

CIREC monthly NEWS

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

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

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Features from this issue, including changing production and trade dynamics

Central European petrochemical markets

- Czech imports of crude from Russia amounted to 42.3% of total supplies of 2.6 million tons in the first five months this year. This dropped from 65.1% in the same period in 2023
- Ethylene production in Poland dropped from 158,200 tons in January to May 2023 to 152,200 tons in the same period in 2024, whilst propylene production increased from 133,500 tons to 168,800 tons
- Slightly lower propylene production in the Czech Republic helped reduce from 19,684 tons in January to May 2023 to 16,132 tons in 2024, with Germany supplying nearly all the product

Central European polymer and chemical trade

- Polish polypropylene imports, including homo grade and copolymers, rose in January to May 2024 to a total of 391,348 tons versus 366,266 tons in January to May 2023
- Polypropylene produced as part of the newly built installations at the Polimery Police plant has been successfully tested through the various stages and is now available for direct sale and distribution
- Polish imports of polyethylene totalled 334,407 tons in January to May this year against 297,491 tons in January to May 2023, with average prices falling from €1492.8 per ton to €1267.1 per ton

Central European rubber and polymer markets

- Czech exports of synthetic rubber amounted to 58,296 tons in January to May this year versus 69,383 tons in the same five months in 2023. The closure of the ESBR plant at Kralupy affected both production and exports
- Poland imported 158,194 tons of synthetic rubber in January to May this year against 113,560 tons in January to May 2023. By category butadiene rubber was the largest, accounting for 43,149 tons in the first five months in 2024
- Manufacture of rubber products in Poland in the first five months this year dropped to 401,018 tons against 439,920 tons in the same period last year
- Isoprene rubber went into Polish export activity this year, amounting to 28,246 tons in the first five months in 2024 against only 4,201 tons in the same period last year

Russian synthetic rubber production and trade

- Synthetic rubber production in Russia amounted to 625,975 tons in the first five months this year against 626,200 tons in the same period in 2023
- SBR was the largest category of Russian synthetic rubber production in the first five months amounting to 121,400 tons. Butadiene rubber production was the second largest category with 117,460 tons followed by isoprene rubber with 109,487 tons
- The Volga region accounted for the largest share of Russian rubber production, amounting to 442,937 tons in the first five months this year against 451,055 tons
- By volume Russian shipments of synthetic rubber to China amounted to 244,793 tons in the first five months, which was up from 204,728 tons in January to May 2023
- Exports of halogenated butyl rubber jumped from \$36.601 million to \$93.766 million, whilst butadiene rubber export values jumped from \$45.395 tons to \$80.886 million
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CENTRAL and SOUTH EAST EUROPE

Slovnaft-Lukoil crude supplies halted

Slovakia has been blocked from 18 July from receiving oil from Lukoil via the Druzhba. Other Russian suppliers can continue shipping to Slovakia. Since the beginning of the war in Ukraine, Slovnaft has invested €200 million into research on other oils. The refinery's technologies have historically been set up for the REBCO petroleum blend and in the case of oil mixtures from other locations, the company has to take into account their specific composition and properties.

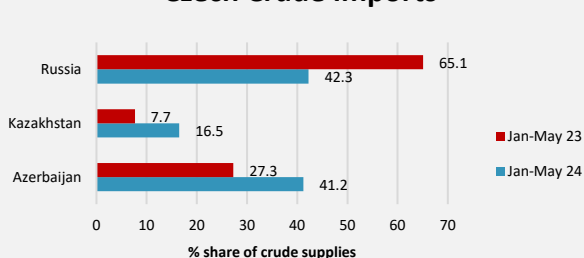
The oil blends, where properties meet the needs of Slovnaft, are brought by tankers to the Croatian port of Omisalj. From the port they are transported via the Adria pipeline. In Hungary, it connects to the southern branch of the Druzhba oil pipeline, through which the raw material reaches Slovnaft. For its design capacity, the Slovnaft refinery needs about 5.5 to 6 million toa of oil.

MOL-crude supply from Lukoil stopped

The delivery of Russian oil to Hungary by Lukoil stopped at the end of June, after Ukraine imposed stricter sanctions. The Russian company was supplying Hungary with crude via the southern leg of the Druzhba oil pipeline which crosses Ukraine. With the toughened sanctions Kyiv imposed on Lukoil in June, Russian oil is currently prevented from reaching Hungary. Politics is clearly the cause of this block on deliveries, possibly the EU might try to persuade Ukraine to reconsider.

In the first four months this year around 84% of Hungarian total crude supply came from Russia, which is up from the 78% of supplies in the whole of 2023. MOL is undertaking measures to adjust to other forms of crude, but it will not be until 2026 until it can fully operate with non-Russian crude.

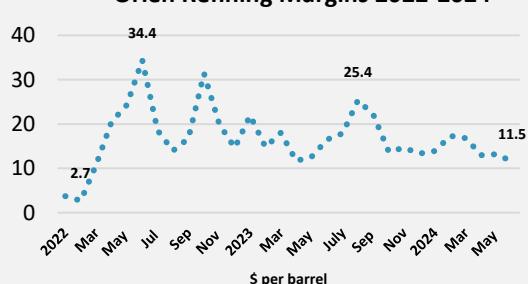
Czech Crude Imports



Czech crude imports Jan-May 2024

Czech imports of crude from Russia amounted to 42.3% of total supplies of 2.6 million tons in the first five months this year against 65.1% in the same period in 2023. Imports from Azerbaijan and Kazakhstan both increased in the first five months, both in volume and percentage share. Azerbaijan is close to exceeding Russia's percentage share of market purchases.

Orlen Refining Margins 2022-2024



Average prices for crude imports into the Czech Republic amounted to €594.2 per ton in the first five months in 2024 against €575.4 per ton in 2023.

By the start of 2025 the Czech Republic will need by sanction requirements to purchase all crude from non-Russian sources. Although the Czech Republic is striving to move away completely from Russian crude the second half of 2024 may be particularly difficult when the capacity of the TAL pipeline will be temporarily

Polish Crude Imports (unit-kilo tons)

Country	Jan-May 24	Jan-May 23
Saudi Arabia	5567.1	5303.5
Nigeria	772.5	645.3
Norway	5284.3	2965.1
US	544.5	370.8
UK	94.2	611.8
Others	0.0	0.1
Total	12,362	11,059.2
Av price \$	570.4	542.9

limited due to modifications.

Orlen refining margins

Refining margins in Poland have eased in the first half of 2024, but still remain in double digits which rarely occurred pre-2022. From the total of 12.362 million tons of crude imported into Poland in the first five months in 2024, supplies from Saudi Arabia totalled 5.567 million tons followed by Norway which provided 5.284 million tons. Other suppliers include the US, Nigeria and the UK. Average prices for Polish crude purchases increased from \$542.9 per ton in the first five months in 2023 to \$570.4 per ton this year.

Central European Olefin Production, Trade & Projects

Polish Petrochemical Production (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Ethylene	152.2	152.8
Propylene	168.8	133.5
Butadiene	24.8	26.7
Phenol	16.9	17.9
Polyethylene	135.6	128.9
PVC	85.4	92.8
Polypropylene	142.6	115.6

Polish petrochemical production Jan-May 2024

Ethylene production in Poland dropped slightly from 152,800 tons in January to May 2023 to 152,200 tons in the same period in 2024, whilst propylene rose from 133,500 tons to 168,800 tons. Propylene production is rising using existing facilities in Poland and particularly in the second half of 2024 should start to see the impact of the Polimery Police plant on total volumes.

Butadiene production at Plock dropped to 24,800 tons in the first five months this from 26,700 tons last year. In the plastics sector polyethylene production at Plock rose to 135,600 tons in January to May 2024 versus 128,900 tons in January to May 2023.

Polypropylene production in Poland increased from 115,600 tons to 142,600 tons. PVC production fell from 92,800 tons to 85,400 tons.

Petrochemical prices in Central Europe have this year faced a combination of oscillating crude prices intertwined with improving demand patterns in some application sectors. Of the olefin monomers,

Central European Chemical and Polymer Prices 2024 (€/ton)					
Product	Jan	Feb	Mar	Apr	May
Ethylene	1272.3	1238.5	1420.4	1366.5	1349.1
Propylene	913.1	858.1	913.2	982.2	903.0
Butadiene	707.2	727.0	793.7	861.7	903.0
Benzene	964.9	957.6	1051.5	1218.7	1045.5
Toluene	927.3	1031.5	1081.1	1174.9	1068.4
Styrene	1223.7	1279.8	1484.1	1158.7	1497.0

ethylene prices started at €1272 per ton in January and rising slightly to €1349 per ton in May. Butadiene prices started at €707 per ton in January and rose to €903 per ton in May whilst propylene rose from €861.7 per ton in January also rose to €903 per ton in May. Toluene and styrene prices in Central Europe have stabilised and risen over the five months slightly. This despite market

challenges facing European producers.

Czech olefin monomer trade, Jan-May 2024

Czech imports of ethylene amounted to only 247 tons in January to May 2024, down from 18,368 tons in January to May 2023. This was to meet demand at Litvinov. Ethylene exports from the Czech Republic amounted to 4,696 tons against 5,136 tons in the first five months in 2023.

Czech Olefin Exports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Ethylene	4.696	5.136
Propylene	5.388	5.974

The Litvinov cracker has operated at a level in 2024 which has required less propylene imports, and imports into the Czech Republic dropped from 19,684 tons in January to May 2023 to 16,132 tons in 2024. Germany has supplied nearly all the propylene this year. Average prices for propylene imports in the first five months in 2024 dropped to €1066.4 per ton against €1051.9 per ton in the same quarter in 2023. Exports of propylene dropped slightly in the first five months to 5,388 tons versus 5,974 tons.

Czech Olefin Imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Ethylene	0.247	18.368
Propylene	16.132	19.684
Butadiene	18.059	43.359

Central European Propylene Prices (€ per ton)		
	Jan-May	Jan-May 23
Czech Republic	1066.4	1051.9
Hungary	1047.5	1145.5
Poland	829.3	972.5

Czech imports of butadiene dropped in the first five months in 2023 from 43,359 tons down to 18,060 tons in January to May 2024, all of which was supplied by Germany and Hungary. Germany supplied 12,930 tons in the first five months for €252.1 million and Hungary supplied 4,270 tons for €81.138 million. Butadiene prices paid for imports into the Czech Republic dropped from €889.3 per ton to €793.7 per ton. Nearly all the butadiene went to Kralupy for conversion into synthetic rubber. Czech imports of ethylene have not been required this year to supplement domestic production. Imports amounted to 247 tons in the first five months against 18,268 tons in the same period last year. Propylene imports into the Czech Republic declined from 19,864 tons in the first five

months in 2023 to 16,132 tons in the same period in 2024, with main suppliers including Germany and Poland. Average prices for propylene imports rose to €1066.4 per ton against €1051.9 per ton last year.

Czech Imports of Propylene (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Germany	14.079	14.957
Bulgaria	0.000	2.712
Poland	2.046	0.000
Romania	0.000	1.048
Slovakia	0.000	0.066
Others	0.008	0.901
Total	16.132	19.684
Av price per ton	1066.4	1051.9

Polish Imports of Propylene (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Bulgaria	1.005	9.138
Czech Republic	4.162	3.951
Germany	39.939	32.089
Serbia	0.000	3.842
Netherlands	0.000	8.966
Others	0.213	1.223
Total	46.041	59.210
Av price per ton	829.3	972.5

Hungarian Propylene Exports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Poland	0.000	1.019
Slovakia	36.144	32.198
Total	36.144	33.216
Av € per ton	1047.5	1145.5

Hungarian butadiene exports amounted to 22,571 tons in the first four months in 2024 against 20,758 tons in the same period in 2022. Shipments into Poland totalled 15,352 tons in January to April 2024

Polish Butadiene Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Austria	15.815	18.363
Germany	9.110	5.354
Hungary	17.429	10.807
Others	0.952	0.229
Total	42.397	35.662
Av € per ton	797.9	916.3

Central European Butadiene Prices (€ per ton)		
	Jan-May	Jan-May 23
Czech Republic	793.7	889.3
Hungary	775.4	882.7
Poland	797.9	916.3

Hungarian butadiene exports fell to €882.7 per ton versus €775.4 in 2023. Besides the Polish market Hungarian butadiene exports are also sent to the Czech Republic and Germany.

Central European propylene imports, Jan-May 2024

Poland imported 46,041 tons of propylene in January to May against 59,210 tons in January to May 2023. Average prices dropped from €972.5 per ton in January to May last year to €829.3 this year. Germany was the main supplier to Poland, shipping 39,939 tons against 32,089 tons in the first five months last year.

Spot purchases rather than contract shipments for the largest Polish importer Grupa Azoty have become more prevalent. This is partly linked to the market position for petrochemicals and partly due to the serious debt crisis faced by the group which is restricting activity. Grupa Azoty aims to access some propylene from the new plant at Police that would help the company reduce its imports.

Propylene is bought mainly by Grupa Azoty Kedzierzyn's Oxoplast Segment, Grupa Azoty Kedzierzyn is currently focusing on expanding the portfolio based on a new product platform diversifying from the currently used aldehydes towards oxo alcohols. The segment's major strategic objective is to reduce exposure to the market downturn risks by enhancing flexibility of production and balancing production volumes of aldehyde derivatives.

There are also plans to enter the bio-plasticizers market.

Exports of propylene from Hungary increased in the first four months to 36,144 tons against 32,198 tons in the same period in 2023. Export prices from Hungary dropped from €1145.5 per ton to €1047.5 per ton. Exports to Germany increased from 1,995 tons to 3,959 tons and to the Czech Republic dropped from 9,906 tons to 3,259 tons.

