.

Poland imported 28,613 tons of propylene in January to March against 25,435 tons in January to March 2023. Average prices dropped from €972.5 per ton in January to March last year to €829.3 this year. Butadiene import prices for Poland dropped from €916.3 per ton in January to March 2023 to €721.2 in January to March this year, with volumes rising from 17,846 tons to 24,263 tons.

Hungarian Propylene Exports (unit-kilo tons)		
Country	***Jan-Feb 25***	***Jan-Feb 23***
Slovakia	22.063	19.011
Total	22.063	19.011
Av € per ton	1040.2	1186.2

Hungarian propylene exports Jan-Feb 2024

Exports of propylene from Hungary dropped in the first two months were focused almost exclusively on Slovakia and amounted to 22,063 tons. In the first two months in 2023 exports to Slovakia totalled 19,011 tons. Export prices from Hungary dropped from €1186.20 per ton to €1040.2 per ton. Propylene exported from Tiszaujvaros to Slovnaft at Bratislava is consumed solely in the production of propylene polymers.

Hungarian Butadiene Exports (unit-kilo tons)		
Country	***Jan-Feb 25***	***Jan-Feb 23***
Czech Republic	2.062	4.075
Germany	3.959	1.995
Poland	6.189	4.055
Total	12.209	10.124
Av € per ton	726.6	869.4

Hungarian butadiene exports amounted to 12,209 tons in the first two months in 2024 against 10,124 tons in the same period in 2022. Shipments into Poland totalled 6,189 tons in January to February 2024 against 4,055 tons in the same period in 2023. Exports to Germany increased from 1,995 tons to 3,959 tons and to the Czech Republic dropped from 4,075 tons to 2,062 tons. Average prices for Hungarian butadiene exports fell to €726.6 per ton versus €869.4 in 2023.

Polish Styrene Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	5.765	0.096
Czech Republic	6.166	4.995
Netherlands	11.227	8.583
Germany	1.984	3.606
Others	0.672	1.939
Total	25.805	19.220
Av € per ton	1349.6	1198.6

Polish styrene imports Jan-Mar 2024

Synthos in Poland imported 25,805 tons of styrene in January to March against 19,220 tons in January to March last year. The Netherlands provided 11,227 tons in the first three months in 2024 versus 8,583 tons in the same period in 2023. The Czech Republic has also been an important supplier this year, shipping from Kralupy to Oswiecim. Styrene import costs into Poland increased from €1198.6 per ton last year to €1349.6 in the first quarter this year.

Central European Polyolefin Production, Trade & Projects

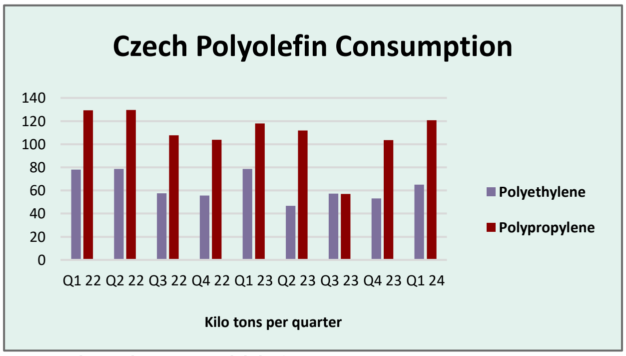
Polish Polyolefin Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Polyethylene	80.4	77.3
Polypropylene	82.7	72.5

MOL's Polyolefin Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
LDPE	17	57
HDPE	74	86
PP	106	128
PE Totals	119	143

Central European polyolefins production Jan-Mar 2024
Production of polyethylene in Poland increased from 77,300 tons in the first quarter last year to 80,400 tons in the same period in 2024. Polypropylene production increased from 72,500 tons in the first quarter in 2023 to 82,700 tons in January to March 2024. Currently polypropylene production in Poland takes place at Plock, but production is currently being started up at the new Polimery Police plant in the north of the country. This plant was expected to start in August or September last year, but problems with the equipment during the start-up phase caused a delay.

The MOL Group reduced polyethylene production at its two plants located in Hungary and Slovakia from 143,000 tons in the first quarter in 2023 to 119,000 tons in 2024. HDPE production at Tiszaujvaros dropped from 86,000 tons to 74,000 tons. Polyolefin sales from the MOL Group amounted to a total of 211,000 tons in the first quarter against 265,000 tons in the same quarter in 2023.

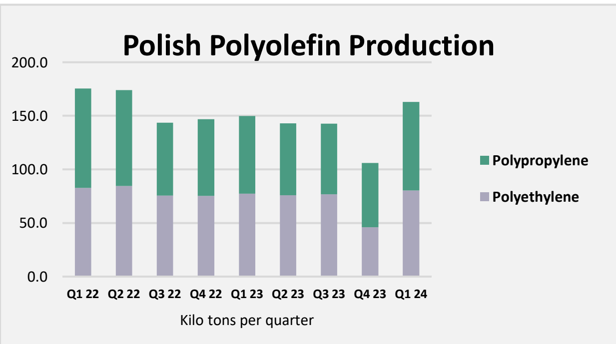
Czech polyethylene production and trade Jan-Mar 2024
Production of polyethylene at Litvinov amounted to around 65,000 tons in the period January to March 2024 against 79,000 tons in the same period in 2023. Polypropylene showed a slight increase in the first quarter totalling around 120,000 tons against 117,000 tons last year.



Overall, for 2023 Czech polyethylene consumption fell to 235,604 tons against 269,901 tons in 2022.

Orlen Unipetrol is attaching greater focus on the principles of circular economy and permanent sustainability. The aim is to It develop these principles by building a broad portfolio of recycling activities, thanks to which it will be able to efficiently acquire and process waste plastic and bio-waste and produce new petrochemicals and biofuels.

Polish polyolefin production Jan-Mar 2024
After slight increases in polyolefin production at Plock in the first quarter Orlen's group's sales of polyethylene and polypropylene rose 13% over the first quarter in 2023 to 179,000 tons. Partly this was due to acquisition of full control over the installation and production of LDPE at Płock. However, it also reflected some stability in the market indicating better prospects for 2024. Even sales of PVC increased slightly in the first quarter after production was restarted.



The Orlen Group is already the largest producer of plastics in the region, and its position will be strengthened due to a significant increase in production capacity as part of the Olefiny III investment.

However, the project has become much more expensive than originally estimated, and its completion has already been postponed several times. Currently, it is valued at approximately zl 25 billion, and the date of commissioning is set for the first half of 2027. Orlen is also working on a concept for the expansion of its polyethylene unit at Plock.

Czech polyethylene exports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
LDPE	9.498	6.369
LLDPE	1.403	0.877
HDPE	81.701	84.744
EVA	0.887	0.898
Other	3.555	2.810
Total	97.044	95.697
Av € per ton	1384.2	1449.5

Czech polyethylene imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
LDPE	27.656	25.936
LLDPE	6.222	5.472
HDPE	29.414	29.382
EVA	2.899	2.411
Other	10.828	10.054
Total	77.020	73.255
Av € per ton	1481.9	1729.5

Czech polyethylene trade Jan-Mar 2024
Consumption of polyethylene in the Czech Republic has mirrored other markets in Europe in the past two years, with quarterly volumes falling sharply in 2023. Overall, for 2023 Czech polyethylene consumption fell to 186,200 tons against 214,300 tons in 2022.

Czech prices for both exports and imports of polyolefins were lower in 2023 against 2022. Polyethylene exports amounted to 97,044 tons in the first quarter in 2024 against 95,697 tons in 2023.

HDPE export shipments comprised 81,701 tons in the first three months in 2024 against 84,744 tons in the same period in 2023. Germany was the largest destination for Czech HDPE supplied from Litvinov. Other important markets for Czech polyethylene exports include Poland, Italy and Belgium.

For imports of all forms of polyethylene, Czech inward shipments amounted to 77,020 tons in January to March 2024 against 73,255 tons in 2023, with prices dropping from €1729.5 per ton to €1481.9 per ton. Germany was the largest source of polyethylene imports.

Polish Polyethylene Trade		
Exports	***Jan-Mar 24***	***Jan-Mar 23***
Vol (kilo tons)	74.276	72.890
Av € per ton	1342.5	1195.4
Imports	***Jan-Mar 24***	***Jan-Mar 23***
Vol (kilo tons)	334.407	297.491
Av € per ton	1267.1	1492.8

Polish polyethylene trade Jan-Mar 2024
Polish trade in polyethylene increased in the first quarter for both imports and exports. The increase in demand has been relatively modest but provides some suggestion that the market may have turned the corner.

Polish PE imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
LDPE	86.967	80.765
LLDPE	52.413	51.459
HDPE	104.139	104.504
EVA	5.366	3.586
EAO	70.667	44.978
Others	14.855	12.198
Total	334.407	297.491
Av € per ton	1267.1	1492.8

Poland carries a large deficit in polyethylene supply, which is part of the reason behind Orlen's Olefiny III project at Plock now under construction.

Polish imports of polyethylene totalled 334,407 tons in January to March this year against 297,491 tons in January to March 2023, with average prices falling from €1492.8 per ton to €1267.1 per ton.

HDPE is the largest category of imported polyethylene into Poland, amounting to 104,139 tons in January to March versus 104,504 tons in January to March 2023. Germany was the largest supplier of HDPE to the Polish market this year.

LLDPE imports increased from 51,459 tons in January to March 2023 to 52,413 tons in the corresponding period in 2024. Most of the LLDPE imports were sourced mostly from West Europe, including France, the Netherlands and Germany.

Polish PE Exports (unit-kilo tons)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
LDPE	11.179	12.009
LLDPE	7.822	5.462
HDPE	47.620	49.758
EVA	0.950	3.082
EAO	4.972	1.675
Other	1.733	0.904
Total	74.276	72.890
€ per ton	1342.5	1195.4

Polish polyethylene exports amounted to 74,276 tons in the first three months in 2024 against 72,890 tons in the first three months in 2023. Average prices for polyethylene exports from Poland increased to €1342.5 per ton against an average of €1195.4 per ton in the period January to March last year. In the first three months this year exports of HDPE from Poland amounted to 47,620 tons versus 49,758 tons in January to March 2023. LDPE exports dropped from 12,009 tons to 11,179 tons.

Hungarian polyethylene trade Jan-Mar 2024

Hungarian polyethylene exports were slightly lower in the first two months in 2024, amounting to 52,111 tons against 59,047 tons in the same period in 2023. Revenues fell from €78.076 million to €61.898 million in 2024, translating into average prices dropping from €1322.3 per ton in 2022 to €1187.8 per ton.

Hungarian Polyethylene Exports (unit-kilo tons)		
Product	***Jan-Feb 24***	***Jan-Feb 23***
LLDPE	0.882	1.247
LDPE	11.801	17.226
HDPE	36.348	39.106
Other	3.079	1.409
Total	52.111	59.047
Av € per ton	1187.8	1322.3

HDPE shipments from Hungary amounted to 36,348 tons in January to March 2024 versus 39,106 tons in the same two months in 2023, whilst exports of LDPE dropped from 17,226 tons to 11,801 tons.

Hungarian Polyethylene Imports (unit-kilo tons)		
Product	***Jan-Feb 24***	***Jan-Feb 23***
LLDPE	4.417	4.145
LDPE	7.664	8.044
HDPE	13.335	12.876
EAO	1.976	0.960
EVA	1.013	0.598
Other	5.072	1.989
Total	33.478	28.613
Av € per ton	1551.617	1913.827

Hungary remains a net exporter of LDPE and HDPE and still a net importer of LLDPE and ethylene copolymers. In the first two months this year imports of all grades of polyethylene into Hungary amounted to 33,478 tons against 28,613 tons in the same period in 2023. Import costs for polyethylene fell to €51.945 million against €54.760 million in the same period last year.

Hungarian import prices for polyethylene decreased on average from €1913.8 in January to February 2023 to €1551.6 in the first two months in 2024 with gradual price declines since the start of last year.

Polish PP Trade Jan-Mar 2024

Polish PP Imports (unit-kilo tons)		
Category	***Jan-Mar 24***	***Jan-Mar 23***
PP homo	149.320	147.584
Polyisobutylene	0.683	0.648
Propylene copolymers	79.601	72.624
Other	4.744	4.410
Total	234.348	225.266
Av €/ton	1332.1	1542.5

Polish polypropylene imports, including homo grade and copolymers, rose in January to March 2024 to a total of 234,348 tons versus 225,266 tons in January to March 2023. Average prices per ton decreased from €1542.5 to €1332.1 per ton. Homo grade polypropylene imports specifically dropped from 149,320 tons in the first quarter in 2024 to 147,584 tons in the same period in 2023, whilst copolymer imports increased from 72,624 tons to 79,601 tons.

Polish PP Exports (unit-kilo tons)		
Category	***Jan-Mar 24***	***Jan-Mar 23***
PP homo	57.988	40.239
Polyisobutylene	0.337	0.174
Propylene copolymers	17.058	21.643
Other	3.964	0.872
Total	79.347	62.927
Av €/ton	1356.9	1513.2

Regarding export activity from Poland, shipments increased from 62,927 tons against 79,347 tons in January to March 2024. Homo polymer grades comprised the main category of Polish polypropylene exports, where Germany was the largest destination followed by the Czech Republic.

Polimery Police production start-up

Polypropylene produced as part of the newly built installations at the Polimery Police plant has been successfully tested through the various stages and is now available for direct sale and distribution. This was made known by Grupa Azoty Polyolefins from 15 May at the PDH and PP (polypropylene) units, as well as at AUX (auxiliary units) and HST (offshore gas terminal). The company's target portfolio includes over 30 types of propylene polymers under the Gryfilen brand. The introduction of new types of products is being carried out gradually and according to the planned schedule.

The Maritime Gas Terminal in Police regularly accepts deliveries of propane and ethylene. The Company received its ninth vessel with a propane cargo by early May. Grupa Azoty Polyolefins is a special purpose vehicle established to implement the Polimery Police project. Its main shareholders are Zakłady Chemiczne Police (34.4%) and Grupa Azoty (30.5%). Grupa Azoty Polyolefins has progressed with the start-up of the Polimery Police and had achieved the level by 15 May that all of the start-up and tests of guaranteed parameters.

