Threats to the fertilizer market and agriculture in Europe



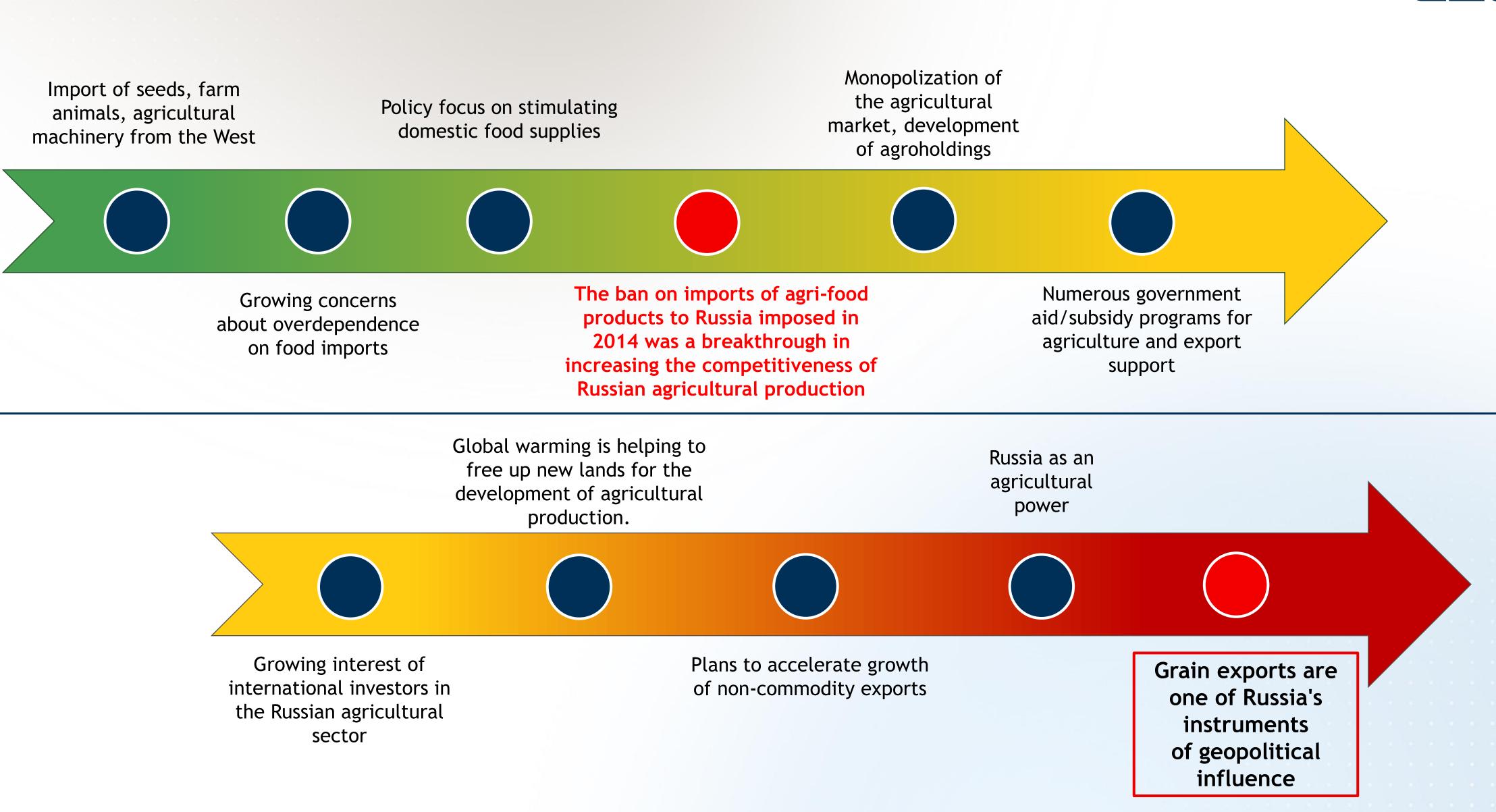
November 2024



Development of agriculture in Russia - from food self-sufficiency to exports intensification Over the past two decades, Russian agriculture has undergone an intensive process of modernization