Central European butadiene imports, Jan-May 2024

Butadiene import prices for Poland dropped from €916.3 per ton on average in January to May 2023 to €798.1 in January to May this year, with volumes rising from 35,662 tons to 42,397 tons.

Hungary was the largest supplier, shipping 17,429 tons in the first five months to Poland against 10,807 tons in 2023. Hungarian exports of butadiene totalled 22,571 tons in the first four months in 2024 against 20,758 tons in 2023. Average prices for

Central European Polyolefin Production & Trade

Polish Polyolefin Production (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Polyethylene	135.6	128.9
Polypropylene	142.6	115.9

Central European polyolefins production Jan-May 2024

Production of polyethylene in Poland increased from 128,900 tons in the first five months last year to 135,600 tons in the same period in 2024. Polypropylene production increased from 115,900 tons in the first five months in 2023 to 142,600 tons in January to May 2024. Currently polypropylene production in

Poland takes place at Plock, but production is currently being started up at the new Polimery Police plant in the north of the country. Production is gradually being phased in and should have a major impact on total Polish production and trade.

MOL-Lummus plastics recycling

MOL Group and Lummus Technology have partnered to launch the first Lummus Advanced Waste Plastic Recycling plant at MOL Petrochemicals in Tiszaújváros. This plant, with a capacity of 40,000 tpa, aims to chemically recycle mixed plastic waste into high-value chemicals and raw materials. It incorporates advanced greenhouse gas reduction technologies, including an all-electric pyrolysis reactor, ensuring zero direct scope 1 emissions during operation. The initiative aligns with MOL's commitment to manage and recycle about 5 million tons of municipal solid waste annually in Hungary, promoting a circular economy.

The partnership with Lummus integrates proven pyrolysis technology to address global plastic waste challenges by converting waste into valuable resources. The project is part of a broader 2023 partnership between Lummus and MOL to implement chemical plastic recycling in Hungary and Slovakia, supported by Lummus' Green Circle technology.

Polish Polyethylene Trade		
Exports	Jan-May 24	Jan-May 23
Vol (kilo tons)	131.222	117.309
Av € per ton	1395.1	1173.5
Imports	Jan-May 24	Jan-May 23
Vol (kilo tons)	567.640	481.593
Av € per ton	1266.3	1478.1

Polish polyethylene trade Jan-May 2024

Polish trade in polyethylene increased in the first five months for both imports and exports. The increase in demand has been relatively modest but provides some suggestion that the market may see more activity in the second half of the year.

Polish PE Exports (unit-kilo tons)		
Product Group	Jan-May 24	Jan-May 23
LDPE	22.228	21.441
LLDPE	11.372	7.675
HDPE	81.081	79.595
EVA	1.590	4.471
EAO	12.041	2.490
Other	2.910	1.637
Total	131.222	117.309
€ per ton	1395.1	1173.5

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

Polish imports of polyethylene totalled 567,640 tons in January to May this year against 481,593 tons in January to May 2023, with average prices falling from €1478.1 per ton to €1266.3 per ton.

HDPE is the largest category of imported polyethylene into Poland, amounting to 179,530 tons in January to May against 167,100 tons in January to May 2023. Germany was the largest supplier of HDPE to the Polish market this year.

Polish PE imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
LDPE	145.056	129.901
LLDPE	89.326	84.240
HDPE	179.530	167.100
EVA	9.049	5.766
EAO	120.001	72.905
Others	24.678	21.681
Total	567.640	481.593
Av € per ton	1266.3	1478.1

LLDPE imports increased from 84,240 tons in January to May 2023 to 89,236 tons in the corresponding period in 2024. Most of the LLDPE imports were sourced mostly from West Europe, including France, the Netherlands and Germany.

Polish polyethylene exports amounted to 131,222 tons in the first five months in 2024 against 117,309 tons in the first five months in 2023. Average prices for polyethylene exports from Poland increased to €1395.1 per ton against €1173.5 per ton in the period

January to May last year. In the first five months this year exports of HDPE from Poland amounted to

81,081 tons versus 79,595 tons in January to May 2023. LDPE exports increased from 21,441 tons to 22,228 tons.

Czech polyethylene exports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
LDPE	15.386	10.229
LLDPE	2.373	1.420
HDPE	143.908	138.809
EVA	1.612	1.419
Other	6.080	4.466
Total	169.359	156.343
Av € per ton	1389.4	1448.5

exports include Poland, Italy and Belgium.

Czech polyethylene imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
LDPE	45.571	42.631
LLDPE	9.541	8.830
HDPE	51.157	47.587
EVA	4.748	4.344
Other	17.887	19.056
Total	128.903	122.447
Av € per ton	1499.586	1717.3

Hungarian Polyethylene Exports		
Product	Jan-Apr 24	Jan-Apr 23
LLDPE	1.895	2.467
LDPE	23.838	33.148
HDPE	72.748	76.592
Other	6.625	4.225
Total	105.106	116.564
Av € per ton	1237.597	1342.1

Hungarian Polyethylene Imports		
Product	Jan-Apr 24	Jan-Apr 23
LLDPE	9.131	8.989
LDPE	15.162	15.926
HDPE	29.323	27.437
EAO	3.513	2.280
EVA	2.317	1.120
Other	9.826	7.549
Total	69.272	63.300
Av € per ton	1581.8	1401.0

391,206 tons versus 366,494 tons in January to May 2023. Average prices per ton decreased from €1530.7 to €1340.9 per ton. Homo grade polypropylene imports increased from 238,039 tons in the first five months in 2024 to 244,934 tons in the same period in 2023, whilst copolymer imports increased from 119,716 tons to 134,919 tons.

Central European PP Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Czech Republic	222.173	219.396
Hungary	73.565	66.760
Poland	391,206	366,494

May 2023 to 222,173 tons in January to May 2024, with average prices dropping from €1667.1 per ton to €1571.3 per ton.

Czech polyethylene trade Jan-May 2024

Polyethylene exports from the Czech Republic amounted to 169,359 tons in the first five months in 2024 against 156,343 tons in 2023. Export prices dropped from €1448.5 per ton to €1389.4 per ton.

HDPE export shipments comprised 143,908 tons in the first five months in 2024 against 138,809 tons in the same period in 2023. Germany was the largest destination for Czech HDPE supplied from Litvinov. Other important markets for Czech polyethylene

For imports of all forms of polyethylene, Czech inward shipments amounted to 128,903 tons in January to May 2024 against 122,447 tons in 2023, with prices dropping from €1717.3 per ton to €1499.6 per ton. Germany was the largest source of polyethylene imports.

Hungarian polyethylene trade Jan-Apr 2024

Hungarian polyethylene exports were slightly lower in the first four months in 2024, amounting to 105,106 tons against 116,564 tons in the same period in 2023. Revenues fell from €156.437 million to €130.079 million in 2024, translating into average prices dropping from €1342.1 per ton in 2023 to €1237.6 per ton.

HDPE shipments from Hungary amounted to 72,745 tons in January to April 2024 versus 76,592 tons in the same four months in 2023, whilst exports of LDPE dropped from 33,148 tons to 23,838 tons.

Hungary remains a net exporter of LDPE and HDPE and still a net importer of LLDPE and ethylene copolymers. Imports totalled 69,272 tons in the first four months in 2024 against 63,300 tons in the same period in 2023, with HDPE imports rising from 27,437 tons to 29,323 tons. Hungarian import prices for polyethylene increased on average from €1401.0 in January to April 2023 to €1581.8 in the first four months in 2024.

Central European PP Trade Jan-May 2024

Polish polypropylene imports, including homo grade and copolymers, rose in January to May 2024 to a total of 391,206 tons versus 366,494 tons in January to May 2023. Average prices per ton decreased from €1530.7 to €1340.9 per ton. Homo grade polypropylene imports increased from 238,039 tons in the first five months in 2024 to 244,934 tons in the same period in 2023, whilst copolymer imports increased from 119,716 tons to 134,919 tons.

For imports of all forms of polypropylene, Czech inward shipments increased from 219,396 tons in January to

Central European PP Import Prices (€/ton)		
Country	Jan-May 24	Jan-May 23
Czech Republic	1571.3	1667.1
Hungary	1518.0	1598.2
Poland	1334.9	1515.3

Exports of all forms of polypropylene from the Czech Republic amounted to 122,431 tons in January to May versus 122,000 tons in January to May 2023, with average prices dropping from €1547.1 per ton to €1463.1 per ton. Homo-grade PP provides the main category of Czech polypropylene exports, amounting to 99,422 tons in January to May this year versus 98,061 tons in 2023.

Central European PP Exports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Czech Republic	122.431	122.000
Hungary	80.481	81.478
Poland	154.387	95.900

Regarding export activity from Poland, shipments increased from 95,900 tons to 154,387 tons in January to May 2024. Homo polymer grades comprised the main category of Polish polypropylene exports, where Germany was the largest destination followed by the

Czech Republic.

Hungarian polypropylene trade Jan-Apr 2024

MOL shipped 43,406 tons of homo grade polypropylene (valued at €58.964 million) in January to April 2024 which was down from 44,236 tons in the same period in 2023 (€62.023 million in value), whilst copolymer exports dropped from 31,147 tons (€45.383 million in value) to 27,057 tons (€38.987 million). Average prices dropped from €1411.3 per ton to €1342.3 per ton.

Central European PP Export Prices (€/ton)		
Country	Jan-May 24	Jan-May 23
Czech Republic	1463.1	1547.1
Hungary	1342.3	1411.3
Poland	1334.9	1515.3

Polypropylene imports into Hungary amounted to 73,565 tons in the first four months in 2024 versus 66,760 tons in the same period in 2023. Costs in January-April 2024 amounted to €111.672 million from €106.699 million in 2023. Overall average prices dropped from €1598.2 per ton to €1518.0 per ton this year, whilst copolymer prices rose from €1538.9 to €1715.1 per ton. By category homo

grade imports into Hungary comprised 47,405 tons in January to April 2024 against 39,484 tons whilst copolymers fell to 18,020 tons against 18,741 tons.

Central European Rubber Markets

Czech Rubber Trade (unit-kilo tons)		
	Jan-May 24	Jan-May 23
Exports synthetic rubber	58.296	69.383
Imports synthetic rubber	61.729	52.389
Imports natural rubber	39.594	33.872

Czech synthetic rubber trade Jan-May 2024

Czech exports of synthetic rubber amounted to 58,296 tons in January to May this year versus 69,383 tons in the same five months in 2023. The closure of the ESBR plant at Kralupy affected both production and exports. Conversely imports of synthetic rubber increased from 52,389 tons in the first five months in 2023 tons to 61,729

tons in January to May 2024. Natural rubber imports into the Czech Republic increased from 33,872 tons to 39,594 tons.

Natural rubber prices have been rising recently which has meant that prices increased on average from €1731.7 per ton in the first five months last year to €2034.5 per ton this year. Synthetic rubber prices by contrast, have been lower this year, with import values dropping from €2297.8 per ton to €2036.7 per ton.

Czech Butadiene Rubber Exports		
	Jan-May 24	Jan-May 23
Total (unit-kilo tons)	46.164	36.912
Revenues € million	75.550	83.863
Av € per ton	1642.5	1849.4

Czech butadiene rubber trade Jan-May 2024

The Czech Republic exported a total of 75,550 tons of butadiene rubber in the first five months this year against 83,863 tons in the same period in 2023.

Average prices for butadiene rubber fell from €1849.4 per ton to €1642.2 per ton. Czech exports of butadiene rubber to India amounted to 6,415 tons in January to May 2024 against 6,239 tons in the same period in 2023. Other important markets included Poland where exports amounted to 6,062 tons in the first five months this year against 4,865 tons in the same period in 2023. Besides exports the

Czech Republic also imported 12,750 tons of butadiene rubber in the first five months in 2024 versus 10,427 tons in the same period in 2023. The two largest suppliers to the Czech market in the first five months were Germany and the US, accounting for around 80% of total imports.

Hungarian synthetic rubber Imports (unit-kilo tons)		
Product	Jan-Apr 24	Jan-Apr 23
Butadiene Rubber	8.595	18.392
HBR	1.004	2.655
SBR	18.891	14.767
Other	8.457	10.674
Total	36.948	46.487
Revenues € mil	91.388	108.647
Av € per ton	2473.0	2337.0

tons to 18,891 tons.

Hungarian synthetic rubber trade Jan-Apr 2024

Hungarian imports of synthetic rubber amounted to 36,948 tons in the first four months versus 46,487 tons in January to April 2023, whilst import costs dropped from €108.647 million to €91.388 million. Average prices rose slightly from €2337.0 per ton to €2473.0 in 2024.

Butadiene rubber imports dropped from 18,392 tons to 8,595 tons, with costs dropping from €36.555 million to €14.022 million. Imports of halogenated butyl rubber dropped from 2,655 tons to 1,004 tons whilst SBR imports rose from 14,767

Polish Synthetic Rubber Imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
ESBR	12.422	11.287
Block SBR	24.145	12.882
S-SBR	13.581	10.863
Butadiene Rubber	43.149	26.537
Butyl Rubber	1.792	2.645
HBR	3.799	5.369
NBR	4.470	2.540
Isoprene Rubber	30.152	4.591
EPDM	18.190	17.984
Others	6.493	18.862
Total	158.194	113.560
Av € per ton	1,692.5	2,355.9

Regarding exports, Hungary shipped 22,479 tons of synthetic rubber in the first four months this year at an average price of €2585.0 per ton. The largest category of exports comprised S-SBR grade.

Polish rubber prices Jan-May 2024

Rubber import prices into Poland for both synthetic and natural have seen gradual declines from January to May this year as a combination of economic factors have taken effect. Overall, synthetic rubber import prices dropped from €2355.9 in the first five months in 2023 to €1692.5 in 2024.

