

# CIREC monthly NEWS

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

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Czech Republic, Hungary, Poland, Slovakia  
South East Europe & Baltic States  
Eurasia Russia-Ukraine-Belarus-Kazakhstan-Uzbekistan-Azerbaijan

Product coverage including olefins plus derivatives, aromatics plus derivatives,  
and organic chemicals

Issue No: 400, 25 March 2024

## Points from this issue, including production and trade

### Central European petrochemical markets

- Ethylene production in Poland amounted to 31,000 tons in January, down marginally from 31,500 tons in January 2023, whilst propylene production dropped from 37,800 tons to 27,700 tons
- In order to familiarise the region's residents with the Olefins III project at Plock, Orlen has prepared a series of meetings entitled "Olefins III Without Secrets" to the region's residents
- Exports of propylene from Hungary amounted to 83,442 in 2023 tons versus 89,378 tons in 2022
- Ethylene exports from the Czech Republic amounted to 1,191 tons in January 2024 against 1,257 tons in January 2023, whilst propylene dropped from 14,323 tons to a few hundred tons

### Central European polymer production & trade

- Polish trade in polyethylene in January this year reflected an increase in market activity compared to January 2023
- At the start of March Grupa Azoty Polyolefins reached agreement with financial institutions for financing the completion of the Polimery Project
- For Hungary, MOL shipped 122,750 tons of homo grade polypropylene (valued at €163.023 million) in January to December 2023 versus 121,977 tons in 2022 (€199.513 million in value)

### Regional methanol markets

- Russia produced 378,024 tons of methanol in January this year which was much higher than the 330,312 tons in January 2023
- Russian methanol exports amounted to 97,924 tons in January against 137,867 tons in January last year. China accounted for 73,465 tons against 58,980 tons in January 2023
- Imports of methanol into Hungary totalled 90,989 tons in 2023 versus 109,150 tons in 2022, with average prices falling from €559.5 per ton to €426.6 per ton. Germany provided 35,513 tons which was up from 16,456 tons in 2022

### Russian polymer & synthetic rubber production

- Although apparent damage to numerous Russian refineries (from drone attacks) there are no indicative signs that chemical production has to date been affected
- The most important immediate challenge facing Russian petrochemical producers is logistics, particularly in relation to the Far East where rail deliveries have been difficult so far in 2024
- Synthetic rubber production in Russia amounted to 121,672 tons in January 2024 against 121,396 in the same month in 2023
- Voronezhskintezkaucuk produced 26,335 tons against 24,815 tons in January 2023 whilst Omsk Kaucuk reduced production from 10,937 tons to 8,751 tons

## CENTRAL and SOUTH EAST EUROPE

### Polish Crude Imports Jan-2024

Country	Mil tons	€ per ton
Saudi Arabia	1120.1	565.7
Nigeria	251.9	590.6
Norway	779.1	545.1
UK	94.2	594.5
Others	0.0	0.0
Total	2,245	632.7

### Polish oil imports Jan-2024

From the total of 2,245 million tons of crude imported into Poland in January, supplies from Saudi Arabia amounted to 45.7% which was followed by Norway with 34.2%. By volume Saudi Arabia supplied 1.120 million tons at €565.7 per ton and Norway supplied 0.779 million tons at €545.1 per ton. Further supplies from Norway have been ensured after the include Orlen Group agreement with BP providing for deliveries of up to 6 million tons. Overall natural gas and crude oil production in Poland has been steadily declining in recent years, with 2023 confirming this trend. Last year the production of natural gas (in liquid or gaseous form, from extraction) dropped 3.2% to almost exactly 5 billion cubic meters.

### Czech Crude Imports Jan-2024

Country	Vol (mil tons)	€ per ton
Azerbaijan	0.208	580.9
Kazakhstan	0.122	579.2
Russia	0.293	540.4
Total	0.623	566.8

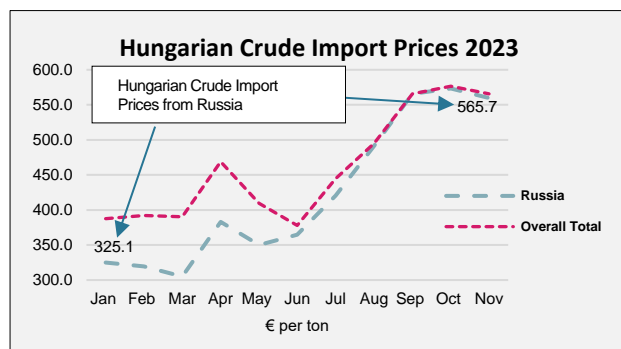
### Czech crude imports Jan-2024

Russia supplied 293,000 tons of crude to the Czech Republic in January at €540.4 per ton. This compares against 430,574 tons in January last year. Deliveries from Russia peaked in the middle of 2023, monthly deliveries have since declined. However Russian crude will still have an important role in Czech crude supply until completion of the modernisation and expansion of the TAL pipeline to 4.0 million tpa. This is intended to be completed by the end of 2024.

Unipetrol is set to undertake maintenance activities at its Litvinov oil refinery from 4 April to 15 May. While a broader general maintenance turnaround at the company's petrochemical site has been deferred to 2025, specific units at the site will undergo maintenance between March and May.

### MOL's feedstock imports

Slovnaft will undertake a two-month shutdown from May, partly to help the Bratislava refinery to adjust its technology to use greater quantities of Russian oil. This is part of the MOL Group's wider diversification of oil supply.



Hungary's crude imports amounted to 5.998 million tons in 2023 of which supplies from Russia totalled 4.729 million tons from Russia which comprised 78.9%. The advantages of cheaper Russian oil from which Hungary was benefiting in the first half of 2023 largely disappeared in the second half of the year as the EU price cap became less effective. By

December MOL paid €565.7 per ton against €325.1 per ton in January.

MOL has reiterated that it will seek to continue supplying Russian oil to its refineries through the Druzhba pipeline through Ukraine, since it does not yet see the possibility of replacing this route. The problem facing the Druzhba comes from unintended consequences from the war. The pipeline was shut temporarily in March following explosion caused near the Ukrainian city of Sumy.

Last year 993,000 tons of crude was delivered to Germany through the Druzhba pipeline, with an increase projected to 1.2 million tons in 2024 but this is still not enough. German companies want to receive more oil from Kazakhstan through the Druzhba and whilst it does not help Russian crude sales transit fees make the trade advantageous for Russia. Kazakhstan has already received a request from the German side to increase supplies to 2.0 million tpa. Russian oil received through the Druzhba pipeline is delivered only in the southern direction to Hungary, Slovakia, and the Czech Republic.

## Central European Olefin Production, Trade & Projects

PKN Orlen Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Ethylene	31.0	31.1
Propylene	27.7	37.8
Butadiene	4.6	5.7
Toluene	0.0	0.4
Phenol	3.6	4.7

### Polish petrochemical production Jan-2024

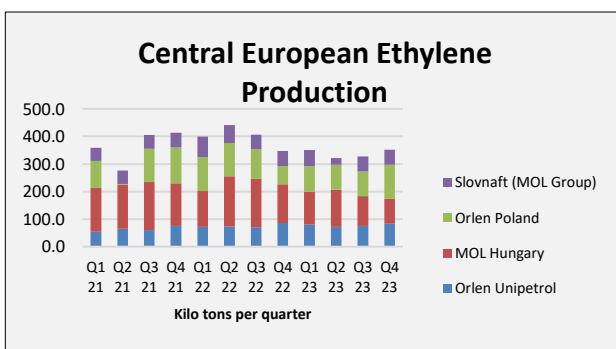
Ethylene production in Poland amounted to 31,000 tons in January, just under the 31,100 tons from January 2023, whilst propylene production dropped more significantly from 37,800 tons to 27,700 tons. Due to prevailing weak demand the Metathesis plant at Plock, which can produce up to 100,000 tpa of propylene, remains idle.

Lower ethylene and propylene production were reflected in other areas of petrochemical production. Butadiene production at Plock dropped to 4,600 tons from 5,700 tons, whilst phenol dropped from 4,700 tons to 3,600 tons. Import costs for monomers were much lower in January against January last year, with propylene dropping from €997.4 per ton to €834.8 per ton and butadiene cost prices dropping from

€925.4 per ton to €715.9 per ton.

Polish Monomer Import Costs (€ per ton)		
Product	Jan-24	Jan-23
Propylene	834.8	997.4
Butadiene	715.9	925.4
Styrene	1123.1	1572.7

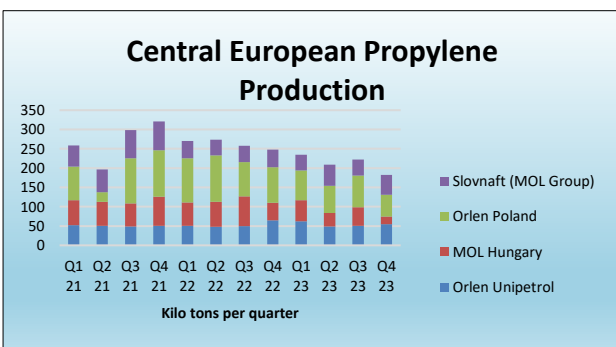
Ethylene production for the four Central European countries forming the Visegrad bloc finished the fourth quarter in 2023 slightly up on the second and third quarters. At the same time plants across the region still ran at relatively low rates of utilisation.



For propylene the falls in production have been fairly continuous since the end of 2021. Propylene production in the plants located in Poland, the Czech and Slovak republics and Hungary dropped below 200,000 tons in the fourth quarter.

### Olefiny III project

Orlen's new management is expected to make some changes in group strategy but most of the key projects are expected to continue which in particular relates to the Olefins III complex. In order to familiarise the region's residents with the Olefins III project at Plock, Orlen has prepared a series of meetings entitled "Olefins III Without Secrets" to the region's residents. The first meeting took place on 19 February where residents had the opportunity to hear from experts an account of the current implementation of the investment, its preparation, course and continuation.



In addition to ethylene and propylene other products will include ethylene oxide, glycols, and

styrene. Hyundai Engineering, in collaboration with Técnicas Reunidas, secured the project contract from Orlen in June 2021. Orlen is currently finalising the terms and conditions of financing with several financial institutions, including Korean and the Spanish Export Credit Agency (i.e. from the countries of origin of the contractors of the main project complex).

The remaining amount will be financed from Orlen's funds, including the value of capital expenditures incurred so far towards Orlen's own contribution. The new installations built as part of the project, on the basis of a lease agreement, will be fully handed over by SPV to Orlen. Orlen established Orlen Olefins in 2021 as a special purpose vehicle (SPV) as the entity undertaking the project. Orlen holds all the shares in the SPV and therefore has full control over the company. It is planned that the SPV will obtain external debt financing in the form of bank loans covering a significant part of the project's capital expenditures.

Polish Imports of Propylene (unit-kilo tons)		
Country	Jan-24	Jan-23
Germany	6.652	4.990
Others	0.722	3.204
Total	7.374	8.194
Av € per ton	834.8	997.4

#### Polish propylene & butadiene imports, Jan-2024

Poland imported 7,374 tons of propylene in January against 8,194 tons in January 2023. Imports from Germany increased from 4,990 tons to 6,652 tons.

Average monomer trade prices dropped from €997.4 per ton in January 2023 to €834.8 per ton in January 2024.

Prices for propylene started falling in the latter part of the 2022 following feedstock trends, but then stabilised towards the end of 2023 and start of 2024.

Butadiene import prices for Poland dropped from €925.4 per ton in January 2023 to €715.9 in January this year, with volumes rising from 6,759 tons to 7,019 tons. Imports into Poland from Austria amounted to 3,378 tons against 3,821 tons in January last year.

Polish Butadiene Imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Austria	3.378	3.821
Germany	1.533	0.913
Hungary	2.108	2.026
Others	0.909	0.000
Total	7.019	6.759
Av € per ton	715.9	925.4

Hungarian Propylene Exports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Slovakia	81.309	77.975
Total	83.442	89.378
Av € per ton	1039.0	1269.4

#### Hungarian propylene exports Jan-Dec 2023

Exports of propylene from Hungary amounted to 83,442 in 2023 tons versus 89,378 tons in 2022. Although MOL currently produces more propylene than it consumes it is currently building a new propylene plant with a capacity of 100,000 tpa which is targeted for conversion into propylene oxide.

Hungarian Butadiene Exports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Czech Republic	15.749	8.205
Germany	3.014	6.049
Poland	23.078	35.355
Total	41.841	49.609
Av € per ton	817.4	1018.9

Export prices from Hungary dropped from €1269.4 per ton to €1039.0 per ton in 2023, following the trajectory in European pricing. Exports to Slovakia from MOL to Slovnaft increased from 77,975 tons to 81,309 tons in 2023. Slovnaft uses propylene for the production of polypropylene as its cracker is unable to meet full demand.

Czech Olefin Exports (unit-kilo tons)		
Product	Jan-24	Jan-23
Ethylene	1.191	1.257
Propylene	0.001	14.323
Czech Olefin Imports (unit-kilo tons)		
Product	Jan-24	Jan-23
Ethylene	0.160	0.871
Propylene	3.842	4.674
Butadiene	4.148	6.804
Styrene	0.246	0.662

Hungarian butadiene exports amounted to 41,841 tons in 2023 against 49,609 tons in 2022. Shipments to Poland totalled 23,078 tons in January to December 2023 against 35,355 tons in 2022. Exports to Germany dropped from 6,049 tons to 3,014 tons and to the Czech Republic rose from 8,205 tons to 15,749 tons. Average prices for Hungarian butadiene exports fell to €817.4 per ton versus €1018.9 in 2022.

#### Czech olefin trade Jan-2024

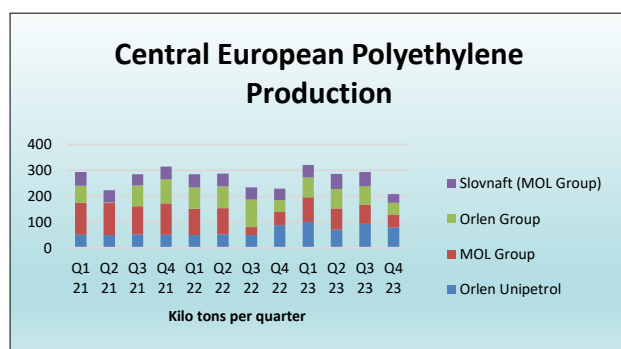
Exports of ethylene from the Czech Republic amounted to 1,191 tons in January 2024 against 1,257 tons in January last year, whilst propylene volumes dropped from 14,323 tons to a few hundred tons. Czech imports of ethylene dropped from 871 tons to 160 tons in January 2024 whilst propylene imports amounted to 3,842 tons versus 4,674 tons. All of the propylene was sourced from Germany at an average price of €844.9 per ton.

