CIREC monthly NEWS

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

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

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

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Central European petrochemical markets

- Ethylene production in Poland dropped from 59,000 tons in January to February 2023 to 58,500 tons in 2024, whilst propylene fell from 67,800 tons to 55,900 tons
- Poland imported 17,884 tons of propylene in January to February 2024 against 16,604 tons in the same period last year
- Market conditions and outlook is forcing European producers to assess investment and keeping older and less economic plants

Central European polymer and chemical trade

- Polish polyethylene exports amounted to 49,089 tons in the first two months in 2024 against 47,957 tons in the same period in 2023
- Hungarian TDI exports rose sharply in January to 28,280 tons against 19,434 tons in January 2023
- Methanol imports into Poland dropped from 103,422 tons in January to February 2023 against 94,647 tons in the same period in 2024. Average prices amounted to €314.9 per ton against €311.9 per ton last year

Regional methanol markets

- Russia produced 652,391 tons of methanol in the first two months in 2024 against 629,569 tons in the same period in 2022
- Russian methanol exports amounted to 211,302 tons in January to February 2024 versus 293,388 tons in the same period in 2023
- Exports to China amounted to 145,473 tons in the first two months in 2024 against 115,795 tons. Volumes to Turkey increased from 29,919 tons to 33,919 tons
- Metafrax Chemicals reported increased revenues for 2023 but significantly reduced profits. The main reason for lower profits were largely attributed to increased freight costs for exports
- SOCAR Methanol exported 82,400 tons of methanol from Azerbaijan in January-February versus 74,900 tons in January to February 2023

Russian synthetic rubber production and trade

- Synthetic rubber production in Russia amounted to 241,046 tons in January to February 2024 against 226,780 tons in the same period in 2023 but this was still lower in the three previous years 2022-2020
- Russian exports of synthetic rubber to China totalled \$122.254 million by value in the period January to February 2024 which was up from \$87.501 million in the same period in 2023
- Sanctions on Russian synthetic rubber with the EU come into force in June this year, although since the first announcements in 2022 volumes have been in decline

Petrochemical projects Kazakhstan

- The Chinese company Sinopec has officially become a co-founder of Silleno LLP, which is engaged in the construction of a polyethylene plant in Kazakhstan
- KazMunayGaz (KMG) holds a 40% stake, followed by a 30% stake for SIBUR and a 30% stake for Sinopec
- Despite the fact that Western companies Linde and Maire Tecnimont are involved in the project SIBUR seems able to participate as a jv shareholder. Linde and Maire Tecnimont are embroiled in several large litigation disputes in Russia following their respective exits from Russian projects in 2022
- The Silleno project will provide polyethylene for both domestic and export markets

CENTRAL and SOUTH EAST EUROPE

Czech Crude Imports (million tons)		
Country	ountry Jan-Feb 24 Jan-Feb 23	
Azerbaijan	476.4	393.0
Kazakhstan	223.2	93.8
Russia	568.2	830.6
Total	1267.8	1317.5
Av € per ton	574.7	452.3

Czech crude imports Jan-Feb 2024

For most of this year the Czech Republic is expected to purchase Russian crude, assuming there are no disruptions on the Druzhba. At same time the country is progressing with plans to be fully independent of Russian crude by 2025. In the first two months this year crude imports from Russia dropped from 830,600 tons last year to 568,200 tons this year, whilst at the same time imports increased from Azerbaijan and Kazakhstan. Although the Czech Republic is striving to move

away completely from Russian crude the second half of 2024 may be particularly difficult when the capacity of the TAL pipeline will be temporarily limited due to modifications.

Polish Crude Imports Jan-Feb 2024		
Country	Mil tons	€ per ton
Saudi Arabia	1836.9	558.0
Nigeria	512.2	588.9
Norway	1285.7	539.1
US	200.3	580.0
UK	94.2	594.5
Others	0.0	0.0
Total	3,929	632.7

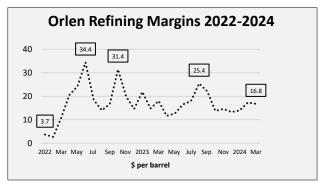
Polish oil imports Jan-Feb 2024

From the total of 3.929 million tons of crude imported into Poland in the first two months in 2024. Supplies from Saudi Arabia totalled 1.837 million tons at €558.0 per ton and from Norway 1.286 million tons at €539.1 per ton.

Orlen has achieved consistently higher refining margins than MOL in the past two years despite than the MOL Group despite receiving a partial Russian discount. MOL has already started transporting crude oil from its oil field in Azerbaijan to Slovnaft in Bratislava via the Adria oil pipeline, but still requires Russian

supplies.

Despite the absence of cheaper Russian crude supplies Orlen's refining margins have remained above historical levels. Previously numbers quite often less than much less than \$10 were the norm



for Orlen and other regional refiners until the start of 2022 and the indirect consequences resulting from the war in Ukraine. Orlen has gradually become more independent of Russian sources over the past decade. Supplies from Russia were last received in late February 2023.

Regarding Hungary and Slovakia MOL has signed a new contract with JANAF for the transport of oil through the Adria pipeline. MOL and Slovnaft had no choice but to re-sign

a short-term contract with JANAF to make their supply situation at least partially predictable.

The deal includes transporting 2.2 million tons of oil by the end of 2024. Whilst Slovnaft considers the contract unfair due to the high price, there are few options and JANAF is taking advantage of the situation. Oil imported through Croatia is an alternative to Russian oil, on which both Hungary and Slovakia currently depend.

Slovnaft can only export products made from Russian oil to the Czech Republic until this December, when an exemption from sanctions imposed by the EU on Russia over its invasion of Ukraine expires. At the end of last year, the EU extended the exemption for imports of Russian oil products into the Czech Republic until 5 December, but only in volumes comparable to the last five years.

Slovnaft makes every effort to comply with EU sanctions against Russia. In addition to Slovnaft's investments in technology at the refinery in Bratislava, access to the Adria pipeline is also necessary to supply the Czech, Polish and Austrian markets.

Central European Olefin Production & Trade

Polish Petrochemical Production (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
Ethylene	58.5	59.0
Propylene	55.9	67.8
Butadiene	9.5	10.4
Toluene	0.0	0.4
Phenol	7.4	8.6
Polyethylene	54.7	50.3
PVC	23.0	37.4
Polypropylene	49.0	49.3

Polish petrochemical production Jan-Feb 2024

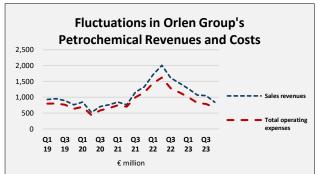
Ethylene production in Poland dropped from 59,000 tons in January to February 2023 to 58,500 tons in the same period in 2024, whilst propylene fell from 67,800 tons to 55,900 tons. Butadiene production at Plock dropped to 9,500 tons from 10,400 tons.

In the plastics sector polyethylene production increased to 54,700 tons in January to February 2024 versus 50,300 tons in 2023. Polypropylene production at Plock dropped slightly from 49,300 tons to 49,000 tons. PVC production fell from 37,400 tons to 23,000 tons, although it should be noted that the plant at Wloclawek restarted production in February after a four-month

stoppage period.

European petrochemical plant closures

Weak financial results from petrochemicals in the past few years have led to some producers in Europe reassessing their strategy and closing down plants which are considered no longer profitable. ExxonMobil Chemical has announced plans in France to close its chemical production at Gravenchon, in Normandy in 2024, subject to the relevant government approvals. SABIC has announced plans to permanently close its Olefins 3 cracker at the Geleen site in the Netherlands



following a maintenance shutdown. The Olefins 3 naphtha cracker and five other installations of the cracker complex will be taken out of operation during this period.

Orlen Group impairment for 2023

Closures of outdated plants in Europe are connected to lower demand patterns and weaker margins. Orlen expects the reduced margins of the petrochemical segment to continue in the long term. Over the past five years Orlen's petrochemical revenues and

costs have undergone significant volatility through external events such as the pandemic and the ongoing war in Ukraine.

Orlen expects to recognise impairment losses in the total amount of zl 10.2 billion in the consolidated financial statements for 2023 which will have a significant impact on its results for 2023. The

Polish Imports of Propylene (unit-kilo tons)		
Country	Jan-Feb 24	Jan-Feb 23
Bulgaria	1.005	1.867
Czech Republic	2.163	0.000
Germany	13.994	10.674
Netherlands	0.000	3.085
Others	0.722	0.977
Total	17.884	16.604
Av € per ton	802.9	979.6

impairment of assets in the petrochemical segment is mainly due to continued difficult economic conditions on the petrochemical market, in particular pressure on sales margins.

This volatility has had a material negative impact on both the efficiency of the current petrochemical assets and the assets under construction, including the Olefiny III complex. Orlen reports that the estimated impairment has been affected by the war in Ukraine and the related sanctions, and thus high costs of materials, broken

supply chains and limited availability of production resources.

Polish propylene & butadiene imports, Jan-Feb 2024

Poland imported 17,884 tons of propylene in January to February 2024 against 16,604 tons in January to February 2023. Germany increased shipments to Poland from 10,674 tons in the first two months last year to 13,994 tons this year, with other sources coming from the Czech Republic and

Bulgaria. Average prices amounted to €802.9 per ton in the first two months against €979.6 per ton last year.

Polish Butadiene Imports (unit-kilo tons)		
Country	untry Jan-Feb 24 Jan-Feb 23	
Austria	6.343	7.224
Germany	3.379	0.913
Hungary	6.189	4.055
Others	0.909	0.000
Total	15.910	12.191
Av € per ton	721.2	916.6

Czech Olefin Imports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
Ethylene	0.167	9.033
Propylene	5.389	9.054
Butadiene	7.924	15.528

Czech Olefin Exports (unit-kilo tons)		
Product Jan-Feb 24 Jan-Feb 23		Jan-Feb 23
Ethylene	2.050	2.163
Propylene	3.053	0.006

Butadiene import prices for Poland dropped from €916.6 per ton in January to February 2023 to €721.2 per ton in January to February 2024, with volumes rising slightly from 12,191 tons to 15,910 tons. Imports from Hungary rose from 4,055 tons in 2022 to 6,189 tons whilst imports from Austria dropped from 7,224 tons to 6,343 tons.

Czech olefin monomer trade, Jan-Feb 2024

Czech imports of ethylene were insignificant in the first two months in 2024, whilst exports of ethylene amounted to 2,050 tons against 2,163 tons in the same period in 2023. Propylene imports into the Czech Republic dropped from 9,054 tons in January to February 2023 to 5,389 tons, with main suppliers including Germany, Romania and Poland. Average prices for propylene imports amounted to €887.977 per ton against €922.576 per ton in January to February 2023. In addition to lower imports this year Czech exports of propylene amounted to 3,053 tons.

Propylene 3.053 0.006 Czech imports of butadiene dropped to 7,924 tons in January to February 2024 against 15,528 tons in the same period last year. All of the imports in both years was supplied by Germany and Hungary. Prices dropped dropping from €1178 per ton to €703.8 per

was supplied by Germany and Hungary. Prices dropped dropping from €1178 per ton to €703.8 per Hungarian Butadiene Exports (unit-kilo tons) ton. Nearly all the butadiene went to Kralupy for

conversion into synthetic rubber.

Hungarian Butadiene Exports (unit-kilo tons)		
Country	Jan-24	Jan-23
Czech Republic	1.061	2.045
Germany	2.108	0.000
Poland	2.108	2.026
Total	5.276	4.071
Av € per ton	717.6	870.0

Polish Styrene Imports (unit-kilo tons)		
Country	Jan-Feb 24	Jan-Feb 23
Belgium	2.755	0.000
Czech Republic	4.095	4.995
Finland	0.179	0.214
Netherlands	3.350	3.131
Germany	1.373	2.853
Others	0.483	1.229
Total	12.236	12.422
Av € per ton	1221.4	1282.5

Hungarian propylene-butadiene trade Jan-2024

Exports of propylene from Hungary amounted to 10,655 tons in January this year against 11,532 tons in January 2023, all of which went to Slovakia. Prices averaged €1085.8 per ton last year, dropping to

€1059.6 in January 2023. Hungarian butadiene exports amounted to 5,276 tons in January against 4,071 tons in the same month in 2023. Shipments into Poland totalled 2,108 tons in January against 2,026 tons last year whilst exports to Germany rose from zero to 2,108 tons. Average prices for Hungarian butadiene exports fell to €717.6 per ton versus €870.0 in 2023.

Central European styrene trade Jan-Feb 2024

Synthos in Poland imported 12,236 tons of styrene in January to February 2024 against 12,422 tons in January to February 2023. The Czech Republic was the largest

supplier shipping 4,095 tons against 4,995 tons in January to February 2023. Styrene import costs into Poland dropped from €1282.5 per ton last year to €1221.4 in January to February 2024.

Hungarian styrene imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Italy	6.923	5.827
Netherlands	0.893	0.000
Others	0.041	0.042
Total	7.857	5.934
Av € per ton	1213.5	1344.6

Imports of styrene into Hungary totalled 7,857 tons in January which was up from 5,934 tons in January last year. Prices for styrene imports into Hungary dropped from €1344.6 per ton to €1213.5. Italy provides most of the styrene entering Hungary, used mostly by Versalis for the production of styrene polymers.