Polish rubber trade Jan-May 2024

Poland imported 158,194 tons of synthetic rubber in January to May this year against 113,560 tons in January to May 2023. By category butadiene rubber was the largest purchased product, accounting for 43,149 tons in imports this year include isoprene rubber and block SBR.

the first five months in 2024 against 26,537 tons in 2023. Other product areas experiencing rises in

Polish Exports of Synthetic Rubber (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
SBR	93.685	78.005
Butadiene Rubber	40.516	18.897
HBR	28.246	4.201
Others	9.724	15.239
Total	172.170	116.343
Av € per ton	1597.9	1402.7

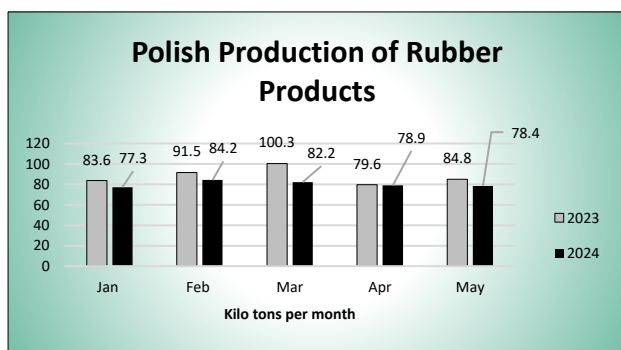
Isoprene rubber also went into export activity this year, rising to 28,246 tons in the first five months in 2024 against only 4,201 tons in the same period last year. Synthetic rubber exports from Poland amounted to 89,711 tons in total against 71,114 tons in January to May 2023. India was the largest destination for Polish exports, consisting mostly of SBR grades. Exports of butadiene rubber from Poland amounted to 40,516 tons in January to May versus 18,897 tons last year. Major destinations for Polish butadiene exports were led by Belgium.

Synthos Production (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Polystyrene	32.1	29.9
EPS	37.2	41.1
Synthetic Rubber	113.3	90.6

Polish synthetic rubber production and domestic market Jan-May 2024

Synthetic rubber production at Oswiecim for Synthos amounted to 68,300 tons in January to May 2024 from 59,300 tons in the same period in 2023. Production increased this year although the market remains under pressure. Synthos

experienced a fire at its Oswiecim plant in June although production has not been affected.



In each of the first five months in 2024 production of rubber products in Poland, based on both synthetic and natural rubber, was lower than in the same month last year. As a result, production of rubber products in the first five months this year dropped to 401,018 tons against 439,920 tons in the same period last year.

The largest segment of rubber products, tyre production, dropped in the first five months and amounted to 191,955 tons against 218,757 tons

in the same period last year. All areas of tyre production showed lower volumes in the first five months.

European tyre manufacturers are faced by cheaper competition which makes it harder to increase volume sales. While prices are harder to challenge the local European producers the quality is often inferior particularly for winter tyres.

Synthos rubber sales

Lower consumption of rubber in Poland this year continues the dominant trend from 2023. Sales of synthetic rubber by Synthos dropped by 61,000 tons in 2023 over 2022, although this was partly affected by the closure of the Kralupy EBSR plant. The line is now closed with all shutdown costs booked. Increased export activity has helped Synthos to increase its production of synthetic rubber this year mainly due to higher sales to Asia.

By the end 2024, Michelin Polska intends to liquidate its Polish truck tyre production plant at Olsztyn, but it will not lay off the people working at the plant. This business of the company will be transferred to Romania due to high costs in Poland. The closure of the plant is also linked to the changing market for truck tyres, which is flooded with cheap tyres mainly from China. Other branches of tyre production Olsztyn will remain operational.

Romanian rubber markets

Rubber consumption in Romania will be boosted by the start-up of the new tyre production unit at Oradea which is being constructed by Nokian Tyres. The plant, which is valued at around €650 million, has already produced the first tyre. The production of commercial tyres to start at the beginning of 2025. Nokian Tyres uses a lot of isoprene rubber, in addition to natural rubber, and thus demand will contribute to the increase in Romanian import activity.

Central European aromatics and derivatives

Polish Aromatic Exports (unit-kilo tons)

Product	Jan-May 24	Jan-May 23
Benzene	72.889	61.833
PTA	142.756	92.020

Polish benzene and PTA exports Jan-May 2024

Polish exports of benzene totalled 72,889 tons in January to May against 61,883 tons in the same period last year. Average prices increased to €975.8 per ton from €871.4 per ton last year. Germany was the largest recipient of Polish benzene exports, followed by the Czech Republic. Grupa

Azoty is the largest consumer of benzene in Poland which it usually buys from domestic sources.

Polish PTA Exports (unit-kilo tons)

Country	Jan-May 24	Jan-May 23
Belgium	1.259	0.240
France	2.508	3.064
Germany	123.362	73.712
Lithuania	4.022	0.953
Switzerland	0.000	3.306
Turkey	3.561	2.002
Others	8.044	7.980
Total	142.756	92.020
Av Price €	755.8	876.8

Polish PTA exports Jan-May 2024

Orlen's PTA exports amounted to 142,756 tons in the first five months against 92,020 tons in the same period in 2023. Shipments to Germany increased from 73,712 tons to 123,362 tons.

Average prices dropped from €876.8 per ton in the first five months last year to €755.8 per ton in the first five months in 2024. This year Orlen has purchased paraxylene on the merchant market in order to support higher PTA production at Wloclawek.

Revenues from PTA sales for Orlen, whether export or domestic, amounted to €174.2 million in the first quarter against €80.3 million in the same period last year. By volume sales rose from 107,000 tons in January to March 2023 to 146,000 tons in January to March 2024.

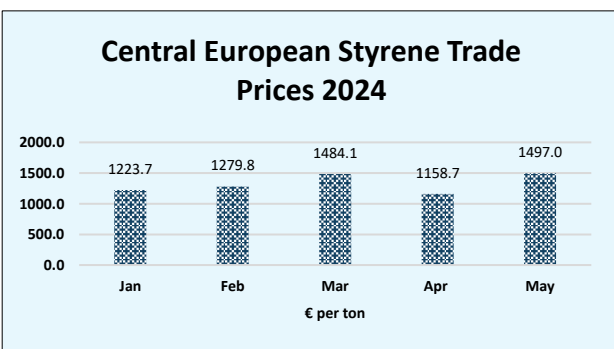
Central European styrene imports Jan-May 2024

Synthos in Poland imported 53,651 tons of styrene in January to May against 36,029 tons in January to May last year. The Netherlands provided 16,992 tons in the first five months in 2024 versus 18,814 tons. The Czech Republic has also been an important supplier this year, shipping from Kralupy to Oswiecim. Styrene import costs into Poland increased from €1196.5 per ton last year to €1422.1 in the first five months this year.

Polish Styrene Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	14.295	2.056
Czech Republic	6.897	5.319
Netherlands	16.992	18.814
Germany	3.394	7.451
Saudi Arabia	7.578	0.000
Others	4.187	1.925
Total	53.651	36.029
Av € per ton	1422.1	1196.5

Styrene imports into Hungary amounted to 25,980 tons in the first four months in 2024 against 28,005 tons in the same period last year. Imports from Italy dropped from 25,514 tons against 23,704 tons in the first four months in 2023. Styrene prices increased from €1300.8 per ton to €1422.7 per ton in 2024.

Czech exports of styrene have exceeded imports this year, as internal demand fell after the closure of the ESBR plant at Kralupy. Exports rose from 5,055 tons in the first five months last year to 6,925 tons whilst imports dropped from 17,491 tons to 3,902 tons. Styrene export revenues rose this year from €1087.5 per ton to €1314.8 per ton this year.



Central European styrene monomer prices have stabilised this year after a turbulent year in 2024. The highest price for styrene this year was achieved occurred in May when prices paid by consumers averaged €1525.0 per ton. Demand in the main application areas is slightly better last year, but both rubber and insulation markets are still struggling to return to normal volumes.

Polish Aromatic Imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Adipic Acid	5.454	5.190
Bisphenol A	0.062	0.000
Caprolactam	3.719	10.361
Ethylbenzene	38,724	51.070
Paraxylene	9.104	0.000
Phenol	43.653	28.854
Phthalic Anhydride	15.374	14.933
PTA	4.893	3.042
Styrene	36.294	31.032
TDI	33.501	28.410
Toluene	9.073	9.133

Polish aromatic imports Jan-May 2024

Phenol imports into Poland amounted to 43,653 tons in January to May 2024 which was up from 28,854 tons in the same period in 2023. Germany supplied 31,793 tons in the first five months followed by Spain with 3,825 tons. Average prices for phenol imports amounted to €1339.3 per ton in 2024 against €1321.9 per ton last year. Grupa Azoty is the largest consumer of phenol in Poland.

In other product areas, ethylbenzene imports declined from 51,070 tons to 38,724 tons. Nearly all of the ethylbenzene imports come from the Czech Republic. Phthalic anhydride imports into Poland increased from 14,933 tons in January to May 2023 to 15,374 tons in the same period in 2023. Phthalic anhydride is used predominantly by Grupa Azoty at Kedzierzyn in the

production of plasticizers. The procurement strategy is based primarily on supplies from the domestic and the EU markets, with deliveries from outside Europe covering any deficit.

Paraxylene imports into Poland have been required this year to support higher PTA production at Wloclawek, totalling 9,104 tons in the first five months. Lower production last year meant that no

imports were undertaken. Paraxylene production takes place at Plock in Poland and production is designed to be coordinated with PTA production at Wloclawek.

Caprolactam imports into Poland dropped from 10,361 tons in the first five months last year to 3,719 tons in the same period in 2024. The reduction was due to higher production in Poland and also continued suppressed demand in the polyamide sector.

Czech Aromatic Exports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Benzene	4.346	4.522
Toluene	3.967	5.347
Ethylbenzene	31.158	51.346
Styrene	6.925	5.055
Caprolactam	13.006	9.467
Czech Aromatic Imports (unit-kilo tons)		
Product	Jan-Mar 24	Jan-Mar 23
Benzene	30.218	16.212
Toluene	2.482	3.082
Styrene	4.263	17.491
Bisphenol A	14.361	12.821

Poland increased production of caprolactam slightly to 42,500 tons in the first five months this year versus 40,800 tons in the same period in 2023. Caprolactam prices have remained fairly stable this year, but margins remain tight due to feedstock costs measured against moderate demands. Caprolactam production is undertaken in Poland by Grupa Azoty at its two plants at Tarnow and Pulawy and over the past two years the company has been affected by higher energy costs, combined with almost constant weak demand for polyamide. Despite the revival the market volumes remain below the pre-pandemic levels.

Czech aromatic imports Jan-May 2024

Czech caprolactam exports amounted to 13,006 tons in the first five months this year up from 9,467 tons in the same period in 2023. Average prices increased from €1747.8 per ton to €2108.0 per ton with upward pressure felt in the second quarter. All of the exports were shipped to European countries. Italy was the largest destination for Spolana's exports, with shipments rising from 5,734 tons in the first five months last year to 5,907 tons.

Czech Caprolactam Exports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	1.348	0.841
Germany	1.559	0.222
Italy	5.907	5.734
Slovenia	3.046	1.444
Switzerland	0.991	1.149
Others	0.154	0.077
Total	13.006	9.467
Av price €	2108.0	1747.8

Czech benzene imports rose to 14,320 tons in the first five months in 2024 against 10,931 tons in the same period in 2023, whilst exports dropped slightly from 4,522 tons to 4,346 tons. There are two producers of benzene in the Czech Republic including Unipetrol at Litvinov and Deza at Valasske Mezirici.

South Korean BPA Exports to Central Europe (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Czech Republic	11.008	5.632
Poland	3.872	8.97
Germany	17.657	22.747
Total	32.537	37.349

Deza is owned by Agrofert and intends to increase the production capacity of benzene to 160,000 tpa in addition to toluene to 25,000 tpa. Toluene imports dropped to 2,482 tons from 3,082 tons, whilst exports of toluene dropped from 5,437 tons to 3,967 tons. Imports of bisphenol A dropped from 29,069 tons to 26,864 tons.

Czech Epoxy Resins (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Austria	1.692	1.106
Germany	7.371	9.626
Spain	1.832	1.482
France	1.743	1.795
UK	0.624	0.527
Italy	2.300	1.956
Poland	0.805	0.726
Turkey	0.623	1.084
Ukraine	0.145	0.098
Others	2.991	0.905
Total	21.248	21.417
Av Price per ton	2064.1	3459.1

Bisphenol A imports into Central Europe

Bisphenol A imports into the Czech Republic totalled 32,537 tons in the first five months in 2024 against 37,348 tons last year, with average prices dropping from €1608.0 per ton to €1360.4 per ton.

The largest user of bisphenol A in the Czech Republic is Spolchemie at Ust nad Labem, where epoxy resins are produced. The largest supplier to the Czech market is South Korea which increased shipments to 11,008 tons from 5,632 tons in the same period in 2023.

For the whole of last year South Korea supplied 13,824 tons to the Czech Republic which was up from 11,072 tons in 2022. Belgium is the only other notable supplier to the Czech Republic.

The largest European recipient of Korean BPA was Germany, rising to 52,157 tons against 15,514 tons in 2023. Poland reduced imports from South Korea in the first five months this year to 3,872 tons.

EU anti-dumping investigation into epoxy resin imports

Spolchemie has joined Olin Corporation in requesting that the European Commission starts an anti-dumping proceeding concerning imports of epoxy resins from China, the Republic of Korea, Taiwan, and Thailand. The Complaint alleges that exporting producers in the four targeted countries have injured the European epoxy resin producers by selling their products on the EU market at unfairly low prices. These prices significantly undercut the prices of European producers. The dumping margins alleged during the investigation period include China at 140%-170%, Korea at 10%-40%, Taiwan at 20% - 40% and Thailand 60%.

totalled 3,946 tons in the first five months in 2024 at an average price of €5.164 per ton against 3,907 tons in the first five months in 2023. Prices were higher last year at €6,031 per ton.