Czech polypropylene exports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
PP Homo	60.276	64.441
Propylene Copolymers	12.298	13.281
Other	1.449	1.159
Total	74.024	78.881
Av € per ton	1438.0	1542.8

Czech polypropylene imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
PP Homo	73.021	72.114
Propylene Copolymers	53.123	52.625
Other	3.711	4.130
Total	129.855	128.869
Av € per ton	1538.4	1687.7

Czech polypropylene production and trade Jan-Mar 2024

Overall, for Central Europe polypropylene production amounted to 188,700 tons in the first quarter in 2024 against 200,500 tons in the same period in 2023. Hungary reduced production of polypropylene from the first three months in 2023 from 128,000 tons to 106,000 tons in January to March 2024.

Production of polypropylene at Litvinov amounted to 154,000 tons in the period January to March 2024 against 195,000 tons in the same period last year. Consumption of polypropylene in the Czech Republic has performed more steadily than polyethylene although quarterly volumes have been slightly down in 2023. Overall, for the first quarter in 2024 Czech polypropylene consumption fell to 329,800 tons against 338,000 tons in the same period in 2023.

Exports of all forms of polypropylene from the Czech Republic amounted to 74,024 tons in January to March versus 78,881 tons in January to March 2023, with average prices dropping from €1542.8 per ton to €1438.0 per ton. Homo-grade PP provides the main category of Czech polypropylene exports, amounting to 64,441 tons in January to March last year versus 60,276 tons in 2023.

For imports of all forms of polypropylene, Czech inward shipments increased from 128,869 tons in January to March 2023 to 129,855 tons in January to March 2024, with average prices dropping from €1687.7 per ton to €1538.4 per ton.

Rompetrol Rafinare Polymer Processed n (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Polypropylene	16	22
Polyethylene	0	4

Rompetrol Rafinare-polyolefin production and sales Jan-Mar 2024

Rompetrol Rafinare processed 23,000 tons of propylene in the first quarter this year for the production of polypropylene against 32,000 tons in the same period in 2023. The LDPE plant remained idle at the Constanta site due to unfavourable market conditions. The polypropylene (PP) plant operates with raw material produced and delivered internally by the Petromidia refinery, and the low-density polyethylene (LDPE) plant uses imported ethylene as a raw material. The petrochemical segment is the only producer of polypropylene and polyethylene in Romania.

Hungarian Polypropylene Exports (unit-kilo tons)		
Product	***Jan-Feb 24***	***Jan-Feb 23***
PP homo	22.408	22.690
Propylene copolymers	12.368	16.363
Others	6.439	2.280
Total	41.215	41.334
Av € per ton	1285.6	1385.1

Hungarian polypropylene trade Jan-Feb 2024

MOL shipped 41,215 tons of homo grade polypropylene (valued at €52.985 million) in January to February 2024 which was down from 41,334 tons in the same period in 2023 (€57.250 million in value), whilst copolymer exports dropped from 16,075 tons (€23.361 million in value) to 12,782 tons (€17.486 million). Average prices dropping from €1385.1 per ton to €1285.6 per ton.

Hungarian Polypropylene Imports (unit-kilo tons)		
Product	***Jan-Feb 24***	***Jan-Feb 23***
PP homo	23.547	19.172
Propylene copolymers	8.619	9.434
Others	3.871	3.737
Total	36.038	32.342
Av € per ton	1717.0	1779.5

Polypropylene imports into Hungary amounted to 36,038 tons in the first two months in 2024 versus 32,342 tons in the same period in 2023, with costs in January-February 2024 amounting to €316.205.520 million from €351.877 million in 2022. Overall average prices dropped from €1779.5 per ton to €1717.0 per ton this year, whilst copolymer prices dropped from €1845.9 to €1624.1 per ton. By category homo grade imports into Hungary comprised 23,547 tons in January to February 2024 against 19,172 tons whilst copolymers fell to 8,619 tons against 9,434 tons.

Central European Rubber Markets

Czech Rubber Trade (unit-kilo tons)		
	Jan-Mar 24	*Jan-Mar 23*
Exports synthetic rubber	34.020	42.251
Imports synthetic rubber	36.337	32.640
Imports natural rubber	20.480	21.679

Czech synthetic rubber trade Jan-Mar 2024

Czech exports of synthetic rubber amounted to 34,020 tons in January to March this year versus 42,251 tons in the same three months in 2023. Imports increased from 32,640 tons to 36,337 tons in January to March 2024. Natural rubber imports into the Czech Republic dropped slightly from 21,679 tons to 20,480 tons.

Czech Butadiene Rubber Exports		
	Jan-Mar 24	*Jan-Mar 23*
Total (unit-kilo tons)	28.898	28.031
Revenues € million	45.924	52.498
Av € per ton	1594.3	1889.8

Czech butadiene rubber trade Q1 2024

The Czech Republic exported a total of 28,898 tons of butadiene rubber in the first quarter this year against 28,031 tons in the same period in 2023.

Average prices for butadiene rubber fell from €1889.8 per ton to €1594.3 per ton. Czech exports of butadiene rubber to India amounted to 3,786 tons in January to March 2024 against 3,761 tons in the same period in 2023. Other important markets included Poland where exports amounted to 3,467 tons in the first quarter this year against 3,045 tons in the same period in 2023, and Slovakia where shipments amounted to 2,555 tons.

Hungarian synthetic rubber Imports (unit-kilo tons)		
Product	*Jan-Feb 24*	*Jan-Feb 23*
Butadiene Rubber	5.016	7.426
HBR	0.749	1.275
SBR	9.271	3.182
Other	2.670	2.272
Total	17.707	14.156
Revenues € mil	42.291	35.327
Av € per ton	2388.2	2496.1

Besides exports the Czech Republic also imported 7,353 tons of butadiene rubber in the first quarter in 2024 versus 6,425 tons in the same period in 2023. The two largest suppliers to the Czech market in the first quarter were Germany and the US, accounting for around 80% of total imports.

Hungarian synthetic rubber imports Jan-Feb 2024

Hungarian imports of synthetic rubber amounted to 17,707 tons in the first two months versus 14,146 tons in January to February 2023, whilst import costs rose from €35.327 million to €42.291 million. Average prices rose slightly from €2223.4 per ton to €2887.5 in 2023.

Polish Synthetic Rubber Imports (unit-kilo tons)		
Product	*Jan-Mar 24*	*Jan-Mar 23*
ESBR	6.516	7.325
Block SBR	6.965	4.914
S-SBR	7.835	7.065
Butadiene Rubber	24.120	15.408
Butyl Rubber	1.231	1.062
HBR	1.425	3.168
NBR	2.307	1.128
Isoprene Rubber	12.785	2.403
EPDM	11.022	10.984
Others	6.493	11.315
Total	80.700	64.773
Av € per ton	1,763.8	2,210.0

Butadiene rubber imports dropped from 7,426 tons to 5,016 tons, with costs dropping from €16.653 million to €7.695 million. Imports of halogenated butyl rubber dropped from 1,275 tons to 749 tons and SBR imports rose from 3,182 tons to 9,271 tons.

Polish rubber prices Jan-Mar 2024

Rubber import prices into Poland for both synthetic and natural have seen gradual declines from January to March this year as a combination of economic factors have taken effect. Overall, synthetic rubber import prices dropped from €2210.0 in the first three months in 2023 to €1763.8 in 2024.

Polish rubber trade Jan-Mar 2024

Poland imported 80,700 tons of synthetic rubber in January to March this year against 64,773 tons in January to March 2023. By category butadiene rubber was the largest, accounting for 24,120 tons in the first three months in 2024 against 15,408 tons in 2023.

Synthetic rubber exports from Poland amounted to 89,711 tons in the first three months against 71,114 tons in January to March 2023. India was the largest destination for Polish exports, accounting for 12,119 tons in the first quarter which consisted mostly of SBR grades.

Polish Exports of Synthetic Rubber (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
SBR	53.421	47.662
Butadiene Rubber	19.012	12.632
HBR	0.499	1.149
Others	16.779	9.671
Total	89.711	71.114

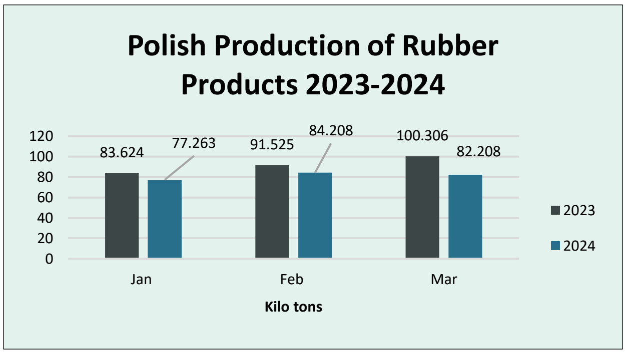
Exports of butadiene rubber from Poland amounted to 19,012 tons in January to March versus 12,632 tons last year. Major destinations for Polish butadiene exports were led by Belgium which took 2,833 tons for €4,016 million.

Polish synthetic rubber production and domestic market Jan-Mar 2024

Synthetic rubber production at Oswiecim for Synthos amounted to 68,300 tons in January to March 2043 from 59,300 tons in the same period in 2023. Production increased this year although the market remains under pressure.

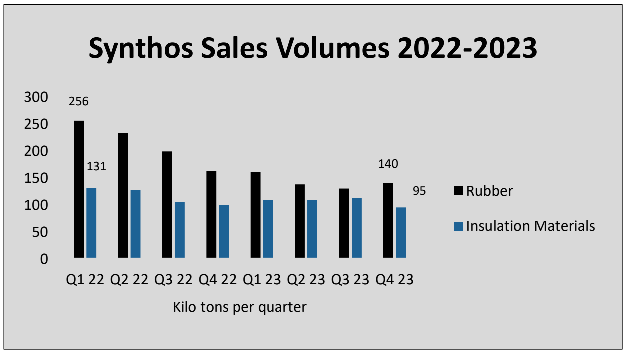
Synthos Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Polystyrene	20.1	17.4
EPS	20.6	23.5
Synthetic Rubber	68.3	59.3

In each of the first three months in 2024 production of rubber products, based on both synthetic and natural rubber. was lower than in the same month last year. Overall production in the first quarter this year dropped to 243,679 tons against 275,455 tons.



The largest segment of rubber products, tyre production, dropped in the first quarter and amounted to 115,522 tons against 137,975 tons in the same period last year. All areas of tyre production showed lower volumes in the first quarter.

At the end of this year, Michelin Polska intends to liquidate its truck tyre production plant Olsztyn, but it will not lay off the people working at the plant. This business of the company will be transferred to Romania due to high costs in Poland. The closure of the plant is also linked to the changing market for truck tyres, which is flooded with cheap tires mainly from China. Other branches of tyre production Olsztyn will remain operational.



Lower consumption of rubber this year continues the trend from 2023. Sales of synthetic rubber by Synthos dropped by 61,000 tons in 2023 over 2022, although this was partly affected by the closure of the Kralupy EBSR plant. The line is now closed with all shutdown costs booked.

Polish Tyre Production (unit-kilo tons)		
Category	***Jan-Mar 24***	***Jan-Mar 23***
Car Tyres	63.004	74.582
Bus & truck Tyres	44.086	53.744
Tractor	1.771	2.581
Agricultural tyres	3.441	4.721
Total	115.522	137.975

Increased export activity has helped Synthos to increase its production of synthetic rubber this year mainly due to higher sales to Asia.

Central European aromatics and derivatives

Polish Aromatic Exports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Benzene	41.968	37.010
PTA	83.977	53.280

Polish benzene exports Jan-Mar 2024

Polish exports of benzene totalled 41,968 tons in January to March against 37,010 tons in the same period last year. Despite similar volumes, average prices dropped to €857.8 per ton from €1178.8 per ton last year. Germany was the largest recipient of Polish benzene exports, followed by the Czech Republic.

Polish Aromatic Imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Adipic Acid	3.586	3.788
Bisphenol A	1.422	0.000
Caprolactam	3.000	1.970
Ethylbenzene	27.373	31.095
Phenol	24.190	20.932
Phthalic Anhydride	9.476	4.618
PTA	2.396	1.739
Styrene	17.793	19.587
TDI	20.482	15.581
Toluene	3.115	5.949

Polish Phenol Supply/Demand Balance (unit-kilo tons)		
	Jan-Mar 24	***Jan-Mar 23***
Production	11.300	12.000
Exports	0.917	0.604
Imports	24.190	20.932
Market Balance	34.273	32.328

Czech Aromatic Exports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Benzene	4.346	0.000
Toluene	2.198	2.869
Ethylbenzene	27.369	32.986
Styrene	6.193	5.050
Czech Aromatic Imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Benzene	14.320	10.931
Toluene	1.524	1.802
Styrene	1.769	5.924
Bisphenol A	8.324	7.570

South Korean Exports of Bisphenol A Main European customers (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Czech Republic	6.560	3.584
Poland	3.472	6.822
Germany	8.375	12.096

Czech Imports of Bisphenol A (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	1.386	1.568
Germany	0.836	0.505
Spain	0.048	0.095
South Korea	5.184	2.879
Poland	0.408	0.600
Singapore	0.000	0.945
Others	0.462	0.308
Total	8.324	7.570
Av € per ton	1374.8	1537.6

Benzene exports from Poland were lower in the first quarter in 2023 due to the problems for Petrochemia Blachownia in receiving coal based raw materials from Ukraine. Petrochemia Blachownia is part of the Czech Agrofert group.

Polish-Czech aromatic imports Jan-Mar 2024

Phenol imports into Poland amounted to 24,190 tons in January to March 2024 which was up from 20,932 tons in the same period in 2023. Consumption of phenol in the Polish market increased in the first quarter this year to 34,273 tons from 32,328 tons in the same period in 2023.