#### Hungarian styrene imports Jan-Dec 2023

Imports of styrene into Hungary totalled 69,986 tons in January to December 2023, down from 95,794 tons in 2022. Prices for styrene imports into Hungary dropped from €1672.9 per ton to €1498.5 per ton in 2023.

Hungarian styrene imports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Italy	63.033	84.990
Netherlands	5.659	4.414
Others	1.294	6.391
Total	69.986	95.794
Av € per ton	1498.5	1672.9

## Central European Polyolefin Trade



### Central European polyethylene production

Polyethylene production throughout Central Europe dropped to just over 200,000 tons in the fourth quarter last year largely in response to weak demand. This was the lowest volume of production since the pandemic.

Production of polyethylene in Poland increased from 25,200 tons in January 2023 to 29,500 tons in January this year whilst polypropylene fell from 24,900 tons to 21,600 tons.

### Polish Polyolefin Production (unit-kilo tons)

Product	Jan-24	Jan-23
Polyethylene	29.5	25.2
Polypropylene	21.6	24.9

### Polish polyethylene trade Jan-2024

Polish trade in polyethylene in January this year reflected an increase in market activity compared to January 2023. Last year's production was underpinned by weak market performance, but the forecasts for 2024 and slightly more optimistic. Based on production and trade Polish consumption of polyethylene increased from 92,000 tons in January last year to 111,900 tons in January 2024.

### Polish PE Supply/Demand Balance (unit-kilo tons)

	Jan-24	Jan-23
Production	21.6	24.9
Exports	24.0	23.6
Imports	114.32	90.64
Market Balance	111.9	92.0

Poland carries a large deficit in total polyethylene supply, which is part of the reason behind Orlen's investment project Olefiny 111 at Plock now under construction. At the outbreak of the war in Ukraine, in February 2022, Orlen was following the plan to contract contractors for the OSBL infrastructure. The war has had side effects on the project, indirectly affecting the availability of materials and resources.

### Polish PE imports (unit-kilo tons)

Country	Jan-24	Jan-23
LDPE	28.593	24.350
LLDPE	18.278	16.380
HDPE	36.224	31.167
EVA	1.749	0.992
EAO	24.023	13.069
Others	5.452	4.682
Total	114.320	90.640
Av € per ton	1267.1	1503.6

### Polish imports of polyethylene Jan-2024

Polish imports of polyethylene totalled 114,320 tons in January 2024 which was up from 90,640 tons in January 2023. Average prices fell from €1503.6 per ton to €1267.7 per ton. HDPE is the largest category of imported polyethylene into Poland, amounting to 36,224 tons in January which was higher than the 31,167 tons achieved in January last year. All categories of polyethylene imports increased in the first month this year, which meant despite lower prices that overall costs rose from €136.3 million to €144.9 million.

The largest jump in ethylene polymer imports applied to ethylene alpha olefins where shipments increased from 13,069 tons in January last year to 24,023 tons. European sources of ethylene alpha olefins included Germany, Belgium and the Netherlands but the largest supplier in January was from the US which provided 7,833 tons.

Regarding LLDPE, imports increased from 16,380 tons to 18,278 tons. Most of the LLDPE imports were sourced from West Europe, including France, the Netherlands and Germany.

### Polish PE Exports (unit-kilo tons)

Product Group	Jan-24	Jan-23
LDPE	5.475	3.445
LLDPE	1.598	1.605
HDPE	15.450	16.957
EVA	0.394	0.687
EAO	0.828	0.569
Other	0.262	0.302
Total	24.007	23.565
€ per ton	1215.1	1213.1

### Polish exports of polyethylene Jan-2024

Polish polyethylene exports amounted to 24,007 tons in January 2024 against 23,565 tons in January last year. Average prices for polyethylene exports from Poland in January rose to €1215.1 per ton

from €1213.1 per ton. Exports of LDPE increased from 3,445 tons to 5,475 tons whilst HDPE exports dropped from 16,957 tons to 15,450 tons.



Czech polyethylene exports (unit-kilo tons)		
Product	Jan-24	Jan-23
LDPE	2.768	1.978
LLDPE	0.336	0.329
HDPE	31.346	25.987
EVA	0.285	0.402
Other	0.899	0.725
Total	35.634	29.422
Av € per ton	1293.4	1432.7

Poland, Italy and Belgium. Polyethylene export prices dropped from €1432.7 per ton to €1293.4 per ton, whilst import prices dropped from €1814.9 to €1445.0.

Czech polyethylene imports (unit-kilo tons)		
Product	Jan-24	Jan-23
LDPE	9.289	7.713
LLDPE	2.350	1.369
HDPE	9.492	9.623
EVA	0.901	0.696
Other	3.495	3.301
Total	25.527	22.703
Av € per ton	1445.0	1814.9

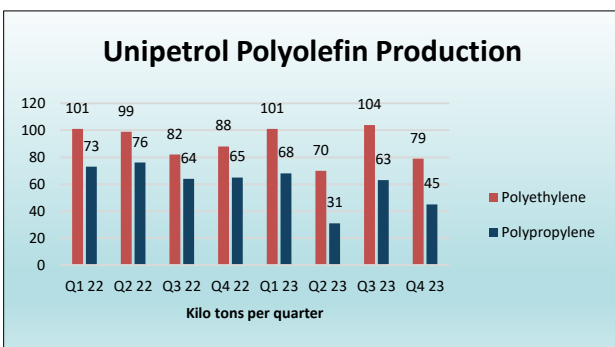
#### Czech polyethylene trade Jan-2024

Czech polyethylene exports amounted to 35,634 tons in January 2024 against 29,422 tons in January last year whilst imports increased from 22,703 tons to 25,527 tons. HDPE exports increased from 25,987 tons to 31,346 tons whilst imports of LDPE increased from 7,713 tons to 9,289 tons.

Germany is the largest destination for Czech HDPE exports supplied from Litvinov. Other important markets for Czech polyethylene exports include

#### Unipetrol-polyolefin production

Unipetrol's polyethylene and polypropylene dropped in 2023 against 2022, although the Litvinov polyolefin plant performed better than the other plants in Central Europe. The third quarter last year was the strongest for polyethylene production over the 2022-2023 timeframe, amounting to 104,000 tons. The second quarter recorded only 70,000 tons. Polypropylene production was also affected in the second quarter by plant maintenance and amounted to 31,000 tons against 76,000 tons in the corresponding quarter in 2022.



#### Rompotrol Rafinare-polyolefin production 2023

Rompotrol Rafinare produced 26,000 tons of polymers in the fourth quarter last year against 35,000 tons in the same period in 2022. In total polymer production for Rompotrol Rafinare amounted to 105,000 tons against 129,000 tons in 2022. The company sold 117,000 tons of

polymers versus 138,000 tons in 2022. The most important distribution channels for polymers comprise the Romanian domestic market with 50%, and for export markets Bulgaria 19%, Italy 6% and Serbia 5%.

Rompotrol Rafinare Polymer Production (unit-kilo tons)		
Product	Jan-Dec 23	Jan-Dec 22
Polypropylene	117.0	126.0
Polyethylene	19.0	68.0
Production	105.0	129.0
Sold	117.0	138.0

The distribution of petrochemical products sold by Rompotrol Rafinare was undertaken by means of auto and railway in the case of sales on the domestic market. For sales on the foreign market, the distribution of these products was made both by means of automotive and maritime transport through the ports of Agigea and Constanta.

Serbian Polymer Exports (unit-kilo tons)		
Product	Jan-Dec 23	Jan-Dec 22
Polyethylene	94.893	119.566
Polypropylene	14.532	16.108
Styrene Butadiene Rubber	17.732	19.400

#### HIP Petrohemija-polyolefin production Jan-Dec 2023

HIP Petrohemija at Pancevo reduced polyethylene exports in 2023 to 94,893 tons against 119,566 tons in 2022, with revenues dropping from \$182.6 million to \$112.5 million. Currently Petrohemija does not produce polypropylene but supplies propylene to Hipol at Odžaci where a 35,000 tpa plant is in operation.

Petrohemija has already started construction of its own polypropylene plant at Pancevo. NIS will invest more than €150 million in the construction of a new polypropylene plant. NIS increased its ownership stake in Petrohemija from 20.86% to 90%, with the obligation of recapitalization in the amount of €150 million and the construction of a polypropylene plant.

Hungarian Polyethylene Imports (unit-kilo tons)		
Product	Jan-Dec 23	Jan-Dec 22
LLDPE	34.363	23.547
LDPE	45.198	55.691
HDPE	85.065	99.715
EAO	9.335	11.140
EVA	4.285	5.962
Other	21.918	22.733
Total	200.163	218.789
Av € per ton	1588.3	1709.3

### Hungarian polyethylene trade Jan-Dec 2023

Hungary remains a net exporter of LDPE and HDPE and still a net importer of LLDPE and ethylene copolymers. Imports of all grades of polyethylene into Hungary amounted to 200,163 tons in 2023 against 218,789 tons in 2022. Import costs for polyethylene fell to €317.924 million against €373.967 million.

Hungarian import prices for polyethylene decreased on average from €1709.3 in January to December 2022 to €1588.3 in 2023. Gradual price declines took place throughout the year.

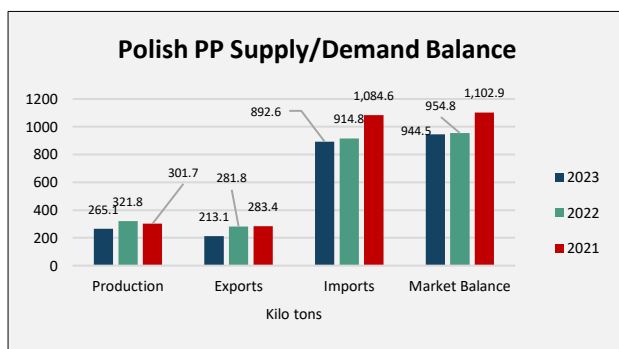
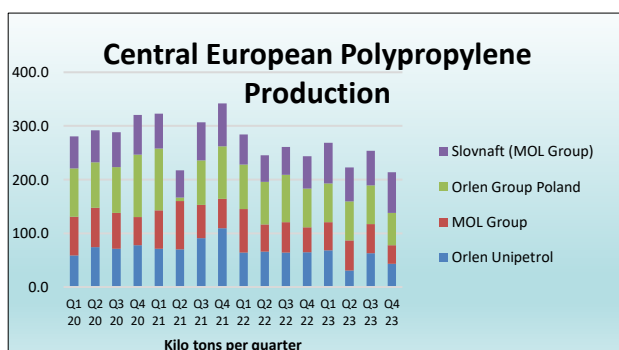
Hungarian Polyethylene Exports (unit-kilo tons)		
Product	Jan-Dec 23	Jan-Dec 22
LLDPE	6.259	5.220
LDPE	80.758	85.083
HDPE	216.556	226.303
Other	31.420	20.071
Total	334.992	337.120
Av € per ton	1246.5	1584.6

Hungarian polyethylene exports amounted to 334,992 tons in 2023 versus 337,120 tons in 2022. Revenues fell from €525.561 million to €421.915 million in 2023, resulting in average prices dropping from €1559.0 per ton in 2022 to €1259.5 per ton.

### Polish polypropylene production & prospects

Polish polypropylene production dropped from 24,900 tons in January 2023 to 21,600 tons in January 2024. Currently polypropylene production in Poland takes place at Plock but

depending on Azoty's finances production could start soon at the new Polimery Police plant. This plant was expected to start in August or September 2023, but problems with the equipment during the start-up phase has been the cause of the delay. Hyundai had set the start-up date for 13 February 2024, but this has been revised to some stage in the first quarter.



### Polimery Police-prospects for success

At the start of March Grupa Azoty Polyolefins reached agreement with financial institutions for financing the completion of the Polimery Project. The agreement involved the requirement that Grupa Azoty and Grupa Azoty Zakłady Chemiczne Police will pay the remaining amount of the loan, up to €105 million by 27 March.

The agreement is an important step on the way to the start of commercial operation of the plant. Completion of the project is associated with the achievement and maintenance by Hyundai of the guaranteed parameters in the license agreements for the PDH propylene production unit and the PP polypropylene production unit.

The domestic market offers great scope for sales as Poland possesses a huge imbalance in polypropylene supply. This is despite the decline in consumption in the past two years, dropping from 1.103 million tons in 2021 to 954,800 tons in 2022 to 944,500 tons in 2023.

Polypropylene production was higher in 2022 over 2021, rising to 321,800 tons over 301,700 tons, but then dropped to 265,100 tons in 2023. Both exports and imports dropped in 2023 to 892,600 tons and 213,100 tons respectively.

<b>Polish PP Imports (unit-kilo tons)</b>		
<b>Category</b>	<b>Jan-24</b>	<b>Jan-23</b>
PP homo	56.820	45.087
Propylene copolymers	26.082	22.516
Other	1.477	1.058
Total	84.558	68.809
Av € per ton	1332.1	1573.9

#### Polish PP Trade Jan-2024

Polish polypropylene imports, including homo grade and copolymers, increased in January against January 2023, rising from 68,809 tons to 84,558 tons. Average prices per ton decreased from €1573.9 to €1332.1 per ton.

Homo grade polypropylene imports increased from 45,087 tons to 56,820 tons, whilst copolymer imports dropped from 22,516 tons to 26,082 tons. Aside European suppliers for homo grade PP, South Korea provided 5,963 tons to Poland in January. The largest supplier of copolymers was Germany, providing 6,770 tons in January followed by the Netherlands with 4,912 tons.