Import of seeds, farm animals, agricultural

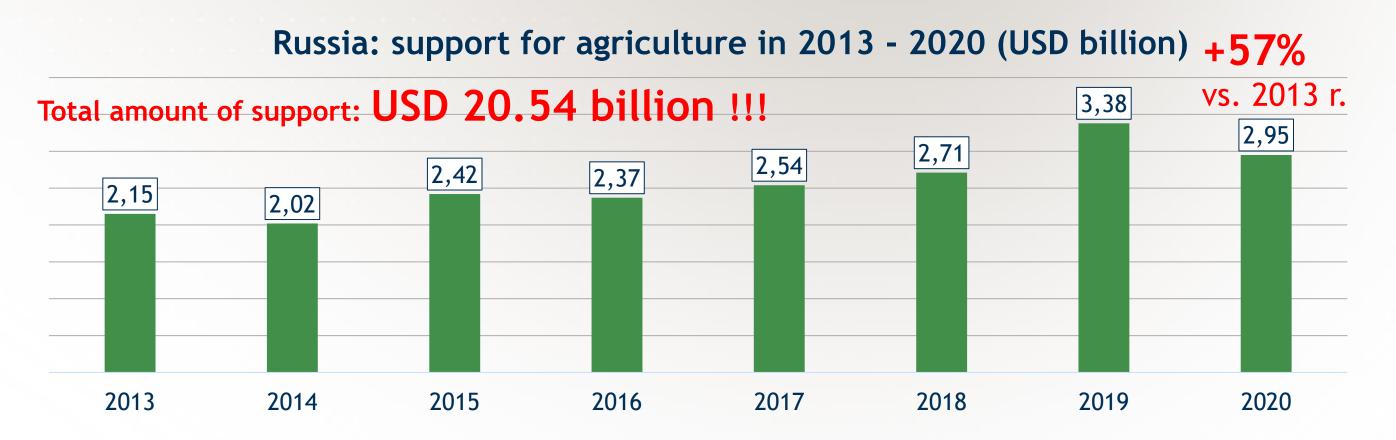
domestic food supplies



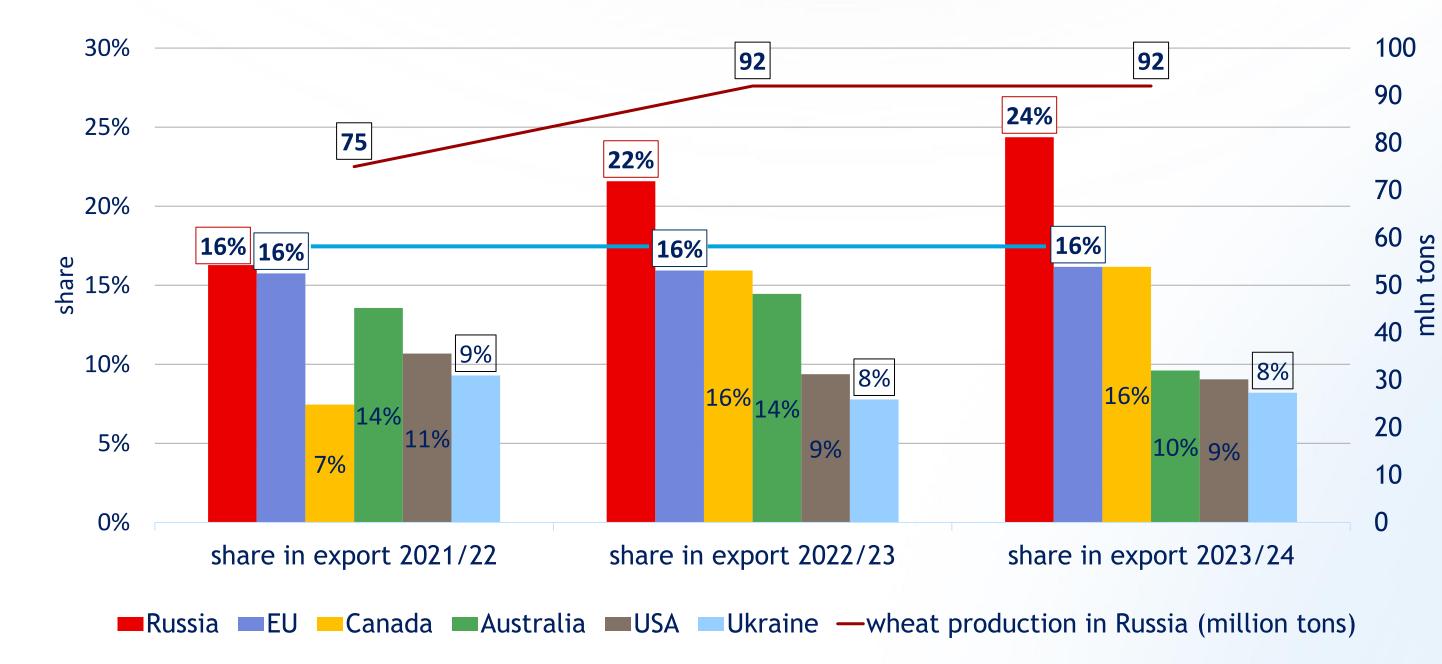




Building RUSSIA'S WORLD POWER based on the fertilizer and agro sectors Development of support programs in Russia



Share of global wheat exports



Source: Argus <u>www.argus.com</u>, Bloomberg <u>www.bnnbloomberg.ca</u>, Fertilizer Daily <u>www.fertilizerdaily.com</u>,, Agro Investor <u>www.agroinvestor.ru</u>, Epravda <u>www.epravda.com.ua</u>, Forbes RU <u>www.forbes.ru</u>, RBC <u>www.rbc.ru</u>



Russia

2013-2020: USD 20.54 billion allocated for support for agriculture Since 2021, the Food Security Doctrine has been in force - the government, after analyzing the results of the agricultural season, decides which sector will receive support

- support for farms within the framework of funds obtained from variable export duties for wheat, barley and corn

2023: Update of the Development Strategy of the Agro-Industrial and Fisheries Complex until 2030.

GOAL: 3% growth per annum - increasing yearly support to the level of over USD 10 billion

(elimination of trade barriers, stimulation of export-oriented industries, support for interregional logistics chains, marketing of products on foreign markets or assistance in product certification)

2017-2025: Federal Scientific and Technical Program for the **Development of Agriculture (over USD 800 million)**

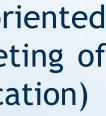
- As part of the program, the sub-program for the development of grain (goal: creation/introduction of competitive domestic varieties and the latest technologies, creation of developed grain export potential) grain production is a strategic industry and grain export is one of the instruments of Russia's geopolitical influence and a source of foreign exchange earnings.



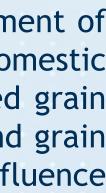








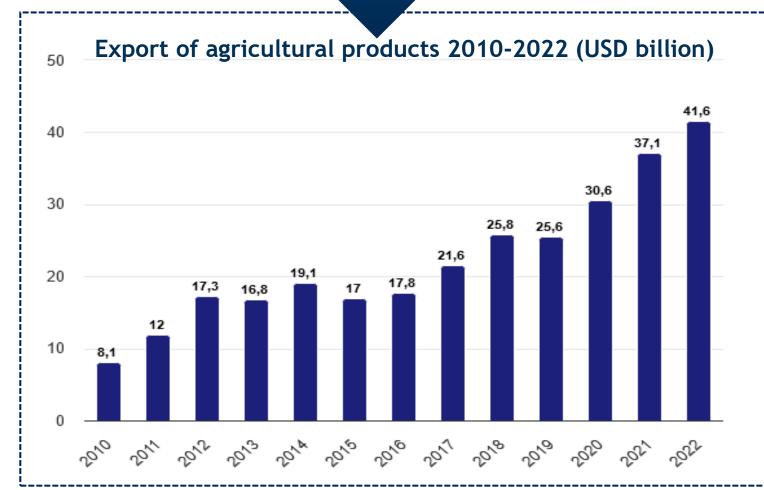




Intensive transformation

Over 20 years from an importer of agricultural products to an exporter. Russian agriculture is in a phase of multi-year development as a result of the effective implementation of the Kremlin's development strategy and plans.

FERTILIZER SECTOR Low costs of fertilizer production in Russia Ensuring low prices of fertilizers for domestic farmers while selling them for export at higher prices (generating high margins and revenues = investments) • Constant development of production capacities Manipulating the market by shifting costs within the production chain from raw materials to fertilizers to agricultural production, while providing "hidden" government support for the development of logistics



market prices of nitrogen fertilizers

- capacities) and investments in M&A
- capital

Source: Epravda www.epravda.com.ua, Agroreview www.agroreview.com, Radio Svoboda www.radiosvoboda.c



AGRICULTURAL SECTOR

- Ensuring Russia's internal food security and agricultural export expansion
- Displacing EU farmers from their export markets due to lower competitiveness, e.g. due to high raw material prices
- Gradual reduction of EU farmers' shares both in the global and local markets
- Necessity to limit production and divest in the EU for economic reasons as a result of loss of competitiveness due to non-market activities, e.g. Russia

MAXIMIZING PROFITS

Controlling the natural gas market and potassium- and phosphorus-bearing raw materials on the

• The use of quotas and customs duties, previous bans on the sale of agricultural products and fertilizers as a result: disruption of the supply-demand balance, impact on prices, generation of high margins and revenues for Russian fertilizer producers and companies in the AGRO sector

domestic investments in the expansion of the industrial complex (expansion of fertilizer production

Extension of the production chain by Russian fertilizer companies to include agro based on oligarchs'

LOCATION OF RUSSIAN GAS IN THE FORM OF FERTILIZERS

Fertilizer production in Russia, forecasts for the coming years

Over the past 7 years, fertilizer production in Russia has increased by 33%



* - Forecast

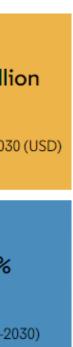
Russia Fertilizers Market



Forecast of growth of the Russian fertilizer

market in the next 6 years by 47%Market Size in USD Billion USD 16.41 B CAGR 6.64% USD 11.16 B 11.16 Billion 16.41 Billion Market Size in 2024 (USD) Market Size in 2030 (USD) 7.63% 6.64 % CAGR (2017-2023) CAGR (2024-2030) 2024 2030 Source : Mordor Intelligence FT Financial Times 'Russian fertiliser is the new gas' for Europe, top producer warns Europe is "sleep walking" into becoming dependent on Russian fertiliser, just as it did with gas, says one of the largest producers of crop nutrients. 29 kwi 2024 WP The Western Producer Russia remains dominant in fertilizer market Russia handles a huge portion of world fertilizer trade with its share amounting to 23 percent for ammonia, 21 percent for potash, 14 percent for urea and 12... 18 maj 2023 POLITICO.eu Russia is winning the global grain war Farmers across Europe have taken to the streets this year, convinced that cheap Ukrainian produce spilling over the border is to blame for their woes.