Phthalic anhydride imports into Poland increased from 24,427 tons in January to March 2023 to 23,314 tons in the same period in 2023. In other product areas, styrene imports amounted to 17,793 tons in the period January to March 2024 versus 19,587 tons in the same period in 2023 whilst ethylbenzene imports declined from 31,095 tons to 27,373 tons. Nearly all of the ethylbenzene imports come from the Czech Republic.

All the ethylbenzene was shipped from Kralupy to Oswiecim, all within the structures of the Synthos Group. Czech styrene exports increased from Kralupy in the first quarter, rising to 6,193 tons from 5,050 tons in 2023 whilst imports dropped from 5,924 tons to 1,769 tons.

Czech benzene imports rose to 14,320 tons in the first quarter in 2024 against 10,931 tons in the same period in 2023, whilst toluene imports dropped to 2,198 tons from 2,869 tons. Imports of bisphenol A dropped from 29,069 tons to 26,864 tons.

There are two producers of benzene in the Czech Republic including Unipetrol at Litvinov and Deza at Valasske Mezirici. Deza is owned by Agrofert and intends to increase the production capacity of benzene to 160,000 tpa in addition to toluene to 25,000 tpa.

Bisphenol A imports into Central Europe

Bisphenol A imports into the Czech Republic totalled 8,324 tons in the first quarter in 2024 against 7,570 tons last year, with average prices dropping from €1537.6 per ton to €1374.8 per ton.

The largest user of bisphenol A in the Czech Republic is Spolchemie at Ust nad Labem, where epoxy resins are produced. The largest supplier to the Czech market is South Korea which increased shipments to 5,184 tons from 2,879 tons in the same period in 2023. For the whole of last year South Korea which supplied 13,824 tons to the Czech Republic which was up from 11,072 tons in 2022.

Poland also increased shipments from South Korea last year rising from 6,909 tons to 11,445 tons whilst the largest European recipient of Korean BPA was Germany, rising to 52,157 tons against 15,514 tons in 2023. Poland reduced imports from South Korea in the first quarter 6,822 tons last year to 3,472 tons.

Czech Epoxy Resins (unit-kilo tons)		
Country	*Jan-Mar 24*	*Jan-Mar 23*
Austria	0.889	0.712
Germany	4.134	6.108
Spain	1.092	0.899
France	1.189	1.130
Italy	1.402	1.336
Poland	0.373	0.546
Others	4.003	3.145
Total	13.082	13.874
Av Price per ton	2494.0	3541.8

Czech exports of epoxy resins amounted to 13,082 tons in the first quarter in 2024 against 13,874 tons in the same period in 2023. Whilst volumes were similar prices fell from €3,541.8 per ton to €2494.0 per ton. The price reduction over the past twelve months has been driven by the decline in raw material prices combined with downward pressure from market conditions. Germany remains the largest market for Czech epoxides, accounting for 4,134 tons in the first quarter in 2024 against 6,108 tons in the same period in 2023.

Hungarian aromatic imports Jan-Feb 2024

Hungarian benzene exports in the first two months in 2024 dropped to 4,411 tons against 21,084 tons in the same period last year due to lower production. Revenues from benzene exports dropped to €4.148 million against €16.525 million. Exports are distributed largely to Germany, Belgium and the Czech Republic.

Toluene imports into Hungary amounted to 9,414 tons in the first two months for €9.024 million in value. This compares against 3,005 tons in the same period last year at costs of €2.782 million. Imports increased this year in line with the increase in TDI production at BorsodChem. Germany was the largest supplier of toluene providing 4,290 tons to the Hungarian market in the first two months in 2024 followed by Slovakia with 3,074 tons. Other suppliers included Belgium and Romania.

Central European caprolactam market Jan-Mar 2024

Poland increased production of caprolactam slightly to 25,000 tons in the first quarter this year versus 24,000 tons in the same period in 2023. Over the course of 2023 the European caprolactam and PA6 markets were affected by reduced consumer demand. The key sectors consuming PA6 operated at significantly reduced rates throughout 2023 due to weak demand from end customers and macroeconomic headwinds. As caprolactam and PA6 exports declined significantly, imports of polymer and PA6 derivative products from regions offering competitive prices (mainly Asia) increased. It became a vicious circle for Grupa Azoty whereby, demand for local PA6 and CPL dropped even lower, especially in the first half of the year.

Since the second half of 2022 caprolactam production by Grupa Azoty at its two plants at Tarnow and Puławy has been affected higher energy costs, combined with constant weak demand for polyamide. The situation picked up in the automotive sector in the second half of 2024. However, despite the revival the market volumes remain below the pre-pandemic levels.

Czech Caprolactam Exports (unit-kilo tons)		
Country	*Jan-Mar 24*	*Jan-Mar 23*
Italy	3.468	2.796
Slovenia	1.814	0.525
Others	2.426	1.789
Total	7.708	5.109
Av price €	1546.3	1747.6

The Czech Republic exported 7,708 tons of caprolactam in the first three months this year down from 5,109 tons in the same period in 2023. Average prices dropped from €1747.6 per ton to €1546.3 per ton with upward pressure felt at the end of the first quarter. All of the exports were shipped to European countries. Italy was the largest destination for Spolana's exports, with shipments rising from 2,796 tons in the first three months last year to 3,468 tons.

Polish PTA Production and Trade		
	Jan-Mar 24	*Jan-Mar 23*
Production (kilo tons)	146.0	107.0
Total Sales (kilo tons)	138.0	98.0
Total Revenues (€ million)	174.2	80.3
Exports (Kilo tons)	84.0	53.3
Export Revenues (€ million)	64.7	47.0

Polish PTA exports Jan-Mar 2024

Revenues from PTA sales for Orlen, for export and domestic sales, amounted to €174.2 million in the first quarter against €80.3 million in the same period last year. By volume sales rose from 98,000 tons in January to March 2023 to 138,000 tons in 2024. Production at Wloclawek totalled 146,000 tons in the first quarter against 107,000 tons. Orlen's PTA exports amounted to 83,977 tons in the first quarter against 53,280 tons in the same period in 2023. Germany increased shipments from 45,836 tons to 71,792 tons. Average prices dropped from €891.8 per ton in the first quarter last year to €770.6 per ton in the first quarter in 2024.

Central European isocyanates & polyols

Hungarian TDI-MDI exports Jan-Nov 2023

Isocyanate exports from Hungary have increased this year, rebounding from the declines in 2023. Hungarian TDI exports rose in the first two months to 55,242 tons against 38,795 tons in January to February 2023. Average prices dropped from €2581.6 per ton to €1917.9 in 2023. Although TDI prices overall were higher in the first half last year, the price trend has been falling gradually which has been partially connected with lower feedstock costs.

Exports of TDI from Hungary to Belgium rose from 7,684 tons in the first two months in 2023 to 8,682 tons in January to February 2024, whilst volumes to Italy increased from 5,474 tons to 6,231 tons.

Elsewhere in West Europe Hungarian exports to Portugal dropped from 2,740 tons to 1,596 tons, whilst shipments to Germany increased from 1,321 tons to 2,311 tons. In Central Europe shipments to Poland fell from 28,620 tons to 25,627 tons and rose to Romania from 13,235 tons to 13,414 tons.

MDI exports from Hungary increased in the first two months last year to 40,199 tons from 49,259 tons in the same period in 2024. MDI export prices dropped from €2495.6 per ton in January to February 2023 to €1774.4 per ton this year.

Poland was the largest destination for Hungarian MDI exports, shipping 7,905 tons in the first two months in 2024 versus 9,496 tons in the same period in 2023. Romania is the second largest market in Central and South East Europe, taking 3,371 tons in the first two months this year which was down from 4,831 tons in 2023.

Hungarian TDI Exports (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Austria	0.693	0.561
Belgium	8.682	7.684
Germany	2.311	1.321
Italy	6.231	5.474
Poland	5.631	5.012
Portugal	1.596	2.740
Romania	2.284	2.089
Spain	1.876	2.039
Turkey	10.905	5.093
Others	15.033	6.782
Total	55.242	38.795
Av € per ton	1917.9	2581.6

Hungarian MDI Exports (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Belgium	4.034	0.169
Czech Republic	1.706	1.673
Germany	4.021	5.234
Algeria	1.274	0.238
Italy	2.338	2.831
France	3.129	2.936
UK	2.181	1.390
Netherlands	1.178	1.214
Poland	7.905	9.496
Romania	3.371	4.831
Turkey	8.087	1.867
Others	9.961	8.320
Total	49.186	40.199
Av price	1774.4	2495.6

Central European isocyanate trade Jan-Mar 2024

MDI imports into the Czech Republic totalled 9,355 tons in January to March 2024 against 9,082 tons in the same period in 2023. The leading supplier was Belgium which shipped 2,140 tons in the first quarter versus 2,394 tons in the same period in 2023.

MDI imports into Poland totalled 39,369 tons in January to March 2024 against 34,921 tons in January to March last year. Average prices dropped from €2358.1 per ton to €1859.4 in January to March 2024. Germany increased shipments to 12,260 tons against 9,760 tons in January to March 2023, whilst imports from Hungary amounted to 10,903 tons against 9,973 tons.

TDI imports into Poland amounted to 20,366 tons in January to March against 17,015 tons in the same period in January to March 2023. Prices this year averaged €2068.1 per ton in the first three months against €2050.1 per ton in 2023.

The cost of toluene was one of the factors behind the rise in TDI prices in the first half of the year but then slowed down in the third quarter allowing TDI prices to move downwards. Besides imports, Poland exported 2,276 tons of TDI in the first quarter in 2024, against 1,552 tons in the same period in 2023.

Polish MDI Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Germany	12.260	9.760
Netherlands	4.140	4.292
Hungary	10.903	9.973
Belgium	8.008	5.202
South Korea	2.167	1.295
Others	1.891	4.401
Total	39.369	34.921
Av € per ton	1859.4	2358.1

Polish TDI Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	3.834	0.471
Germany	4.433	3.664
Hungary	8.008	8.338
Netherlands	3.834	1.146
South Korea	0.972	1.098
Others	1.525	1.610
Total	20.366	17.015
Av € per ton	2068.1	2050.1

Chimcomplex green polyol project finished
Chimcomplex has completed its project for investing in innovative technology for environmentally friendly polyol production. The project has been built at the Ramnicu Valcea division. The overall objective of the project is to make the Chimcomplex production processes eco-friendly and align the company's activities with circular economy principles.

The green polyols produced using the new technology, replace the petrochemical components of conventional polyols with less polluting alternatives or natural oils such as castor oil, soybean oil, and palm oil. Further down the production chain, these "green polyols" are used to create soft foams for pillows, mattresses, and other automotive components.

The new production line will allow Chimcomplex to increase its existing capacity by an additional 17,000 tpa of special polyols. After client testing, these new polyols will enter serial production, significantly reducing their environmental impact due to the nature of the technologies and raw materials used in manufacturing.

MOL's polyol complex officially opens in May

MOL 's Polyol Complex at Tiszaujvaros was officially opened in May 2024, after a two-year delay caused partly by the market effects from firstly COVID and secondly the war in Ukraine. Thyssenkrupp has been the main contractor in the construction of the polyol Complex, which represents the largest organic investment of the MOL Group. The new plant will help MOL Petrochemicals to expand its product range and influence in Central and East Europe. When fully operational the polyol plant is expected to have a significant impact on the regional polyol market.

POLYMOL is the registered trademark for polyether polyol produced by MOL Petrochemicals in Tiszaujvaros. POLYMOL products can be applied to various market segments including flexible slabstock foams, flexible moulded foams, rigid foam applications, coatings, adhesive, sealant, and elastomer applications.

The €1.2 billion investment was started by MOL at the end of 2018 and was supported by the Hungarian government with €31 million in investment subsidies and €72 million in tax incentives. The new complex will have a capacity of 205,000 tpa of polyols in addition to 60,000 tpa of propylene glycol. Besides flexible and rigid foams, polyols are used in the production of unsaturated polyester resin (UPR), functional fluids, and personal care products.

Czech Polyol Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	3.318	6.130
Germany	1.994	4.614
France	2.501	3.727
Netherlands	1.092	2.037
Romania	0.804	0.542
Slovakia	1.097	1.915
Others	1.291	2.035
Total	12.097	21.607
Av € per ton	2285.8	2680.8

Polish Polyol Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	3.748	4.332
China	1.485	2.096
France	0.802	1.626
Germany	8.052	8.427
Netherlands	9.217	6.646
Romania	5.032	3.352
Saudi Arabia	0.610	1.422
South Korea	1.356	3.185
Others	3.551	2.600
Total	33.855	33.687
Price	1896.4	2230.6

MOL has been waiting for European markets to revive before starting production. MOL's original goal was to complete the polyol plant worth $1.3 billion with a production capacity of 200,000 tpa by the second half of 2021, but due to Covid the plans had to be modified.

Czech polyol imports Jan-Mar 2024

Czech polyol imports dropped in the first quarter to 12,097 tons against 21,607 tons in the same period in 2023, with average prices dropping from €2680.8 per ton last year to €2285.8 in 2024. The leading supplier to the Czech market was Belgium which shipped 3,318 tons in the period January to March 2024 against 6,130 tons in the same period in 2023. This was followed by Germany which exported 1,994 tons which was down from 4,614 tons.

Polish polyol trade Jan-Mar 2024

Polish polyol imports amounted to 33,855 tons in the first three months in 2024 against 33,687 tons in the same period in 2023. The major sources of imports came from Belgium, Germany and the Netherlands. Polyol import prices dropped from €2230.6 per ton to €1896.4 per ton. The largest source of imports in the first quarter came from the Netherlands in the first three months, amounting to 9,217 tons against 6,646 tons in the same period in 2023.

Exports of polyols from Poland in the first three months amounted to 14,521 tons against 14,992 tons in the same period in 2023. Destinations for deliveries were focused mostly on Europe in 2023, led by Italy taking 2,280 tons. Due to lower prices this year export revenues dropped from €34.956 million to €30.256 million.

