Directors' Report on the operations of the Grupa Azoty Group in the first half of 2022

Contents

1. General information on the Grupa Azoty Group

1.1. Organisation and structure

The Grupa Azoty Group is one of Central Europe's major chemical groups with a strong presence on the market of mineral fertilizers, engineering plastics, OXO products, and other chemicals.

The Grupa Azoty Group has brought together companies with different traditions and complementary business profiles, seeking to leverage their potential to implement a common strategy. This has led to the creation of Poland's largest and a major European chemical group. Thanks to its carefully designed structure, the Group offers a diverse product mix, ranging from nitrogen and compound fertilizers, engineering plastics, to OXO products and melamine.

As at June 30th 2022, the Grupa Azoty Group (the "Grupa Azoty Group" or the "Group") comprised: Grupa Azoty S.A. (the Parent) and ten direct subsidiaries together with companies included in their respective groups.

Parent

Grupa Azoty S.A. (the "Parent" or the "Company") is the Parent of the Grupa Azoty Group. Its principal business activities include manufacturing, trading in and service activities related to nitrogen fertilizers, engineering plastics and intermediates.

The Company operates its own research facilities, concentrating both on research into new products and technologies, and on advancing existing products.

The Company's registered office is located at ul. Eugeniusza Kwiatkowskiego 8, Tarnów, Poland. Since April 22nd 2013, the Company has been trading under the name Grupa Azoty Spółka Akcyjna. Its history goes back to 1927, when Państwowa Fabryka Związków Azotowych was established in Mościce, a township later incorporated into Tarnów. The plant's construction was one of the largest investment projects undertaken in the Republic of Poland after it regained independence in 1918.

Parent's subsidiaries

Grupa Azoty Zakłady Azotowe Puławy Spółka Akcyjna

The company's registered office is located in Puławy.

Grupa Azoty Zakłady Azotowe Puławy Spółka Akcyjna ("Grupa Azoty PUŁAWY") specialises in the production of nitrogen fertilizers and is also one of the largest melamine manufacturers in the world.

Grupa Azoty Zakłady Chemiczne Police Spółka Akcyjna

The company's registered office is located in Police.

Grupa Azoty Zakłady Chemiczne Police Spółka Akcyjna ("Grupa Azoty POLICE") is a major producer of compound fertilizers, nitrogen fertilizers and titanium white.

Grupa Azoty Zakłady Azotowe Kędzierzyn Spółka Akcyjna

The company's registered office is located in Kędzierzyn-Koźle.

The business of Grupa Azoty Zakłady Azotowe Kędzierzyn Spółka Akcyjna ("Grupa Azoty KĘDZIERZYN") is based on two pillars: nitrogen fertilizers and OXO products (OXO alcohols and plasticizers).

COMPO EXPERT Holding GmgH

The company's registered office is located in Münster, Germany.

COMPO EXPERT Holding GmbH ("COMPO EXPERT") is a holding company for a group of subsidiaries, including the main operating company COMPO EXPERT GmbH, one of the world's largest manufacturers of speciality fertilizers for professional customers. The group's products are sold in many countries in Europe, Asia, Africa, as well as North and South Americas.

Grupa Azoty ATT Polymers GmbH

The company's registered office is located in Guben, Germany.

Grupa Azoty ATT Polymers GmbH ("Grupa Azoty ATT POLYMERS") manufactures polyamide 6 (PA6) and distributes PA6 manufactured by the Parent.

Grupa Azoty Polskie Konsorcjum Chemiczne Spółka z ograniczoną odpowiedzialnością

The company's registered office is located in Tarnów.

The services of Grupa Azoty Polskie Konsorcjum Chemiczne Spółka z ograniczoną odpowiedzialnością ("Grupa Azoty PKCh") encompass comprehensive design support for investment projects in the chemical industry − from study and concept work to engineering design, building permit design and working plans, to services provided during the construction, commissioning and operation of process units.

(all amounts in PLN '000 unless indicated otherwise)

Grupa Azoty Koltar Spółka z ograniczoną odpowiedzialnością

The company's registered office is located in Tarnów.

Grupa Azoty Koltar Spółka z ograniczoną odpowiedzialnością ("Grupa Azoty KOLTAR") is a nationwide provider of railway services. It is one of the few organisations in Poland to hold licences required to perform comprehensive repairs of rail car chassis and tank cars used in the transport of dangerous materials (according to RID).

Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol Spółka Akcyjna

The company's registered office is located in Grzybów.

Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol Spółka Akcyjna ("Grupa Azoty SIARKOPOL") is Poland's largest producer of liquid sulfur.

Grupa Azoty Compounding Spółka z ograniczoną odpowiedzialnością

The company's registered office is located in Tarnów.

The business model of Grupa Azoty Compounding Spółka z ograniczoną odpowiedzialnością ("Grupa Azoty COMPOUNDING") is based on a portfolio of specialised engineering plastics manufactured through the compounding of plastics, with the use of innovative technological solutions. The company manufactures and sells modified plastics.

Grupa Azoty Energia Spółka z ograniczoną odpowiedzialnością

The company's registered office is located in Tarnów.

Grupa Azoty Energia Spółka z ograniczoną odpowiedzialnością ("Grupa Azoty ENERGIA"). Its objective is to support the Group in delivering its Strategy for 2021-2030 in the area of energy transition and lower emissions from production processes. In particular, the company is to implement renewable energy projects on land owned and used by the Group companies, and to participate in acquisition and development projects in the energy sector, including nuclear energy projects (modular nuclear reactors).

Parent's equity interests in the subsidiaries as at June 30th 2022

(in relevant currency)

Company	Registered office/address	Share capital	Equity interest (%)
COMPO EXPERT	Krögerweg 10 48155, Münster, Germany	25,000 EUR	100.00
Grupa Azoty ATT POLYMERS	Forster Straße 72 03172 Guben, Germany	9,000,000 EUR	100.00
Grupa Azoty COMPOUNDING	Chemiczna 118 33-101 Tarnów, Poland	72,007,700 PLN	100.00
Grupa Azoty SIARKOPOL	Grzybów, 28-200 Staszów, Poland	60,620,090 PLN	99.56
Grupa Azoty PUŁAWY	al. Tysiąclecia Państwa Polskiego 13 24-110 Puławy, Poland	191,150,000 PLN	95.98
Grupa Azoty KĘDZIERZYN	ul. Mostowa 30 A P.O. Box 163 47-220 Kędzierzyn-Koźle, Poland	285,064,300 PLN	93.48
Grupa Azoty PKCH	Kwiatkowskiego 7 33-101 Tarnów, Poland	85,630,550 PLN	63.27
Grupa Azoty POLICE	ul. Kuźnicka 1 72-010 Police, Poland	1,241,757,680 PLN	62.86
Grupa Azoty KOLTAR	Kwiatkowskiego 8 33-101 Tarnów, Poland	54,600,000 PLN	60.00
Grupa Azoty ENERGIA	Kwiatkowskiego 8 33-101 Tarnów, Poland	1,000,000 PLN	100.00

The Parent and its subsidiaries as at June 30th 2022

1 **Parent**

- Grupa Azoty COMPOUNDING
  100%
- Grupa Azoty ENERGIA
  100%
- Grupa Azoty PKCh
  63.27%
- Grupa Azoty KOLTAR
  60%

2 Grupa Azoty PUŁAWY
95.98%

3 Grupa Azoty POLICE
62.86%

4 Grupa Azoty KĘDZIERZYN
93.48%

5 Grupa Azoty SIARKOPOL
99.56%

6 Grupa Azoty ATT POLYMERS
100%

7 COMPO EXPERT
100%

Source: Company data.

1.2. Business segments

The Group is the largest chemical group in Poland and a significant player in Central Europe. It offers mineral fertilizers and B2B products, including engineering plastics, OXO products and melamine.

Grupa Azoty – core business areas

Source: Company data.

The Group's business is divided into the following segments:

- Agro Fertilizers
- Plastics,
- Chemicals,
- Energy,
- Other Activities.

Agro Fertilizers

Mineral fertilizers are the key area of the Group's business. The Agro Fertilizers segment manufactures nitrogen and compound fertilizers, as well as speciality fertilizers, ammonia and other nitrogen-based intermediate products.

The segment's manufacturing activities are conducted by the companies based in Tarnów (the Parent), Puławy, Kędzierzyn, Police, Gdańsk, Chorzów, as well as Germany and Spain. The Group is Poland's largest and European Union's second largest manufacturer of mineral fertilizers.

Plastics

The segment's key products are engineering plastics (polyamide 6 (PA6) and modified plastics) and auxiliary products, such as caprolactam and other chemicals.

They are manufactured by three companies − in Tarnów, Puławy, and Guben (Germany). The Group is the leading manufacturer of PA6 in Poland and the third largest producer of this polyamide in the European Union.

Chemicals

The Chemicals segment is an important part of the Group's business, comprising OXO alcohols, plasticizers, melamine, technical grade urea, titanium white, sulfur, RedNOx® reductants, and other products.

They are manufactured in Kędzierzyn, Puławy, Police, and Grzybów. The Grupa Azoty Group is the third largest manufacturer of melamine in the EU. The Group is Poland's only producer of OXO alcohols and plasticizers. It is

EU's No. 4 producer of OXO alcohols and No. 5 producer of plasticizers. The Group is Poland's only producer of titanium white.

Energy

The segment generates energy mostly for the needs of the Group's production plants. Part of the electricity and heat produced by the Energy segment is sold locally, to customers in the immediate vicinity of the Group companies' plants.

The Group companies operate their own energy and energy carrier distribution networks, through which they supply their local customers.

The segment is also involved in various operations in such areas as environmental protection, plant maintenance supervision, administration and research.

Other Activities

The Other Activities segment comprises auxiliary and support services. As in the case of the Energy segment, its services are mainly rendered for the Group companies. Outside the Group, the segment mainly provides maintenance (automation, design, repair, etc.) and logistics services (road transport, rail transport, ports), and conducts manufacturing at the Catalyst Production Plant. The segment is also involved in various infrastructure management operations.

1.3. Overview of key products

AGRO FERTILIZERS

The Group classifies **mineral fertilizers** as nitrogen (single-nutrient) fertilizers and compound fertilizers, the latter including at least two of the following key nutrients: nitrogen (N), phosphorus (P) or potassium (K), as well as speciality fertilizers.

Nitrogen fertilizers

Nitrogen fertilizers are substances or mixtures of substances where nitrogen is the primary plant nutrient. The Group's product range includes a number of nitrogen fertilizers: urea, nitrate fertilizers (including ammonium nitrate, calcium ammonium nitrate, liquid nitrogen fertilizers (UAN–RSM®) and nitrogen-sulfur fertilizers (made as a result of mixing fertilizers in the manufacturing process: ammonium sulfate nitrate, solid and liquid mixtures of urea and ammonium sulfate, and ammonium sulfate). Natural gas is the main feedstock in manufacturing nitrogen fertilizers.

Urea

Urea is a nitrogen fertilizer containing 46% nitrogen; it is produced in Puławy (as PULREA®), Police (as mocznik.pl®), and Kędzierzyn. Urea is a universal fertilizer – it can be used for all crops at various growth stages, both in the granular form and as a solution.

The Group's portfolio also includes Pulrea® +INu, which is urea with an addition of urease inhibitor (NBPT), which increases the absorption of nitrogen from the fertilizer. The fertilizer is a stable source of nitrogen for plants.

Outside agriculture, urea is used for technical purposes, mainly for manufacturing of adhesive resins, which find application in the wood-based panel industry. It may also be further processed into urea-ammonium nitrate solution (UAN – RSM®), a liquid fertilizer, or into melamine.

Nitrate fertilizers

- Ammonium nitrate is a nitrogen fertilizer which is easily dissolved in water, containing between 30% and 34% nitrogen. The Group offers this product in a wide variety of granule forms and sizes, such as mechanically granulated ZAKsan®, with excellent sowing properties, and the PULAN® beaded ammonium nitrate.
- Calcium ammonium nitrate (CAN) is a nitrogen fertilizer with a nitrogen content of up to 27%. It is a universal fertilizer, suitable for all types of soil, well soluble and easily absorbed by crops. The Group markets CAN in a number of granule varieties; the offering includes the granulated Salmag® fertilizers (including varieties with a sulfur or boron content), and bead fertilizers such as Saletrzak 27 (CAN 27) standard and Saletrzak 27 with boron.
- Urea-ammonium nitrate solution (UAN – RSM®) is a liquid nitrogen fertilizer coming in three varieties: with 32%, 30% and 28% nitrogen content. Thanks to its form, RSM® is easily absorbed by plants. It is also produced with an admixture of sulfur, as UAN–RSM®S.

Nitrogen-sulfur fertilizers

These fertilizers improve sulfur content in the soil, enhance arable crops' ability to absorb nitrogen, and thus increase the quality and volume of crops.

- PULGRAN®S – urea-ammonium sulfate, is a nitrogen fertilizer with sulfur in the form of white hemispherical pastilles, obtained by blending urea and ammonium sulfate. It is manufactured in two varieties with various contents: 37% nitrogen/21% sulfur and 33% nitrogen/31% sulfur.
- Saletrosan®, or ammonium sulfate nitrate, is a nitrogen fertilizer with sulfur, obtained by blending ammonium nitrate and ammonium sulfate. Saletrosan® 26 contains 26% nitrogen and 13% sulfur. The product may also include small amounts of iron and magnesium – Saletrosan® 26 Plus, and boron – Saletrosan® 26 with boron. Saletrosan® 30 has different proportions of main components: 30% nitrogen and 6% sulfur. Saletromag® contains 25% nitrogen, 7% sulfur and 6% total magnesium oxide. The product contains small amounts of iron which increase the fertilizer's resistance to high temperatures.
- Polifoska® 21 is a nitrogen fertilizer with sulfur, a mixture of ammonium sulfate-urea containing 21% nitrogen and 33% sulfur.
- Ammonium sulfate, marketed under the trade names AS 21 and Pulsar®, is a simple nitrogen fertilizer with sulfur, containing 21% nitrogen and 24% sulfur. It is a by-product in the manufacture of caprolactam and in flue gas desulfurisation. The Group manufactures a wide range of ammonium sulfate in various granule forms and sizes: selection, macro, standard, and crystalline.
- PULASKA® is a liquid nitrogen fertilizer with sulfur, obtained by blending urea and ammonium sulfate, and has a 20% nitrogen and a 6% sulfur content.

Compound fertilizers (NPK, NP)

NPK and NP compound fertilizers are universal fertilizers which, depending on composition, can be applied to various types of crops and soil. Aside from the primary components − nitrogen (N), phosphorous (P) and potassium (K), these fertilizers contain secondary nutrients such as magnesium, sulfur or calcium, and may contain microelements such as boron or zinc.

Compound fertilizers may be used to provide nutrients to all types of arable crops. The Group's current offering includes more than 40 grades of compound fertilizers, which are marketed under the following trade names: Polifoska®, Polidap®, Polimag® Superfosfat, Amofoska®, etc. The Group also offers dedicated fertilizers, custom-made to satisfy customers' specific requirements.

Speciality fertilizers

Speciality fertilizers are designed to meet the requirements of various sectors, including fruit and vegetable growing, horticulture or maintenance of green areas. In addition to the primary components − nitrogen (N), phosphorous (P) and potassium (K), such fertilizers also contain secondary nutrients and microelements. They may also contain inhibitors that reduce nutrient leaching.

Available in solid (coated or uncoated) or in liquid form, this product range also includes fertigation and foliar fertilizers.

Currently, they are marketed under a number of trade names, including Azoplon Nutri, Azoplon Opti, Fertiplon, Blaukorn®, NovaTec®, Hakaphos®, Basfoliar®, Easygreen®, DuraTec®, Basacote®, Floranid®Twin.

Ammonia

Ammonia is a feedstock for the manufacture of fertilizers, produced in a process of direct synthesis of nitrogen and hydrogen. Ammonia is the basic intermediate product used to manufacture nitrogen fertilizers and compound fertilizers. It is also used in the chemical industry, e.g. for the manufacturing of caprolactam or polymers, or as a cooling agent. Natural gas is the key feedstock for the production of ammonia.

PLASTICS

Engineering plastics

Engineering plastics exhibit high thermal resistance and good mechanical properties. The wide range of the plastics' beneficial properties makes them a product of choice for many industries, including automotive, construction, electrical engineering, household appliances, and the food and textile industries.

The Group manufactures polyamide 6 and modified plastics (with admixtures affecting the physical and chemical properties of the final plastics) based on polyamide 6 and other engineering plastics (PP, PBT, PA6.6). It also offers modified plastics, custom-made to meet the requirements of individual customers.

Polyamide 6 (PA6)

Polyamide 6 (PA6) is a high quality thermoplastic in granular form used for injection processing. It is the leading product among engineering plastics. The Group's very popular brands in this segment are Tarnamid® and Alphalon®.

Caprolactam

An organic chemical compound and an intermediate product used for the manufacture of polyamide 6. It is produced mainly from benzene and phenol. Synthesis of caprolactam yields ammonium sulfate as a by-product.

CHEMICALS

OXO products

OXO alcohols manufactured by the Grupa Azoty Group: OXO alcohols – 2-ethylhexanol (2-EH) and butanols (n-butanol, isobutanol). The key product in this group is 2-EH.

2-ethylhexanol (2-EH) is used in the manufacture of plasticizers, paints and varnishes as well as in the textile industry and oil refining processes. It is also applied as a solvent for vegetable oils, animal fats, resins, waxes and petrochemicals.

Plasticizers manufactured by the Grupa Azoty Group:

- DEHT/DOTP. It is used in the chemical industry to increase the plasticity of materials, mainly PVC, and as an additive to paints and varnishes. The Group's DEHT/DOTP is marketed under the Oxoviflex® brand. It is used in plastics processing as a non-phthalic plasticizer as well as in the manufacture of paints and varnishes. It is also widely applied for the production of floor tiles and wall cladding as well as toys for children.
- DBTP/DBT. It is a plasticizer characterised by quick plastification of polymers and low migration, giving higher flexibility to finished products. Due to these properties, DBTP/DBT is used in the production of PVC flooring as a functional plasticizer in combination with Oxoviflex®, as well as in the production of adhesives, seals, and inks. The Group's DBTP/DBT is marketed under the Oxofine™ DBT brand.
- DEHA/DOA. It is a high quality bis(2-ethylhexyl) adipate which is recommended for the manufacture of food contact materials (particularly PVC food wrapping film) due to its very good plastifying properties and the fact that it maintains its properties in low-temperature applications and has a safe toxicological profile. The Group markets its DEHA/DOA under the Oxofine™ DOA brand. The product is also used in the manufacture of garden hoses, cables and coated fabrics. Depending on the application, it may be used as the main plasticizer or a functional plasticizer in combination with Oxoviflex®. Besides its application in PCV processing, Oxofine™ DOA is also recommended as a solvent for the cosmetics industry, for use in nitrocellulose and synthetic rubber plasticisation, and in the manufacturing of lacquers.

Sulfur

The product offered by Grupa Azoty is mined sulfur. Sulfur is mainly used to produce sulfuric acid, which is widely used in the chemical industry, for instance to produce DAP, a two-component fertilizer. The product is offered in various forms. For the Group's own needs, sulfur is also purchased from other suppliers who obtain it as a by-product from flue gas desulfurisation or crude oil refining.

Melamine

A non-toxic, non-flammable product in the form of a white powder, used for the production of synthetic resins, thermosetting plastics, adhesives, paints, varnishes (including furnace varnishes), auxiliary materials for the textile industry, fire retardants, and other.

Titanium white

Titanium white (titanium dioxide) is the most widespread category of inorganic pigments characterised by the highest refractive index. Its other properties include the capacity to strongly absorb harmful ultraviolet radiation. The pure form is a colourless, crystalline, non-volatile, non-flammable, insoluble and thermally stable solid. Industrial applications of titanium white include the manufacture of paints and varnishes, plastics, paper, synthetic fibres, ceramics, rubber, cosmetics, pharmaceuticals and food products.

The Group sells titanium white under the Tytanpol® brand. Several titanium white grades are regularly manufactured, including universal grades (R-001, R-003, R-210) and speciality grades (R-002, R-211, R- 213, RD-5, RS, R-310).

Sources of strategic raw materials

For the most part, the Group procures its raw materials, merchandise and services on the domestic and EU markets. Certain raw materials (phosphate rock, slag, potassium chloride) are purchased from non-EU suppliers. Raw materials supplied by the Group companies, i.e. ammonia and to some extent sulfur, account for a significant share of the total raw materials procured by the Group.

Ammonia

The procurement strategy is based primarily on the optimisation of intragroup supplies. Intragroup supplies are transacted on arm's length terms. The Grupa Azoty Group is the largest ammonia manufacturer in Poland and CEE, operating several ammonia units. It is also one of the largest consumers of ammonia in the region, with a significant potential in logistics.

Having satisfied its own needs, the Group sells a surplus on the market. The Group's ability to effectively secure ammonia supplies largely depends on conditions prevailing on the fertilizer market and in the natural gas sector.

Benzene

Benzene is mainly delivered under one-year contracts, with supplementary purchases made on the spot market. Benzene is sourced chiefly from domestic and EU suppliers. The benzene market is largely driven by the situation on the crude oil market and the demand–supply balance on global markets, particularly the level of demand for benzene outside Europe.

Electricity

The Group purchases electricity from major Polish suppliers trading with large accounts. Following a number of tenders for 2022, the Group companies signed electricity supply contracts under their existing framework agreements. Thanks to the joint procurement strategy for electricity supplies, they secured competitive prices and favourable terms of the contracts. Given the volatility of the electricity market and its changing legal framework, the Group's policy is to purchase electricity under forward contracts concluded for various periods and on the SPOT market, including on the Polish Power Exchange.

Phenol

The procurement strategy is based primarily on supplies from the domestic and the EU markets, with deliveries from outside Europe covering deficit. The Group secures phenol supplies for its own needs under long-term contracts concluded directly with Europe's largest producers. In 2019, the Grupa Azoty Group increased its internal storage capacities, thus optimising the phenol supply chain.

Phosphate rock

Phosphate rock is purchased under annual contracts, chiefly from North African and West African producers, given the mineral's abundance in the region and the well-developed local sea logistics infrastructure. The situation on the phosphorite market is to a large extent driven by the situation in the fertilizers sector. The Group has in place a joint phosphate rock purchase programme for Grupa Azoty POLICE and Grupa Azoty FOSFORY.

Natural gas

High-methane gas and gas from local sources was supplied by PGNiG S.A. under long-term contracts. In the three months ended March 31st 2022, natural gas was purchased under the contract with PGNiG S.A. at spot prices and in forward transactions, in accordance with the policy of gas price hedging.

As announced by PGNiG S.A on April 27th 2022, supplies of natural gas from Russia to Poland were withheld as a result of PGNiG S.A.'s refusal to make payments for gas in the Russian currency. As at the date of authorisation of this Report for issue, there were no interruptions in the supply of natural gas to the Group. The Group monitors the situation around gas supplies on an ongoing basis. Contingency scenarios have also been developed in case manufacturing operations have to be curtailed in the event of a reduction in natural gas supplies, including in particular a reduction of the load on production units and acceleration of annual maintenance shutdowns.

Propylene

The bulk of the Group's purchases of propylene are made under annual contracts, with supplementary purchases made on the spot market. To a large extent, propylene prices are driven by oil prices as well as the supply and demand balance on the propylene market. The Group pursued a diversified procurement strategy, based chiefly on supplies from the EU and countries east of Poland. As Russia's aggression against Ukraine caused disruptions in the supply chain, the Group switched to a short-term policy for securing supplies from other available sources on the best commercial terms while ensuring the security of supplies.

Sulfur

The Group is the largest producer and consumer of liquid sulfur on the domestic market and in the region. Its sulfur procurement strategy is based on optimising intragroup supplies (from Grupa Azoty SIARKOPOL) and on supplies from the petrochemical sector. This approach gives the Group considerable procurement flexibility, and significantly reduces the risk of supply shortages. With a centralised sulfur procurement strategy in place (a joint purchase programme for the entire Group), the Group is able to aggregate the supply volumes and reduce the cost of this raw material.

Potassium chloride

Having access to substantial natural resources and offering competitive commercial terms, producers from Canada and Germany are the primary suppliers of potassium chloride. The Group's procurement strategy is chiefly based on quarterly framework agreements. The Group pursues a centralised procurement strategy by making joint purchases for Grupa Azoty POLICE and Grupa Azoty FOSFORY.

Coal

The Group purchases coal mainly on the domestic market. Purchasing large volumes of coal of the required quality from geographically remote markets is considerably more expensive given the transport costs and price formulae (ARA – a price benchmark for coal delivered at the ports of Amsterdam, Rotterdam and Antwerp).

Since 2018, the Group companies have followed a strategy of purchasing coal under multi-year contracts with a guaranteed price change range. Such long-term contracts cover the Group's principal coal supply requirements.

In addition, a major and growing risk is related to the availability of hard coal, which was largely imported from Russia before the outbreak of war in Ukraine, from domestic sources. For detailed information on this risk and its impact on the operations and financial performance of the Grupa Azoty Group, see the interim condensed consolidated financial statements of the Grupa Azoty Group for the six months ended June 30th 2022.

2. Financial position of the Group

2.1. Assessment of factors and one-off events having a material impact on the Group's operations and financial performance

Exchange rates

The six months ended June 30th 2022 saw continued increased volatility in the currency market as an effect of disruptions in the supply markets caused by the COVID-19 pandemic, as well as the emergence of a speculative bubble on energy commodity markets. The volatility escalated due to the war in Ukraine, international economic sanctions imposed on Russia, and global inflationary pressures.

In the six months to June 30th 2022, the Polish Monetary Policy Council continued to tighten its monetary policy, both through a series of interest rate rises and amplification of its rhetoric on measures taken to stabilise the Polish złoty and combat inflation. Despite a widening disparity between the domestic interest rates and the rates in the eurozone and the US, real interest rates for the złoty remain significantly negative because of the high inflation in Poland.

Therefore, in the first half of the year the złoty weakened further, with a culmination after the Russian invasion of Ukraine, followed by corrective appreciation after news of Ukraine's effective defence appeared.

Overall, in the six months ended June 30th 2022 the złoty depreciated relative to both euro and US dollar, by 1.8% and 10.4% respectively versus the levels recorded at the end of 2021. At the same time, the average PLN/EUR exchange rate weakened by 1.0% year on year and the average PLN/USD rate – by 7.2%.

As the combined movements of the average PLN/EUR exchange rate were limited and the PLN/USD exchange rate followed the development of the EUR/USD exchange rate, they had no significant effect on the Group's performance in the six months ended June 30th 2022 in terms of the Group's partly balanced EUR exposure and limited USD exposure. At the same time, due to the interest rate hikes, the Group's finance costs rose gradually in the reporting period.

The Group reduces the risk resulting from its currency exposure by using selected instruments and taking measures to hedge against the currency risk based on the current and planned currency exposure. In the reporting period, the main hedging tools used by the Group included natural hedging, factoring and discounting of foreign currency receivables, and currency forwards entered into on a rolling basis to cover up to 80% of the remaining currency exposure with time horizons of less than 6 months, up to 50% of the remaining currency exposure with time horizons between 6 and 12 months, and up to 30% of the remaining currency exposure with time horizons between 12 and 24 months.

The Group has a physical EUR and USD cash pooling structure in place that allows its companies to use the Group's global liquidity limit in these currencies, which further reduces exposure to the currency risk in the euro and the US dollar by correcting potential mismatches in revenue and expenses over time.

In the six months ended June 30th 2022, the Grupa Azoty Group entered into FX forward contracts for the sale of EUR and USD, to supplement currency exposure hedges.

The net result on settled hedging transactions of the Group (excluding Grupa Azoty POLYOLEFINS) in the six months ended June 30th 2022 was PLN 60 thousand. This was accompanied by a negative net result on remeasurement of hedging instruments, at PLN -5,168 thousand, caused by the significant appreciation of the euro against the złoty at the end of the period.

The overall net result of the Group (excluding Grupa Azoty POLYOLEFINS) on the settlement of hedging transactions and remeasurement of hedging instruments in the six months ended June 30th 2022 was PLN -5,108 thousand.

Grupa Azoty POLYOLEFINS's exposure to currency risk

In the six months ended June 30th 2022, Grupa Azoty POLYOLEFINS held and entered into FX forward contracts to buy EUR and PLN for USD to hedge the expected expenditure in EUR and PLN related to contractual payments for the Polimery Police project, to be covered from disbursements under the term facility made available on the basis of the Credit Facilities Agreement.