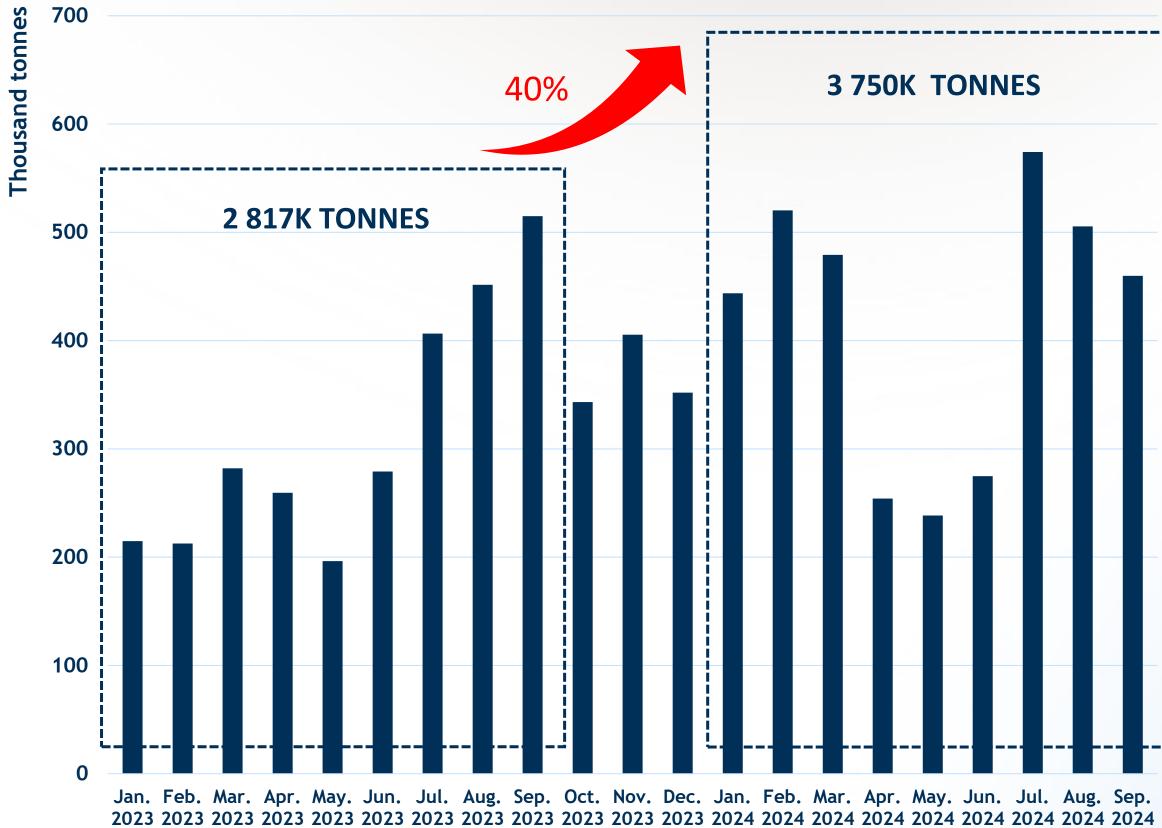
19 mar 2024



Increase in fertilizer imports from Russia to EU 27

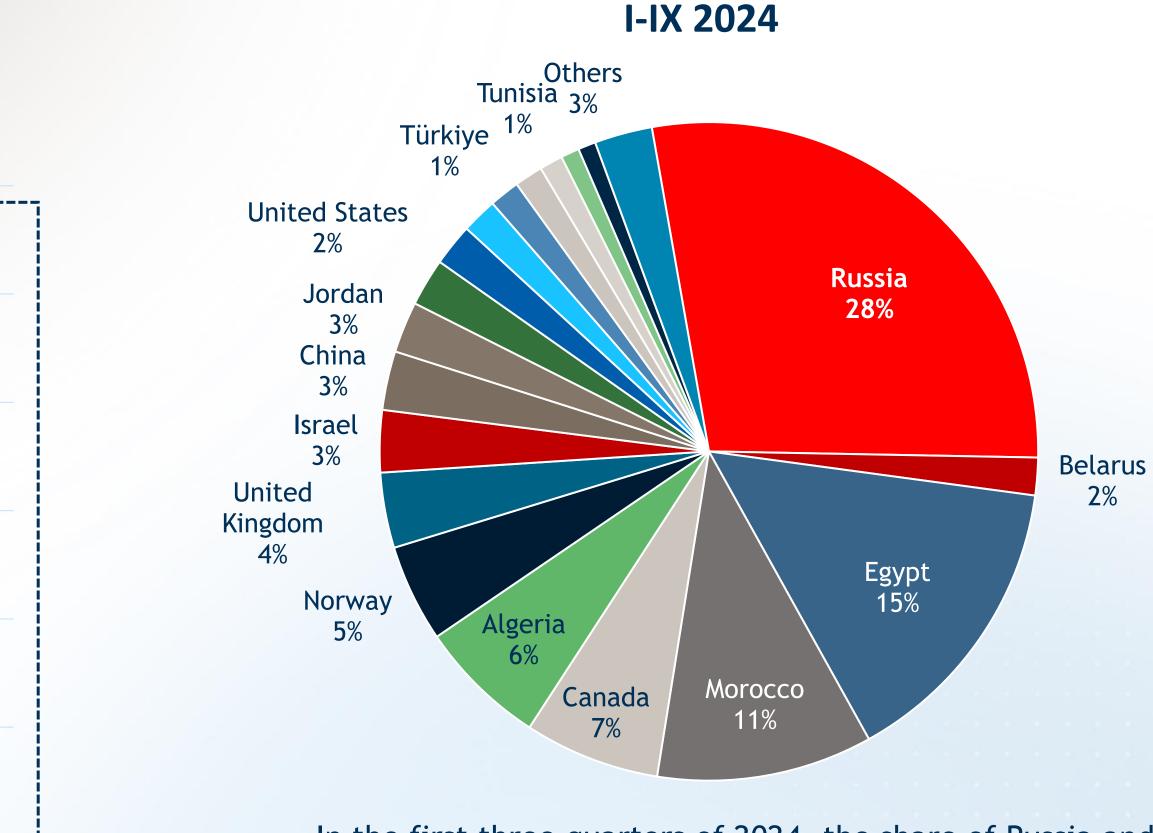
IMPORT OF FERTILIZERS FROM RUSSIA TO EU 27

Increase in fertilizer imports to EU 27 in 2024 compared to the same period last year



Source: Corporate Business Support Department/Trade Defence Office, based on Eurostat data