Central European Polyolefin Trade

Czech polyethylene imports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
LDPE	19.002	16.098
LLDPE	4.700	3.034
HDPE	19.479	18.060
EVA	2.050	1.557
Other	7.279	6.282
Total	52.510	45.031
Av € per ton	1435.7	1739.8

Czech polyethylene Exports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
LDPE	6.414	4.264
LLDPE	0.781	0.528
HDPE	57.017	56.620
EVA	0.556	0.659
Other	2.427	1.802
Total	67.195	63.874
Av € per ton	1349.1	1441.8

Polish Polyethylene Trade			
Exports	Jan-Feb 24	Jan-Feb 23	
Vol (kilo tons)	49.089	47.957	
Value (€ million)	66.364	57.953	
Av € per ton	1351.9	1208.4	
Imports	Jan-Feb 24	Jan-Feb 23	
Vol (kilo tons)	226.127	190.535	
Value (€ million)	259.800	284.743	
Av € per ton	1267.1	1494.4	

Czech	Polyeth	ylene	Expo	rts (unit-	kilo t	ons)
Czech	nrices	for	hoth	exports	and	imn

Czech prices for both exports and imports of polyolefins have been lower in the first two months in 2024 against the corresponding period in 2023. Polyethylene exports from the Czech Republic amounted to 410,125 tons in 2023 against 412,178 tons in 2022. In the first two months exports totalled 67,195 tons against 63,874 tons in the same period in 2023, with average prices dropping from €1441.8 per ton to €1349.1 per ton in 2024. HDPE export shipments comprised 57,017 tons in the first two months in 2024 against 56,820 tons in the same period in 2023. Germany was the largest destination for Czech HDPE supplied from Litvinov. Other important markets for Czech polyethylene exports include Poland, Italy and Belgium.

For imports of all forms of polyethylene, Czech inward shipments amounted to 52,510 tons in January to February 2024 against 45,031 tons in the same period in 2023, with prices dropping from €1739.8 per ton to €1435.7 per ton. Germany was the largest source of

polyethylene imports, followed by Belgium with 35,954 tons for €55.357 million.

Polish polyethylene trade Jan-Feb 2024

Polish trade in polyethylene declined in 2023, for both imports and exports and both in volume and value. Economic conditions affected both demand and pricing. Overall Poland carries a large deficit in polyethylene supply, which is major factor justifying Orlen's Olefiny 111 project at Plock which is currently under construction.

European polyethylene market conditions have not improved in the second quarter but there is hope amongst traders and producers that market sentiment will start to improve in the second half of 2024. In the immediate term, demand is low for HDPE injection moulding grades whilst there are no supply problems. As a result, processors are negotiating price reductions and European producers and traders continue to lower their prices. Factors that will affect the market include rising oil prices, seasonality and raw material stocks in refinery warehouses, which should eventually run out.

Polish PE imports (unit-kilo tons)			
Country	Jan-Feb 24	Jan-Feb 23	
LDPE	59.698	50.881	
LLDPE	36.556	35.058	
HDPE	69.378	65.745	
EVA	3.527	2.293	
EAO	46.507	27.871	
Others	10.461	8.688	
Total	226.127	190.535	
Av € per ton	1267.1	1494.4	

Despite the negative outlook polyethylene trade volumes indicate signs of underlying improvement. Polish imports of polyethylene totalled 226,127 tons in the first two months in 2024 against 190,535 tons in the same period in 2023, with average prices falling from €1494.4 per ton to €1267.1 per ton. Imports of polyolefins and all types of plastics from Russia into Poland saw a progressive decline in 2023, but markets have started 2024 with slightly improved prospects.

HDPE is the largest category of imported polyethylene into Poland, amounting to 69,378 tons in January to February 2024 versus 65,745 tons in January to February 2023. Germany is the

largest supplier of HDPE to the Polish market.

LLDPE imports rose from 35,058 tons in January to February 2023 to 36,556 tons in the corresponding period in 2024. Most of the LLDPE imports were sourced mostly from West Europe, including France, the Netherlands and Germany. LDPE imports remained relatively stable, amounting to 59,698 tons versus 50,881 tons last year.

Polish PE Exports (unit-kilo tons)				
Product Group	Jan-Feb 24	Jan-Feb 23		
LDPE	6.646	7.544		
LLDPE	6.530	3.769		
HDPE	32.132	32.829		
EVA	0.632	2.174		
EAO	2.075	1.064		
Other	1.075	0.577		
Total	49.089	47.957		
€ per ton	1351.9	1208.4		

Polish polyethylene exports amounted to 49,089 tons in the first two months in 2024 against 47,957 tons in the same period in 2023. Average prices for polyethylene exports from Poland declined to €1351.9 per ton against an average of €1208.4 per ton in the period January to February 2023. Exports of HDPE from Poland amounted to 32,132 tons versus 32,829 tons in the same period in 2023 whilst LDPE exports dropped to 6,646 tons versus 7,544 tons.

Hungarian polyethylene trade Jan-2024

Hungarian polyethylene exports amounted to 28,532 tons in January this year against 28,094 tons in January 2023, but

, ,
whilst volumes were unchanged average prices dropped
from €1316.4 per ton to €1127.5 per ton. Revenues for
polyethylene exports in January dropped from €36.893
million last year to €32.171 million. In terms of category
HDPE exports increased from 18,785 tons in January last
year to 20,010 tons whilst LDPE exports dropped from
8,040 tons to 6,467 tons.

Hungarian Polyethylene Imports (unit-kilo tons) Product Jan-24 Jan-23 LLDPE 1.640 1.923 LDPE 3.345 3.701 **HDPE** 6.341 5.553 EAO 0.783 0.527 Other 2.559 0.299 Total 14.668 12.003 1588.9 Av € per ton 2237.0

Hungarian Polyethylene Exports (unit-kilo tons)

Jan-24

0 485

6.467

20.010

28.532

1127.5

Jan-23

0.552

8.040

18.785

28.094

1316.4

Product

LLDPE

LDPE

HDPE

Total

Av € per ton

Hungary remains a net exporter of LDPE and HDPE, whilst a net importer of LLDPE and ethylene copolymers. Imports of all grades of polyethylene into Hungary amounted to 14,668 tons in January this year against 12,003 tons in January 2023.

Import costs for polyethylene fell to €23.306 million against €26.850 million. Hungarian import prices for polyethylene decreased on average from €2237.0 in January 2023 to €1588.9 in January 2024. The largest category of polyethylene imports comprised HDPE, which rose from 5,553 tons to 6,341 tons.

Polish PP Imports (unit-kilo tons)				
Category Jan-Feb 24 Jan-Feb 23				
PP homo	104.849	96.357		
Polyisobutylene	0.404	0.351		
Propylene copolymers	54.149	46.312		
Other	3.128	2.433		
Total	162.529	145.452		
Av €/ton	1332.1	1550.0		

Polish PP Exports (unit-kilo tons)				
Category Jan-Feb 24 Jan-Feb 23				
PP homo	33.003	26.791		
Polyisobutylene	0.134	0.132		
Propylene copolymers	10.335	13.759		
Other	3.677	0.634		
Total	47.149	41.316		
Av €/ton	1371.0	1523.6		

Polish PP Trade Jan-Feb 2024

Polish polypropylene imports, including homo grade and copolymers, increased in the first two months to 162,529 tons against 145,452 tons in the same period in 2023.

Average prices for all types of polypropylene decreased from €1550.0 per ton to €1332.1 per ton. Homo grade polypropylene imports increased dropped from 96,357 tons in January to February last year to

104,849 tons in 2024, whilst copolymer imports increased from 46,312 tons to 54,149 tons.

Regarding export activity from Poland, shipments amounted to 47,149 tons against 41,316 tons in January to February 2023. Homo polymer grades comprised the main category of Polish polypropylene exports, where Germany was the largest destination.

Polish PP Supply/Demand Balance (unit-kilo tons)				
Jan-Feb 24 Jan-Feb 23				
Production	49.0	49.3		
Exports	41.3			
Imports	162.5	145.5		
Market Balance	164.4	153.4		

Consumption of polypropylene in Poland performed slightly better in the first two months this year against the same period in 2023, rising from 153,400 tons to 164,400 tons.

Despite the slight rise this year long term prospects for polypropylene consumption may appear less promising prior to the start of the construction of the new plant for Polimery Police. As a result, Grupa Azoty Polyolefins, which manages Polimery Police, has had to recalculate its market

projections from polypropylene sales. The new plant is scheduled to enter the commercial phase in the first half of 2024, following a successful integrity test by general contractor Hyundai Engineering.

The production capacity of Polimery Police is expected to gradually increase to its nameplate capacities of 429,000 tpa of propylene and 437,000 tpa of polypropylene. The first types of polypropylenes have already been produced in the installations of the new plant. The product portfolio is being expanded to reach the target production of more than 30 types of Gryfilen polypropylene®, including homopolymers, random copolymers and impact copolymers.

Czech polypropylene exports (unit-kilo tons)				
Product Jan-Feb 24 Jan-Feb 23				
PP Homo	40.030	43.280		
Propylene Copolymers	8.415	8.641		
Other	1.048	0.883		
Total	49.493	52.805		
Av € per ton	1417.4	1522.6		
Czech polypropylene imports (unit-kilo tons)				
Product	Jan-Feb 24	Jan-Feb 23		
PP Homo	48.464	45.772		
Propylene Copolymers	35.717	31.771		
Other	2.635	2.579		
Total	86.817	80.121		
Av € per ton	1519.0	1689.0		

Hungarian Polypropylene Imports (unit-kilo tons)				
Product Jan-24 Jan-23				
PP homo	13.141	8.292		
Propylene copolymers	4.201	3.999		
Others	1.955	1.828		
Total 19.298 14.119				
Av € per ton 1407.3 1611.6				

Hungarian Polypropylene Exports (unit-kilo tons)				
Product Jan-24 Jan-23				
PP homo	12.362	10.535		
Propylene copolymers	7.950	8.286		
Others	2.218	1.165		
Total	22.530	19.987		
Av € per ton	1241.5	1376.1		

Czech polypropylene production and trade Jan-Feb 2024

Exports of all forms of polypropylene from the Czech Republic amounted to 49,493 tons in January to February this year versus 52,805 tons in the corresponding period in 2023, with average prices dropping from €1522.6 per ton to €1417.4. Homograde PP provides the main category of Czech polypropylene exports, amounting to 40,030 tons in the first two months this year versus 253,671 tons in 2022.

For imports of all forms of polypropylene, Czech inward shipments increased to 86,817 tons in January to February 2024 from 80,121 tons in 2022, with average prices dropping from €1689.0 per ton to €1519.0 per ton. Imports of propylene copolymers increased from 31,771 tons to 35,717 tons whilst

homo grade polypropylene imports increased from 45,772 tons to 48,464 tons.

Hungarian polypropylene trade Jan-2024

MOL shipped 22,530 tons of propylene polymers in January against 19,987 tons in January 2023 with average prices dropping from €1376.1 per ton to €1241.5 per ton.

Homo grade polypropylene exports amounted to 12,362 tons (valued at €15.051 million) in January versus 10,535 tons in January 2023 (valued €14.458 million), whilst exports of propylene copolymers dropped from 8,286 tons (valued at €11.664 million) to 7,950 tons (valued at €10.247 million).

Polypropylene imports into Hungary amounted to 19,298 tons in January 2024 against 14,119 tons in January 2023, with average prices dropping to €1407.3 per ton to €1611.6 per ton in January last year. By category homo grade imports into Hungary comprised 13,141 tons in January 2024 against 8,292 tons whilst

imports of copolymers rose to 4,201 tons against 3,999 tons.

Central European Rubber Markets

Czech Rubber Trade (unit-kilo tons)				
Jan-Feb 24 Jan-Feb 2				
Exports synthetic rubber	23.428	26.377		
Imports synthetic rubber	24.224	20.458		
Imports natural rubber	12.886	11.156		

Czech Butadiene Rubber Exports		
Country	Jan-Feb 24	Jan-Feb 23
France	0.752	0.970
Germany	1.257	0.000
Hungary	1.412	0.684
India	2.392	2.106
Italy	1.098	0.000
Poland	2.201	2.531
Romania	1.498	0.000
Slovakia	1.826	1.895
South Korea	0.532	2.058
Spain	1.523	0.000
Turkey	1.772	0.935
Others	3.610	5.751
Total	19.881	16.941
Revenues €	30.953	32.828

Hungarian synthetic rubber Imports (unit-kilo tons)			
Product	Jan-24	Jan-23	
Butadiene Rubber	2.966	7.426	
HBR	0.405	1.275	
SBR	5.570	3.182	
Other	1.397	2.272	
Total	10.338	14.156	
Revenues € mil	25.341	35.327	
Av € per ton	2451.5	2496.4	

Polish Synthetic Rubber Imports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
ESBR	3.987	5.159
Block SBR	4.613	3.524
S-SBR	4.319	4.633
Butadiene Rubber	12.922	9.285
Butyl Rubber	0.808	0.559
HBR	0.881	2.718
NBR	1.647	0.508
Isoprene Rubber	4.634	1.113
EPDM	6.868	6.750
Others	6.331	7.635
Total	47.010	41.884
Av € per ton	1,746.4	2,194.9

Czech synthetic rubber trade Jan-Feb 2024

The closure of the EBSR plant at Kralupy last year has impacted on Czech rubber trade flows. Exports of synthetic rubber amounted to 23,428 tons in January to February 2024 versus 26,377 tons in the same two-month period in 2023. At the same time imports increased from 20,458 tons to 24,224 tons in January to

February 2023.