In the six months to June 30th 2022, Grupa Azoty POLYOLEFINS replaced with FX forward contracts some of its call options for the purchase of EUR for USD, securing a planned increase in the Polimery Police project costs to be covered with proceeds from the term facility.

As at June 30th 2022, Grupa Azoty POLYOLEFINS had the following open contracts:

- FX forward to buy approximately EUR 175m for USD (hedging expenditure planned to be financed with proceeds from the USD-denominated term facility available under the Credit Facilities Agreement);
- FX forward to buy approximately PLN 138m for USD (hedging expenditure planned to be financed with proceeds from the USD-denominated term facility available under the Credit Facilities Agreement).

The FX forwards to purchase PLN for USD were designated for the purpose of cash flow hedge accounting.

As at June 30th 2022, the total result on the measurement of open transactions hedging currency risk executed by Grupa Azoty POLYOLEFINS was PLN -155,559 thousand, including PLN -28,260 thousand attributable to the measurement of transactions designated for hedge accounting purposes.

Interest rate risk

In the six months ended June 30th 2022, Grupa Azoty POLYOLEFINS held IRSs with a zero floor whereby positive values of EURIBOR and USD LIBOR are exchanged for a fixed interest rate. The contracts hedge the planned interest expense on the term facility made available under the Credit Facilities Agreement. They constitute security required under the Credit Facilities Agreement.

As at June 30th 2022, Grupa Azoty POLYOLEFINS had the following open contracts:

- IRS with a zero floor on EURIBOR for a maximum notional amount of approximately EUR 370m (the notional amounts increase and then are amortised in accordance with the company's expectations regarding the notional amounts resulting from the term facility under the Credit Facilities Agreement in EUR);
- IRS with a zero floor on USD LIBOR for a maximum notional amount of approximately USD 408m (the notional amounts increase and then are amortised in accordance with the company's expectations regarding the notional amounts resulting from the term facility under the Credit Facilities Agreement in USD).

The transactions hedging interest rate risk were designated for the purpose of cash flow hedge accounting. As at the end of June 2022, the notional amount of the transactions hedging interest rate risk was higher than the actual amount of debt outstanding under the term facility. The hedge relationship for that part of the hedging instrument's notional amount which was not covered by the hedged item was de-designated. A part of the fair value measurement of IRS and floor contracts was reclassified to profit or loss. Only the measurement amount corresponding to the portion of the hedge for which the hedged item is still expected to occur was charged to equity.

As at June 30th 2022, the total result on the measurement of open IRSs with a zero floor executed by the company was PLN 312,927 thousand, including PLN 286,040 thousand attributable to the measurement of transactions designated for hedge accounting purposes.

Commodity risk

In the six months ended June 30th 2022, Grupa Azoty POLYOLEFINS did not carry any commodity risk hedges.

Foreign currency derivatives and hedge accounting

As at June 30th 2022, the notional amount of the Group's open foreign currency derivatives (FX Forward) was EUR 84.5m (maturing in 2022 and 2023) and EUR 6.5m under options, maturing in the period July to December 2022, entered into by Grupa Azoty POLICE.

The total value of the Group's open currency derivatives amounted to EUR 91m.

In the case of USD, the notional amount of the Group's open FX forwards was USD 12m (with maturities in 2022).

Such contracts are only entered into with reliable banks under master agreements. All the contracts reflect actual cash flows in foreign currencies. Currency forwards and derivative contracts are executed to match the currency exposure and their purpose is to limit the effect of exchange rate fluctuations on profit or loss.

The Group applies cash flow hedge accounting. The hedged item are highly probable future proceeds from sale transactions in the euro, which will be recognised in profit or loss in the period from July 2022 to March 2029. The hedging covers currency risk. The hedge are two euro-denominated credit facilities of:

- EUR 54,486 thousand as at June 30th 2022, repayable in the period from December 2018 to June 2025 in 14 equal half-yearly instalments of EUR 9,081 thousand each;
- EUR 128,667 thousand as at June 30th 2022, repayable in the period from September 2021 to March 2029 in 16 half-yearly instalments, including the first instalment of EUR 6,666 thousand, 14 instalments of EUR 9,667 thousand each, and the last instalment of EUR 3,000 thousand.

As at June 30th 2022, the carrying amount of the two credit facilities was PLN 856,938 thousand. As at June 30th 2022, the hedging reserve included PLN -58,622 thousand on account of effective hedge. In the six months ended June 30th 2022, the Group reclassified PLN 7,752 thousand from other comprehensive income to the statement of profit or loss in connection with the settlement of a hedging relationship with respect to payment of currency loan instalments against proceeds from sales in the euro.

Grupa Azoty POLYOLEFINS applies cash flow hedge accounting with respect to currency risk and interest rate risk. In currency risk hedges, the hedged item are future highly probable cash flows related to PLN-denominated costs attributable to a project, financed with drawdowns under the USD-denominated credit facility. In interest rate risk hedges, the hedged item are future highly probable cash flows arising from interest on the term loan denominated in EUR and USD.

As at June 30th 2022, PLN -28,260 thousand on the measurement of FX hedging transactions and PLN 286,040 thousand on the measurement of interest rate risk hedging transactions were recognised in Grupa Azoty POLYOLEFINS's hedge reserve.

2.2. Market overview

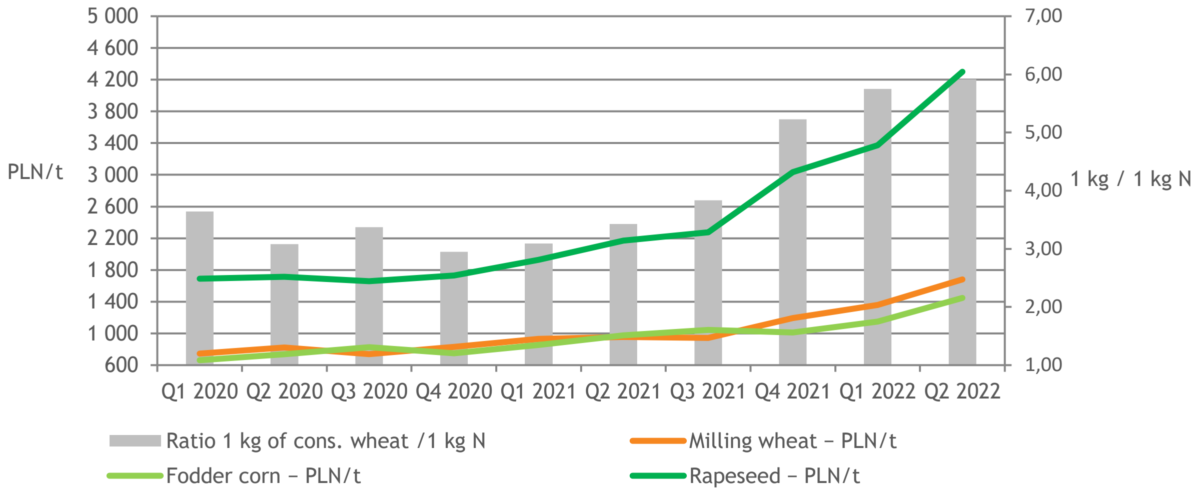
AGRO FERTILIZERS

Economic conditions in agriculture

In the six months to June 30th 2022, the prices of main agricultural produce in Poland were far higher than in the first half of 2021 and significantly exceeded their historical highs. The average price of milling wheat was PLN 1,521 per tonne, up by 61% year on year. Prices of maize and rapeseed were also high (PLN 1,299 per tonne, up by 42% year on year, and PLN 3,837 per tonne, up by 87% year on year, respectively). The second quarter of the year was particularly dynamic, one of the reasons being the continuing armed aggression launched by Russia against Ukraine, as a result of which the supply of cereals from Ukraine and Russia was initially considerably reduced and then almost completely halted. These countries are the world's leading cereal producers, which was the reason why concerns about global food security, including in the EU, were growing. The market's response to these concerns was further price hikes globally, with the domestic market following suit. Price increases in the Polish market were also supported by the agricultural sector's lack of initiative in releasing cereal stocks. The agricultural sector looked forward to further price increases in the hope that they would offset the steep rise in prices of agricultural inputs. Russia's ongoing aggression against Ukraine makes the situation on the cereals market dynamic, with forecasts predicting no major change in this respect until the end of the year. Prices of agricultural produce are expected to remain relatively high despite the periodic fluctuations observed during the harvest season. This year's yields will also play a key role. Based on Strategie Grains' (SG) forecasts for Poland, in the 2022/2023 season the crop yields may be on a par with the last year's season (September 2022 data), despite a series of adverse factors (e.g., drought). Production of wheat is estimated to reach 11.7 million tonnes (up 1.7% year on year), barley – 2.7 million tonnes (down 8.2% yoy), and maize – 7.5 million tonnes (up 3.3% yoy). SG forecasts a decrease in cereal production in the 2022/2023 season in the entire EU, where the total production volume is expected to reach 264.6 million tonnes, down by 25.8 million tonnes (8.9%) relative to the previous season. The condition of crops in Poland after the six months ended June 30th 2022 was assessed as relatively good despite the sometimes severe weather conditions.

The prices of agricultural produce in July and August fell quarter on quarter, which is typical of that period because of the harvest season and increased supply of cereal in the domestic market. An increase, if any, in cereal prices is only expected later during the year. This year's harvest yield, which will depend on weather conditions, will be an important factor. Prices of agricultural produce will also be affected by further development of the armed conflict in Ukraine and how it will influence the balance of cereals globally, i.e., exports of cereals from that area to world markets. If the supplies commence, prices of agricultural produce across global markets may fall, with those on the Polish market following suit. However, if exports from Ukraine are further restricted, prices of agricultural produce may remain high or grow further, especially if its availability declines later in the year.

Prices of wheat, maize and rapeseed



Source: Company data.

Although the prices of agricultural produce remained high, the economic condition of the Polish agricultural sector did not improve during the period under review, mainly as a result of increasing costs of production, driven primarily by rising prices of energy, fuels and agricultural inputs. Forecasts for the coming months do not envisage any changes in this respect. Despite the lack of prospects for improvement in the agricultural sector, the financial condition of domestic agricultural holdings will be substantially supported by the direct payments and area payments scheme under the Rural Development Programme (RDP). As reported by the Agency for Restructuring and Modernisation of Agriculture (ARiMR), a total of PLN 18.3bn was paid out by the end of June 2022, including PLN 15.3bn in direct payments and PLN 3.0bn in RDP area payments. The disbursement of the next envelope for 2022 is scheduled to begin in mid-October. The total amount of payments will depend on the EUR/PLN exchange rate as at September 30th.

Market of nitrogen fertilizers

In the first half of 2022, the prices of nitrate fertilizers were much higher than in the corresponding period of the previous year. The average price of ammonium nitrate (AN) in France was EUR 880 per tonne, having increased year on year by as much as 177%. In Germany, the prices (CIF Inland) of calcium ammonium nitrate (CAN) rose by a steep 196% year on year to an average level of nearly EUR 693 per tonne. The increase was driven mainly by the continuation of the upward trend in natural gas prices observed at the end of 2021, which had a material impact on fertilizer production costs. Another contributing factor was Russia's aggression against Ukraine, as it increased the price volatility and turbulence on commodity markets even further and restricted the availability of fertilizer products on international markets. The unstable geopolitical situation in Europe and continuing concerns about the availability and prices of natural gas warrant the assumption that prices of nitrogen fertilizers in the remaining months of the year will remain high. The prospect of persistently high costs of fertilizer manufacturing will be the key factor behind decisions to cut down or temporarily halt production. The reduced availability of fertilizer products on the domestic and EU markets may become a new driver of higher prices.

The first half of every year sees the highest demand for fertilizer products in the calendar year, which is due to agricultural production technologies. Unfortunately, due to unfavourable market developments, the structure and size of demand in the first half of 2022 strongly deviated from typical patterns. The periodic dynamic changes in market behaviour, coupled with lower purchase volumes corresponding to current demand, resulted from record-high prices of fertilizer products. In expectation of price declines, the agricultural sector waited to the last opportune moment to buy fertilizers and chose to cut spending on agricultural production by reducing fertilizer doses, which affected the total fertilizer consumption. The situation improved slightly in the second quarter, when the prospect of sustaining high prices of produce later in the year encouraged the agricultural sector to increase spending on agricultural production. Weather conditions were also a key driver of demand for nitrogen fertilizers in the first half of 2022, strongly influencing the timing and scope of field work involving fertilizer application, especially in periods of precipitation deficits and increasing drought hazard.

Current market analyses warrant the claim that the situation in the fertilizer segment is not expected to change significantly in the coming months. The protracted military aggression against Ukraine will continue to have an impact on market developments, significantly destabilising the situation in this sector.

In the third quarter, demand for nitrogen fertilizers is at its lowest, which is typical of this part of the year because of the ongoing harvesting period. It is estimated that the demand for fertilizers from the agricultural sector will continue to be hampered by prices of fertilizer products continuing at levels hardly acceptable to the market. Anticipation of price declines will be still evident, which may result in a periodically volatile and fast-changing distribution of demand.

Urea

In the six months ended June 30th 2022, the average urea price (FOB Baltic) was USD 646 per tonne, up 85% year on year. In the three months ended June 30th 2022, on the other hand, it was USD 601 per tonne, up +65% year on year.

Early in 2022, urea prices went down to the four months' low. Interest from buyers was limited and producers experienced difficulties in placing the product on the market, even after price cuts. At the end of February 2022, everything changed. Russia's armed attack on Ukraine spurred a strong price growth on the global urea market. The highest growth was seen in Egypt, where the bid price levels were among the highest globally. In the first quarter of the year, deliveries from Russia were downsized considerably because of the sanctions, which significantly reduced the global supply. In Europe, there was a common concern about urea shortage. Some large forwarding companies scaled down deliveries to and from Russia in view of the rapidly changing legislative situation (imposition of sanctions). The lack of demand for Russian products and logistics problems caused a temporary suspension of handling of export fertilizers. The numerous personnel changes at Russian fertilizer companies which were subjected to EU and US sanctions could not alleviate their effects. The efforts of Russian producers to place their product on the market led to a situation where on certain markets Russian urea was sold at prices lower by even 25% than the average market levels. At the same time, customers on markets previously dependent on Russian prilled urea paid a higher price for supplies from new sources. After the US Office for Foreign Assets Control (OFAC) of the Department of the Treasury excluded fertilizers from the sanctions, urea producers (from the Baltic region) offered and exported the product from Russia. This activity remained limited as a result of difficulties related, *inter alia*, to the unavailability of ships in Russian ports and refusals from European ports to serve Russian ships.

European governments undertook various initiatives to support farmers and fertilizer manufacturers in dealing with high energy costs. The EU announced a EUR 500m plan aimed at helping farmers to grow more crops and mitigate food price spikes and potential shortages resulting from the conflict in Ukraine, which includes economic support for fertilizer manufacturers to offset high energy costs. Due to strict compliance with sanctions in Europe, in the Baltic Sea region Russian producers were able to sell to three major markets: Latin America, China, and India. Facing logistics and financial issues, few buyers were willing to deal with Russia. Most banks did not finance any Russian projects. Non-EU ports in Europe did not admit Russian urea even when loaded from a non-Russian port Sanctions imposed on Russia by Western countries forced Russian producers to focus their sales efforts on the markets of the Americas, which had a crushing effect on prices there, to the extent that the sanctioned Iranian product could hardly compete, let alone products originating from other countries.

In the middle of the second quarter market activity in Europe, as in other markets of the world, remained subdued, since sellers and buyers alike were uncertain where the market was headed. Production in the region was expected to pick up. Unexpectedly, in mid-June, the price of urea increased on the back of rising gas prices, fuelled by concerns that high gas prices could again affect the production and availability of fertilizers in Europe. Prices in main import centres increased and there were several requests for proposal from European buyers.

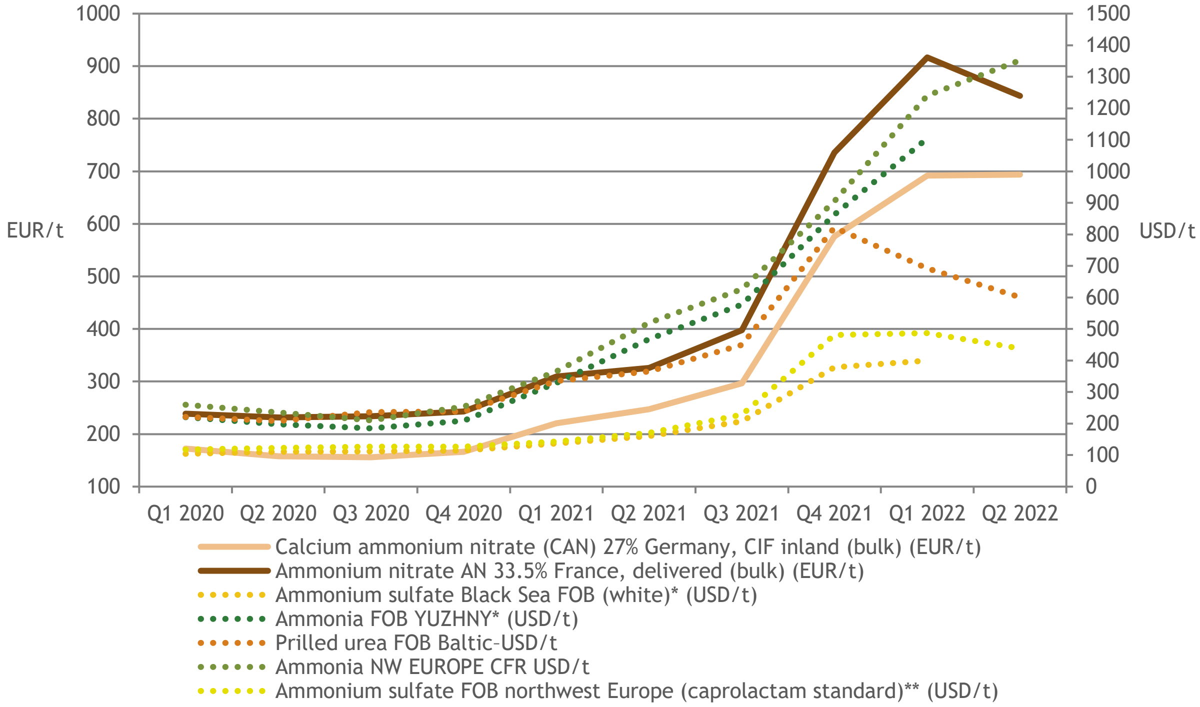
Later in the year, interest in urea is expected to increase. Production losses in Europe will have to be offset by additional imports. However, high market supply and significant reductions in urea prices from Russia and Iran will curb price growth in other markets and result in price variations between the regions.

Ammonia

In the first half of 2022, the average price of ammonia (CFR NW Europe) was USD 1,296 per tonne, up 193% year on year, while average prices in the second quarter of 2022 exceeded USD 1,350 per tonne (up 160% year on year).

The global supply and demand balance early in the first half of the year appeared to be favourable to buyers, for the first time in a few months. The gas prices, which at times were falling, encouraged producers to restart a number of large units in Europe. At the end of January, the balance of supply and demand became less tight as a result of reduced concentration on other nitrogen fertilizers. A large part of the ammonia surplus did not find buyers by that time. At the end of February, Russia's armed aggression against Ukraine gave rise to concerns about possible loss of supply volumes from the Yuzhny region for indefinite time, affecting the market as a whole. The abnormal circumstances faced by ammonia producers, traders and buyers brought activity on the spot market to an almost complete halt. There was uncertainty about whether and how the market would deal with the loss of volumes from the Black Sea, amounting to over 200,000 tonnes per month. The war forced the closure of the Yuzhny port for an indefinite time, and therefore ammonia price quotations were suspended. Given the unstable situation in Ukraine, the quotations will remain inactive until trade is resumed. The war and the resulting loss of trade in the Black Sea, accounting for 15% of the global maritime trade in ammonia, forced buyers to look for alternative sources of this feedstock for some time. In the first half of March, European fertilizer manufacturers had to cut production as rising gas costs (following declines in February) eroded the margins on fertilizer products while the demand remained weak. Early into the second quarter, ammonia producers in Western Europe increased their production levels as natural gas prices seemed to stabilise and local production prices became increasingly competitive compared with ammonia imported into Northwest Europe. In June, the sentiment on the European ammonia market cooled off considerably compared with the earlier months of the period, and the cost of ammonia production in Europe was estimated at approximately USD 1,600 per tonne.

Prices of nitrogen fertilizers (urea, CAN, AN, AS,) and ammonia



*Ammonia FOB YUZHNY in connection with the situation in Ukraine – average for the quarter based on two months of 2022, no price quotations in March.

** Ammonium sulfate FOB Black Sea in connection with the situation in Ukraine – average for the quarter based on two months of 2022, no price quotations in March.

Source: Company data.

In the short term, natural gas price increases in Europe will result in further fragmentation of the global market. An expected pick-up in demand in the fourth quarter will tip the market balance into deficit. However, there are concerns about a possible decline in the anticipated level of demand, not only because higher ammonia prices are squeezing the margins on industrial products, but also because the macroeconomic pressure is dampening consumer demand, especially in the automotive industry. However, ammonia prices can still be expected to rise throughout the winter period, mainly on the back of higher prices in Europe and the associated influx of ammonia from both sides of the Suez Canal. The production of nitrogen fertilizers lost due to shutdowns caused by gas prices will have to be compensated by higher imports. Production is Europe is likely to recover when the cost of production falls or when prices for ammonia from non-European sources increase to levels equal to the cost of ammonia purchases.

Market of compound fertilizers

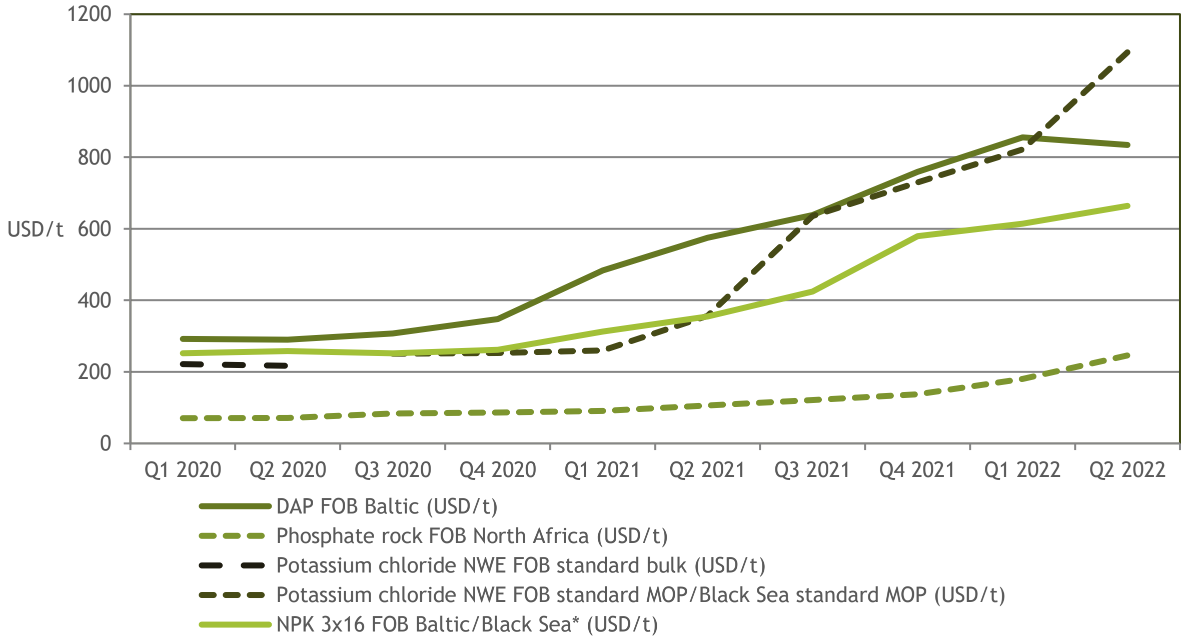
The average price of NPK 3x16 in the first half of 2022 was close to USD 640 per tonne FOB Baltic/Black Sea, up 92% yoy. Until Russia's invasion of Ukraine, the sentiment in the global NPK market was determined by developments in the commodity markets and uncertainty around the impact of sanctions imposed on Belarus. The outbreak of the conflict provided an impetus to intensify buying activity in the European markets amid concerns about product shortages and future price increases.

In the second quarter, the demand for NPK in Europe was steadily weakening. A seasonal slowdown was also recorded in other western consumer markets and the trade activity shifted to the east. Price-wise, the market was stratified. Goods of Russian origin were often offered below regular trading prices. In the first half of the year, the markets seen as indicative for NPK fertilizers demonstrated significant volatility with diverse price trends. In the six months to June 30th 2022, the average price of dicalcium phosphate (DAP) was approximately USD 845 per tonne FOB Baltic, up 60% yoy. In the second quarter of 2022, the prices fell for the first time in two years.

Until the day of the Russian invasion, eastern markets were the main trade centres for phosphate fertilizers. Europe's activity was low in view of high prices prevailing in the region. In the first weeks of the year, despite good cereal prices, buyers from Brazil exercised caution, shying away from new transactions. In the US, NOLA rates (Port of New Orleans) fell to levels close to those seen in late October and early November 2021. Phosphate fertilizers in the US and Brazil did not appreciate until the second half of February (before the spring application).

As in the case of NPK fertilizers, Russia's invasion of Ukraine created concerns about product shortages and future price increases, leading to a temporary spike in buying activity on Western markets. Eastern markets behaved differently, as buyers temporarily refrained from making purchases. In time the prices of phosphate fertilizers on Western markets came under downward pressure caused by weak demand and resistance against high pricing.

Prices of compound fertilizers (DAP, NPK), potassium chloride and phosphate rock



* NPK 3x16 – since January 2022, change of the source of quotations and delivery basis to FOB Baltic/Black Sea.

Source: Company data.

At the end of the second quarter, market activity was once again the highest in Asia. The outcome of the annual purchase tender in Bangladesh, which stated its intention to buy more than 800,000 tonnes of DAP, was a key long-awaited event. Most of it is to be shipped from China, which has "tied up" Chinese producers for the next few months, reducing the global availability of the product in the third quarter of 2022. The geopolitical situation and existing or newly announced export restrictions and quotas were one of the key factors affecting the market of compund fertilizers during the period under review, disrupting the typical supply and demand balance and leading to changes in trade flows. Shipping restrictions in China, which is one of the key market players, were particularly important in the context of phosphate fertilizers. At the end of the first half of 2022, an increase of operating costs in Europe, driven by the rising prices of natural gas, as well as the prospect of fertilizer production stoppages or cuts at local plants, once again triggered concerns about future supply in the region.

Phosphate rock

In early 2022, after significant price hikes in DAP and MAP phosphate fertilizers in the fourth quarter of 2021, the prices stabilised across almost all fertilizer markets. Until mid-February, the supply and demand were balanced with no significant price movements. The market became nervous when reports of an imminent armed conflict in Ukraine became more realistic, and the conflict actually broke out in the middle of February.

Following the launch of Russia's armed aggression against Ukraine, the global markets of phosphate fertilizers responded with steep increases of DAP and MAP prices. Significant increases mainly affected the South American and US markets. Russia is one of the key suppliers of phosphate fertilizers to export markets. Potential supply constraints pushed both DAP and MAP prices up by approximately USD 300 per tonne in a space of a little more than ten days. The steep price increase was largely a panic effect on the part of main buyers, especially Brazil, which in the first few days of the war pointed to a risk of significant shortages on global fertilizer markets. Problems with logistics and payments, which arose after sanctions on Russia had been announced, caused supply disruptions and changes in the directions of supply to Brazil.

The sharp increase in prices of phosphate fertilizers was also attributable to higher prices of phosphate rock and phosphoric acid. In the first half of 2022, average prices of phosphate rock went up by 117%, and the phosphoric acid price quotations for India rose by some 73% year on year. The price of phosphoric acid determines phosphate prices, and it is worth noting that from the beginning of 2021 to June 2022 it increased by as much as 122%. The relation between the prices of phosphoric acid and DAP was a hard blow for the Indian market, which is one of the world's main phosphate fertilizer buyers. The level of subsidisation of fertilizer production by the government failed to keep pace with rising phosphoric acid prices, forcing India to import DAP fertilizers and minimise its own production.

