



Directors' Report on the operations of the Grupa Azoty Group in the first half of 2023



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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 2023, 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 direct 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 GmbH

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).

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.

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.

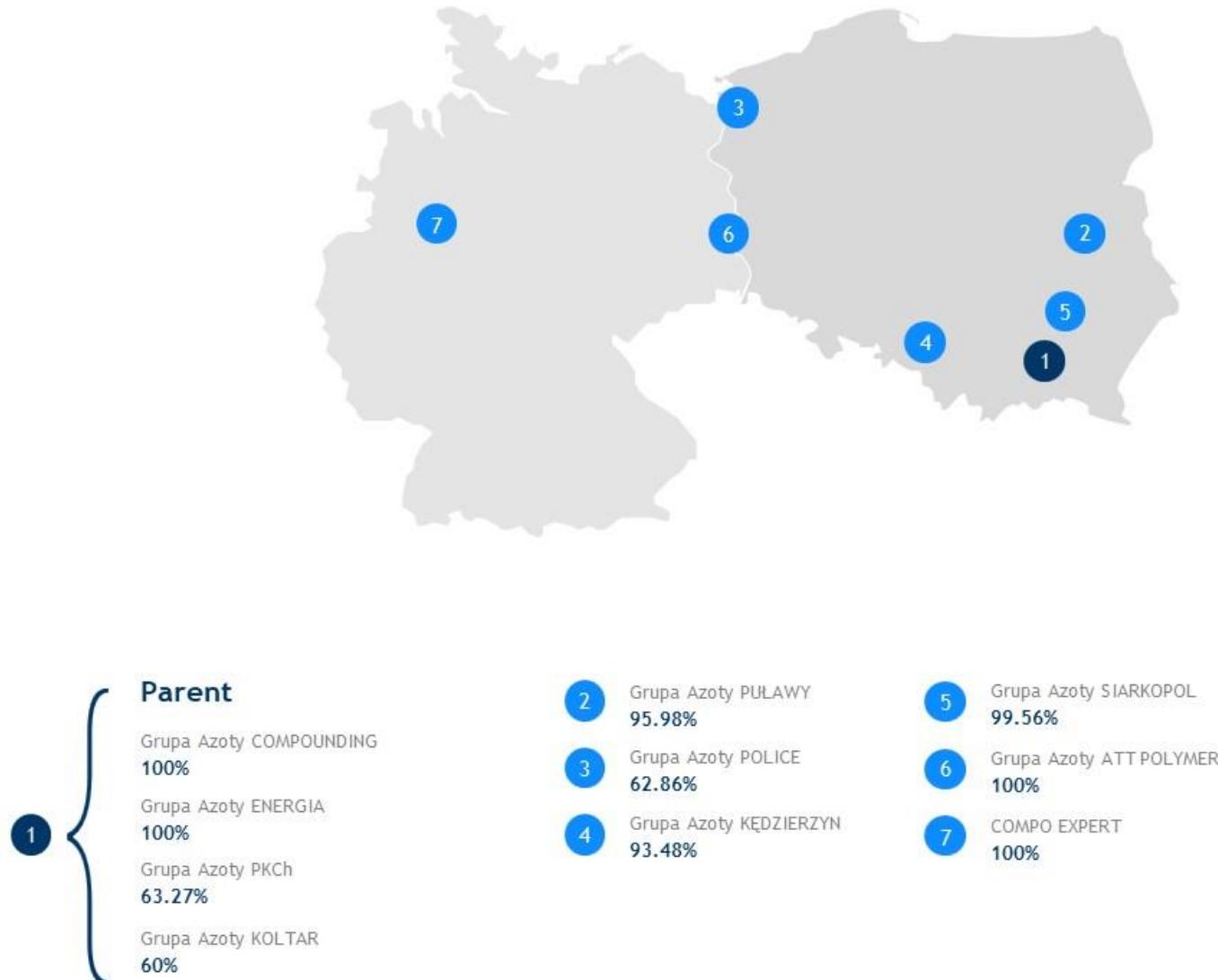
Grupa Azoty Energia Spółka z ograniczoną odpowiedzialnością ("Grupa Azoty ENERGIA") was set up to support the Group in delivering its Strategy for 2021-2030 in the area of energy transition and lower emissions from production processes. In particular, the company is to implement renewable energy projects 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 subsidiaries and jointly-controlled entities as at June 30th 2023

Company	Registered office/address	Share capital	(in relevant currency)
			% of shares held directly
COMPO EXPERT	Krögerweg 1048155, 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	ul. Chemiczna 118, 33-101 Tarnów, Poland	72,007,700 PLN	100.00
Grupa Azoty ENERGIA	ul. Kwiatkowskiego 8, 33-101 Tarnów, Poland	1,000,000 PLN	100.00
Grupa Azoty SIARKOPOL	Grzybów, 28-200 Staszów, Poland	60,620,090 PLN	99.56
Grupa Azoty PUŁAWY	al. Tysiąclecia Państwa Polskiego 1324-110 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	ul. 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	ul. Kwiatkowskiego 8, 33-101 Tarnów, Poland	54,600,000 PLN	60.00
Grupa Azoty POLYOLEFINS*	ul. Kuźnicka 1 72-010 Police, Poland	922,968,300 PLN	30.52

* jointly-controlled entity

The Parent and its subsidiaries as at June 30th 2023

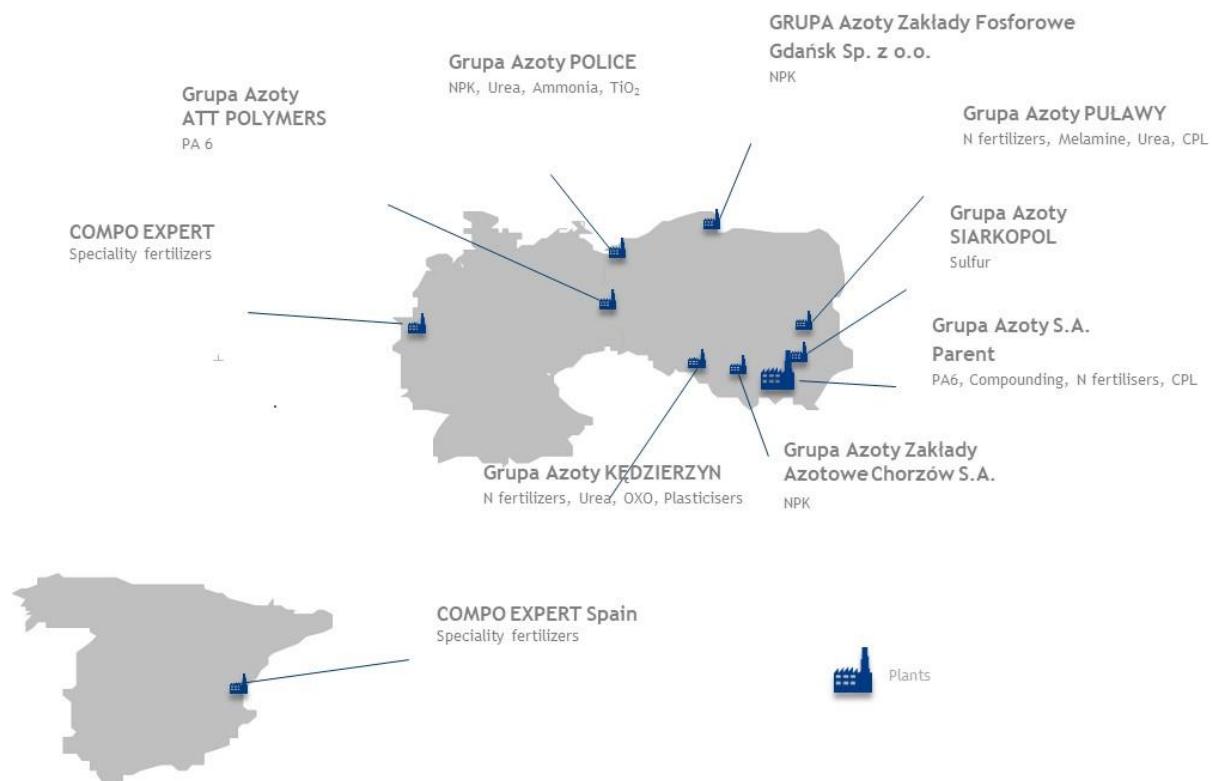


Source: Company data.

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 polypropylene, engineering plastics, OXO products and melamine.

Grupa Azoty - core business areas



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

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

Agro

Mineral fertilizers are the key area of the Group's business. The Agro 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 products are engineering plastics (polyamide 6 (PA6) and modified plastics), polypropylene (PP homopolymers and copolymers) from propylene produced in a propane dehydrogenation (PDH) process, and auxiliary products, such as caprolactam, as well as other chemicals.

They are manufactured by four companies – in Tarnów, Police, 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. Grupa Azoty POLYOLEFINS' project is the largest propylene and polypropylene plant in Central and Eastern Europe.

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's 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

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

Product with a 46% nitrogen content, manufactured in Puławy, Police 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 includes Pulrea® +INu, that 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.

Nitrate fertilizers

- Ammonium nitrate is a nitrogen fertilizer which is easily dissolved in water, containing between 30% and 34% of nitrogen. The Group offers this product in a wide variety of granule forms and sizes, such as mechanically granulated ZAKsan® and PULAN® Macro, 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, such as the granulated Salmag® fertilizers (including varieties with a sulfur or boron content) CAN 27N, and bead fertilizers, such as Saletrzak 27 standard, Saletrzak 27 standard with boron and Saletrzak 27 standard plus.
- 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.
- Saletromag® 25 is a nitrogen and sulfur fertilizer made by combining ammonium nitrate and ammonium sulfate. Containing 25% nitrogen, 7% sulfur and 3.9% magnesium, it is a universal fertilizer that can be used during spring fertilization of all crops.
- 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 Grupa Azoty Group's current offering includes more than 40 grades of compound fertilizers, marketed under the following trade names: Polifoska®, Polidap®, 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., manufacture 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.

Polyolefins

The polypropylene manufactured under the Gryfilen® brand will ultimately comprise a portfolio of more than 30 products, including homopolymers, impact copolymers and random copolymers, which find application in such industries as the automotive, packaging, and home appliance sector. Gryfilen® has a very low volatile substance content and is free of phthalates and bisphenol A (BPA). It is also characterised by a minimal absorption of flavours or odours, which is vital in food industry applications. Polypropylene is a very easily and fully recyclable plastic, which makes it perfectly compatible with the EU's Circular Economy objectives.

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. 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 coverings and wall cladding as well as toys for children. The Group's DEHT/DOTP is marketed under the Oxoviflex® brand.
- **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 plasticizer 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. DOA 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 PVC 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. The Group's DEHA/DOA is marketed under the Oxofine™ DOA brand.
- **TOTM.** A plasticizer suitable for use as the primary plasticizer or in combination with other plasticizers. It is recommended for applications where its superior quality parameters prove useful. Thanks to a low migration rate, it facilitates the preservation of the finished product's properties for a very long time. It stands out for its exceptional chemical resistance and ability to withstand high temperatures. It is primarily used for the production of specialised cables and medical products. The Group's TOTM is marketed under the Oxofine™ TOTM brand.

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.

Technical grade urea

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.

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 (propane, phosphate rock, slag, potassium chloride) are also 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 or purchases ammonia on the market if price relations are favourable.

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 relationship on global markets.

Electricity

The Group purchases electricity from major Polish suppliers trading with large accounts. Following a number of contract award procedures for 2023, 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 the Grupa Azoty Group companies' electricity needs as well as the changing European and national legal framework, the Group's electricity purchase policy is based on a diversified portfolio of exchange products available 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 any deficit. The Group secures phenol supplies for its own needs under long-term contracts concluded directly with Europe's largest producers.

Phosphate rock

Phosphate rock is purchased under forward 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 Orlen S.A. under long-term contracts. In the first half of 2023, natural gas was purchased under the contract with Orlen S.A. at spot prices and in forward transactions, in accordance with the gas price hedging policy.

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 planned maintenance shutdowns.

Propylene

Propylene supply to Grupa Azoty KĘDZIERZYN is secured through annual contracts, supplemented by spot purchases as needed. 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 on supplies from EU countries. As Russia's aggression against Ukraine caused disruptions in the propylene supply chain from the east, the Group switched to alternative supply sources with the most favourable commercial terms, all while prioritising supply security. Propylene for polypropylene production at Grupa Azoty POLYOLEFINS will be produced by an in-house PDH unit.

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

In the six months ended June 30th 2023, coal was supplied to the Grupa Azoty Group mainly under long-term contracts with domestic suppliers. Coal is purchased by way of procurement procedures on the basis of internal regulations. As a result of joint procurement procedures (i.e., leveraging economies of procurement scale) and with logistics handled by the dedicated logistics company Grupa Azoty KOLTAR, the Grupa Azoty Group secures competitive pricing conditions. In response to the challenges of the current commodity market, which include the necessity of ensuring supply security, competitive commercial terms and flexible volumes, the Group companies' strategy in this area assumes the development of a diversified supply portfolio across various supply directions, suppliers, and contracting timeframes, and a streamlined procurement process to expedite the organisation of new deliveries. The Grupa Azoty Group has implemented internal regulations to secure minimum coal stocks as required by the Energy Law.

Grupa Azoty Group's production volume by product group ('000 tonnes)

	H1 2023	H1 2022	change	% change
Agro				
Nitrogen fertilizers	1,143	1,776	(633)	(36%)
Compound fertilizers	264	429	(165)	(38%)
Speciality fertilizers	132	166	(34)	(20%)
Chemicals				
Pigments	9	15	(6)	(40%)
Urea	350	775	(425)	(55%)
OXO products	53	104	(51)	(49%)
Plastics				
Polyamide	48	80	(32)	(40%)

Source: Company data.

Subsequent to the reporting period, the Parent and the Group companies consistently increased their production volumes.

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

Below are presented one-off items affecting the assets, equity and liabilities, capital, net profit/loss or cash flows. In the six months ended June 30th 2023, the Grupa Azoty Group received PLN 234m in financial support from the National Fund for Environmental Protection and Water Management, granted based on the governmental programme 'Aid to energy-intensive sectors related to sudden increases in natural gas and electricity prices in 2022'. Moreover, for a total of PLN 568m the Group companies sold excess CO₂ emission allowances (EUAs) resulting from lower production levels and remaining after surrendering EUAs matching actual emissions for 2022. For detailed information on the aid received, the sale of EUAs and the impact of war in Ukraine, see the interim condensed consolidated financial statements of the Grupa Azoty Group for the six months ended June 30th 2023.

Exchange rates

As of February 2023, the złoty gradually strengthened following the trend seen at the end of 2022. The exchange rate stabilised at the end of June. The exchange rates of key currencies, in particular the EUR/PLN and USD/PLN pairs, were lower than at the end of December by tens of grosz (one hundredth of a złoty). In mid-June, the prices of USD and EUR fell to their lowest levels since, respectively, February 2022 and September 2020.

Despite the ongoing armed conflict in Ukraine, the złoty appreciated due to a heightened risk appetite in global financial markets, including a growing interest in the region's assets, as well as a greater inflow of capital to Poland as part of global supply chain adjustments. The Polish currency was also supported by a global weakening of the US dollar caused by lower expectations of interest rates hikes from the Federal Reserve Bank later in the year, after problems came to light at regional US banks and the inflation rate declined. At the same time, representatives of the European Central Bank kept up the rhetoric about the need to further tighten the monetary policy in the months to come, which supported the euro exchange rate and appreciation of the złoty.

Moreover, Poland's current account situation materially improved in the reporting period. In the first five months of 2023, there was a surplus of EUR 7.4bn, whereas a year earlier there was a deficit of over EUR 10bn, which in December 2022 reached EUR 2.5bn. Polish exports grew significantly, while imports dropped considerably year on year. This was due to weaker internal demand, an effect of the economic downturn, decline in real wages, eroded savings, lower purchasing power of the złoty as a consequence of inflation, and the aforementioned appreciation of the Polish currency against foreign currencies.

The Monetary Policy Council officially ended the cycle of interest rate hikes. For the year from September 2022, it maintained the reference rate at 6.75%. Subsequently, in view of the decline in inflation observed globally and in Poland for several months, at the beginning of September 2023 the Monetary Policy Council reduced the interest rate by as much as 0.75 percentage points, significantly beyond market expectations. This led to a significant depreciation of the złoty.

The market anticipates further interest rate decreases of 50-75 basis points and continued shrinking of the disparity between the domestic interest rates and the rates in the euro area and the US by the end of the year, which may adversely affect the PLN exchange rate. At the same time, the US and EUR interest rates are expected to stabilise by the end of the year following the latest of 25 bp interest rate hike by the European Central Bank at the beginning of September 2023 for the euro area. Real interest rates in PLN will likely persist in the negative territory due to elevated domestic inflation, which remains high despite recent falls, and the interest rate cuts by the central bank.