Polish Polyol Exports 2024 (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Austria	0.341	0.479
Belgium	0.896	0.688
Czech Republic	0.966	1.116
Denmark	0.871	0.846
Estonia	0.452	0.270
Germany	1.916	1.255
Hungary	0.453	1.672
Italy	2.280	1.864
Lithuania	0.744	0.690
Spain	0.668	0.707
Turkey	1.133	1.038
Others	3.800	4.366
Total	14.521	14.992
Av price	2082.3	2331.6

PCC Rokita Jan-Mar 2024

PCC Rokita recorded zl 16.350 million (€3.8 million) of consolidated net profit in the first quarter compared to zl 140.54 million profit (€32.9 million) in the first quarter in 2023. The group's operating profit amounted to zl 26.9 million (€6.3 million) compared to zl 182.370 (€42.7 million), whilst the EBITDA dropped to zl 77.94 million (€18.3 million) compared to zl 231.03 million (€54.1 million).

Consolidated sales revenues for PCC Rokita amounted to zl 491.92 million (€115.2 million) in Q1 2024 compared to zl 779.97 million (€182.6 million) in 2023.

Since the beginning of 2024, PCC Rokita has focused on projects that are associated with reducing the energy intensity of production. This is to be helped by the installation of another two modern electrolysers on the chlor-alkali production unit.

PCC Rokita Product Sales (unit-kilo tons)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Polyurethanes	22.4	22.9
Chloralkalis	69.3	95.2
Chemical	6.0	5.9
PCC Rokita's sales (€ million)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Polyurethanes	46.7	61.1
Chloralkalis	36.2	79.7
Chemical	9.1	11.7
PCC Rokita's Prices (€ per ton)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Polyurethanes	2484.1	2668.9
Chloralkalis	622.0	837.4
Chemical	1796.4	1977.6

The company has also completed the start-up of a new unit for the production of sodium hypochlorite, which is expected to significantly increase the production and sales. The construction of a new universal alkoxylate plant at Brzeg Dolny, in conjunction with PCC Exol, continues to make progress.

The situation in all product areas was challenging for PCC Rokita in the first quarter this year. Lower results were recorded predominantly by the chlorine derivatives segment, which contributed to the decline in the results of the entire group compared to the first quarter in 2023. The segment's EBITDA decreased significantly by 84% compared to the same period of 2023. It should be noted that the first quarter in 2023 was an exceptionally successful period for chloralkalis

PCC Rokita's overall margins fell from 33.3% in the first quarter in 2023 to 20.7% in the first period in 2024. By product area the largest fall was recorded in the chlorine sector where the margin dropped from 33.4% to 12.62%.

PCC Rokita Margins		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Polyurethanes	9.0%	6.1%
Chloralkalis	12.62%	33.4%
Chemical	10.2%	16.2%

Polyurethane margins increased slightly from 6.1% in the first quarter last year to 9.0% this year, with the market showing some minor rebound. Profitability in the European polyol sector last year attained the lowest levels in many years, despite some the improvement in the third quarter.

Margins for PCC Rokita's polyurethanes dropped from 13.4% in January to December 2022 to only 4.2% in for the whole in 2023, although the chlorine sector's margins only dropped from 26.1% against 33.4%. The current level of margins in the polyurethane sector is broadly considered as insufficient for long-term investment. PCC Rokita believes that it probably has not lost any share in the polyurethane market segment and volume should recover in time. Overall, the focus strategy of PCC Rokita on polyols for higher quality foams provides the basis for future performance.

PCC Prodex-polyurethane systems

In addition to polyols the PCC Rokita Group manufactures polyurethane systems and prepolymers as part of the segment. This includes its subsidiaries PCC Prodex and IRPC Polyol Co. Ltd. In the first quarter of 2024, PCC Prodex maintained sales volumes similar to the corresponding period of 2023, but these volumes are lower than in the timeframe period 2021-2022. PCC Prodex recorded declines in sales volume in 2023 compared to 2022. In the group of spray insulation for construction, where PCC Prodex is one of the leading suppliers for the domestic market.

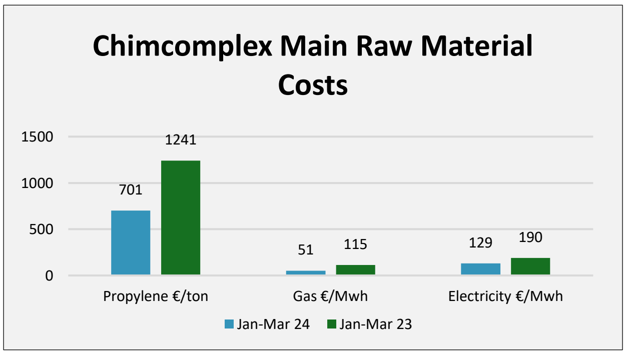
PCC Prodex increased its geographical sales range in 2023, which partially compensates for the decline in volumes in existing markets. Lower revenues were driven partly by lower operating costs which involved reduced prices for the company's main raw material ethylene oxide. Market demand also contributed to lower prices, although some improvement was seen in the third quarter.

Chimcomplex Jan-Mar 2024

Chimcomplex's turnover totalled €84.136 million in the first quarter this year, down slightly from €85.904 million in the same period in 2023. Chimcomplex recorded an operating profit of €4.209 million in the first quarter versus only €0.567 million in the same period last year whilst the net profit increased to €1.495 million against a loss of €1.659 million. Overall, the financial performance was slightly better with costs dropping below revenues, i.e., in January-March 2024 costs were €79.205 million against revenues of €84.136 million.

Chimcomplex Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Chlorine	87.981	77.7
Propylene oxide	21.185	20.172
Polyol	25.925	20.172
Plasticizers	10.582	0.909
Inorganic chlorides	1.08	3.253
Total	146.124	119.190

Chimcomplex focused its activity in the first quarter on polyols/polyethers and oxo-alcohols sectors, which are the most profitable product areas. Although the physical sales volume increased by 12%, the turnover remained relatively constant, with a slight decrease of about 3%. This was due to the decrease in prices and market quotations for chlorakali products.



The decline in revenues in the chlorine sector meant that the share in total revenues dropped from 40% in the first quarter in 2023 to 19% this year. At the same time revenues from polyol sales increased from 44% to 57%.

In the medium and long term Chimcomplex intends to focus on increasing the production of polyols, as evidenced by the completion of the green polyol unit which will add another 17,000 tpa of capacity. Medium term plans include projects to obtain methanol, ethylene oxide, and monoethylene glycol. Some plans include modernising the existing idle PVC plant at Ramnicu Valcea, but the economics of this revamp may not be viable. Regarding energy investments the construction of the cogeneration plant at Ramnicu Valcea now forms a major plank of its strategy with aims to reduce CO2 emissions.

Chimcomplex is today the largest producer of green hydrogen in Eastern Europe, with an annual production of over 6,000 tons. It is the only company in Europe's 10 SE countries with real potential to use hydrogen as a raw material for green chemicals. Currently, projects of over €55 million are in the final execution phase and projects worth over €125 million are being prepared and started.

PCC Exol Margins		
Category	***Jan-Mar 24***	***Jan-Mar 23***
Total sales	17.2%	20.3%
EDITDA	7.6%	11.6%

PCC Exol Jan-Mar 24

PCC Exol recorded zl 8.98 million (€2.1 million) of consolidated net profit in the first quarter compared to zl 20.27 million profit (€4.8 million) in the first quarter last year. The sales volume, despite being higher by 3,000 tons in the first quarter, did not translate into an increase in margins. PCC Exol's operating profit amounted to zl 14.15 million (€3.3 million) compared to zl 28.67 million profit (€6.7 million) a year earlier. The EBITDA dropped to zl 18.35 million (€4.3 million) compared to zl 32.86 million (€7.7 million) a year earlier.

PCC Exol's sales (unit-kilo tons)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Surfactants (detergents and cosmetics)	19.2	17.5
Surfactants for use in industry	10.2	9
PCC Exol's sales (€ million)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Surfactants (detergents and cosmetics)	21.042	27.09
Surfactants for use in industry	20.853	22.113
PCC Exol's Prices (€ per ton)		
Product Group	***Jan-Mar 24***	***Jan-Mar 23***
Surfactants for use in detergents and cosmetics	1095.9	1548.0
Surfactants for use in industry	2044.4	2457.0

Consolidated sales revenues amounted to zl 241.8 million (€56.6 million) in the first quarter versus zl 281.6 million (€65.9 million) in the same period in 2023. The market has been and still remains saturated with chemical products, including surfactants. European producers have put into operation significant additional capacity, and Asian producers are active with cheaper products.

The first quarter of this year saw stable demand from customers of industrial cleaning products and skimmers. At the same time, it is worth noting that there is a very aggressive pricing policy of the competition.

The company's offer in the field of industrial applications has been expanded to include products dedicated to the paints and varnishes industry as well as agrochemicals. In the group of products for use in cosmetics and detergents, PCC Exol had to deal with very high price pressure, the cause of which is mainly due to the oversupply of mass surfactants in Europe and consumer expectations regarding further price declines.

Central European organic chemical trade

Hungarian maleic anhydride exports Jan-Feb 2024

Hungary exported 5,753 tons of maleic anhydride in the first two months this year against 3,149 tons in the same period in 2023, with average prices dropping from €1317.7 per ton to €1141.6 per ton. Exports to Poland from Hungary increased from 523 tons in January to February 2023 to 2,663 tons in the same period in 2024.

Hungarian maleic anhydride exports (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Austria	0.195	0.609
Germany	0.597	0.330
Italy	0.722	0.706
Poland	2.663	0.523
Slovenia	0.302	0.328
Others	1.274	0.653
Total	5.753	3.149
Av € per ton	1141.6	1317.7

Hungarian acrylonitrile imports Jan-Feb 2024

Hungary imported only 1,260 tons of acrylonitrile in the first two months in 2024 against 5,293 tons in the same period in 2023. The Netherlands was the main source of imports in both years, shipping 1,260 tons in January to February 2024 versus 2,426 tons in the same period last year. Acrylonitrile import prices dropped on average from €2120.0 per ton in last year to €1850.3 per ton this year.

Hungarian imports of acrylonitrile (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Germany	0.000	1.500
Netherlands	1.260	2.426
Others	0.000	2.854
Total	1.260	5.293
Av € per ton	1850.328	2120.0

Hungarian aniline imports Jan-Feb 2024

Aniline imports into Hungary dropped from 27,541 tons in the first two months in 2023 to 23,322 tons in the same period in 2023. Inward shipments from BorsodChem-MCHZ in the Czech Republic amounted to 20,074 tons against 11,576 tons last year. Belgium supplied 3,248 tons in the first two months this year against 8,713 tons in the same period in 2023. Cost prices of aniline imports dropped from €1450.1 per ton to €1353.1 per ton.

Hungarian aniline imports (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Belgium	3.248	8.713
China	0.000	7.251
Czech Republic	20.074	11.576
Total	23.322	27.541
Av € per ton	1353.1	1450.1

Polish Organic Chemical Trade		
Exports	***Jan-Mar 24***	***Jan-Mar 23***
Vol (kilo tons)	380.6	540.9
Value (€ million)	214.6	417.1
Imports	***Jan-Mar 24***	***Jan-Mar 23***
Vol (kilo tons)	932.7	1,427.9
Value (€ million)	654.6	892.3

Polish organic chemical trade Jan-Mar 2024

Exports of organic chemicals from Poland fell from 540,900 million tons in January to March last year to 380,600 tons in the same period in 2024, whilst for the same period imports dropped from 1.428 million tons to 932,700 tons.

Methanol imports into Poland totalled 447,391 tons in January to March this year against 694,697 tons in the same period in 2022. For other organic chemical imports Poland imported 8,306 tons of acetic acid in January to March against 9,285 tons in January to March 2023. The US was the leading supplier, shipping 12,236 tons followed by the UK with 5,930 tons.

Polish Organic Chemical Imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Acetic Acid	8.305	9.985
Butadiene	24.262	18.951
DINP/DOP	4.272	1.645
Ethyl Acetate	4.022	3.489
Isopropanol	8.023	8.148
Lysine	13.606	10.671
Maleic Anhydride	2.712	3.934
Methanol	149.775	135.324
Propylene	28.614	24.799
VAM	3.607	3.745

Ethyl acetate imports into Poland amounted to 4,022 tons in January to March this year against 3,489 tons in January to March 2023. Belgium provided the largest share of imports. VAM imports amounted to 3,607 tons in the first quarter versus 3,745 tons last year.

Polish ethylene-propylene oxides and glycols

PCC Rokita's capacity for propylene oxide was expanded to 57,000 tpa in 2021 which has helped reduce the dependency on imports which previously had played an important part in the company's polyol production. The reduction in imports has almost coincided with the gradual rise in propylene oxide prices over the past few years, increasing on average from €1332.0 per ton in 2020 to €2190.1 in 2023. By volume propylene oxide imports dropped from 17,545 tons in 2017 to 257 tons in 2023.

Polish EO/PO Imports (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
DEG	7.169	6.507
Ethylene Glycol	13.551	28.014
Ethylene Oxide	5.467	5.783
Propylene Glycol	3.637	4.671

The contract price for propylene oxide in Europe started 2024 in the range of €2,000 to €2,100 per ton, maintaining consistency with the pricing observed in December. This shift in pricing may be attributed to various market influences, including supply and demand dynamics, raw material costs, and broader economic factors impacting the industry.

Ethylene oxide imports into Poland totalled 5,467 tons in January to March versus 5,783 tons in January to March 2023. Poland stopped importing ethylene oxide from Russia in May 2022 and Germany currently represents the main source of inward shipments. Ethylene oxide is used in Poland mostly by PCC Rokita and PCC Exol. Ethylene glycol imports increased in the first three months to 13,551 tons versus 28,014 tons in the same period last year. Belgium supplied the largest volume of glycols to the Polish market.