Since mid-May, the growth rate of phosphate fertilizer prices has slowed down and there have been initial slight reductions. However, it should be noted that despite the decrease, current DAP prices exceed the levels from before the armed conflict in Ukraine. The phosphoric acid market was abnormal as despite falling prices of phosphate fertilizers in May and June their price in July increased relative to the prices of acid sold to India in the second quarter of 2022. In the longer term, this will have an impact on the ability of acid importing producers to maintain their margins.

Price forecasts for phosphate rock and phosphoric acid will depend on situation prevailing on the markets of phosphate fertilizers. In their case, forecasts predict a gradual decline in the prices in virtually all regions, including the US, Brazil and India. In the latter two countries, demand was expected to go up from the beginning of the second half of the year, but the market activity remains weak with no developments likely to bolster DAP and MAP prices. The situation in China is also relevant, as continued export restrictions are affecting supply regionally. The situation in that country will remain a factor counteracting any major decline in market prices. If no other factors emerge in the coming months, such as an escalation of the military conflict in Ukraine, the phosphate fertilizers market is expected to stabilise. Russia, a major player on that market, is re-creating distribution channels for its products and the supply of DAP and MAP fertilizers. With softer demand, oversupply may be seen towards the end of the year, likely to push the prices further down. The fourth quarter should witness a first clear response of the raw material markets prompting them to lower the prices of phosphoric acid and phosphate rock. Under the assumed scenario of a continued downward trend in DAP and MAP prices and a dramatic decline on the prilled sulfur market, it is impossible that phosphate rock and phosphoric acid producers will be able to maintain the prices of the raw materials used for fertilizer production at the current high levels.

Potassium chloride

Practically throughout January and until mid-February 2022, the market for potassium chloride remained relatively stable and there were no marked price movements despite further sanctions imposed on Belarus. The situation changed dramatically as the military conflict in Ukraine began. As Russia and Belarus had an approximately 40% share of the potassium chloride market, the sanctions considerably reduced the global supply. The other producers were not able to make up for the resulting volume deficit. Brazil, the world's largest importer of potassium chloride, imported approximately 13m tonnes in 2021, including 3.6m tonnes from Russia and 2.4m tonnes from Belarus. The situation on the Brazilian market was the main price growth driver for potassium chloride globally. Soon after the Russian invasion was launched, Brazil started intensive buying of potassium chloride from other sources, mainly from Canada, fearing a potential considerable shortage. As a result, its prices increased considerably not just in Brazil, but also in Europe, which faced a very difficult supply situation as it had been cut off from Russian and Belarussian supplies. The issue for Europe was not only the price, but most of all the availability of potassium chloride. During the period of the strongest growth, in Brazil the price of potassium chloride hit an all-time high, having exceeded the level it reached during the record increases of raw material prices in 2008 and 2009 (USD 1,100 per tonne (CFR)). In the first half of 2022, the average prices of potassium chloride increased by 210% compared with the average for the same period of 2021, with the benchmarks up by 311% between January 2021 — when the prices started going up — to June 2022.

The potassium chloride markets stabilised in late April and early May, and the price growth slowed down slightly around the middle of May. However, at the end of June 2022 the prices of potassium chloride still remained above the levels recorded before Russia's aggression against Ukraine. The price decline is obviously driven by the situation in Brazil, which imported considerable quantities of potassium chloride at the end of the first quarter, while Brazilian farmers are less interested in buying in view of the prohibitive price. In addition, the anticipated collapse of imports from Russia to Brazil was not as severe as expected, and Russia maintained a rather significant share in deliveries to Brazil in the second quarter of 2022. In Western Europe, the supply and conditions of price formation of potassium chloride were strongly affected by the absence of Belarus, which, due to its geographical location, had been a natural trading partner for Europe, including Poland, until 2021. Having no access to the port in Klaipeda and being affected by the sanctions imposed on ports in Russia, Belarus became strongly marginalised on almost all markets in which it was present, which was one of the factors behind a considerable increase of potassium chloride prices in the first half of the year.

Forecasts for potassium chloride indicate that in 2023 its prices may fall to levels recorded before the launch of Russia's armed aggression against Ukraine. Although potassium chloride is strongly correlated with the markets of phosphate and NPK fertilizers and historically its prices clearly followed the general trends set by these products, they may exhibit different trends under the current conditions. Sanctions imposed on Russia and Belarus will continue to translate into supply constraints and real price movements in the potassium chloride market will not be as evident as in the case of DAP and MAP. A possible increase in the volumes supplied by Canadian producers and accelerated launch of the new BPH project would help improve global supply situation over the next few years. At present, with a limited number of suppliers, the situation in Brazil, which had no major bearing on the prices in other regions of the world before the outbreak of the armed conflict in Ukraine, is currently the factor with the greatest impact on European price levels. The price of potassium chloride sold to Brazil was always far above the levels quoted to European customers. Brazil began to compete with Europe in sourcing the raw material from Canada. Previously, Canada's supplies to European companies were only complementary, but as soon as Russia and Belarus were covered by sanctions, Canada became the main supplier of potassium chloride to Europe.

PLASTICS

Polyamide 6 chain

The first half of 2022 saw high price levels along the entire product chain. In that period, and especially in the second quarter, the European market remained under the pressure of the unstable geopolitical situation, which affected energy and fuel markets. This situation, coupled with outbreaks of new coronavirus variants, particularly in China, had an impact on global markets, slowing down the restoration of supply chains disrupted by the pandemic and hampering economic growth.

In the first half of 2022, the benzene market was shaped by volatile oil prices and Russia's escalating armed conflict against Ukraine, which resulted in the imposition of sanctions on Russian companies and institutions, affecting benzene prices. China's restrictive anti-COVID policy and high fuel demand from the US market contributed to a lower market supply of benzene towards the end of the first year-half. In the period under review, with the exception of a slight decline in February, European contract prices for benzene continued on an upward trend. In the second quarter, contract prices in Europe exceeded EUR 1,100 per tonne (CIF NWE), hitting an all-time high of almost EUR 1,400 per tonne in June.

The phenol market in Europe was marked by strong demand from key derivatives sectors in the first quarter and a slowdown in the following months of the reporting period. Phenol prices were stimulated by high benzene and energy utility prices, which had an effect on the quarterly benzene price subsidies, and thus on the final prices of phenol. The availability of phenol in Europe met the demand despite a temporary drop in supply due to maintenance works on several phenol plants in the second quarter.

In the second quarter of 2022, the average price of benzene (CIF NWE contract) in Europe increased 14% year on year, and the average price of phenol (FD NWE) – by 27% year on year. Half-year average prices of benzene (CIF NWE) rose by 28% year on year, and half-year average prices of phenol (FD NWE) – by 34% year on year. High feedstock prices in Europe made derivative products less competitive relative to the Asian market.

Prices of caprolactam and polyamide 6 in Europe in the first half of 2022 followed the price trend of the key feedstocks (benzene and phenol) to a varying degree. Rising feedstock, gas and electricity prices affected the production cost structure, creating a pressure to pass on the increases downstream. Early in the second quarter, CPL and PA6 producers in Europe and the US introduced three-digit product price increases which were gradually corrected downwards over the following months, but the prices still remained high. The producer margins declined.

Anti-COVID policies in the Asian market, including local lockdowns (mainly in China), contributed to a decline in demand from PA6 application sectors. Major producers reduced their work rates due to cost pressure and weak demand. Towards the end of the first half-year, the Chinese government announced a package of incentives to stimulate demand, such as subsidies for the industry, preferential corporate income tax treatment and lower interest rates.

CPL and PA6 prices in Asia remained much lower than in Europe, improving the appeal of imports of various PA6 grades and derivatives, additionally stimulated by uncertainties around the security of gas supply in Europe. This driver is likely to have an effect on industrial production in the second half of the year.

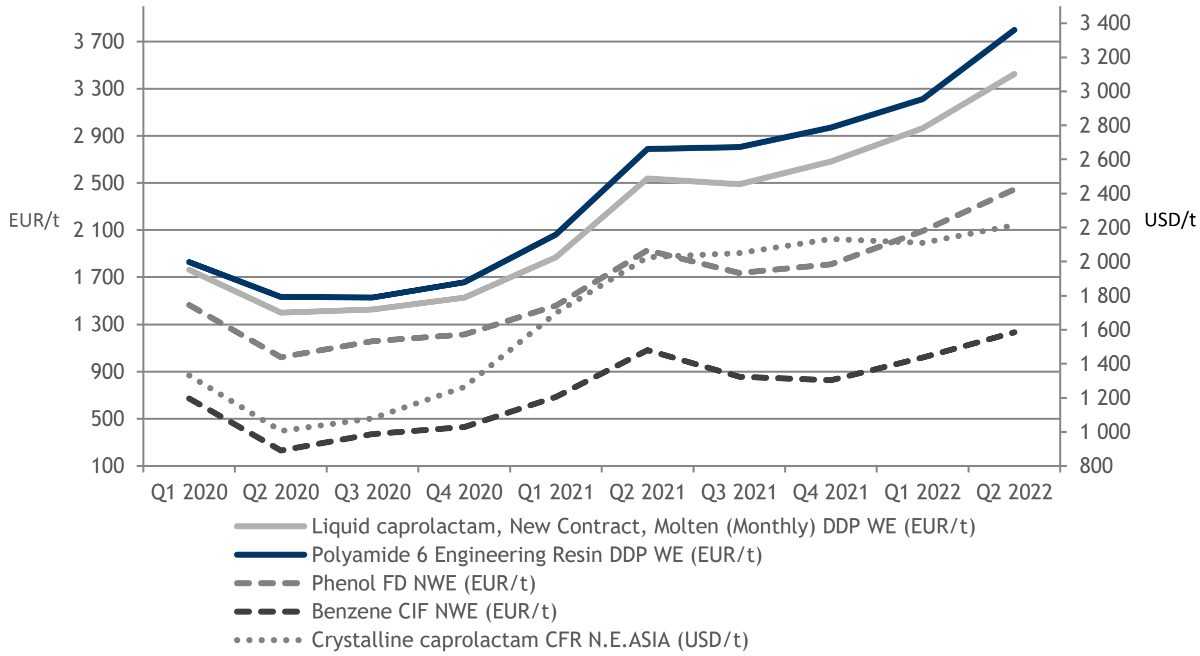
In the second quarter of 2022, the European average contract price of liquid caprolactam (Liq. DDP WE) increased by 35% year on year. The quarterly average contract price (CFR NE Asia) of caprolactam on the broad Asian market was 9% higher year on year. Compared with the first half of 2021, the average contract price of European caprolactam increased by 45% year on year, while the half-year average price of caprolactam on the Asian market rose by 16% year on year.

In Europe, the quarterly average contract price of polyamide 6 (Engineering Resin Virgin DDP, WE) in the second quarter was up 35% year on year. The half-year average price of polyamide 6 on the Euroean market rose by 45% year on year.

In the first half of the year, polyamide 6 remained under the influence of weakening demand. The PA6 product chain market is strongly correlated with economic cycles. In Europe, demand in the automotive industry remained low in the reporting period, squeezed by the limited availability of semiconductors and shortages of many other products from Russia and Ukraine. This resulted in temporary production cuts or even stoppages at individual plants. In the first half of 2022, registrations of new passenger cars and commercial vehicles in the EU decreased by a double digit year on year. The weak demand in the automotive industry resulted in a decline in demand for PA6. The armed conflict in Ukraine, soaring commodity and energy prices, and disruptions in supply chains all contributed to a weakening demand in other application sectors as well at the end of the first half of the year. Affordability continued to determine extremely cautious purchases. Rising inflation reduced demand from end consumers. There was a continued stable and strong demand from the packaging sector.

Supply of both CPL and PA6 on the European market was adjusted to market needs. In the first half of the year, a few European CPL and PA6 producers carried out scheduled maintenance work on their plants. The reduced supply did not improve market demand, only its balance.

Prices of PA6, caprolactam, benzene and phenol



Source: Company data.

In the second half of 2022, the geopolitical developments and macroeconomic climate will continue to affect the PA6 industry. Amid harsh economic conditions, including the soaring gas prices, the operational efficiency of certain CPL and PA6 units in Europe may worsen, leading in some cases to temporary production shutdowns. The high cost of energy has placed Europe at a disadvantage relative to PA6 chain products originating from other regions, particularly Asia, where production costs are much lower. Attractively priced imports of PA6 and PA6 products are likely to grow over the coming months, posing a major threat to operational efficiency and profitability of the European PA6 chain. There are expectations that demand in October will rebound seasonally relative to summer-time lows, but the existing market foundations do not indicate any significant improvement in demand from PA6 application sectors in the short term.

CHEMICALS

OXO product chain

In the first half of 2022, the prices of 2-EH alcohol rose by 18% year on year, chiefly on the back of much higher prices of production inputs (propylene) and energy. Prices rose slightly, by 8%, in the second quarter compared with the first quarter of 2022.

The availability of OXO alcohols in the first quarter of 2022 was sufficient, especially after one of the European producers declared the end of the force majeure event in January. At the beginning of the second quarter, the availability slightly fell due to maintenance shutdowns and a force majeure event at a major market player. At the beginning of the year, demand for OXO alcohols remained strong, especially from companies active in the processing of OXO alcohols into butyl acetate and glycol. In late February, after the start of the armed conflict in Ukraine, this demand began to gradually decline due to the growing uncertainty about the prices and demand for alcohols in the coming months. Demand for OXO alcohols (mainly 2-EH) from non-European markets, in particular in South and North Americas and Turkey, was at a relatively good level, with persistently high prices of freight putting a damper on the demand. The increase in the prices of raw materials used in the production of alcohols (propylene and natural gas) resulted in a further increase in the prices of alcohols on the European market. Imports into the European market were very limited owing to continued logistics problems caused by high freight prices and shortages of transport containers. The market struggled with logistics problems due to a surge in cases of the new coronavirus variant and the outflow of Ukrainian lorry drivers, going back to fight for their homeland. This caused delays in, or even cancellation of, supplies to OXO processors.

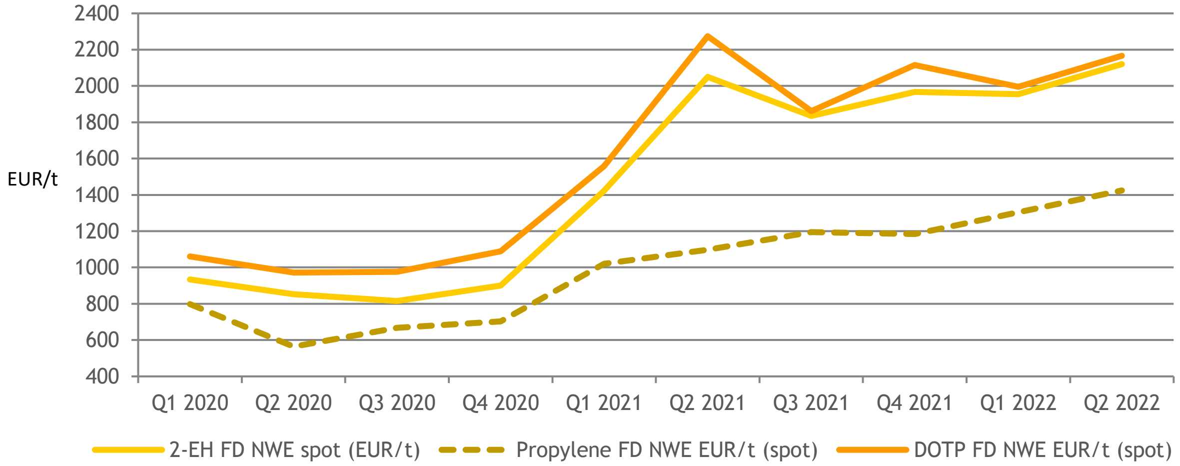
In the first half of 2022, prices of DOTP plasticizer were 9% higher year on year, while in the second quarter the prices rose 9% quarter on quarter. The availability of plasticizers in Europe in that period was viewed as sufficient to cover the demand. Plasticizer imports from Turkey remained strong, further improving the demand and supply balance in Europe. Demand for plasticizers was on the rise from early January, especially in the engineering plastics industry and the medical sector. From the beginning of the second half of February, demand for plasticizers declined slightly in the wake of Russia's military invasion of Ukraine and soaring inflation across Europe. Demand for plasticizers from the US and the Middle East (mainly DINP and DOTP) remained relatively high. Unfortunately, continuing high costs of freight and overall logistics problems gave rise to both import and export constraints. The European market continued to experience logistics problems caused by the pandemic.

In the first half of 2022, spot prices of propylene rose 29% year on year, while prices in the second quarter of 2022 were by 9% higher quarter on quarter. The contract prices also grew.

The supply of and demand for propylene was fairly stable in the first half of the year. Despite unscheduled shutdowns at some manufacturers, the availability of propylene was good also due to higher imports to Europe as high prices of propylene in Europe supported its imports. The pandemic also sparked off certain logistics problems on the propylene market. Demand for polymer and chemical propylene remained relatively high. The launch of the military invasion of Ukraine led to a significant increase in the prices of crude oil and naphtha, which translated into higher prices of propylene. That factor, as well as the sanctions, significantly reduced the possibility of purchasing the product from suppliers in the countries east of Poland. In the second half of the second quarter, demand for propylene fell gradually in all areas where it is processed. This resulted in a significant increase in the amount of propylene available on the European market and a decline in its prices on the spot market.

In the coming months, the situation on the propylene market is forecast to continue to be affected by crude oil and naphtha prices – if they go down, the propylene prices may follow suit. Much will also depend on the availability of propylene in the market. In the near future, significant oversupply of this raw material is expected to continue on the market, which should lead to lower prices.

Prices of 2-EH, DOTP and propylene



Source: Company data.

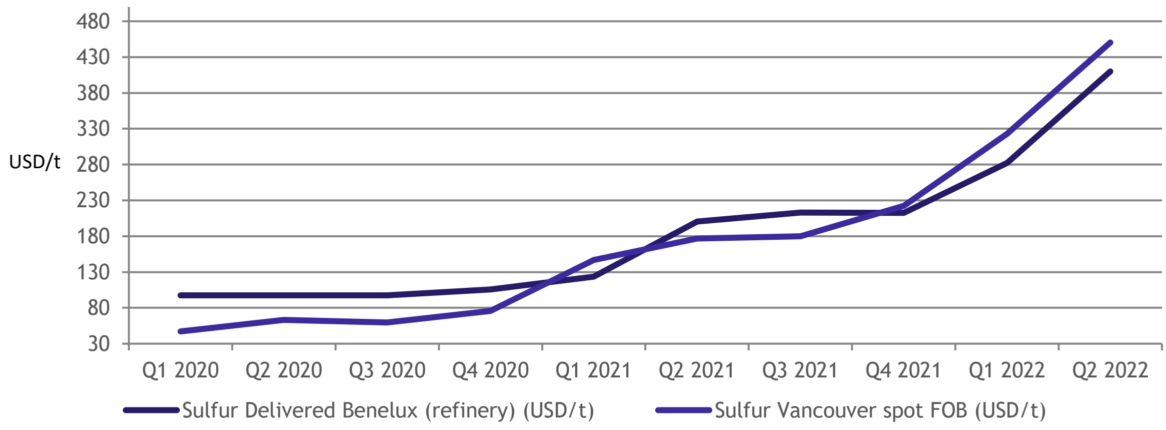
Sulfur

In the first half of 2022, strong price increases, which continued from October 2021, were observed on the markets for prilled sulfur. As recently as in September 2021, the benchmark Middle-East prices of prilled sulfur were around USD 180/tonne, while at the end of December 2021 they were close to USD 300/tonne. The start of Russia's war against Ukraine accelerated further price increases due to expected supply constraints. Distribution channels from Russia and Kazakhstan were cut off overnight and the largest customers were made to look for other sources of sulfur supplies, which further pushed up the prices. In the Middle East, sulfur prices under monthly contracts rose almost every month of the reporting half-year. During this period, average prices of prilled sulfur were higher by about 140% year on year. The maximum prices of prilled sulfur were recorded at the end of May and beginning of June, approaching USD 500/tonne FOB for the Middle East. Since mid-June, the sulfur market began to weaken due to lower orders from the phosphate fertilizers sector, with a relatively high supply of sulfur resulting from the improvement of refineries' efficiency ratios after the COVID pandemic period. In the late June and early July, prices of prilled sulfur fell sharply on all markets. The decline rate indicates a collapse of sulfur markets and it is not quite clear how this situation will affect the other fertilizers markets.

Following hikes in the price of prilled sulfur, the prices of liquid sulfur for customers in Western Europe rose too, but unlike the prilled sulfur market the liquid sulfur market saw no significant price increases in the second half of 2021. As liquid sulfur prices are settled on a quarterly basis, the first significant increase took place in January and the second significant one in April, which resulted in prices of liquid sulfur coming close to the price of prilled sulfur in the second quarter of 2022. These two markets are affected by each other, but in the past the price of liquid sulfur in Europe was mostly higher than the price of prilled sulfur. In the first half of 2022, the average NW Europe benchmark liquid sulfur prices and the average Benelux Delivered benchmark liquid sulfur prices were, respectively, 93% and 128% higher year on year. Due to the collapse of prilled sulfur markets, liquid sulfur prices in the settlements for the third quarter of 2022 decreased too, with the decrease being negligible compared with the plunging prilled sulfur prices.

A short-term forecast for the prilled sulfur market depends largely on developments in the fertilizer sector. The current price decline to record lows is attributable to production cuts haveing been implemented by leading manufacturers, in an effort to maintain high DAP and MAP prices for as long as possible at the expense of volumes. Sulfur prices may rebound and remain on a moderate growth trend in the coming quarters. However, according to a forecast for the phosphate fertilizer sector, the prices of prilled sulfur should not rise above USD 300 per tonne. In the case of liquid sulfur, it is currently priced far above the levels recorded for its prilled counterpart. The disparity between the prilled and liquid sulfur markets has now been disturbed, due mainly to the rate of changes taking place on Middle East markets amid negotiations of liquid sulfur prices for Western Europe to be paid in the third quarter of the year. Another major driver of the current price of liquid sulfur is the situation on the Rhine river, where, due to record-low water levels, many barges have been eliminated from the transport of chemicals, lifting freight rates to extremely high levels and significantly increasing the final purchase cost for chemical plants.

Sulfur prices



Source: Company data.

Pigment chain

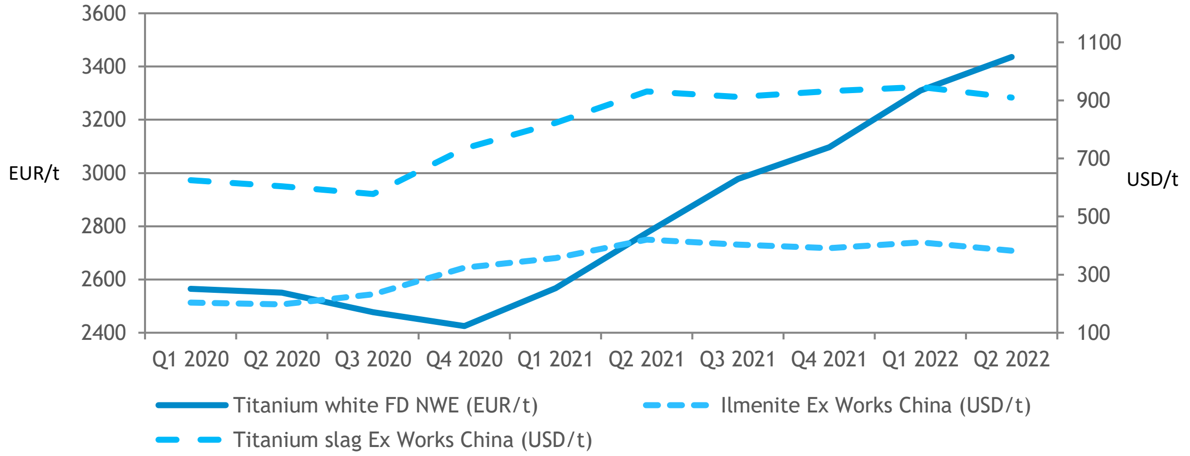
Titanium white

In the first half of 2022, the average price of titanium white in Europe rose by 26% year on year. In the first quarter of 2022, the European titanium white market continued to be affected by production constraints, strong demand outpacing supply, and cost pressures. Demand for TiO_2 imports from Asia was low due to high costs of freight and long delivery times. As costs became even more volatile following the outbreak of the Russian and Ukrainian conflict, a proposal was put forward to review prices on a monthly basis. Customers cut off from the Ukrainian product looked for volumes in Europe and China. The second quarter saw record high prices, which met with strong buyer resistance. The price of titanium white began to grow in the first quarter of 2021, mainly due to the lack of market equilibrium caused by the coronavirus pandemic, uncompetitive exports from Asia, high costs, inflation and the conflict in Ukraine. Freight rates from Asia to Europe and spot prices in China decreased, which aroused interest among some European customers in the product from China. Security of supply remained the main problem of the titanium white market in the first half of 2022. Chinese export prices fell amid weak domestic demand in China. Such a situation may encourage European buyers to be interested again in Chinese products. Later this year we are highly likely to see more intensified competition from Chinese exports in the European market, but a key factor in the development of the situation will continue to be delivery times for deep sea shipping.

High inflation, unstable economy and high prices are factors aggravating the demand, which has been weakening in key segments. Customers remain cautious in their purchasing decisions and consumer confidence in the EU and the euro zone is declining. This situation has prompted certain buyers to reduce their purchases. The automotive sector remains slow due to shortages of components and disruptions in the supply chain, with the situation further aggravated by the ongoing military aggression against Ukraine. The DIY sector decelerated as many home repair or renovation projects had been completed during the last two pandemic years, and now consumer spending is centred around other areas. The holiday period also affects purchasers' decisions to reduce purchases, especially in view of high inflation, which may further weaken demand in the third quarter. The construction segment is in a slump due to higher interest rates and constant uncertainty among buyers. Customers strive to alleviate the increases proposed by western players, focusing on price control and even on price reductions.

Consumers' purchasing power has decreased in view of the growing inflation in Europe, aggravated by the ongoing conflict in Ukraine. This situation introduces uncertainty about the future development of demand in the coming months. Following the decrease in spot prices in China, as well as the decrease in freight rates, some European customers have become interested in the Chinese product. If prices continue to rise, this may lead to a shift of orders in favour of Chinese products in the following months. It is highly likely that imports of Chinese volumes to Europe will increase, but long delivery times and deep sea shipping costs remain key issues. The sentiments on the titanium white market may be further worsened by economic turbulence due to the ongoing military aggression, the overall economic uncertainty, as well as higher costs of energy, gas and titanium-bearing minerals.

Prices of titanium white, ilmenite and titanium slag



Source: Company data.

Ilmenite and titanium slag

Prices of ilmenite available in Europe have been growing ever since the beginning of 2021 due to sharp increases in the prices of titanium white and its limited availability. In the second quarter of 2022 on the European market, ilmenite prices grew 40% year on year and 10%-15% quarter on quarter. In the second quarter of 2022, China recorded a 9% year-on-year drop in the prices of locally produced ilmenite due to the prevailing crisis on the titanium white market caused by lockdowns introduced in many cities to contain the spread of coronavirus. Compared with the previous quarter, the prices of Chinese ilmenite fell 7% in the second quarter of 2022. In the first half of 2022, prices of titanium slag available in Europe for titanium white production by the sulfate process rose by 10%–15% year on year. Due to a slowdown on the local market, the price of Chinese slag rose at a rate lower compared with its counterpart available in Europe, by 6% year on year.

The slowdown of the titanium white market in Europe is expected to curb increases in prices of titanium-bearing minerals in the second half of the year. On the other hand, rising energy costs may hinder the negotiation of price reductions for these minerals. In addition, the supply and demand balance, especially on the supply side, will prevent a stronger price decline. However, this will depend on the availability of raw materials in Europe, affected by production constraints in Ukrainian mines due to the ongoing military conflict. This problem may be counteracted to some extent by main market players' decision to resume the production of minerals and abandon plans to close the mines.