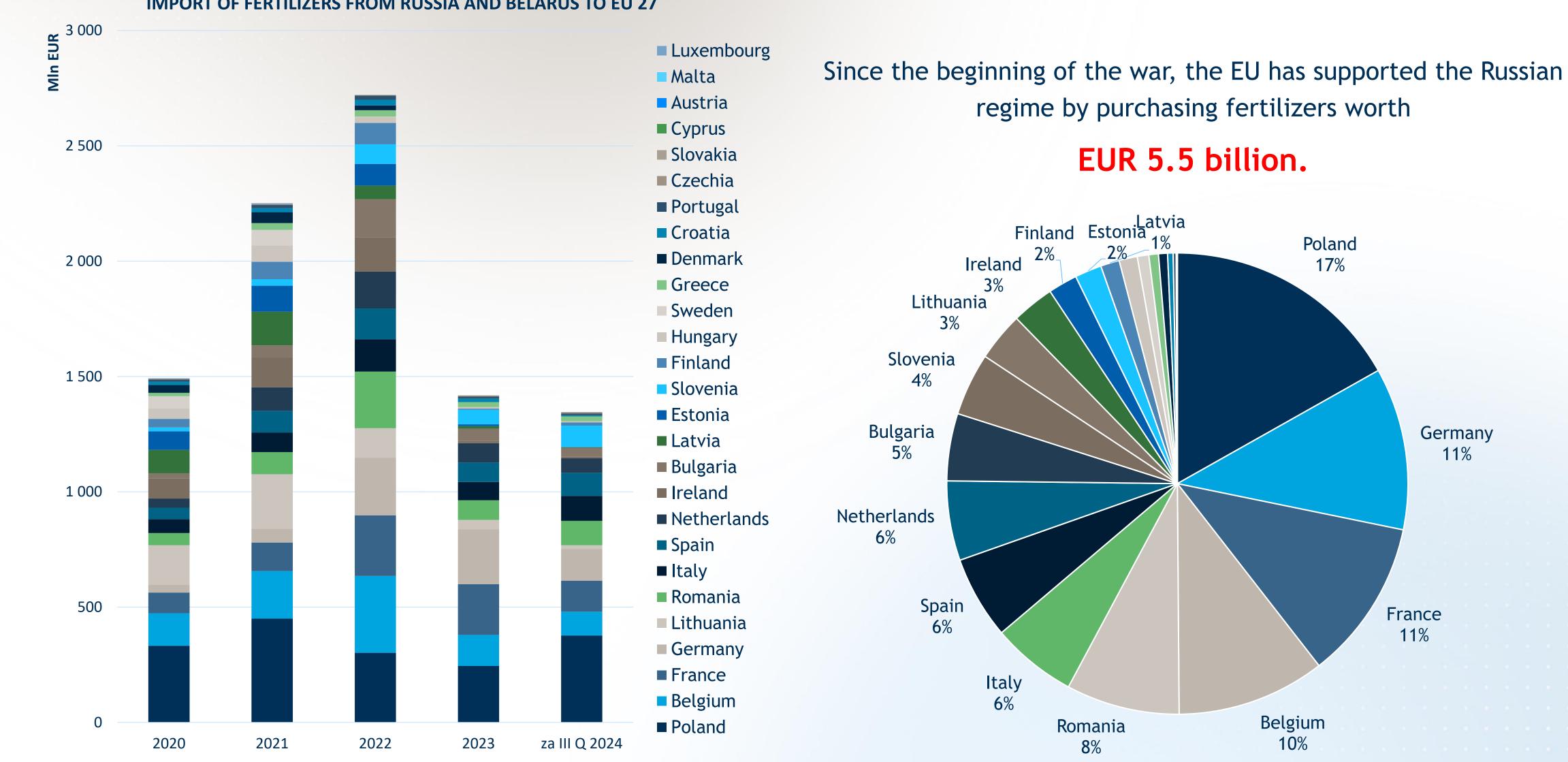




In the first three quarters of 2024, the share of Russia and Belarus in imports from third countries

30 %

War financing



IMPORT OF FERTILIZERS FROM RUSSIA AND BELARUS TO EU 27

Source: Corporate Business Support Department/Trade Defence Office, based on Eurostat data



New tax on excess profits

The 10% excess profit tax introduced on 1 January 2024 aims to ease the budget burden caused by the war in Ukraine and the need to increase defence spending. The tax has added €3.2 billion to Russia's budget.

Increased export duty rates

The export duty on fertilizers has been increased to 10% and a minimum export duty rate per ton of fertilizer has been introduced for nitrogen fertilizers (~11 euros), phosphorus fertilizers (~21 euros), potassium fertilizers (~18 euros) and two- or two- or three-component fertilizers (~21 euros). In the period from 1.10.2023 to 31.12.2024, budget revenues are expected to be around 7.6 billion euros.

New excise tax for natural gas extraction for ammonia production

A new excise tax is planned for the extraction of natural gas intended for the production of ammonia. The rate is expected to be around 2,400 rubles (~25 euros) per 1,000 m3. New taxes will be introduced, including for the extraction of potassium salt (8.8%) and an increase in the tax on the extraction of potassium (by 230%) and phosphates (by 200%).

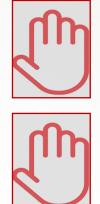
Change in the rules for calculating rates for the lease of port infrastructure The Russian government wants to determine the cost of renting port infrastructure based on tenants' incomes and state spending.

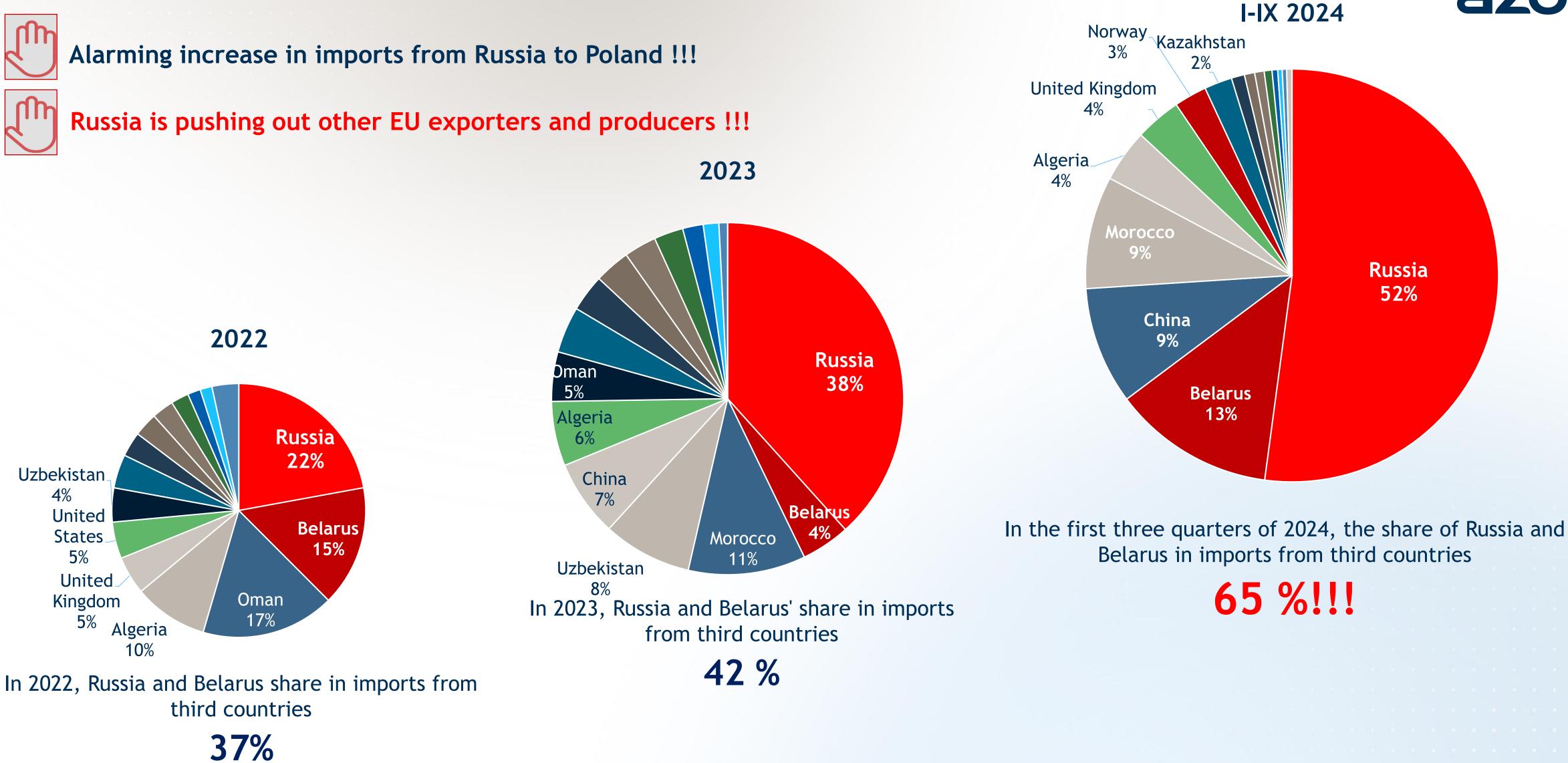
These changes will result in higher rates for logistics services, which will particularly affect exportoriented companies, including mineral fertilizer producers, thus increasing state budget revenues. Demand for port services in Russia significantly exceeds supply, so this change will not be associated with the risk of losing profitability of infrastructure rental.