<b>Polish PP Exports (unit-kilo tons)</b>		
<b>Category</b>	<b>Jan-24</b>	<b>Jan-23</b>
PP homo	15.366	13.441
Propylene copolymers	5.424	7.326
Other	0.376	0.319
Total	21.210	21.148
Av € per ton	1366.6	1531.9

Regarding export activity from Poland, shipments amounted to 21,210 tons in January, against 21,148 tons in January 2023. Despite the similarity of volumes prices dropped from €1531.9 per ton last year to €1366.6 this year.

<b>Czech polypropylene exports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-24</b>	<b>Jan-23</b>
PP Homo	18.289	21.875
Propylene Copolymers	4.212	4.174
Other	0.498	0.353
Total	23.000	26.402
Av € per ton	1392.0	1530.7

#### Czech polypropylene production and trade Jan-2024

Exports of all forms of polypropylene from the Czech Republic amounted to 23,000 tons in January against 26,402 tons in January 2023, with average prices dropping from €1530.7 per ton to €1392.0 per ton.

Homo-grade PP provides the main category of Czech polypropylene exports, amounting to 18,289 tons versus 21,875 tons in January 2023. Imports of homo grade PP increased from 23,162 tons last year to 25,526 tons, whilst copolymer imports increased from 15,975 tons to 17,242 tons in January 2024.

<b>Czech polypropylene imports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-24</b>	<b>Jan-23</b>
PP Homo	25.526	23.162
Propylene Copolymers	17.242	15.975
Other	1.163	1.354
Total	43.931	40.491
Av € per ton	1485.9	1693.7

For imports of all forms of polypropylene, Czech inward shipments increased from 40,491 tons in January 2023 to 43,931 tons in January this year, with average prices dropping from €1693.7 per ton to €1485.9 per ton.

<b>Hungarian Polypropylene Exports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-Dec 23</b>	<b>Jan-Dec 22</b>
PP homo	122.750	121.977
Propylene copolymers	86.965	93.630
Others	15.197	15.749
Total	224.913	231.356
Av € per ton	1350.8	1662.4

#### Hungarian polypropylene trade Jan-Dec 2023

MOL shipped 122,750 tons of homo grade polypropylene (valued at €163.023 million) in January to December 2023 versus 121,977 tons in 2022 (€199.513 million in value). Copolymer exports dropped from 93,630 tons (€166.023 million in value) to 86,965 tons (€122.294 million). Hungarian export revenues dropped for all grades of polypropylene from €384.606 million to €303.820 million, with average prices dropping from €1662.4 per ton to €1350.8.

<b>Hungarian Polypropylene Imports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-Dec 23</b>	<b>Jan-Dec 22</b>
PP homo	118.779	124.790
Propylene copolymers	50.818	56.461
Others	29.529	28.860
Total	199.126	210.111
Av € per ton	1605.0	1792.9

Imports of polypropylene into Hungary totalled 199,126 tons in 2023 against 210,111 tons in 2022 with average prices falling from €1792.9 per ton to €1605.0 per ton.

Homo PP imports dropped from 124,790 tons to 118,779 tons in 2023, whilst copolymer imports dropped from 56,461 tons to 50,818 tons. The Czech Republic was the largest source of homo PP imports, followed by South Korea and Germany.



## Central European Rubber Markets

Czech Rubber Trade (unit-kilo tons)		
	Jan-24	Jan-23
Exports synthetic rubber	1674.8	2103.9
Imports synthetic rubber	2067.3	2473.9
Imports natural rubber	1656.4	1739.6

### Czech synthetic rubber trade Jan-2024

European rubber trade prices could see some rises in the second quarter due to some supply side pressure. Price rises for synthetic rubber could be influenced from natural rubber where major exporting nations such as Thailand, Malaysia, and Indonesia have increased prices in March to consumers such as the US and Germany.

Czech Butadiene Rubber Exports (unit-kilo tons)		
Country	Jan-24	Jan-23
France	0.514	0.554
Germany	0.711	0.000
Hungary	0.739	0.356
India	1.077	0.665
Italy	0.661	0.000
Poland	1.170	1.324
Romania	0.838	0.000
Serbia	0.378	0.139
Slovakia	1.034	0.893
South Korea	0.522	1.029
Spain	0.949	0.000
Turkey	0.897	0.404
Others	1.670	2.477
Total	11.160	7.841
Revenues €	17.031	16.342
Price	1526.0	2084.057

Czech rubber trade prices started 2024 at fairly stable levels although much lower than at the start of 2023. Export prices of synthetic rubber prices dropped from €2103.9 per ton to €1674.8 per ton whilst import prices dropped from €2473.9 per ton to €2067.3 per ton.

Czech exports of synthetic rubber amounted to 149,520 tons in January to December 2023 versus 182,509 tons in 2022. Imports declined from 155,873 tons to 98,084 tons in January to December 2023. Natural rubber imports into the Czech Republic dropped slightly from 91,849 tons to 88,822 tons.

Czech imports of butadiene amounted to 11,020 tons in January whilst exports amounted to 12,950 tons. Imports increased from 10,574 tons in January 2023 and exports dropped slightly from 12,660 tons.

The largest share of synthetic rubber exports from the Czech Republic comprises butadiene rubber where exports amounted to 11,160 tons in January against 7,841 tons in January 2023. Exports of ESBR have almost been phased out after the closure of the Kralupy plant in March last year.

Czech exports of butadiene rubber to are sold mostly to European customers but also India and South Korea. Besides exports the Czech Republic also imported 1,814 tons of butadiene rubber in January versus 27,530 tons in the same period in 2022. Average export prices fell from €2084.1 per ton to €1526.0 per ton.

Hungarian synthetic rubber Imports (unit-kilo tons)		
Product	Jan-Dec 23	Jan-Dec 22
Butadiene Rubber	43.470	48.207
HBR	7.874	15.268
SBR	50.948	48.447
Other	21.860	20.475
Total	124.151	132.397
Revenues € mil	275.309	377.669
Av € per ton	2217.5	2852.6

### Hungarian synthetic rubber imports Jan-Dec 2023

Hungarian imports of synthetic rubber amounted to 124,151 tons in 2023 versus 132,397 tons in January to December 2022, whilst import costs dropped from €377.669 million to €275.309 million. Average prices dropped from €2852.6 per ton to €2217.5 in 2023. Butadiene rubber imports into Hungary declined from 48,207 tons to 43,470 tons, with costs dropping from €108.353 million to €77.916 million. Imports from Russia into Hungary dropped from 13,142 tons to 2,318 tons in January to December 2023 whilst imports from Indonesia rose to 14,479 tons from 8,288 tons.

Aside imports of synthetic rubber Hungarian exports amounted to 66,059 tons in 2023 for revenues of €185.194 million, which showed an increase over 2022 from 60,353 tons for revenues of €161.756 million. The largest share of Hungarian exports in 2023 comprised SBR (HS code: 40021930) for 46,428 tons which increased from 31,241 tons in 2022. Revenues increased from €93.110 million to €138.588 million. Synthetic rubber produced at Tiszaujvaros is part of a joint venture with Japan Synthetic Rubber holding 51% and MOL 49%.

Polish Synthetic Rubber Imports (unit-kilo tons)		
Product	Jan-24	Jan-23
ESBR	1.467	1.454
Block SBR	2.656	2.422
S-SBR	1.844	2.384
Butadiene Rubber	5.630	3.297
Butyl Rubber	0.485	0.193
HBR	0.232	2.474
NBR	0.637	0.114
Isoprene Rubber	2.351	0.494
EPDM	3.146	3.559
Others	2.408	4.520
Total	20.856	20.910
Av € per ton	1,746.4	2,063.9

#### Polish rubber prices and trade, Jan-2024

Rubber import prices into Poland for both synthetic and natural have seen gradual declines from last year as a combination of economic factors have taken effect. Poland imported 20,856 tons of synthetic rubber in January against 20,910 tons in January 2023.

Imports of butadiene rubber amounted to 5,630 tons in January of which Russia supplied 2,298 tons. Russia also supplied 2,253 tons of isoprene rubber to Poland in January from the total of 2,351 tons.

Imports of halogenated butyl rubber from Russia have now been phased out which meant that Polish imports dropped from 2,474 tons in January 2023 to only 232 tons this year. In other categories of Polish imports of synthetic rubber inward shipments of EPDM dropped from 3,559 tons in January last year to 3,146 tons this January. Block SBR imports increased from 2,422 tons to 2,656 tons, with Russia supplying 1,117 tons from Voronezhskintezkavkuk.

Deliveries of synthetic rubber from Russia will be allowed up to June 2024, after which EU sanctions will take full effect.

Synthetic rubber exports from Poland amounted to 26,694 tons in January which was up from 19,089 tons in the same month last year. Exports of butadiene rubber from Poland amounted to 4,702 tons against 3,888 tons, whilst exports of SBRs increased from 12,301 tons to 17,341 tons. Major destinations for Polish butadiene exports were led by Belgium and the Czech Republic. In other product areas Poland

Polish Exports of Synthetic Rubber (unit-kilo tons)		
Product	Jan-24	Jan-23
SBR	17.341	12.301
Butadiene Rubber	4.702	3.888
HBR	0.409	0.180
Others	4.243	2.721
Total	26.694	19.089
Av € per ton	1506.0	2259.5

increased exports in January of butyl rubber and isoprene rubber. Overall average prices for synthetic rubber exports dropped from €2259.5 per ton in January 2023 to €1506.0 in January this year.

#### Synthos production January 2024

Synthos reduced the production of synthetic rubber in January to 20,500 tons from 20,900 tons in the same month in 2023. Polystyrene production at Oswiecim decreased from 6,300 tons to 5,100 tons and the production of expandable polystyrene dropped from 8,400 tons to 7,800 tons.

Synthos Synthetic Rubber, with production facilities in Germany, the Czech Republic and Poland, has received ISCC low emission certification for its entire portfolio of synthetic rubber products. These include solution styrene-butadiene rubber (S-SBR), emulsion styrene-butadiene rubber (E-SBR), high and low cis polybutadiene rubber (Nd-BR, Ni-BR and Li-BR) and recycled rubber powder. With sanctions on Russian rubber trade taking full effect in June this year Synthos is likely to fill part of the market gaps for some grades, particularly butadiene rubber.

Synthos Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Polystyrene	5.1	6.3
EPS	7.8	8.4
Synthetic Rubber	20.5	20.9

As a non-integrated producer feedstock supply remains one of the chief challenges for Synthos. In an attempt to address the supply of butadiene monomer Synthos signed a preliminary agreement with OMV at the end of 2023 to commit to a long-term cooperation on sustainable butadiene until 2030. This initially involves using palm fatty acid distillate as raw materials. Sustainable butadiene will be produced in the steam cracker at the Burghausen refinery in Germany. A first batch of sustainable butadiene was successfully delivered to Synthos in 2023.

Synthos will use the butadiene to produce Solution Styrene-Butadiene Rubber (S-SBR), which is used in high performance tire tread compounds for low rolling resistance, which means reducing the energy loss of a tire rolling on the road. This in turn increases the vehicle's energy efficiency and reduces environmental impact. All Synthos production facilities, including Synthetic Rubber plants in Poland, Czech Republic and Germany, received full ISCC PLUS certification in 2022.

## Central European aromatics and derivatives

Polish Exports of Benzene (unit-kilo tons)		
Country	Jan-24	Jan-23
Czech Republic	1.086	5.307
Germany	10.234	9.999
Others	0.000	1.042
Total	11.320	16.348
Av €/ton	785.868	774.164

## Polish aromatic exports Jan-2024

Polish exports of benzene totalled 11,320 tons in January this year against 16,348 tons in January last year. Germany purchased 10,234 tons from Poland in January which was up on 9,999 tons from last year whilst shipments to the Czech Republic dropped 5,307 tons to 1,086 tons. Average prices amounted to €785.9 per ton in January. Benzene is produced in Poland at Kedzierzyn-Kozle and Plock.

PTA exports from Poland increased to 22,430 tons in January this year against 20,247 tons in January 2023, although still down on traditional volumes. Exports to Germany rose to 19,736 tons from 17,812 tons. Export prices dropped from €987.3 per ton to €771.4 per ton.

Polish PTA Exports (unit-kilo tons)		
Country	Jan-24	Jan-23
France	0.761	0.000
Germany	19.736	17.812
Lithuania	0.516	0.000
Switzerland	0.000	1.278
Others	1.416	1.157
Total	22.430	20.247
Av Price €	771.4	987.3

PTA consumption in Poland is based largely on two PET plants in Poland which are owned by Indorama and Elana PET. Indorama operates a PET plant at Wloclawek with a capacity of 216,000 tpa. There is a smaller PET plant at Torun, managed by Elana PET which is part of the holding Boryszew. Regarding trade in PET imports into Poland amounted to 228,604 tons in 2023 for costs of €253.724 million whilst exports from Poland amounted to 130,561

tons for €161.774 million.

Polish Aromatic Imports (unit-kilo tons)		
Product	Jan-24	Jan-23
Adipic Acid	2.550	1.181
Bisphenol A	0.934	0.000
Caprolactam	0.647	0.531
Ethylbenzene	11.496	10.442
Paraxylene	0.000	34.150
enol	7.107	7.078
Phthalic Anhydride	2.483	1.645
PTA	0.741	0.586
Styrene	4.223	7.165
TDI	6.971	5.008
Toluene	1.593	1.954

Other important regional plants include the Neo Group in Lithuania which resumed operations on its third PET production line at its Klaipeda facility at the end of February. At full capacity the company can produce 480,000 tpa of PET. The Klaipeda plant also has a capacity of 9,000 tpa of polyols.

## Polish-Czech aromatic imports Jan-2024

Phenol imports into Poland amounted to 7,107 tons in January 2024 which was up from 6,519 tons in January 2023. Germany is the dominant supplier of phenol to Poland, shipping 5,567 tons in January. Other sources include Spain.