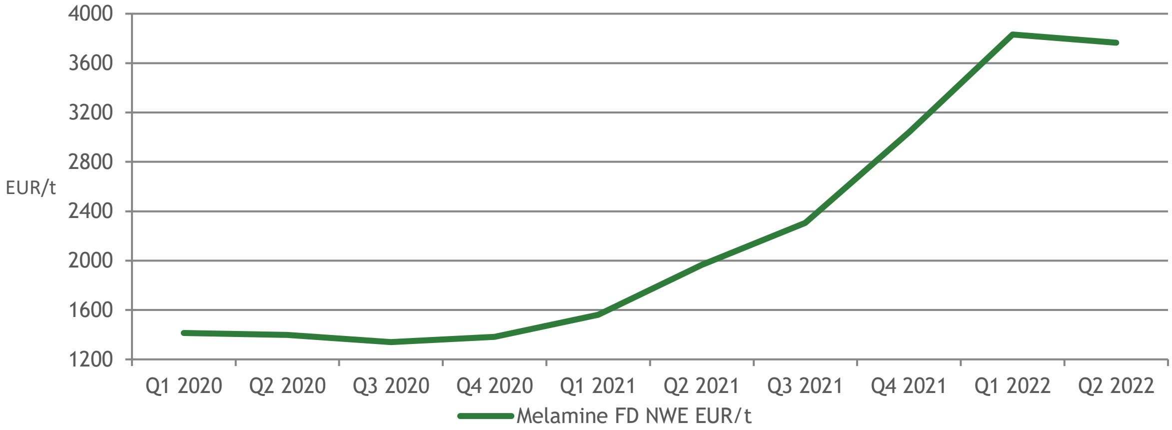
Melamine

In the first half of 2022, contract prices of melamine in Europe rose 120% year on year and 43% relative to the previous half-year. Spot prices went up 85% year on year, with a marginal (less than 1%) decrease relative to the previous half-year.

In the reporting period, the melamine market was affected by the geopolitical situation caused by Russia's invasion of Ukraine. In February, the situation led to an increase in prices of natural gas, impacting production costs and producers' margins. The continued relatively strong interest in DIY products coincided with a high level of activity in the repair and construction sector. The remaining sectors experienced a slump in demand due to the COVID control measures imposed in China and rising inflation. Production problems occurred in Europe and the US. In Asia, the decrease in supply was rather due to a lower interest in melamine.

Consumers' expectations regarding demand for melamine in Europe in the second half of the year are quite pessimistic. High prices of raw materials and energy as well as soaring inflation rates drive up production costs for melamine and its derivatives, which undermines buying sentiment. In July, the anti-dumping duties on imports of melamine from China into the EU were terminated. This creates uncertainty as to changes in melamine trade flows in the near future.

Prices of melamine



Source: Company data.

ENERGY

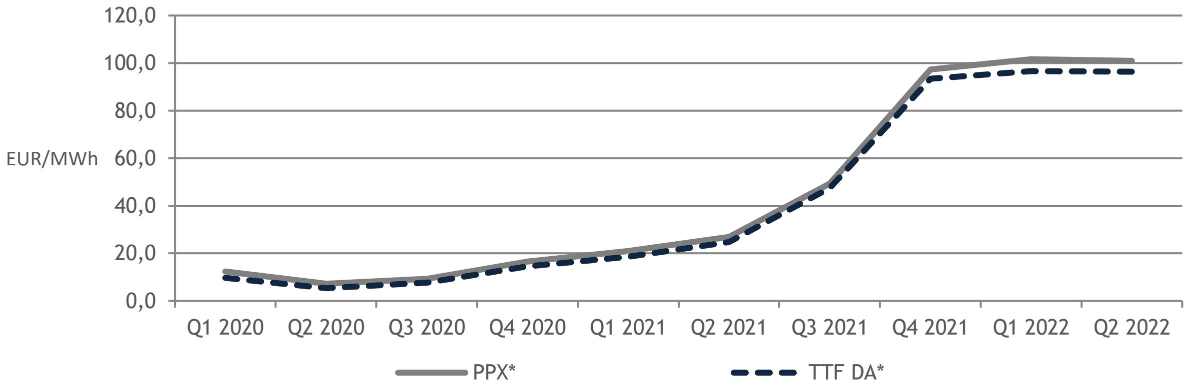
Natural gas

After a significant decrease in gas prices at the end of the year, until mid-February prices were subject to strong daily fluctuations, moving in the range of EUR 70–95/MWh, with a slow downward trend. Prices were falling due to favourable weather conditions and growing LNG supplies to European terminals. Several short-term price corrections were due to reduced gas flows from Russia through the Yamal pipeline and Ukraine, emergency shutdown on the largest Norwegian field Troll, suspension of coal exports by Indonesia and suspension of certification of Nord Stream 2 in Germany. The market also showed growing concern about the amassing of Russian troops at the border with Ukraine.

Gas prices in Europe skyrocketed in the wake of Russia's attack on Ukraine. The possibility of Gazprom reducing gas supplies and the potential need to increase gas withdrawal from the heavily depleted storage facilities lessened the importance of fundamental factors and shifted the weight towards geopolitical ones. The market was affected by reports from the east and concerns about the scope of sanctions, which were initially also to include natural gas. On March 7th, spot gas prices on TTF (Title Transfer Facility) hit a new all-time high of EUR 345/MWh. Prices of other energy commodities rose too. Following Gazprom's announcement that despite the ongoing war gas would be supplied to Europe as per existing contracts, its prices went quickly down and moved within the range of EUR 90–110/MWh. With time, traders got used to the unstable situation, which led to a lower risk premium in European gas prices. Gas prices began to grow towards the end of the first quarter as the Russian Federation's President announced the demand that payments for Russian gas be made in the rouble. The price rose to EUR 125/MWh.

The second quarter began with another drop in gas prices when it turned out that the requirement to pay for gas in Russian currency would not be strictly enforced. At the same time, LNG supplies and regasification remained very high and gas stocks grew faster than the long-term average, which was supported by EC's work on regulations requiring EU Member States to fill their storage facilities to at least 80% of capacity by the beginning of November. When on April 27th Russia discontinued gas supplies to Poland and Bulgaria as the two countries refused to make payments in the rouble, the market responded with a nervous, albeit short lived, price surge. Subsequently, due to warmer weather and growing wind power generation, which reduced demand for gas from households and the power generation sector, the decline continued with one major correction in mid-May following the Ukrainian operator's announcement of a force majeure event at the Sokhranovka entry point on the border with Russia. After Russian armed forces took control of the Sokhranovka point, gas flow through Ukraine decreased by one third. However, later in the month and in early June gas prices were decreasing. On June 8th, the MA contract on TTF was already quoted at EUR 74/MWh, when the market was surprised by the news of explosion at the LNG terminal in Freeport. Due to the explosion, the export capacity for liquefied gas from the US will be reduced by approximately 20% at least until October. The price pressure was further heightened by Russia when it reduced the supplies to 40% of Nord Stream 1's transmission capacity, citing problems with overhaul of compressors due to Western sanctions, the genuine reason being probably the visit of the leaders of Germany, France and Italy in Kiev. At the end of June, Russia had completely stopped LNG transmission through Turkstream for the maintenance period and indicated the possibility of limiting or suspending supplies after the maintenance shutdown of Nord Stream 1 scheduled for the period between July 10th and 20th. These developments pushed prices up to EUR 140/MWh at the end of the first half of the year.

Prices of natural gas



** Excluding transmission.*

Source: Company data.

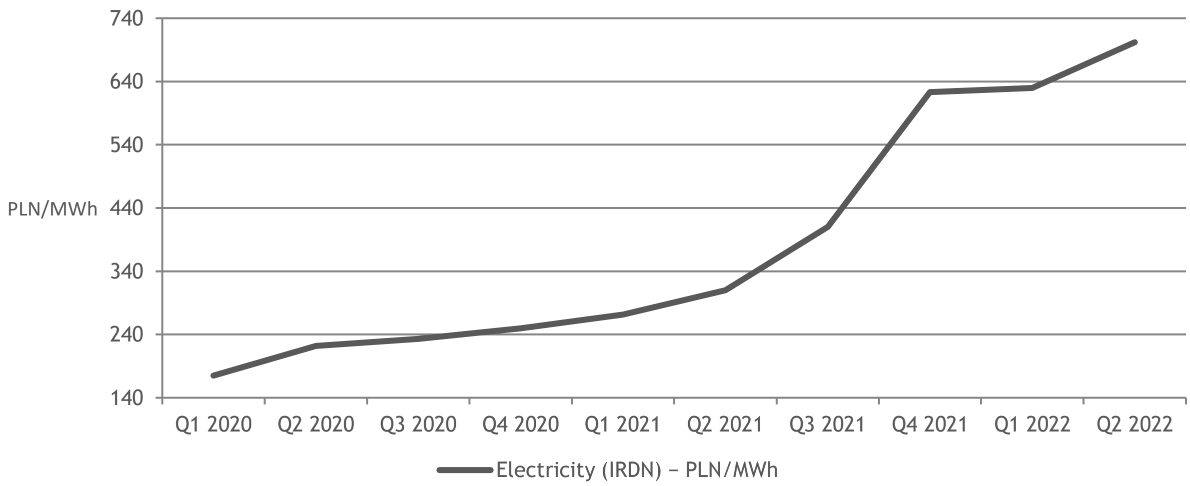
Given the uncertainty of gas supplies from Russia and the excess of demand over supply in the European gas market driven by the need to stock up on gas before the next winter, price pressures and relatively high gas prices should be expected also throughout the rest of the year.

Electricity

The beginning of the first half of 2022 was marked by a slower growth of average electricity prices. However, later on during the reporting period, the prices rose by 11% relative to the first quarter. The year-on-year increase was 230%. Led mainly by higher prices of CO_2 emission allowances (which reached new highs of over EUR 96 per allowance in the first quarter of 2022 and remained over EUR 80 in the second quarter), volatility of demand, changes in the structure of generation sources, weather conditions, and cross-border capacities. The factors which will influence electricity prices in the coming months include:

- situation in Poland and Europe related to higher demand for electricity;
- significant price fluctuations in the other commodity markets, caused by the armed conflict in Ukraine;
- sensitivity to movements in market prices of CO_2 emission allowances.

Prices of electricity



IRDN – average price weighted by the volume of all transactions on a trading day, calculated after the delivery date for the entire day.

Source: Company data.

Coal

The first half of 2022 saw continued growth in coal prices, which rose by 345% year on year and 219% on the previous half-year. The main reason behind this price trend is the supply crisis related to the war in Ukraine and the high risk of failure to maintain uninterrupted supply of energy commodities.

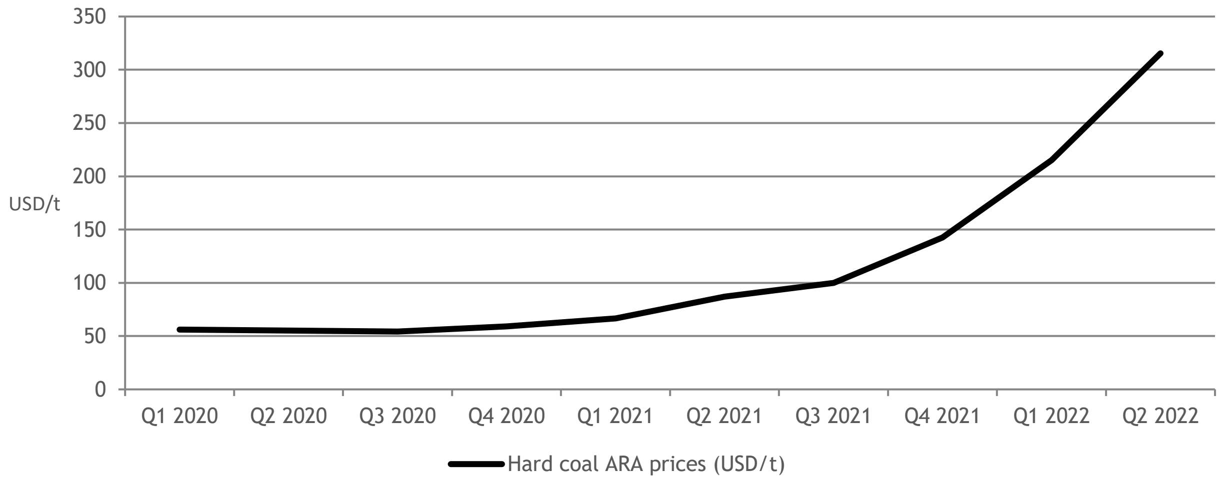
In addition, a major and growing risk is related to the availability of hard coal, which was largely imported from Russia before the outbreak of war in Ukraine, from domestic sources. For detailed information, see the interim condensed consolidated financial statements of the Grupa Azoty Group for the six months ended June 30th 2022.

In the coming months, coal prices will be driven by:

- the geopolitical situation;
- the sanctions on Russian commodities;
- growing demand for coal in Europe;
- price fluctuations in other commodity markets.

Due to the ongoing armed conflict, prices of energy commodities are bound to remain high in the near future, with possible supply disruptions leading to higher price pressures.

Prices of hard coal



Source: Company data.

(all amounts in PLN ‘000 unless indicated otherwise)

2.3. Key financial and economic data

2.3.1. Consolidated financial information

Consolidated data

Item	H1 2022	H1 2021	change	% change
Revenue	13,236,932	6,534,655	6,702,277	102.6
Cost of sales	(9,933,960)	(5,244,064)	(4,689,896)	89.4
Gross profit	**3,302,972**	**1,290,591**	**2,012,381**	**155.9**
Selling and distribution expenses	(612,279)	(492,393)	(119,886)	24.3
Administrative expenses	(465,709)	(407,570)	(58,139)	14.3
Profit on sales	**2,224,984**	**390,628**	**1,834,356**	**469.6**
Net other income/(expenses)	(10,652)	(8,087)	(2,565)	(31.7)
Operating profit	**2,214,332**	**382,541**	**1,831,791**	**478.8**
Net finance income/(costs)	(187,606)	(48,983)	(138,623)	(283.0)
Share of profit of equity-accounted investees	7,861	8,046	(185)	(2.3)
Profit before tax	**2,034,587**	**341,604**	**1,692,983**	**495.6**
Income tax	(352,627)	(87,888)	(264,739)	301.2
Net profit	**1,681,960**	**253,716**	**1,428,244**	**562.9**
EBIT	**2,214,332**	**382,541**	**1,831,791**	**478.8**
Depreciation and amortisation	359,136	383,798	(24,662)	(6.4)
Impairment losses	1,511		1,511	
EBITDA	**2,574,979**	**766,339**	**1,808,640**	**236.0**

Source: Company data.

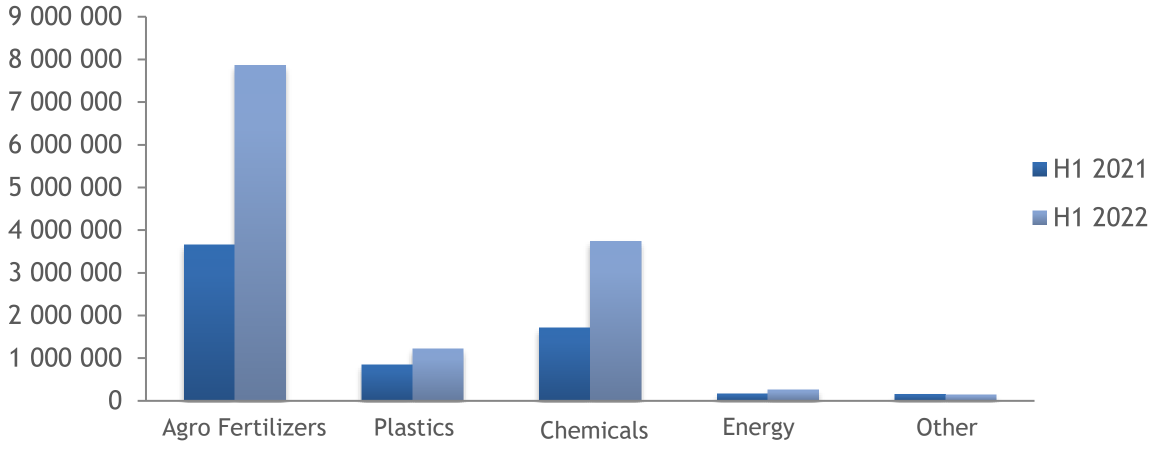
2.3.2. Segment results

EBIT by segment

	Agro Fertilizers	Plastics	Chemicals	Energy	Other Activities
External revenue	7,866,369	1,224,791	3,743,896	262,678	139,198
EBIT	1,305,852	87,922	762,832	24,964	32,762
EBITDA	1,471,672	119,197	807,925	80,117	96,068

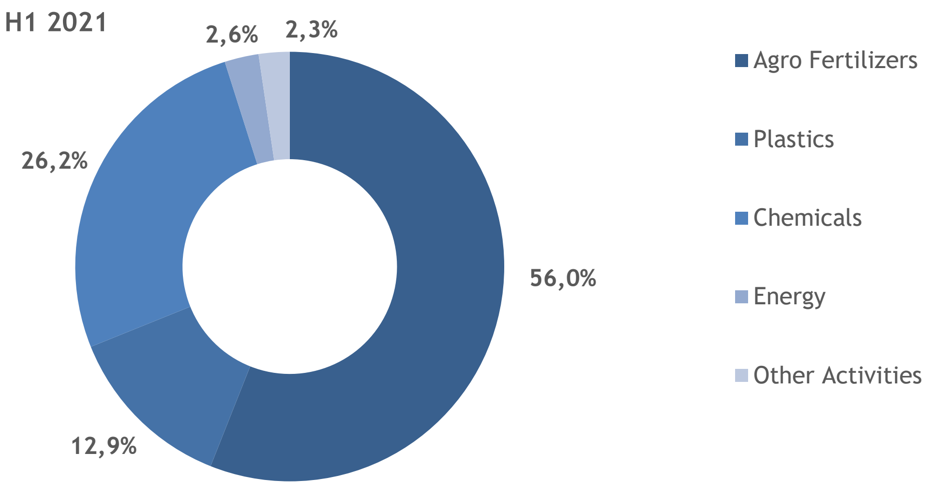
Source: Company data.

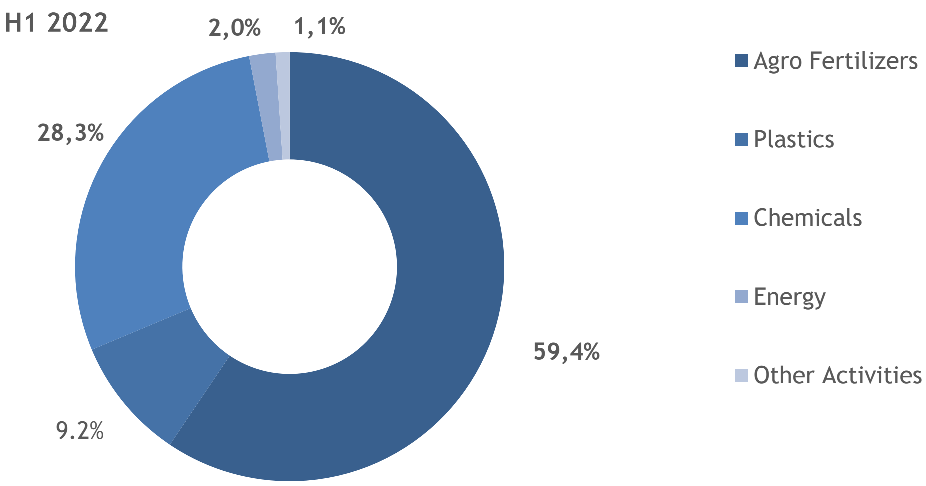
Revenue by segment



Source: Company data.

Revenue by segment





Source: Company data.

(all amounts in PLN '000 unless indicated otherwise)

Agro Fertilizers

In the six months of 2022, revenue in the Agro Fertilizers segment came in at PLN 7,866,369 thousand and accounted for 59.4% of the Group's total revenue. The segment's revenue went up 114.9% year on year, and its share in the Group's total revenue expanded by 3.4 pp.

The Agro Fertilizers segment reported an EBIT of PLN 1,305,852 thousand and a positive EBITDA.

Domestic market accounted for 62% of the segment's total sales.

Plastics

In the first half of 2022, revenue in the Plastics segment was PLN 1,224,791 thousand and accounted for 9.2% of the Group's total revenue. Year on year, the segment's revenue increased by 45.4%. The segment delivered an EBIT of PLN 87,922 thousand and a positive EBITDA.

Foreign markets accounted for 89% of the segment's total revenue.

Chemicals

In the first half of 2022, revenue in the Chemicals segment amounted to PLN 3,743,896 thousand, having increased 118.7% year on year. The segment's revenue accounted for 28.3% of the Group's total revenue. Its EBIT came in at PLN 762,832 thousand, with a positive EBITDA.

Foreign markets accounted for 56% of the segment's total sales.

Energy

In the first half of 2022, revenue in the Energy segment was PLN 262,678 thousand and accounted for approximately 2.0% of the Group's total revenue. Year on year, the segment's revenue increased by 56.4%. EBIT was positive, at PLN 24,964 thousand.

Other Activities

In the first half of 2022, the Other Activities segment reported revenue of PLN 139,198 thousand, down 8.6% year on year, accounting for 1.1% of the Group's total revenue. The segment's operations generated a profit on sales and positive EBIT of PLN 32,762 thousand.

Structure of operating expenses

Operating expenses by nature of expense

	H1 2022	H1 2021	y/y change	% change
Depreciation and amortisation	356,928	381,460	(24,532)	(6.4)
Raw materials and consumables used	8,880,790	3,871,695	5,009,095	129.4
Services	807,024	639,788	167,236	26.1
Salaries and wages, including surcharges, and other benefits	1,030,740	957,135	73,605	7.7
Taxes and charges	365,395	294,261	71,134	24.2
Other	79,814	78,698	1,116	1.4
Total	**11,520,691**	**6,223,037**	**5,297,654**	**85.1**

Source: Company data.

(all amounts in PLN '000 unless indicated otherwise)

Structure of operating expenses [%]

	H1 2022	H1 2021
Depreciation and amortisation	3.1	6.1
Raw materials and consumables used	77.1	62.2
Services	7.0	10.3
Salaries and wages, including surcharges, and other benefits	8.9	15.4
Taxes and charges	3.2	4.7
Other	0.7	1.3
Total	**100.0**	**100.0**

Source: Company data.

The individual items of operating expenses changed year on year mainly as a result of the following factors:

- raw materials and consumables used – higher prices of mainly gas, petroleum-derived raw materials, phosphate rock, potassium chloride and electricity purchased, with reduced consumption volumes,
- services – higher costs of transport services as a result of an increase in the costs of delivery handling and subcontractor services used to carry out maintenance works,
- taxes and charges – increase costs related to CO_2 emission allowances,
- salaries and wages – increase due to higher employee benefits.

2.3.3. Assets, equity and liabilities

Structure of assets

	H1 2022	H1 2021	y/y change	% change
Non-current assets, including:	**16,130,510**	**14,463,144**	**1,667,366**	**11.5**
Property, plant and equipment	12,988,289	11,534,222	1,454,067	12.6
Intangible assets	1,000,857	1,004,230	(3,373)	(0.3)
Right-of-use assets	816,253	835,115	(18,862)	(2.3)
Other receivables	573,999	524,749	49,250	9.4
Goodwill	325,186	320,620	4,566	1.4
Current assets, including:	**8,701,545**	**5,732,719**	**2,968,826**	**51.8**
Inventories	3,011,863	1,548,238	1,463,625	94.5
Trade and other receivables	2,835,841	3,079,793	-243,952	(7.9)
Cash and cash equivalents	866,981	972,038	-105,057	(10.8)
Property rights	1,944,294	81,455	1,862,839	2,287.0
Total assets	**24,832,055**	**20,195,863**	**4,636,192**	**23.0**

Source: Company data.

Structure of equity and liabilities

	H1 2022	H1 2021	y/y change	% change
Equity	**10,919,723**	**8,509,169**	**2,410,554**	**28.3**
Non-current liabilities, including:	**6,527,971**	**5,897,809**	**630,162**	**10.7**
Borrowings	4,218,574	3,431,418	787,156	22.9
Other financial liabilities	669,954	596,876	73,078	12.2
Deferred tax liabilities	423,726	540,570	(116,844)	(21.6)
Employee benefit obligations	398,131	477,899	(79,768)	(16.7)
Lease liabilities	358,082	350,284	7,798	2.2
Provisions	245,813	214,606	31,207	14.5
Government grants	193,321	197,203	(3,882)	(2.0)

(all amounts in PLN '000 unless indicated otherwise)

	H1 2022	H1 2021	y/y change	% change
Current liabilities, including:	**7,384,361**	**5,788,885**	**1,595,476**	**27.6**
Trade and other payables	4,859,189	2,915,492	1,943,697	66.7
Other financial liabilities	367,637	1,623,135	(1,255,498)	(77.4)
Borrowings	686,098	414,611	271,487	65.5
Provisions	73,432	41,330	32,102	77.7
Government grants	977,098	618,095	359,003	58.1
Total equity and liabilities	**24,832,055**	**20,195,863**	**4,636,192**	**23.0**

Source: Company data.

2.3.4. Financial ratios

Profitability ratios [%]

	H1 2022	H1 2021
Gross profit margin	25.0	19.7
EBIT margin	16.7	5.9
EBITDA margin	19.5	11.7
Net profit margin	12.7	3.9
ROA	6.8	1.3
ROCE	12.7	2.7
ROE	15.4	3.0
Return on non-current assets	10.4	1.8

Source: Company data.

Ratio formulas:
Gross profit margin = gross profit (loss) / revenue (statement of comprehensive income by function)
EBIT margin = EBIT / revenue
EBITDA margin = EBITDA / net revenue
Net margin = net profit (loss) / revenue
Return on assets (ROA) = net profit (loss) / total assets
Return on capital employed (ROCE) = EBIT / TALCL, that is EBIT / total assets less current liabilities
Return on equity (ROE) = net profit (loss) / equity
Return on non-current assets = net profit (loss) / non-current assets

Liquidity ratios

	H1 2022	H1 2021
Current ratio	1.2	1.0
Quick ratio	0.8	0.7
Cash ratio	0.1	0.2

Source: Company data.

Ratio formulas:
Current ratio = current assets / current liabilities
Quick ratio = (current assets - inventories) / current liabilities
Cash ratio = (cash + other financial assets) / current liabilities

Profitability ratios

	H1 2022	H1 2021
Inventory turnover	55	53
Average collection period	39	85
Average payment period	88	101

(all amounts in PLN '000 unless indicated otherwise)

	H1 2022	H1 2021
Cash conversion cycle	6	37

Source: Company data.

Ratio formulas:
*Inventory turnover = inventories * 180 / cost of sales*
*Average collection period = trade and other receivables * 180 / revenue*
*Average payment period = trade and other payables * 180 / cost of sales*
Cash conversion cycle = inventory turnover + average collection period - average payment period

Debt ratios [%]

	H1 2022	H1 2021
Total debt ratio	56.0	57.9
Long-term debt ratio	26.3	29.2
Short-term debt ratio	29.7	28.7
Equity-to-debt ratio	78.5	72.8
Interest cover ratio	2,744.7	984.3

Source: Company data.

Ratio formulas:
Total debt ratio = total liabilities / total assets
Long-term debt ratio = non-current liabilities / total assets
Short-term debt ratio = current liabilities / total assets
Equity-to-debt ratio = equity / current and non-current liabilities
Interest cover ratio = (profit before tax + interest expense) / interest expense

2.4. Financial liquidity

The Parent and the Group's other leading companies are fully solvent, with a sound credit standing. In the six months ended June 30th 2022, the Group paid all of its liabilities under borrowings and other financial liabilities when due, and there is no threat to its ability to continue servicing its debt.

The liquidity management policy operated by the Group consists in maintaining surplus cash and available credit facilities as well as limits under the intragroup financing agreement (one purpose of which is to effectively distribute funds within the Group), and in ensuring that their level is safe and adequate to the scale of the Group's business.

The Group may defer the payment of amounts due to suppliers and service providers under reverse factoring agreements executed together with the Group companies. The amounts under the agreements were increased by a total of PLN 800m in the first half of 2022, to PLN 2,721m. The Group is also able to finance its receivables from trading partners under factoring agreements executed together with the Group companies, for up to PLN 750m.

The Group is monitoring the spread of the COVID-19 pandemic and its impact on the Group's economic environment. As at the date of this Report, the Group did not record any material adverse impact of the COVID-19 pandemic on its financial position.