Imports of halogenated butyl rubber (HBR) dropped from 1,726 tons in the first two months in 2023 to 1,203 tons. Although Russia is able to sell HBR into the EU area until June this year, after which sanctions will come into force, very little product has been purchased recently from Nizhnekamskneftekhim. The US, UK and Belgium are the main suppliers of one of the most forms of synthetic rubber.

Czech butadiene rubber trade Jan-Feb 2024

The Czech Republic exported 19,881 tons of butadiene rubber in the first two months in 2024 against 16,941 tons in the same period in 2023. Average prices fell from €2084.1 per ton to €1561.2 per ton. Czech exports of butadiene rubber to India amounted to 2,392 tons in January to February 2024 against 2,106 tons last year. Other important markets included Poland where exports amounted to 2,201 tons against 2,531 tons. Besides exports the Czech

Republic also imported 5,144 tons of butadiene rubber in the first two months in 2024.

Hungarian synthetic rubber imports Jan-2024

Hungarian imports of synthetic rubber amounted to 10,338 tons in January 2024 against 14,156 tons in January last year. Average prices dropped slightly from €2496.4 per ton to €2451.5 in 2024. Butadiene rubber imports dropped from 7,426 tons to 2,966 tons, with the largest source coming from Indonesia. Imports of halogenated butyl rubber dropped from 1,275 tons in January last year to 405 tons and SBR imports rose from 3,182 tons to 5,570 tons.

Polish rubber trade Jan-Feb 2024

Rubber import prices into Poland for both synthetic and natural recorded gradual declines during 2023 as a combination of economic factors took effect. For all types of synthetic rubber average prices dropped from €2194.9 in January to February 2023 to €1746.4 in the first two months in 2024.

Poland imported a total of 47,010 tons of synthetic rubber in January to February 2024 against 41,884 tons. By category butadiene rubber was the largest product, accounting for 12,922 tons against 9,285 tons in the same period in 2023. Imports of synthetic rubber from Russia have become insignificant this year in response to sanctions. Last year imports of synthetic rubber from Russia amounted to 50,547 tons in 2023 which dropped from 92,653 tons in 2022 and

133,341 tons in 2021. Russia is legally able to export most grades of synthetic rubber up until June 2024. Sanctions were first imposed on Russia in July 2022 but were amended in February 2023 under pressure from European tyre manufacturers.

Polish Exports of Synthetic Rubber (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
SBR	34.991	28.357	
Butadiene Rubber	10.282	8.096	
Others	7.628	6.555	
Total	53.378	43.008	
Av € per ton	1504.8	1940.0	

Synthos Production (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
Polystyrene	10.3	11.3	
EPS	14.4	14.3	
Synthetic Rubber	42.7	38.0	

Synthetic rubber exports from Poland amounted to 53,378 tons in the first two months in 2024 against 43,008 tons in January to Exports of butadiene rubber from Poland February 2023. amounted to 10,282 tons in January to February versus 8,096 tons in the same period in 2023.

Polish synthetic rubber production and domestic market Jan-Feb 2024

Synthetic rubber production at Oswiecim for Synthos amounted to 207,600 tons in January to February 2023 from 258,700 tons in 2022. Production of synthetic rubber has been affected by demand side factors which saw a reduction of consumption in the tyre sector from 527,300 tons in 2022 to 466,700 tons. Rubber sales from Synthos dropped by about 10% in 2023. On a quarterly basis there has been a decline in sales for each quarter from the start of 2022 through to the

end of 2023. By illustration, Synthos sold 256,000 tons of synthetic rubber in the first guarter in 2022 which declined to 130,000 tons in the fourth guarter last year.

Synthos is the largest European manufacturer of styrene butadiene rubber (ESBR and SSBR), also offers neodymium polybutadiene rubber (NdBR), high styrene rubber (HSR) and nitrile butadiene rubbers (NBR).

Central European aromatics and derivatives

Polish Aromatic Exports (unit-kilo tons)		
Product Jan-Feb 24 Jan-Feb 23		
Benzene	25.404	26.243
Bisphenol A	0.650	1.223
PTA	56.066	37.182
TDI	0.615	1.119
Toluene	0.320	1.698

Polish benzene exports Jan-Feb 2024

Although Poland is largely a net importer of aromatic products, but does export large volumes of benzene and PTA. Polish exports of benzene totalled 25,404 tons in January to February 2024 against 26,243 tons in the same period in 2023. Exports to Germany increased in the first two months from 18,553 tons last year to 25,405 tons, with average prices rising slightly from €774.2 per ton to €786.8 Benzene exports are sourced largely from per ton.

Petrochemia Blachownia at Kedzierzyn-Kozle.

Polish Aromatic Imports (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
Adipic Acid	2.550	2.607	
Caprolactam	1.706	1.439	
Ethylbenzene	20.305	20.653	
Phenol	15.171	13.853	
Phthalic Anhydride	6.251	2.973	
PTA	1.166	1.153	
Styrene	12.236	12.422	
TDI	13.786	10.573	
Toluene	2.930	3.995	

€6.704 million.

Polish-Czech aromatic imports Jan-Feb 2024

Phenol imports into Poland amounted to 15,171 tons in January to February 2024 which was up from 13,853 tons in 2023. Germany was the dominant supplier of phenol to Poland, shipping 32,231 tons for €30.553 million.

Russia previously provided phenol shipments to Poland, but the last delivery was made in early 2022. The market balance for phenol consumption in 2023 showed some decline, dropping from 137,395 tons in 2022 to 124,180 tons. Phthalic anhydride imports into Poland increased from 2,973 tons in January to February 2023 to 6,251

tons in the same period in 2024. Imports from South Korea amounted to 16,741 tons in 2023 for €18.215 million, followed by Austria from the Schwechat plant with shipments of 4,433 tons for

Czech Aromatic Exports (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
Benzene	3.300	0.000	
Toluene	1.735	1.726	
Ethylbenzene	20.301	20.649	
Styrene	4.123	5.050	
Czech Aromat	Czech Aromatic Imports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23	
Benzene	9.587	8.637	
Toluene	1.127	1.228	
Styrene	1.288	2.550	
Bisphenol A	5.244	4.102	

Czech Bisphenol A Imports (unit-kilo tons)			
Country Jan-Feb 24 Jan-Feb 23			
Belgium	1.386	1.079	
Germany	0.528	0.317	
Spain	0.048	0.000	
South Korea	2.544	1.439	
Poland	0.408	0.600	
Singapore	0.000	0.360	
Others	0.330	0.308	
Total	5.244	4.102	
Av € per ton	1390.1	1537.6	

Labem, where epoxy resins are produced.

The Czech Republic supplied 3,433 tons of phthalic to Poland for €4.943 million. Phthalic anhydride is supplied by the Czech Republic from the Deza plant at Valasske Mezirici.

In other product areas, styrene imports amounted to 12,422 tons in the period January to February 2023 and dropped slightly to 12,236 tons this year. Ethylbenzene imports amounted to 20,305 tons against 20,653 tons in the same period last year. All the ethylbenzene was shipped from Kralupy to Oswiecim, all within the structures of the Synthos Group.

Regarding Czech trade in aromatic monomers and derivatives, styrene exports from Kralupy amounted to 4,123 tons from 5,050 tons in January to February 2023. Czech benzene imports increased to 9,587 tons in January to February 2024 against 8,637 tons in the same period in 2023, whilst exports rose from zero to 3,300 tons. Toluene imports dropped to 1,127 tons, whilst Imports of bisphenol A rose from 4,102 tons to 5,244 tons.

Czech Bisphenol A imports & epoxy resin exports

Bisphenol A imports into the Czech Republic totalled 5,244 tons in January to February 2024 against 4,102 tons in the same period in 2023. South Korea increased shipments from 1,439 tons to 2,544 tons. The largest user of bisphenol A in the Czech Republic is Spolchemie at Ust nad

Czech Bisphenol A Imports			
Product	Jan-Feb 24	Jan-Feb 23	
Total Ktons	5.244	4.102	
Av Price per ton	1390.1	1537.6	
Czech Epoxy Resins (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
Total Ktons	8.191	8.809	
Av Price per ton	2390.5	3626.8	

Czech exports of epoxy resins amounted to 8,191 tons in the first two months in 2024 against 8,809 tons in 2023. Whilst volumes were similar, prices fell from €3,626.8 per ton to €2,390.5 per ton. Germany remains the largest market for Czech epoxy resins, accounting for 2,325 tons in the first two months in 2024.

Hungarian aromatic trade Jan-2024

Hungarian benzene exports amounted to 1,253 tons in January for total costs of €1.014 million. Exports are distributed largely to Germany, Belgium and the Czech Republic. The production of toluene at Szazhalombatta is insufficient to cover Hungarian demand and thus imports are required. Toluene imports into Hungary amounted to 5,505 tons in January this

Polish PTA Exports (unit-kilo tons)		
Country	Jan-Feb 24	Jan-Feb 23
Belarus	0.000	0.223
Belgium	0.000	0.198
France	2.206	0.000
Germany	48.274	32.801
Lithuania	1.919	0.000
Switzerland	0.000	1.278
Turkey	1.893	0.000
Others	1.773	2.401
Total	56.066	36.901
Av Price €	768.9	779.9

year for costs of €4.933 million. Slovakia supplied 2,264 tons in January for €1.795 million, whilst Germany supplied 2,017 tons for €1.937 million.

Polish PTA exports Jan-Feb 2024

PKN Orlen operates a modern PX/PTA complex with a capacity of around 690,000 tpa of PTA. PKN Orlen is the only producer in Europe to have production units fully integrated with paraxylene production.

PTA exports increased sharply in the first two months from 36,901 tons last year to 56,066 tons in the same period in 2024. Exports to Germany increased from 32,801 tons to 48,274 tons. Average prices for PTA changed slightly from €779.9 per ton in

the first two months in 2023 to €768.9 per ton.

Hungarian TDI Exports (unit-kilo tons)			
Country	Jan-24	Jan-23	
Austria	0.317	0.226	
Belgium	5.054	4.608	
Germany	1.200	1.261	
Italy	3.080	2.499	
Poland	2.933	2.059	
Portugal	0.984	1.391	
Romania	1.059	1.123	
Spain	1.136	1.065	
Turkey	5.389	2.523	
Others	7.129	2.680	
Total	28.280	19.434	
Av € per ton	1903.8	2906.7	

Central European isocyanates & polyols

Hungarian TDI-MDI exports Jan-2024

Hungarian TDI exports rose in January to 28,280 tons against 19,434 tons in January 2023. Average prices dropped from €2906.7 per ton to €1903.8 per ton. Prices have been influenced to some extent by demand but predominantly feedstocks and lower costs of toluene. Although TDI prices overall were higher in the first half last year the trend has been falling gradually to current levels

Volume sales of TDI tended to increase in the latter part of 2023 after a difficult first half of the year. Exports of TDI from Hungary to Belgium rose from 4,608 tons in January last year to 5,054 tons in January 2024, whilst volumes to Italy increased from 2,499 tons to 3,080 tons. In Central Europe shipments to Poland increased from 2,059 tons to 2,933 tons and rose to Turkey from 2,523 tons to 5,389 tons.

Hungarian MDI Exports (unit-kilo tons)			
Country	Country Jan-Feb 24		
Belgium	1.768	0.076	
Germany	2.018	3.154	
Italy	1.418	1.575	
France	2.451	1.640	
UK	1.353	1.034	
Poland	4.379	6.428	
Romania	1.524	3.414	
Turkey	2.608	0.636	
Others	2.490	1.866	
Total	23.689	25.742	
Av price	1737.6	2338.2	

By contrast to TDI, exports of MDI from Hungary amounted in
January to 23,689 tons against 25,742 tons in January last year. MDI
export prices have undergone a different cycle to TDI, dropping from
€2338.2 per ton in January 2023 to €1737.6 per ton this year.

Poland was the largest destination for Hungarian MDI exports, shipping 4,379 tons in January 2024 versus 6,428 tons in January 2023. Exports to France rose from 1,640 tons to 2,451 tons whilst to Germany exports declined from 3,154 tons to 2,018 tons. The demand for PU Resin in Germany has been impacted by the deterioration of the construction sector, which has experienced consecutive monthly declines dating back to late 2022. The decline in activity in March 2024 was accelerated from February to March. Despite the market weakness prices of PU Resin are expected to appreciate in April 2024 due to anticipated increments in the prices of feedstock MDI, TDI, and polyols which may edge up production costs.

Czech MDI imports (unit-kilo tons)			
Country Jan-Feb 24 Jan-Feb 23			
Total	5.372	5.574	
Av Price € per ton	2006.5	2652.0	

Polish MDI Imports (unit-kilo tons)		
Country	Jan-Feb 24	Jan-Feb 23
Total	25.845	21.973
Av € per ton	1800.4	2358.1

Polish TDI Imports (unit-kilo tons)			
Country Jan-Feb 24 Jan-Feb		Jan-Feb 23	
Belgium	2.040	0.346	
Germany	3.521	2.346	
Hungary	5.277	5.153	
Netherlands	2.040	0.651	
Saudi Arabia	0.078	0.639	
South Korea	0.952	0.628	
Others	1.525	0.813	
Total	13.786	10.574	
Av € per ton	2054.6	3298.6	

Central European isocyanate trade Jan-Feb 2024

MDI imports into the Czech Republic totalled 5,372 tons in January to February 2024 against 5,574 tons in the same period in 2022. Average prices dropped from €2652,0 per ton to €2006,5 per ton. The leading supplier was Belgium which shipped 1,137 tons against 1,529 tons in January to February 2023.