Phthalic anhydride imports into Poland increased from 1,645 tons in January last year to 2,483 tons, most of which came from South Korea and the Czech Republic. Phthalic anhydride is used in Poland for the production of unsaturated polyester resins,

Czech Aromatic Exports (unit-kilo tons)		
Product	Jan-24	Jan-23
Benzene	2.045	0.000
Toluene	1.289	0.728
Ethylbenzene	11.492	10.439
Styrene	1.528	4.995
Czech Aromatic Imports (unit-kilo tons)		
Product	Jan-24	Jan-23
Benzene	3.134	7.357
Toluene	0.559	0.631
Styrene	0.246	0.662
Bisphenol A	2.268	1.674

In other product areas, styrene imports amounted to 4,223 tons in January versus 7,165 tons whilst ethylbenzene imports increased from 10,442 tons to 11,496 tons. All of the ethylbenzene imports come from the Kralupy plant in the Czech Republic. In confirmation of Polish numbers Czech exports of ethylbenzene amounted to 11,492 tons in January against 10,439 tons in the same month in 2023. All the ethylbenzene was shipped to Oswiecim, all within the structures of the Synthos Group. Styrene exports from the

Czech Republic dropped from 4,995 tons in January last year to 1,528 tons whilst at the same time imports dropped from 662 tons to 246 tons.

Benzene exports from the Czech Republic amounted to 2,045 tons in January, all of which went to Hungary for €1.546 million. Hungary does not normally import benzene. Imports of benzene into the Czech Republic dropped from 7,359 tons in January 2023 to 3,134 tons in January 2023. Benzene imports were sourced from Hungary, Poland and Serbia

<b>Czech Exports of Epoxy Resins (unit-kilo tons)</b>		
<b>Country</b>	<b>Jan-24</b>	<b>Jan-23</b>
Austria	0.162	0.276
Germany	1.990	2.051
Spain	0.345	0.228
Italy	0.433	0.564
Poland	0.169	0.196
Others	0.723	1.418
Total	3.822	4.735
Av Price per ton	2390.5	3671.2

to €2390.5 per ton.

<b>Polish Epoxy Resin Trade Jan-2024</b>		
	<b>Ktons</b>	<b>€ million</b>
Exports	0.942	3.132
Imports	1.771	6.393

Most of Spolchemie's epoxy resin production is exported, with a share of the Czech market amounting to only 5%. Besides Bisphenol A, Spolchemie also uses epichlorohydrin in the production of epoxy resins, which it produces itself from renewable resource (glycerine). The company more epichlorohydrin than it needs for epoxy resin production and thus exports up to 5,000 tpa.

<b>Hungarian Benzene Exports (unit-kilo tons)</b>		
<b>Country</b>	<b>Jan-Dec 23</b>	<b>Jan-Dec 22</b>
Belgium	7.416	8.210
Czech Republic	1.005	16.709
Germany	25.473	50.987
France	12.237	14.453
Italy	1.262	8.834
Netherlands	16.677	2.000
Poland	0.000	1.018
Russia	0.000	0.000
Total	64.070	102.209
Av € per ton	830.2	1008.4

in 2022. At the same time shipments to the Netherlands increased from 2,000 tons to 16,677 tons. Average prices for Hungarian exports dropped to €830.1 per ton from €1008.4 per ton in 2022. Besides exports Hungary imported 8,051 tons in 2023.

<b>Hungarian Toluene Imports (unit-kilo tons)</b>			
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Ktons	43.235	35.068	46.222
\$ mil	49.180	38.171	30.064
Av € per ton	1137.5	1088.5	650.4

Average cost prices for toluene averaged €1137.5 per ton in 2023 against €1088.5 in 2022. Germany was the largest supplier of toluene to Hungary in the period January to December 2023, amounting to 21,223 tons which was up from 16,427 tons in 2022. Slovakia reduced shipments from Slovnaft's refinery to 8,152 tons to 8,688 tons, whilst Poland reduced shipments from 5,913 tons to 1,398 tons. The Netherlands was a new supplier to Hungary in 2023, proving 5,822 tons.

Bisphenol A imports into the Czech Republic totalled 2,268 tons in January against 1,674 tons in January 2023. Average prices dropped from €1776.9 per ton to €1410.1 per ton. Belgium was the largest source of imports in January this year, amounting to 814 tons followed by South Korea with 704 tons.

#### **Central European epoxy resin trade Jan-2024**

Czech exports of epoxy resins amounted to 3,822 tons in January against 4,735 tons in January 2023. Average prices dropped sharply in the corresponding first months of each year, dropping from €3671.2 per ton

Polish imports of epoxy resins amounted to 1,771 tons in January against exports of 942 tons. Costs amounted to €6.393 million against export revenues of €3.132 million. Epoxy resins production in Poland is undertaken by Lerg at Pustkow, to the east of Krakow.

#### **Hungarian aromatic imports Jan-Dec 2023**

Hungarian benzene exported 64,070 tons of benzene in 2023 against 102,209 tons in 2022. In other areas of aromatic trade Hungary imported 76,991 tons of styrene in 2023, whilst exporting 25,226 tons of orthoxylene.

Germany was the largest customer got Hungarian benzene in 2023, taking 25,473 tons against 50,987 tons

Toluene imports into Hungary amounted to 43,235 tons in 2023 for €49.180 million in value. This compares against 35,068 tons in 2022 for a total value of €38.171 million.



Hungarian TDI Exports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Austria	2.916	2.679
Belgium	29.732	20.026
Germany	9.922	13.101
Italy	27.254	33.286
Poland	28.346	31.662
Portugal	11.701	11.966
Romania	14.479	14.306
Spain	10.050	9.417
Turkey	33.265	32.917
Others	74.222	60.225
<b>Total</b>	<b>241.887</b>	<b>229.585</b>
Av € per ton	2429.8	2906.7

Hungarian MDI Exports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Czech Republic	6.988	6.100
Germany	20.493	21.115
Italy	10.050	5.094
France	9.237	8.953
UK	6.272	6.662
Poland	32.536	30.438
Romania	14.646	19.260
Turkey	13.620	11.132
US	0.000	23.562
Others	57.754	53.179
<b>Total</b>	<b>171.595</b>	<b>185.496</b>
Av price	1947.4	2338.2

Czech MDI imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Belgium	0.586	0.741
Hungary	0.270	0.784
Netherlands	0.738	0.315
Others	0.464	0.648
<b>Total</b>	<b>2.057</b>	<b>2.487</b>
Av Price € per ton	2050.0	2766.3

Polish MDI Imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Germany	4.542	3.083
Netherlands	1.338	0.961
Hungary	3.708	3.318
Belgium	2.251	1.907
Others	0.998	0.605
<b>Total</b>	<b>12.837</b>	<b>9.875</b>
Av Price € per ton	1793.3	2358.1

## Central European isocyanates & polyols

### Hungarian TDI-MDI exports Jan-Dec 2023

Hungarian TDI exports increased to 241,887 tons against 229,585 tons in January to December 2022. The second half of 2023 showed stability in TDI shipments, in comparison to the lower-than-normal export volumes in the third and fourth quarters in 2022. Average prices dropped from €2906.7 per ton to €2429.8 in 2023. Prices dropped from a peak of €3255.4 per ton in January to €2009.3 per ton in December 2023 which measured against €3389.1 per ton in December 2022.

Regarding destinations, exports of TDI to Belgium rose from 20,026 tons in 2022 to 29,732 tons in 2023 whilst volumes to Italy fell from 33,286 tons to 27,254 tons. In other parts of West Europe Hungarian TDI exports to Portugal dropped from 11,966 tons to 11,701 tons, and to Spain rose from 9,417 tons to 10,050 tons. In Central Europe shipments to Poland fell from 31,662 tons to 28,346 tons and Romania increased from 14,306 tons to 14,479 tons.

MDI exports from Hungary dropped in 2023 to 171,595 tons from 185,496 tons in 2022. The first half of 2022 saw high volume shipments (116,700 tons) but only 68,400 tons were shipped in the second half of 2022. Throughout 2023 export volumes were slightly more balanced with 91,700 tons shipped in the first half and 79,200 tons in the second.

Poland was the largest destination for Hungarian MDI exports, shipping 32,536 tons in 2023 versus 30,438 tons in 2022. Romania is the second largest market in Central and South East Europe, taking 14,646 tons in 2023 which was down from 19,260 tons.

The most significant drop in Hungarian sales was the US where no shipments were made in 2023 against 23,562 tons in January to December 2022. MDI export prices underwent a different price cycle to TDI, dropping from €2338.2 per ton to €1947.4 per ton in 2023.

### Central European isocyanate trade

MDI imports into the Czech Republic totalled 2,057 tons in January 2024 against 2,487 tons in the same month in 2023. Average prices dropped from €2766.3 per ton to €2050.0 per ton.

MDI import prices for Poland dropped from €2358.1 per ton in January last year to €1793.3 per ton in January 2024, but volume imports increased from 9,875 tons to 12,837 tons. Germany provided the largest share of imports, rising from 3,083 tons to 4,542 tons whilst Hungarian shipments rose from 3,318 tons to 3,708 tons.

TDI imports into Poland amounted to 6,971 tons in January which was up from 5,008 tons in last January, with average prices dropping from €3369.4 per ton to €2051.1. Germany increased shipments from 1,414 tons in January 2023 to 2,132

tons whilst imports from Hungary increased from 2,049 tons to 2,894 tons.



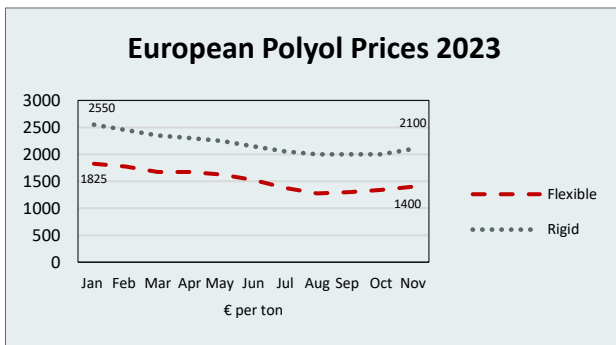
**Polish TDI Imports (unit-kilo tons)**

Country	Jan-24	Jan-23
Belgium	0.250	0.277
Germany	2.132	1.414
Hungary	2.894	2.049
Netherlands	0.250	0.283
Saudi Arabia	0.078	0.344
South Korea	0.845	0.093
Others	0.378	0.548
Total	6.971	5.008
Av € per ton	2051.1	3369.4

**European polyol market**

Polyol prices witnessed some degree of stabilisation in the latter part of 2023, although consumption remains under pressure. The downward trend of consumption started in the second half of 2022 and was particularly noticeable in the first half of 2023. Demand for polyethers returned to growth in September 2023 after the holiday period, a trend that continued in Q4 leading to a return to growth in sales prices.

The most affected industries consuming polyols were construction, comfort (mattresses, chairs, furniture) and home appliances. Low consumption of polyethers generated a continuous decrease in prices in 2023. The pressure on prices was accentuated by massive imports from China and Korea.



European prices for rigid polyols dropped from €2550 per ton in January 2023 to €2100 in December whilst flexible polyols fell from €1825 per ton to €1400 per ton. In the fourth quarter, polyether prices increased on average by €100/ton compared to September. Quantities sold by producers and traders increased by 10% compared to the third quarter. Total sales for the company

amounted to 80,138 tons in 2023, which was 5% lower than in 2022.

Prospects for the European polyurethane sector in 2024 appear slightly better for 2024, but there are numerous external events such as problems in the Suez Canal, military tensions in the Middle East and of course the situation in Ukraine.

Regarding polyol competition from Asia, the delays caused in transportation issues could add another 14-20 days to delivery. This could apply particularly to flexible polyols, where alternative transport routes (depending on loading ports in China and South Korea), could leading to an increase in transport cost by €100/ton. Theoretically, this will reduce the flow of imports or delay monthly imports

**Czech Polyol Imports (unit-kilo tons)**

Country	Jan-24	Jan-23
Belgium	0.987	1.223
Germany	0.663	0.760
France	0.929	0.573
Netherlands	0.401	0.460
Romania	0.213	0.024
Slovakia	0.394	0.342
Others	0.344	0.387
Total	3.931	3.768
Av € per ton	2282.1	2419.9

of 5-10,000 tons of polyol that frequently arrive from Asia, and European production will have to adapt.

Thus, imports are expected to fall this year and combined with plant outages in Europe undertaken in the first quarter could tighten the supply side and allow prices to rise. This reduction in the availability of polyethers in the market could lead to a more balanced situation, and manufacturers will certainly try to regain some of profitability after almost a year of minimal or negative profitability.

**Czech polyol imports Jan-2024**

Czech polyol imports amounted to 3,931 tons in January this year against 3,768 tons in January 2023. The leading supplier to the Czech market was Belgium which shipped 987 tons in against 1,223 tons, followed by France which shipped 929 tons. Average prices dropped from €2419.9 per ton to €2282.1 per ton.

Hungary imported 33,467 tons of polyols in the first ten months in 2023 against 27,624 tons in the same period in 2022. The largest source of imports came from Belgium in the first ten months, amounting to 12,694 tons against 2,218 tons in the same period in 2022. Deliveries from China amounted to 8,671 tons versus 10,028 tons.

<b>Polish Polyol Imports (unit-kilo tons)</b>		
<b>Country</b>	<b>Jan-24</b>	<b>Jan 23</b>
Belgium	1.186	1.331
China	0.698	0.947
France	0.034	0.000
Germany	2.357	2.264
Netherlands	2.876	1.592
Romania	1.524	0.703
Saudi Arabia	0.432	0.000
South Korea	0.832	1.385
Others	0.989	1.714
Total	10.929	9.936
Av Price € per ton	1865.3	2225.4

<b>Polish Polyol Exports (unit-kilo tons)</b>		
<b>Country</b>	<b>Jan-24</b>	<b>Jan-23</b>
Austria	0.018	0.163
Belgium	0.342	0.243
Czech Republic	0.351	0.311
Denmark	0.330	0.362
Estonia	0.172	0.098
Germany	0.583	0.386
Hungary	0.094	0.849
Italy	0.567	0.643
Lithuania	0.245	0.275
Spain	0.218	0.272
Turkey	0.261	0.415
Others	1.159	1.277
Total	4.340	5.292
Price	2022.3	2278.1

<b>Hungarian Polyol Imports (unit-kilo tons)</b>		
<b>Country</b>	<b>Jan-Dec 23</b>	<b>Jan-Dec 22</b>
Austria	0.790	0.321
Belgium	12.887	2.611
China	9.774	11.091
Germany	3.111	3.449
Italy	0.367	0.426
Netherlands	4.996	6.246
Poland	1.684	3.111
Romania	1.673	2.564
Others	2.446	0.988
Total	37.728	30.806

<b>Polish EO/PO Imports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-24</b>	<b>Jan-23</b>
DEG	2.247	1.961
Ethylene Glycol	6.881	10.971
Ethylene Oxide	1.102	2.364
Propylene Glycol	1.865	1.617

other sources. Imports from Russia amounted to 7,807 tons in the whole of 2021 but dropped to 1,192 tons in 2022 and zero in 2023.