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 did not significantly affect Grupa Azoty Group's performance in the six months ended June 30th 2023 in terms of the Group's partly offset EUR exposure and limited USD exposure.

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 Group used natural hedging, factoring, currency forwards and swaps as its primary currency risk hedging tools.

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

In the six months to June 30th 2023, the Group settled FX forward contracts for the sale of EUR and USD and entered, to a limited extent, into new transactions hedging its currency exposure due to increased volatility during the period.

The net result on hedging transactions settled in the six months ended June 30th 2023 by the Group (excluding Grupa Azoty POLYOLEFINS) was positive at PLN 3,961 thousand, with the net result on remeasurement of hedging instruments positive at PLN 692 thousand.

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 2023 was positive at PLN 4,653 thousand.

Grupa Azoty POLYOLEFINS's exposure to currency risk

In the six months ended June 30th 2023, Grupa Azoty POLYOLEFINS held and entered into FX forward contracts to buy EUR for USD and to sell USD and EUR for PLN and USD to hedge the expected expenditure in EUR, USD and PLN.

As at June 30th 2023, Grupa Azoty POLYOLEFINS had the following open contracts:

- FX forward to buy EUR 38,539 thousand for USD (hedging expenditure planned to be financed with proceeds from the term facility made available under the Credit Facilities Agreement in USD);
- FX forward to buy PLN 12,306 thousand for EUR (hedging expenditure planned to be covered with proceeds from the term facility made available under the Credit Facilities Agreement in EUR);
- FX forward to buy PLN 39,676 thousand for USD (hedging expenditure planned to be covered with proceeds from the term facility made available under the Credit Facilities Agreement in USD);
- FX Forward to sell EUR 1,000 thousand for USD (hedging expenditure related to the first repayment of the term facility made available under the Credit Facilities Agreement in USD), which falls due in the fourth quarter of 2023.

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

As at June 30th 2023, the total result on the measurement of open transactions hedging currency risk executed by the company was PLN -11,831 thousand, including PLN -2,427 thousand attributable to the measurement of transactions designated for hedge accounting.

Interest rate risk

In the six months ended June 30th 2023, Grupa Azoty POLYOLEFINS held IRSs with a zero floor whereby positive values of floating interest rates on debt denominated in EUR and USD 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 2023, Grupa Azoty POLYOLEFINS had the following open contracts:

- IRS with a zero floor on EURIBOR for a maximum notional amount of EUR 370,299 thousand (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 (SOFR from June 2023) for a maximum notional amount of USD 408,151 thousand (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).

In the six months ended June 30th 2023, the company executed annexes amending the Credit Facilities Agreement, which modified certain financing terms, particularly those related to the interest rate on the USD-denominated tranche to be applied following cessation of the USD LIBOR rate. As of June 2023, the USD-denominated tranche bears interest at the SOFR rate.

The transactions hedging interest rate risk were designated for the purpose of cash flow hedge accounting. As at the end of June 2023, 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 2023, the total result on the measurement of open IRSs with a zero floor executed by the Company was PLN 406,192 thousand, including PLN 401,747 thousand attributable to the measurement of transactions designated for hedge accounting purposes.

Commodity risk - natural gas prices

After a period of soaring natural gas prices, which peaked in September 2022 having reached an unprecedented level of EUR 345/MWh, the prices declined steadily until the end of the year. At Europe's largest hub TTF (Title Transfer Facility) the prices fell to EUR 25/MWh. The savings plans put in place by the European Commission, fears of an upcoming recession and high average temperatures led to a decline in demand for natural gas, pushing its prices down to the lowest level in over two years. Given increased LNG imports into Europe, prices at the largest European gas hubs are expected to remain relatively low, with a risk of rising again in late autumn and winter. The Group constantly monitors the prices of all commodities, especially natural gas, as the prices are

the key factor driving the profitability of production, and stabilises future cash flows by signing contracts providing for some of the gas supplies to be made at a specific time and for a specific price.

In the period under review, Grupa Azoty POLYOLEFINS did not carry any commodity risk hedges.

Foreign currency derivatives and hedge accounting

As at June 30th 2023, the notional amount of Grupa Azoty Group's open FX forwards was EUR 6.7m, with maturities falling in 2023.

In addition, Grupa Azoty POLICE held open currency derivatives (FX forwards) to exchange EUR 3m for USD, to be settled in July 2023.

As at June 30th 2023, Grupa Azoty POLICE had initiated three FX swap contracts to hedge its planned short position in the EUR/PLN currency pair in the third quarter of 2023, for a total amount of EUR 40m. The first transaction encompassed the sale of euros on the spot market on June 30th. The other transactions were executed to purchase euros on the forward market, with settlement dates scheduled for the end of July, August and September 2023.

As regards the US dollar, as at June 30th 2023 the Group had no outstanding derivative instruments in that currency.

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 2023 to March 2029. The hedging covers currency risk. The hedging instruments are two EUR-denominated credit facilities, which as at June 30th 2023 amounted to:

- EUR 36,324 thousand, repayable in the period from December 2018 to June 2025 in 14 equal half-yearly instalments of EUR 9,081 thousand each;
- EUR 109,333 thousand, 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 2023, the carrying amount of the two credit facilities was PLN 648,005 thousand. The hedging reserve includes the effect of valuation as at June 30th 2023 in the amount of PLN -12,574 thousand, which entirely represents the effective hedge.

In the six months ended June 30th 2023, the Parent offset a hedging relationship with respect to payment of instalments of a foreign currency credit facility against proceeds from sales in the euro for the amount PLN 5,817 thousand.

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 2023, Grupa Azoty POLYOLEFINS recognised in the hedge reserve PLN -1,481 thousand on the measurement of FX hedging transactions and PLN 401,747 thousand on the measurement of interest rate risk hedging transactions. PLN 409,048 thousand was recognised in the opening balance sheet and PLN -8,782 thousand as a cash flow hedge.

2.2. Market overview

AGRO

Economic conditions in agriculture

The domestic agricultural sector is facing mounting challenges amidst an ongoing economic downturn. In the second quarter of 2023, the IRGAGR agricultural confidence index dropped to negative 26.3 points (a year-on-year decline of 2.6 points), hitting its lowest level in 14 years. This decline is primarily attributable to the deteriorating sentiment among farmers and the decreasing incomes of farms.

In addition to production costs, the prices of primary agricultural produce in Poland are a pivotal factor that shapes the economic situation of farms and influences production profitability. In the six months ended June 30th 2023, the prices of agricultural produce saw a marked year-on-year decrease. The most significant price

decline was observed in rapeseed, which averaged PLN 2,399 per tonne in the first half of the year, representing a 38% drop from the previous year. In contrast, rye, wheat, and maize experienced comparatively smaller price declines, with average prices for the period standing at PLN 910 per tonne (down 27% year on year), PLN 1,191 per tonne (down 22% year on year), and PLN 1,176 per tonne (down 9% year on year), respectively.

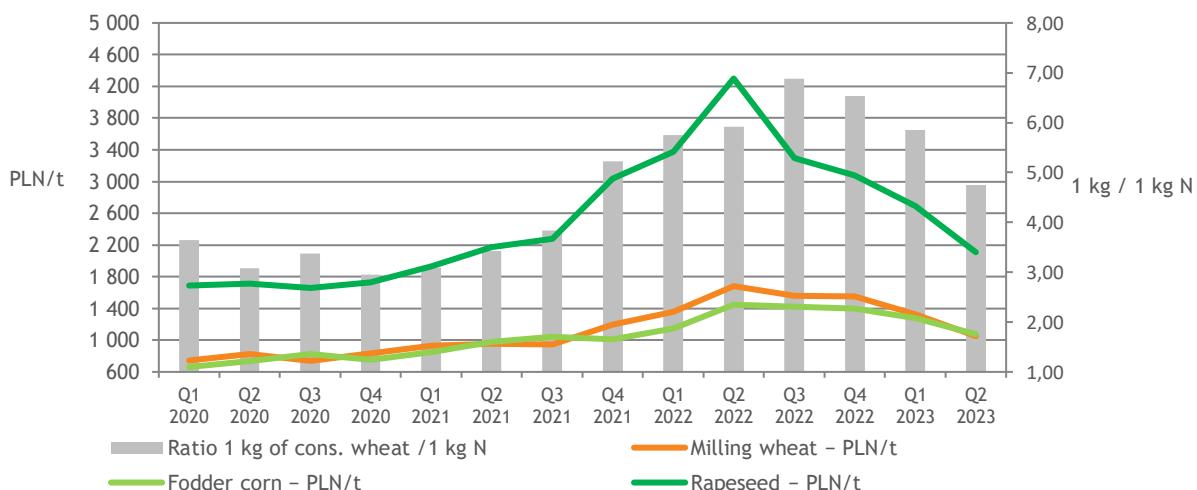
An added factor exerting pressure on domestic market prices was the influx of agricultural produce from Ukraine. This influx led to a substantial supply of grains in Poland, consequently driving down prices. In response to the decreasing prices of agricultural produce, the agricultural sector withheld the sale of grain stocks in anticipation of future price hikes. Price correction in the domestic market continued, leaving farmers with accumulated and unsold stock. This situation added further pressure to the agricultural sector considering the approaching harvest season and the necessity to secure adequate storage capacity. Downward adjustments to future harvest estimates only began towards the end of the first half of the year, primarily due to a rainfall deficit affecting key global markets, including Poland. In foreign grain exchanges, this was reflected in rising prices of agricultural produce, in contrast to domestic price trends.

In August, the European Commission (EC) released forecasts for Poland's 2023/24 season, indicating a decrease in grain yields compared to the previous season. Wheat production is projected at 12.7 million tonnes (a 4.9% decline season-on-season), barley production is anticipated to reach 2.8 million tonnes (a 0.5% decrease s/s), while maize production is expected to total 7.5 million tonnes (down by 8.7% s/s). For the EU, total grain production is estimated to increase by 2.4% s/s, or 6.4 million tonnes, with a total yield of 274.1 million tonnes. Maize production is forecast to increase to 61.9 million tonnes (an 18.5% increase s/s), wheat production is expected to rise to 127.1 million tonnes (a 0.3% increase s/s), and barley production is projected to decrease to 49.1 million tonnes (down by 5.5% s/s).

According to data from the Agency for Restructuring and Modernisation of Agriculture, out of over one million applications submitted by farmers as part of the 2023 subsidy campaign, approximately 35% were related to eco-schemes. Specifically, Carbon Farming and Animal Welfare schemes garnered the most interest. Farmers may apply for various forms of assistance, including co-financing for the purchase of mineral fertilizers (excluding fertilizer lime and fertilizer lime with magnesium), support for wheat, maize, and buckwheat producers who suffered losses due to the conflict in Ukraine, and financial aid for farmers producing maize, rye, barley, oats, triticale, grain mixtures, rapeseed, or turnip rape who suffered losses due to increased imports of grains and oilseeds from Ukraine.

Aside from macroeconomic and weather-related factors, the key factor influencing the agricultural sector's condition remains the prospect of continued supply of agricultural products from Ukraine to global markets. This would significantly impact the balance and prices of grains, as well as the purchasing power of farmers.

Prices of wheat, maize and rapeseed



Source: Company data.

Market of nitrogen fertilizers

In the first half of 2023, the prices of nitrate fertilizers were much lower than in the previous year. In France, the average price of ammonium nitrate (AN 33.5% N) was EUR 439/tonne, having decreased by more than 50% year on year. A comparable fall in prices was recorded for calcium ammonium nitrate (CAN 27% N) in Germany, down 49% year on year. The largest declines were seen in UAN (32% N) prices (FOB Baltic), down 66% year on year. In the second quarter of 2023, the price of ammonium nitrate in France was EUR 349/tonne, down 34% quarter on quarter. Concurrently, the average price of calcium ammonium nitrate in Germany amounted to EUR 275/tonne (down 37% quarter on quarter), with the price of UAN down by 50% quarter on quarter.

Between January and April 2023, demand for fertilizers improved only slightly despite resumed fertilizer production in Europe and a strong rebound in supply, prompting a series of price cuts. The level of demand for nitrate fertilizers typical for this season of the year was dampened by customers opting for urea, which - as a cheaper alternative - enjoyed more popularity with end users, and by the fact that customer already held high stocks of nitrate fertilizers. The unfavourable situation was aggravated by wintry and rainy weather, hardly conducive to farming activity or field work. This affected demand, which was limited to spot purchases. As the weather improved in May, demand picked up, mainly for fertilizers to be applied on grassland (Ireland, Germany, France, United Kingdom). However, the purchases were not large as farmers had built up stocks and only bought fertilizers in amounts required for current applications. The approaching end of the application season and rising temperatures in Europe in June led to price declines. Fertilizer application was becoming increasingly difficult due to drought and insufficient rainfall in some parts of Europe. As a result, most farmers refrained from making purchases and demand was limited.

The conditions in the European nitrogen fertilizer market, as detailed above, deviated from the typical seasonal trends historically observed. Traditionally, demand for fertilizers tends to rise as the application season advances, leading to increased prices. However, in the first six months of 2023, this pattern was disrupted. Due to the declines in gas prices since the start of 2023, the reporting period witnessed an atypical scenario in the fertilizer market. Contrary to the usual trend of rising prices during this time, prices were actually decreasing, causing farmers to refrain from purchasing fertilizers.

Urea

The average price of urea (FOB Baltic) in the first half of 2023 was USD 294 per tonne, down 55% year on year. In the three months ended June 30th, the average price of urea (FOB Baltic) was USD 262/tonne, down 56.4% year on year. During the reporting period, urea imports from non-European sources had a material adverse impact on the competitiveness of fertilizers manufactured in Poland and the broader EU market. This situation also led to the cessation of sales for nitrate fertilizers, which are typically in demand among farmers in temperate climate zones.

The urea market slowed down at the beginning of 2023. Urea prices on several markets were close to two-year lows. At the end of the first quarter, demand was low, the market continued to be oversupplied, and buyers anticipated further price declines. There was an increase in activity as the weather improved across the US and Europe. In consequence, prices on some markets followed the rise in Nola/US prices. In the reporting period, India announced two import tenders under which it purchased 1.1 million tonnes of urea, which did not help stabilise the strongly oversupplied market, and 560 thousand tonnes of urea (out of the planned 800 thousand tonnes) due to the manufacturers' reluctance to further cut the prices. At the beginning of the second quarter, the market continued to be oversupplied. Maintenance shutdowns also began (in Egypt, Malaysia, Indonesia and other countries). With limited supply, Asia was more stable compared with the other global markets. Buyers only decided to make small purchases to supplement their day-to-day needs. In June, the sentiment in the urea market slightly improved. Prices varied, with upward trends observed in Egypt, Algeria, and Brazil, whereas China experienced declines. Meanwhile, the situation in the Arabian Gulf was characterized by a mix of changes. In the first six months of 2023, Chinese exports continued to be subdued. They were expected to grow towards the end of the first half-year, but local demand curtailed exports to a minimum.

In Europe, the early months of 2023 witnessed a drop in gas prices, prompting a gradual increase in production to 70% of the capacity. Both imported and domestically produced urea was available in the European market throughout the entire reporting period. However, customers purchased urea only to satisfy their current needs and buyers were waiting in expectation. The European market took a wait-and-see stance in the second quarter. The continuing economic instability across Europe discouraged buyers from making purchases in advance. On June 17th, the suspension of European import duties on urea of 6.5% expired. Production in Europe remained stable. In June, the region entered the seasonal summer slowdown.

Market prospects for the coming months remain stable with chances of gradual recovery. Factors driving the market include another import tender announced by India, a purchase rebound in Brazil, demand levels in Australia and Argentina, and limited supply in China and Southeast Asia. It is expected that the market will become undersupplied. Renewed interest in US imports and cost pressures in Europe will continue to support prices at the turn of the year.