MDI imports into Poland totalled 25,845 tons in January to February 2024 against 21,973 tons in January to February 2023. Average prices dropped from €2358.1 per ton to €1800.4 in January to February 2023. Germany increased shipments to 8,274 tons against 6,219 tons in January to February 2023, whilst imports from Hungary amounted to 6,826 tons against 6,511 tons.

TDI imports into Poland amounted to 13,786 tons in January to February 2024 against 10,574 tons in January to February. Prices dropped from €3298.6 per ton last year to €2054.6 per ton. 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 later in the

year allowing TDI prices to move downwards.

Czech Polyol Imports (unit-kilo tons)		
Country Jan-Feb 24 Jan-Feb		Jan-Feb 23
Belgium	2.003	2.487
Germany	1.347	1.448
France	1.959	1.144
Netherlands	0.687	0.811
Romania	0.543	0.166
Slovakia	0.783	0.723
Others	0.677	0.710
Total	7.999	7.488
Av € per ton	2234.0	2744.2

Polish Polyol Exports			
	Jan-Feb 24	Jan-Feb 23	
Total volume (ktons)	9.516	9.864	
Av € per ton	2044.6	2305.5	
Polish Polyol Imports			
Jan-Feb 24 Jan-Feb 23			
Total volume (ktons)	21.686	21.606	
Av € per ton	1861.8	2229.4	

Czech polyol imports Jan-Feb 2024

Czech polyol imports amounted to 7,999 tons in the first two months this year against 7,488 tons in the same period in 2023, with average prices dropping from €2744.2 per ton to €2234.0 per ton. The leading supplier was Belgium shipping 2,003 tons in the period January to February 2024 against 2,487 tons last year, followed by France which exported 1,959 tons which was up from 1,144 tons.

Polish polyol trade Jan-Feb 2024

Polish polyol imports amounted to 21,686 tons in the first two months in 2024 against 21,606 tons in the same period in 2023. The major sources of imports came from Belgium, Germany and the Netherlands. Polyol import prices dropped from €2229.4 per ton to €1861.8 per ton.

Exports of polyols from Poland in the first two months in 2024 amounted to 9,516 tons against 9,864 tons in the same period in 2023. Destinations for deliveries were focused mostly on Europe, led by Italy taking 1,573 tons. Average export prices dropped from €2305.5 per ton to €2044.6 per ton

Central European organic chemical trade

Hungarian maleic anhydride exports (unit-kilo tons)			
Country Jan-24 Jan-23			
Austria	0.126	0.312	
Germany	0.335	0.118	
Italy	0.417	0.329	
Poland	2.339	0.214	
Slovenia	0.140	0.211	
Others	0.709	0.342	
Total	4.065	1.526	
Av € per ton	1157.9	1343.6	

Hungarian aniline imports (unit-kilo tons)		
Country Jan-24 Jan-23		
Belgium	2.606	3.821
China	0.000	4.108
Czech Republic	8.896	5.940
Others	0.000	0.000
Total	11.502	13.869
Av € per ton	1269.0	1396.6

Polish Organic Chemical Trade		
Exports	Jan-Feb 24	Jan-Feb 23
Vol (kilo tons)	250.3	273.8
Value (€ million)	204.3	202.5
Imports	Jan-Feb 24	Jan-Feb 23
Vol (kilo tons)	584.4	714.8
Value (€ million)	422.7	398.7

Hungarian maleic anhydride exports Jan-2024

Hungary exported 4,065 tons of maleic anhydride in January 2024 against 1,526 tons in January this year, with average prices dropping from €1343.6 per ton to €1157.0 per ton. Exports to Poland from Hungary increased from 214 tons in January 2023 to 2,339 tons.

Hungarian aniline imports Jan-2024

Aniline imports into Hungary dropped from 13,869 tons January 2023 to 11,502 tons January 2024. Inward shipments from BorsodChem-MCHZ in the Czech Republic amounted to 8,896 tons against 5,940 tons in January 2023. Belgium

supplied 2,606 tons against 3,821 tons in January 2023. Cost prices of aniline imports dropped from €1396.6 per ton to €1269.0 per ton.

Polish organic chemical trade Jan-Feb 2024

Exports of organic chemicals from Poland fell from 273,800 tons in January to February 2023 to 250,300 tons in 2024, whilst imports dropped from 714,800 tons to 584,400 tons. High energy prices played a key role in driving up values last year which are still impacting on production and trade.

Methanol imports into Poland totalled 103,422 tons in January to February 2024 against 94,647 tons in the same period in 2023. For other organic chemical imports Poland imported 3,971 tons of acetic acid in January to February against 6,559 tons in January to February 2023. The US was the leading supplier, followed by the UK.

Polish Organic Chemical Imports (unit-kilo tons)			
Product Jan-Feb 24 Jan-Feb 23			
Acetic Acid	3.971	6.559	
Acetone	0.224	0.812	
Butadiene	7.019	12.191	
DINP/DOP	1.784	1.645	
Ethyl Acetate	2.810	2.571	
Isopropanol	2.011	1.580	
Maleic Anhydride	1.698	2.289	
Methanol	103.422	94.647	
Propylene	17.885	16.604	
VAM	1.300	2.707	

Ethyl acetate imports into Poland amounted to 2,810 tons in January to February 2024 against 2,571 tons in January to February 2023. Belgium provided the largest share of imports. VAM imports amounted to 1,300 tons versus 2,707 tons in 2023. Average prices for VAM imports dropped from €2087.1 per ton to €1214.2 per ton.

Maleic anhydride imports into Poland amounted to 1,698 tons in January-February 2024, down from 2,289 tons in the previous year. Imports were sourced in 2023 from Germany (4,492 tons), Hungary (2,836 tons) and South Korea (1,853 tons).

Isopropanol imports into Poland amounted to 2,011 tons in January to February 2024 against 1,580 tons in the same period in 2023. Aside Germany imports came last year from the Netherlands and South Africa.

Orlen was considering the construction of an isopropanol plant at Plock to meet domestic demand, but this investment depends on the completion of the delayed phenol project.

Polish EO/PO Imports (unit-kilo tons)			
Product Jan-Feb 24 Jan-Feb 23			
DEG	4.462	4.546	
Ethylene Glycol	8.660	17.043	
Ethylene Oxide	2.932	3.419	
Propylene Glycol	19.431	18.688	

Ethylene oxide imports into Poland totalled 8,660 tons in January to February 2024 versus 17,043 tons in January to Germany currently represents the main February 2024. source of inward shipments.

Ethylene glycol imports dropped in the first two months in 2023 in 17,043 tons to 8,660 tons in the same period this year. Belgium is the main supplier of supplied the largest volume of glycols to the Polish market, shipping 91,405 in 2023. DEG imports increased in 2023 to 30,343 tons against

Polish Organic Chemical Exports (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
Acetone	2.542	2.927
Ethylene Glycol	4.692	2.658
Formaldehyde	4.846	4.055
Glycerol	7.301	5.317
Monochloroacetic Acid	4.237	6.925
Nonylphenol	4.198	6.864
N-Butyl Acetate	1.721	2.523
Propylene Glycol	2.049	1.267

27,949 tons, whilst propylene glycol amounted to 19,431 tons against 18,688 tons in 2022. Poland also exports glycols, although in less volume than exports. Ethylene glycol exports totalled 20,423 tons in 2023 and propylene glycol 12,957 tons.

Regarding export activity in organic chemicals, Polish shipments of monochloroacetic acid (MCAA) amounted to 4,198 tons in the first two months against 6,864 tons in the same period in 2023. MCAA production is undertaken by the PCC Group at Brzeg Dolny. Other organic chemical exports from Poland include acetone where shipments amounted to 2,542 tons in January-February

2024 versus 2,927 tons in January to February 2023. The main markets for Polish acetone exports included Italy, Germany, Romania and Lithuania. Normal butyl acetate exports dropped from 2,523 tons to 1,721 tons in January to February 2024 The largest destination for Polish butyl acetate exports is Germany, accounting for 4.252 tons in 2023 for a value of €5.998 million.

Polish Methanol Imports (unit-kilo tons)			
Country	Jan-Feb 24	Jan-Feb 23	
Azerbaijan	0.000	4.981	
Belgium	16.782	0.000	
Finland	1.238	0.000	
Germany	14.735	8.736	
Netherlands	18.320	8.700	
Norway	17.001	8.978	
Russia	0.000	65.881	
Venezuela	35.245	0.000	
Others	0.101	0.049	
Total	103.422	94.647	
Av € per ton	314.9	311.9	

Central European methanol markets

Central European methanol trade Jan-Feb 2024

Methanol represents the largest organic chemical export commodity for Poland despite the lack of domestic production. Exports amounted to 35,752 tons in the first two months in 2024 against 51,176 tons in January to February 2023. Methanol imports into Poland totalled 103,422 tons in January to February 2024 against 94,647 tons in the same period in 2023. Average prices amounted to €314.9 per ton against €311.9 per ton last year. Poland has been developing alternative sources to Russian methanol before the full embargo took full effect in June. Venezuela supplied 35,245 tons in the first two months, whilst Belgium supplied 16,782 tons.

Poland Methanol Exports (unit-kilo tons)			
Country	Jan-Feb 24	Jan-Feb 23	
Austria	0.169	7.632	
Czech	7.107	11.143	
Germany	17.260	13.061	
Romania	0.000	2.890	
Slovakia	5.992	8.064	
Ukraine	5.144	6.257	
Hungary	0.000	2.067	
Others	0.079	0.063	
Total	35.752	51.176	
Av € per ton	378.8	403.5	

Exports of methanol from Poland amounted to 35,752 tons in January to February against 51,176 tons in January to February 2023. Exports declined in 2023 due to lower imported volumes after the sanctions imposed on Russia took full effect after 18 June. The largest destination for Polish exports was Germany which took 17,260 tons in the first two months in 2024 against 13,061 tons in the same period in 2023.

Ukraine imported 5,144 tons of methanol from Poland in the first two months 2024 against 6,257 tons in 2023. Export prices dropped from €403.5 per ton to €378.8 per ton.

Czech imports of methanol amounted to 11,815 tons in the first two months in 2024 against 13,501 tons. Prices per ton for methanol imports into the Czech Republic increased slightly from €370.5 per ton to €389.5 per ton. Poland supplied 7,696 tons to the Czech Republic in the first two months against 8,682 tons in the same period in 2023, whilst the second largest source of supply came from Estonia which amounted to 2,197 tons.

Czech Methanol Imports (unit-kilo tons)			
Country	Jan-Feb 24	Jan-Feb 23	
Germany	1.070	1.664	
Norway	0.016	0.793	
Estonia	2.197	0.000	
Russia	0.000	2.148	
Poland	7.696	8.682	
Others	0.837	0.215	
Total	11.815	13.501	
Av € per ton	389.5	370.5	

Regarding Estonia, European company Power2X is planning an investment of over a billion euros in the Niidu industrial area in the coastal town of Pärnu for the construction of a methanol plant with a capacity of 500,000 tpa. Production is intended to be based on sustainably sourced forestry by-products and flexible green hydrogen. These resources will be produced using the output from Estonia's future offshore wind energy areas.

Throughout the development, construction, and long-term operation phases, the project is expected to increase Estonia's GDP, whilst creating over 2,000 construction jobs

and more than 200 jobs in the supply chain and on-site. The project is currently in the feasibility assessment phase and is starting the permit process. Production is planned to start in 2028.

According to Power2X's plan, the future new logistics capabilities of Pärnu County, including the Rail Baltica freight station, will be combined with our traditions in optimizing industries. Power2X develops large-scale industrial projects focusing on hydrogen, ammonia, and methanol, with a diverse project portfolio across Europe.

Hungarian methanol imports (unit-kilo tons)		
Country	Jan-24	Jan-23
Austria	0.042	0.046
Germany	6.738	3.946
Netherlands	0.999	0.411
Slovakia	0.000	1.843
Others	0.229	0.002
Total	8.008	7.349
Av € per ton	422.9	426.6

Methanol imports into Hungary in January 2024 rose to 8,008 tons against 7,349 tons in January 2023. Imports from Germany increased from 3,946 tons to 6,738 tons, replacing sources from Poland and Slovakia last year.

Azerbaijan has replaced some of Russia's previous market share in Europe. Exports to the EU from Azerbaijan's SOCAR plant amounted to 260,700 tons in 2023 which was 0.4% down from 2022. Romania imported 82,300 tons of methanol from Azerbaijan in 2023 against 60,100 tons in 2022, whilst the

Netherlands reduced imported from 105,800 tons in 2022 to 71,300 tons.

Regional company challenges

Grupa Azoty Production (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
Nitrogen Fertilisers	451.0	496.0
Compound Fertilisers	105.0	112.0
Potassium Fertilisers	0.0	0.0
Pigments	3.0	3.7
Urea	128.0	150.0
Oxo alcohols	24.0	18.0
Polyamide	16.0	13.0
Caprolactam	16.2	19.0
Speciality Fertilisers	26.0	49.0

Grupa Azoty production Jan-Feb 2024

Grupa Azoty's production has stabilised in the first two months in 2024, even if the overall volumes are still slightly down in the first two months and the group remains confronted by huge financial challenges. Grupa Azoty has come to an agreement with several banks that give the company time restructure and devise a survival strategy. In addition to energy costs from 2023 Grupa Azoty has found itself facing higher costs for the Polimery Police project. Debts facing the group are estimated to total more than zl 10 billion, thus substantially above €2 billion.