2.5. Borrowings

In the first half of 2022, the Group paid all of its borrowing-related liabilities when due, and there is no threat to its ability to continue servicing its debt. The Grupa Azoty Group has access to umbrella overdraft limits related to the PLN and EUR physical cash pooling arrangements and under a multi-purpose credit facility, which may be used as directed by the Parent at times of increased demand for funding from any of the Group companies. The Group also has access to bilateral overdraft limits and multi-purpose facilities available to the Group companies.

On June 29th 2022, COMPO EXPERT repaid the EUR 38m credit facility with Banco Santander on the due date.

(all amounts in PLN '000 unless indicated otherwise)

The aggregate amount of the Group's undrawn overdraft and multi-purpose credit facilities as at June 30th 2022 was PLN 1,023m. At the same time, the Group had undrawn limits under corporate credit facilities of PLN 1,111m and PLN 18m in funds available under special purpose loans.

In addition, the amount of credit limits available to Grupa Azoty POLYOLEFINS under the Credit Facilities Agreement for the financing of the Polimery Police project was PLN 4,375m.

As at June 30th 2022, under the agreements specified above the Group had access to total credit limits of approximately PLN 6,527m (of which limits under Grupa Azoty POLYOLEFINS special purpose credit facilities for the financing of the Polimery Police project were PLN 4,375m, and other limits available to the Group amounted to PLN 2,152m).

The Group's financial standing is sound, and there are no material threats or risks of its deterioration in the future. The Group complies with the uniform covenants of its facility agreements which enable it to significantly increase financial debt when and as needed.

2.6. Type and amounts of one-off items affecting the assets, equity and liabilities, capital, net profit/loss or cash flows

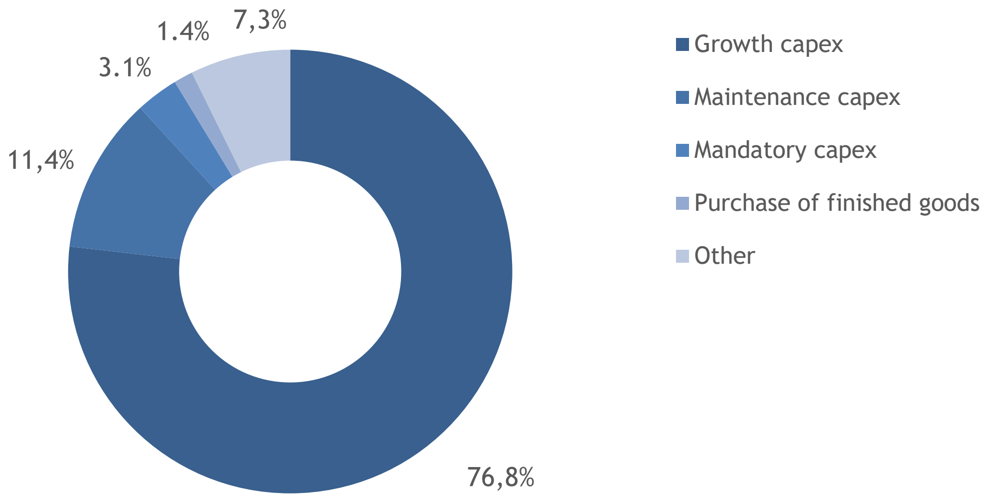
There were no other one-off items that would materially impact the Group's assets, equity and liabilities, capital, net profit/loss or cash flows.

2.7. Key investment projects

In the first half of 2022, the Group incurred expenditure of PLN 1,337,233 thousand to purchase intangible assets and property, plant and equipment.
Structure of capital expenditure:

• Growth capex	PLN 1,026,495 thousand
• Maintenance capex	PLN 152,662 thousand
• Mandatory capex	PLN 40,982 thousand
• Purchase of finished goods	PLN 19,537 thousand
• Other (major overhauls, components, catalysts, etc.)	PLN 97,557 thousand

Structure of the Group's capital expenditure in the first half of 2022



Source: Company data.

Below is presented Grupa Azoty Group's capital expenditure in the six months ended June 30th 2022:

- Parent PLN 92,360 thousand
- Grupa Azoty POLYOLEFINS PLN 918,789 thousand
- Grupa Azoty PUŁAWY Group PLN 127,893 thousand
- Grupa Azoty KĘDZIERZYN Group PLN 89,598 thousand
- Grupa Azoty POLICE Group PLN 59,691 thousand
- COMPO EXPERT PLN 14,149 thousand
- Grupa Azoty KOLTAR PLN 9,159 thousand
- Grupa Azoty SIARKOPOL PLN 11,372 thousand
- Grupa Azoty PKCH PLN 5,026 thousand
- Grupa Azoty COMPOUNDING PLN 8,966 thousand
- Grupa Azoty ATT POLYMERS PLN 230 thousand

Key investment projects implemented by the Group as at June 30th 2022 (PLN '000)

Project name	Project budget	Expenditure incurred	Expenditure incurred in H1 2022	Project purpose	Scheduled completion date
Parent					
Neutralisation unit (for ammonium nitrate)	130,000	2,804	845	The purpose of the project is to construct a new unit for the production of concentrated ammonium nitrate solution (neutralisation unit). The objective of the project is to ensure continuity and improve the efficiency of production of nitrate fertilizers. The project will help reduce heat consumption and contain the environmental impact of the production process, also improving cost competitiveness.	2024
Grupa Azoty POLYOLEFINS					
Polimery Police	7 210 957*	4,024,738	918,789	The project is to build an on-purpose propylene dehydrogenation plant (PDH) and a polypropylene production plant with associated infrastructure, including the expansion of the Police Sea Port to include a propane and ethylene handling and storage terminal.	2023
Grupa Azoty POLICE					
Making production of demineralised water independent of variable salinity of the Oder River and increasing the ability to produce special waters in the water preparation units	108,000	101,490	6,452	The upgrade and expansion of the water treatment and demineralisation station will help protect Grupa Azoty POLICE against periods of elevated salinity in the Oder riverand will enable the use of the Oder river as the only supply source. The project will also secure the supply of demineralised water to Grupa Azoty POLYOLEFINS units.	2022
Grupa Azoty PUŁAWY					
Construction of coal-fired power generation unit	1,200,000	965,932	6,647	Bringing Grupy Azoty PUŁAWY's energy generation units in line with the latest environmental	2023

(all amounts in PLN '000 unless indicated otherwise)

Project name	Project budget	Expenditure incurred	Expenditure incurred in H1 2022	Project purpose	Scheduled completion date
				requirements, while increasing the share of the autoproducer CHP plant in the electricity volumes consumed by the production units, and ensuring uninterrupted supplies of energy (process steam and heating water).	
Upgrade of existing nitric acid production units and construction of new nitric acid production and neutralisation units and units for production of new fertilizers based on nitric acid	695,000	396,891	3,789	Increase in the efficiency of nitric acid production and the economics of production of nitric acid-based fertilizers. Any excess of nitric acid will be processed on the new line for the production of speciality fertilizers: magnesium nitrate, calcium nitrate and potassium nitrate.	2028
Facility for production of granulated fertilizers based on ammonium nitrate	430,000	419,856	5,125	Improvement of the quality of fertilizers by applying modern mechanical granulation. The key element of the complex is two lines for manufacturing granulated fertilizers based on ammonium nitrate melt as the feedstock for granulated ammonium nitrate and calcium ammonium nitrate.	2022
Upgrade of steam generator OP-215 No. 2 to reduce NO_x emissions	145,000	111,474	20,736	Bringing the generator into compliance with new NOx emission standards and refurbishing the generator, which is to become a principal generating unit at the captive CHP plant along with generators nos. 4 and 5.	2023
Replacement of the TG-1 turbine generator set	85,000	76,508	9,278	Increasing the efficiency of electricity and heat cogeneration by replacing the TG-1 30 MWe pass-out and condensing turbine with a new 34 MWe turbine as part of the power system upgrade.	2022
Grupa Azoty KĘDZIERZYN					
Upgrade of the synthesis gas compression unit supplying the Ammonia Plant	180,000	112,724	26,982	Rebuilding the synthesis gas compression capacities for the Ammonia Plant through the installation of new compressors. The project will reduce maintenance expenditure and the energy intensity of the ammonia production process and significantly lower department overheads.	2023
Peak-load/reserve boilers	110,087	37,416	18,574	The peak-load/reserve boiler house as a peak-load source will operate in conjunction with steam generators in the existing CHP plant; in the event of downtime of coal-fired boilers, the peak-load/reserve boiler house will operate as a stand-alone reserve steam generator.	2024
Purchase and installation of a new oxygen compressor	72,800	60,105	806	The objective is to replace old steam turbine driven oxygen compressors K-101 A and K-101 B with one electric compressor. The project follows the concept of innovative management of heat	2023

(all amounts in PLN '000 unless indicated otherwise)

Project name	Project budget	Expenditure incurred	Expenditure incurred in H1 2022	Project purpose	Scheduled completion date
				from ammonia production processes as an alternative to heat generation in coal-fired boilers.	
2-ethylhexanoic acid unit	120,000	2,886	778	Enabling the production of 20,000 tonnes of 2-EHA per year.	2024
Upgrade of the urea production line	172,447	1,240	1,240	Improving consumption rates for utilities and raw materials/feedstocks, improving environmental performance of the unit and increasing daily production capacity to 780 tonnes, which will step up the production of technical-grade urea and significantly improve the overall balance of liquid ammonia and carbon dioxide.	2025

* The project budget translated into PLN at the PLN/USD mid exchange rate assumed in the project financial model. The project budget approved by corporate bodies is USD 1,837,998 thousand.

Source: Company data.

2.8. Factors which will affect the Group's performance over at least the next reporting period

Exchange rates

Given the current situation in financial markets driven by the war in Ukraine, the global inflationary pressures and the monetary policy tightening by central banks, the prospects of Europe plunging into an energy crisis if supplies from Russia continue to be limited or are stopped altogether, give rise to fear of a global recession. Unrest in the financial markets will adversely affect the Polish currency. The Polish currency is also internally weak, which is linked to the rising negative real interest rate in Poland, the growing risk of non-payment of EU funds under the National Recovery Plan and divergence in national monetary and fiscal policies. Despite the growing interest rate disparity between Poland on the one side and the euro area and the United States on the other side, the Polish currency may remain weak in the second half of 2022.

The Group expects that in the second half of 2022 the exchange rate of the Polish złoty will remain at the currently observed high levels, with strong market volatility bound to continue. A stronger appreciation of the złoty is expected in the middle of the fourth quarter 2022, when a significant majority of the negative factors will have already been discounted, the inflation pressure will start to subside and the main central banks will probably revise their monetary policies in the face of recession.

The second half of the year may see a temporary depreciation of the złoty in relation to both the euro and the US dollar. The weakening of the złoty in relation to convertible currencies should not have any significant impact on the Group's planned performance in the second half of 2022 in terms of its foreign currency exposure.

Interest rates in Poland

In the first half of 2022, domestic interest rates were raised to 6.0% (to reach the current level of 6.5% in July), with the National Bank of Poland approaching the end of a contractionary monetary policy. Financial markets expect to see a maximum of three further interest rate increases in Poland and the series of reference rate increases ending at 7.0-7.5%. Based on forward rate contracts currently executed in Poland, the 3M WIBOR rate is estimated to rise to approximately 7.5% over the next six months. At the same time, given the still high inflation rate, a scenario where interest rates grow even up to 8% cannot be ruled out, but this is not a base case scenario. In the base case scenario, the Grupa Azoty Group assumes that the current interest rates will increase by the end of the third quarter of 2022 with respect to the currencies in which the Group finances its operations. This will increase the Group's financing costs, while ensuring further safe debt servicing, also taking into account the planned increase in the financing of investing activities. The debt service costs will then stabilise at a high level in PLN and relatively low in EUR and USD.

There continues a growing discrepancy between the monetary policies pursed by the United States and the euro area. While the FED forecasts three to four further interest rate hikes in 2022, the ECB only began to tighten its monetary policy in July 2022. In the coming months, the market consensus is that there will be two to three increases in the euro area by the end of 2022. The war in Ukraine has a stronger negative impact on the European than on the US economy. As a result, the euro (and the złoty) will remain under pressure, while for the US dollar there is a further opportunity to strengthen.

Inflation remains a key economic problem in Poland and globally. Financial markets are increasingly concerned by the slowdown of economic growth and the possibility of recession. In the euro area, the economy is already probably in stagnation or has been recording declines in GDP. Poland has seen a marked decrease in the GDP growth rate. At the end of 2022 and beginning of 2023, we may see a negative GDP growth. This trend is likely to continue at least until the first quarter of 2023.

Prices of CO_2 emission allowances

According to forecasts by the largest financial institutions, the market for carbon allowances will be marked by strong volatility until the end of the year. At present, the Group notices two key drivers of EUA prices. On the one hand, concerns over the imminent recession in Europe and the ongoing correction in the commodity markets should exert a downward pressure on the EUA prices but, on the other hand, the current and anticipated increase in energy produced by burning coal in 2022-2023 compared to energy produced by burning gas will drive up the prices. The EUA market should remain in a broad consolidation range of EUR 70-95 until the end of the year. If the recession scenario materialises, a temporary bearish breakout from the above area is possible.

Based on the adopted joint model for managing CO_2 emission allowances and approved purchase plans, Grupa Azoty Group companies captured the opportunity created by the downward correction in the first half of 2022 to purchase allowances to secure part of the required EUA volumes for 2023. At the same time, the Group companies have secured all EUAs required for 2022.

Regulatory area

New EU Fertilising Products Regulation (Regulation (EU) 2019/1009 of the European Parliament and of the Council of June 5th 2019)

The Regulation applies from July 16th 2022 and opens the single market to, in addition to mineral fertilizers, fertilizing products which have not yet been covered by harmonised regulations: organic fertilizers, organic and mineral fertilizers, soil improvers, inhibitors, biostimulants, growing media and mixtures. The Regulation lays down common rules on the safety, quality and labelling of fertilising products. The regulation for the first time introduces limits for toxic contaminants to ensure a high level of soil protection and reduce health and environmental risks.

Common Agricultural Policy (CAP)

Following the reform of the CAP for 2023–2027, EU Member States are required to submit national strategic plans to the European Commission. Poland submitted its strategic plan on December 22nd 2021, and in the first half of 2022 the final form of the plan was pending agreement with the EC. Changes in animal welfare, eco-schemes, options for the implementation of coal farming and nutrient management, including the development of and compliance with a fertilisation plan and good agricultural and environmental conditions (GAEC), were discussed.

Monitoring framework for circular economy

From March 30th to May 22nd 2022, the European Commission held consultations on the monitoring framework for circular economy. The purpose of the framework is to monitor progress towards a circular economy and help to determine whether the EU and national policies and actions contribute to its creation. The EU submitted a new Circular Economy Action Plan for a cleaner and more competitive Europe.

Farm to Fork strategy

From February 16th to March 16th 2022, the EC received comments on the assessment of the effects of the directive on soil health, including soil protection, sustainable soil management in the EU and soil restoration. The aim of the soil health law proposal is to specify the conditions for a healthy soil, determine options for soil monitoring, and lay out rules conducive to sustainable soil use and restoration.

February 7th 2022 saw the opening of EU public consultations on certification of carbon removals. The purpose is to expand sustainable carbon removals and encourage the use of innovative solutions to capture, recycle and store CO_2 by farmers, foresters and industries.

On March 23rd 2022, the European Commission published a communication on ensuring food security and on reinforcing resilience of food systems, which presented short-term and medium-term actions to enhance global food security and to support farmers and consumers in the EU in light of rising food prices and input costs, such as energy and fertilizers.

In April 2022, the Agriculture and Fisheries Council adopted conclusions on regenerative agriculture, based on the EC Communication on sustainable carbon cycles of December 2021. They are to encourage agricultural practices that help capture CO_2 from the atmosphere and store it in a sustainable manner in soil or biomass.

Fit for 55

The EC continues to analyse the proposed amendments to the draft regulations published on July 14th 2021 under the Fit for 55 framework. The individual acts making up the Fit for 55 package are either being discussed by EU bodies or negotiated by the European Commission, the European Parliament and the Council of the EU (the "trilogues"). The following have entered the trilogues phase: the amendment to Directive 2003/87/EC (ETS Directive) and Regulation on establishing a carbon border adjustment mechanism (CBAM), providing for the establishment of a mechanism to redeem purchased certificates for goods covered by CBAM from third countries, the withdrawal of free emission allowances for EU producers of goods covered by CBAM, making the allocation of free allowances dependent on implementing energy audits recommendations, and the revision of benchmarks for 2026–2030 for products covered by the ETS.
From December 15th 2021 to April 12th 2022, the EC held public consultations on the draft of amended Directive and Regulation on common rules for the internal markets in renewable and natural gases and in hydrogen, i.e., the Hydrogen and Decarbonised Gas Package, complementing the draft legislative acts published as part of the Fit for 55 package.

Taxonomy

The beginning of 2022 saw the entry into force of the obligation to apply the taxonomy criteria and to include them in non-financial statements and product information for environmental purposes, which reflect the EU's climate objectives and ambitions for specific areas of the economy. The European Commission is continuing work on further delegated acts designed to achieve the other environmental objectives, and has announced the publication of draft acts in the third quarter of 2022.

On February 2nd 2022, the EC adopted a supplementary delegated act, which accounts for the role of gas and nuclear energy in energy transition, under strict conditions. The European Commission included gas and nuclear energy activities in the second category of activities, i.e., transitional activities covered by Article 10(2) of the Taxonomy Regulation. This means that gas and nuclear energy activities are consistent with the EU's climate and environmental objectives and will help accelerate the transition towards a climate neutral future. The supplementary delegated act confirms that nuclear energy and gas are a transitional solution confirming that there is currently no economically viable low-emission alternative to ensure stable generation of electricity and heat. This is critical to the Parent's business, taking into account the decarbonisation strategy, and especially projects whose completion is necessary to achieve climate neutrality by 2050.

Microplastics pollution – measures to reduce its impact on the environment

From March 4th to May 16th 2022, the European Commission held public consultations to support the implementation of the "Microplastics pollution – measures to reduce its impact on the environment" initiative. Under EU's Zero Pollution Action Plan, by 2030 the amount of plastic microparticles released into the environment is to be reduced by 30%. This initiative relates mainly to microplastics which are unintentionally released into the environment, for instance during the use-phase, including as a result of fragmentation and abrasion.

Ecodesign requirements for sustainable products

On March 30th 2022, the European Commission published a proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC. The purpose of the Regulation is to improve the environmental sustainability of products and to ensure the free movement on the internal market of products for which sustainability requirements have been set.

End-of-waste criteria for plastic waste

Since May 31st 2022, the EC has worked on documents relating to end-of-waste criteria for plastic waste. Preparation are under way to develop a report on setting the end-of-waste criteria for plastic waste, generic data for polymers to identify the most suitable candidate streams, uses, market and trade, existing standards and specifications, environmental and health impacts and existing national end-of-waste criteria.

Other initiatives

- On February 18th 2022, the EC launched work on reviewing the Best Available Techniques Reference Document for Large Volume Inorganic Chemicals (LVIC BREF) – the process is supervised by the Joint Research Centre and covers large volume production of inorganic chemicals. The Kick-off Meeting (KoM) related to drawing up of LVIC BREF is scheduled for the fourth quarter of 2022.
- On March 19th 2022, the EC issued a communication on the State Aid Temporary Framework, whose aim is to enable Member States to use the full flexibility foreseen under state aid rules to support the economy hit by the COVID-19 pandemic.
- Following Russia's invasion of Ukraine, in March 2022 the European Commission launched, under the REPowerEU initiative, measures to make Europe independent of Russian fossil fuels and published communications on, among other things, diversification of gas supply, speeding up the roll-out of renewable gases, replacing gas in heating and power generation, and a temporary crisis framework designed to enable Member States to support the economy after Russia's invasion of Ukraine. On May 18th 2022, the EC presented a detailed plan to phase out the European Union's dependency on supplies of Russian fossil fuels.

- From March 23rd to May 26th 2022, the EC held public consultations on a proposal for a Regulation amending Regulation (EU) 2017/1938 concerning measures to safeguard the security of gas supply and Regulation (EC) 715/2009 on conditions for access to natural gas transmission networks, with the aim of aligning the regulations with the effects of the EU communication REPowerEU on joint European action for more affordable, secure and sustainable energy and the statement made at a meeting in Versailles on the Russian military aggression. The Regulation was adopted on June 29th 2022.
- On March 23rd 2022, the EC issued a communication "Security of supply and affordable energy prices: options for immediate measures and preparing for next winter", presenting options for measures that could be implemented in the short term to mitigate the impact of soaring natural gas prices on the electricity market. The publication, announced for the beginning of the second half of the year, was issued on July 20th 2022. The Council approved the EC proposal and published a regulation on coordinated demand reduction measures for gas.
- On May 20th 2022, the EC presented delegated acts setting out detailed rules for the production of renewable liquid and gaseous fuels of non-biological origin and establishing a methodology for assessing greenhouse gas emissions savings from RFNBOs and recycled carbon fuels. The draft acts will be relevant to determining what hydrogen meets the requirements for the sub-targets currently identified and planned to be achieved as part of the Fit for 55 package from Directive 2018/2001 on the promotion of the use of energy from renewable sources.

Polish Regulatory Area

- From January 31st to March 2nd 2022, the Ministry of Climate and Environment held public consultations on the draft Act Amending the Act on Packaging and Packaging Waste Management and the Waste Act, a partial transposition of Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.
- On February 25th 2022, the Ministry of Climate and Environment published a draft amendment to the Act on Renewable Energy Sources and Certain Other Acts. The draft amendment is to be a transposition of Directive 2018/2001 of December 11th 2018, containing a proposal of changes concerning energy clusters, guarantees of origin, peer-to-peer energy trading, and operational support for renewable energy sources whose 15-year support period is nearing an end.
- February 25th 2022 was the publication date of the Act Amending the Act on the Compensation Scheme for Energy-Intensive Sectors and Subsectors of February 9th 2022 – the aim is to bring the current compensation regulations in line with the EC communication on certain state aid measures in the context of the system for greenhouse gas emission allowance trading post-2021.
- From March 15th to April 14th 2022, the Ministry of Agriculture and Rural Development held public consultations on the draft Act Amending the Act on Fertilizers and Fertilization and the Act on Value Added Tax, with the aim of implementing the provisions of Regulation (EU) 2019/1009 of the European Parliament and of the Council of June 5th 2019 laying down rules on the making available on the market of EU fertilising products.
- March 18th 2022 saw the publication of a Regulation of the Council of Ministers of March 17th 2022 amending the Regulation on the detailed scope and manner of implementation of certain tasks of the Agency for Restructuring and Modernisation of Agriculture (ARiMR), which imposes a new responsibility on ARiMR: disbursement of fertilizer subsidies. On April 19th 2022, in response to the State aid scheme, submitted for notification, the European Commission approved the Polish scheme with a value of EUR 836m (PLN 3.9bn) to support the agricultural sector following Russia's invasion of Ukraine under the temporary crisis legal framework for State aid, adopted by the European Commission on March 23rd 2022 pursuant to Article 107 (3) (b) of the Treaty on the Functioning of the European Union ("TFEU"). Under the scheme, the aid will take the form of direct subsidies to farmers operating in Poland who bear the brunt of fertilizer price hikes caused by the current geopolitical crisis and the related sanctions.
- On April 25th 2022, the Ministry of Development and Technology presented a bill to amend the Spatial Planning and Development Act and Certain Other Acts. The bill provides for changing the rules of implementation of planning procedures, in particular by introducing general zoning plans for municipalities, constituting a planning document and a local regulation.
- On June 28th 2022, the Minister of Climate and Environment announced a draft resolution of the Council of Ministers on the National Waste Management Plan 2028. The Plan includes measures necessary to ensure integrated waste management in Poland with due regard to environmental protection, taking into account existing and future economic opportunities and conditions as well as the technological level of the existing infrastructure.

International trade policy

- On January 26th 2022, the United States International Trade Commission (ITC) instituted an expiry review of the antidumping and countervailing duties on ammonium sulfate imports from China. The duties were imposed in March 2017. On May 9th, ITC announced that it would proceed to a full review to determine whether the lifting of the countervailing and antidumping duty orders could lead to continuation or recurrence of material injury to the US industry within foreseeable time.

- In Mexico, antidumping duties on ammonium sulfate imports from China and the US were introduced on May 25th for a period of six months. The duties are suspended until November 25th to control inflation in the country. Once the suspension period ends, the duties will be reinstated and will remain in force until October 2025.
- On May 26th 2022, the Indian Ministry of Commerce closed the anti-dumping duty investigation on melamine imports from the EU, Japan, Qatar and the United Arab Emirates without the imposition of duties. The decision was made as a result of the anti-dumping duty proceedings initiated in February 2021 by the commerce protection body at India's Department of Commerce at the request of the local industry.
- On June 21st 2022, the US Department of Commerce (DOC) announced final determinations in the anti-dumping and countervailing duty investigations on imports of UAN from Russia and Trinidad and Tobago. DOC determined that imports from Russia and Trinidad and Tobago are dumped (the dumping rates are 8.2%–122.9% for Russia and 111.7% for Trinidad and Tobago) and unfairly subsidised (the rates are 6.3%–9.7% for Russia and 1.8% for Trinidad and Tobago). On July 18th, the US International Trade Commission (ITC) determined that the US industry was not materially injured or threatened with material injury because of UAN imports from Russia and Trinidad and Tobago. As the ITC's final determination was negative, the US Department of Commerce will not issue countervailing and anti-dumping duty orders on UAN imports from the countries referred to above.
- On July 25th 2022, the EC decided to reject the request for suspension of anti-dumping duties on UAN imports from Russia, the US and Trinidad and Tobago imposed by Commission Implementing Regulation (EU) 2019/1688 of October 8th 2019.
- On September 14th 2022, the General Court of the European Union rejected the claim of EuroChem Group and Methanol Holding (Trinidad) Ltd challenging the Commission's decision to impose, by virtue of Commission Implementing Regulation 2019/1688 of 8 October 2019, anti-dumping duty on imports of UAN from Russia, Trinidad and Tobago and the US.
- Restrictions on phosphate exports, introduced by the National Commission for Reform Development (NDRC), were in force in China between September 2021 and June 2022. The restrictions have been extended and are also valid in the second half of 2022.
- In Russia, until the end of May 2022 fertilizer prices on the domestic market were frozen under decisions made in 2021 by the country's largest mineral fertilizer manufacturers.As the reasons behind the decisions, the producers cited changes in macroeconomic conditions triggered by the COVID-19 pandemic and the natural disasters that hit some regions of Russia.
- Export quotas for nitrogen and compound fertilizers were in force in Russia from December 2021 until the end of May 2022. Their purpose was to reduce exports of fertilizer products outside the Eurasian Economic Union. The quotas were calculated based on historical export volumes. At the end of May, Russia's government signed a decree to extend nitrogen and compound fertilizer export quotas from July to December 2022. Export quotas for nitrogen fertilizers and compound fertilizers amount to, respectively, 8.3m tonnes and 5.9m tonnes. The limits do not apply to exports to South Ossetia, Abkhazia, as well as the Donetsk and Luhansk areas.
- In early February 2022, Russia introduced a two-month ban on ammonium nitrate exports, which was extended at the end of March until May 1st 2022. According to the Russian government, its purpose was to meet Russia's domestic demand.
- On March 12th 2022, the Ukrainian Ministry of Agriculture announced the introduction of zero quotas for exports of mineral fertilizers, which in practice means a ban on exports of those products. The quotas applied to nitrogen, phosphate, potassium and compound fertilizers and were intended to help maintain balance in the domestic market. The quotas were to be valid until the end of 2022, but at the end of July the Ukrainian Government abolished the export ban and introduced licencing.
- On April 20th 2022, Ukraine's government imposed a full embargo on imports of goods from Russia.
- On April 25th 2022, the UK Department of Trade announced that import duties on all goods from Ukraine will be removed for a period of at least twelve months. Ukraine also announced reduction of all duties on imports from the United Kingdom to support its businesses in the reconstruction of the country after the Russian invasion.
- On May 24th 2022, the Council of the EU adopted a decision to suspend all import duties on Ukrainian exports for a period of one year. The suspension covers duties on industrial products, fruits and vegetables and other agricultural products. The EU also temporarily suspended anti-dumping duties and safeguard measures on Ukrainian imports. The regulations came into force on June 4th.
- The EU continues to negotiate its trade agreements with third countries. In February 2022, another negotiation round was held with Australia. On June 17th, negotiations with India concerning a balanced, ambitious, comprehensive and mutually beneficial free trade agreement were officially resumed. At the same time, negotiations concerning an investment protection agreement and geographical indications agreement were commenced.