Imports of epoxy resins Into Poland amounted to 9,530 tons in the first five months in 2024 at an average price of €4640.5 per ton. Poland exported 4,525 tons of epoxy resins in the first five months this year at an average price of €3427.6 per ton.

Epoxy resin production in Poland takes place at Lerg (formerly Ciech Zywiec) which is the sixth largest producer in Europe at 30,000 tpa. Aside domestic production the most serious competitors in Poland

Hungarian Benzene Exports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Belgium	0.000	4.127
Czech R	5.023	0.000
Germany	5.727	15.976
France	3.227	7.402
Italy	0.529	0.620
Netherlands	0.000	11.686
Total	14.506	39.811
Av € per ton	1140.5	811.8

include resin suppliers from Germany, the Czech Republic and Italy.

Hungarian aromatic imports Jan-Apr 2024

Hungarian benzene exports in the first four months in 2024 dropped to 14,506 tons against 39,811 tons in the same period last year due to lower production. Although prices rose from €811.8 per ton to €1140.5 per ton, lower volumes meant that revenues from benzene exports dropped to €16.545 million against €32.320 million. Exports are distributed largely to Germany, France and the Czech Republic. Benzene is used in Hungary in the

MDI chain.

Hungarian Toluene Imports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Belgium	2.000	0.001
Czech R	0.069	0.000
Germany	9.199	4.049
France	0.202	0.004
Italy	0.529	0.000
Netherlands	0.007	2.549
Poland	0.000	1.398
Romania	3.016	0.329
Slovakia	3.654	1.867
Total	18.676	10.196
Av € per ton	1058.4	1065.9

Toluene imports into Hungary amounted to 18,676 tons in the first four months for €19.134 million in value. This compares against 10,196 tons in the same period last year at costs of 10.868 million.

Average toluene prices dropped slightly from €1065.9 per ton to €1058.4 per ton. Imports increased this year in line with the increase in TDI production at BorsodChem.

Germany was the largest supplier of toluene providing 9,199 tons to the Hungarian market in the first four months in 2024. This was followed by Slovakia from the Slovnaft refinery with 3,654 tons against 1,867 tons in the same period last year. Other suppliers included

Belgium and Romania.

Hungarian TDI Exports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Austria	1.199	1.059
Belgium	13.027	9.484
Germany	4.259	3.509
Italy	11.336	10.351
Poland	10.760	10.523
Portugal	3.373	4.848
Romania	4.725	4.379
Spain	3.558	3.612
Turkey	18.635	11.591
Others	27.480	19.039
Total	98.352	78.395
Av € per ton	1960.3	3036.4

Polish TDI Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	4.077	0.655
Germany	7.752	7.340
Hungary	12.446	12.340
Netherlands	4.077	1.962
South Korea	2.493	2.830
Others	2.108	2.289
Total	32.791	28.413
Av € per ton	2035.6	3015.2

1,552 tons in the same period in 2023.

Hungarian MDI Exports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Belgium	4.148	0.510
Czech Republic	3.442	2.306
Germany	7.762	6.778
Algeria	1.888	0.238
Italy	3.907	3.667
France	3.937	4.540
Spain	1.559	1.832
UK	3.493	1.721
Netherlands	2.518	1.671
Poland	13.912	12.540
Romania	6.629	6.425
Turkey	13.707	2.466
Others	15.647	8.610
Total	82.549	53.302
Av € per ton	1833.5	2542.5

MDI exports from Hungary increased in the first four months last year to 82,549 tons from 53,302 tons in the same period in 2024. MDI export prices dropped from €2452.5 per ton in January to April 2023 to €1833.5 per ton this year. Poland was the largest destination for Hungarian MDI exports, shipping 13,707 tons in the first four months in 2024 versus 12,540 tons in the same period in 2023. Romania is the second largest market in Central and South East Europe, taking 6,629 tons in the first four months this year which was down from 6,425 tons in 2023.

Central European isocyanates & polyols

Hungarian TDI-MDI exports Jan-Apr 2024

Isocyanate exports from Hungary have increased this year, rebounding from the declines in 2023. Hungarian TDI exports rose in the first four months to 98,352 tons against 78,395 tons in January to April 2023. Average prices dropped from €3036.4 per ton to €1960.3 in 2024.

Exports of TDI from Hungary to Belgium rose from 9,484 tons in the first four months in 2023 to 13,027 tons in January to April 2024, whilst volumes to Italy increased from 10,351 tons to 11,336 tons.

Elsewhere in West Europe Hungarian exports to Portugal dropped from 4,848 tons to 3,373 tons, whilst shipments to Germany increased from 3,509 tons to 4,259 tons. In Central Europe shipments to Poland rose slightly from 10,523 tons to 10,760 tons and to Romania from 4,379 tons to 4,725 tons.

Besides exports, Hungary imported 3,348 tons of TDI in the first four months in 2024 against 3,436 tons in the same period last year. Whilst volumes remained similar, prices dropped from €2726.3 per ton last year to €1723.0 per ton in 2024.

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

1,552 tons in the same period in 2023.

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

Central European isocyanate trade Jan-May 2024

MDI imports into the Czech Republic totalled 17,414 tons in January to May 2024 against 15,615 tons in the same period in 2023. The leading supplier was Belgium which shipped 4,239 tons in the first five months versus 4,046 tons in the same period in 2023. Average prices for MDI dropped from €2467.5 per ton to €2081.7 per ton.

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

Polish MDI Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Germany	19.533	14.345
Netherlands	7.091	8.839
Hungary	16.639	16.227
Belgium	15.287	9.356
South Korea	4.423	3.071
Others	4.220	7.658
Total	67.193	59.496
Av € per ton	1898.8	2228.5

Besides exports, Hungary imported 4,030 tons of MDI in the first four months in 2024 against 3,226 tons in the same period last year. Whilst volumes remained similar, prices dropped from €1985.0 per ton last year to €1797.5 per ton in 2024.

Central European polyol prices 1st half of 2024

Central European polyol prices started 2024 on a slight downward trajectory, continuing the trend from 2023. The market has tended to stabilise this year even if profit margins for producers have been minimal. The question is now what impact the MOL plant will have on the market.

Czech MDI Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
China	1.422	1.414
Belgium	4.239	4.046
Germany	3.129	1.908
Hungary	3.760	5.266
Netherlands	3.150	2.433
Others	1.714	0.549
Total	17.414	15.615
Av Price €	2081.7	2467.5

Hungarian polyol imports

Hungarian polyol imports amounted to 14,396 tons in the first four months this year against 21,491 tons in the same period in 2023. Prices dropped this year to €1782 per ton. The largest supplier of polyols this year has been China, shipping 3,438 tons to Hungary, followed by the Netherlands with 3,231 tons.

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

Czech Polyol Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	5.795	8.524
Germany	3.027	6.184
France	3.449	4.783
Netherlands	1.954	2.749
Romania	0.828	0.991
Slovakia	1.862	2.854
Others	2.678	3.033
Total	19.592	29.726
Av € per ton	2296.4	2639.8

Czech polyol imports Jan-May 2024

Czech polyol imports dropped in the first five months to 19,592 tons against 29,726 tons in the same period in 2023, with average prices dropping from €2639.8 per ton last year to €2296.4 in 2024. The leading supplier to the Czech market was Belgium which shipped 5,795 tons in the period January to May 2024 against 8,524 tons in the same period in 2023. This was followed by Germany which exported 3,027 tons, down from 6,184 tons.

Polish Polyol Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	6.658	7.431
China	2.674	4.272
France	1.643	2.247
Germany	14.871	13.482
Netherlands	16.954	11.612
Romania	6.737	6.747
Saudi Arabia	0.886	1.663
South Korea	3.002	7.317
Others	5.084	4.460
Total	58.509	59.232
Price	1837.468	2205.627

Polish polyol trade Jan-May 2024

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

Poland exported 24,137 tons of polyols in the first five months in 2024 against 24,535 tons in 2023. Average prices dropped slightly to €2118.0 per ton from €2248.1 per ton last year.

Italy was the largest destination for Polish exports of polyols, rising to 3,773 tons from 2,583 tons last year whilst Germany took 3,016 tons. Due to lower prices this year export revenues dropped from €34.956 million to €30.256 million.

Hungarian maleic anhydride exports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Austria	0.219	1.126
Germany	1.051	0.696
Italy	1.253	1.126
Poland	3.288	1.061
Slovenia	0.608	0.656
Others	2.475	2.076
Total	8.894	6.741
Av € per ton	1167.7	1302.4

Hungarian imports of acrylonitrile (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Germany	0.157	1.501
Netherlands	2.355	4.448
Others	0.000	1.949
Total	2.355	8.367
Av € per ton	1670.9	2092.8

Hungarian aniline imports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Belgium	3.296	18.534
China	0.000	10.875
Czech Republic	37.857	26.269
Total	41.177	55.678
Av € per ton	1460.6	1446.1

Polish Organic Chemical Trade		
Exports	Jan-May 24	Jan-May 23
Vol (kilo tons)	664.0	656.7
Value (€ million)	530.6	533.7
Imports	Jan-May 24	Jan-May 23
Vol (kilo tons)	1,632.4	1,778.4
Value (€ million)	1,144.4	1,156.3

Polish Organic Chemical Imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Acetic Acid	14.295	14.503
Acetone	2.827	2.925
Butadiene	41.066	35.661
DINP/DOP	10.971	5.348
Ethyl Acetate	6.699	7.157
Isopropanol	4.936	4.303
Maleic Anhydride	4.859	5.627
Methanol	277.300	325.649
Propylene	42.688	60.552
VAM	9.054	6.017

Central European organic chemical trade

Hungarian maleic anhydride exports Jan-Apr 2024

Hungary exported 5,753 tons of maleic anhydride in the first two months this year against 3,149 tons in the same period in 2023, with average prices dropping from €1302.4 per ton to €1167.7 per ton. Exports to Poland from Hungary increased from 1,061 tons in January to April 2023 to 3,288 tons in the same period in 2024.

Hungarian acrylonitrile imports Jan-Apr 2024

Hungary imported only 2,355 tons of acrylonitrile in the first four months in 2024 against 8,637 tons in the same period in 2023. The Netherlands was the main source of imports in both years, shipping 2,355 tons in January to April 2024 versus 4,448 tons in the same period last year. Acrylonitrile import prices dropped on average from €2092.8 per ton in last year to €1670.9 per ton this year.

Hungarian aniline imports Jan-Apr 2024

Aniline imports into Hungary dropped from 55,678 tons in the first four months in 2023 to 41,177 tons in the same period in 2024. Inward shipments from BorsodChem-MCHZ in the Czech Republic amounted to 37,857 tons against 26,269 tons last year. Belgium supplied 3,296 tons in the first four months this year against 18,534 tons in the same period in 2023. Cost prices of aniline imports increased from €1446.1 per ton to €1460.6 per ton.

Polish organic chemical trade Jan-May 2024

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

Methanol imports into Poland totalled 277,300 tons in January to May this year against 325,649 tons in the same period in 2022. Acetic acid imports were virtually unchanged this year, amounting 14,295 tons in the first five months against 14,503 tons last year. However, prices have been lower averaging €637.0 per ton, down from €817.0 per ton. Imports from the UK increased from 2,690 tons in January to May 2023 to 6,655 tons whilst volumes from the US dropped from 8,543 tons to 2,156 tons.

Ethyl acetate imports into Poland amounted to 6,699 tons in January to May this year against 7,157 tons in January to May 2023. Belgium provided the largest share of imports. VAM imports amounted to 9,054 tons in the first five months versus 6,017 tons last year.

Polish ethylene-propylene oxides and glycols

Ethylene oxide imports into Poland totalled 9,221 tons in January to May versus 7,293 tons in January to May 2023. 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 in the first five months to 23,551 tons versus 42,597 tons in the same period last year. Belgium supplied the largest

Polish EO/PO Imports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
DEG	13.729	12.449
Ethylene Glycol	24.179	42.597
Ethylene Oxide	9.221	7.293
Propylene Glycol	9.395	8.201
Propylene Oxide	3.266	0.000

slightly to 6,216 tons against 7,364 tons.

Polish Organic Chemical Exports (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Acetone	5.145	6.085
Methanol	88.245	156.865
Monochloroacetic Acid	10.387	16.096
N-Butyl Acetate	2.977	5.006
Phthalic Anhydride	1.832	1.418
TDI	2.607	2.198

tons in January to May 2024. The largest destination for Polish butyl acetate exports is Germany.

Poland Methanol Exports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Austria	0.671	29.002
Czech	19.773	29.179
Germany	44.282	38.375
Romania	0.000	17.443
Slovakia	12.525	21.553
Ukraine	10.528	8.915
Hungary	0.000	12.260
Others	0.467	0.137
Total	88.245	156.865
Av € per ton	374.6	384.9

Polish Methanol Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belgium	75.231	33.413
Estonia	3.354	0.000
Germany	39.462	19.426
Netherlands	38.766	20.325
Norway	42.397	23.150
Russia	0.000	185.481
US	0.000	10.001
Trinidad	0.000	7.989
Venezuela	77.788	20.765
Total	0.300	0.118
Total	277.300	325.649
€ price per ton	317.9	298.1

sources arrived last year from the US and Trinidad.

Czech imports of methanol amounted to 31,891 tons in the first five months in 2024 versus 33,511 tons in the same period in 2023. Imports from Poland increased from 21,939 tons to 23,964 tons.

volume of glycols to the Polish market. Propylene oxide is produced by PCC Rokita, but imports are occasionally required, and amounted to 3,266 tons in the first five months this year.