Structure of extra-trade imports of fertilizers to Poland (CN code 31 by countries)



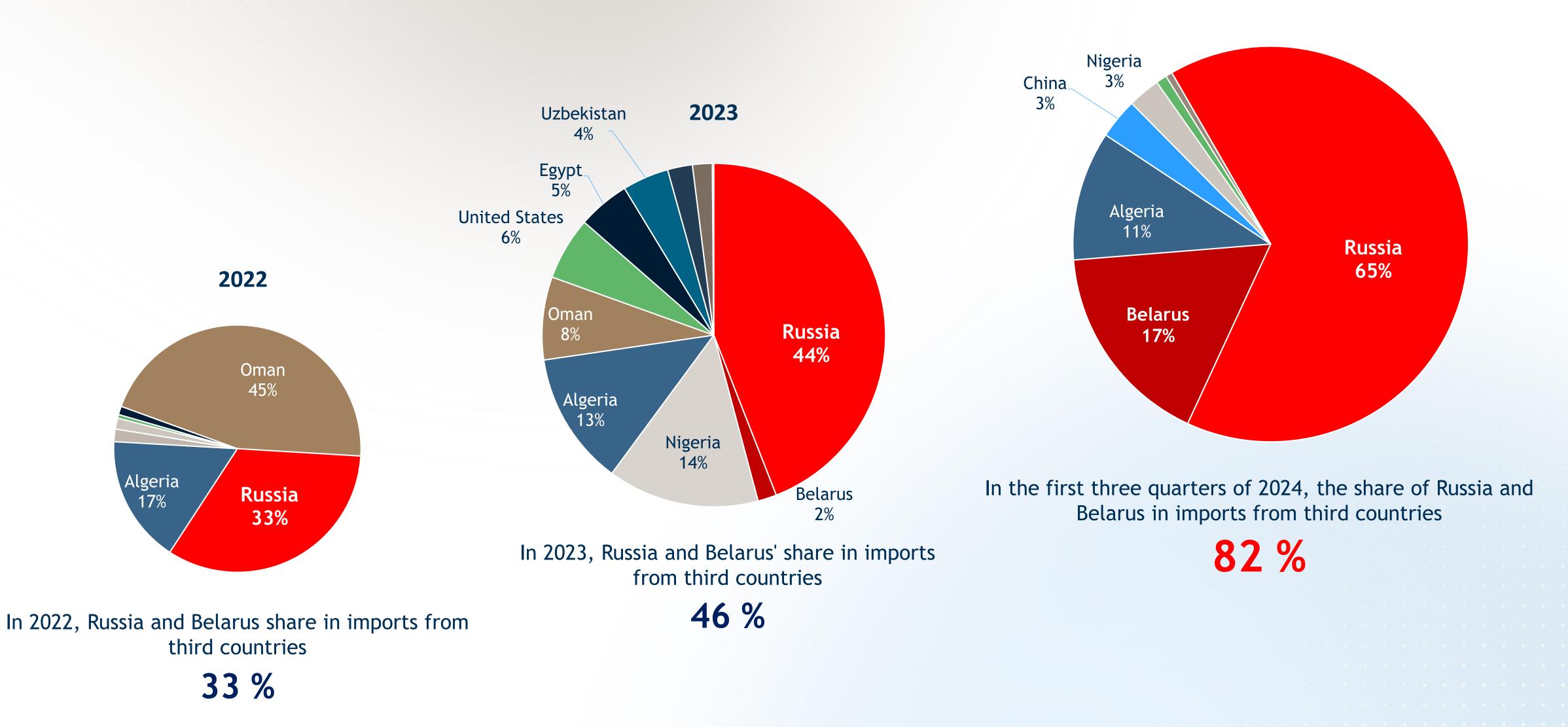


Source: Corporate Business Support Department/Trade Defence Office, based on Eurostat data



Structure of extra-trade urea imports to Poland

(CN code 310210 by countries)