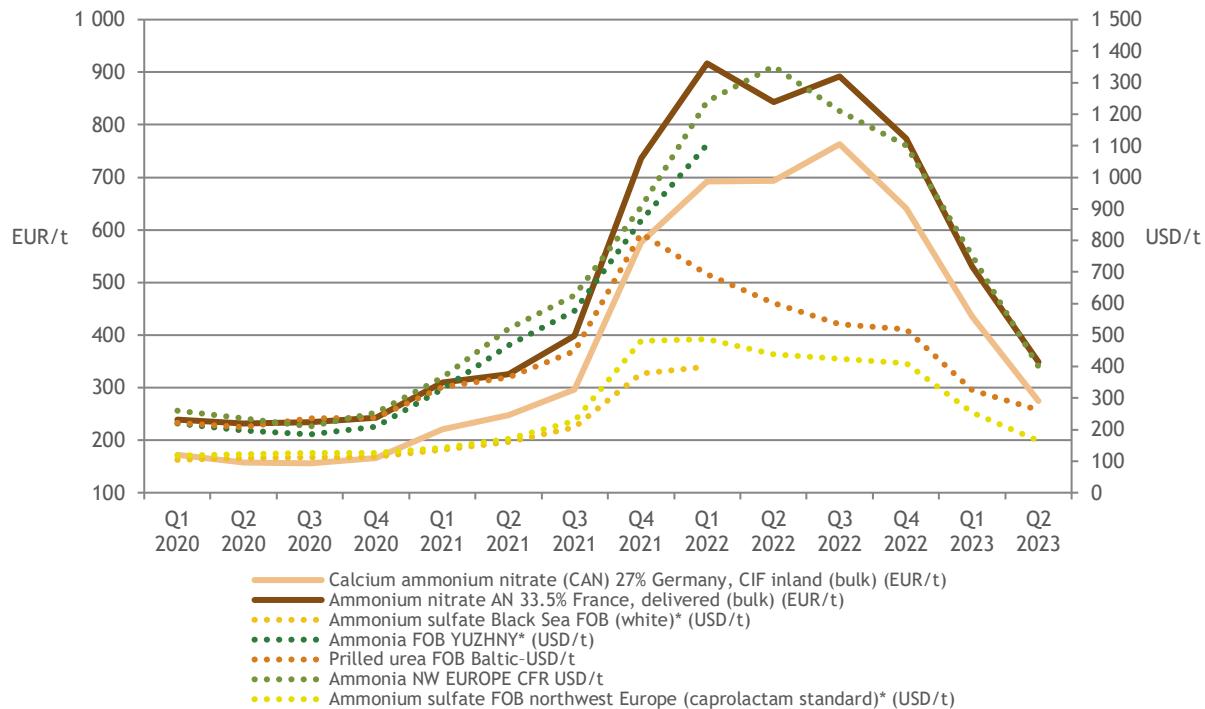
Ammonia

In the first half of 2023, the prices of ammonia were much lower than a year earlier. The average price of ammonia (NW Europe) reached USD 576/tonne, down 56% year on year. In the second quarter, the average price was USD 400/tonne, down 70% year on year.

The global ammonia market saw little movement in spot prices from the beginning of 2023. Continuing low demand, high supply and lower production costs put pressure on prices. In the first half of the year, there was a six-fold decrease in contract prices of ammonia on US Tampa basis. In June, the price was USD 340/tonne, down USD 635/tonne, or 65%, from January. In the reporting period, ammonia imports in Europe fell significantly on account of low demand and strong supply. Demand for fertilizers and chemicals was low. The demand and supply dynamics continued to determine prices and market prospects. At the beginning of the second quarter, the purchasing activity was the strongest in Turkey and Asia. Demand for ammonia increased in parallel with a steady

increase in crop planting in the US. In Europe, unfavourable weather conditions delayed the spring fertilizer application. Activity on the global ammonia market did not pick up until the beginning of May. At the end of the first half-year, the availability of ammonia in the Asia-Pacific region fell due to maintenance shutdowns in Indonesia and Australia. The suspension of EU import duties on cargoes originating in all countries (with the exception of Russia and Belarus) was in force until June 16th. The absence of duties resulted in a shift in trading directions in 2023. Volumes from the US, Nigeria, the Arabian Gulf and Southeast Asia flowed into Europe. At the end of June, the end of the sowing season in the US was announced. The market entered the seasonal summer slowdown.

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



* Ammonia FOB YUZHNY, ammonium sulfate Black Sea FOB, no quotations available since March 2022 due to the situation in Ukraine; the average for the first quarter based on January and February.

Source: Company data.

Market of compound fertilizers

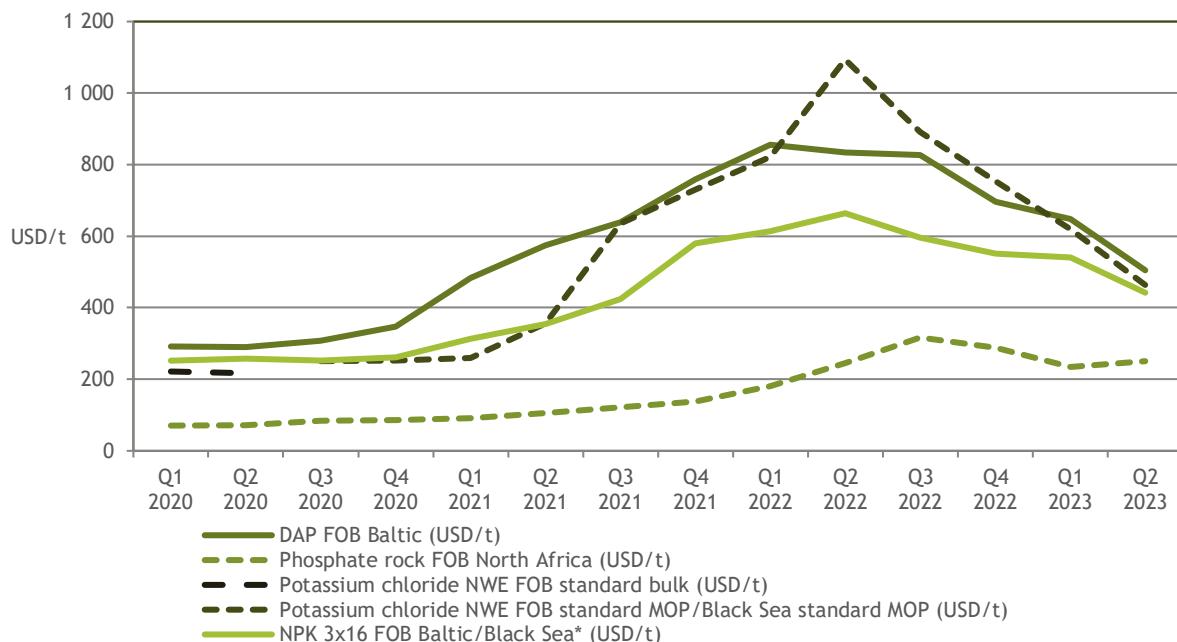
In the first six months of 2023, the average NPK 3x16 price benchmark was approximately USD 490/tonne FOB Baltic/Black Sea, down 23% year on year, and in the second quarter approximately USD 440/tonne FOB Baltic/Black Sea, down 18% quarter on quarter.

Both the low liquidity of the NPK compound fertilizers market, primarily due to weak demand, and the evolving situation in other fertilizer markets put downward pressure on prices. With the exception of Asia, notably India, there was no regular large-scale trade in these fertilizers globally. Towards the end of the first half-year, there was a gradual uptick in demand for NPK in Europe. However, due to the potential for further price reductions, buyers adopted a cautious approach and procured only the necessary volumes.

In the first six months of 2023, the average diammonium phosphate (DAP) price benchmark was approximately USD 575/tonne FOB Baltic, down 32% year on year, and in the second quarter approximately USD 500/tonne FOB Baltic/Black Sea, down 22% quarter on quarter.

With the exception of a few locations where purchasing activity was particularly strong, the demand for DAP remained low. Falling prices reflected a gradual decline in prices asked by producers and suppliers in response to unfavourable market conditions. Certain exceptions occurred periodically, such as in April when phosphate rock prices briefly surged to highs not seen in months in the US domestic market, driven by robust demand from local farms. However, the prices subsequently dropped once the demand was satisfied. China's role as one of the key players was particularly important in terms of foreign supply constraints. In early May, a new government policy on phosphate fertilizer exports was implemented to enhance the availability of Chinese products in Asia.

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.

Phosphate rock

In the first half of 2023, the average phosphate rock price benchmark (FOB North Africa) went up 14% year on year, while quarter on quarter the increase was 6%. The average price benchmark of phosphoric acid delivered to Western Europe fell 23% year on year. The second quarter saw a 4% decline quarter on quarter.

After substantial increases of phosphate fertilizer prices in the first half of 2022, the subsequent months of the year witnessed a major decline in demand and prices. In terms of demand, the fourth quarter of 2022 was extremely sluggish across virtually all markets. In the six months to June 30th 2023, the downward trend in DAP and MAP fertilizer prices persisted. As regards raw materials used in the production of phosphate fertilizers, the second half of 2022 witnessed a steep decline in phosphoric acid price benchmarks, historically at an all-time high since 2008. During that period, the correction in phosphate rock prices was minimal, significantly reducing the profitability of production.

In the past, the change of phosphate rock and phosphoric acid prices was typically somewhat delayed relative to fluctuations in DAP and MAP product prices, with the relationship between the costs of raw materials and product prices tending to stabilise over time. But the situation has changed now. The phosphate rock price benchmark (FOB North Africa) has been above the actual market price for many months. This benchmark also serves as a reference for other phosphate rock prices, which are now higher than the prices of fertilizer products. In the past, the price of Moroccan phosphate rock was higher than that from other countries in North Africa: Algeria, Tunisia or Egypt. However, the current gap between the benchmarks is so large that it disrupts the market of raw materials used in the production of phosphate fertilizers. This situation also extended to the market of phosphoric acid, where Morocco, its leading exporter, ceased publishing contract prices for India. In response to extremely high prices of Moroccan phosphoric acid, India compounded efforts to diversify its sources of supply.

Potassium chloride

Since mid-2022, the global potassium chloride markets have been on a downturn due to a significant drop in demand for compound fertilizers. In the fourth quarter of 2022 and the first quarter of 2023, potassium chloride manufacturers recorded production declines of several dozen percent. It should be noted that in 2022 the price of potassium chloride on the Brazilian market reached an all-time high. Last year, it was the Brazilian market that largely contributed to a surge in potassium chloride prices in Western Europe due to sanctions imposed on Russia and Belarus. In the past, these two countries were the key suppliers of this raw material to Europe, including Poland. Amid concerns regarding the availability of potassium chloride, Brazil began to compete with European producers for purchases in Canada and Germany, driving prices to unprecedented levels.

The downward trend in potassium chloride prices which began in mid-2022 was very pronounced in Brazil and the US, with Southeast Asia experiencing a comparatively milder decrease. Producers maintained high prices of potassium chloride for the longest time in Western Europe, largely due to the halt in imports from Belarus and Russia into European markets. European producers undoubtedly found themselves in a particularly challenging

situation: NPK fertilizer prices were falling while the benchmarks for potassium chloride, that is the key input in the production of NPK fertilizers, were the highest worldwide. Historically, potassium chloride benchmarks in Brazil had never been lower than those in Southeast Asia or Western Europe.

A slump in demand for potassium chloride prompted suppliers to gradually reduce their asking prices. In April 2023, setting a new contract amount for the supply of MOP to India at 29% below the amount of the previous contract brought about only a brief recovery before global trade activity decelerated once again. As the market gradually weakened, China, with its ample stocks of MOP, did not rush to sign the contract. Finally, in early June, news emerged about China concluding a similar import contract, but in that case the amount was reduced by as much as 48%. Once a more favourable contract was signed by China, customers from India entered into renegotiations. Undoubtedly, the Chinese contract price also served as a catalyst for a notable decrease in potassium chloride prices in Western Europe, which alleviated the challenging situation faced by NPK fertilizer manufacturers.

PLASTICS

Polyamide 6 chain

In the first six months of 2023, the European plastics market was marked by diminished demand from the polyamide 6 application sectors and a downward price trend throughout the entire product chain. The European PA6 application sectors were affected by a weak economic environment, i.e., high inflation and interest rates, as well as shifts in consumer behaviour and purchasing strategies, as well as imports of finished products from other regions.

In the first half of 2023, the European contract prices of benzene were subject to fluctuations. Demand from the local processing industry was poor, with prices driven mainly by demand from the US market and speculation.

In the reporting period, the European phenol market continued to be affected by sluggish demand from application sectors, competition from Asian products, and low operating rates for both phenol and phenol derivative plants. Phenol output was scaled back to meet market demand. Challenging market conditions discouraged a leading European phenol manufacturer from relaunching the phenol/acetone plant in one location following the maintenance shutdown in 2022. At the end of June 2023, the manufacturer announced the restructuring of that production plant.

In the first six months of 2023, the average contract prices of benzene (CIF NWE) and phenol (FD NWE) fell, respectively, 19% and 8% year on year. In the second quarter of 2023, the average contract price of benzene (CIF NWE) rose 7% quarter on quarter and fell 1% (FD NWE) in the case of phenol.

The PA6 product chain market is strongly correlated with economic cycles. The European polyamide market faced significant challenges during the first half of 2023, with prices of both CPL and PA6 consistently experiencing downward pressures. In the reporting period, there was a substantial decline not only in European domestic demand, but also in export opportunities. The low demand was caused by persistently higher costs relative to other regions, destocking, and dampened demand from downstream markets. Challenging macroeconomic conditions impacted all consumer markets. Despite an increase in the sector's output and growing sales of new cars in the EU, automotive applications failed to boost the overall demand for PA6.

A highly detrimental factor influencing the European PA6 market was the aggressive pricing strategy adopted by Asian producers, who were seeking avenues to offload their products amidst sluggish domestic demand. The prices of polymers imported from China during the first half of 2023 were frequently below the production costs incurred by European manufacturers. Costs of benzene and phenol, natural gas, energy and CO₂ emissions, which are predominantly beyond the control of PA6 manufacturers, played a pivotal role in determining variable production costs.

The influx of cheap PA6 imports into the European market, which was experiencing low demand, heightened the competition among European producers even more. As a result, the prices of PA6 produced in Europe were driven down to levels that closely aligned with the prices offered by Asian competitors.

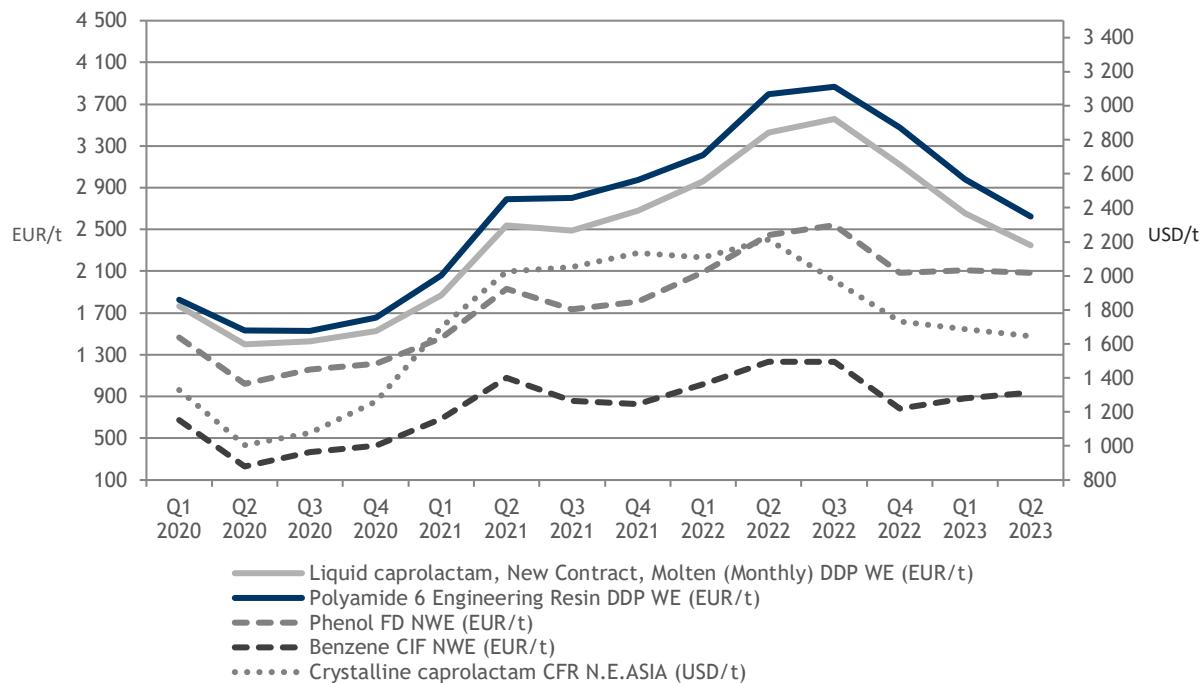
In the first half of 2023, the average contract prices of caprolactam (Liq. DDP WE) fell 22% year on year. The average contract prices of caprolactam in Asia (CFR NE Asia) were down 23% year on year. In the second quarter of 2023, the average contract price of liquid caprolactam in Europe (Liq. DDP WE) and of caprolactam on the broad Asian market (CFR NE Asia) went down by, respectively, 12% and over 2% quarter on quarter.

The operating rates of European producers of CPL and PA6 were squeezed down to align with market demand. In the reporting period, some producers carried out maintenance work, with some temporarily suspending production due to adverse market conditions. A key CPL producer announced plans to permanently close down one of its plants in Europe. In April, a new global player in the PA6 market officially commenced operations (following the merger of two major PA6 manufacturers).

In the first six months of 2023, the average contract prices of polyamide 6 (Engineering Resin Virgin DDP, WE) went down 20% year on year. In the second quarter of 2023, the average European price of polyamide 6 (Engineering Resin Virgin DDP, WE) fell 12% quarter on quarter.

In the second half of 2023, the prices and demand in the entire polyamide 6 product chain will be mainly driven by the demand and supply dynamics on PA6 application markets, which will continue to be impacted by macroeconomic conditions and commodity prices. The short-term sentiment is uncertain.