Poland Methanol Exports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Austria	0.265	16.067
Czech	11.052	16.788
Germany	28.140	22.461
Romania	0.000	7.344
Slovakia	5.992	11.468
Ukraine	6.216	7.364
Hungary	0.000	4.889
Others	0.181	0.102
Total	51.847	86.483
Av € per ton	378.8	390.0

Regarding export activity in organic chemicals, exports of methanol from Poland amounted to 51,847 tons in January to March against 86,483 tons in January to March 2023. Germany imported 28,140 tons in the first quarter against 22,461 tons in the same period in 2023, whilst Ukraine reduced imports slightly to 6,216 tons against 7,364 tons.

Polish shipments of monochloroacetic acid (MCAA) declined sharply in the first three months to 7,280 tons against only 10,220 tons in the same period in 2023. The destinations for Polish MCAA exports are spread throughout Europe including Germany, Italy, France and Spain. Other organic chemical exports from

Poland include acetone where shipments amounted to 3,774 tons in the first three months this year versus 3,993 tons in January to March 2023. Normal butyl acetate exports dropped from 3,394 tons to 2,182 tons in January to March 2024. The largest destination for Polish butyl acetate exports is Germany.

Central European methanol markets

Central European methanol trade Jan-Mar 2024

Methanol imports into Poland totalled 149,775 tons in January to March this year against 173,327 tons in the same period in 2023. Average prices amounted to €320.4 per ton against €306.8per ton last year.

Polish Methanol Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belgium	33.573	8.363
Finland	1.828	0.000
Germany	22.797	11.979
Netherlands	30.567	13.320
Norway	25.600	14.752
Russia	0.000	107.130
Venezuela	35.245	12.706
Others	0.166	0.097
Total	149.775	173.327
€ price per ton	320.435	306.805

Poland has been developing alternative sources to Russian methanol before the full embargo took full effect in June 2023. Apart from Venezuela and Belgium, other new sources arrived this year from the US and Trinidad.

Norway supplied 25,600 tons of methanol to Poland in the first quarter in 2024 versus 14,752 tons in the same period in 2023, whilst imports from Venezuela increased from 12,706 tons to 35,245 tons.

Czech Methanol Imports (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Germany	1.860	2.039
Norway	0.032	0.793
Estonia	2.197	0.000
Russia	0.000	2.923
Poland	12.848	13.311
Others	1.323	0.973
Total	18.260	20.039
Av € per ton	386.9	382.2

Czech imports of methanol amounted to 18,260 tons in the first quarter in 2024 versus 20,039 tons in the same period in 2023. Imports from Poland dropped from 13,311 tons to 12,348 tons. Prices per ton for methanol imports into the Czech Republic rose from €382.2 in 2023 to €386.6 in January to March 2024.

Hungarian methanol imports (unit-kilo tons)		
Country	***Jan-Feb 24***	***Jan-Feb 23***
Austria	0.042	0.255
Germany	11.608	4.393
Netherlands	0.062	3.232
Poland	1.046	1.231
Slovenia	2.374	0.000
Slovakia	0.000	2.621
Others	0.278	1.130
Total	15.411	12.861
Av € per ton	426.4	437.4

Methanol imports into Hungary in the first two months in 2024 increased to 15,411 tons against 12,861 tons in the same period in 2023. The largest supplier to the Hungarian market was Germany which provided 11,608 tons versus 4,393 tons in the same period last year. Slovenia was the second largest supplier providing 2,374 tons.

Grupa Azoty

Grupa Azoty Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Nitrogen Fertilisers	743.0	707.0
Compound Fertilisers	156.0	158.0
Speciality Fertilisers	0.0	19.0
Pigments	5.0	5.7
Urea	235.0	203.0
Oxo alcohols	40.0	21.0
Caprolactam	25.0	24.0
Polyamide	16.200	43.700

Grupa Azoty production Jan-Mar 2024

Grupa Azoty's estimated financial results for the first quarter still show difficulties in returning to profitability. Only the fertiliser section recorded a minimal profit in the first quarter. The new management board of Grupa Azoty has a difficult task ahead to create a recovery plan for the company and convince financial institutions to continue different forms of communication.

Overall Grupa Azoty generated consolidated revenue of zl 3.399 m and an EBITDA of minus zl 50 million, with an EBITDA margin of minus 1.5%. Demand for the products offered by the Grupa Azoty Group remained too low for the Group's operating profitability to recover, especially in the face of a further decline in their prices. The Azoty Management Board's goal is not only to survive from month to month, but also to get the company back on track, which means that more decisive measures will have to be introduced.

Grupa Azoty's production in the first quarter was slightly higher in a number of product areas against the same quarter last year, although the group remains under pressure from market demand and costs. Nitrogen fertiliser production increased from 707,000 tons in the first three months in 2023 to 743,000 tons in the same quarter this year whilst oxo alcohol production at Kedzierzyn-Kozle rose from 21,000 tons to 40,000 tons.

Grupa Azoty expects that 2024 will be a difficult year in terms of results, and the fertiliser season will largely determine its financial situation. The group is looking for additional capital, also for development activities, and is also reviewing its strategy.

Grupa Azoty's Financial Performance (€ million)						
2023	**Fertilisers**	**Plastics**	**Chemicals**	**Energy**	**Other**	**Total**
Sales Revenues	1859.3	256.0	570.6	246.8	111.1	3043.8
EBIDTA	-158.9	-118.1	-103.2	25.6	47.5	-307.1
2022	**Fertilisers**	**Plastics**	**Chemicals**	**Energy**	**Other**	**Total**
Sales Revenues	3394.1	468.0	1441.2	173.0	64.7	5541.1
EBIDTA	305.7	-10.3	173.6	55.5	4.8	529.4

2023 was particularly challenging for the group with total EBITDA of minus €307.1 million against an EBITDA in 2022 of plus €529.4 million. Even the 2022 results were difficult but then the results in 2023 have forced the group to undertake significant changes.

In 2023, the prices of all oxo alcohols in Europe fell on average by 27%. Prices of n-Butanol and 2-EH remained below the five-year average in the second half of the year. The downward trend persisted for three quarters, with prices increasing by 8% quarter on quarter in the final quarter of the year. The price decline was driven by the falling contract prices of the main raw material, i.e., propylene (down 21% year on year), and the structurally weak demand in downstream processing industries.

Margin targets have been set for 2024-2025 at 16%, which the group needs to be able to operate efficiently without the need for extra capital support. However, the fourth quarter last year yielded a margin of -0.3% and thus achieving a double-digit margin in 2024 may not be realistic. Overall, for 2023 the EBITDA margin totalled -13.0% which was down from +14.1% in 2022. Some benefits may be seen from stabilising gas prices in addition to most key raw materials such as propylene and benzene. Melamine production was revived at the Melamine III plant at Puławy the first quarter. The capacity of the unit occupies approximately one third of the production capacity of all melamine units at Azoty in Puławy, which totals 270,000 tpa.

Grupa Azoty's Financial Performance (€ million)		
	Jan-Dec 23	***Jan-Dec 22***
Total sales revenue	2058.482	3963.193
Operating EBIT	-426.116	519.512
EBITDA	-107.143	606.874
EBITDA margin	-13.0%	+14.1%

Polish Chemical Production (unit-kilo tons)		
Product	***Jan-Mar 24***	***Jan-Mar 23***
Caustic Soda Liquid	83.3	97.1
Caustic Soda Solid	11.9	20.0
Caprolactam	25.1	27.3
Acetic Acid	0.6	0.5
Polyethylene	80.4	77.3
Polypropylene	82.7	72.5
Synthetic Rubber	68.3	59.3
Ammonia (Gaseous)	494.0	472.0
Pesticides	13.6	15.3
Nitric Acid	566.0	499.0
Nitrogen Fertilisers	430.0	421.0
Phosphate Fertilisers	57.7	56.6
Potassium Fertilisers	68.3	56.3

Grupa Azoty is depending on the start-up of Polimery Police to inject a boost to incomes. This is an investment that has severely strained the group's financial capabilities. The Plastics Segment's operations posted an EBITDA margin of minus 79.8% in the fourth quarter last year, mainly due to the impact of high start-up costs incurred by its subsidiary, Grupa Azoty Polyolefins.

Azoty could give equity stakes in Polimery Police

Grupa Azoty is examining the interest of financial and industry entities in acquiring equity stakes in the Polimery Police project. The level of shares in the Polimery Police project, which would be taken over by the new partner or partners, is still to be discussed.

RUSSIA

Russian Chemical Production (unit-kilo tons)		
Product	***Jan-Mar 23***	***Jan-Mar 23***
Ethylene	1246.4	1128.9
Propylene	723.4	701.9
Benzene	365.6	336.8
Toluene	86.3	88.7
Xylenes	119.5	127.3
Orthoxylene	38.3	38.3
Paraxylene	56.4	56.1
Styrene	183.8	183.5
Ethylbenzene	207.8	206.8
Methanol	985.6	972.2
Isopropanol	23.4	13.4
Butanols	33.1	32.5
Phenol	67.6	54.3
Acetic Acid	65.6	44.4
Phthalic Anhydride	23.5	20.4

Russian chemical production Jan-Mar 2024

Chemical production in Russia increased for many products over the course of the first quarter and to date has been unaffected by any feedstock shortages that might occur from the ongoing drone attacks on refineries. Naphtha production in Russia dropped by 30% in the first quarter this year against the same period in 2023, falling from 2.931 million tons to 1.974 million tons. Refineries in the north west and south of Russia reported the biggest fall in naphtha output.

The main petrochemical monomers, ethylene, propylene and benzene all recorded increases in the first quarter this year. Ethylene production increased from 1.129 million tons in the first three months last year to 1.246 million tons this year whilst propylene increased from 701,900 tons to 723,400 tons. Methanol production increased marginally from 972,200 tons to 985,600 tons, with domestic merchant sales helping to offset the decline in exports.

Although the chemical industry in Russia has largely been isolated from the war itself, the sanctions have had a significant impact both in terms of access to plant technology and higher value commodity raw materials. To an extent the industry adjusted to a new regime of market sales and has replaced some external sourcing with internal sourcing. The abrupt decoupling of Western involvement in the Russian chemical industry seems likely to restrict growth for the Russian chemical industry in the medium to long-term.

In the absence of Western competitors' domestic chemical producers and suppliers have been able to exploit obvious opportunities and this this helps to account for the rise in production across numerous mainstream products. Profit margins in 2023 and so far in 2024 for most chemical producers have been generally lower than pre-2022 levels, and this may limit scope for maintenance expenditure and future investment. In the first quarter domestic demand for chemicals and polymers was relatively stable although some regions such as Tatarstan observed a slowdown or a pause in growth. Russian export trade with China continues to play a key role in the market calculations of producers, whilst China has also filled import gaps for raw materials that were previously purchased in the West. Overall methanol represents the largest outward product from Russia to China and PTA the largest inward product.

Russian Polymer Production (unit-kilo tons)		
Product	***Jan-Mar 23***	***Jan-Mar 23***
Plastics	2763.2	2661.9
PE	912.1	868.3
PS	128.0	139.4
PVC	199.5	210.6
PP	584.5	554.6
Polyamide	33.7	32.3
PET	116.5	104.0
Synthetic Rubber	376.8	373.2

Russian polymer production Jan-Mar 2024

Russian bulk plastics production amounted to 2.763 million tons in the first quarter against 2.662 million tons in the same quarter last year. Russian production of polyethylene rose from 868,300 tons in January to March 2023 to 912,100 tons in the same period this year.

Polypropylene production increased from 554,600 tons in the first quarter in 2023 to 584,500 tons in the same period in 2024. Polystyrene production dropped from 139,400 tons to 554,600 tons whilst PVC production declined from 210,600 tons to 199,500 tons. Demand for PVC recovered in 2023 after a difficult year in 2022, whilst production problems caused by missing raw materials have been largely overcome. Consumption levels are still lower than in 2021. Russian production of synthetic rubbers amounted to 376,800 tons in the first three months in 2024 compared to 373,200 in the first quarter in 2023. Production has been helped by some improvement in tyre manufacturing in the first quarter, whilst also rubber exports to China have increased.

Russian petrochemical projects

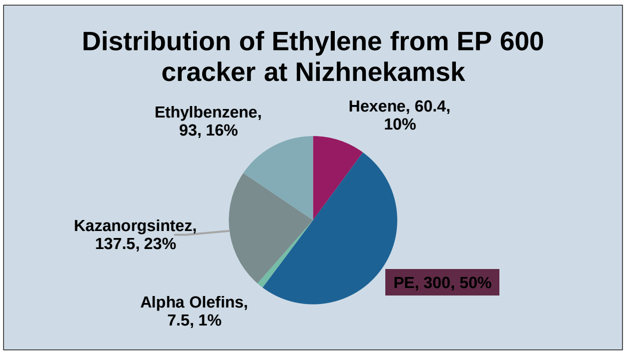
Nizhnekamskneftekhim EP-600 cracker commissioning

Nizhnekamskneftekhim is aiming to start the commissioning its new EP-600 cracker in 2024, with start-up of production expected in early 2025. The launch of benzene and butadiene production units is scheduled for later in 2025. The project still requires the commissioning of compressors, the pyrolysis furnaces and a steam turbine.

Nizhnekamskneftekhim EP 600 Capacities (unit-kilo tons)	
Naphtha	1.77 million tpa
Ethylene	600
Propylene	270
Benzene	247.8
Butadiene	89.3

The project configuration for the EP-600 cracker has altered since Nizhnekamskneftekhim was taken over by SIBUR from TAIF. Previously Nizhnekamskneftekhim wanted to make polypropylene from propylene at the PP-400 unit, but this part of the project was scrapped by SIBUR. One objective of the new cracker will be to supply more ethylene to Kazanorgsintez which requires further feedstock beyond its own production.