Amongst the products oxo alcohol production at Kedzierzyn increased from 18,000 tons in January to February 2023 to 24,000 tons this year and polyamide production rose from 13,000 tons to 16,000 tons, but all the other products were slightly lower even if the prospects appear better for this year.

The production of nitrogen fertilisers dropped from 496,000 tons to 451,000 tons although the prospects for thus year are better. Grupa Azoty resumed the Melamine 111 unit at Pulawy at the end of January. The maximum production capacity of the Melamine III unit, 90 tons per day, represents approximately one third of the rated capacity of all melamine units at the subsidiary.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Feb 24	Jan-Feb 23
Caustic Soda Liquid	52.3	62.5
Caustic Soda Solid	6.9	13.6
Caprolactam	16.2	19.0
Acetic Acid	0.5	0.3
Ammonia (Gaseous)	296.0	340.0
Ammonia (Liquid)	15.6	14.3
Pesticides	8.5	9.1
Nitric Acid	350.0	347.0
Nitrogen Fertilisers	263.0	284.0
Phosphate Fertilisers	35.0	34.4
Potassium Fertilisers	46.2	38.7

Chimcomplex tender for epoxy resin project

Chimcomplex has issued a tender for its epoxy resin project at Borzesti. The tender includes the acquisition of license, basic and detailed engineering, technical assistance for the project which comprises epoxy resins production unit based on epichlorohydrin synthesis.

The project is based on the Romanian state aid scheme regarding the granting of grants for investments intended for the manufacturing industry. The contract price must not exceed €16.5 million excluding VAT. The deadline for the offers (bids) transmittal is 10 May 2024.

Chimcomplex introduces plan for cost reduction

Chimcomplex has approved a plan aimed at cost

reductions and accelerated investments, seeking to ensure stability and sustainability in the face of present and future difficulties. This is a response to the unfavourable and unpredictable developments in the business environment generated by military conflicts and multiple crises globally, culminating in the difficulty of contracting essential raw materials for Chimcomplex. Other factors include the high prices for natural gas, electricity, and propylene. The forecast for 2024 in the realistic version indicates a slight improvement, but this projection that could easily be reversed.

Regarding other investments, Chimcomplex Borzesti intends to spend around €98 million on construction of a plant that will produce epoxy resins. The full project comprises the construction of glycerine, epichlorohydrin and four grades of epoxy resins. With a capacity of over 46,000 tpa, these products will help Romania's total independence from chemical imports.

In the medium and long term Chimcomplex intends to focus on increasing the production of polyols, whilst developing projects to obtain methanol, ethylene oxide, and monoethylene glycol, glycols. Some plans include modernising the existing idle PVC plant, but this may not be economically viable. Generally, the diversification of production by including new chemical products that Romania currently imports is a strategic objective of Chimcomplex. Regarding energy investments the construction of the cogeneration plant at Ramnicu Valcea forms a major plank of its strategy.

RUSSIA

Russian Chemical Production (unit-kilo tons) Product Jan-Feb 24 Jan-Feb 23 Ethylene 789.3 760.1 Propylene 456.9 445.8 Benzene 239.7 232.9 Toluene 54.2 59.0 **Xylenes** 81.3 88.1 Orthoxylene 23.9 25.9 37.8 Paraxylene 41.1 Styrene 116.5 126.8 Ethylbenzene 130.9 141.3 629.6 Methanol 652.4 Isopropanol 13.2 9.4 Ethylene Glycol 80.6 80.5 22.9 Butanols 18.0 Phenol 44.9 35.9 Acetic Acid 46.2 29.1 Phthalic Anhydride 16.6 14.7

Russian base chemical production Jan-Feb 2024

Russian production of chemicals and chemical products in January-February 2024 increased by 7.9% in volume compared to the same period in 2023. This could be construed as more recovery than growth, as the first two months in 2023 recorded a drop against 2022.

Despite the range of challenges production continues to perform relatively well in the areas of olefins and aromatics. Maintaining current production levels is faced by a range of short-term issues, all of which are connected to the war in Ukraine.

Refinery output and naphtha

In the first two months naphtha production in Russia fell to 1.192 million tons from 1.927 million tons in 2023, with southern refineries (including Novoshaktinsky and Tuapse) particularly affected. Lukoil's refineries reflect broader problems in the Russian energy sector, where some oil companies are struggling to renovate their refineries built with

the help of US and European engineering companies. These difficulties are exacerbated by Ukrainian drone attacks that have hit at least a

dozen Russian refineries this year.

Russian Benzene Production by Region			
Region	Jan-Feb 24	Jan-Feb 23	
Central Federal District	19.061	18.703	
Northwestern Federal District	13.638	13.124	
North Caucasus Federal District	13.722	5.739	
Volga Federal District	139.513	139.775	
Ural federal district	7.671	8.464	
Siberian Federal District	46.091	42.843	
Total	239.696	228.648	
Pussian Toluono Production by Pogion			

Russian Toluene Production by Region		
Region	Jan-Feb 24	Jan-Feb 23
Central Federal District	14.269	13.153
Northwestern Federal District	7.878	7.298
Volga Federal District	20.803	26.553
Siberian Federal District	11.299	9.982
Total	54.249	56.986

Total	34.243	30.300	
Russian Xylenes Production by Region			
Region	Jan-Feb 24	Jan-Feb 23	
Central Federal District	2.162	3.502	
Northwestern Federal District	13.666	12.929	
Volga Federal District	28.585	30.833	
Siberian Federal District	36.849	31.859	
Total	81.263	79.122	

Western companies such as UOP and Swiss engineering group ABB have supplied technology and software to around forty of Russia's largest refineries over the past two decades. A combination of Russian and foreign equipment is used at each plant. As both UOP and ABB left the Russian market in February 2022 and sanctions soon followed, Russian oil companies now face difficulties in repairing oil refineries. Parts of the damaged refineries can be repaired using Russian engineers, but some parts remain unique and will remain idle.

The impact of the drone attacks on Russian refineries has been that feedstocks that would normally be used for aromatics production have been redirected towards gasoline production, thereby driving up the price of toluene amongst other products.

The price rise of toluene and other fuel additives has raised the attention of the government which does not want fuel prices to get out of hand. Overall, aromatics supply, including benzene and xylenes, could become difficult if these attacks continue to cause problems.

Toluene supply in Russia is fairly balanced between production and consumption, thus in 2023 a total of 320,000 tons versus 310,000 tons. As a result, there is no surplus of this octane additive, and this has culminated in price rises.

Of the refineries so far struck by drones only the Novokuibyshevsk complex produces both ethylene and propylene. Lukoil's Kstovo refinery is a major producer of propylene, whilst the Ryazan refinery sells propane-propylene fractions to petrochemical producers such as Omsk Kaucuk, Ufaorgsintez

and SIBUR-Khimprom. In the aromatics sector the Kirishi refinery produces benzene, toluene and xylenes.

Russian Polymer Production (unit-kilo tons)			
Product Jan-Feb 24 Jan-Feb 23			
Plastics	1,816.2	1,729.0	
PE	613.2	609.3	
PS	92.2	93.8	
PVC	120.6	141.7	
PP	383.9	373.6	
Polyamide	22.7	21.9	
PET	104.6	104.0	
Synthetic Rubber	241.0	226.8	

Russian polymer production Jan-Feb 2024

The production of plastics in primary forms increased from 1.729 million tons in the first two months in 2023 to 1.816 million tons in the same period this year. Russian production of polyethylene rose from 609,300 tons to 613,200 tons in January to February 2023.

Polypropylene production increased from 373,600 tons to 383,900 tons, whilst polystyrene production dropped slightly from 93,800 tons to 92,200 tons. PVC production dropped

from 141,700 tons in January to February 2023 to 120,600 tons in the same period in 2024. The production of polyamide in Russia fell from 163,000 tons in 2022 to 132,400 tons. Russian production of synthetic rubbers amounted to 241,000 tons in January to February 2024 compared to 226,800 tons in 2023. February was a particularly weak month for rubber production last year.

Selected Russian Chemical Producer Net Profits (\$ million)		
ν.		
Producer	2023	2022
Akron	398.9	1229.5
Bashkir Soda	117.3	92.0
Kazanorgsintez	176.7	282.2
Evrokhim	1243.3	2423.3
Metafrax	25.3	144.0
Nizhnekamskneftekhim	245.3	655.4
RusVinyl	75.4	232.5
SIBUR Group Total	1872.3	4135.2
SIBUR-Khimprom	6.6	9.3
SIBUR-Neftekhim	4.0	7.2
Uralkali	128.9	1442.5
Total	4,299.9	10,652.5

Russian chemical company financial performance

A general feature of the impact of sanctions on the Russian chemical industry has been the drop in foreign trade both in terms of exports and imports. At the same time producers have increased domestic sales. These sales are generally less profitable than the exports were previously carried out to the European markets.

Russian chemical producers reported much lower profits in 2023 over 2022, broadly attributed to the loss of European markets and the limited possibilities for export trade. At the same time the financial pattern of Russian petrochemical plants has followed international trends of lower profitability, but largely for different reasons from

European companies. Feedstock and raw material costs for Russian producers were lower in 2023, complying with international trends, whilst sales prices also dropped.

SIBUR Group's net profits dropped from \$4.135 billion in 2022 to \$1.872 billion in 2023, with



heightened focus on the domestic market. A share of 53% of SIBUR's total revenues came from the sales of polyolefins in 2023, with plastics and organic chemicals accounting for 22%. SIBUR group member Nizhnekamskneftekhim reduced net profits from \$655.4 million in 2022 to \$245.3 million in 2023.

In the fertiliser sector despite a 10% rise in revenues in 2023 Uralkali's net profit dropped from \$1.442 billion to \$128.9 million. Akron

Group's net profit for 2023 amounted to 35.9 billion roubles, down 2.5 times against 2022. Revenue decreased by 30% to 179.5 billion roubles, whilst the EBITDA margin dropped from 53% to 38%. Evrokhim reported a group profit of \$1.243 billion in 2023 versus \$2.423 billion in 2022.

Russian Monomers

Russian Ethylene Production (unit-kilo tons)			
Region	Jan-Feb 24	Jan-Feb 23	
North Caucasus Federal District	60.377	53.981	
Volga Federal District	369.810	371.274	
Ural federal district	269.184	251.613	
Siberian Federal District	89.968	83.245	
Total	789.338	760.113	

Russian ethylene p	roduction Ja	n-Feb 2024
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Russian ethylene production totalled 789,338 tons in the first two months tons in 2024 against 760,113 tons in the same period in 2023. Regarding individual producers ZapSibNeftekhim at Tobolsk produced 269,184 tons in January to February 2024, up from 251,613 tons from January to February 2023.

Russian Propylene Production (unit-kilo tons)			
Region	Jan-Feb 24	Jan-Feb 23	
North Caucasus Federal District	25.396	21.515	
Volga Federal District	190.956	203.225	
Ural federal district	181.428	182.039	
Siberian Federal District	88.122	81.444	
Total	485.902	488.223	

Russian propylene production Jan-Feb 2024

Russian propylene production totalled 485,902 tons in the first two months tons in 2024 against 488,223 tons in the same period in 2023. ZapSibNeftekhim at Tobolsk produced 181,428 tons from 182,039 tons in 2023. The Volga-Urals region accounted for 190,956 tons against 203,225 tons in 2023.

Russian Propylene Domestic Sales (unit-kilo tons)			
Producer Jan-Feb 24 Jan-Feb 23			
Angarsk Polymer Plant	10.096	5.985	
Omsk Kaucuk	0.213	0.194	
SIBUR-Kstovo	34.132	25.56	
LUKoil-NNOS	26.454	35.609	
Tomskneftekhim	0.000	0.803	
Gazprom neftekhim Salavat	0.000	0.252	
Nizhnekamskneftekhim	0.000	0.805	
Stavrolen	0.000	3.302	
Total	70.682	72.316	

Russian propylene domestic sales and exports Jan-Feb 2024

Russian sales of propylene on the domestic merchant market amounted to 70,682 tons in the first two months this year against 72,316 tons in January to February 2023. The largest propylene supplier to the domestic market was SIBUR-Kstovo, shipping 34,132 tons against 25,560 tons in January to February 2023. Lukoil-NNOS reduced propylene sales from 35,609 tons in the first two months to 26,454 tons this year. Sales from Lukoil-NNOS dropped in February and in March due to the side-effects of the drone

attacks on the refinery.