Prices of PA6, caprolactam, benzene and phenol



Source: Company data.

CHEMICALS

OXO product chain

In the first six months of 2023, the average prices of all OXO alcohols on the European market fell 23% year on year. In the second quarter of 2023, their prices declined by 12% quarter on quarter. The year-on-year decline was driven by lower prices of propylene (the key feedstock) and natural gas (the energy carrier). The second quarter of 2023 saw a further drop in the price of natural gas, accompanied by a minor correction of propylene prices. The market situation was another factor with a bearing on the prices of OXO alcohols. The decline in demand across virtually all sectors of the European industry persisted throughout the first half of the year, with no clear signs of improvement at the end of the second quarter.

Contract counterparties accepted minimum contracted volumes, and any spot purchases of products were subject to securing additional orders for finished products. The availability of OXO alcohols on the market continued to surpass demand despite the fact that European producers maintained limited production capacities, extended maintenance shutdowns and employed destocking policies.

With low prices and weak demand for OXO alcohols in Asia, European producers were unable to export their surplus output. In addition, more affordable Asian products were delivered to the Middle East markets, which normally had sourced the raw materials from Europe. Certain less expensive products originating in the Middle East were also available in the European market. The demand for OXO alcohols, primarily 2-EH, in North America continued to outpace that in Europe. However, by the end of the second quarter the sentiment deteriorated as American producers optimised their stocks of raw materials and finished products.

Plasticizers

In the first six months of 2023, the average prices of all of the monitored plasticizers on the European market fell 22% year on year. In the second quarter of 2023, the prices declined by 12% quarter on quarter. The year-on-year decline was driven by lower prices of the key feedstocks (2-EH, PTA) and natural gas (the energy carrier). In the second quarter of 2023, both natural gas and raw material prices continued to decrease, impacting the prices of plasticizers. Another significant contributor to the decline in plasticizer prices was imports of much cheaper products from Korea and Turkey into Europe, facilitated by lower logistics costs. Furthermore, imports from Asia and the US of more affordable raw materials used in plasticizer production, including by Turkish producers, coupled with lower production costs in Asia, spurred the activity of intermediaries placing imported goods in Europe. This, combined with the substantial decline in demand across Europe in the first half of the year, put substantial price pressures on plasticizers, eroding the margins of European producers. Although European producers maintained limited production capacities and employed destocking policies, the availability

of plasticizers on the market continued to surpass demand. In the first half of the year, demand on other markets, particularly in the US, continued to surpass that in Europe. However, sentiment regarding the level of future orders waned across all markets towards the end of the first half-year, especially during summer. This led to further optimisation of stocks of raw materials and finished products.

Propylene

In the first six months of 2023, contract prices of propylene fell by 25% year on year. In the second quarter of 2023, the contract price went down 3% quarter on quarter. The year-on-year decline was driven mainly by lower prices of crude oil and naphtha and by the demand and supply situation. Despite production constraints, the availability of propylene in Europe was sufficient, well above demand. Limited storage capacities at manufacturers resulted in propylene being sold on the spot market at the end of the second quarter with discounts reaching up to 50% of the contract price. Demand among producers of polypropylene, OXO alcohols and other derivatives was very low. In addition, the rather sluggish recovery in Asia and the aspiration for self-sufficiency in certain Asian markets made exporting derivatives, particularly polypropylene, unfeasible, further dampening the demand for olefins.

Terephthalic acid

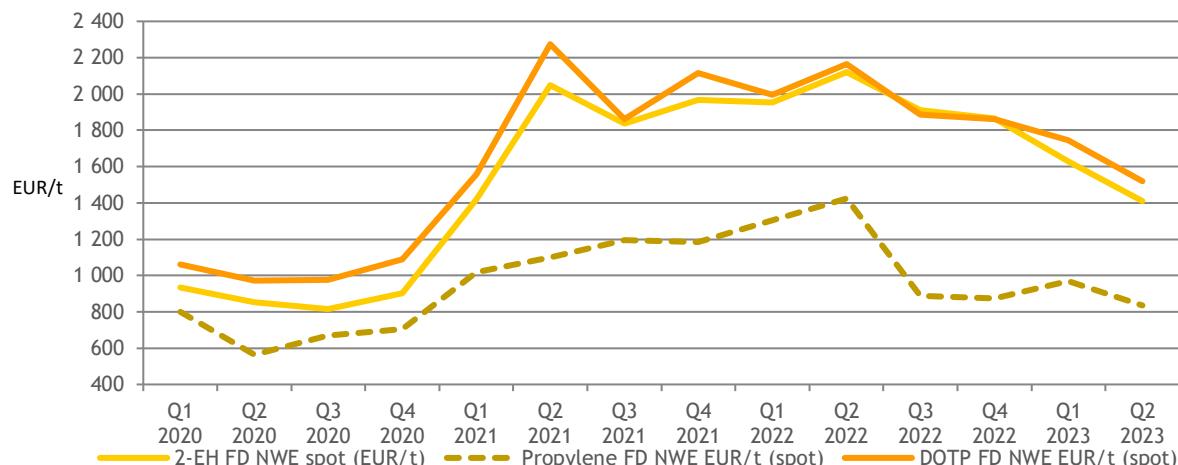
In the first six months of 2023, contract prices of PTA fell by 17% year on year. In the second quarter of 2023, the average contract price went down 8% quarter on quarter. The year-on-year decline was driven mainly by lower prices of paraxylene (down by almost 11%) and by the demand and supply situation. Demand for PTA derivatives, such as polyester fibres, as well as demand from plasticizer producers, remained exceedingly low in both quarters. Towards the end of the second quarter of 2023, the demand for PET bottles surged as temperatures in Europe rose. Nonetheless, the first half of the year saw Europe experiencing low PTA production, aligned with market demand. According to buyers, the availability of products was greater than demand. European producers additionally had to contend with imports of the more affordable raw material from Asia. At the close of the second quarter, the price difference between goods of European and Asian origin narrowed, improving both sentiment and the prospects of successfully placing the product on the European market.

Crude oil

In the first half of 2023, the prices of crude oil went down year on year, with the price movements driven by both supply-related events and the macroeconomic situation. The key events included two production cut announcements. The first one was made in early April, when OPEC+ announced a production cut of 1.6 million bbl/d from May to the end of the year. Then the Saudi Arabia made a unilateral announcement in early June to cut production by 1 million bbl/d from July. However, these measures did not bring about any significant or sustained increase in prices. Market participants paid more attention to developments in the global economy. In the first quarter, investors closely monitored the US banking sector, which experienced turmoil due to the bankruptcy of a few regional banks. Additionally, there were substantial concerns regarding the level of demand for crude oil in China, resulting from a smaller-than-expected economic recovery. This factor had a pronounced impact on oil prices also in the second quarter of the year. The price increase was further impeded by investor uncertainty about the outcome of negotiations on the suspension of the US debt ceiling. Failure to reach an agreement would lead to the technical bankruptcy of the United States, which would have adverse consequences for the economy globally. An agreement was finally approved in early June. The rise in oil prices was also not supported by central banks' efforts to combat inflation, i.e., the interest rate hikes by the Fed and ECB. The monetary policy tightening and announcements of further interest rate hikes have resulted in, and continue to contribute to, a decrease in investment opportunities. Investors were prompted to exercise even more caution following the release of data indicating a slower-than-expected pace of industrial activity in China. EU data provided no impetus for growth, either, with GDP growth reported at a mere 0.1% for the first quarter of 2023. These figures raised fears of recession among market participants, which could significantly reduce the demand for crude oil. Oil prices were supported by reports from Alberta, Canada, where efforts to put out wildfires continued, and the US government's plans to replenish strategic reserves. In addition to the factors mentioned above, Russia was considered to fail to fulfil its declarations to cut exports, while Iran, despite sanctions, managed to export the largest volumes of crude oil since 2018.

The oil market is currently at a crossroads. Concerns about the condition of the global economy and monetary policy clash with supply-side factors. Whilst Saudi Arabia is taking proactive measures to curtail production and the US is increasing its reserves, concerns persist on the demand side regarding inflation and the deceleration of global economic activity, particularly in China.

Prices of 2-EH, DOTP and propylene



Source: Company data.

Sulfur

In the first half of 2023, the average sulfur price benchmark was USD 105/tonne FOB Vancouver, down 73% year on year. In the second quarter, the price was USD 85/tonne FOB, down 32% quarter on quarter.

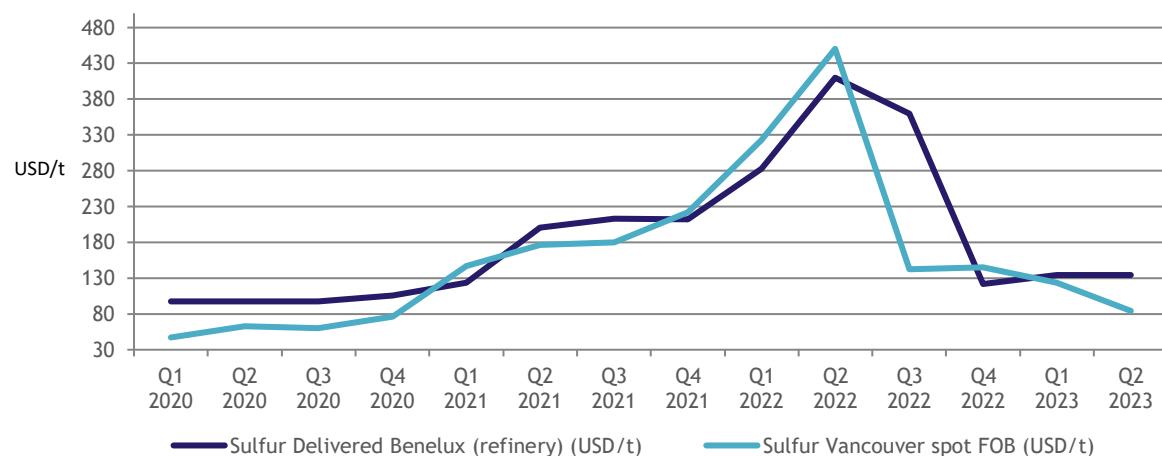
In the first half of 2023, the average price benchmark for Delivered Benelux liquid sulfur, settled under quarterly contracts, was close to USD 135/tonne, down 61% year on year. In the second quarter, the value of the contract remained unchanged compared with the first quarter.

The first six months of 2023 saw insufficient demand for sulfur from the fertilizer sector leading to a decrease in the average spot prices, although there were occasional periods of price growth or stabilisation. Ultimately, the value of sulfur imported into China fell to USD 85/tonne CFR. The Vancouver sulfur price was strongly correlated with the Chinese benchmark in that period, reaching a level just slightly above USD 60/tonne FOB.

In the Middle East, monthly sulfur prices stabilised at around USD 85/tonne FOB in June after a series of declines since the beginning of the year, with the exception of March, when they slightly rebounded to USD 135/tonne FOB.

In the first quarter of 2023, overhaul and maintenance work was carried out at some refineries in Europe. The resulting shutdowns and production cuts, coupled with labour strikes in France, led to a corresponding tightening of supply on the local market for liquid sulfur. Certain restrictions persisted in the second quarter of the year, attributable to the overhaul and maintenance work and the relaunch of production units, as well as restocking in France. Softer demand from Europe during the period helped the regional market keep the balance.

Sulfur prices



Source: Company data.

Pigment chain

Titanium white

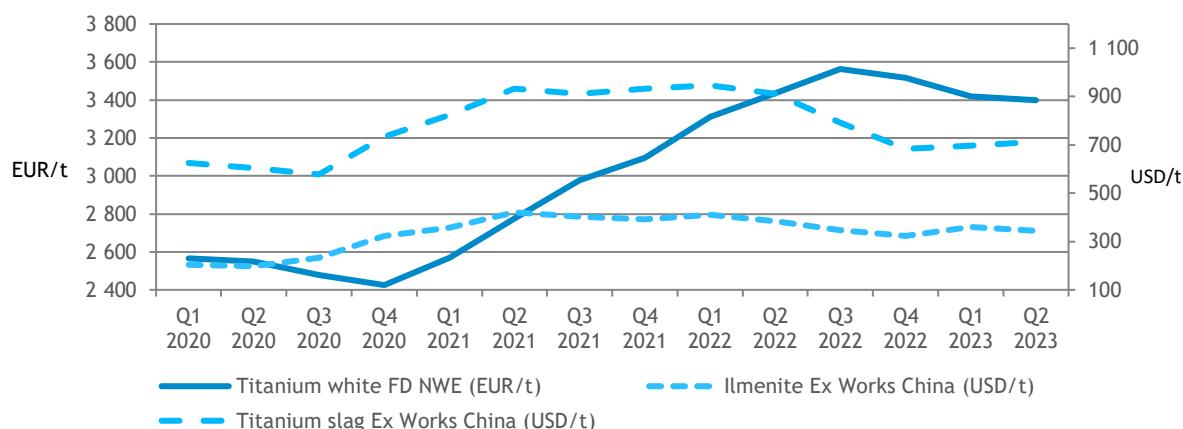
In the first six months of 2023, the average price of titanium white in Europe (FD NWE) was PLN 3,409/tonne, up 1% year on year. In the second quarter of 2023, the average contract price (FD NWE) was EUR 3,400/tonne, down 1% quarter on quarter.

The first quarter of 2023 saw continued weak, albeit slightly better than expected, demand for TiO₂ in Europe due to macroeconomic headwinds, while the supply was more than sufficient, partly due to imports. The steepest decrease in demand, of the order of 30% year on year, was recorded from the paints and coatings sector, in particular the construction and DIY segments. In the second quarter, the DIY sector continued to grapple with challenges posed by falling consumer spending and the effects of the pandemic. The construction sector continued to face difficulties due to growing interest rates and problems with obtaining financing for new investment projects. The automotive sector started to slowly recover as bottlenecks in microchip supplies were partially eliminated. Although the price gap between China and Europe narrowed in the second quarter of 2023, Europeans continued imports from China, encouraged by foreign exchange rates and lower costs of freight.

Due to the challenging market conditions, capacity utilisation at certain European plants remained limited.

Market participants are closely monitoring the appeal against the General Court's judgment of November 23rd 2022, which annulled the harmonised classification and labelling of TiO₂ in accordance with the EU Classification, Labelling, and Packaging Regulation (CLP). As both the EC and France have appealed against the judgment, the General Court's judgment annulling the Regulation will only take effect if the appeals are dismissed.

Prices of titanium white, ilmenite and titanium slag



Source: Company data.

Ilmenite and titanium slag

Due to a decline in demand for titanium white, the prices of titanium-bearing minerals stopped growing in mid-2022, but they still remain high.

The prices of ilmenite available in Europe, used to produce titanium white by the sulfate method, rose by 11% year on year in the first half of 2023, while the prices of titanium-bearing minerals in China declined from record highs, mainly as a consequence of a downturn observed in that market. China's construction market is experiencing a significant slowdown, compounded by challenges in the property development sector. The lifting of restrictions in the first quarter of 2023 briefly stimulated activity in the country's titanium white segment, albeit only briefly and to a limited extent. As a result, the downward trend in TiO₂ prices on the Chinese market continues.

The average prices of Chinese ilmenite in the first half of 2023 decreased by almost 12% year on year. The prices of titanium slag available in Europe, used to produce titanium white by the sulfate method, went up by 17% year on year, while the prices of titanium slag in China went down by 24% in the period. As a result, the prices of Chinese titanium-bearing minerals again approached the global price level. Combined with relatively lower energy and gas costs, this makes the Chinese products highly competitive.

Melamine

Situation on the European market remained tough throughout the period under review. Operating rates in Europe were squeezed down by low demand. The reduced supply was sufficient to satisfy the lower demand. The challenging situation on the European market resulted in production cuts or temporary stoppages.