### Polish polyol trade Jan-2024

Polish polyol imports amounted to 10,929 tons in January against 9,936 tons in January last year. The major sources of imports came from Belgium, Germany and the Netherlands. Polyol import prices dropped from €2225.4 per ton to €1865.3 per ton. The largest source of imports came from the Netherlands, rising from 1,592 tons to 2,876 tons this January followed by Germany which supplied 2,357 tons.

Exports of polyols from Poland dropped from 5,292 tons in January 2023 against 4,340 tons in January this year with average prices dropping from €2278.1 per ton to €2022.3 per ton. Nearly all exports were sold on European markets.

With the construction of a fifth production line for polyether polyols two years ago, PCC Rokita increased its capacity to 110,000 tpa (measured in terms of standard polyols). The fifth production line is mainly used to manufacture intermediate products for the further polyols production.

The PCC Rokita Group is the largest polyol producer for the production of polyurethanes used in the automotive, furniture and construction industries. The production of polyurethanes in Poland is carried out by Ciech Pianki at Bydgoszcz.

The European polyol market is estimated to comprise around 600,000 tpa. The main product group is polyester polyols, and the dominant market is the segment of panel manufacturers layered. Demand of this market segment is estimated at between 200-220,000 tpa.

Hungarian imports of polyols increased in 2023 to 37,728 tons against 30,806 tons in 2022w with imports from Belgium increasing from 2,611 tons to 12,887 tons. Volumes from China dropped from 11,091 tons to 9,774 tons.

### Polish oxide-glycol trade

Ethylene oxide imports into Poland amounted to 6,881 tons in January which was down from 10,971 tons in January last year. 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 dropped to 6,881 tons in January which was down from 10,971 tons last year. Belgium supplied the largest volume of glycols to the Polish market.

Regarding diethylene glycol (DEG), imports amounted to 2,247 tons in January against 1,961 tons last year. In the past year Saudi Arabia has become the largest supplier of glycols to the Polish market.

Increased consumption is one factor behind the increased imports from Saudi Arabia, the disappearance of Russian DEG has also meant that Polish consumers have had to buy from

## Central European organic chemical trade

## Hungarian maleic anhydride exports (unit-kilo tons)

Country	Jan-Dec 23	Jan-Dec 22
Austria	2.941	4.359
Germany	1.924	1.200
Italy	2.877	2.676
Poland	2.859	4.849
Slovenia	1.869	2.035
Others	7.355	5.744
Total	19.825	20.863
Av € per ton	1155.1	2032.8

## Hungarian imports of acrylonitrile (unit-kilo tons)

Country	Jan-Dec 23	Jan-Dec 22
Germany	2.472	5.708
France	0.891	10.275
Netherlands	10.736	36.858
Russia	0.000	1.488
Others	3.374	3.373
Total	17.472	57.702
Av € per ton	2065.5	2335.2

## Hungarian aniline imports (unit-kilo tons)

Country	Jan-Dec 23	Jan-Dec 22
Belgium	24.545	17.129
China	11.067	0.120
Czech Republic	65.110	148.579
Others	2.031	7.345
Total	102.754	173.173
Av € per ton	1401.2	1733.8

## Polish Organic Chemical Trade

Exports	Jan-24	Jan-23
Value (€ million)	118.5	148.3
Vol (kilo tons)	96.0	108.9
Imports	Jan-24	Jan-23
Value (€ million)	309.9	377.1
Vol (kilo tons)	201.4	206.4

## Polish Organic Chemical Imports (unit-kilo tons)

Product	Jan-24	Jan-23
Acetic Acid	1.267	3.387
Acetone	0.224	0.616
Butadiene	7.019	6.759
DINP/DOP	1.784	0.000
Ethyl Acetate	1.405	0.918
Lysine	6.439	3.035
Maleic Anhydride	2.483	1.645
Methanol	44.461	52,201
Propylene	7.375	8.194
VAM	1.300	1.038

## Hungarian maleic anhydride exports Jan-Dec 2023

Hungary exported 19,825 tons of maleic anhydride in 2023 against 20,863 tons in 2022, with average prices dropping from €2032.8 per ton to €1155.1 per ton. Export shipments to Austria amounted to 2,941 tons against 4,359 tons in 2022, whilst exports to Poland dropped from 4,849 tons to 2,859 tons. Other markets included Italy, Germany and Slovenia.

## Hungarian acrylonitrile imports Jan-Dec 2023

Hungary imported 17,472 tons of acrylonitrile in 2023 against 57,702 tons in 2022. The Netherlands was the main source of imports in both years, shipping 10,736 tons in January to December 2023 versus 36,858 tons in 2022. Acrylonitrile prices dropped on average from €2335.2 per ton to €2065.4 per ton in 2023.

## Hungarian aniline imports Jan-Dec 2023

Aniline imports into Hungary amounted to 102,754 tons in 2023 against 173,173 tons in 2022. BorsodChem opened its new plants for nitrobenzene and aniline at the start of July 2022 which has reduced the need for imports. The nitrobenzene plant consists of a capacity of 240,000 tpa and aniline at 200,000 tpa. Shipments from BorsodChem-MCHZ in the Czech Republic to Hungary amounted to 65,110 tons against 148,579 tons in 2022. Belgium supplied 24,545 tons in 2023 against 17,129 tons in 2022. Cost prices of aniline imports into Hungary dropped from €1733.8 per ton to €1401.2 in 2023.

## Polish organic chemical trade Jan-2024

Volumes and values of Polish organic chemical trade, in both exports and imports, were lower in January against January 2023 but at the same time showed signs of stabilisation. Exports of organic chemical products dropped from 108,900 tons to 96,000 tons whilst revenues dropped from €148.3 million to €118.5 million. Some of the main organic products exported by Poland include normal butyl acetate.

Imports of organic chemicals dropped slightly from €377.1 million to €309.9 million. Methanol imports into Poland totalled 44,461 tons in January against 52,170 tons in January 2023. Acetic acid imports dropped from 3,285 tons to 1,269 tons, with average prices dropping from €1043.8 per ton to €632.7 per ton.

Ethyl acetate imports into Poland amounted to 1,405 tons in January 2024, with shipments arriving from Mexico, South Africa and Germany. Average prices for ethyl acetate imports dropped from €1319.3 per ton in January 2023 to €1123.9 per ton this year. VAM prices also reflected the lower feedstock costs, dropping from €1460.8 per ton in January last year to €1246.8. Imports of VAM increased from 1038 tons to 1300 tons this year

with Saudi Arabia providing over half of the supply.

## Central European methanol markets

Czech Methanol Imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Estonia	1.212	0.000
Poland	4.044	4.851
Others	0.304	0.383
Total	6.863	6.975
Av € per ton	402.0	387.0

Poland Methanol Imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Belgium	8.374	0.000
Estonia	0.598	0.000
Germany	6.649	3.208
Netherlands	0.145	3.946
Norway	8.401	6.300
Russia	0.000	33.690
Venezuela	20.245	0.000
Others	0.050	0.046
Total	44.461	52.170
Av € per ton	325.5	320.3

Poland Methanol Exports (unit-kilo tons)		
Country	Jan-24	Jan-23
Austria	0.000	4.402
Czech	3.199	5.641
Germany	8.328	6.776
Romania	0.000	2.890
Slovakia	3.644	4.524
Ukraine	2.474	3.863
Hungary	0.000	0.411
Others	0.060	0.063
Total	17.705	28.569
Av € per ton	383.2	403.5

Hungarian methanol imports (unit-kilo tons)		
Country	Jan-Dec 23	Jan-Dec 22
Austria	2.137	2.778
Germany	35.513	16.456
Netherlands	26.702	12.464
Poland	10.358	24.092
Russia	0.000	21.526
Slovenia	7.630	3.635
Slovakia	4.591	23.469
Others	4.058	4.730
Total	90.989	109.150
Av € per ton	426.6	559.5

## Central European methanol trade Jan-2024

Czech imports of methanol amounted to 6,212 tons in January 2024 against 6,105 tons in January 2023. Imports from Poland amounted to 4,851 tons versus 4,044 tons whilst Estonia supplied 1,212 tons. Prices per ton for methanol imports amounted to €402.0 per ton in January.

Imports of methanol into Poland were completely restructured in January this year with the leading supplier replaced by Venezuela against Russia. Imports from Venezuela amounted to 20,245 tons in January against imports of 33,690 tons from Russia in January 2023. Other sources this year have included shipments from Germany, Belgium and Norway.

In place of Russian exports Poland increased imports from Norway, rising from 30,160 tons to 101,129 tons and from new countries such as Trinidad which supplied 43,007 tons in 2023 and Venezuela which supplied 38,759 tons. Average costs for Polish methanol imports dropped from €380.4 per ton in 2022 to €301.8 in 2023.

Exports of methanol from Poland amounted to 17,705 tons in January against 28,569 tons in January 2023. Poland supplied 2,474 tons to Ukraine in January versus 3,863 tons in January 2023. Trade increased in the first year of the war as Poland became a trading route for Russian methanol supply to South East Europe which became inaccessible through Ukraine. EU sanctions on Russian methanol mean that Polish traders have lost one of their largest suppliers. Average prices for Polish methanol exports dropped from €403.5 per ton in January last year to €383.2 in 2024.

Imports of methanol into Hungary totalled 90,989 tons in 2023 versus 109,150 tons in 2022, with average prices falling from €559.5 per ton to €426.6 per ton. Germany provided 35,513 tons which was up from 16,456 tons in 2022. Imports from Poland dropped from 24,092 tons to 10,358 tons, whilst inward shipments from the Netherlands increased from 12,464 tons to 26,702 tons. Imports from Russia were not carried out in 2023 against 21,526 tons in 2022, all of which were shipped in the first quarter.

Azerbaijan has replaced some of Russia's previous market share in Europe. The top five importers of methanol from Azerbaijan include Romania, Italy, the Netherlands, Spain and Lithuania. Exports to the EU from Azerbaijan's SOCAR plant in total amounted to 260,700 tons in 2023 which was 0.4% down from 2022.

Romania imported 82,300 tons of methanol from Azerbaijan in 2023 against 60,100 tons in 2022, whilst the Netherlands reduced imported from 105,800 tons in 2022 to 71,300 tons.



## Company news

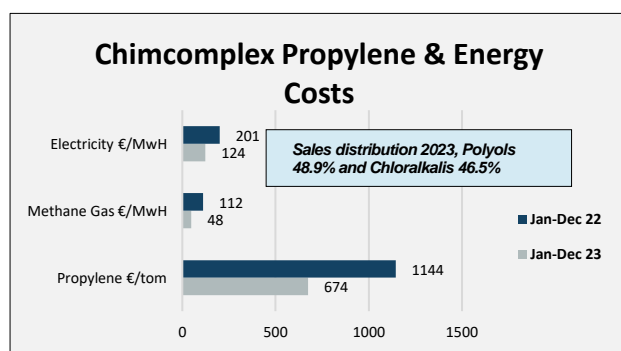
Grupa Azoty Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Nitrogen Fertilisers	2299	2741
Compound Fertilisers	264	769
Potassium Fertilisers	40	80
Pigments	9	24
Urea	796	1037
Oxo alcohols	53	146
Polyamide	48	126
Ammonia	33	23
Caprolactam	84.6	123.2
Speciality Fertilisers	132	247

## Grupa Azoty Jan-2024

Debt issues for Grupa Azoty have raised the spectre of deconsolidation even though the group wants to stay in its current format. The government, which has an interest in Azoty, tends to want to retain the group as it stands at the same time there are question marks regarding the investment of a coal fired plant at Pulawy and the polypropylene project for Polimery Police.

The new management team is currently working on a new strategy which may take several months before becoming evident. The addition of the Polimery Police plant to Grupa Azoty could help significantly to the financial performance of Grupa Azoty which has been under pressure from energy and raw material costs in the past two years.

Strong competition from Asian fertiliser producers, which benefit from both competitive labour costs and lower energy prices have been a major problem in the past two years. Moreover, the plastics segment has had a very difficult time in conjunction with the downturn in the construction and automotive industries. High costs combined with weak demand have presented challenges to Grupa Azoty in managing production and sales. In the chemical segment, prices are falling due to lower demand from European customers and thus effectively all the main product groups are under pressure.



The company currently has high debt, high financing costs, and a new complex that is not yet generating cash. Orlen has indicated that it is ready to take over the Pulawy plant from Grupa Azoty, but for at least the time being this interest has been rejected.

## Chimcomplex Jan-Dec 2023

Romanian chemical producer Chimcomplex operated at a reduced capacity over 2023 due to market circumstances. Costs declined last year

for raw materials and energy, and average prices of one the company's main feedstocks propylene reduced from €1144 per ton to €674 per ton.

Chimcomplex Revenues (€ million)		
Product Group	Jan-Dec 23	Jan-Dec 22
Petrochemicals	137.734	220.502
Chloralkali	130.975	200.262
Oxo alcohols	1.119	13.430
Other	11.603	28.475
Total	281.431	462.669

Despite lower costs overall, margins have been restricted by lower prices for polyols. Chloralkali sales helped offset the weakness in polyol sales and allowed the company to attain an 8% margin between January and December 2023. Energy costs were significantly lower this year for both natural gas and electricity.

Chimcomplex's turnover totalled €281.4 million in 2023, decreasing from €462.7 million in 2022. The company recorded an operating profit of €22.542 million in 2023 and the net profit amounted to €15.296 million, decreasing from €23.160 million in 2022. In the context of a continued decline in consumption that began in the second half of 2022, Chimcomplex's sales volume decreased by 38% in 2023 compared to 2022. However, cost reduction efforts led to achieving an operating profit margin of 8% in 2023.