- On June 30th 2022, the EU and New Zealand concluded their four-year negotiations of a free trade agreement. This is the first EU agreement which provides for potential sanctions for breach of environmental norms and labour rights. The agreement will enter into force after its approval by the European Parliament and the governments of the EU States.
- No significant progress has been made in ratifying the trade agreement with MERCOSUR countries. Negotiations on the agreement ended in 2019. The European Commission expects MERCOSUR to become involved in the Paris Agreement and to tackle the problem of deforestation in the Amazon rainforest.
- The United Kingdom continues the execution of free trade agreements. In February 2022, it signed a trade agreement with New Zealand, as well as a digital trade agreement with Singapore. Negotiations of free trade agreements were started in mid-January 2022 with India, in March with Canada, and in June with the Gulf Cooperation Council.In February, the United Kingdom passed the first stage of the process to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).
- January 1st 2022 saw the entry into force of the Regional Comprehensive Economic Partnership (RCEP), paving the way to create the world's largest free trade area. RCEP covers ten current members of ASEAN, namely Indonesia, Thailand, Singapore, Malaysia, the Philippines, Vietnam, Myanmar, Cambodia, Laos and Brunei, and five other countries of the region: China, Japan, South Korea, Australia and New Zealand.
- On March 11th 2022, G7 countries (Canada, France, Germany, Italy, Japan, the United Kingdom and the US) and the EU issued a statement of their intention to levy additional economic sanctions against Russia in response to the military invasion of Ukraine, including restrictions on trade in goods. The joint statement contained a number of commitments to isolate Russia from the world's largest economies and global financial institutions, including a decision to deny Russia Most-Favoured-Nation (MFN) status under the World Trade Organisation (WTO) rules, which qualified Russian imports for favourable duty rates. The US, EU and United Kingdom have taken steps to implement the measures announced by the G7 countries.On May 18th, the Russian Government started the process of unilaterally withdrawing from a series of international bodies, including the World Trade Organisation.
- On June 15th 2022, the European Commission launched two new legal proceedings against the United Kingdom in response to the publication of UK plans to override some post-Brexit rules governing Northern Irish trade. Additionally, the EC resumed the infringement procedure suspended in 2021. The proceedings may result in the imposition of a fine by the European Court of Justice.
- On July 22nd 2022, the EC launched four new infringement procedures against the United Kingdom for failure to comply with the significant parts of the Protocol on Ireland/Northern Ireland. This is in addition to the infringement procedures previously launched on June 15th 2022. The proceedings may result in the imposition of a fine by the European Court of Justice.

EU and US sanctions imposed on Russia and Belarus

- On February 21st 2022, the President of Russia Vladimir Putin issued a decree recognising the independence of the self-proclaimed Donetsk People's Republic and Luhansk People's Republic. In response, the US President's administration issued an executive order prohibiting new US investments in Russia as well as exports to and imports from the two self-proclaimed republics. A ban was introduced on imports to and exports from Russia of dual-use materials, arms industry goods, and technologies supporting the war in Ukraine.
- On February 22nd 2022, the US Treasury Department imposed sanctions targeting two main Russian state-owned financial institutions (VEB, PSB) and their subsidiaries, which are crucial to the financing of the Russian defence industry, as well as five Kremlin-linked oligarchs. It continues to impose additional restrictions on Russian sovereign debt.
- On February 23rd 2022, the EU introduced the first set of sanctions against Russia, including a ban on imports of goods from the Donetsk Republic and the Luhansk Republic, trade and investment restrictions, an export ban for certain goods and technologies, and restrained access by Russia to EU's capital and financial markets and services.
- On February 24th 2022, the (EU) Council decided to prolong the restrictive measures against Belarus for one year. The decision was made following an annual review, taking into account the continuing difficult situation in that country. The restrictive measures are to apply until February 28th 2023.
- On February 25th 2022, in response to Russia's invasion of Ukraine, the EU introduced a second package of sanctions, including financial sanctions against Vladimir Putin, Minister of Foreign Affairs Sergey Lavrov, and Russian banks. Also, the US Treasury Department imposed sanctions freezing all interests in US assets held by Vladimir Putin, Sergey Lavrov and 11 members of the Russian Security Council.
- On February 28th 2022, the EU adopted the third package of sanctions, prohibiting transactions with the Russian Central Bank, closing off the EU's airspace for Russian air carriers, and imposing sanctions on 26 further Russian individuals. On March 2nd 2022, the EU expanded the third package of sanctions, banning seven Russian banks from the SWIFT system as of March 12th 2022: Bank Otkritie, Novikombank, Promsvyazbank, Bank Rossiya, Sovcombank, Vnesheconombank (VEB) ans VTB Bank. The United States and many other countries took similar measures.

- On March 2nd 2022, the EU condemned Belarus's participation in the Russian military invasion against Ukraine and, in response to its actions, imposed a package of individual and economic sanctions on 22 persons, and introduced further trade restrictions. The European Council introduced restrictions on trade in potassium chloride products. The ban applies to imports of potassium chloride designated with code 3104.20 and includes the previously allowed potassium chloride designated with code 3104.20.50; also, exceptions for pre-existing contracts were removed.
- On March 8th 2022, US President's administration issued an executive order banning the import of Russian oil, liquefied natural gas and coal.
- On March 9th 2022, the European Council imposed additional controls on exports of maritime navigation goods and radio-communication technologies to Russia, as well as financial sanctions and travel ban on 160 Russian oligarchs and politicians.
- On March 9th 2022, the EU imposed new financial sanctions on Belarus, including the exclusion of three Belarussian banks from SWIFT.
- On March 11th 2022, the US announced another executive order imposing new prohibitions on trade with Russia and investments in Russia.
- On March 15th 2022, the EU imposed a fourth package of sanctions, which restricted imports of iron and steel originating from Russia and exports of luxury goods to Russia, prohibited new investments and added export controls against the Russian energy industry.
- On April 8th 2022, the EU imposed a fifth package of sanctions, prohibiting imports of Russian coal and other products, such as wood, cement, fertilizers, seafood and alcohol as of August 2022. It also introduced an entry ban on Russian-flagged vessels to EU ports and a full ban on Russian and Belarusian freight road operators working in the EU. The package includes a full transaction ban on four Russian banks and financial sanctions on Russian oligarchs, politicians and members of their families, including on Vladimir Putin's daughters.
- On April 8th 2022, the (EU) Council introduced a Regulation prohibiting any road transport undertaking established in Belarus to transport goods by road within the territory of the Union, including in transit, after April 16th 2022. Derogations apply to the transport of pharmaceutical, medical, agricultural and food products and humanitarian purposes.
- On May 8th 2022, the United States imposed further sanctions against Russia. Assets of 33 individuals and 22 companies were frozen and contracting with them was forbidden. The list includes the current members of the Management Board of Gazprombank and Sberbank, 10 subsidiaries of Moscow Industrial Bank, a private Russian arms producer, three public television broadcasters, as well as land and maritime transport operators. Approximately 70 Russian flag cargo vessels (including ships transporting raw materials) were also included in the list. As of June 7th 2022, there will be a ban on the provision of any accounting, trust, corporate formation and management consulting services by US entities to entities located in the Russian Federation. As of August 20th 2022, the provision of credit rating and auditing services by US entities to entities located in the Russian Federation will be prohibited.
- On May 9th 2022, the United States suspended for one year its Section 232 "national security duties" imposed by the Trump Administration on Ukrainian steel.
- On May 30th and 31st 2022, the European Council agreed on the sixth package of sanctions, which covered crude oil and petroleum products supplied from Russia to Member States. A temporary exception was made for crude oil delivered by pipeline. The European Council also addressed food security challenges arising from the war waged by Russia and called for accelerated work on solidarity lanes to facilitate the export of food from Ukraine. The leaders looked into the progress of work on increasing the EU's energy independence and agreed on further steps to ensure the security of energy supply.
- On June 2nd 2022, the US Treasury Department, Department of State, and Department of Commerce froze assets of additional persons from Russia, imposed financial sanctions and export controls, and added new entities to the list of sanctioned entities.
- On June 3rd 2022, the European Council adopted a sixth package of sanctions, comprising a ban on imports of oil and petroleum products from Russia, with a few exceptions, excluding another three Russian banks and one Belarusian bank from the SWIFT system, and suspending the operations of three more Russian state-owned broadcasters in the EU. The EU also imposed sanctions on further 65 persons and 18 entities. Among the sanctioned persons are those deemed responsible for the atrocities committed in Bucha and Mariupol.
- On June 20th 2022, the European Council decided to extend the sanctions introduced in response to the illegal annexation of Crimea and the city of Sevastopol by the Russian Federation until June 23rd 2023. The sanctions include prohibitions targeting the imports of products originating from the illegally annexed territories into the EU, infrastructural or financial investments in Crimea and Sevastopol and tourism services in those territories, the exports of certain goods and technologies to Crimean companies or for use in Crimea in the transport, telecommunications and energy sectors, and the exploration and production of crude oil, natural gas and mineral resources.
- On June 28th 2022, the US Treasury Department implemented the G7 commitment to prohibit imports of Russian gold. It also imposed financial sanctions on an additional 70 Russian entities and 29 Russian individuals.

- On June 29th 2022, the Russian Elites, Proxies and Oligarchs (REPO) Task Force issued a joint statement summarising the progress of coordinated blocking or freezing of Russians' assets and promoting effective implementation of sanctions.
- On July 14th 2022, the U.S. Department of the Treasury issued a food security and Russia sanctions fact sheet, explaining that agricultural commodities (including fertilizers), agricultural equipment or medicine relating to the Russian Federation are not subject to U.S. sanctions.
- On July 21st 2022, the European Council adopted the seventh package of sanctions aimed at tightening the existing economic sanctions against Russia, improving their implementation and enhancing their effectiveness. The package introduces a new ban on purchase, import or transfer of gold, including jewellery, originating in Russia, reinforces export controls on dual-use goods, extends the existing port access ban, clarifies the existing measures, for instance in the field of public procurement, aviation and justice, and imposes sanctions on an additional 54 individuals and 10 entities, including the mayor of Moscow and Sberbank. Like previous sanctions, the new measures do not apply to exports of food, cereals or fertilizers from Russia.
- On July 26th 2022, the EU extended the economic sanctions imposed in the wake of Russia's military aggression against Ukraine for a further six months until January 31st 2023.
- On July 29th 2022, the US Treasury Department and the US Department of Justice imposed sanctions on two individuals and four entities supporting Russian attempts to manipulate and destabilise the United States and its allies and partners, including Ukraine.
- On August 4th 2022, the EU imposed sanctions on pro-Russian former President of Ukraine Viktor Yanukovych and his son Oleksandr Yanukovych.
- On September 2nd 2022, the finance ministers of the G7 countries agreed to impose a price cap on Russian crude oil and petroleum products. This measure is intended to prohibit sea transport of Russian crude oil worldwide, unless the products are purchased at a certain price or lower.
- On September 9th 2022, the Council of the European Union decided to fully suspend its visa facilitation agreement with Russia. Consequently, the general rules of the Visa Code will apply by default to Russian nationals. The decision applies from September 12th 2022.
- On September 9th 2022, the US Department of Treasury published preliminary guidance concerning the implementation of the G7 price cap for Russian crude oil supplies, announced on September 2nd 2022.
- On September 14th 2022, the EU extended, for another six months, the travel restrictions, freezing of assets and financial penalties already imposed on 1,206 individuals and 108 entities.
- On September 15th 2022, the US administration announced the introduction of additional measures to control exports of cutting-edge technology to Russia. It was also prohibited for US entities to provide quantum computer-related services and sanctions were imposed on 22 individuals and 2 entities.

Polish sanctions against Russia and Belarus

- April 16th 2022 saw the entry into force of the Act on Special Measures to Prevent Supporting Aggression against Ukraine and Protect the National Security, implementing measures to enhance the enforcement of EU sanctions against Russia and Belarus in Poland. Under the Act, on April 26th 2022, a Polish sanctions list was established, including sanctioned persons and entities, and a new restrictive measure was created whereby the sanctioned entities are excluded from public procurement procedures The Act provides for administrative penalties and criminal liability for a breach of its provisions or of EU sanctions regulations. On May 13th 2022, the sanctions list was updated.
- On July 7th 2022, the Sejm (Lower Chamber of the Polish Parliament) passed amendments concerning establishment of administration to take over, against compensation, the assets of companies from the sanctions list for the benefit of the State Treasury or to sell the companies.

Russian retaliatory sanctions

- On May 3rd 2022, the President of the Russian Federation signed a decree on retaliatory special economic measures to be introduced in connection with the "unfriendly actions of some foreign states and international organizations". By a decree of May 11th 2022, the Government of the Russian Federation approved the list of legal persons subject to the retaliatory sanctions. It contains entities from Germany, France and other European countries, as well as the US and Singapore. These include European subsidiaries of Gazprom, traders and operators of underground gas storage facilities, Gazprom Germania of Germany and Polish EuRoPol Gaz, the owner of the Polish section of the Yamal pipeline. Russian public institutions, legal persons and citizens may not enter into transactions with those entities or any structures under their control, discharge obligations to those entities under completed transactions, or execute financial transactions with them. This also applies to foreign trade contracts that have already been signed.
- On May 21st 2022, Russia prohibited US President Joe Biden and 962 other Americans from entering Russia.

- On May 21st 2022, Russian energy company Gazprom cut off its natural gas supplies to Finland as it had not received payment in rubles.
- On June 3rd 2022, Russia banned entry for 41 Canadians including top defense officials and executives.
- On July 22nd 2022, Russia and Ukraine signed an agreement in Istanbul to reopen Black Sea ports to grain exports, in an effort to ease an international food crisis. The first ships loaded with grain left Ukraine's Odessa port on August 1st 2022.
- On August 10th 2022, the President of Russia issued a decree imposing a total ban on the trading of certain assets, such as the securities of certain Russian companies and shares in certain Russian investment projects, if such securities and shares are held by persons from "hostile countries" or by persons controlled by such persons. The assets include shares in some key Russian entities, companies and energy and underground projects, as well as in Russian banks. The ban is aimed at restricting investors' withdrawal from investment projects in Russia or restructuring of Russian shareholdings without the express consent of the Russian President.

3. Risks and threats

In the six months ended June 30th 2022, the continuing threat of the COVID-19 pandemic was exacerbated by another unpredictable event with a significant macroeconomic impact, that is the invasion of the Russian armed forces in Ukraine. As regards risks related to the pandemic and risks resulting from the political and economic situation in Ukraine, the Group examined in detail the potential effects of the market instability.

The Group identified potential risk areas that may affect its future financial performance, including potential disruptions in supply and higher prices of raw materials and energy carriers, especially natural gas and coal. This applies specifically to raw materials supplied from the territory of Ukraine, as well as from the Russian Federation and the Republic of Belarus. The Group may encounter problems in the execution of investment projects, increase in financing costs due to higher interest rates and weakening of the Polish złoty against the euro and the US dollar, or a potential increase in the number of cyber attacks and physical security incidents. However, no material adverse events occurred in these respects in the six months to June 30th 2022.

The Group takes regular risk mitigation measures both by implementing crisis management procedures and by preparing and deploying hedging solutions and measures that contain the impact of identified threats on the Group's operations. The Group continues to monitor the political and economic situation resulting from the Russian aggression against Ukraine and the COVID-19 pandemic, analyses the impact of these circumstances on its business and takes appropriate measures to mitigate the identified risks. However, new circumstances may arise in the future that will have a bearing on the Group's business.

Risk associated with price and availability of key raw materials

Group – medium risk / Parent – medium risk

Risk that production may be stopped or significantly constrained due to disruptions in supplying a key raw material or a significant increase in its price.

Continuity of the Group's production depends on availability and quality of key raw materials. No assurance can be given that terms of business with some suppliers will not deteriorate or that the supply of raw materials used in production will not be interrupted. In particular, a limited number of potential suppliers and the presence of oligopolies with a dominant position of a single entity on some of the markets for the commodities used by the Group may be a source of risk.

The continuity of supply of raw materials to the Group may also be disrupted by factors such as technical failures, natural disasters, adverse market conditions resulting from the lack or short supply of certain raw materials, significant adverse weather conditions or events of force majeure. Furthermore, no assurance can be given that contracts for the supply of raw materials will not contain clauses unfavourable to the Group companies, which would unduly or ineffectively protect the Group companies' interests in the event that a given supplier fails to perform or improperly performs its obligations under such contracts.

The key raw materials and feedstocks for fertilizer production at the Parent include natural gas, ammonia, phenol, sulfur, and coal. Group companies additionally use benzene, propylene, phosphate rock and potassium chloride. It should be noted, however, that ammonia and sulfur are largely supplied from the Group's internal sources, which significantly mitigates this risk.

In the first six months of 2022, commodity markets were driven by unstable oil and gas prices. The invasion of Ukraine by the armed forces of the Russian Federation, which led to the imposition of sanctions on Russian companies and institutions, sent prices on an upward trend and caused their significant fluctuations. Raw materials which used to be imported from countries which are now either sanctioned or threatened by war are supplied from different sources.

Among risks related to key raw materials, the risks related to availability and prices of natural gas and coal are particularly subject to the consequences of the ongoing market turmoil.

Risk related to price and availability of natural gas

Group – medium risk / Parent – medium risk

Risk related to prices and operational disruptions caused by a lower-than-expected or restricted supply of adequate volumes of natural gas of the right grade and quality required for production.

In the search for competitive sources of gas in order to diversify both the geographical regions and suppliers of gas, the Grupa Azoty Group companies provide details of executed contracts and their terms and conditions in press releases and reports. Requests for proposals are made and negotiations with gas suppliers are conducted at the Group level to leverage the Group's stronger bargaining position. The Grupa Azoty Group takes steps to satisfy its overall gas demand through a combination of a long-term contract with its strategic supplier, annual or shorter contracts with a number of other suppliers, and transactions on energy exchanges and the OTC market to meet short-term demand of the companies, secure gas supplies and lower cost of gas.

To this end, the Parent and the subsidiaries have concluded a long-term contract with a reliable strategic partner. The contract secures 80–100% of the needs, making it possible to partially diversify supplies. The contract provides for a price formula based on market quotations and allows the Parent to hedge future prices based on forward products. The conclusion of a long-term contract with pricing formulas based on the German market (the largest gas market in Europe) has limited the risk of having to pay significantly higher prices than the direct EU competitors.

Furthermore, the risk of supply constraints due to disruption in gas supplies to Poland has been mitigated by the extension of cross-border interconnectors, launch of the LNG terminal, and by Regulation (EU) 2017/1938 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply. Moreover, the risk of gas availability and price levels run by the Parent is mitigated by less expensive alternative gas supplies from local sources. They ensure that in the event of limited grid gas supply production may be continued at satisfactory levels, and if supplies from local sources are lower than needed, grid gas may be purchased on the Polish Power Exchange and supplied as part of within-day capacity.

The management of risk related to the price and availability of natural gas is supported by the Corporate Committee for Hedging the Prices of Natural Gas and CO_2 Emission Allowances along with the Gas Market Analysis and CO_2 Emission Allowance Team which uses fundamental and technical analysis to determine, among other things, the impact of the risk on the Group's product margins and responds to identified risks and market opportunities on an ongoing basis.

In the first half of 2022, natural gas was purchased under the contract with PGNiG S.A. at spot prices and in forward transactions, in accordance with the price hedging policy. As announced by PGNiG S.A on April 27th 2022, supplies of natural gas from Russia to Poland were withheld as a result of PGNiG S.A.'s refusal to make payments for gas in the Russian currency. As at the date of authorisation of this Report for issue, there were no interruptions in the supply of natural gas to the Group. High prices of gas seriously erode the profitability of production. Contingency scenarios have been developed in case manufacturing operations have to be curtailed in the event of a reduction in natural gas supplies, including in particular a reduction of the load on production units and acceleration of necessary maintenance shutdowns. This risk may have a material effect on the Group's operations in subsequent periods.

Risk related to the price and availability of coal

Group – medium risk/ Grupa Azoty S.A. – medium risk

Risk that production may be stopped or significantly constrained due to disruptions in supplying adequate volumes of coal of the right grade and quality or a significant increase in its price.

Hard coal is the key feedstock for the Group's leading companies, necessary for the production of process steam required in manufacturing. The individual Group companies have set the level of emergency stocks and the level of safe stocks that mitigates the risk of failure to maintain the required emergency stocks. Joint corporate tender procedures are conducted and long-term contracts with reliable suppliers are signed to secure coal supplies. Polska Grupa Górnicza S.A. (PGG) is now the strategic coal supplier to the Grupa Azoty Group.

Following Russia's invasion of Ukraine in February 2022, the risk related to the price and availability of hard coal increased. Hard coal was largely imported from Russia. April 16th 2022 saw the entry into force of the Polish embargo on Russian coal. EU's embargo will take effect on August 10th 2022. In addition, limited availability and soaring prices of natural gas triggered the growth of electricity prices, which significantly increased coal-fired electricity generation in Europe, translating directly into a major rise in coal consumption. The increased demand and lack of coal supplies from Russia triggered not only a price surge, but also limited availability of this energy carrier. The situation was additionally aggravated by logistics problems related to ensuring the supply of hard coal to Europe from sources alternative to Russia due to limited handling capacity of ports and rail transport. The Grupa Azoty Group continuously monitors the situation with respect to securing hard coal supplies, negotiating deliveries with domestic coal producers and looking for alternative supply sources. This risk may have a material effect on the Group's operations in subsequent periods. It is now difficult to predict how the situation will unfold. The Group is preparing analyses and action scenarios and taking appropriate preventive measures in the event of difficulties with the availability of coal and a significant increase in its prices in the second half of 2022.

Risk of rising prices of carbon emission allowances

Group – medium risk / Parent – medium risk

Potential threats related to this risk include higher market prices of CO_2 emission allowances or failure to purchase sufficient volumes of CO_2 emission allowances due to unavailability of cash or trading limits at banks.

To monitor this risk, the Group has established an EU ETS Management Committee and an EU ETS Executive Team. In order to mitigate the risk of a negative impact of CO_2 emissions trading prices on the results delivered by the Parent and other key Group companies, the CO_2 emission allowances market is continuously monitored and emission allowances are purchased on the futures market on a rolling basis. Additional futures transactions are also executed when the market conditions are favourable. Such approach minimises the risk of buying allowances at unfavourable prices.

In addition, a part of future emission allowances is secured by means of purchases of emission allowances in transactions that give rise to an obligation to deliver allowances on future dates, to be settled in future periods. The Group has signed framework agreements with three banks, under which it is granted limits to hedge futures transactions to purchase greenhouse gas emission allowances under futures contracts. The potential risk related to full utilisation of existing trading limits at banks has been mitigated by negotiating new, increased limits.

The policies and procedures in place are designed to ensure smooth trading in CO_2 emission allowances, ensure its efficiency, minimise the cost of operation of the EU Emissions Trading Scheme at the Group, and reduce the risks associated with participation in the Scheme. They also aim to reduce spending on the purchase of emission allowances by entry into forward transactions, which maximally delay the related cash outflows, thus minimising an increase in the net debt to EBITDA ratio at the end of a reporting period. The risk of higher prices of CO_2 emission allowances is managed by the Corporate Committee and the Gas Market Analysis and CO_2 Emission Allowance Team, which, based on the monitoring of the market and current trends, responds to the identified risks and opportunities when and as needed.

Based on the adopted joint model for managing CO_2 emission allowances and approved purchase plans, Grupa Azoty Group companies captured the opportunity created by the downward correction in the first half of 2022 to purchase allowances to secure part of the required EUA volumes for 2023. At the same time, the Group companies have secured all EUAs required for 2022.

At present, the Group notices two key drivers of EUA prices. On the one hand, concerns over the imminent recession in Europe and the ongoing correction in the commodity markets should exert a downward pressure on the EUA prices but, on the other hand, the current and anticipated increase in energy produced by burning coal in 2022-2023 compared to energy produced by burning gas will drive up the prices. The EUA market should remain in a broad consolidation range of EUR 70-95 until the end of the year. If the recession scenario materialises, a temporary bearish breakout from the above area is possible.

According to forecasts by the largest financial institutions, the allowances market will be marked by strong volatility until the end of the year.

Risks related to execution of investment projects, including risks and opportunities related to investment projects undertaken to meet decarbonisation requirements

Group – medium risk / Parent – medium risk

Risk that key investment projects will not be completed according to plan or will not deliver the expected results. Risk that a given investment project may not be executed at all, may be delayed or may be over budget.

Implementation of strategic investment projects is among the Group's major areas of activity, critical to value maintenance and growth. The Group's strategy envisages both investment projects in the core business areas of the Group and expansion of its new business segments. The Group is committed to implementing sustainable investment projects and environmental protection projects aimed at minimising the environmental and climate footprint of its operations and embracing decarbonisation.

Investment decisions are made on a case-by-case basis in the context of compliance with the Group's strategy, the project's expected economic viability, and the level of risk associated with achieving the objective, including the time necessary for preparation and implementation, and the impact of new legislation on project viability. There is a risk that some of the investment projects within the Group's investment programme will be modified, delayed or will not be completed.

In addition, the Group took steps to identify environmental projects and to examine whether they were in compliance with the EU taxonomy for sustainable activities according to Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment ("taxonomy"). In autumn 2021, a work team appointed by the Grupa Azoty Management Board developed criteria for the evaluation of investment projects with a view to obtaining bank and non-bank financing and their compliance with the taxonomy. These measures will enable meeting the EU commitments made in the Paris Agreement at the level of the Group, reducing the risk of implementing a portfolio of investment projects that do not meet decarbonisation requirements.

Each investment project is implemented in line with internal procedures. Monthly reporting by project managers and quarterly corporate reporting have been put in place at the Group. The reports contain analyses identifying potential increases in the risk of deadline or budget overrun for specific projects. The risk of failure to comply with EU climate policy requirements was mitigated by introducing additional criteria in the preparation process for the Long-Term Investment Plan to select investment projects which are in line with the taxonomy.

As at the date of authorisation of this Report for issue, the Parent and Group companies did not observe any significant impact of the war in Ukraine on their investment or maintenance activities. However, it cannot be ruled out that events with a significant bearing on the implementation of the Grupa Azoty Group's capex programme will occur in the coming quarters.

Risk related to the security of IT systems, networks and industrial automation systems, including information security, business continuity and cybersecurity

Group – medium risk / Parent – medium risk

In their operations, the Group companies use IT systems whose operation can be disrupted by errors in software or ICT infrastructure failures. In addition, some of the systems may be subject of cyber attacks, in particular those taking advantage of defects or security gaps in ICT systems which have not yet been identified by their manufacturers or providers of ICT security solutions.

Despite the implementation of ICT security systems and procedures as well as constant efforts to minimise the risk of failure and breaking the security barriers in place, the technical and organisational solutions applied may prove ineffective, and failures or ICT security breach incidents may pose a threat to the systems' uninterrupted operation and to the confidentiality and integrity of the data processed in these systems, which in turn may have a material adverse effect on the Group's business, financial position or growth prospects.

The Parent has in place a number of solutions governing information security management: These include: Information Security Policy, ICT system security policy, Instructions for secure use of email, and internal orders concerning the protection of business secrets and handling of information security incidents. The Group has established a Data Protection Committee, as well as a security testing team and an ICT security procedure team. The Group's Security Operations Centre monitors the security of ICT systems and handles ICT security incidents.

Following Russia's invasion of Ukraine, the CHARLIE-CRP alert state was introduced in Poland to prevent threats in cyberspace related to increased probability of cyber terrorism. Despite higher probability of cyber attacks, in the first half of 2022 neither the Parent nor Group companies saw any significant rise in the number of cybersecurity incidents directly affecting their operations.

Risk of major industrial accidents or technical failures disrupting the continuity of processes and operation of key production units, including risks and opportunities arising from physical effects of climate change

Group – medium risk / Parent – medium risk

The risk of major industrial accidents defined in accordance with the Environmental Protection Law or technical failures disrupting the continuity of processes and operation of production units of key importance for the implementation of the enterprise's objects. Risk of accidents and disruptions of operation of production units due to sudden storms, floods, heat waves, hurricanes, tornadoes, lightning strikes, other weather events and natural disasters resulting from the physical effects of climate change and the need to adapt industrial infrastructure and production technologies to climate change.