Russian Major Propylene Domestic Buyers (unit-kilo tons)		
Consumer	Jan-Feb 24	Jan-Feb 23
Saratovorgsintez	25.275	30.589
Volzhskiy Orgsintez	2.111	1.904
Akrilat	5.461	4.016
SIBUR-Khimprom	8.268	5.281
Omsk-Kaucuk	7.883	3.603
Tomskneftekhim	1.182	0.504
ZapSibNeftekhim	12.864	27.250
Moscow Refinery	1.084	0.250
Nizhnekamskneftekhim	1.467	0.000
Ufaorgsintez	2.188	2.165
Kazanorgsintez	1.430	0.000
Khimprom Kemerovo	1.071	1.241
Total	70.682	72.316

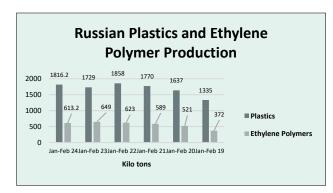
ZapSibNeftekhim purchased 12,864 tons of propylene in the first two months in 2024 against 27,250 tons in the same period in 2023, whilst Saratovorgsintez reduced purchases from 30,589 tons to 25,285 tons.

SIBUR-Khimprom at Perm increased purchases from 5,281 tons to 8,268 tons whilst Omsk Kaucuk increased purchases from 3,603 tons to 7,883 tons. The increase in propylene purchases by Omsk Kaucuk was required to provide feedstock for the production of isopropanol. The other isopropanol producer in Russia, the Plant of Synthetic Alcohol at Orsk, purchases in the main propane-propylene

fractions.

Propylene exports from Russia amounted to 10,187 tons in the first two months in 2024 against 2,973 tons in 2023. Most of the exports went to China and most were delivered from the Angarsk Polymer Plant. Prior to 2022 Lukoil-NNOS was the main exporter of propylene.

Russian bulk polymers



Russian plastics production Jan-Feb 2024 Russian bulk plastics production amounted to 1.816 million tons in January to February 2024 against 1.729 million tons in the same period in 2023 and 1.858 million tons in 2022.

Polyethylene has been the leading product, whilst polyamide production has been affected by lower tyre consumption and also exports. PVC production recovered in the latter part of 2023 but still remains lower than prior to 2022.

Russian Ethylene Polymer Production by Region (unit-kilo tons)			
Region	Jan-Feb 24	Jan-Feb 23	
Central Federal District	18.703	20.373	
Northwestern Federal District	6.232	5.560	
Southern Federal District	5.069	4.894	
North Caucasus Federal District	54.806	50.133	
Volga Federal District	184.710	211.972	
Ural federal district	283.879	253.465	
Siberian Federal District	59.797	62.864	
Far East	0.021	0.051	
Total	613.196	609.262	

Polyethylene production amounted to 613,196 tons in the first two months 2024 up from 609,262 tons in the same period in 2023. From the totals, the main grades of polyethylene accounted for 565,007 tons against 540,107 tons.

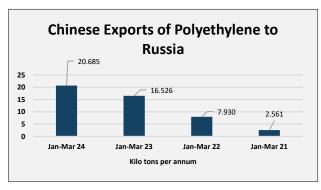
ZapSibNeftekhim is the largest Russian producer, increasing production polyethylene grades from 253,465 tons to 283,879 tons in January to February 2024 nearly all of which comprised main polyethylene grades HDPE and LLDPE.

Aside polyethylene production of other grades of ethylene polymers, such as ethylene vinyl acetate, is quite small in Russia and the market relies to a large extent on imports. Overall, the market for ethylene polymers has undergone significant changes in the past two years. 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 32.6% in 2023.

Russian polymer pipe growth

Over the past four years, the consumption of polymers in pipeline systems in Russia has increased by 50%. In 2023 this growth was 9%. The market of polymer pipes in the Russian Federation is one of the growing markets. Active growth began in 2020, despite restrictions on the operation of production facilities in the context of COVID-19. The production of polymer pipes reached the highest growth rate in 2021 of 34.9% compared to 2020. In 2022 and 2023, there was no such explosive growth in output, but the intensive increase

continued.



Russian polyethylene trade Jan-Feb 2023

Russian polyethylene exports to China jumped from 28,884 tons in January to February 2023 to 78,947 tons in 2024, with both HDPE and LDPE showing rises.

Average prices for Russian polyethylene exports to China rose from \$788.1 per ton to \$879.8 which meant that revenues increased

from \$22.764 million to \$69.454 million.

Inward shipments of polyethylene from China into Russia amounted to 12,513 tons in the first two months against 16,526 tons in the same period in 2023. The most expensive grades of polyethylene included ethylene-vinyl acetate and ethylene-hexene copolymers. Average prices fell in 2023 to \$1177.1 from \$1675.9 in 2022 and \$1542.4 in 2021.

Imports of polyethylene and its copolymers to Russia from non-CIS countries continued to decline in 2023. Imports of uncompounded polyethylene from these countries have decreased by 27.4% since

Hexene plant installation at Nizhnekamskneftekhim
Hexene production at Nizhnekamskneftekhim will
probably be available in 2025 which will allow the
production of ethylene hexene copolymers. Currently
Russia depends on imports for this type of polymer.
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 new hexene unit is 50,000 tpa. The overall
progress of the project at the end of January was rated
at 51.1%. One of the major consumers of hexene will
also be the Amur Gas Chemical Complex, which is
currently being built in the Far East.

2021 to a total of 283,000 tons. At the same time, imports of LDPE from non-CIS countries have fallen by 69.1% since 2021 to 12,000 tons in 2023, and imports of LLDPE decreased by 40% over two years to 91,000 tons in 2023.

In contrast to the reduction in imports of polyethylene from non-CIS countries, the supply of PE from the countries of the former CIS shows significant growth. PE imports from Belarus in 2023 increased by 55.6% and reached 84,000 tons, PE imports from Azerbaijan jumped 2.6 times to 76,000 tons, and

from Uzbekistan increased by 41.9% to 44,000 tons.

The supply of ethylene vinyl acetate (EVA) to the Russian market remained unchanged in 2023 from 2022 and amounted to slightly more than 27,000 tons. In contrast to other ethylene polymers imports of HDPE pipe grades in 2023 increased by 47.6% and amounted to 62,000 tons. This is mainly due to an increase in the share of polyethylene producers from China and Thailand in the Russian market. Imports of polyethylene with cross-linked PE-C molecules (XLPE) of pipe and cable grades also increased by about 15% to 11,000 tons.

Russian Propylene Polymers Production by Region (unit-kilo tons)			
Region	Jan-Feb 24	Jan-Feb 23	
Central Federal District	23.393	26.626	
Northwestern Federal District	0.087	0.593	
Southern Federal District	0.983	0.974	
North Caucasus Federal District	22.683	17.802	
Volga Federal District	74.583	68.992	
Ural federal district	200.040	199.430	
Siberian Federal District	62.119	59.199	
Total	383.888	373.617	

Russian polypropylene production Jan-Feb 2024

Production of propylene monomers totalled 383,888 tons in the first two months in Russia of which 366,445 tons consisted of polypropylene (largely homo grade). Production of propylene polymers increased slightly against 2023.

Production in Russia is mostly focused on homo grade product and thus most copolymers are imported which is currently from China. The

new DGP-2 plant under construction at Tobolsk will be more flexible being able to produce heat-sealable polymers which are not yet produced in Russia. Officially, the construction of DGP-2, which will produce 570,000 tpa of polypropylene, began at the Tobolsk site of ZapSibNeftekhim in August 2023. Production is expected to be launched in 2027. The new DGP-2 plant should increase the capacity of ZapSibNeftekhim to 1.5 million tpa of polypropylene.

Chinese Imports of PP from Russia			
Jan-Feb 24 Jan-Feb 23			
\$ million	17.4	34.613	
Ktons	20.1	47.835	

Russian-Chinese polypropylene trade Jan-Feb 2024

Russian exports of polypropylene to China dropped in the first two months to 17,400 tons against 20,100 tons in the same period in 2023, with costs falling from \$47.835 million to \$34.613 million. Imports from China dropped from 13,721 tons in the

first two months in 2023 to 4,849 tons in January to February 2024. Import costs dropped from \$26.610 million to \$8.098 million.

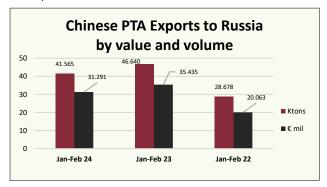
China increased export sales of polypropylene to Russia to 57,099 tons in 2023 against 31,404 tons in 2022. Average prices amounted to \$1898.5 per ton against \$2045.6 in the corresponding period in 2022 and \$1675.7 in 2021. Exports of polypropylene from Russia to China increased to 157,109 tons in 2023 against 70,054 tons in 2022. Average prices fell from \$1158.4 per ton to \$813.8 per ton. The loss of the European market for basic grades of polypropylene was the factor accounting for increased shipments to China in 2023, whilst at the same time Chinese copolymer producers too advantage from the exit of Western suppliers to the Russian market.

Russian PTA-PET

Russian PX-PTA-PET production Jan-Feb 2024

Russian paraxylene production amounted to 44,700 tons in the first two months in 2024 against 41,866 tons in the same period in 2023. Gazprom Neft increased production from 12,003 tons to 19,871 tons whilst Ufaneftekhim reduced production from 26,600 tons to 21,193 tons.

PTA production at Polief amounted to 59,506 tons in the first two months in 2024, combined with



36,963 tons of PET. PTA production for Polief amounted to 28,841 tons in January and then increased to 30,636 tons in February. In addition to pure PTA Polief produces salts for PTA in small quantities.

Ekopet at Kaliningrad produced 37,245 tons of PET in the first two months in 2024, whilst the combined plants of Senezh and SIBUR-PETF produced 30,428 tons.

Russian PTA imports Jan-Feb 24

Russian PTA imports from China amounted to 41,565 tons in the first two months in 2024 versus 46,240 tons in the same period in 2023. Last year values of imports amounted to \$193.5 million in against \$213.6 million in 2022 and \$182.7 million in 2021. Nearly all of the PTA imports from China were shipped to Ekopet at Kaliningrad by rail. PTA import prices averaged \$752.8 in the first two months in 2024, down from \$754.7 in 2023 and up from \$700.9 in 2022.

Tatneft-PTA updated project details

Tatneft held public hearings on 16 April regarding the project for the construction of a PTA plant with a capacity of 1 million tpa at the Taneko refinery. The capacity has been raised from the 600,000 tpa

PTA project for Tatarstan

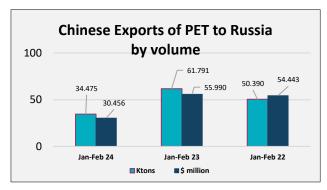
- PTA plant to be constructed at Nizhnekamsk.
- Project capacity now targeted at 1 million tpa
- PTA intended for Ekopet at Kaliningrad

capacity that was considered In 2021 to million tpa on the basis of expanded production of aromatics.

The first aromatics complex at the Taneko refinery was completed in December 2022, involving a

capacity of 150,000 tpa of paraxylene which has yet to start. Tatneft has outlined plans for an additional unit for paraxylene which would be sufficient for PTA production at Nizhnekamsk. As previously noted, the main volume of products will be provided with raw materials by the Ekopet enterprise, which the oil company acquired in June 2021.

The Investment Council of Tatarstan has approved the project for the production of PTA at Nizhnekamsk. The total investment will amount to about 91.2 billion roubles (\$1.031 billion at current exchange rates), with a project construction period lasting five years.



year to \$30.456 million in 2024.

In addition to meeting Ekopet's demand for PTA Tatneft wants to use PTA for producing polyester fibre in Tatarstan. Despite the ambitious plans there are still big challenges in relation to technology and financing.

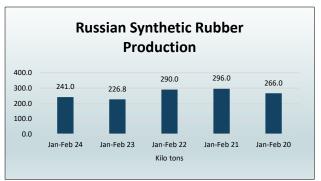
Russian PET trade Jan-Feb 24

Russian PET imports from China in January to February dropped to 34,475 tons against 61,791 tons in the same period in 2023 and 50,390 tons in 2021. Import costs dropped from \$55.990 million in the first two months last

Synthetic rubber

Russian synthetic rubber production Jan-Feb 2024

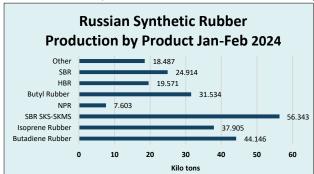
Synthetic rubber production in Russia amounted to 241,046 tons in January to February 2024 against



226,780 tons in the same period in 2023 but lower in the three previous years 2022-2020. Production tended to stabilise in the latter part of 2023 but is still much lower than prior to the full-scale Russian invasion of Ukraine.

In terms of regional production, the Volga region is the most important for synthetic rubber production. This region includes Nizhnekamskneftekhim, Togliattikaucuk, and Sterlitamak Petrochemical Plant, accounting for around 70% of total production. In the first two

months this year the Volga region accounted for 169,886 tons of synthetic rubber against 158,718 tons in the same period in 2023. Voronezhsintezkaucuk is the only producer of synthetic rubber in the Central Federal District of Russia, accounting for around 20% of production, where volumes amounted to 54,536 tons in the first two months against 47,143 tons in the same period last year.



The only other synthetic rubber producer in Russia is Omsk Kaucuk where production totalled 16,278 tons in the first two months in 2024 versus 20,918 tons in the same period in 2023.

The largest category of synthetic rubber production in Russia comprises SKS-SKMS which amounted to 56,343 tons in the first two months this year. Butadiene rubber amounted to 44,146 tons followed by 37,905 tons of isoprene rubber. The highest value rubber sold

by Russia is halogenated butyl rubber which is produced only by Nizhnekamskneftekhim where capacity has been expanded at the start of 2024. Production of halogenated butyl rubber amounted to 19,571 tons in the first two months in 2024.