The consumption of raw materials required to operate the EP-600 plant is estimated at 1.770 million tpa. The production capacities include 600,000 tpa of ethylene, 480,000 tpa of propylene, about 180-200,000 tpa of benzene and other by-products. Nizhnekamksneftekhim is unable to estimate when full capacity utilisation will be achieved, but this is unlikely prior to 2026. The reason for this slow approach is due to the need to find alternative derivatives and decisions which are yet to be finalised. Other derivatives being considered include the styrene chain, namely ethylbenzene–styrene–polystyrene, or as an alternative more polyethylene.



Nizhnekamskneftekhim is supervising the installation and commissioning of the ethylene complex without the participation of the licensor Linde AG, which supplied the main range of technological equipment and then, due to sanctions, refused to continue the project. The work is being carried out by SIBUR by specialists who commissioned ZapSibNeftekhim.

Amur Gas Chemical Complex-Chinese banks

Following the withdrawal of Western banks from Russia, financing has not been easy for the Amur Gas Chemical Complex. The refusal of Chinese banks to lend money to Russia for the Amur Gas Chemical Project has forced the majority shareholder SIBUR to secure long-term project financing from Russian state funds. Chinese banks do not want to finance the project due to fears over secondary sanctions. The Russian mechanism for financing the project falls under the so-called the Project Finance Factory, which was launched in 2018, which provides loans for investment projects in priority sectors of the economy.

Amur Gas Chemical Complex-project timing

The completion of the Amur Gas Chemical Complex has already been delayed significantly by sanctions and equipment deliveries, whilst there are also other factors to take into consideration that could affect the start-up date. It is likely that the Amur Gas Chemical Complex (AGCC) may face a very acute shortage of personnel, which have been influenced by mass call-ups for the armed forces.

The readiness of the Amur Gas Chemical Complex had achieved 47% by mid-May, according to SIBUR. About 15,000 people work at the site currently which is expected to rise to 20,000 people in the second half of 2024 and will reach a peak of 25,000 people in 2025. The project, which includes the production of 2.3 million tpa of polyethylene and 0.4 million tpa of polypropylene, faced the refusal of European partners to supply equipment. The management claims that it has managed to enter new markets, to find new supply chains, and to agree on a schedule for completion of the construction process by 2026 and launch of the plant by 2027.

Russian Monomers

Russian ethylene production Jan-Mar 2024

Russian ethylene production totalled 1.246 million tons in the first quarter in 2024 against 1.178 million tons in the same period in 2023. The largest producer ZapSibNeftekhim at Tobolsk produced 408,968 tons in January to March 2024, up from 393,036 tons from January to March 2023.

Russian Ethylene Production (unit-kilo tons)		
Region	***Jan-Mar 24***	***Jan-Mar 23***
North Caucasus Federal District	91.594	82.115
Volga Federal District	611.049	575.919
Ural federal district	408.968	393.036
Siberian Federal District	134.807	127.025
Total	1246.419	1178.095

ZapSibNeftekhim is only one of three ethylene plants in Russia that is not connected to other producers or consumers through pipeline. The other two other stand-alone plants include Stavrolen and SIBUR-Khimprom. The main ethylene pipeline is located in the Volga-Urals region. The southern branch provides ethylene supply from Nizhnekamskneftekhim to Ufaorgsintez, Bashkir Soda Company, and Gazprom neftekhim Salavat. The northern branch supplies Kazanorgsintez where its own ethylene production is lower than required for polymer capacity. Kazanorgsintez uses ethane technology for the production of ethylene, receiving ethane through a pipeline system from the Orenburg region.

Other shorter pipelines are located in the Irkutsk and Nizhniy Novgorod regions. The Siberian ethylene pipeline Angarsk-Sayansk allows to pump around 130,000 tpa from the Angarsk Polymer Plant to Sayanskkhimplast for the production of PVC. Although a new ethylene-polyethylene project is being constructed at Ust Kut in the north of the Irkutsk Oblast the distances to Angarsk and Sayansk are too far away to consider a pipeline construction.

Russian Propylene Production (unit-kilo tons)		
Region	***Jan-Mar 24***	***Jan-Mar 23***
North Caucasus Federal District	38.699	32.976
Volga Federal District	273.311	283.796
Ural federal district	276.597	277.886
Siberian Federal District	133.776	122.351
Total	722.384	717.008

In the Nizhniy Novgorod region SIBUR supplies ethylene from its petrochemical complex at Kstovo to Dzerzhinsk for the production of ethylene oxide and glycols.

Russian propylene production Jan-Mar 2024

Russian propylene production totalled 722,384 tons in the first quarter in 2024 against 717,008 tons in the same period in 2023. ZapSibNeftekhim at Tobolsk produced 276,597 tons from 277,886 tons in the first quarter in 2023. The Volga-Urals region accounted for 273,311 tons against 283,796 tons in 2023.

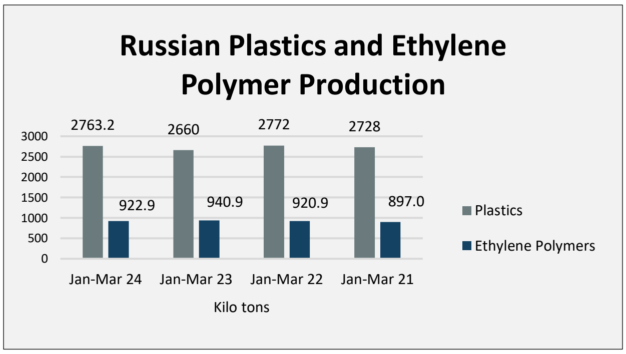
Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Mar 24	Jan-Mar 23
Angarsk Polymer Plant	16.505	6.319
SIBUR-Kstovo	49.571	33.371
Lukoil-NNOS	36.834	56.012
Total	102.910	106.214

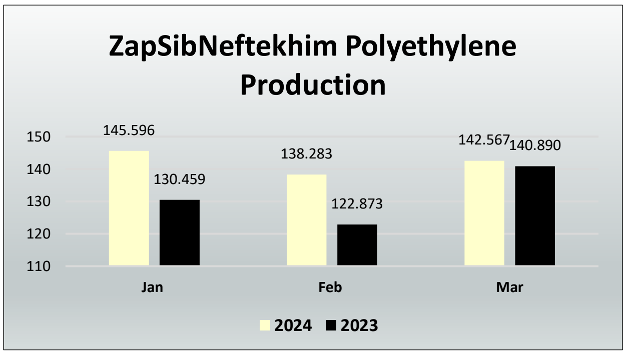
Russian Major Propylene Domestic Buyers (unit-kilo tons)		
Consumer	***Jan-Mar 24***	***Jan-Mar 23***
Saratovorgsintez	37.074	45.651
Volzhskiy Orgsintez	3.144	3.039
Akrilat	7.816	11.499
SIBUR-Khimprom	13.544	8.295
Omsk-Kaucuk	8.748	3.603
Tomskneftekhim	1.182	1.142
ZapSibNeftekhim	19.543	30.996
Moscow Refinery	1.084	0.613
Nizhnekamskneftekhim	2.152	0.000
Ufaorgsintez	4.839	3.459
Kazanorgsintez	1.795	0.000
Khimprom Kemerovo	1.587	2.050
Total	102.910	106.214

Russian propylene domestic sales Jan-Mar 2024

Russian sales of propylene on the domestic merchant market amounted to 102,910 tons in the first quarter this year against 106,214 tons in January to March 2023. The largest propylene supplier to the domestic market was SIBUR-Kstovo, shipping 49,571 tons against 33,371 tons. Lukoil-NNOS reduced propylene sales from 56,012 tons in the first quarter to 36,434 tons, partly due to the side-effects of the drone attacks on the refinery. ZapSibNeftekhim purchased 19,543 tons of propylene in the first quarter in 2024 against 30,996 tons in the same period in 2023, whilst Saratovorgsintez reduced purchases from 45,651 tons to 37,074 tons.

Russian bulk polymers





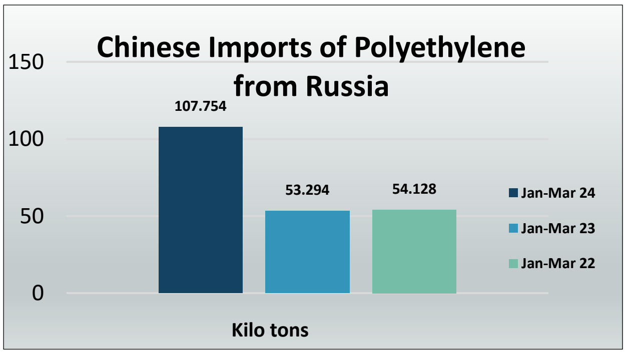
Russian plastics production Jan-Mar 2024

Russian bulk plastics production amounted to 2.763 million tons in January to March 2024 against 2.660 million tons in the same period in 2023 and 2.772 million tons in the first quarter in 2022.

Polyethylene remains the leading growth polymer, followed by polypropylene. Polyamide production was affected by lower tyre consumption in 2022 and most of 2023 but is now showing some degree pf recovery.

PVC production was particularly affected by lower construction in the domestic market but saw a recovery in the latter part of 2023.

Production of ethylene polymers amounted to 922,872 tons in the first quarter this year which was slightly lower than in the first quarter last year when production totalled 940,925 tons. The decline was attributable to lower output at plants in the Volga region, particularly Kazanorgsintez where maintenance was carried out in the first quarter. Russia's largest plant at Tobolsk (run by ZapSibNeftekhim) produced more polyethylene in each of the first three months in 2023.



Total market sales of polyethylene in 2023 amounted to 3.382 million tons, of which 1.106 million tons were exported. The share of export supplies of Russian-made polyethylene has declined over the past three years from 58.1% in 2021, 51.8% in 2022, and to only 32.6% in 2023.

Russian polyethylene trade Jan-Mar 2024

Russian polyethylene exports to China increased from 53,294 tons in January to March 2023 to 107,754 tons in the same period this year, with values rising from $42.244 million to $105.809 million. Export grades from Russia to China comprise HDPE, LLDPE and LDPE.

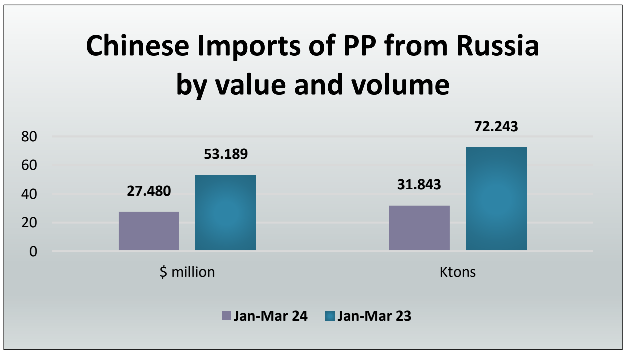
Russian Propylene Polymers Production by Region		
Region	***Jan-Mar 24***	***Jan-Mar 23***
Central Federal District	38.487	40.595
Northwestern Federal District	0.185	0.692
Southern Federal District	2.209	0.975
North Caucasus Federal District	35.544	28.971
Volga Federal District	111.613	102.666
Ural federal district	303.432	293.800
Siberian Federal District	92.995	90.767
Total	584.464	558.466

Inward shipments of polyethylene from China into Russia increased to 20,685 tons in the first quarter against 16,526 tons in the same period in 2023 and only 7,930 tons in 2021. The most expensive grades of polyethylene included ethylene-vinyl acetate and ethylene-hexene copolymers. Average PE prices fell in the first three months to $1177.1 to $1675.9 in the same period in 2022 and $1542.4 in 2021.

Russian polypropylene production Jan-Mar 2024

Russian polypropylene production totalled 584,464 tons in the first quarter in 2024 versus

558,466 tons in the same period in 2023. Production in Russia is mostly focused on homo grade product and thus most copolymers are imported which is currently from China.



Russian-Chinese polypropylene trade Jan-Mar 2024
Exports of polypropylene from Russia to China amounted to 31,843 tons in the first quarter in 2024 against 72,243 tons in the same period in 2023. Export revenues dropped from $53.189 million to $27.480 million. Most of the Russian exports to China consisted of homo grade polypropylene.

Chinese suppliers reduced shipments of various grades of propylene polymers. Chinese exports to the Russian market dropped to 8,253 tons in the first quarter in 2024 against 12,462 tons in the first quarter last year with values dropping from $25.473 million to $14.453 million.

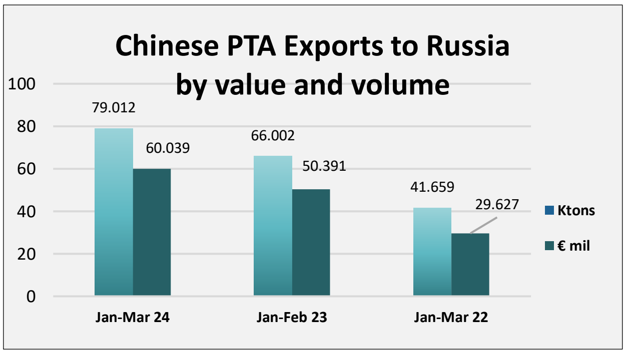
Chinese Exports of PVC to Russia (unit-kilo tons)		
	Jan-Mar 24	*Jan-Mar 23*
PVC Total	36.795	28.694
PVC S	20.860	17.550
PVC E	15.935	11.145

Russian PVC market 2024
PVC production in Russia amounted to 199,500 tons in the first quarter in 2024 against 210,600 tons in the same period in 2023. Despite the minor decline in production the market has stabilised in the past few months. Production is supplemented by imports from China which increased in the first quarter this year to 36,795 tons against 28,694 tons in the same period in 2023.

PVC suspension imports into Russia increased from 17,550 tons to 20,860 tons whilst emulsion grade imports increased from 11,145 tons 15,935 tons. Chinese imports has become almost the sole source of imported PVC into Russia since the exit of German and other European suppliers in 2022 which mostly provided emulsion PVC. The dynamics of the demand for PVC are closely correlated with the patterns of work in the construction sector. In 2023 PVC consumption increased by 9% over 2022 to 914,000 tons of which around 800,000 tons was consumed in the manufacture of windows.