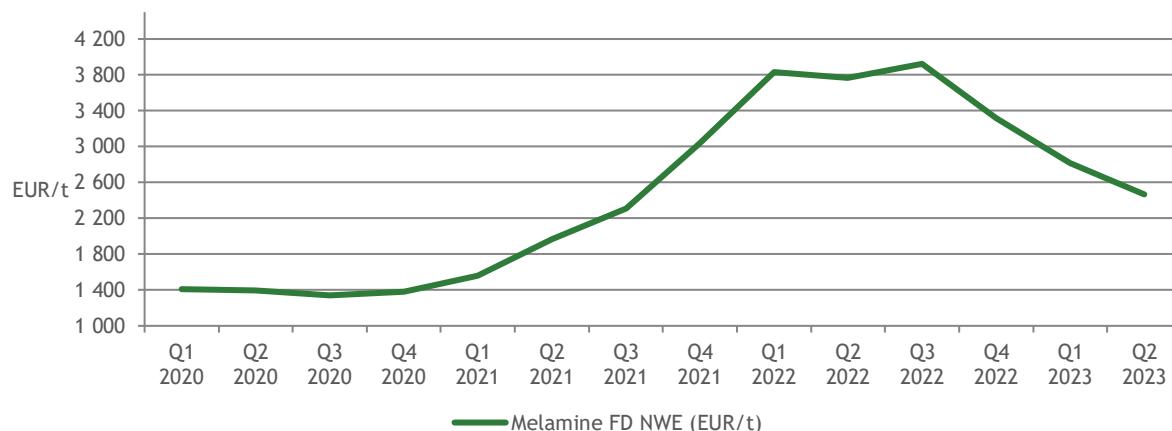
Despite previous announcements indicating a forthcoming rebound in the second quarter, typically a peak season for melamine, the end-use sectors, namely automotive and construction, failed to recover. This was primarily

attributed to soaring inflation, increasing interest rates, and weak macroeconomic data coming from the world's largest economies. Market participants reported a demand decline of approximately 30-40% compared to the usual levels observed in previous years. A glimmer of hope for European melamine suppliers emerged from the waning appeal of Chinese products in the European market and the growing interest in locally-produced alternatives. The situation was driven by the narrowing of the price gap between products manufactured in the Old Continent and those from abroad, also due to the extended order fulfilment times. In the context of increasing imports from Asia to Europe, the outcomes of the ongoing anti-dumping investigation regarding melamine imports from China and the potential adjustments in duties on these products hold significant importance.

Market players are uncertain about when the demand situation will improve, and with the approach of the summer slowdown, pessimism is growing regarding when any improvement in demand will be seen. Summer maintenance shutdowns can be extended if melamine consumption remains low. As a result, it is not clear when and whether demand will pick up in the coming months. With the arrival of colder months, the market will also more closely monitor gas prices and their impact on melamine production costs.

In view of the unstable macroeconomic and market situation, contract prices were still set by market participants on a monthly basis and, at the end of the first quarter of 2023, were set retrospectively, reflecting a three-month accumulation of changes in contracts that could be confirmed. In the second quarter of 2023, the contract price of melamine was ultimately set at EUR 2,250 to EUR 2,680/tonne FD NWE, down by EUR 350/tonne quarter on quarter. The average contract price of melamine in Europe in the first half of 2023 was EUR 2,748/tonne FD NWE, down 28% year on year.

Prices of melamine



Source: Company data.

ENERGY

Natural gas

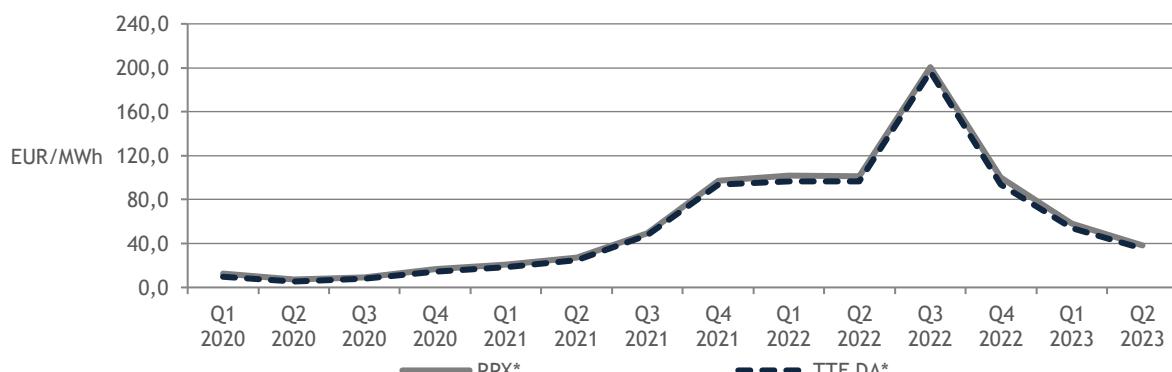
In the six months ended June 30th 2023, the price of natural gas was on a downward trend. At the end of the period, it was 45% lower than at the beginning of January. Spot prices experienced significant daily fluctuations, with volatility surpassing ten percent. Despite the downward trend, several corrections occurred in the period under review. The largest were seen in January, March and June. The January corrections were triggered by reports of the delayed launch of Freeport LNG in the US and a decline in supplies by Ukraine. The price surge in March was a consequence of news regarding nuclear energy issues in France and labour strikes at the regasification terminals in the country. Prices saw an uptick in June due to extended maintenance work at Norwegian gas installations and announcements from the Dutch government confirming the closure of the Groningen field by no later than 2024. The situation deteriorated further as forecasts predicting high temperatures for the second half of Europe were announced, potentially translating into heightened demand for electricity.

The key factor with an impact on gas prices was the weather. In general, the temperatures in most countries of north-western Europe remained above the seasonal average for most of the first half of 2023, which reduced the demand for heating energy. Moreover, the favourable weather conditions, coupled with the growing capacity generated by renewable energy sources (RES), eliminated the need to balance energy production by initiating additional capacity in gas power plants. Another factor contributing to the decline in gas prices was the decreasing cost of coal, leading to reduced demand for gas in Asian countries. China used coal for industrial production and energy production, while South Korea used nuclear energy. On the other hand, stable pipeline supplies and strong LNG deliveries coupled with low demand resulted in continued record-high fill levels at storage facilities in Europe, Asia and North America. As at the end of June 2023, storage facilities in the EU were 77.3% full, up 19.1% year on year. However, Europe's maximum gas storage capacity currently only covers less than half of its winter gas consumption. The balance must be covered by current supplies. At the same time, the EU's LNG import capacities grew as new regasification facilities were placed in service. The impact of the macroeconomic situation, primarily the turbulence associated with the banking sector and the need to raise debt limits in the US, which could result in a crisis and a decline in demand for commodities, also had a significant influence. Another contributing factor is the subdued demand from the industrial sector in Europe, indicative of the sector's ongoing struggles to rebound primarily due to a decline in demand caused by elevated prices in 2021 and 2022. In addition, the European Council agreed to extend the 15% gas demand reduction target for EU member states by another year. It is worth noting that the first-ever EU tender for collective gas purchase achieved success.

In the coming quarters, the following factors will play a key role in price development:

- In Europe, possible above-average seasonal temperatures will increase demand for energy for cooling systems, which can increase pressure on gas prices. A colder winter than that experienced at the end of 2022 and beginning of 2023 will have the same effect;
- Decline in LNG production in the US, which may lead to a price spike;
- China, which imported 20% less than in 2022, is likely to join the competition for LNG resources. As a result, some of the supplies from the Middle East or Australia may be redirected to China, potentially leading to price increases in Europe;
- Market uncertainty stemming from the possibility of high temperatures in the Equatorial Zone, known as El Niño, which, on the one hand, reduce the demand for heating gas (while increasing the demand for gas for the production of electricity powering A/C equipment), and on the other hand may cause hurricanes that disrupt gas production in the US.

Prices of natural gas



* Excluding transmission.

Source: Company data.

Electricity

In the first half of 2023, average electricity prices continued to fall, having declined by 32% relative to the second half of 2022. Year on year, the prices fell only slightly, by 2%.

In the six months ended June 30th 2023, the EU saw a 6% decline in energy demand as a result of the economic slowdown caused by the war in Ukraine and record high commodity prices in 2022. Many countries recorded minimum GDP growth rates and some entered a technical recession. In addition, the weather played a significant role. Its impact was multi-faceted. Demand fell on the back of exceptionally warm winter. This contributed to a decrease in gas prices, enabling it to complement energy derived from renewable sources. Generating energy from natural gas results in lower emissions compared to coal. The prices of the latter also experienced a decrease, yet the cost of emission allowances remained high. Additionally, there was a noteworthy improvement in the hydrological conditions. This will make it possible to generate more energy from this source, with a sufficient water supply for cooling nuclear reactors (particularly in France) and for potential transport of coal along the Rhine, if needed.

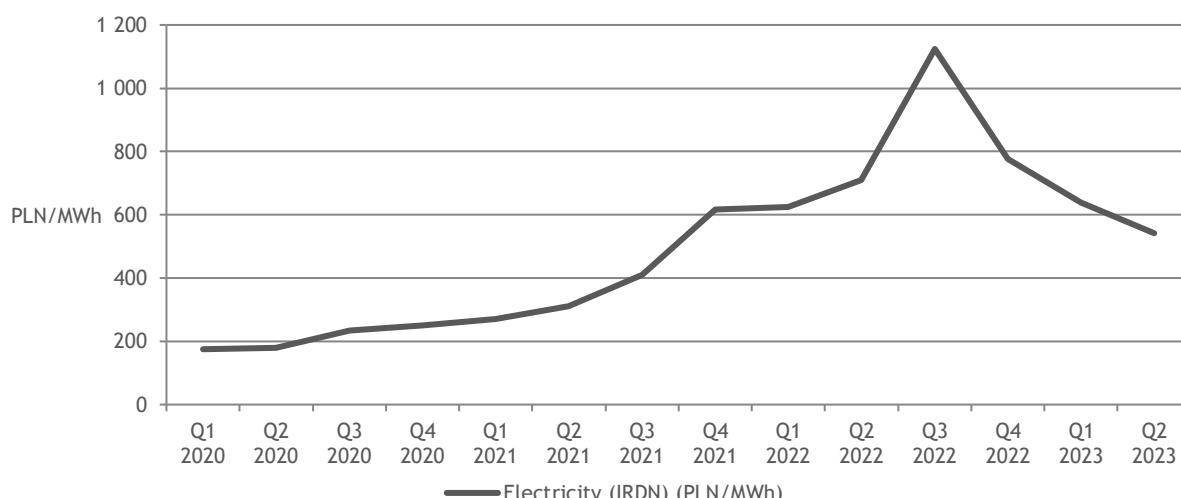
Another factor directly linked to the weather is the production of energy from renewable sources. In individual months of the reporting period, its share in the overall energy mix achieved new record highs. This means that both in Poland and across Europe renewable energy sources begin to push out coal-based energy production. In Poland, the share of RES in the period under analysis was approximately 20%, while in Germany it was 52%. As a result of the introduction of a solidarity shield in Poland, 8 million Polish households will pay only 40% of the market price of electricity this year. The introduction of new legislation and extensive state intervention imposing price limits on the wholesale market also played a significant role in this regard.

Currently, the market is more predictable and prices have stabilised at a lower level. Nonetheless, this outcome is a consequence of efforts to mitigate the repercussions of the war in Ukraine. The conflict may lead to increased uncertainty in the future and thus price volatility.

In the coming periods, electricity prices will be driven by the following factors:

- situation in Poland and Europe related to industrial demand for electricity,
- government action to provide protection against excessive increases in energy prices,
- weather situation - the occurrence of heat waves in the northern hemisphere may lead to a surge in energy prices due to increased demand for air conditioning,
- the growing proportion of renewable energy production - further investments in the production of this kind of energy will require expansion and modernisation of the distribution network, and market participants' adaptability to change in the share of renewable energy in the overall energy balance will also be important,
- prices of raw materials, coal and gas, and their strong correlation with the political and economic situation in Europe and globally; the level of their stocks before winter will also play a crucial role,
- maintaining the marginal cost pricing mechanism in spot markets (based on variable costs of conventional power generation),
- the pace of implementing the energy market reform, including strengthening of the role of long-term contracts.

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.

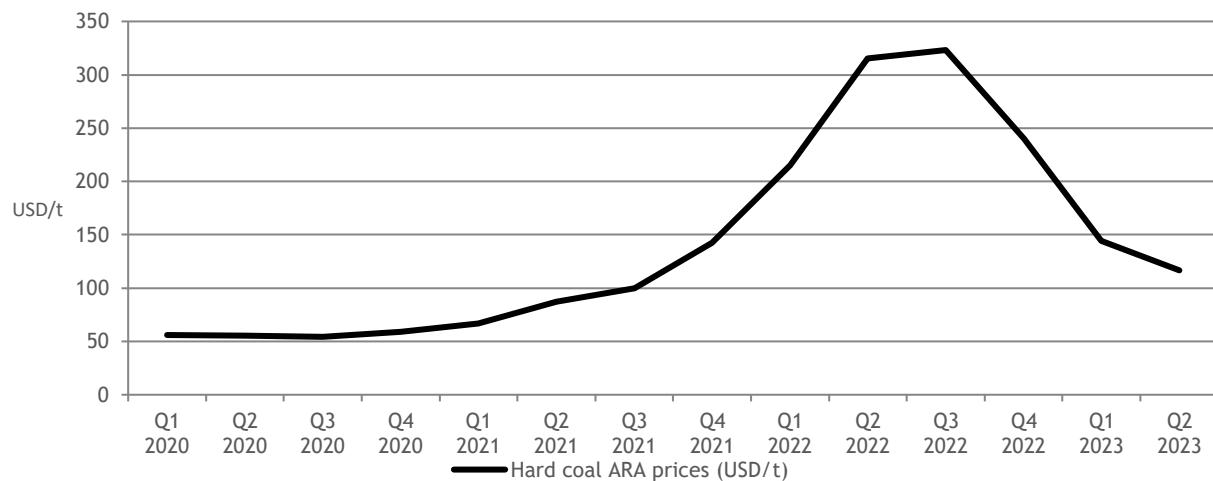
Source: Company data.

Coal

In the first half of 2023, coal prices on the international market followed a downward trend. The correction in June was due to an increase in gas prices related to prolonged overhauls of installations in Norway. One of the main reasons for the situation were weather conditions, that is mild winter, record high renewable energy output (many countries reported largest ever output of this kind of energy) and significant improvement in hydrological conditions in most European countries. It is worth noting that Europe's economies are experiencing minimal economic growth, and many companies are postponing full-capacity operations, leading to reduced energy demand. Furthermore, falling gas prices made energy production using this commodity more cost-effective. Another factor was the record-high refilling of gas storage facilities, which eliminated the need to burn coal. Prices of coal were also undermined by the limited demand from the main buyers of this raw material, i.e., China and India. The economic recovery in China turned out to be significantly below the levels anticipated by market participants, and coal inventories have reached historically high levels in both China and South Korea, as well as Japan. Additionally, the stocks of this commodity in European ports reached exceptionally high levels, with some of them acquired well in advance of the winter season. According to estimates, coal stocks at Amsterdam, Rotterdam and Antwerp (ARA) ports averaged 6 million tonnes in the first half of 2023, compared with just over 4 million tonnes in the period January to June 2022. As a result, some of the exporters from Europe decided to resell their products, primarily high-calorific coal intended for power plants, to markets in Asia and the Pacific.

The international coal market, which has experienced numerous upheavals recently, appears to be gradually stabilising. In the upcoming quarters, coal prices will be affected by weather conditions and the demand for energy, driven by cooling needs in the third quarter of 2023 and heating requirements in the fourth quarter of 2023 and the first quarter of 2024. One of the most critical factors will be the price of gas, which, like coal and nuclear power, plays a crucial role in balancing energy production from weather-dependent sources. Key factors will also encompass China's actions, as the country continues to expand its coal-fired power generation capacity. Recently, reports of droughts in the country have surfaced, which may lead to lower production in hydropower plants and necessitate the balancing of energy demand using conventional energy sources.

Prices of hard coal



Source: Company data.

2.3. Key financial and economic data

2.3.1. Consolidated financial information

Consolidated data

Item	H1 2023	H1 2022	change	% change
Revenue	7,386,299	13,236,932	(5,850,633)	(44.2)
Cost of sales	(8,059,305)	(9,933,960)	1,874,655	(18.9)
Gross (loss)/profit	(673,006)	3,302,972	(3,975,978)	(120.4)
Selling and distribution expenses	(474,111)	(612,279)	138,168	(22.6)
Administrative expenses	(487,065)	(465,709)	(21,356)	4.6
Gross (loss)/profit	(1,634,182)	2,224,984	(3,859,166)	(173.4)
Net other income/(expenses)	230,999	(10,652)	241,651	x
Operating (loss)/profit	(1,403,183)	2,214,332	(3,617,515)	(163.4)
Net finance income/(costs)	107,182	(187,606)	294,788	x
Share of profit of equity-accounted investees	13,130	7,861	5,269	67.0
(Loss)/profit before tax	(1,282,871)	2,034,587	(3,317,458)	(163.1)
Income tax	184,450	(352,627)	537,077	x
Net (loss)/profit	(1,098,421)	1,681,960	(2,780,381)	(165.3)
EBIT	(1,403,183)	2,214,332	(3,617,515)	(163.4)
Depreciation and amortisation	397,515	359,136	38,379	10.7
Impairment losses	(3,007)	1,511	(4,518)	(299.0)
EBITDA	(1,008,675)	2,574,979	(3,583,654)	(139.2)

Source: Company data.