Russian Butadiene Production (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
ZapSibNeftekhim	52.078	32.116
Nizhnekamskneftekhim	30.922	22.965
Togliattikaucuk	8.410	8.080
Sterlitamak Petrochemical Plant	4.522	4.465
Omsk Kaucuk	5.167	7.775
Total	101.099	75.401

Nizhnekamskneftekhim Financial Performance (\$ million)			
2023 2022			
Revenues	2472.8	3527.1	
Cost of Sales	1661.0	2586.4	
Gross Profit	811.2	940.8	
Profit before Tax	619.6	709.8	
Profit from sales	331.9	813.7	
Net Profit	245.3	655.4	

Russian butadiene production Jan-Feb 2024

Russian butadiene production totalled 101,099 tons in the first two months in 2024 against 75,401 tons in the same period in 2023. The largest producers ZapSibNeftekhim and Nizhnekamskneftekhim both showed significant rises in production, whilst Omsk Kaucuk was the only producer to report a drop in the first two months. ZapSibNeftekhim produces butadiene only for merchant market sales whilst Nizhnekamskneftekhim processes most of its butadiene into rubber SKD-N and SKD-L are butadiene rubbers based on neodymium and lithium catalysts.

Nizhnekamskneftekhim finances 2023

Nizhnekamskneftekhim is Russia's largest producer of synthetic rubber, in addition to producing other products such as polyolefins, styrene polymers, glycols and polyether polyols. Despite a profit margin of 30% the company's revenue dropped from

\$3.418 million to \$2472.8 million, and costs of sales dropped from \$2586.4 million to \$1661.0 million. The net profit fell from \$655.4 million to \$245.3 million.

SIBUR's share in NKNH's sales increased from 54% to 87%. This means that the parent SIBUR has almost complete control over the cash flow of the subsidiary NKNK. Fourth quarter production costs rose 35% in the fourth quarter over the third quarter which was likely due to the withdrawal of the government subsidy following a record increase in rubber prices. That same scenario applied to the first quarter in 2024.

Nizhnekamskneftekhim has completed the modernisation of the halogenated butyl rubber plant, increasing capacity from 150,000 tpa to 200,000 tpa. This makes Nizhnekamskneftekhim the world's

Chinese Synthetic Rubber Imports from Russia (unit-kilo tons)			
Product	Jan-Feb 24	Jan-Feb 23	
SBRs	6.064	9.174	
Butadiene Rubber	19.237	4.836	
Butyl Rubber	11.378	19.367	
HBR	15.176	5.375	
NBR	5.928	4.857	
Isoprene Rubber	10.871	4.916	
Others	10.139	9.094	
Total	78.794	57.619	
	1552.0	1519.0	
Chinese Imports of	Synthetic Rub (\$ million)	ber from Russia	
Product	Jan-Feb 24	Jan-Feb 23	
SBRs	7.936	10.408	
Butadiene Rubber	27.288	6.241	
Butyl Rubber	17.709	30.007	
HBR	31.439	12.396	
NBR	7.734	7.145	
Isoprene Rubber	15.274	7.471	
Others	14.875	13.833	
Total	122.254	87.501	

from 4,916 tons to 10,871 tons.

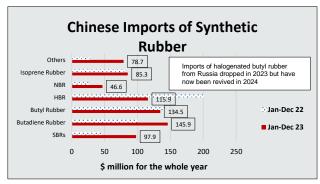
largest producer of HBR by capacity, although the company can only sell into the European market until 24 June this year. HBRs are used as a sealing layer in the manufacture of tubeless automobile tyres. Due to this component, they become not only more environmentally friendly, but also economical, allowing to reduce fuel consumption.

Russian Chinese rubber trade Jan-Feb 2024

Russian exports of synthetic rubber to China totalled \$122.254 million in the period January to February 2024 against \$87.501 million in the same period in 2023. By volume Russian shipments amounted to 78,794 tons in 2024 versus 57,619 tons in the same period in 2023.

By volume butyl rubber exports from Russia to China dropped from 19,367 tons in January to February to 11,378 tons in the same period this year. Butadiene rubber exports increased from 4,836 tons to 19,237 tons whilst SBS grade SBRs dropped from 9,174 tons to 6,064 tons. Halogenated butyl rubber exports recorded a significant increase, rising from 5,375 tons to 15,176 tons. Isoprene rubber exports increased

By value butyl rubber exports from Russia to China dropped slightly from \$109.303 million in January to December 2022 to \$108.097 million in 2023. Butadiene rubber exports increased from \$55.376 million to \$99.247 million whilst SBS grade SBRs increased from \$29.070 million to \$77.529



million. Halogenated butyl rubber exports recorded a significant fall, dropping from \$130.137 million to \$84.093 million. Nitrile-butadiene rubber shipments increased from \$9,359 million to \$34.161 million.

EU sanctions on Russian synthetic rubber take full effect from June

Sanctions on Russian synthetic rubber with the EU come into force in June this year, although since the first announcements in 2022 volumes have been in decline.

Concessions were made to West European tyre manufacturers in February 2023 in order to allow time to adjust to the new suppliers, which seemed absurd considering the ongoing war.

Russian exporters, particularly Nizhnekamskneftekhim, have realigned the export markets away from Europe to China. The process been relatively successful despite the longer freight distances. Unlike methanol, rubber prices are high enough to make long-distance exports profitable.

Methanol

Russian Methanol Production (unit-kilo tons)			
Producer	Jan-Feb 24	Jan-Feb 23	
Shchekinoazot	206.430	199.458	
Gazprom Methanol	116.600	133.600	
Metafrax Chemicals	164.333	176.100	
Akron	16.340	14.041	
Azot Novomoskovsk	9.963	9.320	
Angarsk Petrochemical	6.242	5.142	
Azot Nevinnomyssk	22.084	15.820	
Tomet	83.025	52.450	
Ammoni	15.776	12.892	
Ural/Novatek	10.991	11.764	
Totals	651.784	630.587	

Russian methanol production Jan-Feb 2024

Russia produced 652,391 tons of methanol in the first two months in 2024 against 629,569 tons in the same period in 2022. The largest producer Shchekinoazot increased production from 199,458 tons to 206,430 tons. At Togliatti, Tomet produced 83,025 tons of methanol in January to February 2024 versus 52,450 tons in January to February 2023.

Gazprom Methanol reduced production from 133,600 tons in the period January to February 2023 to 116,600 tons whilst Metafrax reported a fall from 176,100 tons to 164,333 tons.

Regarding the smaller producers Azot at Nevinnomyssk increased production from 15,820 tons to 22,084 tons

which correlated with the increase in acetic acid production. Other plants where methanol is consumed internally include Akron, Angarsk Petrochemical and Novatek. Akron uses methanol for formaldehyde production, Angarsk Petrochemical uses methanol for MTBE and Novatek uses methanol for gas processing.

Metafrax Chemicals reduced its annual net profit by 4.7 times with a 7% increase in revenue

Metafrax reported increased revenues for 2023 but significantly reduced profits. The main reason for lower profits were largely attributed to increased freight costs for exports. In rouble terms Metafrax Chemicals increased its revenue by 7.2% compared to 2022 up to 28.9 billion roubles, but due to the

lower exchange rate at the end of 2023 it meant that revenues declined in dollar values.

Metafrax Chemicals Finances 2023 (\$ million)		
	2023	2022
Revenues	321.124	365.430
Cost of Sales	187.084	169.206
Gross Profit	134.040	196.224
Profit from Sales	57.545	144.035
Profit before Tax	20.741	173.463
Net Profit	25.308	144.024

Despite the loss of European market sales, the share of exports in sales for Metafrax increased from 38.7% in 2022 to 39.2% in 2023. Methanol accounted for 35.5% of the company's revenue in 2023 which was followed by urea with a share of 29.8%.

came from the cost of sales which rose by 35% in roubles, but the exchange rate in this case helped to reduce the amount of expenditure in dollars. The company's net profit decreased by 4.7 times to 2.3 billion roubles, or from \$144.024 million to \$25.308 million.

Russian Methanol Exports by Producer (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Azot Nevinnomyssk	3.034	0.000
Azot Novomoskovsk	13.847	9.709
Akron	0.000	0.000
Metafrax Chemicals	35.651	77.186
Gazprom Methanol	52.207	73.861
Tomet	23.932	20.999
Shchekinoazot	82.631	111.632
Total	211.302	293.388

Metafrax Group includes Metafrax Chemicals, Metadynea (Perm Territory and Moscow Region), and Karbolit near Moscow. From 1 February 2024, Roskhim was appointed as the managing organization of Metafrax Chemicals.

Russian methanol exports Jan-Feb 2024

Russian methanol exports amounted to 211,302 tons in January to February 2024 versus 293,388 tons in the same period in 2023. Shchekinoazot reduced exports from

1111,632 tons to 82,631 tons in the first two months this year, whilst Metafrax Chemicals reduced shipments from 77,186 tons to 35,651 tons. Tomet exported 23,932 tons versus 20,999 in January to February 2023. Gazprom Methanol reduced exports in 2024 to 52,207 tons from 73,861 tons. To the south Azot at Novomoskovsk increased exports from 9,709 tons to 13,847 tons, shipped through the Temyruk and Kavkaz ports to Turkey.

Russian Methanol Exports by Destination (unit-kilo tons)			
Country	Jan-Feb 23	Jan-Feb 23	
Belarus	14.337	41.371	
China	145.473	115.795	
Finland	0.000	45.701	
Germany	0.000	0.910	
Kazakhstan	11.272	4.470	
Latvia	0.000	1.230	
Netherlands	0.000	20.814	
Poland	0.000	33.596	
UAE	6.191	0.000	
Turkey	33.919	29.919	
Total	211.192	293.806	

Exports to China amounted to 145,473 tons in the first two months in 2024 against 115,795 tons in the same period in 2023. Volumes to Turkey increased from 29,919 tons to 33,919 tons.

Although China has replaced Finland as Russia's main export destination for methanol exports, most of the Russian methanol plants are located in the western parts of the country which means that the freight distances are much larger and costlier than to the EU markets.

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 is using the Zabaikalsk route, which

can save several thousand kilometres in rail costs, but this also depends on the location of the Chinese consumers.

The largest Chinese region for purchases of Russian methanol is the Zhejiang Province which accounted for around 40% of shipments last year. The Guangdong Province accounted for just

Russian Methanol Exports to China 2024		
From Nakhodka Vostochny		
Exporter	Jan	Feb
Metafrax Chemicals	16.664	8.337
Gazprom Methanol	24.775	27.369
Tomet	0.000	0.000
Shchekinoazot	25.195	25.215
Total	66.634	60.921
From Zabaikalsk		
Exporter	Jan	Feb
Tomet	6.831	11.167
Total	6.831	11.167

under 30% and the Beijing area around 20%. Average prices paid by Chinese consumers in 2023 amounted to \$273.2 per ton which producers acknowledged were not enough to cover rail costs and production. Even with the mostly easterly of the Russian plants at Tomsk in Siberia freight costs to the Russian Far East ports raise questions about profitability. As with many aspects of the rise in Sino-Russian trade in the past two years, China buys from Russia because of price advantage whilst Russia sells to China because it has limited alternatives.

Although China has largely replaced Finland as the main export route for Russian methanol rail distances and freight costs are much greater than to European markets. Railcars are taking longer to return to producers which acts as a limit to how much methanol can be shipped. The

export of methanol to the east is also hampered by the shortage of carrying capacity of the Eastern railway range.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Azot Nevinnomyssk	1.799	0.806
Azot Novomoskovsk	3.871	0.000
Metafrax Chemicals	82.507	64.242
Gazprom Methanol	61.787	60.021
Tomet	52.070	49.718
Shchekinoazot	60.698	64.803
Ammoni (Mendeleevsk)	3.724	4.633
Total	266.456	244.223

Russian methanol domestic sales, Jan-Feb 2024

Domestic merchant sales increased in the first two months in 2024 to 266,456 tons against 244,223 tons in the same period in 2023. Domestic merchant sales have helped methanol producers offset lower exports enabling plants to operate at technically manageable levels of utilisation. Metafrax Chemicals increased domestic merchant sales to 82,507 tons in January to February 2024 against 64,242 tons in 2023, whilst Gazprom Methanol increased domestic merchant sales to 61,787 tons in January to February 2024 against

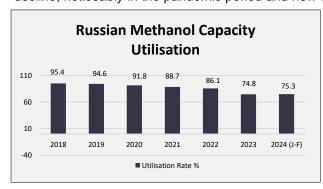
60,021 tons. From 1 February 2024 Metafrax became part of the Roskhim state holding which manages a number of chemical companies where assets have been stripped from the owners.

Sales for Tomet on the domestic market increased from 49,718 tons in January to February 2023 to 52,070 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. Shchekinoazot increased domestic methanol sales from 64,803 tons in the first two months in 2023 to 60,698 tons in January to February 2024. The increase only partly offset the loss of export volumes. Overall, the company faces the largest challenges amongst the Russian producers having expanded its capacity to 1.45 million tpa in September 2021.

Solutions to Russian methanol oversupply

Russian methanol plants ran at an average capacity rate of 74.8% in 2023 which was down against 86.1% in 2022 and 88.7% in 2021. From the peak of 95.4% in 2018 the rate has been in steady decline, noticeably in the pandemic period and now under the sanction regime. Whereas the drop in



sales through the pandemic period transpired to be a temporary phase, recovering lost sales from the sanction regime appears a much harder task.