The drop in turnover was caused by lower quantities sold by the company. Chimcomplex focused its activity on the polyols/polyethers and caustic soda sectors, which were the most profitable. The share of the main products in total sales comprised 48.9% for polyols and 46.5% for chloralkali products.



PCC Rokita Margins		
Product Group	Jan-Dec 23	Jan-Dec 22
Polyurethanes	4.1%	12.2%
Chloralkalis	26.7%	40.1%
Chemical	8.0%	27.1%

#### PCC Rokita Jan-Dec 2023

Due predominantly to the weakness in the polyurethane sector and polyol sales, PCC Rokita reduced net profits from €143.994 million in 2022 to €59.155 million in 2023. The company generated revenues of €527.381 million, which was 26% lower than in 2022.

PCC Rokita Product Sales (unit-kilo tons)		
Product Group	Jan-Dec 23	Jan-Dec 22
Polyurethanes	88.4	95.0
Chloralkalis	316.0	395.1
Chemical	20.3	25.4

In terms of product shares, polyols accounted for 42% of PCC Rokita's sales, with the chlorine division accounting for 44% and phosphorous chemicals 8%. By region, 48% of total sales were shipped to the Polish market, 24% to the EU, 14% to Germany and 3% to Asia.

PCC Rokita's sales (€ million)		
Product Group	Jan-Dec 23	Jan-Dec 22
Polyurethanes	214.8	279.7
Chloralkalis	297.3	443.4
Chemical	36.0	51.6

Revenues declined in all three sectors, but the chlorine division recorded the largest proportional fall. The decline in revenues from these three complexes was caused, on the one hand, by lower sales volume and, on the other hand, by lower average sales prices of the offered products.

PCC Rokita's Prices (€ per ton)		
Product Group	Jan-Dec 23	Jan-Dec 22
Polyurethanes	2321.7	3387.1
Chloralkalis	728.4	718.4
Chemical	1779.1	2044.4

Significant factors affecting the segment's result in relation to 2022 included a decrease in demand for polyether polyols, increased market availability of polyether polyols from outside Europe, and a decline in prices and margins on the market.

Profitability in the European polyol sector has reached its lowest levels in many years, despite the improvement in the third and fourth quarters. Margins for PCC Rokita's polyurethanes dropped from 12.2% in January to December 2022 to only 4.1% in 2023, although the chlorine sector's margins only dropped from 26.7% against 40.1%.

PCC Exol Margins		
	Jan-Dec 23	Jan-Dec 22
Total margins	18.3%	21.9%
Net margins	4.4%	10.1%

#### PCC Exol Jan-Dec 2023

The PCC Exol Group generated a net profit in 2023 that was almost 65% lower than 2022. However, the comparative year, i.e. 2022, was a period in which record results were recorded, and thus 2023 was considered relatively successful.

PCC Exol's sales (unit-kilo tons)		
Product Group	Jan-Dec 23	Jan-Dec 22
Surfactants-detergents & cosmetics	67.4	66.9
Surfactants-industry	33.2	33.6
PCC Exol's sales (€ million)		
Product Group	Jan-Dec 23	Jan-Dec 22
Surfactants- detergents & cosmetics	89.8	112.9
Surfactants-industry	74.7	94.9
PCC Exol's Prices (€ per ton)		
Product Group	Jan-Dec 23	Jan-Dec 22
Surfactants- detergents & cosmetics	1332.9	1687.6
Surfactants-industry	2249.9	2825.6

Sales of surfactants for detergents and cosmetics rose slightly from 66,900 tons to 67,400 tons in 2023, whilst sales of industrial surfactant sales dropped from 33,600 tons to 33,200 tons. Prices for both categories fell from €1687.6 per ton to €1332.9 per ton and €2825.6 per ton to €2249.9 per ton.

In terms of market demand, in the first half of 2023, and especially in the second quarter, the market faced a decline in demand. The decline in demand was caused by high stocks of surfactants in many European companies.

The third quarter showed some improvement before tailing off at the end of the year. On the producers' side, the surfactant market in 2023 was characterized by oversupply, and at the same time, increased imports of surfactants to Europe were noted. The further development of surfactant imports to Europe in 2024 may be influenced by the geopolitical situation in the Middle East. The situation facing shipping owners of limited imports through the Suez Canal due to terrorist attacks on commercial ships in that region.

## RUSSIA

Russian Petrochemical Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Ethylene	409.3	391.3
Propylene	238.2	232.2
Benzene	129.5	113.4
Toluene	29.6	27.4
Xylenes	41.8	39.9
Orthoxylene	12.3	11.0
Paraxylene	20.8	20.2
Styrene	56.3	62.4
Ethylbenzene	59.8	70.9
Methanol	378.0	330.3
Isopropanol	6.1	5.7
Ethylene Glycol	39.6	38.5
Butanols	11.4	5.7
Phenol	23.6	15.9
Acetic Acid	23.4	15.9
Phthalic Anhydride	9.8	7.0

### Russian petrochemical and organic chemical production Jan-24

The chemical industry in Russia appears to be unaffected by the apparent damage to numerous Russian refineries from drone attacks in the past two months. The most important challenge facing Russian petrochemical producers at present is export logistics, where costs are rising and rail deliveries to the Far East have been very difficult since the start of 2024 due to a lack of agreement on tariffs. Thus, in some cases product deliveries to China have had to be re-routed.

In January Russian chemical production started as it finished 2023 with volumes close to pre-invasion levels. Ethylene production amounted to 409,300 tons in January against 391,300 tons in January 2023 whilst propylene production increased from 232,200 tons to 238,200 tons.

Aromatic monomer and derivative production in January was stable for most products, apart from ethylbenzene which fell from 70,900 tons to 59,800 tons and styrene which fell from 62,400 tons to 56,300 tons. Production of aromatics could be affected by the increasing drone attacks on Russian refineries, which are aimed principally at disabling fuel sources. Kirishi has already been hit once, whilst other aromatic producing refineries at Omsk and Ufa may be too far from the Ukrainian border to be targeted by drones.

Russian Polymer Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Plastics in Bulk	920.0	885.0
Polyethylene	316.1	317.8
Polystyrene	45.9	48.1
PVC	92.8	76.3
Polypropylene	197.9	193.1
Polyamide	11.7	11.5
Synthetic Rubber	121.7	121.4
Synthetic Fibres	13.7	14.1

### Russian polymer production Jan-2024

The production of plastics in primary forms in Russia in January 2024 rose 3.9% to 920,000 tons. The main stimulant from higher growth in plastics production came from PVC which rose by 27.3% over January 2023 whilst the production of formaldehyde resins increased by 12.6%. At the same time, the production of polystyrene dropped 4.6% and polyacetals dropped 2.3%. The volume of synthetic rubbers produced amounted to 121,700 tons versus 121,400 tons in January 2023.

### SIBUR's domestic market sales increase but profits fall

SIBUR's net profit is reported to have amounted to 168.510 billion roubles in 2023, equating roughly to \$1.8 billion. Data for the full year of 2022 is not available but for the nine months net profits amounted to 226.4 billion roubles which equated to roughly \$2.5 billion. The company's debt increased by the end of 2023 to about 637 billion roubles against 635.2 billion roubles at the end of 2022.

SIBUR's production of petrochemical products amounted to 8 million tons in 2023 of which 5.9 million tons, or around 75%, were sold on the domestic market. SIBUR exported about 1.8 million tons to the countries of the Asia-Pacific region and the Middle East. Thus, despite SIBUR's prioritisation of the domestic market exports still play an important role in overall sales.

Only synthetic rubber remains dominated by exports whilst for basic polymers and special chemicals, SIBUR primarily focused on the Russian market in 2023. For 2023 sales of SIBUR's polypropylene and polyethylene in the domestic market increased by 11% compared to 2022. In other product areas, sales of BOPP films increased by 16% in 2023, elastomers by 8%, and plastics and organic synthesis products by 11%.

## Russian petrochemical production and markets

Russian Ethylene Production (unit-kilo tons)		
Region	Jan-24	Jan-23
North Caucasus Federal District	31.411	28.345
Volga Federal District	195.399	195.375
Ural federal district	136.115	124.126
Siberian Federal District	46.373	43.441
Total	409.298	391.287

### Russian ethylene production, Jan-2024

Russian ethylene production totalled 409,226 tons in January 2024 against 391,287 tons in January 2023. Regarding individual producers ZapSibNeftekhim at Tobolsk produced 136,115 tons up from 124,126 tons from January 2023. The two Siberian crackers at Tomsk and Angarsk increased production from 43,441 tons to 46,373 tons.

Russian Propylene Production (unit-kilo tons)		
Region	Jan-24	Jan-23
North Caucasus Federal District	13.164	11.078
Volga Federal District	84.384	83.651
Ural federal district	94.633	95.427
Siberian Federal District	45.994	42.007
Total	238.175	232.163

Stavrolen at Budyennovsk increased production from 28,345 tons to 31,411 tons whilst production from the five plants in the Volga Urals region was almost the same at 195,399 tons versus 195,375 tons. These plants included Nizhnekamskneftekhim and Kazanorgsintez in Tatarstan, Gazprom neftekhim Salavat and Ufaorgsintez in Bashkortostan, and SIBUR-Kstovo in the Nizhniy Novgorod region.

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-24	Jan-23
Angarsk Polymer Plant	4.523	2.187
SIBUR-Kstovo	17.427	12.378
LUKoil-NNOS	15.449	18.833
Stavrolen	0.000	3.302
Others	5.656	2.595
Total	37.399	38.662

### Russian propylene production Jan-2024

Russian propylene production amounted to 238,175 tons in January against 232,163 tons in January 2023. ZapSibNeftekhim reduced production at Tobolsk slightly from 95,427 tons to 94,633 tons whilst the four plants located in the Volga-Urals produced 84,384 tons against 83,651 tons. Stavrolen increased production from 11,078 tons to 13,164 tons and the Siberian plants increased from 42,007 tons to 45,994 tons.

Russian Propylene Domestic Purchases (unit-kilo tons)		
Consumer	Jan-24	Jan-23
Saratovorgsintez	13.814	16.035
Volzhskiy Orgsintez	1.166	0.889
Akrilat	2.233	0.511
SIBUR-Khimprom	3.637	1.993
Omsk-Kaucuk	4.846	1.802
Tomskneftekhim	1.182	0.504
ZapSibNeftekhim	6.858	14.901
Moscow Refinery	0.873	0.250
Ufaorgsintez	0.302	1.269
Kazanorgsintez	0.690	0.000
Khimprom Kemerovo	0.331	0.508
Total	37.399	38.662

Russian sales of propylene on the domestic merchant market amounted to 37,399 tons in January 2024 against 38,662 tons last year. The largest propylene supplier to the domestic market was SIBUR-Kstovo which increased sales from 12,378 tons to 17,427 tons.

Regarding consumers Saratovorgsintez purchased 13,814 tons in January against 16,035 tons last year, whilst ZapSibNeftekhim reduced purchases from 14,901 tons to 6,858 tons.

### Russian butadiene production Jan-2024

Russian butadiene production totalled 51,891 tons in January this year against 40,322 tons in January 2023. The largest producers ZapSibNeftekhim and Nizhnekamskneftekhim both increased production in January this year, rising to 26,391 tons and 16,719 tons respectively.

Russian Butadiene Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
ZapSibNeftekhim	26.391	15.677
Nizhnekamskneftekhim	16.719	13.885
Togliattikaucuk	3.798	4.445
Sterlitamak Petrochemical Plant	2.086	2.350
Omsk Kaucuk	2.897	3.965
Total	51.891	40.322

ZapSibNeftekhim is the sole Russian butadiene producer which produces only for merchant market sales. Nizhnekamskneftekhim processes most of its butadiene into rubber grades SKD-N and SKD-L. Other producers of butadiene in Russia include Togliattikaucuk, Sterlitamak Petrochemical, and Omsk Kaucuk.

## Russian bulk polymers

### Russian Ethylene Polymer Production by Region

Region	Jan-24	Jan-23
Central Federal District	6.565	9.573
Northwestern Federal District	2.505	2.706
Southern Federal District	0.000	2.410
North Caucasus Federal District	28.962	26.469
Volga Federal District	99.700	114.182
Ural federal district	145.596	130.525
Siberian Federal District	30.578	31.932
Far East	0.010	0.010
Total	313.906	317.798

### Russian plastics production Jan-2024

Russian bulk plastics production amounted to 920,000 tons in January this year against 885,000 tons in January 2023. Despite the increase this year's figure was still lower than the 946,000 tons in January 2022.

Polyethylene production amounted to 313,906 tons in January 2024 against 317,798 tons in the first month last year. The largest producer ZapSibNeftekhim at Tobolsk produced 145,596 tons against 130,525 tons. Production in Siberia is undertaken at Tomsk and Angarsk and for both plants amounted to 30,578 tons in January 2024 versus 31,932 tons. Tomskneftekhim produced a total of 444,000 tons of LDPE and

polypropylene in 2023. The increase in output at Tomsk was due to the modernisation of equipment and the undertaking of a number of technical improvements.

Most of the polyethylene plants are close to running at full capacity, although Kazanorgsintez faces feedstock limitations. Production in Russia should be boosted in 2025 following the completion of the new EP-600 cracker at Nizhnekamsk which is expected to be ready for production by the end of 2024. Not only will this new ethylene plant provide feedstock for increased production at Nizhnekamskneftekhim, but it will also provide feedstock for Kazanorgsintez where polymer capacity exceeds olefin capacity. As part of SIBUR's investment at Nizhnekamskneftekhim, the new 50,000 hexene plant will enable the production of higher-grade polyethylene.

### Russian Propylene Polymer Production (unit-kilo tons)

Region	Jan-24	Jan-23
Central Federal District	10.652	13.705
Northwestern Federal District	0.001	0.006
Southern Federal District	0.001	0.858
North Caucasus	10.910	7.572
Volga Federal District	38.148	35.968
Ural federal district	105.983	104.255
Siberian Federal District	32.237	30.759
Total	197.932	193.124

### Russian polypropylene production Jan-2024

Production of propylene polymers in Russia amounted to 197,932 tons in January against 193,124 tons in January 2023. ZapSibNeftekhim accounted for 105,983 tons which was up from 104,255 tons last year. Nizhnekamskneftekhim and Ufaorgsintez jointly accounted for 38,148 tons in the first month in 2024 against 35,968 tons in January last year, whilst Stavrolen increased production to 10,910 tons from 7,572 tons.