2.3.1. Segment results

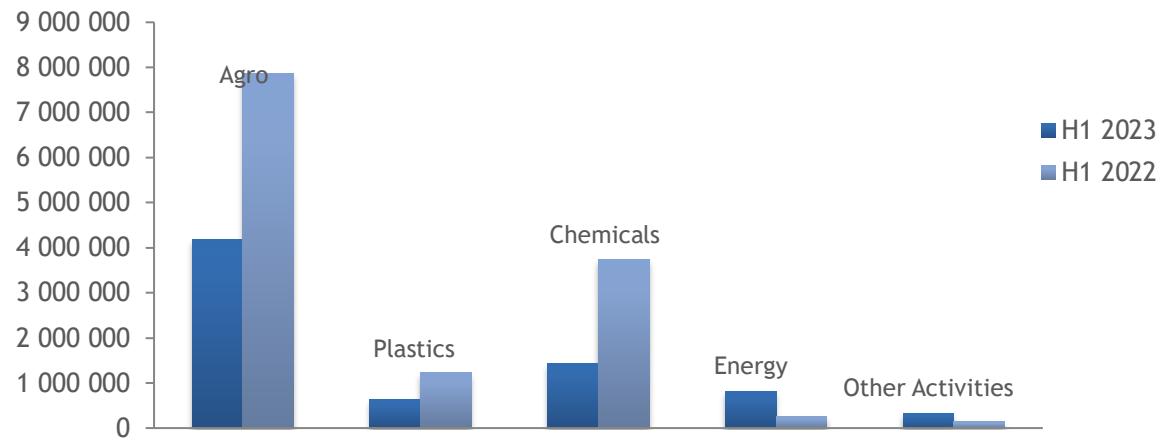
EBIT by segment

H1 2023	Agro	Plastics	Chemicals	Energy	Other Activities
External revenue	4,189,772	633,919	1,427,639	805,866	329,103
EBIT	(856,121)	(263,936)	(357,434)	(10,539)	84,847
EBITDA	(660,087)	(233,406)	(313,831)	45,393	153,256

H1 2022	Agro	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

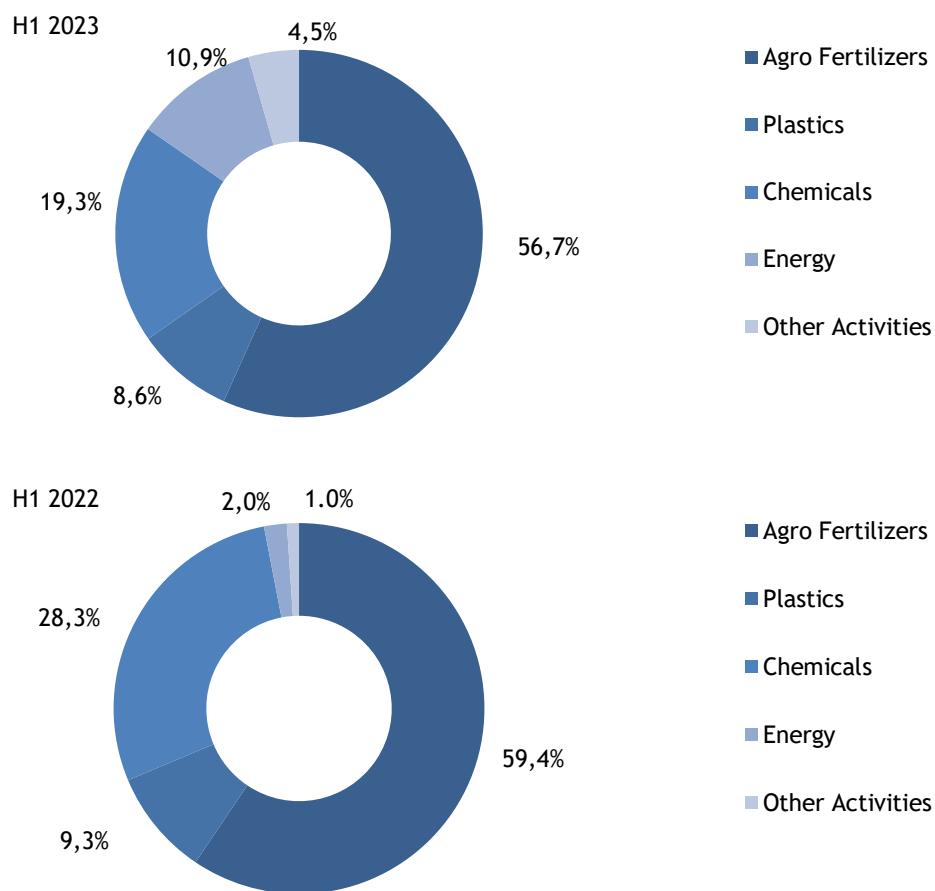
Source: Company data.

Revenue by segment



Source: Company data.

Revenue by segment



Source: Company data.

Agro

In the first six months of 2023, revenue in the Agro Segment came in at PLN 4,189,772 thousand and accounted for 56.7% of the Group's total revenue. The Segment's revenue shrank by 46.7% year on year, and its share in the Group's total revenue declined by 2.7pp.

The Agro Segment reported an EBIT loss of PLN 856,121 thousand and a negative EBITDA.

The domestic market accounted for 57% of the Segment's total sales.

Plastics

In the six months ended June 30th 2023, revenue in the Plastics Segment was PLN 633,919 thousand and accounted for 8.6% of the Group's total revenue. Year on year, the Segment's revenue decreased by 48.2%. The Segment delivered an operating loss of PLN 263,936 thousand and a negative EBITDA.

Foreign markets accounted for 81% of the Segment's total revenue.

Chemicals

In the first half of 2023, revenue in the Chemicals Segment amounted to PLN 1,427,639 thousand, having decreased 61.9% year on year. The Segment's revenue accounted for 19.3% of the Group's total revenue. The Segment delivered an operating loss of PLN 357,434 thousand and a negative EBITDA.

Foreign markets accounted for 55% of the Segment's total sales.

Energy

In the first half of 2023, revenue in the Energy Segment was PLN 805,866 thousand and accounted for 10.9% of the Group's total revenue. Year on year, the Segment's revenue increased by 206.8%. The Segment reported a negative EBIT of PLN 10,539 thousand and a positive EBITDA.

Other Activities

In the six months ended June 30th 2023, the Other Activities Segment reported revenue of PLN 329,103 thousand, up 136.4% year on year, accounting for 4.5% of the Group's total revenue. The Segment's operations generated a profit on sales and positive EBIT of PLN 84,847 thousand.

Structure of operating expenses

Operating expenses by nature of expense

	H1 2023	H1 2022	y/y change	% change
Depreciation and amortisation	395,305	356,928	38,377	10.8
Raw materials and consumables used	5,847,885	8,880,790	(3,032,905)	(34.2)
Services	632,629	807,024	(174,395)	(21.6)
Salaries and wages, including surcharges, and other benefits	1,098,504	1,030,740	67,764	6.6
Taxes and charges	260,995	365,395	(104,400)	(28.6)
Other	88,294	79,814	8,480	10.6
Total	8,323,612	11,520,691	(3,197,079)	(27.8)

Source: Company data.

Structure of operating expenses (%)

	H1 2023	H1 2022
Depreciation and amortisation	4.7	3.1
Raw materials and consumables used	70.3	77.1
Services	7.6	7.0
Salaries and wages, including surcharges, and other benefits	13.2	8.9
Taxes and charges	3.1	3.2
Other	1.1	0.7
Total	100.0	100.0

Source: Company data.

2.3.2. Assets, equity and liabilities

Structure of assets

	H1 2023	H1 2022	y/y change	% change
Non-current assets, including:	18,115,849	16,130,510	1,985,339	12.3
Property, plant and equipment	14,412,897	12,988,289	1,424,608	11.0
Intangible assets	928,285	1,000,857	(72,572)	(7.3)
Right-of-use assets	786,639	816,253	(29,614)	(3.6)
Other receivables	661,655	573,999	87,656	15.3
Deferred tax assets	466,059	102,217	363,842	356.0
Derivative financial instruments	394,360	157,368	236,992	150.6
Goodwill	289,481	325,186	(35,705)	(11.0)
Current assets, including:	7,904,016	8,701,545	(797,529)	(9.2)
Inventories	2,605,887	3,011,863	(405,976)	(13.5)
Property rights	2,204,890	1,944,294	260,596	13.4
Trade and other receivables	1,592,115	2,835,841	(1,243,726)	(43.9)
Cash and cash equivalents	1,405,681	866,981	538,700	62.1
Total assets	26,019,865	24,832,055	1,187,810	4.8

Source: Company data.

Structure of equity and liabilities

	H1 2023	H1 2022	y/y change	% change
Equity	8,795,144	10,919,723	(2,124,579)	(19.5)
Non-current liabilities, including:	5,894,230	6,527,971	(633,741)	(9.7)
Borrowings	3,584,290	4,218,574	(634,284)	(15.0)
Other financial liabilities	678,324	669,954	8,370	1.2
Employee benefit obligations	469,344	398,131	71,213	17.9
Lease liabilities	391,035	358,082	32,953	9.2
Deferred tax liabilities	323,079	423,726	(100,647)	(23.8)
Provisions	240,693	245,813	(5,120)	(2.1)
Government grants	188,111	193,321	(5,210)	(2.7)
Current liabilities, including:	11,330,491	7,384,361	3,946,130	53.4
Trade and other payables	4,227,386	686,098	3,541,288	516.1
Borrowings	3,316,339	4,859,189	(1,542,850)	(31.8)
Other financial liabilities	2,301,289	367,637	1,933,652	526.0
Provisions	87,962	73,432	14,530	19.8
Government grants	1,230,958	977,098	253,860	26.0
Total equity and liabilities	26,019,865	24,832,055	1,187,810	4.8

Source: Company data.

2.3.3. Financial ratios

Profitability ratios [%]

	H1 2023	H1 2022
Gross profit margin	(9.1)	25.0
EBIT margin	(19.0)	16.7
EBITDA margin	(13.7)	19.5
Net profit margin	(14.9)	12.7
ROA	(4.2)	6.8
ROCE	(9.6)	12.7
ROE	(12.5)	15.4
Return on non-current assets	(6.1)	10.4

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 / 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 2023	H1 2022
Current ratio	0.7	1.2
Quick ratio	0.5	0.8
Cash ratio	0.1	0.1

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

Efficiency ratios [days]

	H1 2023	H1 2022
Inventory turnover	58	55
Average collection period	39	39
Average payment period	75	88
Cash conversion cycle	22	6

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 2023	H1 2022
Total debt ratio	66.2	56.0
Long-term debt ratio	22.7	26.3
Short-term debt ratio	43.5	29.7
Equity-to-debt ratio	51.1	78.5
Interest cover ratio	(531.2)	2,744.7

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 have remained solvent, with a solid credit standing. In the six months ended June 30th 2023, 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 pursued 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 also defer the payment of amounts due to suppliers and service providers under the reverse factoring agreements, for a total of amount of PLN 2,843m. 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 monitors on an ongoing basis the impact of the war in Ukraine and the resulting extraordinary and highly volatile prices of natural gas and other energy commodities on the Group and the Group's economic environment. As at the date of this Report, the Group did not record any material adverse impact of the war in Ukraine on its financial position.

In view of the risk of exceeding, as at June 30th 2023, the Net Debt to EBITDA ratio cap permitted under the Grupa Azoty Group financing agreements, the Company's Management Board held negotiations with the institutions providing financing to the Grupa Azoty Group. The goal of the negotiations was to obtain consent for the Group to waive some of the lending terms, including in particular waiver of the ratio specified above and waiver by the Financing Parties of the rights arising from the possible breach of the required ratio cap. On June 1st 2023, the Company's Management Board provided the Financing Parties with Waiver and Amendment Letters containing a proposal of the provisions agreed upon by the parties. For detailed information, see Section 4.2 of this Report.

2.5. Borrowings

In the first half of 2023, the Group paid all of its borrowing-related liabilities when due, and there is no threat to its ability to continue servicing its debt in a timely manner. The Group has access to umbrella limits under PLN, EUR and USD overdraft facilities linked to physical cash pooling arrangements and under a multi-purpose credit facility which may be used as directed by the Parent in accordance with changes in funding requirements of any of the Group's subsidiaries. The Group also has access to bilateral overdraft limits and multi-purpose facilities.

The aggregate amount of the Group's undrawn overdraft and multi-purpose credit facilities as at June 30th 2023 was PLN 767m. At the same time, the Group had undrawn limits under corporate credit facilities of PLN 30m, and PLN 10m 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 2,008m.

As at June 30th 2023, under the agreements specified above the Group had access to total credit limits of approximately PLN 2,815m (of which limits under Grupa Azoty POLYOLEFINS special purpose credit facilities for the financing of the Polimery Police project were PLN 2,008m, and other limits available to the Group amounted to PLN 807m).

Grupa Azoty Group's financial standing is sound given the execution of the Waiver and Amendment Letters with the financial institutions. However, it cannot be ruled out that a further accumulation of adverse external factors, including any extraordinary volatility of the prices of key raw materials, lower demand for the Group's products, and stoppages of some production units, may result in a temporary deterioration of its financial standing.

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.

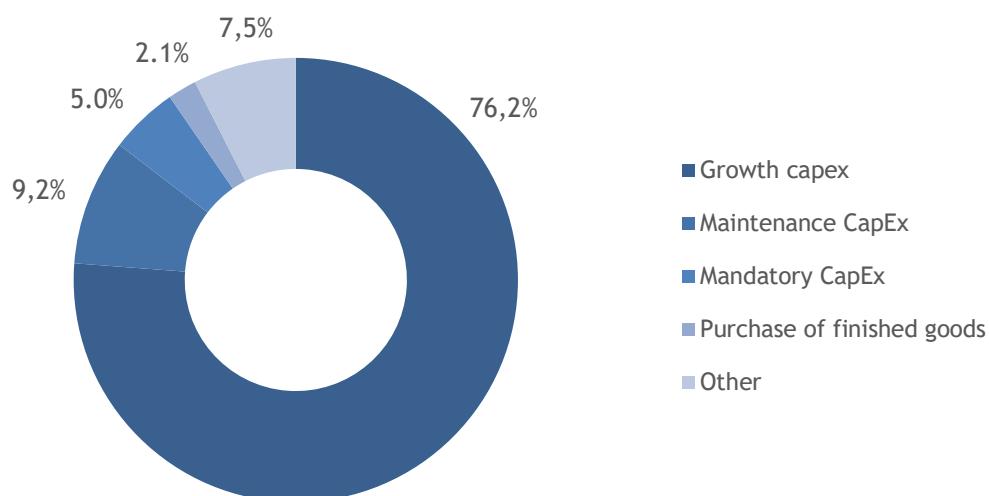
2.7. Key investment projects

In the first half of 2023, the Group incurred expenditure of PLN 1,256,967 thousand to purchase intangible assets and property, plant and equipment.

Structure of capital expenditure:

• Growth CapEx	PLN 958,161 thousand
• Maintenance CapEx	PLN 116,355 thousand
• Mandatory CapEx	PLN 62,918 thousand
• Purchase of finished goods	PLN 25,772 thousand
• Other (major overhauls, components, catalysts, etc.)	PLN 93,761 thousand

Structure of the Group's capital expenditure in the first half of 2023



Source: Company data.