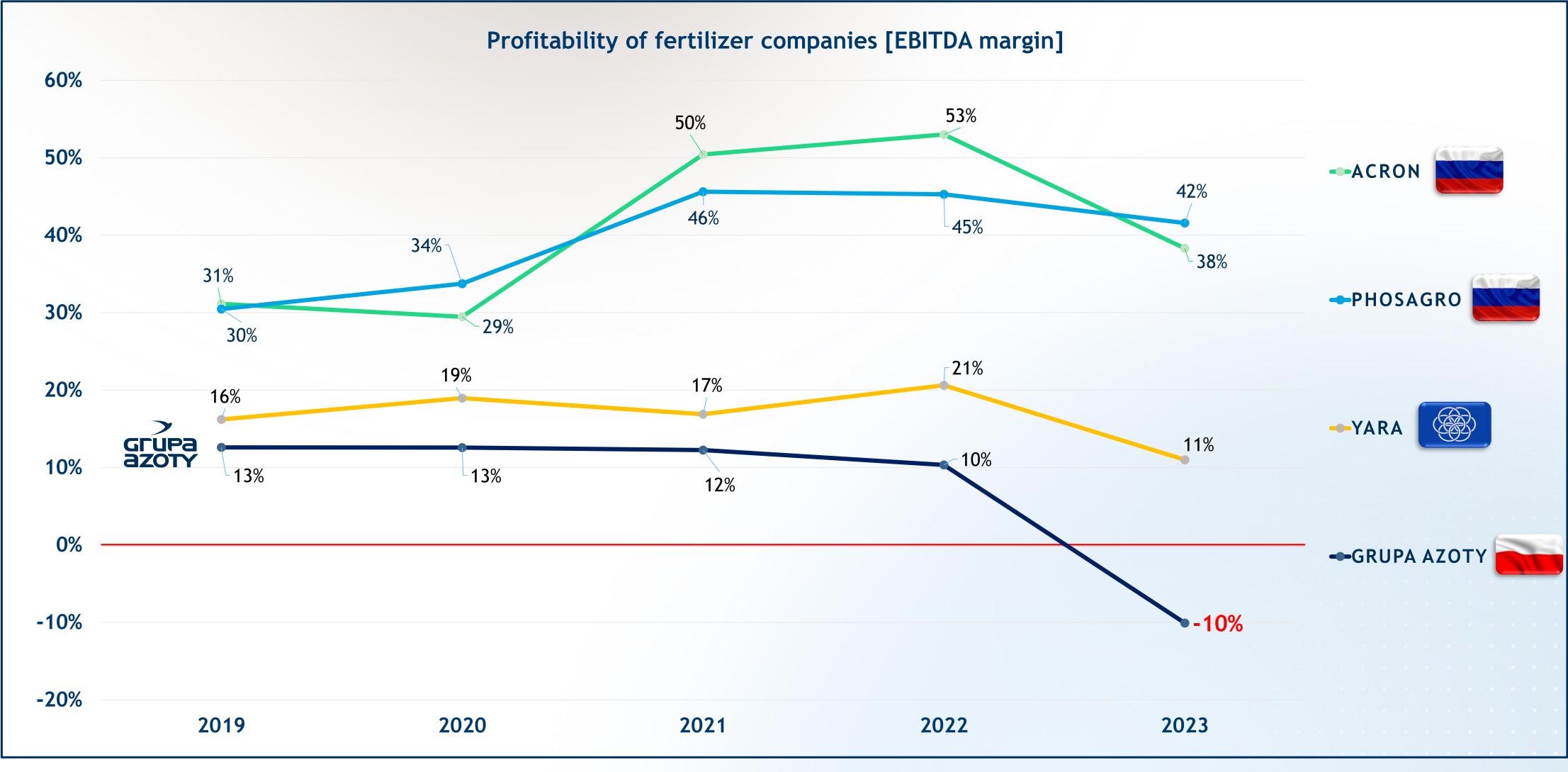
Source: Corporate Business Support Department/Trade Defence Office, based on Eurostat data



I-IX 2024

Effect of Russia's policy - Record margins of Russian producers

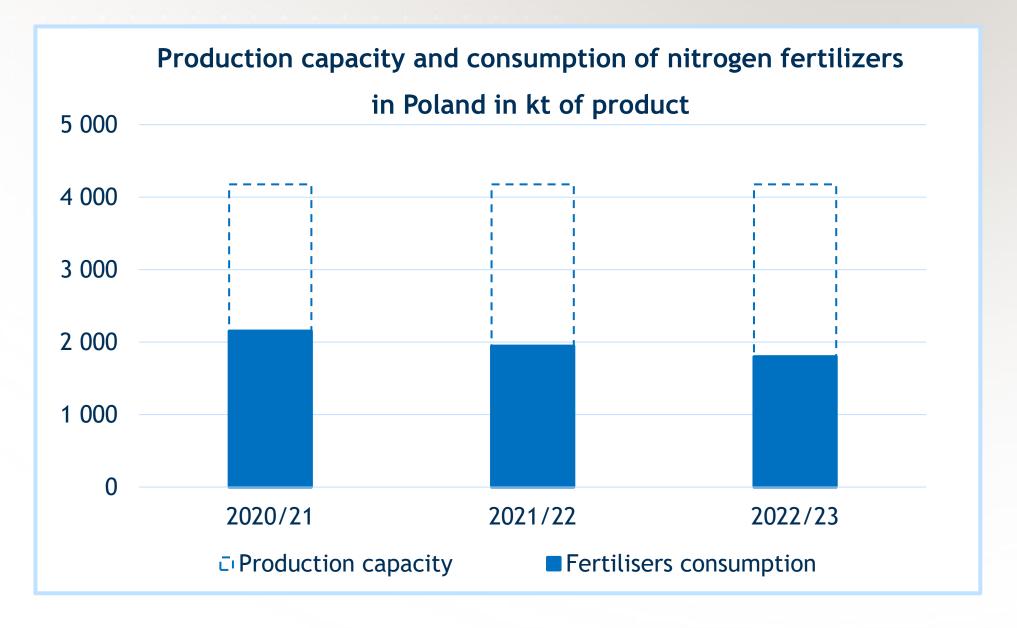
Russian producers gain high margins while producers in the EU bear losses