### Russian trade in bulk polymers

Russian polymer exports have been in decline since 2022 and this trend followed into 2023, even if exports remain

relatively important in some product areas. The decrease in the share of exports in polymer shipments is due to higher demand from domestic processors which have increased activity since the mass exit of Western companies from the market. This scenario has allowed Russian processors not only to fill market gaps left by European suppliers, but also to be able to introduce new brands to the market. Pipe polymers has seen the largest growth covering areas of the water and gas industries.

### Russian Polyethylene Sales (unit-kilo tons)

Product	Total Sales	Exports	Export % of sales
2021	3402	1978	58.1
2022	3362	1743	51.8
2023	3389	1106	32.6

### Russian polyethylene market 2023

Polyethylene exports from Russia have been steadily declining for two years in parallel with the growth of domestic consumption. Exports dropped to 1.106 million tons in 2023 compared to 1.978 million tons in 2021. No exports to the EU countries and Ukraine were undertaken in 2023. The main market has been and remains China. Although volumes dropped from

407,649 tons in 2022 to 307,574 tons in 2023, the first two months of 2024 has seen higher volumes.

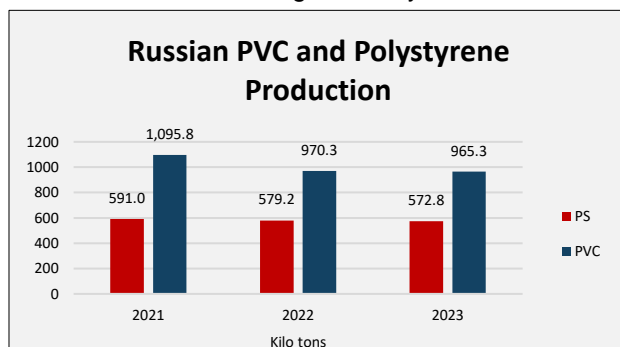


The largest consumer of Russian polyethylene in 2023 was Turkey where shipments amounted to 428,000 tons which compares against 270,000 tons in 2021. The reason shipments to Turkey have increased are largely connected with shorter transport distances and easier logistics. China and Turkey accounted for around 90% of polyethylene exports from Russia last year. Vietnam became the third largest export market in 2023 accounting for 63,000 tons, which is 2.5 times higher than in 2021.

By contrast inward shipments of polyethylene from China into Russia increased by value in the first eleven months to 95,891 tons versus 48,379 tons in 2022 and 21,983 tons in 2021. Russian imports of polyethylene from China started rising in the last few months in 2022 and then stabilised in for the first three quarters in 2023. The fourth quarter saw more export more volumes which appear to have carried into 2024.

Russian Polypropylene Sales (unit-kilo tons)			
Product	Total Sales	Exports	Export % of sales
2021	2113	730	34.5%
2022	1956	662	33.8%
2023	2075	875	42.2%

157,109 tons in 2023 against only 13,000 tons in 2021. Exports to Uzbekistan have also risen in the past two years, amounting to 108,000 tons in 2023 against only 7,000 tons in 2022.



Russian PVC Sales (unit-kilo tons)			
Product	Total Sales	Exports	Export % of sales
2021	1043	143	13.7%
2022	890	149	16.7%
2023	935	87	9.3%

Turkey remained the largest importer of Russian PVC in 2023, although volumes dropped by half to 32,000 tons. Shipments to Azerbaijan increased three-fold (up to 16,000 tons) and to Kazakhstan four-fold times (up to 19,000 tons).

Russian Polystyrene Sales (unit-kilo tons)			
Product	Total Sales	Exports	Export % of sales
2021	564	39	6.9%
2022	544	61	11.2%
2023	529	26	4.9%

Polystyrene production in Russia is focused mainly on the domestic market. Exports increased in 2022 for general-purpose polystyrene and impact-resistant polystyrene which mainly went to China. At the same time, imports dropped sharply. Exports of expanded polystyrene in two years decreased by two and a half times, amounting to 8,400 tons in 2023. Prior to the war Ukraine was the main buyer of Russian expandable polystyrene, taking 10,584 tons in 2021 in addition to 1,933 tons of general-purpose polystyrene. Turkey became the main sales market in 2023 and accounted for 62% of all Russian polystyrene exports. Uzbekistan was also a major buyer, which increased purchases by 2.5 times compared to 2021. This country accounted for 19% of Russian exports in 2023.

### Russian PP market 2023

Polypropylene exports amounted to 875,000 tons in 2023 against 662,000 tons in 2022. Polypropylene processing in the Russian domestic market has been slower than polyethylene to increase, whilst at the same time the shift in trade to China in the past two years has been successful. Exports to China in 2023 amounted to 157,109 tons in 2023 against only 13,000 tons in 2021.

### Russian PVC & Polystyrene market 2023

Production of both PVC and polystyrene in Russia has declined since 2021 but have relatively withstood the impact of international sanctions. PVC demand in Russia suffered more than any other of the bulk polymers from sanctions and production dropped from 1.095 million tons in 2021 to 970,300 tons in 2022.

As PVC demand recovered to an extent in the latter part of 2023 this led to increases in production and volumes last year were only slightly down on 2022. The increased demand in 2023 also meant that there was less product available for exports which dropped from 149,000 tons in 2022 to 87,000 tons, dropping in share of total sales from 16.7% to 9.3%.



## Paraxylene

Russian Paraxylene Production (unit-kilo tons)		
Region	Jan-24	Jan-23
Kirishinefteorgsintez	3.636	3.263
Ufaneftekhim	10.802	14.224
Gazprom Neft	10.001	6.001
Total	24.440	23.488

### Russian paraxylene production Jan-24

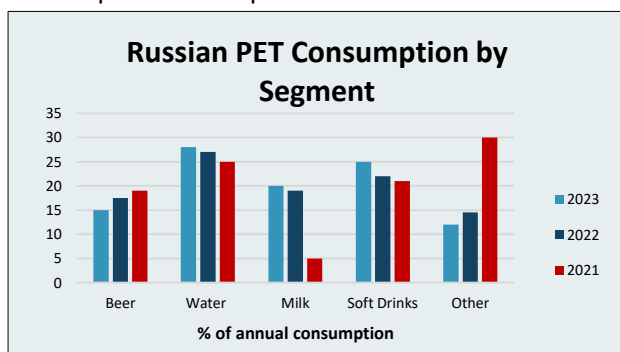
Russian paraxylene production amounted to 24,440 tons in January against 23,488 tons in the same month in 2023. Ufaneftekhim reduced production from 14,224 tons to 10,001 tons whilst Gazprom Neft increased production from 6,001 tons to 10,001 tons.

Ufaneftekhim's paraxylene capacity was increased to 260,000 tpa in 2022 but is operating at under 50% utilisation rate which is fairly indicative of the global market. In the US, Ineos Aromatics has taken a strategic decision to indefinitely halt the operations of two paraxylene production lines at its Texas City facility in Texas. The affected lines have capacities of 525,000 tpa and 400,000 tpa.

## Russian PET

### Russian PET consumption 2023

Overall consumption of PET preforms increased from 718,000 tons in 2022 to 744,000 tons in 2023. At the same time, there was a redistribution of shares in the main segments of PET consumption. Consumption of PET preforms for bottles in Russia in the beer segment fell by 4.8% in 2023 against an increase of 2.5% in 2022. Conversely the share of soft drinks increased to 25% after experiencing a decline in 2022.



The shares of the water and milk segments in PET consumption showed growth for the second year. Water production accounted for 25% of all preforms sold in the Russian market in 2021, and this share rose to 27% in 2022 and 28% in 2023. Regarding the milk sector, only 5% of preforms were consumed in 2021, but this rose to 19% in 2022 and 20% in 2023.

Further growth is predicted in the water and milk segments. PET bottles are not only more cost-effective due to its weight, but also much more environmentally friendly in terms of its recycling capabilities in Russia and its carbon footprint. There are no restrictions at the legislative level on transparent PET for water, but it is required to be white for milk.

The departure of some foreign brands from the Russian market has helped accelerated the development of the bottled water industry in Russia. Domestic players have used this unique opportunity to expand the sales market, bringing their brands to new regions and increasing the range of products. Despite the

Russian polyester fibre producers		
Company	Licensor	Main production area
Vostokhimvolokno	Moscow	Polyester yarns
Komitex	Syktvykar	Geotextiles and fabrics
TechnoNikol	Tver	PET fibres various
Selena-Khimvolokno	Karachay-Cherkessia	Textiles, non-wovens
Shakhty Polyester	Shakhty	Polyester staple
Zavidovsky Textile	Tver	Upholstery polyester fabrics

difficulties that the Russian market experienced in 2022 and 2023, bottled water continues to be a sought-after product.

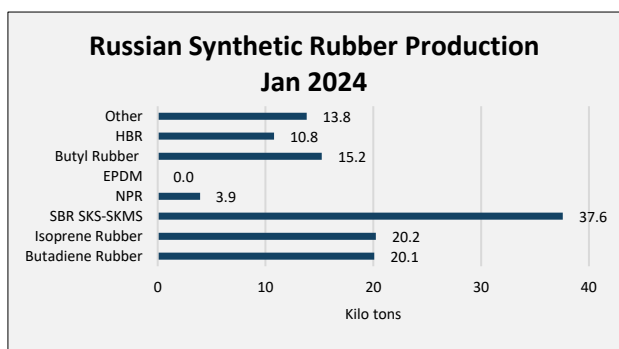
2023, with around 60% of the market based on imports. The domestic market of polypropylene and polyamide fibres and yarns is balanced, but the situation is quite different for polyester fibres and yarns, which are most in demand by various sectors of industry. More than 200,000 tpa of polyester fibres and yarns worth more than \$250 million are purchased annually. To date, PET for fibre purposes has not been produced in Russia. At the same time, the production of food-grade PET in the Russian Federation, used mainly for bottle containers, exceeds 600,000 tpa.

## Russian polyester market

### Russian polyester fibre market

The demand for PET fibres in Russia and yarns amounted to around 330,000 tons in

## Synthetic rubber

**Russian synthetic rubber production Jan-2024**

Synthetic rubber production in Russia amounted to 121,672 tons in January 2024 against 121,396 in the same month in 2023. The largest category of production came from butadiene-styrene SKS-SKMS, which are Russian SBR grades, and this amounted to 37,587 tons.

Isoprene rubber production amounted to 20,243 tons and butadiene rubber amounted to 20,101 tons. Isoprene rubber production is undertaken in Russia at Nizhnekamskneftekhim, Togliattikaucuk and Sterlitamak Petrochemical Plant. Butyl rubber production at Nizhnekamskneftekhim and Togliattikaucuk totalled 15,227 tons in January and halogenated butyl rubber at Nizhnekamskneftekhim 10,785 tons.

Russian Synthetic Rubber Production by Region (unit-kilo tons)		
Region	Jan-24	Jan-23
Central Federal District	26.335	24.815
Northwestern Federal District	0.140	0.000
Volga Federal District	86.446	85.644
Siberian Federal District	8.751	10.937
Total	121.672	121.396

In terms of regional production Tatarstan and Bashkortostan accounted for 72% of total synthetic rubber production in January. Around 20% of production took place at Voronezhskintezkavkuk and 7% at

Omsk Kavkuk. Of the total production of synthetic rubber in January, 86,446 tons came from the combined plants of Nizhnekamskneftekhim and Togliattikaucuk. Voronezhskintezkavkuk produced 26,335 tons against 24,815 tons in January 2023 whilst Omsk Kavkuk reduced production from 10,937 tons to 8,751 tons. The largest producer of synthetic rubber in Russia Nizhnekamskneftekhim recorded a fall in revenues in 2023 by 11.7% to 227.5 billion roubles. The company's net profit amounted to 22.6 billion roubles against 47.8 billion roubles in 2022.

Russian Tyre Production (unit-kilo tons)		
Product	Jan-24	Jan-23
Car Tyres	19.6	13.5
Lorry tyres	3.8	4.8
Agricultural tyres	0.5	0.4
Total	23.9	18.7

**Russian synthetic rubber market Jan 2024**

Tyre manufacturing in Russia showed an increase in January 2024, rising particularly in the car sector where consumption increased from 13,500 tons to 19,600 tons. Russian and localized foreign manufacturers provide about 60% of domestic tyre consumption, despite the sanctions. There are a total of 18 production facilities in Russia, where tyres of various classes are produced but quality remains a problem.

The main problem facing the Russian tyre sector is the depletion of stocks of high-quality tyres of top brands, the prices for which have increased significantly. At the same time the quality of budget tires leaves much to be desired according to market observers, as Chinese and Russian tyres perform their function extremely poorly.

**Raw materials for Russian tyre industry**

In some respects, the Russian tyre market has quickly reoriented to the supply of tyres and raw materials for their domestic production to friendly countries. On the other hand, Russia needs to establish the production of vulcanizers, plasticizers and other components to create a full chain of production. The Department of Chemical Industry of the Ministry of Industry and Trade of Russia has already identified at least 40 raw materials which are necessary for the creation of these products. To meet SIBUR's own needs which have been accentuated through the exit of international companies from the Russian market, the company has decided to build its own catalyst plant at the holding's Voronezh site. The design production capacity amounts to 350 tons per annum for pure N-butyllithium. SIBUR plans to build three production lines for synthesis and filtration.

## Methanol

Russian Methanol Production (unit-kilo tons)		
Region	Jan-24	Jan-23
Central Federal District	127.495	117.549
Northwestern Federal District	8.881	6.495
North Caucasus Federal District	11.595	7.812
Volga Federal District	155.631	114.865
Ural federal district	5.579	5.924
Siberian Federal District	68.843	77.667
Total	378.024	330.312

## Russian methanol production Jan-2024

Russia produced 378,024 tons of methanol in January this year against 330,312 tons in January 2023, with the combination of export activity and domestic merchant sales enabling most producers to run at reasonable capacity levels. By regional production the Volga-Urals region represents the largest in Russia, producing 155,631 tons in January which is much higher than the 114,865 tons in January 2023. The Volga-Urals region includes Metafrax Chemicals at Gubakha, Tomet at Togliatti and Ammoni at Mendeleevsk.