Below is presented Grupa Azoty Group's capital expenditure in the six months ended June 30th 2023:

• Parent	PLN 49,811 thousand
• Grupa Azoty POLYOLEFINS	PLN 889,069 thousand
• Grupa Azoty PUŁAWY Group	PLN 172,674 thousand
• Grupa Azoty KĘDZIERZYN Group	PLN 57,683 thousand
• Grupa Azoty POLICE Group	PLN 41,739 thousand
• COMPO EXPERT	PLN 10,640 thousand
• Grupa Azoty KOLTAR	PLN 9,407 thousand
• Grupa Azoty SIARKOPOL	PLN 16,470 thousand

- Grupa Azoty PKCH PLN 4,581 thousand
- Grupa Azoty COMPOUNDING PLN 4,848 thousand
- Grupa Azoty ATT POLYMERS PLN 45 thousand

Key investment projects implemented by the Group as at June 30th 2023 (PLN '000)

Project name	Project budget	Expenditure incurred	Expenditure incurred in the first half of 2023	Project purpose	Scheduled completion date
Parent					
Neutralisation unit (for ammonium nitrate)	210,000	6,597	1,992	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.	2025
Construction of a neutralisation and precipitation unit	141,000	10,291	3,123	The purpose of the project is to construct a new neutralisation and precipitation unit and upgrade the caprolactam and ammonium sulfate manufacturing process to reduce heat consumption through better use of the heat generated by neutralisation of caprolactam ester. Reduction of steam consumption will help to lower the cost of caprolactam and ammonium sulfate production and improve cost competitiveness.	2025
Grupa Azoty POLYOLEFINS					
Polimery Police	7,210,957*	5,528,944	889,069	The project is to build an on-purpose propylene dehydrogenation plant (PDH) and a polypropylene production plant with associated infrastructure, including 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	111,000	109,798	1,302	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 River and will enable the use of the river as the only supply source. The project will also secure the supply of demineralised water to Grupa Azoty POLYOLEFINS units.	2023**
Grupa Azoty PUŁAWY					
Construction of coal-fired power generation unit	1,230,000	1,011,864	6,812	Bringing Grupa Azoty PUŁAWY's energy generation units in line with the latest environmental requirements, while increasing the share of the autoproducer CHP	2023

Project name	Project budget	Expenditure incurred	Expenditure incurred in the first half of 2023	Project purpose	Scheduled completion date
				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	455,506	23,191	Increase in the efficiency of nitric acid production and the economics of production of nitric acid-based fertilizers. Any nitric acid surplus will be processed on the new line for the production of speciality fertilizers: magnesium nitrate, calcium nitrate and potassium nitrate.	2028
Upgrade of steam generator OP-215 No. 2 to reduce NO _x emissions	145,000	141,608	12,835	Bringing the generator into compliance with new NO _x 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
Upgrade of Urea 2 unit - reduction of ammonia consumption rates	139,396	411	394	Improvement of the energy intensity of urea production, reducing the carbon footprint of urea from Urea 2 unit and improving the competitiveness of urea by reducing the unit cost of raw materials.	2026
Adaptation of FGD unit to BAT conclusions	75,000	4,789	4,149	The project is to upgrade the scrubber, part of the FGD unit. Once completed, the project will ensure compliance with the emission thresholds for gaseous pollutants released into the atmosphere.	2024
Grupa Azoty KĘDZIERZYN					
Upgrade of the synthesis gas compression unit supplying the Ammonia Plant	180,000	148,723	2,015	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.	2024
Peak-load/reserve boilers	110,087	78,296	14,867	The peak-load/reserve boiler house functioning as a peak-load source will interoperate with steam generators at 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	75,600	70,281	436	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 from ammonia production	2024

Project name	Project budget	Expenditure incurred	Expenditure incurred in the first half of 2023	Project purpose	Scheduled completion date
				processes as an alternative to heat generation in coal-fired boilers.	
2-ethylhexanoic acid unit	156,000	2,259	39	Enabling the production of 20,000 tonnes of 2-EHA per year.	2026
Upgrade of the urea production line	172,447	6,440	62	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.	2026

* 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.

** All the project work has been completed. Settlement of the project is under way.

Source: Company data.

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

The global economic outlook remains negative. In 2023, GDP growth will be lower than in 2022. Coincident and leading indicators still point to a high risk of recession in the United States and in the euro area. China's economy is currently grappling with a major slowdown. In 2023, also the Polish economy may enter a technical recession, with expectations of a rebound in 2024.

Exchange rates

Financial markets are hoping for a soft landing for the US economy, that is avoiding recession caused by fighting inflation through monetary tightening. There is currently a strong appetite for risk, accompanied by a low risk discount rate. Inflation in the United States is decreasing rapidly, the labour market remains strong and the economic growth rate is moderate. This gives rise to optimistic market sentiments, leading to a continued upward trend in stock indices and higher prices of riskier assets.

The main central banks have been maintaining a relatively reserved stance (compared with the markets) concerning further inflation and monetary policy. Despite clearly lower price increases, both the US Federal Reserve (the FED) and the European Central Bank (ECB) continued their monetary tightening policies in the second and third quarters of 2023. In both cases, the language remains hawkish. Considering the weakness of the Chinese and European economies observed in the third quarter, as well as the leading indicators suggesting a weakening of the US economy, it appears that both banks will embark on the initial phase of monetary policy easing in early autumn 2023, at least by refraining from any further interest rate hikes. Before the end of the year, interest rate cuts until mid-2024 may be announced.

The strong risk appetite and the appreciation of the euro against the US dollar had a positive effect on the złoty, which in mid-2023 gained approximately 10% against the euro and the US dollar.

Nevertheless, the situation remains uncertain, primarily due to factors such as the ongoing conflict in Ukraine, lack of funds from the National Recovery Plan, the weakening of the banking sector following unfavourable rulings issued by the CJEU against lenders, and the Monetary Policy Council having cut the interest rates much above market expectations. Current conditions suggest that the potential for any sustained appreciation of the złoty has diminished and that the risk of return to the long-term trend of złoty depreciation against the US dollar and the euro is higher. The domestic currency remains vulnerable to the risk of depreciation also due to the high risk of a prolonged economic slowdown coinciding with a deepening decline in the euro area, the United States, and China. The Polish currency may depreciate later during the year, also because of the falling interest rate disparity between Poland on the one hand and the euro area and US on the other, given the prospects of further interest rate cuts by the National Bank of Poland with the FED and the ECB maintaining their rates.

The Grupa Azoty Group expects the exchange rate of the Polish złoty to weaken moderately in the second half of 2023, with continually strong market volatility. A slight depreciation of the złoty against the euro or US dollar should not significantly affect the Group's results with regard to its planned currency exposure.

In the long term, since Poland's public debt to GDP is relatively low, household debt is limited and the banking sector is solid, further depreciation of the zloty should decelerate in 2024.

Interest rates in Poland

Since the third quarter of 2022, interest rates in Poland have remained unchanged at 6.75%. The NBP first concluded the cycle of monetary policy tightening, and then, in a surprising move for financial markets, reduced interest rates by 0.75 percentage points to 6.00% at the beginning of September. This decision was prompted by the decline in domestic inflation observed since March 2023, even though it remained at approximately 10% in August. The financial markets therefore expect interest rates to fall by the end of 2023 by another 50-75 basis points. In forward rate contracts in Poland the 3M WIBOR rate is currently estimated at 5.40% until December 2023, 5% until mid-2024 and 4% until the end of 2024. The Group expects that PLN interest rates will fall while EUR and USD interest rates will remain unchanged by mid-2023 with respect to the currencies in which it finances its operations, with further interest rate cuts in 2024. This will stabilise or reduce 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 relatively high level in PLN, EUR and USD.

In the US, interest rates are most likely to stabilise in the coming months until the end of 2023. Interest rate cuts may also take place during the first half of 2024 if the inflation rate drops to the 2% target and the economy slows down or enters a recession.

In the euro area, as announced, interest rates were increased by 0.25% to 4.5% (the refinancing rate) in September 2023. The increase is likely to be the final one and the rates are expected to remain unchanged until the end of the year.

Disinflation will remain the key global economic phenomenon in the near future. A lot depends on whether economies will manage to avoid a recession and whether there will be a second wave of high inflation within the next two years. Poland is seeing a marked decline in the economic growth rate, which may result in a technical recession in 2023, i.e., two consecutive quarters of negative GDP growth. From 2024 onwards, Poland's economy should begin to gradually recover.

Prices of CO₂ emission allowances

In the first half of 2023, the prices of CO₂ emission allowances ranged from EUR 78-100/tonne. The reporting period saw attempts to drive short-term downward trends, which could have been caused by the economic downturn in Europe and the prospects of continued downturn in the latter part of the year. As of March 2023, the prices of allowances have remained at the lower end of the range, with a potential to fall to EUR 65-75/tonne, which could be considered relatively low and favourable for the buyers of the allowances.

Based on the adopted joint model for managing CO₂ emission allowances and approved purchase plans, the Group companies have secured almost all EUAs required for 2023. The companies purchased allowances in earlier periods, in forward contracts, at prices significantly lower than the current market prices.

According to Refinitiv's forecasts of July 14th 2023, the average price of CO₂ emission allowances in 2023 will be EUR 86. The emission allowance market continues to be a regulated market, with the regulator aiming to achieve a sustainable rise in EUA prices in response to the progressing on climate ambitions outlined in the Fit for 55 package. However, the expected economic recession at the end of 2023 and beginning of 2024 in the euro area and the effects of high energy prices should stabilise the EUA prices in the medium term due to a decline in industrial demand. Transitory declines in EUA prices may be brought about by the REPowerEU plan (energy savings, diversification of energy supplies, and accelerated roll-out of renewable energy) and lower production of electricity from coal. The ETS market may remain under consolidation in the price range of EUR 70-99.

European Union Regulatory Area

Fit for 55

The individual acts making up the *Fit for 55* package are largely at an advanced phase of the legislative procedure. Amendments to ETS Directive (2003/87/EC) and CBAM Regulation were published in the Official Journal of the EU on May 16th 2023 and took effect in May and June 2023. The published acts provide for, *inter alia*, the creation of a mechanism for importers to purchase and redeem certificates for CBAM-covered imported goods pro rata to CO₂ emissions associated with the production of those goods, the phasing out (until 2034) of free allowances for EU producers of CBAM-covered products, as well as linking the allocation of free allowances to the implementation of energy audit recommendations and updating the rules and benchmarks for 2026-2030 with respect to ETS-covered products. Following the publication of the above regulations, the process of revising or issuing delegated and implementing acts began. Significant criticism was directed towards the published CBAM implementing regulation draft, which is to govern the responsibilities of importers throughout the transition period, i.e., from the beginning of October 2023 to the end of December 2025. Significant consequences of the revised ETS Directive and the CBAM Regulation will be experienced by entities subject to these regulations as of the next five-year ETS period starting on January 1st 2026. In March 2023, the EU bodies agreed on amendments to Directive (EU) 2018/2001 (RED II), which provides, among other things, for increasing the use of renewable energy in industry and the share of non-biological renewable fuels in sectors consuming hydrogen for energy and

non-energy purposes. An agreement was also reached to amend Directive 2012/27/EU (EED), which provides that the EU's overall energy consumption in 2023 should be no more than 763 million tonnes of oil equivalent (Mtoe) in the case of final energy consumption (binding target), and 993 Mtoe in the case of primary energy consumption (indicative target). The acts are pending formal adoption.

Energy market reform

On March 16th 2023, the EC submitted a proposal to reform the electricity market. The proposed reform consists in particular of an amendment to Regulation (EU) 2019/943 and Directive (EU) 2019/942 setting out the basic legal framework for the functioning of the common market for electricity in the EU. The main objective of the amendments is to enhance the resilience of the electricity market and to protect it against price surges in the event of a significant rise in the prices of energy commodities. To achieve this objective, the EC proposes to increase the role of long-term contracts between producers of renewable electricity and its direct customers (under PPAs), introduce the obligation to use Contracts for Difference for new installations using low-carbon technologies benefiting from public support, and improve the flexibility of using demand response mechanisms. The proposed regulation is presently in the phase of formulating positions within the Council and the European Parliament in preparation for the forthcoming interinstitutional negotiations.

Green Deal Industrial Plan for the Net-Zero Age

On February 1st 2023, the European Commission issued the Green Deal Industrial Plan communication. The Plan aims to enhance the competitiveness of Europe's industry, support fast transition to climate neutrality and provide a more supportive environment for the scaling up of the EU's manufacturing capacity for the net-zero technologies and products required to meet EU's ambitious climate targets. It builds on earlier initiatives and the strengths of the EU Single Market, complementing ongoing efforts under the European Green Deal and REPowerEU.

On March 16th 2023, the European Commission published a proposal for a regulation on establishing measures for strengthening clean energy generation technologies (Net Zero Industry Act). The proposal establishes a framework of measures for innovation and strengthening of the EU's net-zero technology products manufacturing ecosystem, ensuring access to secure and sustainable supplies of net-zero emission technologies necessary to protect the resilience of the EU energy system and contribute to creating quality jobs. The initiative was announced as part of the Green Deal Industrial Plan. On June 23rd, the deadline for submitting amendments to the European Parliament's Committee on Industry, Research and Energy (ITRE) expired. Concurrently, work was under way on amendments within working groups at the EU Council.

IED

Work was continued on the revision of Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) and Directive 1999/31/EC of 26 April 1999 on the landfill of waste. IED is the main EU instrument regulating pollutant emissions from industrial installations. It also applies to the large-volume chemical industry, and installations covered by the Directive must operate in accordance with a permit issued by the national authorities. The EC published draft amendments on April 5th 2022. The European Parliament's ITRE Committee adopted its position on this matter on March 28th 2023 and the Committee on the Environment, Public Health and Food Safety (ENVI) - on May 24th 2023. Council of the EU's general approach was adopted on March 16th 2023. Concurrently, work is under way to develop a document specifying the Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals (BREF LVIC).

EU's chemicals strategy for sustainability

On June 30th 2023, a compromise text of the Swedish Presidency was adopted at the COREPER meeting, containing the agreed negotiating position of the Council of the EU on the proposed amendments to Regulation No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP). In the context of the implementation of the European Green Deal, the strategy identifies a number of actions that require a targeted review of the CLP Regulation. The meeting of the European Parliament's Committee on the Environment, Public Health and Food Safety (ENVI) that discussed this subject took place on September 11th 2023, while the plenary vote is scheduled for October 2023.

Circular economy

The draft ecodesign regulation was subject of public consultation until June 22nd 2023. Additionally, in July, the Spanish Presidency initiated the next phase of work on the ecodesign regulation, and the European Parliament adopted its position in the first reading - the matter was forwarded to the committee responsible for interinstitutional negotiations. In its proposal for an ecodesign regulation, the EC sets out new requirements that aim to sustainably manufacture products sold on the EU market to make them "more durable, reliable, reusable, upgradable, reparable, easier to maintain, refurbish and recycle, and energy and resource efficient".

On June 30th 2023, the EU Council agreed its position on the proposed Critical Raw Materials Act, emphasising the need for the EU to increase domestic production of raw materials for green transition technologies. The proposal aims to reinforce EU monitoring capacities and strengthen both the EU value chain - through the identification of mineral resources and raw materials projects in the EU's strategic interest, with strong environmental protection - and EU external policies on critical raw materials. The proposed regulation sets out, among others, targets for domestic capacities along the strategic raw material supply chain: at least 10% of the

EU's annual consumption for extraction, at least 40% of the EU's annual consumption for processing, and at least 15% of the EU's annual consumption for recycling by 2030. Member States seek to increase the processing target to 50% and the recycling target to 20%.

Other initiatives / measures

- On June 20th 2023, delegated acts to Directive 2018/2001 on the promotion of the use of energy from renewable sources were published in the Official Journal of the EU, setting out 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 are 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. The delegated acts took effect on July 10th 2023.
- On June 30th 2023, the 8th round of discussions took place within the EU Council regarding the Urban Wastewater Treatment Directive. The first plenary session of the European Parliament is expected to be held in October. The Economic and Social Committee issued a favourable opinion on the proposed Urban Wastewater Treatment Directive. The Committee endorsed the EC's proposal to revise EU rules on urban wastewater. The Urban Wastewater Treatment Directive is a key piece of EU legislation aimed at protecting the environment from the adverse effects of untreated wastewater, by introducing, *inter alia*, a change in the permitted total nitrogen concentration (from 15 mg/dm³ to 6 mg/dm³) and a minimum percentage reduction (from 70-80 to 85), a change in the permitted phosphorus concentration (from 1.0 mg/dm³ to 0.5 mg/dm³); increased monitoring of pollution in the inlets and outlets of treatment facilities, identification of the presence of micro-plastics, as well as an obligation to additionally treat urban wastewater to remove the widest possible spectrum of micro-pollutants by December 31st 2040 in those areas where the concentration or accumulation of micro-pollutants represents a risk for human health or the environment.
- On March 31st 2023, the Commission launched a consultation process to set an intermediary climate target for 2040. The EU has already set targets for 2030 (GHG emissions reduction by 55% relative to 1990) and 2050 (climate neutrality, *i.e.*, net-zero GHG emissions). The setting of the intermediary target for 2040 will affect a number of economic sectors and may require new solutions, in social and labour market policies as well as other areas, but it also aims to create a more predictable environment for investment decisions.

Polish Regulatory Area

- On February 17th 2023, the Polish Ministry of Climate and Environment published a draft Regulation on the granting of public aid for the development of hydrogen technologies and associated infrastructure under the National Recovery and Resilience Plan.
- 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. Following approval by both chambers of the Polish Parliament, the bill was submitted to the President of Poland for signature in July 2023.
- On March 23rd 2023, the Act Amending the Act on Wind Farm Investment Projects and Certain Other Acts of March 9th 2023 was promulgated in the Journal of Laws (Dziennik Ustaw). The Act liberalises the 10H rule, according to which the minimum distance from housing is to be ten times the height of a planned wind turbine. Onshore wind power projects can now be implemented within a shorter distance where permitted by the local zoning plan, provided that the minimum distance is to be no less than 700 metres. A number of other changes have also been made to the implementation of investment projects, including: allocation of at least 10% of the installed capacity to virtual presumption for the municipality's residents, the possibility of locating residential buildings around existing wind farms (in compliance with the minimum distance requirement of 700 metres), and the introduction of additional obligatory public discussion on a draft local zoning plan providing for the construction of wind farms.

International trade policy

- The EU has suspended import duties on Ukrainian goods, as of June 4th 2022 for a period of 12 months. In May 2023, the liberalisation of trade was extended by another year.
- The United Kingdom has applied the zero-rate tariffs on Ukrainian goods, first introduced by the United Kingdom Department of Commerce on April 25th 2022 for 12 months, and subsequently extended until March 2024.
- As of January 1st 2023, Russia introduced an export duty on mineral fertilizers, which will continue in force until the end of 2023. The duties do not apply to exports to the Euro-Asian Economic Union. The 23.5% duty applies to all types of fertilizers and is levied on prices above USD 450/tonne.
- Russia will apply export quotas on nitrogen and compound fertilizers until November 30th 2023.
- On February 28th 2023, the European Commission initiated another review of the anti-dumping duties on melamine imports from China at the request of Xinjiang Xinlianxin Energy Chemical Co., Ltd.