Regarding export activity in organic chemicals, exports of methanol from Poland amounted to 51,847 tons in January to May against 86,483 tons in January to May 2023. Germany imported 28,140 tons in the first five months against 22,461 tons in the same period in 2023, whilst Ukraine reduced imports

Polish shipments of monochloroacetic acid (MCAA) declined in the first five months to 10,387 tons against only 16,096 in the same period in 2023. The destinations for Polish MCAA exports are spread throughout Europe including Germany, Italy, France and Spain. Other organic chemical exports from Poland include acetone where shipments amounted to 5,145 tons in the first five months this year versus 6,085 tons in January to May 2023. Normal butyl acetate exports dropped from 5,006 tons to 2,182

Methanol is the largest organic chemical exported from Poland, all of which is based on imported sources. In the first five months this year imports amounted to 88,245 tons against 156,865 tons in the same period last year. The drop can largely be attributed to the full ban on Russian methanol purchases as other countries have been able to find other sources. Azerbaijan, for example, has increased sales to the EU countries which has added competition to Polish traders.

Central European methanol imports

Polish methanol imports Jan-May 2024

Methanol imports into Poland totalled 277,300 tons in January to May this year against 325,649 tons in the same period in 2023. Average prices amounted to €317.9 per ton against €298.1 per ton last year.

Belgium was the largest European supplier this year, shipping 75,431 tons to Poland in the first five months against 33,413 tons in 2023. Norway increased exports to 42,397 tons of methanol to Poland in the first five months in 2024 which was up from 23,150 tons in the same period in 2023, whilst imports from Venezuela increased from 20,765 tons to 77,768 tons. Supplies from Venezuela have meant that imports from Trinidad have not been required.

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

Czech Methanol Imports (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Germany	2.796	2.744
Norway	0.064	0.833
Estonia	3.262	0.000
Russia	0.000	6.237
Poland	23.964	21.939
Others	1.805	1.757
Total	31.891	33.511
Av Price €	382.6	393.3

Estonia became a new supplier to the Czech Republic in 2024, supplying 3,262 tons in the first five months. Prices per ton for methanol imports into the Czech Republic dropped from €393.3 per ton in 2023 to €382.6 in January to May 2024.

Methanol imports into Hungary in the first four months in 2024 amounted to 30,194 tons against 31,418 tons in the same period in 2023. The largest supplier to the Hungarian market was Germany which provided 21,271 tons versus 8,572 tons in the same period last year. Slovenia was the second largest supplier providing 4,014 tons.

Hungarian methanol imports (unit-kilo tons)		
Country	Jan-Apr 24	Jan-Apr 23
Austria	0.154	0.559
Germany	21.271	8.572
Netherlands	3.295	9.672
Poland	1.070	6.738
Slovenia	4.014	0.304
Slovakia	0.000	4.181
Others	0.390	1.391
Total	30.194	31.418
Av € per ton	449.6	437.4

Grupa Azoty Q1 2024

Grupa Azoty's financial predicament is being seen as the need for serious long-term restructuring. The value of the company has fallen in the past two years and now stands at around €1.8 billion which equates to the amount invested into the Polimery Police project.

Grupa Azoty generated consolidated revenues of zł 3.399 million in the first quarter and an EBITDA of minus zł 50 million. The group's EBITDA margin amounted to minus 1.5%.

Essentially demand for the products offered by Grupa Azoty remained too low for the Group's operating profitability to recover, especially in the face of a further decline in prices. Too many products offer low margins, and it is very difficult to compete against products from other parts of the world. Thus, the Azoty Management Board's goal is at present focused on surviving month to month, but also may require a substantial increase in capital by adding extra shares. The Polimery Police project appeared

Grupa Azoty's Financial Performance (€ million)						
Q1 2024	Fertilisers	Plastics	Chemicals	Energy	Other	Total
Total revenue	699,016	131,870	211,182	291,934	77,579	1,411,581
Operating expenses	-717,917	-147,583	-236,652	-290,268	-79,895	-1,472,315
EBIT	-18,555	-16,341	-25,196	914	-1,344	-60,522
Q1 2023	Fertilisers	Plastics	Chemicals	Energy	Other	Total
Total revenue	929,911	128,901	336,743	529,977	73,088	1,998,619
Operating expenses	-1,019,045	-157,999	-374,103	-555,766	-79,661	-2,186,574
EBIT	-55,098	-26,801	-19,058	-31,354	-6,623	-138,934

around nine to ten months.

Last year was particularly challenging for the group with total EBITDA of minus €307.1 million against an EBITDA in 2022 of plus €529.4 million. The first quarter this year showed some overall improvement in terms of lower losses, but revenues were also much lower at €1.411 billion against €1.999 billion in the first quarter in 2023.

In the plastics and chemical divisions feedstock issues continued to affect profits. The plastics division should see an increase in revenues when the polypropylene plant starts to start selling in greater volume. The polyamide sector continues to experience lower consumption than normal but sales for Azoty and other European suppliers have been helped by logistical constraints caused by attacks in the Red Sea. Reduced and delayed imports of PA6 and derivative products from Asia has helped sales.

In the chemical sector, the prices of all oxo alcohols showed some slight improvement in the first few months of 2024 but melamine production remains a price problem due to natural gas and energy. Grupa Azoty Puławy has thus decided to temporarily suspend melamine production. It could be resumed when it is possible to obtain an acceptable price, but imports represent a challenge.

RUSSIA

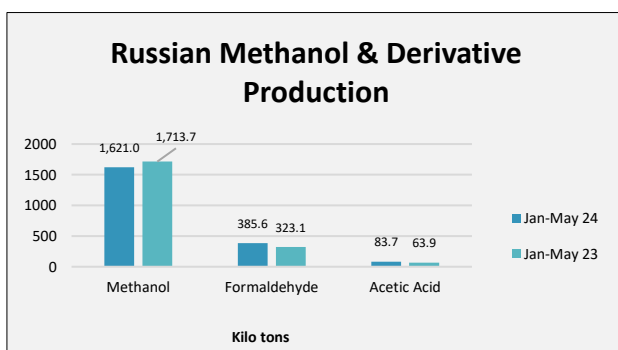
Russian Chemical Production (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Ethylene	2013.0	1956.6
Propylene	1158.6	1107.6
Benzene	586.8	552.1
Toluene	160.5	149.8
Xylenes	189.9	194.4
Orthoxylene	56.1	55.4
Paraxylene	85.0	84.3
Styrene	322.4	304.8
Ethylbenzene	369.9	339.6
Methanol	1621.0	1755.1
Isopropanol	35.0	26.4
Butanols	61.6	59.8
Phenol	108.8	98.9
Acetic Acid	83.7	63.9
Phthalic Anhydride	38.3	38.2

Russian chemical production Jan-May 2024

Organic chemical and petrochemical production in Russia increased for most products over the course of the first five months against 2023, with the exception of methanol. The main petrochemical monomers, ethylene, propylene and benzene all recorded increases in the first five months this year.

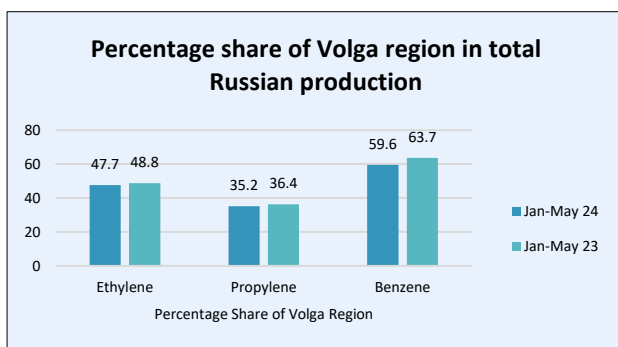
Ethylene production increased from 1.957 million tons in the first five months last year to 2.013 million tons this year whilst propylene increased from 1.108 million tons to 1.159 million tons. Styrene production increased from 304,800 tons in the first five months last year to 322,400 tons in January to May this year, whilst benzene production increased from 552,100 tons to 586,800 tons.

Further growth for the main petrochemical monomers is likely to depend on the start-up of Nizhnekamskneftekhim's new EP-600 cracker which is expected to become fully operational in 2025. Nizhnekamskneftekhim's new cracker will operate predominantly on naphtha from the nearby Taneko refinery.



Naphtha production in Russia dropped by 30% in the first five months this year against the same period in 2023, falling from 2.931 million tons to 3.507 million tons. Refineries in the north west and south of Russia reported the biggest fall in naphtha output.

In the organic chemical sector methanol production fell from 1.755 million tons to 1.621 million tons, with domestic merchant sales helping to offset the decline in exports. Methanol derivatives such as acetic acid and formaldehyde both recorded increases in the first five months, although underlying currents suggest a slowdown.



Russian polymer production Jan-May 2024

Russian bulk plastics production amounted to 4.607 million tons in the first five months against 4.473 million tons in the same period last year.

Russian production of polyethylene rose from 1.368 million tons in January to May 2023 to 1.437 million tons in the same period this year. Polypropylene production increased from 905,900 tons in the first five months in 2023 to 928,500 tons in the same period in 2024. Polystyrene production increased from 246,900 tons to 255,200 tons whilst PVC production rose from 396,500 tons to 415,600 tons.

Russian Polymer Production (unit-kilo tons)		
Product	Jan-May 24	Jan-May 23
Plastics	4,607.2	4,473.0
PE	1437.2	1368.2
PS	255.2	246.9
PVC	415.6	396.5
PP	928.6	905.9
Synthetic Rubber	625.6	626.8

Russian production of synthetic rubbers amounted to 625,600 tons in the first five months in 2024 compared to 626,800 in the first five months in 2023.

Russian petrochemical projects

Wison Engineering suspends activities in Russia

China's Wison New Energies, which has been engaged some of the Russian hydrocarbon and petrochemical projects, suspended all activities in Russia in June. Following the exit of Western companies the Chinese company had been commissioned for the construction of modules for Novatek's Arctic LNG-2 project. Wison New Energies is part of the Wison Group, engaged in engineering services, shipbuilding and green energy. Wison (Nantong) Heavy Industry, a subsidiary of Wison New Energies, has contracts with Rosatom for the construction of buildings for three floating nuclear power units.

Wison has other projects in Russia, and particularly with Titan in the petrochemical sector. In November 2023, the Titan Group of Companies signed a cooperation agreement with the Chinese Wison Engineering Ltd to create an EP-600 complex on the basis of an industrial park in the Omsk region. Design of the EP-600 ethylene production complex was to include ethylene, propylene, butadiene, benzene and other petrochemical products. Titan Group announced the start of the design of the complex in January this year, but the fear of secondary sanctions from the US may prevent further progress with Wison Engineering.

SIBUR-metallocene PE project at Nizhnekamsk

SIBUR will build a metallocene polyethylene production facility in Nizhnekamsk with a capacity of 300,000 tpa. The raw material for the new production will stem from products of the EP-600 complex, which this year is moving to the stage of commissioning. The result, the plant, which currently produces LLDPE, will be able to produce more premium grades of polyethylene. The consumption of metallocene grades of polyethylene is at the level of 170,000 tpa, and the potential for import substitution is around 30,000 tpa.

ethylene complex, which will produce the first products in 2024.

SIBUR to construct EB, styrene and polystyrene plants at Nizhnekamsk

As extensions to the new EP 600 cracker at Nizhnekamskneftekhim, SIBUR has identified derivative plants including the production of ethylbenzene, styrene and polystyrene at Nizhnekamskneftekhim. The design production capacities are expected to comprise 350,000 tpa of ethylbenzene, 400,000 tpa of styrene and 250,000 tpa of polystyrene. The raw material will be supplied from the EP-600

Ruskhimalliance-Deutsche Bank dispute

Ruskhimalliance's dispute with Linde and Deutsche Bank continues to evolve over the aborted construction of the Ust Luga gas processing and gas chemical complex. Russian courts have not recognised Deutsche Bank's appeal to recover more than €238 million from it on the claim of Ruskhimalliance, which is building a gas processing plant in Ust-Luga. At the same time Ruskhimalliance is suing Bayerische Landesbank for around €274 million.

Linde informed Ruskhimalliance in 2022 about the suspension of all work on the creation of a complex in Ust-Luga due to EU sanctions. However, Russia said that the EU restrictive measures do not apply to the implementation of the project in Ust-Luga, since they were not imposed on the design of gas processing and gas chemical facilities. Linde did not start work on the project again. After that, Ruskhimalliance terminated Linde's contract and filed lawsuits against the company and banks.

SIBUR is concluding contracts for the supply of equipment and materials for these derivative plants, which will involve machine builders and manufacturers from Russia and so-called friendly countries. Construction work on the site is expected to begin in 2025, with mechanical readiness and commissioning scheduled for 2028. This would increase Russia's capabilities in the production of polystyrene by almost a quarter.

Hexene plant installation at Nizhnekamskneftekhim

Russia currently relies on imports of ethylene hexene copolymers, but this position could change after the completion of the new hexene plant under construction at Nizhnekamskneftekhim. The construction of the hexene unit is being carried out using SIBUR's own technology with 90% of the

equipment produced in Russia. The hexene-1 product produced will be used at SIBUR's production sites in the future as a comonomer to produce premium quality polyethylene. The capacity of the hexene unit is 50,000 tpa. The overall progress of the project is 51.1%. The government of Tatarstan has allocated subsidies of 1.04 billion roubles for the construction of the railway infrastructure linked to the Ethylene-600 industrial park, being built in the Alabuga Special Economic Zone.

Russian Monomers

Russian ethylene production Jan-May 2024

Russian ethylene production totalled 2.013 million tons in the first five months in 2024 against 1.935 million tons in the same period in 2023. The largest producer ZapSibNeftekhim at Tobolsk produced 679,436 tons in January to May 2024, up from 658,722 tons from January to May 2023.