Paraxylene-PTA-PET

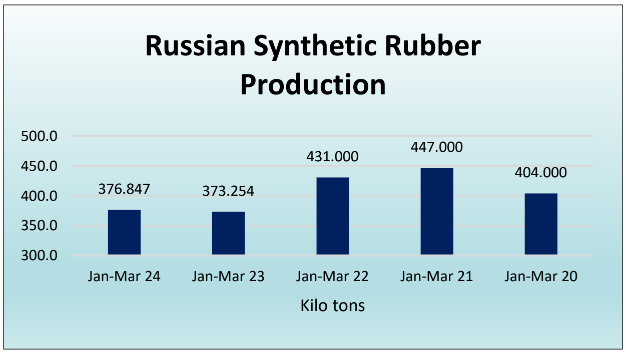
Russian PTA imports Jan-Mar 2024
Russian PTA imports from China amounted to 60,039 tons in the first quarter in 2024 against 50,156 tons in the same period in 2023. Last year values of imports amounted to $193.5 million in against $213.6 million in 2022 and $182.7 million in 2021. Nearly all of the PTA imports from China were shipped to Ekopet at Kaliningrad by rail. PTA import prices averaged $779.8 2023, down from $848.2 in 2022 and up from $628.3 in 2021.



Polief produced 91,698 tons of PTA in the first quarter this year which corresponds to around 96% of capacity. Paraxylene is sourced mostly from Ufaneftekhim whilst Nizhnekamskneftekhim is the main supplier of MEG to Polief. The capacity of the plant at Blagoveshchensk is currently estimated at 374,000 tpa of PTA and 264,000 tpa of PET. Polief produces a small surplus of PTA which is sent normally to SIBUR-PETF at Tver.

The Eurasian Economic Union (EAEU) has extended the zero rate of import customs duty in relation to PTA until March 2026. Existing capacities for the production of PTA in the EAEU today are not enough to meet demand. Zero import duty on PTA was first introduced in 2015.

Synthetic rubber



Russian synthetic rubber production Jan-Mar 2024

Synthetic rubber production in Russia amounted to 376,847 tons in the first quarter this year against 373,254 tons in the same period in 2023 and 431,000 tons in 2022. The market has shown some degree of recovery in the first quarter, with tyre manufacturing increasing in rubber consumption to 84,300 tons against 65,800 tons last year.

Russian Synthetic Rubber Production by Region (unit-kilo tons)		
Region	***Jan-Mar 24***	***Jan-Mar 23***
Central	80.633	71.677
Privolzhsky	269.573	255.272
Siberia	26.132	31.288
Others	0.509	18.541
Total	376.847	358.239

More than a third of rubber consumption in the Russian tyre sector is based on natural rubber which Russia imports from countries such as Thailand and Indonesia. Supplies of natural rubber from Indonesia to Russia were expected to be higher after a deal was concluded several years ago for an exchange of rubber for SU-35 fighter planes. However, this deal has yet to be concluded as Indonesia is trying to avoid US sanctions which could be imposed.

For synthetic rubber production the Volga region accounted for the largest share, amounting to 269,573 tons in the first quarter this year against 255,272 tons in the same period last year. The Volga region includes Nizhnekamskneftekhim, Togliattikaucuk and Sterlitamak Petrochemical Company. The central Russian region, largely based on production at Voronezhsintezkaucuk, accounted for 80,633 tons in the first three months in 2024 against 71,677 tons in 2023. Siberian production of synthetic rubber, based at the Omsk Kaucuk plant, reduced volumes in the first quarter last year from 31,288 tons to 26,132 tons.

Russian Tyre Production (unit-kilo tons)			
Product	***Jan-Mar 24***	***Jan-Mar 23***	***Jan-Mar 22***
Car Tyres	70.0	51.6	92.1
Lorry tyres	12.4	12.5	10.1
Agricultural tyres	1.9	1.7	3.5
Total	84.3	65.8	105.6

Broken down by product, SBR was the largest category of Russian synthetic rubber production in the first quarter amounting to 77,225 tons. Butadiene rubber production was the second largest category of Russian synthetic rubber production with 67,364 tons followed by isoprene rubber with 64,939 tons. Nizhnekamskneftekhim is the largest producer of synthetic rubber in Russia, followed by Toglaittikaucuk. Both producers produce butyl rubber which amounted to 45,776 tons in the first quarter whilst as halogenated butyl rubber production (only at Nizhenkamskneftekhim) amounted to 30,204 tons.

Regarding C4 supplies, Togliattikaucuk increased purchases from 38,300 tons in the first quarter in 2023 to 106,200 tons in the same period in 2024 whilst Nizhnekamskneftekhim reduced purchases from 34,900 tons to 22,700 tons.

Russian Butadiene Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
ZapSibNeftekhim	77.924	50.307
Nizhnekamskneftekhim	48.268	38.555
Togliattikaucuk	13.210	12.510
Sterlitamak Petrochemical Plant	6.938	6.495
Omsk Kaucuk	7.834	11.505
Total	154.174	119.372

Russian butadiene production increased from 119,372 tons in the first quarter in 2023 to 154,174 tons in the same period in 2023. The largest producers ZapSibNeftekhim and Nizhnekamskneftekhim both showed lower production, rising respectively from 50,307 tons to 77,924 tons and from 38,555 tons to 48,268 tons.

ZapSibNeftekhim produces butadiene only for merchant market sales whilst Nizhnekamskneftekhim processes most of its butadiene into rubber SKD-N and SKD-L are butadiene rubbers based on neodymium and lithium catalysts.

Russian Chinese rubber trade Jan-Mar 2024

Russian exports of synthetic rubber to China totalled $218.860 million in the period January to March 2024 against $149.508 million in the same period in 2023. Exports of halogenated butyl rubber jumped from $18.912 million to $56.466 million, whilst butadiene rubber export values jumped from 14,201 tons to 39,523 tons.

Chinese Synthetic Rubber Imports from Russia ($ million)		
Product	**Jan-Mar 24**	**Jan-Mar 23**
SBRs	16.980	25.961
Butadiene Rubber	39.523	14.201
Butyl Rubber	44.805	47.213
HBR	56.466	18.912
NBR	11.064	13.583
Isoprene Rubber	25.852	14.415
Others	22.171	15.223
Total	216.860	149.508

By volume Russian shipments of synthetic rubber to China amounted to 138,270 tons in the first quarter, which was up from 102,104 tons in January to March 2023.

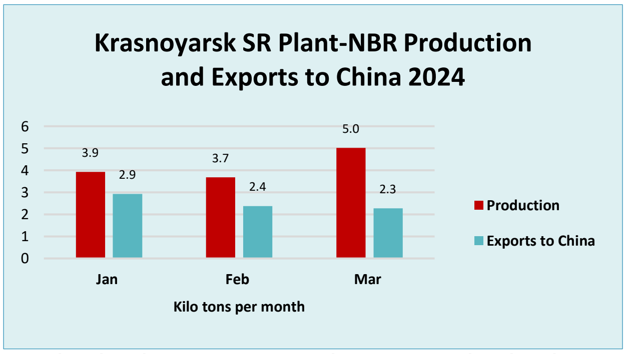
Butadiene rubber exports represented the largest category, rising from 11,528 tons last year to 28,438 tons. Exports of halogenated butyl rubber showed the largest percentage increase, rising from 8,854 tons to 27,025 tons this year which has been partially facilitated by the increase in production at Nizhenkamskneftekhim. Butyl rubber exports from Russia to China dropped slightly in the first quarter to 27,979 tons from 28,325 tons in Q1 2023.

Chinese Synthetic Rubber Imports from Russia (unit-kilo tons)		
Product	**Jan-Mar 24**	**Jan-Mar 23**
SBRs	12.864	24.066
Butadiene Rubber	28.438	11.528
Butyl Rubber	27.979	28.325
HBR	27.025	8.854
NBR	8.608	9.630
Isoprene Rubber	18.243	9.662
Others	15.113	10.038
Total	138.270	102.104
	1568.4	1464.3

Nizhnekamskneftekhim-expansion of halogenated butyl rubber

Nizhnekamskneftekhim has now completed the modernisation of the halogenated butyl rubber (HBR) production capacity with an increase in productivity from 150,000 tpa to 200,00 tpa. The aim is to load the production of HBR to full capacity by the end of 2025. The payback period will depend on the prices of rubbers in the world market. For this project, the main challenge was that the rubber separation line came from Europe. Although the equipment itself was already on site, the company had to carry out installation supervision, commissioning, etc.

The original idea of expanding the HBR plant was to sell into the European market. With sanctions taking full effect this June, the company is now unable to send any product to Europe. For the past eighteen months the company has been focusing on Asian markets, where the conditions for sales are fundamentally different. Factors include very high competition, long and expensive logistics, and completely different customer requests. Nizhnekamskneftekhim occupies 25% of the world market for butyl rubber and halogenated butyl rubber.



Krasnoyarsk Synthetic Rubber Plant

The Krasnoyarsk Synthetic Rubber Plant (KZSK, part of SIBUR) is the only producer of nitrile butadiene rubbers (NPR) and nitrile butadiene latex in Russia. Until 2022, the plant supplied 40% of its products to Europe and 10% to America. The remaining half was dispersed to Russia, China and the CIS.

Despite the imposition of economic sanctions, the company has managed to maintain production in full. A large share of production is exported to the Chinese market, roughly around 60% in the first quarter. The owner of Krasnoyarsk Synthetic Rubber Plant is SIBUR which is trying to open new markets in India and is also cooperating with Turkey. NPR is used in the automotive industry, mechanical engineering, aircraft construction, in the production of machine tools and equipment, household goods; Latex is used in the production of examination and medical gloves.

Methanol

Russian Methanol Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Shchekinoazot	283.774	321.284
Gazprom Methanol	183.630	193.770
Metafrax Chemicals	258.255	280.100
Akron	25.583	20.940
Azot Novomoskovsk	21.118	9.320
Angarsk Petrochemical	9.717	8.963
Azot Nevinnomyssk	28.383	21.763
Tomet	132.391	83.179
Ammoni	25.452	15.449
Novatek	16.931	16.929
Totals	985.234	971.697

Russian methanol production Jan-Mar 2024

Russia produced 985,234 tons of methanol in the first three months in 2024 against 971,697 tons in the same period in 2023. The three largest producers reported lower production volumes and the increased volumes were driven by smaller producers. Azot at Novomoskovsk produced 21,118 tons against 9,320 tons last year whilst Azot at Nevinnomyssk increased production from 21,763 tons to 28,383. Ammoni in Tatarstan increased production from 15,449 tons to 25,452 tons. The most significant increase came from Tomet which produced 132,391 tons in the first quarter this year versus 83,179 tons in January to March 2023.

Gazprom Methanol reduced production from 193,770 tons in the period January to March 2023 to 183,630 tons whilst Metafrax Chemicals reported a fall from 280,100 tons to 258,255 tons. Russia's largest producer Shchekinoazot reduced production from 321,284 tons to 283,774 tons.

Russian Methanol Market (unit-kilo tons)		
	Jan-Mar 24	***Jan-Mar 23***
Production	985.169	971.696
Exports	322.400	447.168
Domestic	411.166	373.797
Captive/Inventory	251.603	150.732

The Russian market was helped in the first quarter by an increase in domestic merchant sales and internal processing. Both these categories helped offset the decline in exports.

Russian Methanol Exports by Producer (unit-kilo tons)		
Producer	***Jan-Mar 2024***	***Jan-Mar 2024***
Azot Nevinnomyssk	3.034	0.000
Azot Novomoskovsk	22.669	17.284
Akron	0.000	0.000
Metafrax Chemicals	55.524	123.781
Gazprom Methanol	77.357	97.878
Tomet	34.677	21.182
Shchekinoazot	129.140	187.043
Total	322.401	447.169

Russian methanol exports Jan-Mar 2024

Russian methanol exports amounted to 322,401 tons in the first quarter to 322,401 tons versus 447,169 tons in the same period in 2023. Increases in exports came from Azot at Nevinnomyssk, Azot at Novomoskovsk and Tomet. However, the three largest producers all recorded declines in export activity. Metafrax Chemicals reduced exports from 123,781 tons to 55,524 tons, Shchekinoazot reduced exports from 187,043 tons to 129,140 tons and Gazprom Methanol reduced exports from 97,878 tons to 77,357 tons.

Russian Methanol Exports by Destination (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Belarus	24.171	64.175
China	222.504	156.470
Finland	0.000	74.800
Germany	0.000	2.535
Kazakhstan	16.832	7.242
Latvia	0.000	1.230
Lithuania	0.000	2.134
Netherlands	0.000	20.814
Poland	0.000	67.225
Romania	0.000	26.488
UAE	7.151	0.000
Turkey	51.623	50.962
Total	322.281	447.587

Exports to China amounted to 222,504 tons in the first three months in 2024 against 156,470 tons in the same period in 2023. By percentage shares China accounted for 69% of Russian methanol exports in the first quarter thus year versus 35% last year. Prior to 2022 Russian export trade to China was non-existent due to such a range of factors as distances, terminal facilities, and profit margins.

Average prices for Russian methanol exports to China in the first three months this year dropped to $280.2 per ton against $305.9 per ton in January to March 2023. Freight costs mean that even the most furtherly eastern producer Gazprom Methanol at Tomsk is confronted with tight margins, even if there is some subsidisation from the government for export deliveries. Gazprom Methanol is faced with rail costs in the range of $140 per ton which is obviously higher for the other Russian plants.

Russian Methanol Exports to China by Producer		
Exporter	***Jan-Mar 24***	***Jan-Mar 23***
Metafrax Chemicals	41.679	46.071
Gazprom Methanol	77.294	97.795
Tomet	27.999	0.000
Shchekinoazot	75.612	12.603
Total	222.584	156.469

All of Gazprom Methanol's exports are sent to China whilst other producers sent methanol to Belarus, Kazakhstan and Turkey. Metafrax Chemicals also sends product to the UAE.