The Parent is classified as an establishment with a high risk of a major industrial accident (upper-tier establishment – UTE). Therefore, the Company has developed and implemented incident prevention programmes and regularly monitors and implements legal safety requirements, including requirements of the SEVESO III Directive. The Parent has reliable safety systems and preventive and prediction measures in place at all organisational and technological levels, including occupational health and safety as well as protection against industrial accidents. The correctness of adopted safety measures is assessed by internal and external inspection authorities as well as by accreditation and certification bodies.

The strategy for managing the risk of major industrial accidents or technical failures focuses in the first place on measures to prevent critical situations, and if any such event occurs, the risk is shared with the insurer.

Measures to prevent emergency situations at the Grupa Azoty Group companies include ongoing monitoring of hazards related to technological processes and operation of machinery and equipment, ongoing assessment of their technical condition, and monitoring of threats in storage and transport. The Parent's plants and units are equipped with safety and protection systems to minimise the risk of major accidents and environmental contamination, as well as risks to human life and health. The Group's units are Best Available Techniques (BAT) compliant. The units are kept in a proper working order also by carrying out scheduled technical stoppages and maintenance shutdowns, periodic inspections and routine rounds as required in the technological and job instruction manuals. The relevant execution resources are provided.

If a failure or accident occur, they are thoroughly analysed in order to identify their causes. Based on such analysis, preventive measures are taken to minimise the risk of such incidents taking place again.

Currency risk

Group – medium risk / Parent – medium risk

Risk of excessive finance costs resulting from foreign exchange losses.

In the six months to June 30th 2022, and particularly from the outbreak of the war in Ukraine, the PLN exchange rate was subject to increased volatility, trending downwards against main currencies.

The Group companies hedge their currency exposures using natural hedging, factoring and discounting of foreign currency receivables, currency forwards and, to a lesser extent, options. Since 2014, the Group has applied the Financial (Currency and Interest Rate) Risk Management Policy. In 2015, a centralised financing model was put in place at the Group, supporting a long-term hedge horizon by contracting a portion of long-term financing in the form of a euro-denominated credit facility. As of 2017, the Group also reduces its euro-denominated currency exposure by increasing natural hedging.

The Group also has in place a Risk Committee which analyses and determines the consolidated currency exposure of the Group, and recommends target levels and time horizons of hedges, types of hedging instruments, and exchange rates for hedge transactions. Hedge transactions are executed by the Group companies with the hedged currency exposure. The methods applied by the Group enable it to significantly limit risk by using selected currency risk hedging instruments and strategies, based on one-year and long-term currency exposure plans and their updates to account for quarterly operational plans and short-term projections of currency inflows and currency expenditures, and based on the results of transactions already registered in the financial and accounting system. However, these methods do not eliminate that risk completely.

The Parent is monitoring the situation on the financial markets and identifies key threats related to the ongoing war in Ukraine, the rising inflationary pressure, the tightening of monetary policies by central banks, and other factors. Fears of a global recession and a potential energy crisis in Europe in the event of a Russian natural gas cutoff were added to this list of concerns in the second quarter of 2022. Unrest in the financial markets will adversely affect the Polish currency. The Polish currency is also internally weak, which is linked to the rising negative real interest rate in Poland, the growing risk of non-payment of EU funds under the National Recovery Plan and divergence in national monetary and fiscal policies. Despite the growing interest rate disparity between Poland on the one side and the euro area and the United States on the other side, the Polish currency may remain weak in the second half of 2022.

The Group expects that in the second half of 2022 the exchange rate of the Polish złoty will remain at the currently observed high levels, with strong market volatility bound to continue. A stronger appreciation of the złoty is expected in the middle of the fourth quarter, when a significant majority of the negative factors will have already been discounted, the inflation pressure will start to subside and the main central banks will probably revise their monetary policies in the face of recession.

The second half of the year may see a temporary depreciation of the złoty to both the euro and the US dollar, to 5.00. The weakening of the złoty in relation to convertible currencies should not have any significant impact on the Group's planned performance in the second half of 2022 due to its foreign currency exposure.

Interest rate risk

Group – low risk / Parent – low risk

A risk of interest rate changes having an adverse effect on indicators of the Group's financial condition.

From the Parent's perspective, current net exposure to interest rate risk is partly limited as the Parent's credit facilities bear variable interest at 1M WIBOR plus the banks' margin and, at the same time, the Parent has granted the Group companies loans bearing interest at the same variable rate and a slightly higher margin. From the Group's perspective, this risk is not hedged, and it is mitigated by the fact that some credit facility agreements are denominated in the euro and have fixed interest rates.

The Group also uses surplus cash in PLN and EUR to balance the debt owed by the Group companies in PLN and EUR under Overdraft Agreements connected with physical cash pooling agreements. This limits the Group's net exposure to the PLN/EUR exchange rate and EUR and PLN interest rate risk. Moreover, the Parent had utilised the first long-term loan with the EIB by 2017 and discontinued the utilisation of the second loan from the EIB in 2021. Both loans bear interest at a fixed rate and are repayable over a period of 10 years. The Group also has access to transaction limits with banks, which enable it to enter into fixed-rate hedging transactions if the risk of a significant increase in financing costs due to higher variable market interest rates grows.

The Group has implemented a Financial (Currency and Interest Rate) Risk Management Policy. The Group has a Risk Committee which periodically assesses the consolidated exposure to interest rate risk of the Parent and its leading subsidiaries, and examines the validity of measures designed to mitigate that risk.

When market interest rates are low, risk indicators are calculated and risk assessment is performed based on a scenario analysis with regard to the Parent's and the subsidiaries' actual exposure to that risk. If the risk exposure or market interest rates significantly increase, the Risk Committee considers calculating the value exposed to interest rate risk in accordance with the VaR methodology. Interest rate risk hedges should be executed by the Parent as the entity which centrally manages the Group's finances. Under the loan agreement with the EIB, the Group is obliged to keep its consolidated EBITDA to net interest expense ratio at no less than 6x.

The National Bank of Poland's monetary policy tightening cycle is nearing its end. Financial markets expect to see a maximum of three further interest rate increases in Poland and the series of reference rate increases ending at 7.0-7.5%. Based on forward rate contracts currently executed in Poland, the 3M WIBOR rate is estimated to rise to approximately 7.5% over the next six months. At the same time, given the still high inflation rate, a scenario where interest rates grow even up to 8% cannot be ruled out, but this is not a base case scenario. In the base case scenario, the Grupa Azoty Group assumes that the current interest rates will increase by the end of the third quarter of 2022 with respect to the currencies in which the Group finances its operations. This will increase the Group's financing costs, while ensuring further safe debt servicing, also taking into account the planned increase in the financing of investing activities. The debt service costs will then stabilise at a high level in PLN and relatively low in EUR and USD.

There continues a growing discrepancy between the monetary policies pursed by the United States and the euro area. While the FED forecasts three to four further interest rate hikes in 2022, the ECB only began to tighten its monetary policy in July 2022. In the coming months, the market consensus is that there will be two to three increases in the euro area by the end of 2022. The war in Ukraine has a stronger negative impact on the European than on the US economy. As a result, the euro (and the złoty) will remain under pressure, while for the US dollar there is a further opportunity to strengthen.

Inflation remains a key economic problem in Poland and globally. Financial markets are increasingly concerned by the slowdown of economic growth and the possibility of recession. In the euro area, the economy is already probably in stagnation or has been recording declines in GDP. Poland has seen a marked decrease in the GDP growth rate. At the end of 2022 and beginning of 2023, we may see a negative GDP growth. This trend is likely to continue at least until the first quarter of 2023.

Liquidity risk

Group – medium risk / Parent – medium risk

Liquidity risk is the risk of unexpected cash shortage or unavailability of credit facilities, resulting in temporary loss of ability to meet financial liabilities or the need to raise financing on unfavourable terms.

The Group is exposed to financial liquidity risk consisting in the Group's inability to repay its financial liabilities when they fall due. Risk of failure to raise new financing or refinance existing debt can increase liquidity risk.

The Group has put in place a Grupa Azoty Group Financing and Liquidity Risk Management Policy. Under the central financing model, the Group has implemented a package of financing agreements and amended its umbrella overdraft and multi-purpose credit facility agreements which secure current liquidity of the Group companies. The Parent is the agent under the umbrella agreements, authorised to allocate sub-limits of those credit facilities to individual Group companies. In 2015, the Parent and its key subsidiaries entered into an Intra-Group Financing Agreement (amended in 2018) under which it set financing limits of PLN 1bn for each of the subsidiaries. On October 1st 2016, the Group launched a physical cash pooling service in PLN and, on November 2nd 2018, in EUR. The services enable the Group companies to take advantage of the Group's overall liquidity position, including for short-term financing of deficits at some of the Group companies with surpluses at others. As a result, the Group has access to credit facilities (surplus cash) as well as mechanisms for their free redistribution, which significantly reduces the probability of short-term liquidity loss by the Group or its individual companies. The mechanism also significantly reduces the Group's finance costs. In addition, the Group concluded reverse factoring agreements, which offer a lower cost of financing and full contracting and repayment flexibility, and make it possible to reduce the cost of traditional debt financing.

The above instruments effectively satisfy the Group's current liquidity needs and provide financing for its investment programme. However, if there is an accumulation of both external and internal negative factors, the liquidity risk mitigation methods applied by the Group may prove insufficient, which may have a material adverse effect on the Group's operations, financial condition and results. Therefore, the key issue is to ensure compliance with the covenants provided for in the credit facility agreements, in particular the ratio of the Group's net debt to consolidated EBITDA. This ratio is calculated on a rolling 12 month basis and monitored semi-annually, i.e., at the end of the first half of a calendar year and at the end of the year. The Group monitors projections concerning changes in this ratio on the basis of its annual budget and by preparing long-term budgets taking into account both base-case and conservative scenarios. At present, none of the covenants under the credit facility agreements are projected to be breached, but in the event of accumulation of adverse macro- and microeconomic factors, especially in the event of a sudden material deterioration of the Group's financial performance, such risk may materialise. Therefore, operating and financial performance must be monitored on an ongoing basis, and operating expenses and capital expenditure at individual Group companies must be monitored and managed effectively.

Risks related to the sales and marketing function of the Agro Fertilizers Segment, including increased supply and imports of fertilizers and risks and opportunities arising from physical climate change

Group – high risk / Parent – high risk

Risk of failure to achieve target revenue from sales of fertilizers due to higher fertilizer imports. Risk related to periodic increases in volumes of fertilizers imported into Poland from other EU countries and from third countries as well as to a decline in economic performance as a result of squeezed product margins caused by the emergence of new market players and significant volumes of imported fertilizers. Consequently, there is a risk of failure to achieve targeted revenue from sales of fertilizers.

In the six months to June 30th 2022, the continued upward trend in gas prices and subdued demand reflecting high fertilizer prices led many plants to reduce or suspend production again. The supply of fertilizer products in Europe fell, with output sold mainly on the home markets. As a consequence, the first half of 2022 saw a decline in the volumes of fertilizer imports to Poland relative to previous years. From the fourth quarter of 2021, imports of ammonium nitrate, calcium nitrate, NPK and DAP dropped significantly.

Risk associated with increased production capacities, which result in changes in local and global fertilizer processing and trade markets, as well as tailoring the offering to meet the needs of trading partners (distributors) and end users.

There is an oversupply on the global nitrogen fertilizer market and the oversupply has grown significantly in the recent years. The largest increase in production capacities was observed in the US, Russia, Kazakhstan, Iran and India. New units and plants are also expected to come onstream in China. The oversupply situation, especially in the case of nitrogen fertilizers, has affected the EU and Polish markets as well. The supply of fertilizers in Poland is visibly growing.

In both cases, the Group's efforts focus on mitigating the risks and on strengthening and consolidating its position in the segment of fertilizer production and sale. The Group monitors the volume of fertilizer imports and the share of each company in the fertilizer market, adapting its sales/pricing policies to market developments, for instance by adjusting price paths to current trends on the European and key global markets and taking steps to optimise the production costs and expand the portfolio of products and services offered to customers.

Risk of restrictions on fertilizer sales due to physical climate change. Risk of restrictions on fertilizer sales and not achieving the expected revenue level due to unstable weather conditions, changes in plant growing periods due to increased temperatures, water shortages and intensification of the water cycle (summer heat waves, drought, torrential rains and flooding, storms), and the occurrence of extreme weather events (such as hail storms, hurricanes, severe frost), which all may compromise the purchasing power of farmers.

The measures taken by the Group consist in adapting the prices, terms of sales and product mix to the market situation. The Group's activities include efforts to introduce new fertilizers containing organic matter, soil de-acidifying fertilizers and products improving soil water holding capacity (some of them are already available). The Group works with universities and scientific institutions to develop advanced fertilizer application technologies, including technologies related to agricultural specialisation.

Risks related to the sales and marketing function of the Plastics Segment, including the risk of deterioration of the polyamide demand and supply balance, as well as risks and opportunities arising from more stringent requirements with respect to plastics recycling and sustainability attitudes

Group – low risk / Parent – medium risk

A risk of demand and supply imbalance due to lower demand or increased supply of polyamide (PA6) on the global market.

The beginning of 2022 was marked by generally strong demand from polyamide 6 application markets, except for the automotive industry, and high prices along the entire product chain. The first six months of 2022 saw subdued demand and a major slowdown towards the end of the period. The PA6 product chain market is strongly correlated with economic cycles. In Europe, demand in the automotive industry remained low throughout the reporting period, squeezed by the limited availability of semiconductors and shortages of many other products from Eastern Europe, which led to temporary production cuts or even temporary shutdowns by car makers. The supply of both CPL and PA6 in Europe was adjusted to market needs. The market, especially in the second half of the reporting period, remained under the pressure of unstable geopolitical situation contributing to destabilisation of energy and fuel markets. Combined with the outbreaks of new coronavirus variants, mainly in China, this may hurt global markets, decelerating the recovery of supply chains disrupted by the COVID-19 pandemic and undermining economic growth.

The Group is monitoring the market situation (supply/demand) throughout the value chain. The product and application portfolio is being streamlined so that certain product streams can be allocated to the market segments in which sales efforts deliver the best economic results.

A risk of lower sales of selected plastic materials due to growing customer requirements driven by a sense of responsibility for environmental damage, including waste, caused by the product throughout its life cycle.

The Group has in place a Circular Economy and Extended Producer Responsibility Monitoring Team that participates in designing and implementing development programmes for strategic products and materials. The responsibilities of the Team include monitoring of proposed legal changes which affect or may affect the Plastics business.

Risk of tightening of the regulations affecting the Group's operations and products, including environmental regulations resulting from climate transition

Group – high risk / Parent – high risk

The Group is continuously monitoring projects and proposals of administrative bodies regarding amendments to existing laws and new legislation. The Group is an active member of European associations and works with Polish institutions to respond to upcoming changes in legislation. The Group analyses the risks associated with regulatory trends and draft amendments or planned new regulations. The impact of new regulations on its operations and marketed products is examined by the Group on a case-by-case basis. Amendments to EU directives and regulations applicable to the Group's principal manufacturing and trading activities give rise to a potential risk that the use of the Group companies' products by customers in the EU countries may be restricted as a consequence of tightening of legal regulations.

Currently, the Grupa Azoty Group is particularly focused on monitoring risks and opportunities associated with the implementation of regulatory packages arising from the European Green Deal, including those associated with the Fit for 55 package and the circular economy concept. Among the risks that continue to be monitored is the risk of tightening of EU regulations on heavy metal content in fertilizer products and changes in the measurement methodology for classifying titanium white as a carcinogen. In view of the military conflict in Ukraine and the deepening energy crisis, the Grupa Azoty Group is monitoring and actively engaging in the work on legislative proposals that may have an impact on the availability of energy commodities.

4. Other information

4.1. Other significant events

Implementation of the Polimery Police project

In the six months to June 30th 2022, Grupa Azoty POLYOLEFINS carried out the 'Polimery Police' investment project, comprising a propylene production unit (429 thousand tonnes per year), a polypropylene production unit (437 thousand tonnes per year) together with auxiliary installations and associated infrastructure, as well as a port terminal with feedstock storage facilities (the "Project").

The General Contractor for the Project is Hyundai Engineering Co., Ltd. (the "General Contractor" or "Hyundai"), in accordance with the contract for turnkey execution of the Project of May 11th 2019 (the "EPC Contract"). The start of its commercial operation is scheduled for 2023.

Impact of the COVID-19 pandemic on the Project implementation

Given the impact the COVID-19 pandemic had on the Project execution, the General Contractor notified Grupa Azoty POLYOLEFINS of the opening of the procedure to amend the EPC Contract. Following the formal and business assessment of the amendments to the EPC Contract, proposed on August 27th 2021 and covering an increase in Hyundai's fee, a change in the Project execution schedule as well as technical changes, Grupa Azoty POLYOLEFINS entered into negotiations with the General Contractor. On January 28th 2022, having obtained the required corporate approvals, Grupa Azoty POLYOLEFINS executed Annex 3 to the EPC Contract, providing for:

- A EUR 72.5m increase in the General Contractor's fee;
- A six-month extension of the time limit to complete the Project;
- An amendment of the appendix to the EPC Contract relating to the scope of work under the EPC Contract.

The execution of Annex 3 did not change the budget of the Polimery Police project (USD 1,838m), and the increase in the General Contractor's fee will be financed from the project contingency reserve. With COVID-19 subsiding and certain restrictions being lifted, the chances of materialisation of the risk related to the continuing impact of coronavirus on the financing and completion of the Project diminished.

Impact of war in Ukraine on the Project

In early March 2022, the General Contractor notified Grupa Azoty POLYOLEFINS that some of its Ukrainian employees had left the construction site without stating any reasons for doing so. However, the most probable reason was their willingness to fight for their country. In a letter of June 27th 2022, the General Contractor stated that the worker shortage caused by Ukrainian employees who abandoned the site following the outbreak of war was partly solved and that, in the opinion of the General Contractor, the number of workers was sufficient to continue the construction work.

In addition, to mitigate the risk of reduced supply of strategic raw materials, Grupa Azoty POLYOLEFINS plans to diversify its supply sources.

Stage of completion

As at June 30th 2022, the overall stage of completion under the EPC Contract was 94.25%. The overall stage of completion is understood as comprising design, procurement and supply, construction, acceptance, commissioning and start-up.

The deliveries of plant and equipment continued in the first half of 2022. The installation of aboveground and underground pipelines, wiring, electrical equipment and automation systems, as well as steel structures was underway as part of all sub-projects.

Deliveries of long-lead items of plant and apparatus were completed, marking another key milestone in the Project. As at the end of June, deliveries were 99.96% complete.

Handling and storage terminal (marine gas terminal, HST)

Hydrostatic testing of propane and ethylene storage tanks was completed. Submersible pumps were installed in the fire pump room. Insulation and painting work was completed on the ethylene tank and the same work began on the propane tank. On August 1st 2022, another key milestone, namely "Acceptance of technical and physical safeguards for the Port", was achieved. The Security Office began a series of acceptance procedures for individual safeguards.

Propane dehydrogenation unit (PDH), polypropylene unit (PP) with logistics base (PPL), auxiliary systems (AUX)

On May 13th 2022, two sets of expanders were installed on the PDH unit as part of the gas separation system. The assembly of internal trays in the propane separation column (PP splitter) was completed. The installation of the chlorine distribution system necessary for the regeneration of the Oleflex catalyst continued, and a chlorine neutralisation unit intended to prevent any leakage was also installed within the system. Work was under way to install compressor canopies, underground and aboveground piping, fittings, and power supply cables. The process of securing steel structures with a fire resistant layer was also under way.

On the PP subproject, a product purge bin (PPB) was installed on the top of the granulation building, and the installation of a steel structure around the PPB was completed. The installation work related to the extruder kit continued, and the main equipment for the VOC treatment system was delivered and installed. As part of the subproject, 94% of equipment and apparatus, including 100% of key equipment and long lead items, were installed. As regards the installation work related to materials, the installation of aboveground piping and fittings continued and control and power supply cables were laid. Work began to apply a fire protection layer on steel structure components. Pressure testing of the aboveground pipelines continued.

In the PPL subproject, the installation of bagging and packaging lines was completed, and finishing work (internal and external) on buildings was carried out. The installation of underground piping continued, and a concrete pavement was laid in the storage yard. Installation of the power supply station and electrical switchgear commenced in the packaging station building, and the construction of a power service line from the S03 power substation began.

Hydrostatic tests of fire, process and demi water tanks were carried out in the AUX sub-project. Filtering equipment was also delivered to the construction site.

Administrative decisions

By way of a decision of March 1st 2022, the company obtained a use permit for the new building, air intake, air pipeline with supports, road, rainwater drainage and electricity systems and site amenities.

Financing

At present, Grupa Azoty POLYOLEFINS draws funds under a term facility and VAT facility to meet its liquidity needs according to the progress in implementing the Project.

In accordance with the subordinated loan agreements signed on May 31st 2020 between the company and the Parent, Grupa Azoty POLICE, Grupa LOTOS S.A. and Korea Overseas Infrastructure & Urban Development Corporation, the company signs annexes to loan agreements with these entities concerning capitalisation of interest and commission fees for subsequent interest periods.

For the interest period ended December 31st 2021, annexes to the loan agreements between Grupa Azoty POLYOLEFINS and the Parent and Grupa Azoty POLICE were signed on January 5th 2022. In the case of Grupa LOTOS S.A. and Korea Overseas Infrastructure & Urban Development Corporation, annexes concerning capitalisation of interest and commission fees for the interest period ended January 13th 2022 were signed on January 20th and January 24th 2022, respectively.

In connection with the interest period ended June 29th 2022, annexes to the loan agreements between Grupa Azoty POLYOLEFINS and the Parent and Grupa Azoty POLICE were signed on July 1st 2022. In the case of Grupa LOTOS S.A. and Korea Overseas Infrastructure & Urban Development Corporation, annexes concerning capitalisation of interest and commission fees for the interest period ended July 14th 2022 were signed on July 19th and July 18th 2022, respectively.

Grupa Azoty PUŁAWY recognised in the Decarbonisation Initiatives Ranking

Grupa Azoty PUŁAWY won the second edition of the Decarbonisation Initiatives Ranking of the PTWP Group. The ranking presents the most interesting, imaginative and effective initiatives to reduce greenhouse gas emissions. The Ranking leaders were selected by the Board of the 'Green Index' campaign, consisting of representatives of environmental protection institutions, organisations and experts.

Grupa Azoty PUŁAWY was recognised for its R&D project 'Development and implementation of advanced process controls (APC) for the ammonia production unit'. Advanced process controls is a system whose implementation has reduced the carbon footprint on a single ammonia production line by more than 20 kg CO_2 per tonne of ammonia.

The positive project outcomes provide rationale for the deployment of the APC system on the remaining eight ammonia production lines, which may reduce the total CO_2 emissions by more than 20,000 tonnes per year. In the future, Grupa Azoty PUŁAWY intends to introduce the APC system for other technological processes as well.

The project was implemented under the INNOCHEM sectoral programme financed from the resources of the National Centre for Research and Development under Measure 1.2 'Sectoral R&D Programmes' of the Smart Growth Operational Programme 2014-2020. The Decarbonisation Initiatives Ranking is a part of 'Green Index', an extensive campaign run by the PTWP Group, publisher of the wnp.pl website, addressed to active participants of the green transition of Poland's economy.

Grupa Azoty KĘDZIERZYN sums up its tasks under the New Energy Concept

Two investment projects totalling PLN 36.1m were completed on the premises of the Ammonia Department at Grupa Azoty KĘDZIERZYN. 'Upgrade of the ammonia liquefaction unit' and 'Replacement of K-2 and K-3 ammonia gas compressors with electric compressors' are implemented as part of the New Energy Concept, one of the key ongoing projects carried out by Grupa Azoty KĘDZIERZYN.

As part of the upgrade of the ammonia liquefaction unit, a new system based on screw compressors and evaporative condensers was designed and built. The project included construction (bunds, foundations), installation (rainwater drainage and industrial sewer system), erection (pipelines and equipment), electricity (such as equipment power supplies) and I&C works (including the installation of metering devices, control system upgrade). The PLN 19.3m project was executed from 2019 to 2021.

To replace the K-2 and K-3 gas ammonia compressors with electric compressors, three screw compressors were installed, and connection pipelines and power supply routes were provided for new machinery. The necessary I&C work was also completed at the facility and within the control system. The PLN 16.8m project commenced in 2019 and was placed in service in late 2021.

Production cuts at the Parent and its subsidiaries

On August 22nd 2022, in view of the extraordinary and unprecedented increase in natural gas prices,

- the Management Board of the Parent decided to temporarily shut down the nitrogen fertilizer, caprolactam and polyamide 6 production units as of August 23rd 2022. The Company continues to produce catalysts, polyamide casings, humic acids, thermoplastic starch and concentrated nitric acid.
- The Management Board of Grupa Azoty PUŁAWY also decided to temporarily scale down production of ammonia, to about 10% of the capacity, as of August 22nd 2022, and to halt production activities in the Plastics and Agro Segments, with the exception of production of ammonium sulfate from the FGD Plant, NOXy®, Likam and PULNOX®.
- The Management Board of Grupa Azoty KĘDZIERZYN decided to reduce, as of August 24th 2022, the operation of production units to a minimum, i.e., to 43% in the case of the Fertilizers Unit.

During the announced temporary shutdowns of production units at the Parent and Grupa Azoty PUŁAWY, investment and repair work will be carried out, including the scheduled overhaul of the Parent's Polyamide unit.

The current situation in the gas market, which determines the profitability of production activities, is extraordinary and completely beyond the control of the Grupa Azoty Group, and could not have been predicted.

Approaching State Treasury with proposal regarding acquisition and integration of ZEW Niedzica S.A. into Grupa Azoty Group

On September 12th 2022, having completed a due diligence and valuation of the business of Zespół Elektrowni Wodnych Niedzica S.A. ("ZEW Niedzica") and considering the Grupa Azoty Group's Strategy for 2021–2030 envisaging, among other things, the Group's transition towards renewable energy sources, the Management Board of the Parent decided to request the Polish State Treasury, as the sole shareholder in ZEW Niedzica, to initiate a process leading to its potential acquisition and merger into the Grupa Azoty Group. The principal business of ZEW Niedzica is the generation of renewable energy from hydropower assets – the pumped-storage hydroelectric power station in Niedzica, and the hydroelectric power plants in Sromowce Wyżne on the Dunajec River, and in Łączany and Smolice on the Vistula River. Their annual electricity output is approximately 100 GWh.

Further steps in the potential transaction and its optimal structure will be subject to specific arrangements with the State Treasury.

Other material events

For information on other – not listed above – material events in the reporting period and subsequent to the reporting date, including the effect of the war in Ukraine on the Grupa Azoty Group's operations, see the interim condensed consolidated financial statements of the Grupa Azoty Group for the six months ended June 30th 2022.

4.2. Significant agreements

Trade contracts

Extension of Individual Contracts with Polskie Górnictwo Naftowe i Gazownictwo S.A.

On July 7th 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN and Grupa Azoty SIARKOPOL (collectively the "Grupa Azoty Group Customers") executed an annex to the Gas Sale Framework Agreement of April 13th 2016 and annexes to Individual Contracts.

As a result of the execution of the annexes to the Individual Contracts, PGNiG will remain the strategic supplier of gas fuel for the Grupa Azoty Group Customers until September 30th 2023.

The total value of the annexes executed with the Grupa Azoty Group Customers for the term of extension of the Individual Contracts is estimated at PLN 13.4 billion. The pricing formula applied in the Individual Contracts is based on gas market price indices.

Execution of coal purchase contracts

On September 19th 2022, following a tender procedure, the Parent entered into a framework contract for the purchase of coal with the successful bidder Polska Grupa Importowa Premium Sp. z o.o. of Katowice. The contract provides for the supply of imported thermal coal. Coal deliveries to be made under the contract will be complementary to other sources of coal used by the Parent for energy generation purposes. The contract has been concluded for an indefinite period and contains general terms and conditions of cooperation related to the supply and offtake of coal. The total value of coal to be delivered in 2022 is estimated at approximately PLN 110m.

Framework contracts for the purchase of coal with Polska Grupa Importowa Premium Sp. z o.o. were also executed by the subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN. Coal deliveries to be made under the contracts will be complementary to deliveries received by the Group companies from their strategic suppliers. The contracts also permit the customers to redirect contracted coal supplies between themselves.