Russian Ethylene Production (unit-kilo tons)		
Region	Jan-May 24	Jan-May 23
North Caucasus Federal District	151.386	135.950
Volga Federal District	959.948	943.640
Ural federal district	679.436	658.722
Siberian Federal District	222.237	197.292
Total	2013.007	1935.603

ZapSibNeftekhim is only one of three ethylene plants in Russia that is not connected to other producers or consumers through pipeline. The other two other stand-alone plants include

Stavrolen and SIBUR-Khimprom. The main ethylene pipeline is located in the Volga-Urals region. The southern branch provides ethylene supply from Nizhnekamskneftekhim to Ufaorgsintez, Bashkir Soda Company, and Gazprom neftekhim Salavat. The northern branch supplies Kazanorgsintez where its own ethylene production is lower than required for polymer capacity. Kazanorgsintez uses ethane technology for the production of ethylene, receiving ethane through a pipeline system from the Orenburg region.

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

Russian Propylene Production (unit-kilo tons)		
Region	Jan-May 24	Jan-May 23
North Caucasus Federal District	54.378	54.512
Volga Federal District	397.561	401.811
Ural federal district	458.025	452.001
Siberian Federal District	219.654	196.449
Total	1129.617	1104.772

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Angarsk Polymer Plant	54.378	54.512
SIBUR-Kstovo	397.561	401.811
Lukoil-NNOS	458.025	452.001
Total	219.654	196.449

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

of propylene in the first five months in 2024 against 30,996 tons in the same period in 2023, whilst Saratovorgsintez reduced purchases from 45,651 tons to 37,074 tons.

Russian propylene production Jan-May 2024

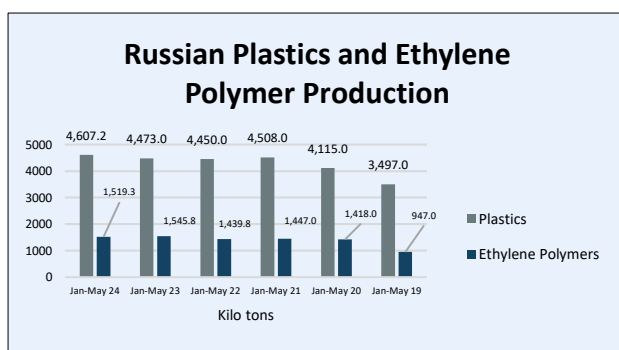
Russian propylene production totalled 1.130 million tons in the first five months in 2024 against 1.105 million tons in the same period in 2023. ZapSibNeftekhim at Tobolsk produced 458,025 tons rising from 452,001 tons in the first five months in 2023. The Volga-Urals region accounted for 397,561 tons against 401,811 tons in 2023.

Russian propylene domestic sales Jan-May 2024

Russian sales of propylene on the domestic merchant market amounted to 102,910 tons in the first five months this year against 106,214 tons in January to May 2023. The largest propylene supplier to the domestic market was SIBUR-Kstovo, shipping 49,571 tons against 33,371 tons.

Lukoil-NNOS reduced propylene sales from 56,012 tons in the first five months to 36,434 tons, partly due to the side-effects of the drone attacks on the refinery. ZapSibNeftekhim purchased 19,543 tons

Russian bulk polymers

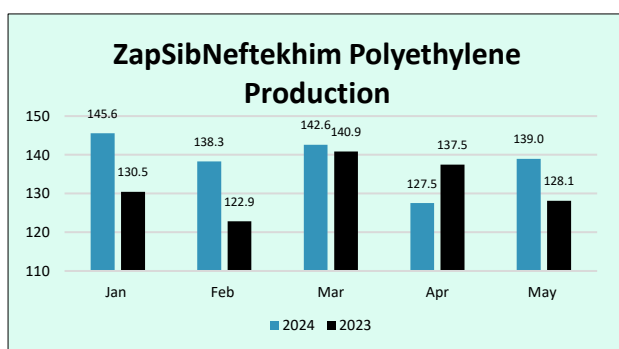


Russian plastics production Jan-May 2024

Russian bulk plastics production amounted to 4.607 million tons in January to May 2024 against 4.473 million tons in the same period in 2023 and 4.550 million tons in the first five months in 2022.

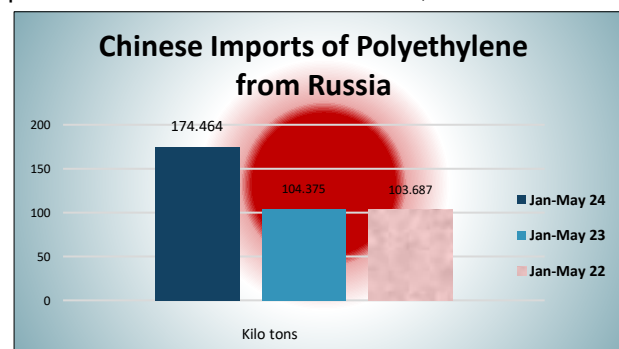
Ethylene polymers remain the leading growth for polymers in Russia, followed by polypropylene. Production totalled 1.519 million tons in the first five months in 2024 against 1.546 million tons in the same period in 2023.

2023. Polyethylene production broken down by category is dominated by LDPE and HDPE. Other products include LLDPE and ethylene vinyl acetate.



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

The production of ethylene polymers is the only one segment in the plastics production segment that showed growth in 2023 both compared to 2022 and compared to 2021. The production of polyethylene in Russia in 2023 increased by 1% compared to the previous year from 3.190 million tons to 3.230 million tons, while its processing increased by almost 18% to 2.9 million tons. LLDPE production amounted to about 670,000 tons in 2023 against demand of 550,000 tpa. The surplus is being directed towards the Chinese market.



Russian polymer prices have been in decline in the first half of 2024, dropping 17% between the 1 July 2023 and 1 July 2024. From December 2023 to May 2024, the cost of polymers decreased by an average of 7%, while the increase in prices for plastic products was 6%. It should be stressed that since the spring of 2022, the dynamics in Russia have ceased to correspond to global trends. In the first phase of the war Russian polymer prices

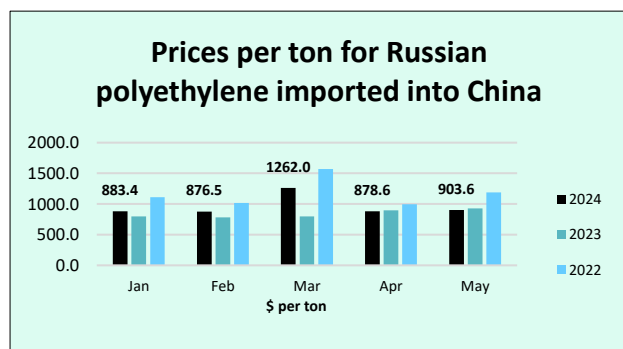
were artificially reduced in order to support the Russian plastics processing industry. Although this support has since ceased the market is functioning in different ways from European market.

Chinese Exports of Polyethylene to Russia (unit-kilo tons)			
Product Category	Jan-May 24	Jan-May 23	Jan-May 22
LDPE	7.6	5.6	0.4
HDPE	6.1	14.8	0.7
LLDPE	10.3	2.6	0.0
EVA	5.5	7.1	1.4
Ethylene-hexene	10.1	10.9	11.1
Others	0.1	0.3	0.0
Total	39.6	41.2	13.6

Russian polyethylene trade Jan-May 2024

Russian polyethylene exports to China increased from 104,375 tons in January to May 2023 to 174,464 tons in the same period this year, with values rising from \$88.936 million to \$165.104 million. Average prices rose from \$852.1 per ton to \$946.3 per ton. As illustrated in the graphic below prices for Russian

polyethylene exports to China have dropped significantly against 2022 but slightly higher than in 2023. Apart from market factors driving prices lower Chinese consumers are in a strong negotiating position with Russian suppliers. March 2024 saw an increase in prices to \$1262.0 per ton but had fallen to \$903.6 per ton in May.



Export grades from Russia to China comprise HDPE, LLDPE and LDPE. HDPE shipments from Russia to China amounted to 77,173 tons in the first five months in 2024 against 132,148 tons in the same period in 2023.

Inward shipments of polyethylene from China into Russia dropped slightly in the first five months to 39,600 against 41,031 tons in the same period in 2023 and only 13,632 tons in 2022. The most expensive grades of polyethylene included ethylene-vinyl acetate

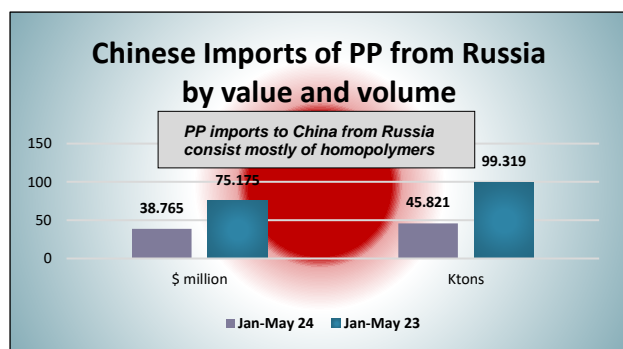
and ethylene-hexene copolymers. Average PE prices fell in the first five months to \$1430.7 to \$1858.3 in the same period in 2023.

Russian Propylene Polymers Production by Region (unit-kilo tons)		
Region	Jan-May 24	Jan-May 23
Central Federal District	70.162	63.156
Northwestern Federal District	0.427	0.567
Southern Federal District	4.349	5.317
North Caucasus Federal District	59.876	51.865
Volga Federal District	170.434	174.962
Ural federal district	498.162	473.066
Siberian Federal District	147.365	147.466
Total	950.775	916.400

Russian polypropylene production Jan-May 2024

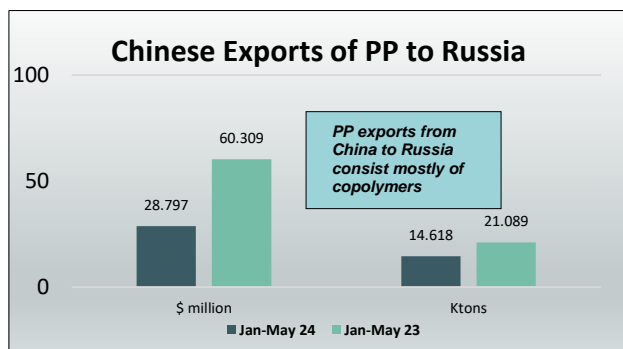
Russian production of propylene polymers totalled 950,775 tons in the first five months in 2024 versus 916,400 tons in the same period in 2023. Most of the production in Russia is focused on homo grade product. Most copolymers are imported which is currently from China.

Russia's largest producer ZapSibNeftekhim at Tobolsk increased production from 473,066 tons in the first five months in 2023 to 498,162 tons in the same period in 2024.



Russian-Chinese polypropylene trade Jan-May 2024

Exports of polypropylene from Russia to China amounted to 45,821 tons in the first five months in 2024 against 99,319 tons in the same period in 2023. Export revenues dropped from \$75.175 million to \$38.765 million. Most of the Russian exports to China consisted of homo grade polypropylene.

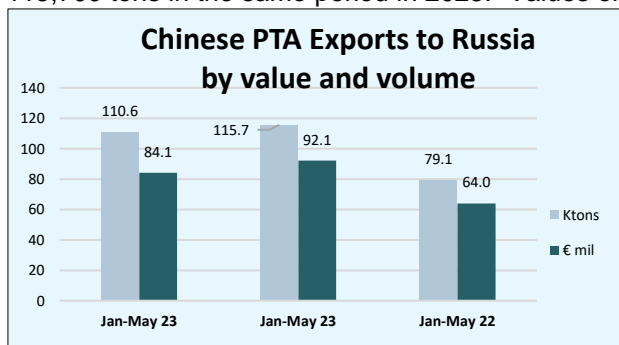


Chinese exports to the Russian market dropped to 14,618 tons in the first five months in 2024 against 21,089 tons in the first five months last year. Values dropped from \$60.309 million to \$28.797 million. Besides Russia, the main buyers of Chinese polymer are the countries of South and Southeast Asia including Vietnam, Thailand, Bangladesh and Brazil. In the first five months in 2024 exports of propylene polymers from China amounted to \$1.227 billion in value against imports of \$1.984 billion.

Paraxylene-PTA-PET

Russian PTA imports Jan-May 2024

Russian PTA imports from China amounted to 110,600 tons in the first five months in 2024 against 115,700 tons in the same period in 2023. Values of imports amounted to \$84.1 million against \$92.1 million in 2023. Nearly all of the PTA imports from China were shipped to Ekopet at Kaliningrad by rail. PTA import prices averaged \$779.8 2024, down from \$848.2 in 2023.



The Eurasian Economic Union (EAEU) has extended the zero rate of import customs duty in relation to PTA until March 2026.

Paraxylene production totalled 106,197 tons in the first five months in 2024 against 107,682 tons in the same period in 2023. Whilst Gazprom Neft at Omsk increased production from 24,936 tons to 36,710 tons, Ufaneftekhim reduced production from 65,772 tons to 48,298 tons.

Russian PET Production by Region (unit-kilo tons)

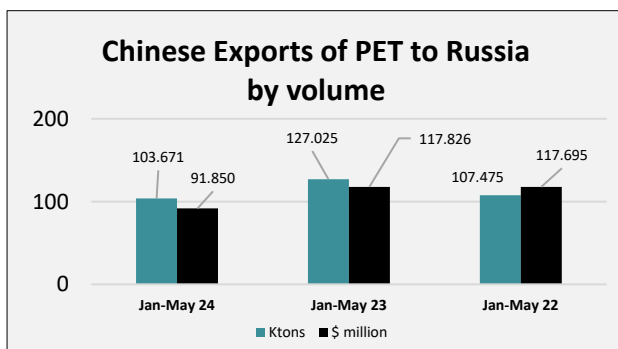
Region	Jan-May 24
SIBUR-PETF & Senezh	84.136
Ekopet	88.656
Polief	92.884
Total	265.676

Polief produced 147,619 tons of PTA in the first five months in 2024. This was up by 12% over the

same period in 2023. PET production in Russia totalled 265,676 tons in the first five months in 2024, of which Ekopet at Kaliningrad produced 88,656 tons and Polief 92,884 tons.