In the short to medium term exports to China are essential for Russian producers even trade is not very profitable due to high freight costs. Maintaining utilisation rates of around 73-75% is the main goal of producers and this currently would not be possible if export shipments to China are not carried out.

Russian methanol was not supplied to China prior to 2022 due to significant transportation costs. Some help from the government is provided in that methanol producers have the right to take part in the selection for subsidies to compensate for transportation costs incurred for the export of products. This helps marginally to justify Russian methanol exports, but the mechanism is oriented towards volume than making it profitable for producers to ship more product. Essentially deliveries towards the Russian Far East by rail incur low profitability due to high track loading and large transport distances, both of which are combined with low selling prices in China. To the south, there are no large transshipment capacities and Russia is faced by high competition from Iran.

As a counterbalance to lower export activity domestic merchant sales performed relatively well in the second half of 2023. However, in the context of an expected recession in the Russian economy, or at least showdown, demand for methanol in the domestic market is not expected to increase beyond current levels. The Ministry of Industry and Trade has suggested the use of methanol as an alternative "green" automobile, marine and railway fuel as one of the measures to increase demand. These represent long term goals and faced with complicated restrictions producers remain sanguine over their prospects.

Russian Formaldehyde Production (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Pigment	6.398	5.498
Shchekinoazot	5.752	4.773
Akron	24.476	19.411
Metafrax	65.191	46.280
Sverdlov Plant	0.007	1.440
Khimsintez	10.023	4.328
Uralkhimplast	8.359	6.661
Nizhnekamskneftekhim	26.810	25.395
Metadynea	8.691	5.986
Total	155.706	119.772

MTO projects have been mentioned also as option for the methanol market but in view of the lack of access to advanced technologies interest is low-key. Furthermore, for the production of polyolefins and other petrochemicals Russia is well served already through traditional steam cracking. Thus, the MTO idea seems impractical.

Russian formaldehyde production Jan-Feb 24 Shchekinoazot increased the production of formaldehyde in the first two months in 2024 to 5,772 tons against 4,773 tons in the same period in 2023. Overall Russian formaldehyde production increased from 119,772 tons to

155,706 tons. Matafrax Chemicals increased production in the first two months to 65,191 tons against 46,280 tons in January to February 2023, whilst Akron increased production from 19,411 tons to 24,476 tons.

Organic chemicals

Russian N-Butanol Production (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Angarsk Petrochemical company	5.421	6.349
Azot Nevinnomyssk	2.955	2.901
Gazprom neftekhim Salavat	8.989	11.668
SIBUR-Khimprom, Perm	5.580	4.170
Total	22.945	25.088
Russian Isobutanol Prod	uction (unit-k	ilo tons)
Producer	Jan-Feb 24	Jan-Feb 23
Angarsk Petrochemical Company	3.720	5.464
Gazprom neftekhim Salavat	4.816	3.496
SIBUR-Khimprom, Perm	18.180	15.985
Total	26.716	24.945

Russian butanol production Jan-Feb 2024

Russian normal butanol production dropped from 25,086 tons in January to February 2023 to 22,945 tons in the same period in 2024. Gazprom neftekhim Salavat was the largest Russian producer, reducing volumes to 8,989 tons from 11,668 tons.

Isobutanol production in Russia increased from 24,945 tons to 26,716 tons in January to February 2024. Gazprom neftekhim Salavat increased production from 3,496 tons to 4,816 tons, whilst SIBUR-Khimprom increased production from 15,985 tons to 18,180 tons.

Russian Butanol Exports (unit-kilo tons)		
N-Butanol	Jan-Dec 23	Jan-Dec 22
Gazprom neftekhim Salavat	9.239	2.603
SIBUR-Khimprom	0.000	0.746
Angarsk Petrochemical	7.110	2.076
Azot Nevinnomyssk	1.131	1.819
Dmitrievsky Chemical Plant	0.000	2.068
Total	17.480	9.312
Russian Butanol Expe	orts (unit-kild	tons)
Isobutanols	Jan-Dec 23	Jan-Dec 22
Gazprom Neftekhim Salavat	6.496	28.331
SIBUR-Khimprom	16.130	16.593
Angarsk Petrochemical	0.118	2.770
Dmitrievsky Chemical Plant	1.877	0.498
Total	24.621	48.191

		U
Russian Acetone Production (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Ufaorgsintez	6.599	5.471
Kazanorgsintez	7.356	9.332
Novokuibyshevsk Petrochemical	5.747	5.471
Omsk Kaucuk	7.108	4.295
Total	26.810	24.569

Normal butanol exports from Russia rose from 9,312 tons in 2022 to 17,480 tons in 2023, including an increase in shipments by Gazprom neftekhim Salavat from 2,603 tons to 9,239 tons.

Isobutanol exports fell from 48,191 tons in January to December 2022 to 24,621 tons in 2023. Gazprom neftekhim Salavat reduced shipments from 28,331 tons to 6,496 tons whilst SIBUR-Khimprom reduced shipments from 16,593 tons to 16,130 tons.

Russian solvent production Jan-Feb 2024

Russian acetone production increased from 24,569 tons in the first two months last year to 26,810 tons in 2024. Omsk Kaucuk produced 4,295 tons of acetone against 7,108 tons in the previous year whilst Kazanorgsintez reduced production from 9,332 tons to 7,356 tons. The other two producers Ufaorgsintez and Novokuibyshevsk Petrochemical Combine both increased production.

Russian acetic acid production amounted to 44,733 tons in January to February 2024 against 29,072 tons in the same period in 2023. The largest producer in Russia Azot at Nevinnomyssk increased production from 22,407 tons to 36,117

tons. Aside using acetic acid for the production of butyl acetate and methyl acetate Azot supplies merchant acetic to the Russian domestic market. The two largest customers include Polief which

Russian Acetic Acid Production (unit-kilo tons)			
Producer Jan-Feb 24 Jan-Feb 23			
Azot Nevinnomyssk	36.117	22.407	
Others	8.616	6.665	
Total	44.733	29.072	

purchases acetic acid for PTA and Stavrolen which uses acetic acid in the production of vinyl acetate monomer (VAM).

Azot produced 9,646 tons of VAM in the first two months this year from the country total of 10,737 tons. VAM is exported from Stavrolen in quantities

of around 2,000 tons per month, most of which goes to Turkey. Some shipments were previously sent to Finland which has now stopped.

Russian Isopropanol Production (unit-kilo tons)		
Producer	Jan-Feb 24	Jan-Feb 23
Plant of Synthetic Alcohol	7.027	6.581
Omsk Kaucuk	6.202	3.088
Total	13.229	9.669

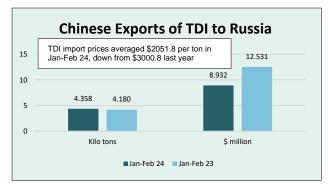
Isopropanol production in Russia amounted to 13,229 tons in January to February 2024 against 9,669 tons in the same period in 2023. Omsk Kaucuk increased production from 3,088 tons to 6,202 tons whilst the Plant at Synthetic Alcohol at Orsk increased production from 6,581 tons to 7,027

tons. Omsk Kaucuk only started isopropanol production in 2020 and only achieved high utilisation rates in 2023. Regarding other producers Sintez-Acetone's isopropanol unit at Dzerzhinsk was largely idle in 2023, although other parts of the company had been operating normally. An explosion at Sintez-Acetone took place in the middle of December during the process of trying to restart the isopropanol plant.

Russian polyurethane raw materials

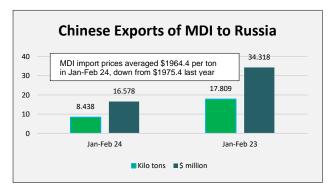
Isocyanate/polyol imports from China into Russia

TDI imports from China into Russia amounted to 4,358 tons in January to February 2024 against



4,180 tons in the same period in 2023. Due to much lower prices, costs of Chinese imports dropped from \$12.531 million to \$8.932 million in 2024.

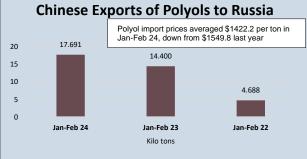
The largest plant for the production of flexible polyurethane foam in the Russian Far East is owned by Sibplast and has tripled its production capacity from 5,100 tpa to 15,000 tpa after opening a new production building in the Krasnoyarsk region.



Almost all polyurethane production in Russia is based on imported material, and industrial facilities are located in general production facilities and in Russian factories. Part of the market will be replaced by Sibplast's raised production levels. After the reconstructed plant reaches full capacity, the company's share in the Russian market will rise to about 8%.

The main isocyanate imported into Russia is MDI, which accounted for 75.4% of all imports

in this segment in 2023. The annual growth rate from 2018 to 2023 was 7.4%. So, after the crisis year of 2022, the volume of the isocyanate market reached its maximum values, increasing by 31.5% at the end of 2023.



The share of Chinese MDI in imports increased from 22.7% in 2021 to 53.5% in 2023. However, imports from China fell from 16,578 tons in the first two months in 2023 to 8,438 tons in January and February 2024. Costs of imports fell from \$34.318 million to \$17.809 million.

Polyol imports into Russia from China increased from 14,400 tons in January to February 2023 to 17,691 tons in the same period in 2024. Import costs rose from \$22,309 million in 2022 to \$25.161 million. Average prices fell from \$1549.2 per ton in 2023 to \$1422.2 in 2024. Prices in 2022 averaged \$2413.2 per ton.

Kazakhstan-Central Asia

Kazakh Aromatics Production (unit-tons)		
Product 2023 2022		
Paraxylene	18.0	76.0
Benzene	1.2	6.452

Atyrau refinery to restart aromatics production

The Atyrau Oil Refinery restarted production of paraxylene and benzene in the first quarter this year, after stopping last year due to disadvantageous pricing. Paraxylene production at the Atyrau refinery amounted

only to 18,000 tons in 2023 against a planned target at the start of the year at 208,391 tons. Production amounted to 76,000 tons in 2022, and benzene 6,452 tons. The restart of the aromatics plant will improve the profitability of oil refining for the Atyrau refinery. Paraxylene from the Atyrau refinery is exported through a terminal in Kulevi on Georgia's Black Sea coast with subsequent delivery by sea to China. The Parto-Tskali railway station is used for delivery to the Kulevi port.

Sinopec officially joins Silleno project

The Chinese company Sinopec has officially become a co-founder of Silleno LLP, which is engaged in the construction of a polyethylene plant in Kazakhstan. KazMunayGaz (KMG) holds a 40% stake, followed by a 30% stake for SIBUR and a 30% stake for Sinopec. Previously the project shares were broken down into 49.9% for KMG, 10.1% for subsidiary KMG Petrochem and 40% for SIBUR. Although SIBUR's share has been reduced from 40% to 30% this situation could run into problems depending on future sanctions, political relations and trading access.

Sanctions on SIBUR and loopholes

SIBUR's involvement in the Kazakhstan polyethylene project is possible due to loopholes in international sanctions which currently allow Russian companies to take minority stakes in other countries. At the same time, it creates a situation which allows SIBUR some degree of contact with Western engineering companies that it cannot use inside Russia. It should be noted that both Maire Tecnimont and Linde are embroiled in several large-scale litigation disputes with Russian companies over abandoned projects. Thus, it has been highlighted in the Kazakh press that it does this seem strange that a Russian company can work, albeit as a minority shareholder, on a project in Kazakhstan.

The polyethylene project involves the construction of a plant with a capacity of 1.25 million tpa in the Atyrau region in western Kazakhstan. The estimated cost of the project is \$7.7 billion, and the plant is expected to be completed in 2028.

Linde and Maire Tecnimont commissioned for Kazakh polyethylene project

Kazakhstan has commissioned Linde to construct the polyethylene plant, consisting of two units of 625,000 tpa. Maire Tecnimont is also being commissioned to develop the basic design of the Silleno complex. This will include the design for polymerisation units, alphaolefins and off-site facilities.

Linde is developing an advanced basic design for ethane cracking and air separation plants (nitrogen, process air) used in the production of

 Kazakh Exports of PP to China

 Jan-Feb 24
 Jan-Feb 23

 Kilo tons
 22.109
 31.977

 \$ million
 19.984
 25.846

polyethylene on the basis of its own technology. The two polyethylene units have been licensed to Chevron Phillips and Univation.

smillion 19.984 25.846 KazMunayGaz (KMG) and Germany's Euler Hermes have agreed to cooperate in raising financing for the construction of a polyethylene plant. The polyethylene complex is planned to be located next to the polypropylene plant in the Karabatan special economic zone of the Atyrau region. Finished products are planned to be sent to the domestic market and for export. The domestic polyethylene market comprises around 180,000 tpa, with an annual growth rate of roughly 4%.

Azerbaijan Methanol Market (unit-kilo tons)			
	Jan-Feb 24	Jan-Feb 23	
Production	94.9	72.5	
Exports	82.4	74.9	
Value (\$ mil)	15.1	16.5	

SOCAR Methanol Jan-Feb 2024

SOCAR Methanol produced 94,900 tons of methanol in January-February 2024, against 72,500 tons in the same period in 2023. SOCAR Methanol exported 82,400 tons of methanol in January-February versus 74,900 tons in January to February 2023. SOCAR held

inventory of 22,000 tons of methanol at the start of the year.

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