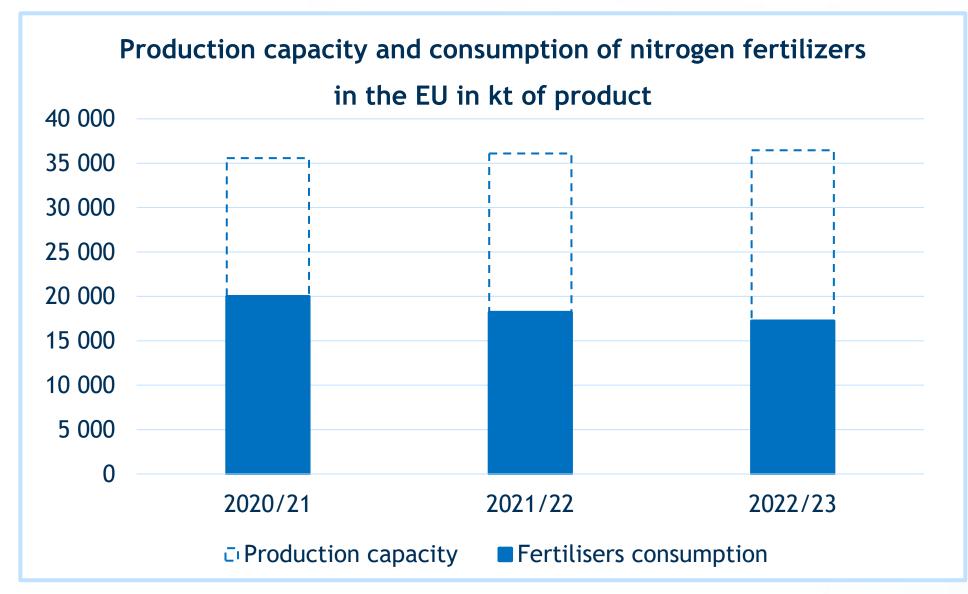


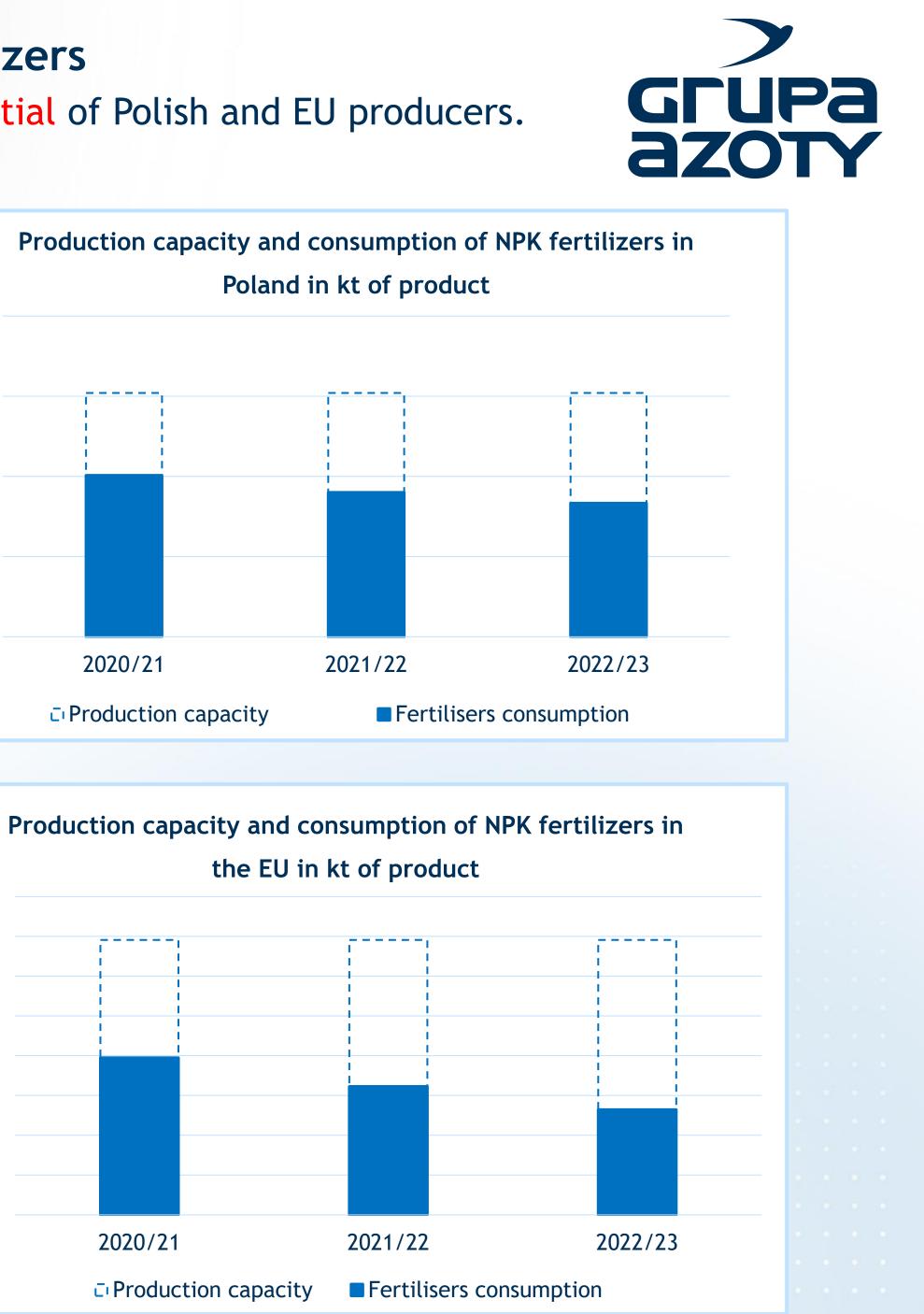
Source: financial statements of producers

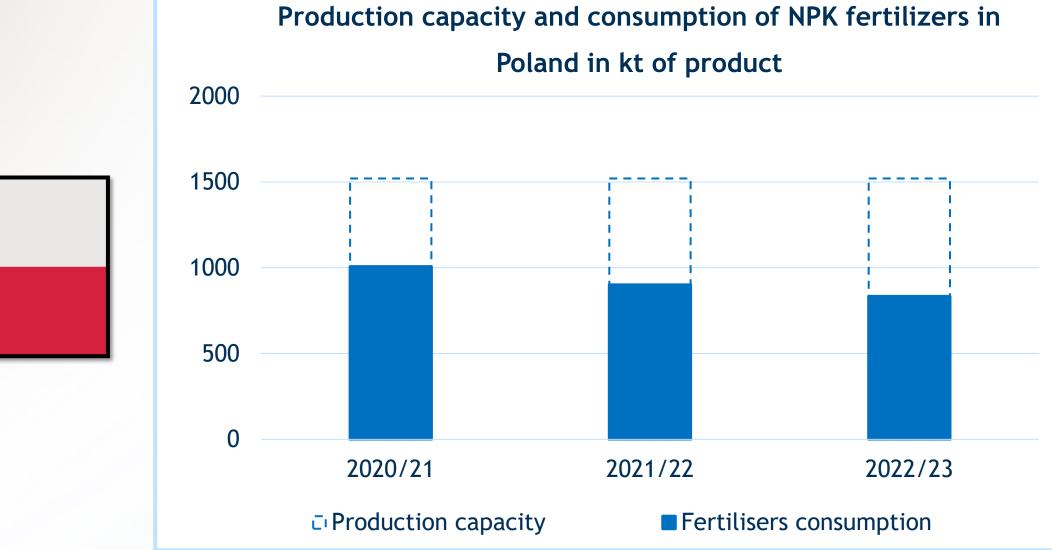
European Union is self-sufficient in the fertilizer production of fertilizers

Consumption on the Polish and EU markets is much lower than the production potential of Polish and EU producers. Fertilizers are imported to the EU from several directions outside Russia.



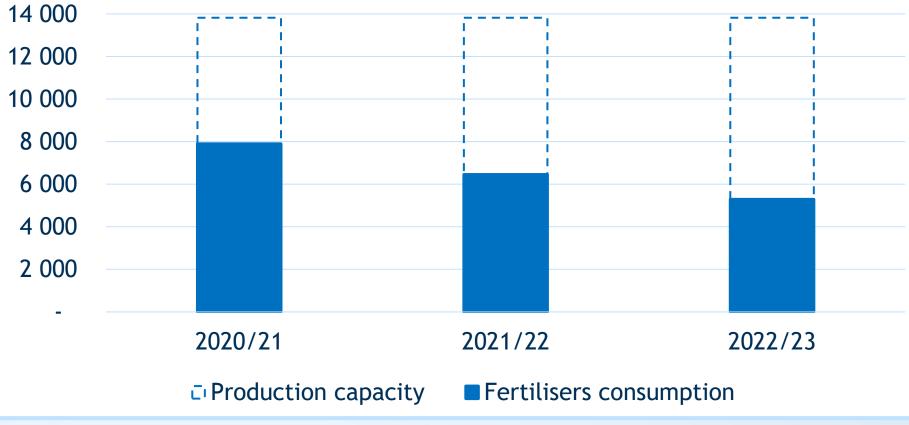












Impact of Russian dependence on market prices

Loss of a Local Producer - Irish Market Case Study

In countries that do not have their own fertilizer production and rely 100% on import volumes, higher fertilizer prices are recorded, which is why protecting their own market (including the EU), where local producers operate, is necessary to maintain the competitiveness of the entire agricultural sector.

An example is Ireland, which had its own producer ICI, but currently has none. The liquidation of this company's assets took place in 2003 (the decision was made in 2002). As a result, this has been the market with the highest import prices for years. Nitrogen consumption is mainly based on the use of two types of nitrogen fertilizers: CAN (50% share) and urea - 45%.