Russian PET trade Jan-May 2024

Russian PET imports from China in January to May dropped to 103,671 tons against 127,025 tons in the same period in 2023 and 107,475 tons in 2022. Average prices dropped from \$922.3 per ton to \$880.9 in 2024.



Russian import costs of PET from China amounted to \$91.850 million in the first five months in 2024 against \$117.826 million in the same period in 2023.

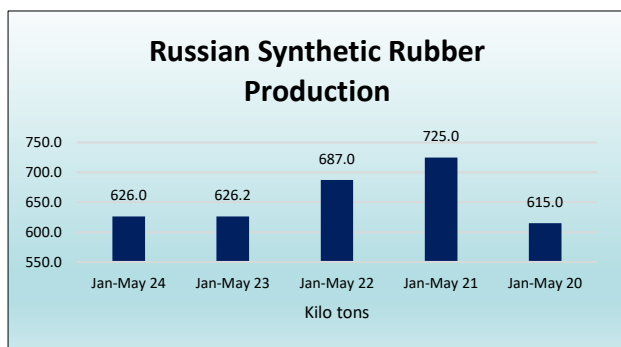
Average prices fell in the first five months mostly in response to lower feedstock costs and amounted to \$884.6 per ton against \$922.3 per ton in the first five months in 2023. Russian PET imports from China in the whole of 2023

amounted to a total of 237,500 tons, versus 276,500 tons in 2022. As a result, the share of Chinese PET in total Russian imports increased from 84% to 95%.

Regarding the domestic market Titan-Polymer plant at Pskov increased the production and sales of BOPET films by three-fold in the first five months in 2024 against 2023. Currently, the Pskov plant produces various types of films and buys PET on the open market. In the second stage of the investment project of the Titan-Polymer plant, it is planned to completely cover the company's production demand for PET.

A constraining factor for the Russian PET industry is the shortages of machinery. The vast majority of machines for the production of flexible packaging are imported but due to the sanctions, warranty service and the supply of spare parts have become more complicated. In 2023 this problem was partially solved by parallel imports, multi-stage logistics, and coming across Asian suppliers. Companies gained access to new printing presses and solvent laminators that allow them to produce new product variants.

Synthetic rubber

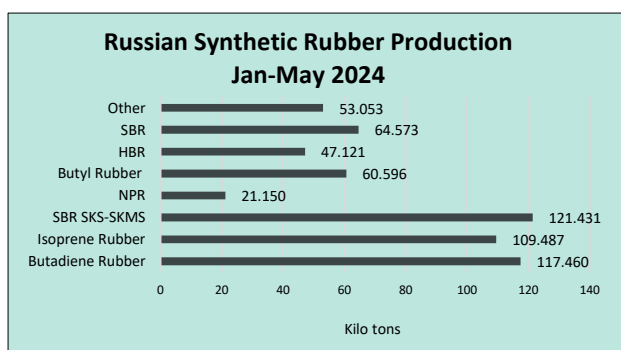
**Russian synthetic rubber production Jan-May 2024**

Synthetic rubber production in Russia amounted to 625,975 tons in the first five months this year against 626,200 tons in the same period in 2023 and 687,000 tons in 2022. The market has shown some degree of recovery in the first five months, with tyre manufacturing increasing in rubber consumption to 84,300 tons against 65,800 tons last year. However, total production remains lower than in 2021.

Russian Synthetic Rubber Production by Region (unit-kilo tons)		
Region	Jan-May 24	Jan-May 23
Central	136.250	125.355
Privolzhsky	442.397	451.055
Siberia	46.176	49.816
Total	625.647	626.237

For synthetic rubber production the Volga region accounted for the largest share, amounting to 442,937 tons in the first five months this year against 451,055 tons in the same period last year. The Volga region includes Nizhnekamskneftekhim, Togliattikavuk and Sterlitamak Petrochemical Company.

The central Russian region, largely based on production at Voronezhskintezkavuk, accounted for 136,250 tons in the first five months in 2024 against 125,355 tons in 2023. The only other producer in the Central region is Efremov Synthetic Rubber Plant in the Tula Oblast. Siberian production of synthetic rubber, based at the Omsk Kaucuk plant, reduced volumes in the first five months last year from 49,816 tons to 46,176 tons. Omsk Kaucuk produces a range of butadiene rubbers.



tons. Butadiene rubber production was the second largest category of Russian synthetic rubber production with 117,460 tons followed by isoprene rubber with 109,487 tons.

Nizhnekamskneftekhim is the largest producer of synthetic rubber in Russia, followed by Togliattikavuk. Both producers produce butyl rubber which in total amounted to 60,596 tons in the first five months in 2024 whilst halogenated butyl rubber production (only undertaken at Nizhnekamskneftekhim) amounted to 47,121 tons.

Chinese Synthetic Rubber Imports from Russia (\$ million)		
Product	Jan-May 24	Jan-May 23
SBRs	38.522	50.162
Butadiene Rubber	80.886	45.395
Butyl Rubber	84.184	72.639
HBR	93.766	36.601
NBR	19.019	22.532
Isoprene Rubber	42.479	30.150
Others	31.790	37.941
Total	390.647	295.419

Domestic demand in Russia has improved in 2024 after the withdrawal of Western companies, whilst as tyre manufacturers have restarted some of the idle capacity. Production still remains lower though than in 2021.

Russian Chinese rubber trade Jan-May 2024

Russian exports of synthetic rubber to China totalled \$390.647 million in the period January to May 2024 against \$295.419 million in the same period in 2023.

Exports of halogenated butyl rubber jumped from \$36.601 million to \$93.766 million, whilst butadiene rubber export values jumped from \$45.395 million to \$80.886 million. By volume Russian shipments of synthetic rubber to China amounted to 244,793 tons in the first five months, which was up from 204,728 tons in January to May 2023.

**Chinese Synthetic Rubber Imports from Russia
(unit-kilo tons)**

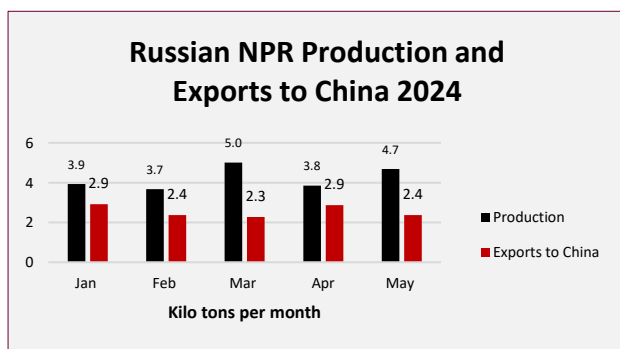
Product	Jan-May 24	Jan-May 23
SBRs	27.624	43.877
Butadiene Rubber	56.501	36.963
Butyl Rubber	51.783	45.635
HBR	44.550	17.970
NBR	14.548	15.414
Isoprene Rubber	28.706	19.651
Others	21.082	25.218
Total	244.793	204.728
Av price \$ per ton	1595.8	1443.0

Butadiene rubber exports represented the largest category, rising from 36,963 tons last year to 56,501 tons. Exports of halogenated butyl rubber showed the largest percentage increase, rising from 17,970 tons to 44,550 tons this year which has been partially facilitated by the increase in production at Nizhnekamskneftekhim. Butyl rubber exports from Russia to China increased slightly in the first five months to 51,783 tons from 45,635 tons in the same period in 2023.

EU sanctions on Russian synthetic rubber take full effect from 1 July

Restrictions on the import of synthetic rubber and carbon black from Russia to the European Union took full effect from 1 July this year. These restrictions amended earlier sanctions and were included in the tenth package of sanctions. The package of sanctions was approved from February 2023 until 30 June 2024. Until this date the import of synthetic rubber was limited by quotas, including 563,000 tons for synthetic rubber and 752,500 tons for carbon black.

In 2022 Russian exports of synthetic rubber to the EU area accounted for around 40% of total sales.



The quotas in exports until 2024 were never really tested as Russian producers moved away from the European market to China.

By the end of 2023, the leading Russian producer Nizhnekamskneftekhim had realigned its market sales to about 70% of its products to the domestic market and to the countries of the Eurasian Customs Union, whilst the share of sales to Europe was reduced to 4%. As a result, the passing date for sanctions was largely a formality.

Krasnoyarsk Synthetic Rubber Plant

The Krasnoyarsk Synthetic Rubber Plant (KZSK, part of SIBUR) is the only producer of nitrile butadiene rubbers (NPR) and nitrile butadiene latex in Russia. Until 2022, the plant supplied 40% of its products to Europe and 10% to America. The remaining half was dispersed to Russia, China and the CIS. Against the backdrop of EU sanctions China is now the major export destination for NPR exports, taking 12,109 tons in the first five months from the total production of 21,150 tons.

Russian Methanol Production (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Shchekinoazot	452.462	563.202
Gazprom Methanol	299.210	324.610
Metafrax Chemicals	434.689	492.861
Akron	43.682	35.819
Azot Novomoskovsk	45.981	9.320
Angarsk Petrochemical	12.797	13.449
Azot Nevinnomysk	44.737	38.866
Tomet	221.688	174.549
Ammoni	37.256	32.670
Novatek	28.103	27.939
Totals	1620.605	1713.285

Methanol**Russian methanol production Jan-May 2024**

Russia produced 1.620 million tons of methanol in the first five months in 2024 against 1.713 million tons in the same period in 2023. The three largest producers reported lower production volumes and the increased volumes were driven by smaller producers.

Azot at Novomoskovsk produced 45,981 tons against 9,320 tons last year whilst Azot at Nevinnomysk increased production from 38,866 tons to 44,737 tons. Ammoni in Tatarstan increased production from 32,670 tons to 37,256 tons. The most significant increase came from Tomet which produced 221,688 tons in the first five

months this year versus 174,549 tons in January to May 2023.

Gazprom Methanol reduced production from 324,610 tons in the period January to May 2023 to 299,210 tons whilst Metafrax Chemicals reported a fall from 492,681 tons to 434,689 tons. Russia's largest producer Shchekinoazot reduced production from 563,202 tons to 452,462 tons.

Russian Methanol Market (unit-kilo tons)		
	Jan-May 24	Jan-May 23
Production	1620.951	1713.746
Exports	559.276	779.078
Domestic merchant	659.229	618.121
Captive/Inventory	402.446	316.548

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

Russian methanol exports Jan-May 2024

Russian methanol exports amounted to 559,274 tons in the first five months versus 779,079 tons in the same period in 2023. Metafrax Chemicals reduced exports from 205,737 tons to 99,000 tons, Shchekinoazot reduced exports from 319,313 tons to 209,240 tons and Gazprom Methanol reduced exports from 171,852 tons to 133,250 tons.

Russian Methanol Exports by Producer (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Azot Nevinnomysk	4.591	3.536
Azot Novomoskovsk	38.981	40.366
Metafrax Chemicals	99.000	205.737
Gazprom Methanol	133.250	171.852
Tomet	74.252	38.274
Shchekinoazot	209.200	319.313
Total	559.274	779.079

Exports to China amounted to 389,503 tons in the first five months in 2024 against 292,022 tons in the first five months in 2023. By percentage shares China accounted for 70% of Russian methanol exports in the first five months this year versus 37% last year. Prior to 2022 Russian export trade to China was non-existent due to such a range of factors as distances, terminal facilities, and profit margins.

Average prices for Russian methanol exports to China in the first five months this year dropped to \$283.6 per ton against \$298.2 per ton in January to May 2023. Freight costs mean that even the most furtherly eastern producer Gazprom Methanol at Tomsk is confronted with tight margins, even if there is some subsidisation from the government for export deliveries. Gazprom Methanol is faced with rail costs in the range of \$140 per ton which is obviously higher for the other Russian plants.

Russian Methanol Exports to China by Producer		
Exporter	Jan-May 24	Jan-May 23
Metafrax Chemicals	79.024	92.221
Gazprom Methanol	131.942	171.769
Tomet	46.467	15.428
Shchekinoazot	131.440	12.603
Total	389.503	292.022

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

Russian Methanol Exports by Destination (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Belarus	46.235	89.175
China	389.503	292.022
Finland	0.000	106.441
Germany	0.000	5.265
Kazakhstan	27.873	14.398
Latvia	0.000	1.230
Lithuania	0.000	9.019
Netherlands	0.000	20.814
Poland	0.000	126.002
UAE	8.956	0.500
Turkey	86.600	114.631
Total	559.274	779.079

Russian methanol exports to Belarus decreased to 46,235 tons in January to May 2024 against 89,175 tons in January to May 2023. Exports to Kazakhstan increased to 27,873 tons from 14,398 tons in the first five months in 2023. The two Azot plants at Nevinnomysk and Novomoskovsk, which belong to the Evrokhim, did not export to China in 2023. Both producers are concentrated on shipments to Turkey through the ports of Kavkaz and Temyruk. As the war prolongs both of these ports could be targets for Ukrainian missiles. Already the Kavkaz port has been hit by Ukrainian drones. Azerbaijan is reported to have increased exports to the Turkish market which may be the main reason for reduced purchases from Russia this year.

Most of the exports to China are conducted through the port of Nakhodka-Vostochny, accounting for 96% of shipments in 2023. The other route used by Russian producers is Zabaikalsk which is located on the border with China. Tomet shipped all of its exports of 46,467 tons to China in the first five months in 2024 through Zabaikalsk.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Azot Nevinnomyssk	3.221	2.606
Azot Novomoskovsk	13.506	0.000
Metafrax Chemicals	212.872	175.431
Gazprom Methanol	151.187	135.365
Tomet	112.509	125.225
Shchekinoazot	152.368	164.824
Ammoni (Mendeleevsk)	13.566	14.670
Total	659.229	618.121

formaldehyde production in the first five months this year to 100,180 tons against 71,096 tons in January to May 2023. Gazprom Methanol increased domestic shipments from 135,365 tons in January to May 2023 to 151,187 tons in the first five months in 2024.