The total value of coal to be delivered by Polska Grupa Importowa Premium Sp. z o.o. to the Group companies in 2022 is estimated at approximately PLN 160m. The Parent may order further deliveries under the contract in the future.

Financing agreements

Annex 4 to the Payments Servicing Agreement of December 14th 2018 with Banco Santander S.A. and Santander Factoring Sp. z o.o., as amended by the Agreement of September 23rd 2019 Amending and Superseding the Payments Servicing Agreement

On March 15th 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN and COMPO EXPERT signed Annex 4 to the Payments Servicing Agreement of December 14th 2018, as amended by the Agreement of September 23rd 2019 Amending and Superseding the Payments Servicing Agreement, capped at EUR 122m, with Banco Santander S.A. and Santander Factoring Sp. z o.o. in order to enable suppliers to discount accounts receivable before invoice due dates.

Annex to the Payment Services and Financing Agreement with CaixaBank S.A.

On March 31st 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed an Annex to the Payment Services and Financing Agreement of April 29th 2021 with CaixaBank S.A., Polish Branch.

The amendments introduced by the Annex include an increase in the facility amount from PLN 500 million to PLN 800 million (or its equivalent in EUR or USD), extension of the availability period of the facility until April 29th 2023, change of the CaixaBank's margins on the financing in PLN and USD in accordance with the standards applied in other contracts of this type, and making available the option of supplier financing until payment date as a split-payment mechanism.

Annex to the Supply Financing Agreement with Pekao Faktoring Sp. z o.o.

On March 31st 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed an Annex to the supply financing agreement of May 31st 2021 with Pekao Faktoring Sp. z o.o.

The amendments introduced by the Annex include an increase in the facility amount from PLN 250 million to PLN 550 million (or its equivalent in EUR or USD), extension of the availability period of the facility until November 30th 2022, replacement of the 1M LIBOR benchmark for USD with the 1M CME Term SOFR benchmark, and making available the option of supplier financing until payment date.

Annex to factoring agreement with Pekao Faktoring Sp. z o.o.

On May 31st 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN (the "Factorees") signed Annex 2 to the Factoring Agreement of May 31st 2021 with Pekao Faktoring Sp. z o.o.

The Annex provides for the possibility of financing receivables from related parties of the Factorees in an aggregate amount of up to PLN 100m (or its equivalent in EUR or USD).

Annex to reverse factoring agreement with ING Commercial Finance Polska S.A.

On June 3rd 2022, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed an Annex to the reverse factoring agreement of April 29th 2021 with ING Commercial Finance Polska S.A.

As part of the amendments made by the Annex, the factoring limit was increased from PLN 500m to PLN 800m (or its equivalent in EUR or USD) and the option of supplier financing until payment date was made available as a split-payment mechanism.

Agreement on COMPO EXPERT GmbH's accession to Payment Services and Financing Agreement with CaixaBank S.A.

On June 29th 2022, CaixaBank S.A., the Parent and COMPO EXPERT GmbH signed an agreement on accession by COMPO EXPERT GmbH, as a new Factoree, to the Payment Services and Financing Agreement. The agreement is an accession agreement within the meaning of the Payment Services and Financing Agreement of April 29th 2021 between CaixaBank S.A., the Parent, Grupa Azoty PUŁAWY, Grupa Azoty POLICE, and Grupa Azoty KĘDZIERZYN.

Annex 8 to the multi-purpose credit facility (MPCF) agreement with PKO BP S.A.

On September 26th 2022, the Parent and its subsidiaries signed an annex to the PLN 240m multi-purpose credit facility agreement with PKO BP S.A. Under the annex:

- the term of the MPCF agreement, originally expiring on September 30th 2022, was extended until September 30th 2025, with the option to extend it for subsequent 12-month periods,
- the credit limit under the MPCF agreement was increased to PLN 1bn,
- an overdraft facility was made available within the facility limit to the Parent,
- a revolving working capital facility, bank guarantees and bank letters of credit were made available within the facility limit to the Parent and the Group companies being parties to the MPCF agreement;
- the following companies: Grupa Azoty PUŁAWY, Grupa Azoty KĘDZIERZYN and Grupa Azoty POLICE were released from their obligations under a surety agreement for the MPCF agreement of June 29th 2018.

As at the annex date, the following limits and sub-limits were set within the facility limit with effect from September 30th 2022:

- limit of the overdraft facility for the Parent: up to PLN 300m;
- sub-limits of the revolving facility, bank guarantees and bank letters of credit: up to PLN 575m for the Parent, up to PLN 62m for Grupa Azoty POLICE, up to PLN 1m for Grupa Azoty PUŁAWY, up to PLN 30m for Grupa Azoty KĘDZIERZYN, and up to a total of PLN 32m for the other Group companies being borrowers under the MPCF agreement.

The annex to the MPCF agreement is part of a long-term financing package designed to finance general corporate needs and to ensure security of financing for the Group companies through the umbrella nature of limit allocation and actual intra-Group redistribution.

The MPCF agreement as amended by the annex supersedes and consolidates the existing overdraft facility agreements for up to PLN 310m and up to EUR 75m (or its equivalent in USD), both executed with PKO BP S.A., expiring on September 30th 2022.

Physical cash pooling (PCP) agreement with PKO BP S.A.

On September 23rd 2022, the Parent and the Group companies executed a new PLN, EUR and USD physical cash pooling agreement with PKO BP S.A. with a term running until September 30th 2025.

The CPR agreement supersedes and consolidates the existing PLN physical cash pooling agreement and the PLN, EUR and USD physical cash pooling agreement, both executed with PKO BP S.A., expiring on September 30th 2022.

Insurance agreements

Grupa Azoty Group's Consolidated Insurance Programme with TUW PZUW

The Grupa Azoty Group companies which are members of the Grupa Azoty Mutual Insurance Union (ZWC) within Towarzystwo Ubezpieczeń Wzajemnych (TUW) of Polski Zakład Ubezpieczeń Wzajemnych (PZUW) signed a new Master Agreement for the Consolidated Property Insurance Programme with TUW PZUW for a term of 3 years, i.e. from March 1st 2022 to February 28th 2025, under which policies were issued for the first year, covering the following lines of insurance:

- all-risk property insurance (PD/ALLR);
- all-risk electronic equipment insurance (EEI);
- loss of profit insurance (PD/ALLR (BI));
- all-risk machinery insurance (MB).

Trade credit insurance at Grupa Azoty PUŁAWY

In February 2022, Towarzystwo Ubezpieczeń Euler Hermes S.A. (TUEH) issued trade credit insurance policies for Grupa Azoty Puławy. The insurance, within the credit limits set by TUEH, except for transactions secured by bank guarantees and letters of credit, will cover:

- domestic and export sales of caprolactam and melamine and other products under a policy taken out for a period from February 1st 2022 to June 30th 2023;
- export sales of fertilizers and other chemical products under a policy taken out for a period from February 1st 2022 to June 30th 2023;
- domestic sales of fertilizers and other chemical products under a policy taken out for a period from July 1st 2022 to June 30th 2023.

CARGO and CAR/EAR insurance

On July 1st 2022, the Group companies which are members of the Grupa Azoty Mutual Insurance Union (ZWC) received the confirmation of insurance cover for the following agreements:

- the property in national and international transit insurance (CARGO) master agreement, renewed with TUW PZUW for a period of three years (from July 1st 2022 to June 30th 2025), under which a policy for the first annual insurance period has been issued,
- the contractors/erection all risks (CAR/EAR) insurance master agreement, transferred from TUW PZUW to InterRisk for a period of three years (from July 1st 2022 to June 30th 2025).

Business and property third-party liability insurance

On July 28th 2022, a business and property third-party liability insurance policy was issued for a second annual period (from August 1st 2022 to July 31st 2023), reflecting the terms of the Master Agreement made with TUW PZUW for a period of two years (from August 1st 2021 to July 31st 2023).

Project co-financing agreements

In the first half of 2022, no material amounts of project co-financing were received. In the same period, the Parent received a grant of PLN 1,473 thousand for the project "Speciality ammonium nitrate-sulfate fertilizer products with functional additives".

In the first six months of 2022, Grupa Azoty KĘDZIERZYN signed:

- An annex to the co-financing agreement for the project "Innovation Centre at Grupa Azoty Zakłady Azotowe Kędzierzyn Spółka Akcyjna", extending the expenditure eligibility period under the project until June 30th 2022.
- An annex to the co-financing agreement for the project "Speciality compound fertilizers based on ammonium nitrate, containing primary nutrients (NPK), micronutrients, selenium and plant growth stimulants", amending the deadlines for the completion of individual stages of the project as well as the technological issues (in one of the stages).

In the first half of 2022, co-financing for the projects implemented by Grupa Azoty KĘDZIERZYN totalled PLN 2,446 thousand.

In the first half of 2022, Grupa Azoty PUŁAWY's bank account was credited with grants totalling PLN 925 thousand, including mainly:

- PLN 263 thousand under the co-financing agreement of November 29th 2017 for the project "Development of a technology for obtaining potassium thiosulfate from flue gases from sulfuric acid plants and potassium thiosulfate-based compound liquid fertilizers",
- PLN 232 thousand under the co-financing agreement of August 3rd 2018 for the project "Green technology for the production of succinic acid from renewable and waste materials".

On April 29th 2022, Grupa Azoty FOSFORY and the Provincial Fund for Environmental Protection and Water Management signed a PLN 8m loan agreement for the co-financing of the "Transition to gas as fuel at GA FOSFORY Sp. z o.o." project. The last instalment is repayable on January 31st 2029. The loan amount disbursed by June 30th 2022 was PLN 0.

In the first six months of 2022, Grupa Azoty POLICE, the leader of a consortium with Grupa Azoty PUŁAWY, continued the POIR.01.01.01-00-0476/18 research and development project. The project budget is PLN 14.9m and the maximum amount of co-financing represents 49.9% of total eligible expenditure.

In the first half of 2022, Grupa Azoty POLICE, as a consortium member, worked on the POIR.01.01.01-00-1495/19 project. The project budget is PLN 5.8m and the maximum amount of co-financing represents 66.2% of total eligible expenditure.

In the first half of 2022, Grupa Azoty POLICE continued to work on the POIR.01.01.01-00-1313/20 project. The project budget is PLN 3.5m and the maximum amount of co-financing represents 56.2% of total eligible expenditure.

Other contracts

Execution of agreement to negotiate acquisition of shares in Solarfarm Brzezinka Sp. z o.o.

On July 20th 2022, the Parent entered into an agreement with VSB Holding GmbH of Dresden, Germany, Janusz Franciszek Siemieniec (collectively the "Sellers") and Solarfarm Brzezinka Sp. z o.o. of Wrocław ("Solarfarm") to conduct negotiations, on an exclusive basis, regarding the potential acquisition of 100% of shares in the share capital of Solarfarm.

The Parties expressed their interest in collaborating on a project to build the Brzezinka solar PV power plant with a capacity of approximately 270 MWp which is being developed by Solarfarm, comprising preparatory, construction and installation work, grid connection, commissioning and potential operation of the power plant (the "PV Project"). Once the parties have agreed on the target business model and technical and economic parameters and once the conditions precedent agreed upon during negotiations have been met, the PV Project may be acquired by the Parent or its subsidiary through acquisition of shares in Solarfar, unless the parties agree on a different transaction model.

The Agreement sets out the terms and conditions of the negotiations to be conducted by the parties on an exclusive basis with a view to closing the transaction and defining the terms of the collaboration, as well as the key parameters necessary for closing the transaction and enabling the collaboration, including the financial model and technical and economic parameters of the PV Project, the purchase price of Solarfarm shares, the price payment terms and price adjustment methods, if applicable.

If the transaction is closed, it will significantly contribute to achieving the goals outlined in the part of the Grupa Azoty Strategy 2021–2030 where it provides for the acquisition of own renewable energy sources.

4.3. Sureties and guarantees

Guarantees

In the first half of 2022, the total amount of all guarantees issued at the request of the Group companies was PLN 4,768 thousand. The guarantee for the highest amount, PLN 1,296 thousand, was issued on January 4th 2022 at the request of Grupa Azoty PUŁAWY in favour of Enea Wytwarzanie Sp. z o.o.

Intragroup loans

Annexes to agreements of May 31st 2020 for loans granted to Grupa Azoty POLYOLEFINS by the Parent and Grupa Azoty POLICE

In January and July 2022, Grupa Azoty POLYOLEFINS signed annexes to loan agreements of May 31st 2020:

- On January 5th 2022, with the Parent, Annex 3 in connection with capitalisation of another portion of commission and interest for the next interest period. In accordance with the Annex, as a result of the capitalisation as of December 31st 2021 the loan principal was PLN 384,718 thousand;

(all amounts in PLN '000 unless indicated otherwise)

- On July 1st 2022, with the Parent, Annex 4 in connection with capitalisation of another portion of commission and interest for the next interest period. In accordance with the Annex, as a result of the capitalisation as of June 30th 2022 the loan principal was PLN 405,325 thousand.
- On January 5th 2022, with Grupa Azoty POLICE, Annex 3 in connection with capitalisation of another portion of commission and interest for the next interest period. In accordance with the Annex, as a result of the capitalisation as of December 31st 2021 the loan principal was PLN 433,831 thousand.
- On July 1st 2022, with Grupa Azoty POLICE, Annex 4 in connection with capitalisation of another portion of commission and interest for the next interest period. In accordance with the Annex, as a result of capitalisation as of June 30th 2022 the loan principal was PLN 457,068 thousand.

In the case of Grupa LOTOS S.A. and Korea Overseas Infrastructure & Urban Development Corporation, annexes concerning capitalisation of interest and commission fees for the interest period ended January 13th 2022 were signed by Grupa Azoty POLYOLEFINS on January 20th and January 24th 2022, respectively. As regards the interest period ended July 14th 2022, annexes to the subordinated loan agreements were signed on July 18th and July 19th 2022, respectively.

Annex to a loan agreement between the Parent and Grupa Azoty PUŁAWY

On February 18th 2022, Annex 1 to the loan agreement executed on February 5th 2021 between the Parent and Grupa Azoty PUŁAWY under an intra-group financing agreement was signed. The Annex extended until February 25th 2023 the disbursement/availability period for the PLN 650,000 thousand loan to be used to cover capital expenditure under the project "Construction of a coal-fired power generation unit". The loan repayment date is June 29th 2025.

Annexes to agreements on loans granted by Grupa Azoty PUŁAWY

On May 23rd 2022, Grupa Azoty PUŁAWY signed:

- Annex 4 to the Loan Agreement of April 2nd 2014 and Annex 2 to the Loan Agreement of January 8th 2020 with Grupa Azoty CHORZÓW,
- Annex 5 to the Loan Agreement of May 7th 2014 and Annex 3 to the Loan Agreement of January 16th 2017 with SCF Natural Sp. z o.o.

4.4. Shareholding structure

Number and par value of shares as at the issue date of this Report:

- 24,000,000 Series AA shares with a par value of PLN 5 per share,
- 15,116,421 Series B shares with a par value of PLN 5 per share,
- 24,999,023 Series C shares with a par value of PLN 5 per share,
- 35,080,040 Series D shares with a par value of PLN 5 per share.

The total number of Parent shares is 99,195,484 bearer shares (ISIN code PLZATRM00012).

Below are listed shareholders holding directly, or indirectly through subsidiaries, at least 5% of total voting rights at the General Meeting as at the date of this Report, along with information on the number of shares held by such entities, their respective ownership interests, the number of voting rights held, and their share in total voting rights at the General Meeting.

Shareholding structure as at May 25th 2022 (in accordance with the information provided in the interim report for the first quarter of 2022)

Shareholder	Number of shares	Ownership interest (%)	Number of votes	% of voting rights
State Treasury	32,734,509	33.00	32,734,509	33.00
ING OFE	9,883,323	9.96	9,883,323	9.96
Norica Holding S.à r.l. (indirectly: 19,657,350 shares or 19.82%)	406,998	0.41	406,998	0.41
Rainbee Holdings Limited*)	9,820,352	9.90	9,820,352	9.90
Opansa Enterprises Limited)	9,430,000	9.51	9,430,000	9.51
TFI PZU S.A.	8,530,189	8.60	8,530,189	8.60

(all amounts in PLN '000 unless indicated otherwise)

Other	28,390,113	28.62	28,390,113	28.62
Total	**99,195,484**	**100.00**	**99,195,484**	**100.00**

*) Direct subsidiaries of Norica Holding S.à r.l., which, together with that company, are related parties of Mr Vyacheslav Moshe Kantor.

The actual shareholding structure may differ from that presented if there were no events giving rise to a shareholder's obligation to disclose a new shareholding or if, despite the occurrence of such events, a shareholder failed to provide information.

In the period from May 25th 2022 to the issue date of this Report, the Parent was not officially notified of any changes in major holdings of its shares.

4.4.1. Sanctions imposed on a minority shareholder

On April 6th 2022, Mr Kantor was placed on the United Kingdom sanctions list, on April 8th 2022 – on the European Union sanctions list, and on April 26th 2022, together with subsidiaries of Norica Holding S.à.r.l. of Luxembourg, i.e., Opansa Enterprises Limited of Cyprus and Rainbee Holdings Limited of Cyprus, through which he controls 19.82% of Grupa Azoty shares – on the Polish sanctions list. Mr Kantor is a minority shareholder who has no influence over the activities of Grupa Azoty or the right to nominate members of the Company's governing bodies, and therefore, despite his shareholding, Mr. Kantor does not own or control the Parent within the meaning of Council Regulation (EU) No. 269/2014 of March 17th 2014 on restrictive measures with regard to actions undermining or threatening the territorial integrity, sovereignty and independence of Ukraine.

4.5. Parent shares held by management and supervisory personnel

As at the date of this Report, none of the Management Board members or supervisory personnel held any shares in the Parent.

4.6. Composition of the management and supervisory bodies

The Management Board

In the first half of 2022, there were no changes in the composition of the Management Board. As at June 30th 2022, the Management Board consisted of the following persons:

- Tomasz Hinc – President of the Management Board,
- Mariusz Grab – Vice President of the Management Board,
- Filip Grzegorczyk, PhD – Vice President of the Management Board,
- Tomasz Hryniewicz – Vice President of the Management Board,
- Grzegorz Kądzielawski – Vice President of the Management Board,
- Marek Wadowski − Vice President of the Management Board,
- Zbigniew Paprocki – Member of the Management Board.

Powers and responsibilities of the Company's Management Board and Supervisory Board members

The powers and responsibilities of the members of the Company's Management Board as at June 30th 2022 were as follows:

- Tomasz Hinc – President of the Management Board, responsible for managing the Company Management Board's operation and for corporate governance, corporate supervision, communication and PR, human resources management, sponsorship activities, compliance management, internal audit, CSR, representing the Parent in relations with its stakeholders, including shareholders, governing bodies, central and local government authorities, integration and coordination of supervised areas and processes within the Group;
- Mariusz Grab – Vice President of the Management Board, responsible for procurement process management, ICT process management, security and cybersecurity management, raw material and semi-finished product integration, integration and coordination of supervised areas and processes within the Group;
- Filip Grzegorczyk, Dr. Habil. – Vice President of the Management Board, responsible for strategic management of energy transition projects, logistics process management, corporate risk management, market regulations and protection, market analyses, integration and coordination of supervised areas and processes within the Group, coordination of efforts designed to meet the requirements of the Green New Deal in the area of energy;

- Tomasz Hryniewicz – Vice President of the Management Board, responsible for management of sales and customer service standards, product portfolio management, integration and coordination of supervised areas and processes within the Group;
- Grzegorz Kądzielawski, Ph.D. – Vice President of the Management Board, responsible for research and development, protection of intellectual and industrial property, technology transfer and cooperation with universities and institutions in the area of innovation, preparation and implementation of investment projects at the Parent, monitoring of the implementation of investment projects at the Group, social dialogue, strategic planning and monitoring of strategy implementation, strategic management of projects with the exception of energy transition, integration and coordination of supervised areas and processes within the Group, coordination of the Group's efforts designed to meet the requirements of the Green New Deal (excluding the energy area) and Circular Economy;
- Marek Wadowski – Vice President of the Management Board, responsible for finance and accounting policy management, monitoring of the implementation of plans, planning, budgeting and controlling, mergers and acquisitions, investor relations, integration and coordination of supervised areas and processes within the Group;
- Zbigniew Paprocki – Member of the Management Board, Chief Executive Officer of the Parent, responsible for management of integration and coordination of production processes, management of maintenance of production assets, shutdowns, repair and overhauls, critical infrastructure management, technical safety, fire and environmental safety, integration and coordination of supervised areas and processes within the Group.

Division of powers between members of the Company's Management Board as at June 30th 2022

Source: Company data.

Supervisory Board

In the first half of 2022, there were no changes in the composition of the Supervisory Board. As at June 30th 2022, the Supervisory Board consisted of the following persons:

- Magdalena Butrymowicz, LL D – Chair of the Supervisory Board,
- Wojciech Krysztofik – Deputy Chair of the Supervisory Board,
- Robert Kapka – Secretary of the Supervisory Board,

- Monika Fill – Member of the Supervisory Board,
- Bartłomiej Litwińczuk – Member of the Supervisory Board,
- Michał Maziarka – Member of the Supervisory Board,
- Marcin Mauer – Member of the Supervisory Board,
- Janusz Podsiadło – Member of the Supervisory Board,
- Roman Romaniszyn – Member of the Supervisory Board.

The Company's Supervisory Board operates in accordance with the following regulations:

- The Accounting Act of September 15th 2000;
- The Act on Commercialisation and Certain Employee Rights of August 30th 1996;
- The Accounting Act of September 29th 1994;
- The Company's Articles of Association,
- The Rules of Procedure for the Company's Supervisory Board.

Pursuant to Art. 32 of the Company's Articles of Association, the key powers and responsibilities of the Supervisory Board include:

- appointing and removing from office Management Board members;
- assessing the Management Board's proposals on distribution of profit or coverage of loss;
- assessing the Directors' Report on the operations of the Parent and the Grupa Azoty Group, as well as of separate financial statements of the Parent and the consolidated financial statements of the Group for their consistency with accounting records and supporting documents and for accuracy;
- appointing an audit firm to review and audit the financial statements of the Parent and the consolidated financial statements of the Group;
- approving the Parent's long-term strategic plans;
- approving annual budgets including capital expenditure budgets;
- issuing opinions on all matters submitted by the Management Board for consideration to the General Meeting;
- granting consent for the Management Board to execute material legal transactions.

In the first half of 2022, the Supervisory Board had the following committees:

- the Audit Committee,
- the Strategy and Development Committee,
- The Nomination and Remuneration Committee.

Audit Committee

To streamline its work and improve control of the Parent and the Group, on July 4th 2013 the Supervisory Board passed a resolution to appoint an Audit Committee.

In the first half of 2022, there were no changes in the composition of the Audit Committee. As at June 30th 2022, the Audit Committee consisted of the following persons:

- Marcin Mauer – Chair,
- Monika Fill – Member,
- Michał Maziarka – Member,
- Robert Kapka – Member,
- Janusz Podsiadło – Member.

In the first half of 2022, the Audit Committee operated pursuant to the Rules of Procedure for the Audit Committee adopted by the Supervisory Board under a resolution of February 11th 2021 and approved by the Supervisory Board under a resolution of March 8th 2021.

The Committee's main tasks are those provided for the Audit Committee in the Act on Statutory Auditors, Audit Firms, and Public Oversight of May 1st 2017, the Company's Articles of Association, and resolutions of the Supervisory Board.

The Committee has the right to demand from the Company's Management Board any information, materials and explanations required for the performance of the Committee's tasks.

Strategy and Development Committee

In the first half of 2022, there were no changes in the composition of the Strategy and Development Committee. As at June 30th 2022, the Committee consisted of the following persons:

- Wojciech Krysztofik – Chair,
- Robert Kapka – Member,

- Bartłomiej Litwińczuk – Member.

In the first half of 2022, the Strategy and Development Committee operated pursuant to the Rules of Procedure adopted by the Strategy and Development Committee under a resolution of March 2nd 2021 and approved by the Supervisory Board under a resolution of March 8th 2021.

Nomination and Remuneration Committee

In the first half of 2022, there were no changes in the composition of the Nomination and Remuneration Committee. As at June 30th 2022, the Committee consisted of the following persons:

- Michał Maziarka – Chair,
- Magdalena Butrymowicz – Member,
- Wojciech Krysztofik – Member,
- Roman Romaniszyn – Member.

In the first half of 2022, the Nomination and Remuneration Committee operated pursuant to the Rules of Procedure adopted by the Nomination and Remuneration Committee under a resolution of March 24th 2021 and approved by the Supervisory Board under a resolution of April 19th 2021. The tasks, powers, rules of procedure and name of the Committee were changed after the reporting date. The Committee was renamed as the Corporate Governance Committee and operates on the basis of the Rules of Procedure, the consolidated text of which was approved by a Supervisory Board resolution of August 23rd 2022.

5. Additional information

Management Board's position on the achievement of forecasts

As no forecasts for 2022 were published, the position of the Parent's Management Board concerning achievement of such forecasts is not presented.

Litigation

There are no material court, arbitration or administrative proceedings pending with respect to any of the Group companies that would concern liabilities or debt claims as referred to in the Regulation of the Minister of Finance of April 20th 2018 on current and periodic information (Dz. U. of 2018, item 757), other than the following proceedings:

- Proceedings instigated by a Shareholder of the Parent to repeal Resolution No. 5 of the Parent's Extraordinary General Meeting of August 21st 2020 to grant consent for legal transactions which could result in disposal of the Parent's non-current assets. The value of the claim was PLN 599,283 thousand. The claim was brought on September 23rd 2020 before the Regional Court of Kraków. The Company considers the claim to be unfounded. On April 1st 2021, the Regional Court of Kraków issued a judgment dismissing the claim. The plaintiff appealed against the judgment. On April 28th 2022, the Court of Appeals in Kraków passed a judgment dismissing the Shareholder's appeal, thus upholding the decision on the merits issued by the court of first instance. The judgment is final.
- Proceedings instigated by the parent against Cenzin Sp. z o.o. The value of the claim is PLN 79,821 thousand. The case concerns a claim for payment of contractual penalty for delay, extension of CAR/EAR insurance by the Parent, repayment of an outstanding advance, loss of co-financing under the Norwegian Financial Mechanism, cost of work in progress inventory taking following withdrawal from the Contract, cost of completion of the Project, compensation for the purchase of more expensive coal, compensation for lost benefits from sale of magnesium sulfate, compensation for purchase of magnesium oxide, and determination of the defendant's liability for losses which may arise in the future. The claim was filed with the Regional Court of Kraków on May 7th 2021.

Parent's branches

The Parent does not operate non-local branches or establishments.

Shares, share issues

In the first half of 2022, the Parent did not issue, redeem or repay any debt or equity securities. The Parent had spent the proceeds from Public Offerings by the end of 2013. The proceeds were used in line with the original issue objectives.

There are no agreements known to the Parent which may cause future changes in the percentages of shares held by the existing shareholders and bondholders.

The Parent does not operate any employee stock option schemes.

Distribution of profit

On June 29th 2022, the Annual General Meeting passed a resolution to allocate the entire amount of the Company's net profit for the financial year 2021, of PLN 191,789,688.13, to the Company's statutory reserve funds.

The decision was in line with the Management Board's recommendation. In its resolution of May 20th 2022, the Management Board proposed that the entire net profit generated in 2021 be retained by the Company. By retaining earnings, the Company will secure financing for the implementation of its planned investment projects, with particular focus on those related to energy transition.

On May 26th 2022, the Company's Supervisory Board gave a favourable opinion on the proposal of the Company's Management Board for the Annual General Meeting to allocate the entire net profit for the financial year 2021, of PLN 191,789,688.13, to the Company's reserve funds.

Signatures of members of the Management Board

………………………………	………………………………
Tomasz Hinc	Mariusz Grab
President of the Management Board	*Vice President of the Management Board*
………………………………	………………………………
Filip Grzegorczyk, PhD	Tomasz Hryniewicz
Vice President of the Management Board	*Vice President of the Management Board*
………………………………	………………………………
Grzegorz Kądzielawski, PhD	Marek Wadowski
Vice President of the Management Board	*Vice President of the Management Board*
………………………………	
Zbigniew Paprocki	
Member of the Management Board Director General	

Tarnów, September 28th 2022