Aggressive sale of Russian fertilizers in India

- eliminating competition and taking over the market

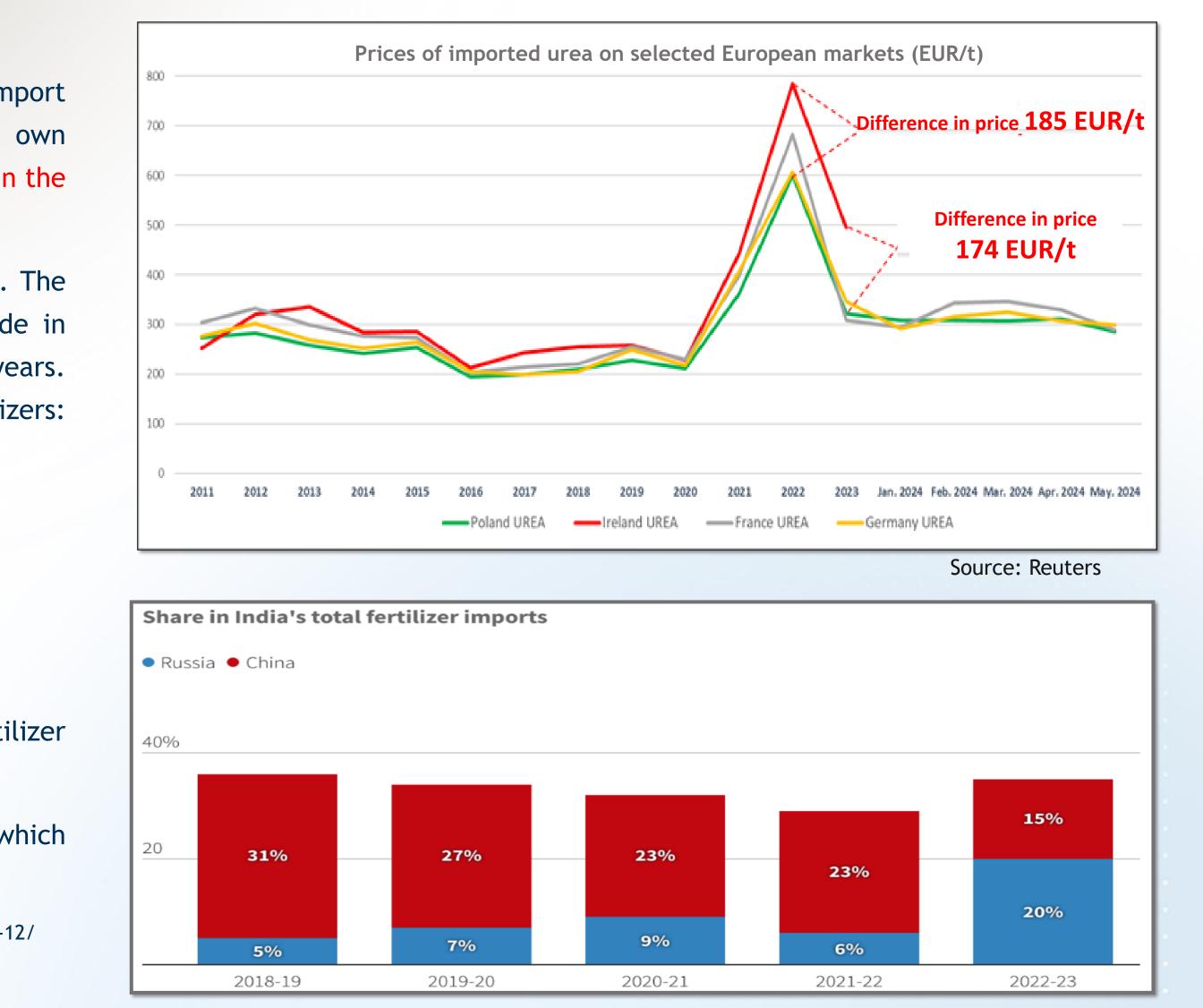
In 2022, Russia became the largest supplier of fertilizers to India.

Aggressive sales of Russian fertilizers at a discount = elimination of other fertilizer exporters, including China, Egypt, Jordan and the UAE.

Russia stopped offering fertilizers at preferential prices, while limiting supply, which increased the level of fertilizer prices*

* Source: https://www.reuters.com/world/india/russian-sellers-stop-fertiliser-discounts-india-sources-2023-09-12/





No protective measures for the European market = Black scenario

Further increase in the import of fertilizer volumes from Russia and Belarus to the EU **Economic deterioration of producers on the European markets** strong cost advantage of Russia and Belarus Farmer-unfriendly purchasing structure displacement of EU producers from the market and progressive elimination of suppliers from third countries Price dictate of Russia and Belarus **FINAL EFFECT** = necessity of accepting high prices by Polish farmers due to lack of alternatives



Russia has vast energy resources and significant deposits of many different minerals. Most, if not all, of the raw materials required by modern industry are found within its boundaries.

Fertilizer companies registered in, originating from, or having assets concentrated in the Russian Federation have for years shown interest in systematically increasing their presence and thus influence on the European market.



DECARBONISATION = CHALLENGE FOR THE CHEMICAL INDUSTRY Rising regulatory costs for EU fertilizer producers in the absence of obligations in Russia and Belarus

RED III (Renewable Energy Directive)

On 19 November 2023, the RED III Directive entered into force, and Member States have 18 months to implement the new provisions. The Directive tightens the target for renewable energy sources in the EU's energy consumption to 42.5% compared to the RED II Directive. EU rules on the promotion of renewable energy sources have evolved significantly: from the original target of 20% of EU energy consumption from renewable energy sources by 2020 to a change in 2018, when the target for 2030 of 32% of EU energy consumption is to come from renewable sources. The draft RED III Directive tightens the target for the share of renewable energy in the EU's energy consumption to 42.5%.

The delegated act sets out the main principles for the production of RFNBO (renewable fuels of non-biological origin), together with the criteria for including hydrogen in the calculation of the targets set out in the RED III Directive.

What does this mean for fertilizer producers?

- mandatory target for the share of renewable energy in 2030 at the level of 42.5% (previously 32%, originally proposed 50%)
- the share of renewable fuels of non-biological origin in hydrogen used in industry is to be 42% in 2030 and 60% in 2035.

EU ETS Directive

The EU Emissions Trading System ("EU ETS") is the main instrument for reducing greenhouse gases and the most important element in implementing the European Union's climate policy. The amendment to the EU ETS entered into force on 6 June 2023, while the decision on the functioning of market stability reserves entered into force on 1 January 2024. The current, fourth stage of the EU ETS covers the years 2021-2030. Bloomberg forecast predicts that the price of emission allowances will increase twice by 2030 and three times by 2035.

What does this mean for fertilizer producers?

Increase in operating costs due to:

- reduction in the allocation of free allowances and reduction in the number of allowances in circulation
- introduction of CBAM



BASF to cut 2,600 jobs on high costs in Europe

KEY POINTS German chemicals glant BASF said it would cut 2,600 jobs and halt its share buybacks, flagging earnings declines, given high costs in Europe, firm Interest rates and uncertainty because of the war in Ukraine

 BASF in October announced plans to reduce annual costs in Europe by 500 million euros. The company on Friday said that this would equate to about 2,600 job cuts, roughly 65% of which would be in Germany.



A view of a chemical plant of German company BASF, in Ludwigshafen, Rhineland-Palatinate, western Germany, on October 06, 2022 i Ludwigshafen, Germany Thomas Lohnes | Getty Imag