Russian methanol exports to Belarus decreased to 24,171 tons in January to March 2024 against 64,175 tons in January to March 2023. Exports to Kazakhstan increased to 16,832 tons from 7,742 tons in the first quarter in 2023. The two Azot plants at Nevinnomyssk and Novomoskovsk, which belong to the Evrokhim, did not export to China in 2023 and will concentrate on shipments to Turkey through the ports of Kavkaz and Temyruk.

Most of the exports to China are conducted through the port of Nakhodka-Vostochny, accounting for 96% of shipments in 2023. The other route used by Russian producers is Zabaikalsk which is located on the border with China. Tomet appears to favour exports using this rail connection.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Azot Nevinnomyssk	2.519	0.806
Azot Novomoskovsk	6.203	0.000
Metafrax Chemicals	131.649	101.026
Gazprom Methanol	95.911	86.201
Tomet	73.956	77.726
Shchekinoazot	92.221	100.225
Ammoni (Mendeleevsk)	6.616	7.913
Total	409.075	373.897

Russian methanol domestic sales, Jan-Mar 2024

Domestic merchant sales increased from 373,897 tons in the first quarter last year to 409,075 tons in the same period this year. These sales helped producers offset lower exports enabling producers to operate at reasonable levels of utilisation.

Russian Formaldehyde Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Feb 23***
Pigment	9.769	8.865
Shchekinoazot	8.322	7.388
Akron	38.613	31.153
Metafrax	100.180	71.096
Sverdlov Plant	0.011	2.125
Khimsintez	14.716	9.324
Uralkhimplast	13.056	10.717
Nizhnekamskneftekhim	42.331	41.367
Metadynea	11.940	9.396
Total	238.938	191.431

Metafrax Chemicals increased domestic merchant sales to 131,649 tons in 2023 against 101,026 tons in the same period in 2023, which went largely into formaldehyde. Metafrax increased formaldehyde production in the first quarter this year to 100,180 tons against 71,096 tons in January to March 2023. Gazprom Methanol increased domestic shipments from 86,201 tons in January to March 2023 to 95,911 tons in the first quarter in 2024.

Shchekinoazot reduced domestic methanol sales from 100,092 tons in the first quarter in 2023 to 92,683 tons in January to March 2024. Tomet reduced domestic merchant sales in the first quarter in 2023 from 77,526 tons to 73,956 tons in the same period this year.

Gazprom Methanol expansion postponed

Gazprom Methanol has taken the decision to postpone plans to modernize production at the Tomsk plant including an increase in capacity. Due to sanctions on Russian methanol the concept of the project to increase capacity to 3,100 tons per day (about 1.13 million tpa) by 2025 has been broadly undermined. The project idea initially was considered in 2021 and despite the isolation from Europe has gone through several stages of feasibility study, but in May this year Gazprom decided to postpone it. As a group Gazprom reported record losses in 2023, although this is not a factor in postponing the methanol expansion.

Last year part of the equipment and structural elements of the cooling tower was replaced, in addition to the process pipelines of the water circulation cycle. Gazprom Methanol is part of the Vostokgazprom group, which, through the production company Gazprom Dobycha Tomsk, owns the right to develop seven hydrocarbon blocks: Myldzhinsky, Severo-Vasyugansky, Kazansky, Ostaninsky, Chkalovsky, Rybnoye and Somovsky.

Organic chemicals

Russian N-Butanol Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Angarsk Petrochemical company	7.174	9.532
Azot Nevinnomyssk	3.616	4.232
Gazprom neftekhim Salavat	13.891	15.485
SIBUR-Khimprom, Perm	8.446	7.063
Total	33.127	36.312

Russian Isobutanol Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Angarsk Petrochemical Company	5.148	8.265
Gazprom neftekhim Salavat	7.463	4.937
SIBUR-Khimprom, Perm	27.206	21.598
Total	39.817	34.800

Russian butanol production Jan-Mar 2024

Russian normal butanol production dropped from 36,312 tons in January to March 2023 to 33,127 tons in January to March 2024. Gazprom neftekhim Salavat was the largest Russian producer, although reducing production to 13,891 tons from 15,484 tons. The Salavat refinery was struck by a drone in May which has damaged some of the facilities, and now Gazprom Neftekhim is being forced to invest in protection against future attacks.

Isobutanol production in Russia increased from 103,866 tons to 122,325 tons in January to March 2024. Gazprom neftekhim Salavat increased production from 4,937 tons to 7,463 tons, whilst SIBUR-Khimprom increased production from 21,598 tons to 27,206 tons.

Russian Acetone Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Ufaorgsintez	9.463	8.065
Kazanorgsintez	12.210	14.206
Novokuibyshevsk Petrochemical	8.580	8.741
Omsk Kaucuk	10.842	6.100
Total	41.095	37.112

Russian solvent production Jan-Mar 2024

Russian acetone production increased from 37,112 tons in the first quarter in 2023 to 41,095 tons in the same period in 2024. Omsk Kaucuk produced 10,842 tons of acetone against 6,100 tons in the previous year whilst Kazanorgsintez produced 12,210 tons against 14,206 tons.

Russian Acetic Acid Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Azot Nevinnomyssk	49.379	34.949
Others	13.887	9.432
Total	63.266	44.381

Russian acetic acid production amounted to 63,266 tons in January to March 2024 against 44,381 tons in 2022. The largest producer in Russia, Azot at Nevinnomyssk, increased production from 34,949 tons to 49,379 tons. Azot also produces methanol which makes the plant fully integrated through to solvents. Aside using acetic acid for the production of butyl acetate and methyl acetate Azot supplies merchant acetic to the Russian domestic market. The two largest customers include Polief which purchases acetic acid for PTA and Stavrolen which uses acetic acid in the production of vinyl acetate monomer (VAM).

Whilst acetic acid trade for Russia, both imports and exports, is relatively small Russia exports VAM in large quantities of around 2,000 tons per month. Most product is shipped from Stavrolen with Turkey representing the largest destination. Some shipments are sent to Finland which may be forced to stop in the next few months.

Russian Isopropanol Production (unit-kilo tons)		
Producer	***Jan-Mar 24***	***Jan-Mar 23***
Plant of Synthetic Alcohol	10.640	6.581
Omsk Kaucuk	6.202	3.088
Total	16.842	9.669

Isopropanol production in Russia amounted to 16,842 tons in the first three months in 2024 against 9,669 tons in January to March 2023. Omsk Kaucuk increased production from 3,088 tons to 6,202 tons whilst the Plant at Synthetic Alcohol at Orsk increased production from 6,581 tons to 10,640 tons.

Omsk Kaucuk only started isopropanol production in 2020 and only achieved high utilisation rates in 2023. Omsk Kaucuk recently completed the installation of an isopropyl alcohol loading station (IPS) with a capacity of up to 500 tons per month. The new station can ship IPS all year round.

Phthalic anhydride production in Russia totalled 23,515 tons in the first quarter this year which is higher by around 3,000 tons over the same period in 2023. Kamteks-Khimprom at Perm is the largest producer followed by Gazprom neftekhim Salavat, and together these two plants produced 19,298 tons in the first three months in 2024.

Maleic anhydride production in Russia totalled 3,489 tons in the first quarter in 2024. Consumption of maleic anhydride in the Russian market in 2023 increased by 22% and amounted to 11,000 tons against 9,000 tons in the previous year. The market has been helped by the start-up of the plant at Tobolsk in 2022, which was constructed using Italian technology. Such technology is not available today due to EU sanctions that were introduced in March 2022. There was an argument for introducing such technology sanctions in 2014 after Russia's occupation of Crimea but were never implemented until the full invasion of Ukraine.

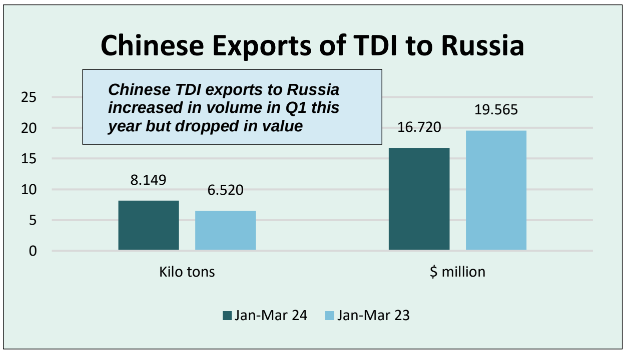
Last year SIBUR's Tobolsk plant accounted for around 80% of domestic market sales in Russia, whilst at the same time the share of imports fell to 20% from 67% in 2022. The largest global segment of maleic anhydride consumption remains unsaturated polyester resins which is a relatively small sector in Russia but could grow based on the domestic availability of maleic.

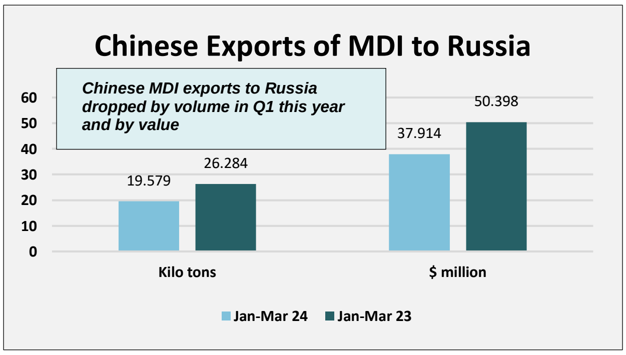
Promising segments of maleic consumption include enterprises for the production of additives to lubricants and fuels, additives for concrete and the food industry, reagents for the oil and gas industry and special chemicals for various industries, as well as pulp and paper mills.

Omsk Kaucuk-isophorone from acetone
Omsk Kaucuk has started a pilot plant for isophorone production, which is a solvent derivative of acetone. The pilot plant makes it possible to obtain isophorone with a high yield percentage from acetone, as well as intermediate substances such as diacetone alcohol, mesityl oxide and methyl isobutyl ketone. These solvents are widely used in many industries.

Two units of the condensation and separation unit have already arrived at the site, the manufacturer will deliver the third hydrogenation unit in June this year. The main task of the current stage is to work out technologies for their scaling to industrial volumes. The goal is to completely replace products of low and medium-tonnage chemistry where Russia is dependent on imports. Isophorone is widely used in the paint and varnish industry and is in [Grab your reader's attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]

demand in the production of adhesives and pulp solvent and polymers.





Russian polyurethane raw materials

Isocyanate/polyol imports from China into Russia
TDI imports from China into Russia increased from 6,520 tons in January to March 2023 to 8,149 tons in the same period in 2024.TDI prices fell from $2979.9 per ton in January to March 2023 to $2497.6 per ton in 2023 whilst MDI prices fell from $2162.4 per ton to $1975.7. Due to lower prices costs and lower volumes the costs of TDI imports dropped from $88.315 million to $26.949 million.

MDI costs dropped from $50.398 million in the first quarter in 2023 to $37.914 million in the same quarter in 2024 as volumes fell from 26,284 tons to 19,579 tons. Almost all polyurethane production in Russia is based on imported material, and industrial facilities are located in general production facilities and in Russian factories.

Polyol imports into Russia from China increased from 22,750 tons in the first quarter last year to 31,079 tons in this year. Import costs rose from $94.504 million in 2022 to $173.167 million. Average prices fell from $1557.8 per ton to $1411.5 per ton. The general perception of instability in the industry remains, but although market participants are gradually returning to discussing prospects and investment projects.

Kazakhstan

Chinese Exports of PET to Uzbekistan and Kazakhstan (unit-kilo tons)		
Country	***Jan-Mar 24***	***Jan-Mar 23***
Kazakhstan	14.930	16.370
Uzbekistan	29.497	19.825

Central Asian PET imports from China

Kazakhstan reduced imports of PET in the first quarter from China to 14,930 tons against 16,370 tons in the same period in 2023 whilst Uzbekistan increased imports from 19,825 tons to 29,497 tons.

Kazakh Exports of PP to China		
	Jan-Mar 24	***Jan-Mar 23***
Kilo tons	34.700	40.293
$ million	26.150	32.316

Kazakh polypropylene Jan-Mar 2024

Kazakh exports of polypropylene to China amounted to 34,700 tons in the first quarter this year against 40,293 tons in the same period in 2023. Revenues dropped from 32,316 tons to 26,150 tons. The range of polypropylene produced at the plant of Kazakhstan Petrochemical Industries Inc LLP (KPI, has been increased with two new grades taking the full range on sale of nine target grades of polypropylene.

One of the grades PP H250GP/7 is a propylene homopolymer with a standard molecular weight distribution. The product is a general-purpose product designed for the production of products by injection moulding methods. The second new grade PP H253FF/7 is a propylene homopolymer with a standard molecular weight distribution. The product is characterized by high fluidity and a special composition of the stabilization formulation, which provides balanced physical and mechanical characteristics. It is designed for the production of continuous fibres, multifilament yarns.

The main consumer of PP H253FF/7 polypropylene in Kazakhstan is Bal Textile LLP, the first factory in Kazakhstan for the production of carpets and carpet products, which is one of the largest carpet factories in Central Asia. In April this year, the KPI technical service group successfully homologated the PP H253FF/7 brand in Bal Textile LLP with the achievement of high-quality indicators at the maximum speed of the production line. The company is ready to purchase and process up to 500 tons of products monthly, and also plans to export carpet products to Europe.

Navoiazot Air Products CO2 project

Air Products is planning to open a carbon dioxide (CO_2) production project at Navoiazot in Uzbekistan. The plant will be the first and so far, the only one of its kind in Uzbekistan, and will use untreated CO_2 captured at the ammonia production line. The plant, which will have a capacity of 120 tons of CO_2 per day, will reduce the consumption of natural gas, which is currently the main source of CO_2 generation.

Navoiazot produced 744,883 tons of ammonium nitrate in 2023, 491,511 tons of urea and 46,984 tons of PVC. The plant's capacity is designed to produce 100,000 tpa of PVC, 300,000 tpa methanol and 75,000 tpa of caustic soda. In 2024, Navoiazot plans to produce 80,000 tons of PVC of which around 20,000 tons will be exported.

Contents from Issue No 402