Russian Formaldehyde Production (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Pigment	16.673	15.608
Shchekinoazot	14.824	11.949
Akron	67.244	52.748
Metafrax Chemicals	153.862	120.510
Sverdlov Plant	0.017	3.416
Khimsintez	24.386	19.759
Uralkhimplast	21.957	18.593
Nizhnekamskneftekhim	68.626	66.079
Metadynea	18.028	14.396
Total	385.616	323.059

increased production from 120,510 tons in the first five months last year to 153,862 tons whilst Akron at Novgorod increased production from 52,748 tons to 67,244 tons.

Russian methanol project update

No new methanol capacity in Russia is expected to come on stream before 2026, and even then, this provisional date could well be subject to change. The construction of the Ammoni-2 mineral fertiliser plant in Tatarstan, which should start before the end of 2024, dropped the methanol component from the original plan due to the impact of sanctions on the Russian market.

The design of a 1.0 million tpa methanol production complex at Volgograd is expected to be completed in 2025. Originally the project was to be constructed by Japanese engineering companies for the AEON holding. Due to sanctions AEON was forced to change the general contractor to Chinese company CNCEC, which itself has not been affected by secondary sanctions. The complex will



become an anchor on the territory of the Khimprom special economic zone in Volgograd. The Nakhodka Mineral Fertiliser Plant (NFP), which is being built in the Nakhodka Advanced Special Economic Zone (ASEZ) has recently received pipes and components for the installation of underground networks. These pipes will be used for the installation of underground communications of the plant: water, sewerage, steam. All of them are made of high-tech and safe materials: three-layer steel with a polyethylene coating and fibreglass. This means that all communications will be protected from oxidation, corrosion and depressurisation and will be able to serve for more than 50 years without damage to nature.

Russian methanol domestic sales, Jan-May 2024

Domestic merchant sales increased from 618,121 tons in the first five months last year to 659,229 tons in the same period this year. These sales helped producers offset lower exports enabling producers to operate at reasonable levels of utilisation.

Metafrax Chemicals increased domestic merchant sales to 212,872 tons in 2024 against 175,431 tons in the same period in 2023. Metafrax increased

Shchekinoazot reduced domestic methanol sales from 164,824 tons in the first five months in 2023 to 152,368 tons in January to May 2024.

Sales for Tomet on the domestic market fell from 125,225 tons in January to May 2023 to 112,509 tons in the same period in 2024. The largest domestic consumer for Tomet is Togliattiazot where methanol is used for the production of urea-formaldehyde concentrate.

Formaldehyde production totalled 385,616 tons in the first five months in 2024 against 323,059 tons in the same period in 2023. Metafrax Chemicals

Russian N-Butanol Production (unit-kilo tons)		
Region	Jan-May 24	Jan-May 23
North Caucasus Federal District	5.745	6.148
Volga Federal District	43.148	47.638
Siberian Federal District	12.715	6.004
Total	61.609	59.790

producer. Angarsk Petrochemical Company increased production from 6,004 tons to 61,609 tons.

Russian Acetone Production (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Ufaorgsintez	12.185	14.635
Kazanorgsintez	21.631	23.237
Novokuibyshevsk Petrochemical	14.033	14.293
Omsk Kaucuk	19.461	12.736
Total	67.310	64.901

Russian acetic acid production amounted to 83,691 tons in January to May 2024 against 63,891 tons

Russian Acetic Acid Production (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Azot Nevinnomyssk	63.908	54.120
Others	19.783	9.771
Total	83.691	63.891

acid for the production of butyl acetate and methyl acetate Azot supplies merchant acetic to the Russian domestic market. The two largest customers include Polief which purchases acetic acid for PTA and Stavrolen which uses acetic acid in the production of vinyl acetate monomer (VAM).

Russian Isopropanol Production (unit-kilo tons)		
Producer	Jan-May 24	Jan-May 23
Plant of Synthetic Alcohol	14.178	14.375
Omsk Kaucuk	14.223	9.893
Total	28.401	24.268

Omsk Kaucuk only started isopropanol production in 2020 and only achieved high utilisation rates in 2023.

Volzhsky Orgsintez-potassium butyl xanthate
Although delayed by its nationalisation in 2023, Volzhsky Orgsintez is now proceeding with its expansion of its potassium butyl xanthate plant from 20,000 tpa to 45,000 tpa. Potassium xanthate is used by mining and processing companies, and the demand for this product is currently growing from companies such as Norilsk Nickel, the Ural Mining and Metallurgical Company and the Russian Copper Company. The launch of the second line is scheduled for the 4th quarter of 2026. Currently, the project is almost half ready.

The project started in 2020 but due to sanctions the company has had difficulties with the supply of imported equipment. When completed the new production will completely cover the needs of the Russian market.

plant at Tobolsk in 2022, which was constructed using Italian technology. Last year SIBUR's Tobolsk

Organic chemicals

Russian butanol production Jan-May 2024

Russian normal butanol production increased from 59,970 tons in January to May 2023 to 61,609 tons in January to May 2024. Gazprom neftekhim Salavat was the largest Russian

Russian solvent production Jan-May 2024

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

in 2023. The largest producer in Russia, Azot at Nevinnomyssk, increased production from 54,120 tons to 63,908 tons.

Azot also produces methanol which makes the plant fully integrated through to solvents. Aside using acetic

Isopropanol production in Russia amounted to 28,401 tons in the first five months in 2024 against 24,268 tons in January to May 2023. Omsk Kaucuk increased production from 9,893 tons to 14,223 tons whilst the Plant at Synthetic Alcohol at Orsk reduced production from 14,375 tons to 14,178 tons.

The new station can ship IPS all year round.

Phthalic anhydride production in Russia totalled 38,343 tons in the first five months this year against 38,200 in the same period in 2023. Kamteks-Khimprom at Perm is the largest producer followed by Gazprom neftekhim Salavat, and together these two plants produced 33,298 tons in the first five months in 2024.

Maleic anhydride production in Russia totalled 10,501 tons in the first five months in 2024. Consumption of maleic anhydride in the Russian market in 2023 increased by 22% and amounted to 11,000 tons against 9,000 tons in the previous year.

The market has been helped by the start-up of the

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

Norchem Saratov polyacrylamide

Norchem Holding signed an agreement for the construction of a polyacrylamide plant in the Saratov region. The agreement was signed with the Ministry of Industry and Trade and the government of the Saratov region. Norchem is already the largest producer of polyacrylamide in Russia and intends to increase its capacity.

Epoxy resin project-Polyplast-UralSib

The construction of epoxy resin production facilities at Pervouralsk (Sverdlovsk Region) is expected to be completed by 2026 and commissioned. The enterprise is being built by Polyplast-UralSib, which is part of the Polyplast Group of Companies. It was originally scheduled for completion in 2025.

The planned capacity of the enterprise is 55,000 tpa which would cover almost the entire needs of the Russian market. The only existing producer of epoxy resin in Russia takes place at the Sverdlov Plant in Dzerzhinsk. However, production amounts to around 2,000 tpa. At the same time, imported epichlorohydrin is used as a raw material. The total demand in Russia for epoxy resins is currently estimated at 57,000 tpa.

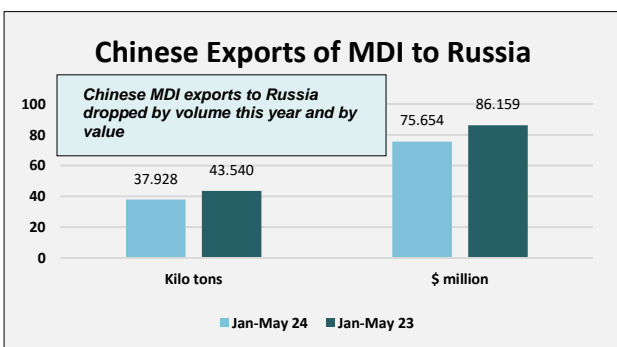
Norchem Group of Companies is a leading Russian manufacturer of surfactants, polyacrylamides and other special chemicals. The group of companies includes several production sites and a research centre. Production facilities amount to 200,000 tpa. The company's portfolio includes about 300 products for various industries, including the production of household chemicals and cosmetics, oil production, mining, pulp and paper industry, building materials industry and other industries.

Russian polyurethane raw materials

Isocyanate/polyol imports from China into Russia

TDI imports from China into Russia increased from 10,979 tons in January to May 2023 to 13,178 tons in the same period in 2024. TDI prices fell from \$2926.2 per ton in January to May 2023 to \$1703.6 per ton in 2023.

MDI costs dropped from \$86.159 million in the first five months in 2023 to \$75.654 million in the same period in 2024 as volumes fell from 43,540 tons to 37,928 tons.



Polyol imports into Russia from China dropped slightly from 42,315 tons in the first five months last year to 41,943 tons in this year. Import costs declined from \$67.067 million in 2023 to \$58.868 million. Average prices fell from \$1557.8 per ton to \$1403.5 per ton.

Kazakhstan

Kazakh polypropylene sales

- Domestic polypropylene production displaces imports
- KPI is attempting to promote the usage of PP in order to domestic sales
- Kazakh PP exports to China amounted to 40,887 tons in the first five months in 2024

country is forecast to amount to 45,500-46,000 tons in 2024 and so despite the increase domestic sales represent only take a small share of production from the 500,000 tpa plant which was launched in November 2022. 49.5% of KPI belongs to the national company KazMunayGaz, 40% to SIBUR, another 9.5% to SK Ondeu LLP and 1% to Almex Plus.

Kazakh polypropylene, Jan-May 2024

In the first five months in 2024, the share of Kazakhstan Petrochemical Industries Inc (KPI) increased its share of the domestic polypropylene market by 30% to 53%. KPI occupied only 23% of the market last year, reflecting the rate of increase. Consumption of polypropylene homopolymer in the

Currently there are about 50 manufacturers in Kazakhstan that produce products from polypropylene. The main consumer of in Kazakhstan is Bal Textile LLP, the first factory in Kazakhstan for the production of carpets and carpet products. The company processes up to 500 tons of products monthly. In order to development of Kazakhstan's polymer processing industry, KPI has launched the "Fast and the Furious" programme, which provides for special commercial conditions for companies, engaged in the processing of polypropylene, with the subsequent production of goods.

Kazakh Exports of PP to China		
	Jan-May 24	Jan-May 23
Kilo tons	40.887	49.970
\$ million	39.292	39.838

Kazakh exports of polypropylene to China amounted to 40,887 tons in the first five months in 2024 against 49,970 tons in the same period in 2023. The range of polypropylene produced at the plant of Kazakhstan Petrochemical Industries Inc LLP (KPI, has been increased with two new grades taking the full range on

sale of nine target grades of polypropylene

Chinese Exports of PET to Uzbekistan and Kazakhstan (unit-kilo tons)		
Country	Jan-May 24	Jan-May 23
Kazakhstan	27.671	31.510
Uzbekistan	63.018	46.576

Central Asian PET imports from China

Kazakhstan reduced imports of PET in the first five months from China to 27,671 tons against 16,370 tons in the same period in 2023. At the same time Uzbekistan increased imports from 46,576 tons to 63,018 tons.

Prices for imports into Kazakhstan averaged \$892 per ton and into Uzbekistan \$871 per ton.

Kiyanly Gas Chemical Complex Turkmenistan

Turkmenkhimiya has restarted the polymer plant at Kiyanly, which stopped working in 2023 due to a fire. South Korean licensing companies LG Chemical and Hyundai Engineering sent staff to Kiyanly in February this year in order to troubleshoot and restart the plant. Production ran into problems as soon as the state took over its management. The gas chemical complex was built in 2018 as part of a trilateral agreement between the Turkmengaz State Concern, South Korean companies LG International Corp and Hyundai Engineering and the Japanese company TOYO Engineering Corporation. At the design load, the MCC can produce 381,000 tpa of LDPE and 81,000 tpa of polypropylene.

Silleno polyethylene project protocol

KazMunayGaz (KMG, Kazakhstan), SIBUR and Sinopec Overseas Investment Holding signed the Protocol of Participants on the Silleno project on 2 July in Astana. The parties confirmed their intention to agree on a final investment budget for the Silleno project. This comprises the construction of the first integrated gas chemical complex for the production of polyethylene with a capacity of 1.25 million tons in the Atyrau region of Kazakhstan.

License agreements for the use of MarTECH ADL and UNIPOL PE Process technologies have been concluded with anies Chevron Phillips Chemical and Univation Technologies. To provide the Polyethylene project with ethane, a gas separation complex will be built at the Tengiz field.

Navoiyazot Air Products CO2 project

Air Products is planning to open a carbon dioxide (CO2) production project at Navoiyazot in Uzbekistan. The plant will be the first and so far, the only one of its kind in Uzbekistan, and will use untreated CO2 captured at the ammonia production line. The plant, which will have a capacity of 120 tons of CO2 per day, will reduce the consumption of natural gas, which is currently the main source of CO2 generation.

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

Azerbaijan Methanol Market (unit-kilo tons)		
	Jan-May 24	Jan-May 23
Production	204.4	181.9
Exports	190.9	169.1
Value (\$ mil)	37.7	37.7

75,000 tpa of caustic soda. In 2024, Navoiyazot plans to produce 80,000 tons of PVC of which around 20,000 tons will be exported.

SOCAR methanol Jan-May 2024

Azerbaijan produced 204,400 tons of methanol in January-May 2024, which is 20% more than in the corresponding period in 2023. Exports increased by 12.8% to 190,929 tons of methanol which is an increase of 12.8% over 2023 whilst the value decreased by 0.04% to \$37.791 million.

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