The second most important region for Russian methanol production is the Central Federal District which includes Shchekinoazot and Azot at Novomoskovsk, both of which are located in the Tula region. Azot has been idle since January 2023 and thus Shchekinoazot was solely responsible for the production of 127,495 tons in January versus 117,549 tons in January 2023. In the North Caucasus Azot Nevinnomyssk increased production from 7,812 tons to 11,595 tons in January 2024.

Siberian plants include Gazprom Methanol at Tomsk and Angarsk Petrochemical Company, and combined they produced 68,843 tons in January 2024 versus 73,667 tons last year. Regarding other plants Akron in the north west of Russia produced 8,881 tons in January against 6,495 tons last year whilst Novatek in the Urals region reduced production slightly from 5,924 tons to 5,579 tons.

Russian Methanol Exports by Destination (unit-kilo tons)		
Country	Jan-24	Jan-23
Belarus	6.236	22.530
China	73.465	58.980
Finland	0.000	16.390
Kazakhstan	6.279	3.040
Latvia	0.000	0.320
Lithuania	0.000	56.659
Netherlands	0.000	4.160
Poland	0.000	12.580
UAE	2.055	0.000
Turkey	9.799	19.870
Others	0.000	0.000
Total	97.924	137.867

## Russian methanol exports Jan-2024

Russian methanol exports amounted to 97,924 tons in January against 137,867 tons in January last year. China accounted for 73,465 tons against 58,980 tons in January 2023, whilst volumes to Turkey dropped from 19,870 tons to 9,799 tons. The third quarter and fourth quarters last year saw lower exports from Russia, mainly due to the loss of EU trade and this extended into January. Volumes to Kazakhstan and Belarus remain relatively insignificant.

By producer Tomet exported 6,892 tons in January which was up from 4,345 tons in January last year, whilst Gazprom Methanol reduced exports from 42,183 tons to 24,838 tons. Despite not operating Azot at Novomoskovsk exported 5,217 tons to Turkey in January, having purchased methanol from Shchekinoazot. The other Evrokhim subsidiary Azot at Nevinnomyssk exported 1,217 tons in January through the Temyruk port to Turkey.

Russian Methanol Exports by Producer (unit-kilo tons)		
Producer	Jan-24	Jan-23
Azot Nevinnomyssk	1.213	0.000
Azot Novomoskovsk	5.217	3.027
Akron	0.01	0.000
Metafrax Chemicals	21.758	30.647
Gazprom Methanol	24.838	42.183
Tomet	6.892	4.345
Shchekinoazot	38.006	57.665
Total	97.924	137.867

Metafrax reduced exports from 30,647 tons in January 2023 to 21,758 tons in January this year of which 16,664 tons went to China via the Nakhodka-Vostochny port. Shchekinoazot exported 25,165 tons to China in January from its total of 38,006 tons which was down against 57,665 tons in January last year.

Chinese methanol demand is reported to be under pressure from the economic slowdown in China. Although China has largely replaced Finland as the main export route for Russian methanol rail distances and freight costs are much greater than to European markets. Railcars are taking longer to return to

producers which acts as a limit to how much methanol can be shipped. The export of methanol to the east is also hampered by the shortage of carrying capacity of the Eastern railway range.

Most of the methanol exports to China are conducted through the port of Nakhodka-Vostochny, accounting for 96% of shipments 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.

Regarding consumers of Russian methanol, the largest region in China is the Zhejiang Province, followed by the Guangdong Province and Beijing. Besides China, Turkey has also increased its imports of methanol from Russia in the past two years. Volumes are restricted by difficulties with the carrying capacity to the ports of the Southern Basin at Kavkaz and Temyruk.

### **Russian methanol domestic sales, Jan-2024**

Domestic merchant market sales in Russia have been steady in recent months enabling producers to operate at reasonable levels of utilisation. The increase in production of formaldehyde resins provided extra consumption to offset the declines in exports. Production of formaldehyde resins rose by 9.6% in 2023 versus 2022, although the increase was only really noted in the third quarter.

<b>Russian Methanol Domestic Sales (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-24</b>	<b>Jan-23</b>
Azot Nevinnomyssk	1.021	0.806
Azot Novomoskovsk	2.538	0.000
Metafrax	35.976	33.712
Gazprom Methanol	28.482	31.366
Tomet	32.962	25.720
Shchekinoazot	29.439	32.731
Ammoni (Mendeleevsk)	1.540	2.320
Total	131.958	126.655

whilst Tomet increased sales from 25,720 tons to 32,962 tons. The largest domestic consumer for Tomet is Togliattiazot where methanol is used for the production of urea-formaldehyde concentrate. Togliattiazot introduced a methanol loading point in 2023 for tank trucks and introduced a new brand of urea-formaldehyde concentrate. Shchekinoazot reduced domestic methanol sales from 32,731 tons in January 2024 versus 29,439 tons in January 2023.

The fall in Russian methanol production in Russia in 2023 following the loss of the European market has created a dilemma for Russian producers. Taking into account sanctions, infrastructure and sales restrictions, the conversation amongst producers focuses on what new opportunities could drive the domestic market, all of which are essentially long-term. One example includes the Ruskhim Group, which continues to lay the foundations for a new methanol plant in the Artic region, has outlined plans to supply methanol from the future plant as fuel for cargo ships. This would be the first type of vessels in Russia using methanol as fuel. A total of 3 ice-class cargo ships will be built with the delivery of the entire series by 2029, when the company plans to commission the gas chemical complex in the Nenets Autonomous Okrug.

<b>Russian Formaldehyde Production (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-24</b>	<b>Jan-23</b>
Pigment	3.052	2.498
Shchekinoazot	2.853	2.397
Akron	11.471	9.586
Metafrax	33.119	24.785
Sverdlov Plant	0.003	0.815
Khimsintez	4.919	2.095
Uralkhimplast	4.489	3.540
Nizhnekamskneftekhim	13.534	11.592
Metadynea	4.524	3.283
Total	77.963	60.590

### **Russian formaldehyde production Jan-2024**

Russian formaldehyde production has stabilised over the past year after demand dropped in the second half of 2022. Production totalled 77,963 tons in January against 60,590 tons in January last year, with the largest producer Metafrax increasing production from 24,785 tons to 33,119 tons. Other large producers included Nizhnekamskneftekhim which uses formaldehyde for the production of isoprene monomer and Akron which uses formaldehyde for the production of formaldehyde resins. Despite the higher production in 2023 most producers reported lower profits and turnover. Production costs were lower in 2023 against 2022

but at the same time market prices have to be kept within a certain range to maintain sales.



## Organic chemicals

Russian N-Butanol Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
Angarsk Petrochemical company	2.787	6.577
Azot Nevinnomyssk	1.487	1.481
Gazprom neftekhim Salavat	4.219	6.323
SIBUR-Khimprom, Perm	2.922	10.081
Total	11.415	24.462

Russian Isobutanol Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
Angarsk Petrochemical Company	2.036	3.397
Gazprom neftekhim Salavat	2.359	1.481
SIBUR-Khimprom, Perm	9.488	4.525
Total	13.883	9.403

Russian Acetone Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
Ufaorgsintez	4.134	2.954
Kazanorgsintez	3.269	4.912
Novokuibyshevsk Petrochemical	3.160	2.961
Omsk Kaucuk	3.047	2.168
Total	13.610	12.995

Russian Acetic Acid Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
Azot Nevinnomyssk	15.162	12.471
Others	2.402	3.099
Total	17.758	15.866

tons whilst the Plant at Synthetic Alcohol at Orsk

Russian Isopropanol Production (unit-kilo tons)		
Producer	Jan-24	Jan-23
Plant of Synthetic Alcohol	3.642	3.365
Omsk Kaucuk	2.492	2.297
Total	6.134	5.663

Chinese Exports of Polyurethane Raw materials to Russia (unit-kilo tons)		
TDI	Jan-24	Jan-23
Kilo tons	2.192	1.760
\$ million	4.511	5.561
Av Price \$/ton	2058.2	3159.7
MDI	Jan-24	Jan-23
Kilo tons	4.233	9.864
\$ million	8.385	18.914
Av Price \$/ton	1964.6	1975.4
Polyols	Jan-24	Jan-23
Kilo tons	11.414	8.373
\$ million	16.421	13.079
Av Price \$/ton	1438.8	1562.0

## Russian butanol production Jan-2024

Russian normal butanol production amounted to 11,415 tons in January 2024 against 24,462 tons in January last year. Gazprom neftekhim Salavat reduced production from 6,323 tons to 4,219 tons whilst SIBUR-Khimprom reduced production from 10,081 tons to 2,922 tons. Gazprom neftekhim Salavat and SIBUR-Khimprom also produced 2-ethylhexanol in January.

Isobutanol production in Russia increased from 9,403 tons in January to 13,883 tons in January 2023. Gazprom neftekhim Salavat increased production from 1,481 tons to 2,359 tons, whilst SIBUR-Khimprom increased production from 4,525 tons to 9,488 tons.

## Russian solvent production Jan-2024

Russian acetone production increased from 12,995 tons in January 2023 to 13,610 tons in the same month this year. Omsk Kaucuk produced 3,047 tons of acetone against 2,168 tons in the previous year whilst Kazanorgsintez produced 3,269 tons against 4,912 tons.

Russian acetic acid production amounted to 17,758 tons in January against 15,866 tons in the same month in 2023.

The largest producer in Russia Azot at Nevinnomyssk increased production from 12,471 tons to 15,162 tons.

Isopropanol production amounted to 6,134 tons in January versus 5,663 tons in January 2023. Omsk Kaucuk increased production from 2,297 tons to 2,492 tons whilst the Plant at Synthetic Alcohol at Orsk increased from 3,365 tons to 3,642 tons. Omsk Kaucuk only started isopropanol production in 2020 and only achieved high utilisation rates last year.

## Russian polyurethane raw materials

## Russian imports of isocyanates/polyols

TDI imports from China into Russia amounted to 2,192 tons in January against 1,760 tons in January last year, with average prices dropping from \$3159.7 per ton to \$2058.2.

MDI imports dropped from 9,864 tons last January to 4,233 tons in January this year, dropping from \$1975.4 to \$1964.6 per ton. In 2023 MDI imports from China to Russia totalled 117,324 tons which was up from 58,370 tons in 2022.

Polyol imports into Russia from China increased from 8,373 tons in January 2023 to 11,414 tons in January this year. Import costs rose from \$13.079 million to \$16.421 million, with average prices fell from \$1562.0 per ton to \$1438.8 per ton.



## Central Asia-Kazakhstan

## Kazakh Polyethylene Imports from Russia 2023

Category	Kilo tons	\$ million
LLDPE	2.1	3.0
LDPE	18.7	24.9
HDPE	85.8	127.8
EA0	7.0	8.4
Others	0.5	1.1
Total	114.1	165.2

## Polyethylene imports into Kazakhstan 2023

Imports of polyethylene into Kazakhstan from Russia amounted to 114,100 tons in 2023 for total costs of \$135.2 million. The domestic market of Kazakhstan for polyethylene is ranges between 180,000-240,000 tpa. The main share of imports came from HDPE which totalled 85,800 tons in 2023 for costs of \$127.8 million.

HDPE imports from China into Kazakhstan amounted to 11,146 tons for costs of \$13.086 million. This was an increase from 3,592 tons in 2022 for \$4.932 million. LDPE imports rose from 3,730 tons in 2022 to 5,905 tons in 2023, although lower prices meant that costs increased only marginally from \$6.360 million to \$6.815 million. EVA import from China increased from 290 tons to 616 tons.

## Kazakh Exports of PP to China

	Jan-Dec 23	Jan-Dec 22
Kilo tons	106.326	3.218
\$ million	82.639	2.457

## Kazakhstan polypropylene market

Kazakh PP exports to China amounted a total of 106,326 tons in 2023 for \$82.639 million. This measures against 3,218 tons in 2022 for \$2.457 million. The KPI capacity should be enough to cover all domestic demand. The needs of Kazakh producers are now about 80,000 tpa of polypropylene. However, they continue to buy raw materials abroad due to price. The main volume in 2023 came from China (10,100 tons), Russia (6,800 tons) and Turkmenistan (400 tons).

## Kazakh Exports of PP to Russia

	Kilo tons	\$ million
Homo	44.0	34.4
Others	0.2	2.5
Total	44.3	36.9

KPI sold abroad about 180,000-190,000 tons of polypropylene, which is about 75% of all Kazakhstan's exports of petrochemical products last year (240,000-250,000 tons). Another Kazakh producer of polypropylene is Pavlodar-based Neftekhim Company Ltd. The capacity of the enterprise is up to 70,000 tpa. The plant sells the bulk of its products on the domestic market, and also ships small batches of products by road to Russia.

Polypropylene exports from Kazakhstan to Russia totalled 44,300 tons in 2023 for revenues of \$36.9 million. Homo grade exports accounted for the largest share of exports. At the end of last year, imports of polypropylene to Kazakhstan decreased by 42%. KPI believes that it will reduce imports to a minimum this year whilst increasing exports to China, Turkey, Europe, and Russia.

## Navoiyazot 2023

Navoiyazot 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, Navoiyazot plans to produce 80,000 tons of PVC of which around 20,000 tons could be exported.

## Roskhim invests in north Kazakhstan

Russian state holding Roskhim is undertaking investments in the creation of a chemical cluster in the Pavlodar FEZ in northern Kazakhstan with values of up to \$900 million. In previous years, the Bashkir Soda Company (BSC) took the initiative to implement a large investment project in Kazakhstan, involving the comprehensive high-tech processing of titanium-zirconium deposits into inorganic products that are in demand on the market. This involves the production of zirconium oxychloride with a capacity of 12,000 tpa, and the production of aluminum oxychloride with a capacity of 20,000 tpa. The project to create a chemical cluster will cover the development of three regions of Kazakhstan, including North Kazakhstan, Aktope and Pavlodar regions.

Roskhim is a new large chemical holding that began to form in Russia back in 2022 under the name Russian Hydrogen. In 2023, the holding changed its name and gained control of new assets. From these, the company forms soda, chlor-alkali, petrochemical, titanium clusters, as well as a cluster for the production of mineral fertilizers. Roskhim should also become the operator of the Federal Center for Chemistry in Ussolye-Sibirskoye.

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