- March 31st 2023 saw the conclusion of negotiations on the UK's accession to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) between Australia, Brunei, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam and Canada.
- On April 5th 2023, the US Department of Commerce and the US International Trade Commission announced the extension of the anti-dumping and countervailing duties on ammonium sulfate imports from China following the expiry review. The duties will continue to apply for another five years and their rate will remain unchanged.
- On May 5th 2023, Ukraine began formal efforts to join the CPTPP trade pact.
- On June 17th 2023, the EU reinstated tariffs on urea and ammonia imports from third countries. The tariffs on imports of urea and ammonia from third countries (except Russia and Belarus) for a period of six months were introduced under Council Regulation (EU) 2022/2465 of December 12th 2022.
- The proceedings are pending concerning an appeal filed by Methanol Holding (Trinidad) Ltd and EuroChem Group against the decision of the General Court of the European Union whereby it dismissed the claims of those two companies challenging the Commission's decision to impose anti-dumping duties on UAN imports from Russia, Trinidad and Tobago and the US.
- On July 5th 2023, the General Court of Luxembourg, following an investigation, issued a judgment to annul Implementing Regulation (EU) 2020/2100 imposing a definitive anti-dumping duty on imports of ammonium nitrate originating in Russia.
- The EU continues to negotiate its trade agreements with third countries, including India, Australia and Indonesia. Work is under way to update the trade deal with Mexico. Negotiations were resumed on a free trade agreement with Thailand.
- On June 19th 2023, the EU and Kenya concluded their negotiations of a trade agreement.
- On July 9th 2023, the EU and New Zealand signed a free trade agreement.
- No significant progress was made in ratifying the trade agreement with MERCOSUR countries. However, negotiations on an addendum tightening up the climate aspects of the EU - MERCOSUR trade agreement have gathered momentum.

Sanctions imposed on Russia and Belarus in connection with Russia's aggression against Ukraine

- On January 27th 2023, the EU prolonged the sanctions targeted at trade, finance, technology and other industries in Russia by six months, until the end of July 2023.
- On January 31st 2023, Ukraine imposed sanctions on Russian and Belarusian chemical, transport, and coal-fired power generation companies as well as private entrepreneurs in Russia and Belarus.
- On February 4th 2023, the EU Council decided to set two price caps for Russian petroleum products and products which originate in or are exported from Russia. The decision has supplemented the crude oil price cap applicable since December 2022 and the EU import ban on Russian seaborne crude oil and petroleum products. The agreed price caps, effective as of February 5th, are USD 100 per barrel of diesel oil and gasoline and USD 45 per barrel of fuel oil. The EU has also introduced a transitional exemption period of 55 days for Russian petroleum products that are purchased and loaded until February 5th and unloaded before April 1st.
- On February 24th 2023, a tenth package of sanctions was adopted, introducing further bans on exports of critical technologies and industrial goods, such as electronics, special vehicles, machine parts, spare parts for heavy trucks and jet engines, electronic components, drones, missiles, helicopters, specific rare earths, electronic integrated circuits and thermal cameras, as well as construction goods that can be easily redirected to be used to support the Russian war effort, such as aerials or cranes. Further restrictions were imposed on imports of Russian high-revenue goods, such as bitumen and synthetic rubber. The sanctions list included for the first time seven Iranian entities producing unmanned combat aerial vehicles and four Iranian individuals.
- On February 24th 2023, the EU Council resolved to extend the restrictive measures in respect of Belarus for another year in view of the situation in that country. The decision was taken based on an annual review, considering the continuing grave situation in the country and its involvement in the Russian aggression against Ukraine. The restrictive measures are to apply until February 28th 2024.
- On March 9th 2023, the US Department of the Treasury imposed sanctions on five Chinese undertakings and one individual accused of supplying aviation components to an Iranian manufacturer of drones sold to Russia and used in attacks on tankers.
- On March 18th 2023, the President of Ukraine approved sanctions against 300 civilians and 141 legal entities from Russia, Iran, and Syria and signed the relevant decree, confirming the sanctions proposed by the National Security and Defence Council. The sanctions provide, among other things, for blocking of assets and commercial operations, transit and transport through the territory of Ukraine for ten years, cancellation of concessions, prohibition of privatisation, land purchases, as well as transfers of technology and intellectual property. 16 Iranian companies were also included on the Ukrainian sanctions list.

- On March 21st 2023, the US Department of the Treasury announced sanctions on four companies and three individuals from Iran and Turkey engaged in supplying components for drone production to the Iranian arms industry. According to its communication, the sanctions were imposed on the DTSRC research centre of the Iranian ministry of defence, as well as individuals who imported parts for the production of unmanned aerial vehicles and allegedly intermediated in the sale of more than 100 European engines for surface-to-air missiles and drones worth more than USD 1m. These are further US measures targeting the Iranian arms industry manufacturing drones sold to Russia for use in its aggression against Ukraine.
- On April 12th 2023, the State and Treasury Departments announced sanctions targeting a total of over 120 individuals and 29 entities located in 25 different countries, including sanctions against the Russia-controlled International Investment Bank (IIB) of Budapest, which has links with the Russian services. The presence of the IIB in Budapest provides Russia with an opportunity to expand its intelligence operations in Central Europe and the Western Balkans, and might serve as a conduit for corruption and illicit financial transactions, including violation of sanctions. The list of sanctions includes individuals and entities registered in Cyprus, Switzerland, France, Liechtenstein, Uzbekistan, and Slovakia, as well as a number of companies from China, Turkey, and the UAE. They violated the export restrictions imposed by the United States regarding the sale of semiconductors to Russia and sent Chinese UAVs to Russia to be used by the Russian army.
- On April 26th 2023, the Cabinet of Ministers of Ukraine made the decision to request the National Security and Defence Council to implement sectoral sanctions against Iran for supplying Russia with Iran-manufactured UAVs used in the shelling of Ukrainian cities. The sanctions are to apply for 50 years and encompass a prohibition on the transfer of technology and intellectual property rights to Iran as well as investments in or electronic payments to that country. Restrictions on trade operations are also proposed.
- On May 5th 2023, the Office of Foreign Assets Control issued General License No. 8G: Authorizing transactions related to energy: extraction, production, refinement, liquefaction, gasification, regasification, conversion, enrichment, fabrication, transport, or purchase of petroleum, including crude oil, lease condensates, unfinished oils, natural gas liquids, petroleum products, natural gas, or other products capable of producing energy, such as coal, wood, or agricultural products used to manufacture biofuels, or uranium in any form, as well as the development, production, generation, transmission, or exchange of power, through any means, including nuclear, thermal, and renewable energy sources. Transactions prohibited by Executive Order (E.O.) 14024 related to energy are authorized through November 1st 2023.
- On May 29th 2023, the Minister of Internal Affairs and Administration decided to add 365 Belarusian citizens to the list of foreign individuals whose presence in Poland is undesirable. Those individuals will also be prohibited from entering the Schengen area. Moreover, their funds and economic resources have been frozen. In addition, the Minister decided to freeze funds and economic resources of 20 entities and 16 individuals primarily linked with Russian capital.
- On June 19th 2023, the Belarusian Council of Ministers prohibited the entry into Belarus of Polish lorries and passenger cars with trailers. Their owners were required to remove these vehicles from the territory of Belarus by July 2nd 2023 on pain of administrative penalties. This prohibition does not extend to semi-trailers registered in other EU countries. The restrictions are a response of the Belarusian authorities to the imposition by Poland of sanctions against more than 350 officials of the Alexander Lukashenko's regime, responsible for political repressions, as well as to the freezing of funds of Belarusian companies with links to Russian capital. The restriction was introduced until further notice.
- On June 23rd 2023, the EU Council adopted the 11th package of sanctions, which includes the following key elements:
 - Trade measures:
 - New anti-circumvention tool.
 - Extension of the transit prohibition for certain sensitive goods (e.g., advanced technology, aviation-related materials) exported from the EU to third countries, via Russia. They are subject to tighter export restrictions for dual-use and advanced technology items.
 - Restriction on the exports of further 15 technological items found on the battlefield in Ukraine or equipment needed to produce such items.
 - Tightening restrictions on imports of iron and steel goods by requiring importers of sanctioned iron and steel goods that have been processed in a third country to prove that the inputs used do not come from Russia.
 - Extension of the ban on export of luxury cars to all new and second-hand cars above a certain engine size ($>1,900 \text{ cm}^3$), and all electric and hybrid vehicles.
 - A full ban on certain types of machinery components.
 - Simplifying the structure of the industrial goods annex, by listing products subject to restrictions in one single section and with broader product definitions, to better identify goods subject to export bans and reduce circumvention of sanctions by misclassification.

- Transport measures:
 - A full ban on trucks with Russian trailers and semi-trailers from transporting goods to the EU.
 - Prohibition to access EU ports for vessels that engage in ship-to-ship transfers suspected to be in breach of the Russian oil import ban or G7 Coalition price cap.
 - Prohibition to access EU ports for vessels if a vessel does not notify the competent authority at least 48 hours in advance about a ship-to-ship transfer occurring within the Exclusive Economic Zone of a Member State or within 12 nautical miles from the baseline of that Member State's coast.
 - Prohibition to access EU ports for vessels which manipulate or turn off their navigation tracking system when transporting Russian oil subject to the oil import ban or G7 price cap.
- Energy measures:
 - End of the possibility to import Russian oil by pipeline for Germany and Poland.
 - Insertions of strict and very targeted derogations to the existing export bans to enable the maintenance of the CPC (Caspian Pipeline Consortium) pipeline which transports Kazakh oil to the EU through Russia.
 - Extension of the exception to the oil price cap for Sakhalin oil for Japan (until 31 March 2024).
- On July 17th 2023, Russia withdrew from the Black Sea Grain Agreement that had been negotiated by the UN and Turkey in July 2022 to address the global food crisis and enable the export of Ukrainian grain via the Black Sea, controlled by the Russian fleet. The core of the dispute revolves around Western sanctions, which Russia says are impeding the payment for its exports of grains and fertilizers. From the very beginning, Russia consistently sought the easing of Western sanctions in exchange for its concessions related to the Grain Agreement. The main issue of disagreement is the Russian Agricultural Bank, which can no longer carry out any transactions. Representatives of Russia had issued repeated threats to withdraw from the Agreement, arguing that the UN had the duty to exert pressure on Western countries.

3. Risks and threats

Regulatory risk arising from the climate transition occurring through implementation of the European Green Deal reforms

Group, Parent - high risk with high probability

Grupa Azoty is continuously monitoring projects and proposals of administrative bodies regarding amendments to existing laws or new legislation and takes an active part in the work of European associations and cooperates with Polish institutions to respond to upcoming changes in legislation and propose regulations favourable to the industry. The Group analyses the risks associated with regulatory trends and draft amendments or planned new regulations. The effect 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's products by customers in the EU countries may be restricted as a consequence of tightening of legal regulations. In particular, the most important amendments have been made to the following documents:

- Amendment to Directive 2003/87/EC of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading (EU ETS),
- Amendment to Decision 2015/1814 of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme,
- Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism,
- Amendment to Directive 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources (REDII), Regulation 2018/1999 of 11 December 2018 on the Governance of the Energy Union and Climate Action, and Directive 98/70/EC of 13 October 1998 relating to the quality of petrol and diesel fuels,
- Delegated Regulation on requirements for the production of renewable fuels of non-biological origin (RFNBO),
- Proposal for a Directive of the European Parliament and of the Council on common rules for the internal markets in renewable and natural gases and in hydrogen,
- Proposal for a Regulation of the European Parliament and of the Council on the internal markets for renewable and natural gases and for hydrogen.

In the case of the first three documents, the trilogues between the EC, the Council and the European Parliament were concluded at the end of 2022 and, after being formally voted on by the EP and the Council, the documents

were published in the Official Journal of the EU on May 16th 2023. The implemented regulations relating to the reduction of the total pool of emission allowances and the rules of free allocation of allowances - due to rebasing, a higher linear reduction factor (LRF), benchmark adjustment and the introduction of the Carbon Border Adjustment Mechanism (CBAM) - will necessitate purchasing a growing number of allowances by entities participating in the system, including the Grupa Azoty Group, which means higher operating expenses. The increase may be compounded by growing prices of allowances resulting from their limited availability. The introduction of the carbon tax on products (such as fertilizers) imported into the EU ensures a level playing field for competition only to some extent. It is so because the EU ETS covers production plants and all products made by them, regardless of the target market while CBAM covers only certain products and only to the extent that they are marketed in the EU, rather than the entire production volume. In the case of imported products which are necessary for the Grupa Azoty Group's processes (raw materials for production, building materials), the carbon tax will increase their purchase price.

The growing demand for alternative fuels in transport, especially hydrogen, will undoubtedly contribute to the development of the market for renewable and low-carbon gases. This should be seen as a market opportunity, especially for the Grupa Azoty Group, currently the largest producer of hydrogen in Poland. Risks include growing competition from a range of entities and countries already interested in producing hydrogen and developing operations on this promising market. Participation in the European hydrogen market is sought in particular by businesses from third countries with good natural conditions for producing low-cost renewable energy. The introduction, in accordance with draft RED III, of the requirement to ensure a 42% share of RFNBO in hydrogen used for energy and non-energy purposes will mean that the Grupa Azoty Group will be required to produce almost a half of its current hydrogen output using the electrolysis process instead of steam reforming of natural gas. Such legislation presents an important business risk given the limited availability of RES in Poland. There is a risk of failure to achieve this target using RFNBO produced in Poland, which will necessitate imports of RFNBO originating in other EU or third countries. Imports of green ammonia satisfying approximately a half of Grupa Azoty Group's ammonia consumption emerge as an alternative solution. The draft is presently awaiting formal approval from the European Parliament and the Council, following which it will be published in the Official Journal of the EU.

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.

Risk related to the implementation of investment projects

Group, Parent - medium risk with medium probability

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.

The implementation of strategic investment projects is among the Group's principal 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 arising from newly adopted and planned regulations and regulatory trends, as well as the market situation.

In addition, the Group took steps to identify projects and determine their 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"). A task force appointed by the Management Board in 2021 drew up the criteria for evaluating investment projects in terms of obtaining bank and non-bank financing and 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 carried out in line with internal procedures. The Grupa Azoty Group has put in place monthly and quarterly corporate reporting. To this end, a team was established in 2022 to directly oversee strategic investment projects. The reports contain analyses identifying potential increases in the risk of deadline or budget overrun and changes to project scope. 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 compliant with the Taxonomy for sustainable activities.

The armed conflict in Ukraine, disruptions in the supply chain of materials and equipment, rising material and service costs, as well as exchange rate fluctuations were noted to have a significant impact on the implementation of investment projects at the Grupa Azoty Group.

Currency risk

Group, Parent - medium risk with high probability

Risk of excessive finance costs resulting from foreign exchange losses.

As of February 2023, the złoty gradually strengthened following the trend seen at the end of 2022. The exchange rate stabilised at the end of June. The exchange rates of key currencies, in particular the EUR/PLN and USD/PLN pairs, were lower than at the end of December by tens of grosz (one hundredth of a złoty). In mid-June, the prices of USD and EUR fell to their lowest levels since, respectively, February 2022 and September 2020.

The Group companies hedge their currency exposures using such instruments as natural hedging, factoring, currency forwards and zero-cost collars with a symmetric risk profile. 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. Moreover, since 2017 the Group has been reducing its euro-denominated currency exposure by increasing natural hedging.

The Group has also established 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 Grupa Azoty Group enable it to significantly limit risk by using selected currency risk hedging instruments and strategies, based on long-term and one-year 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 entirely.

The Grupa Azoty Group is monitoring the situation on the financial markets and notices the main threats related to the ongoing war in Ukraine, rising inflationary pressures, tightening of monetary policies by central banks, and other factors. These negative developments are compounded by fears of a global recession and a strong slowdown in GDP growth in Poland. Unrest in the financial markets may in the future adversely affect the Polish currency.

Movements in the exchange rates in the six months ended June 30th 2023 did not significantly affect the Grupa Azoty Group's performance in terms of the Group's partly offset EUR exposure and limited USD exposure.

Liquidity risk

Group, Parent - increased risk with high probability

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 (as amended), under which it set financing limits of PLN 1bn for each of the subsidiaries.

In September 2022, the Grupa Azoty Group combined, as part of a single multi-currency physical cash pooling facility, the physical cash pooling service in PLN, EUR and USD, and linked it with the financing under the multi-purpose credit facility agreement (up to a maximum of PLN 1bn and its equivalent in EUR and USD) and with daily or umbrella financing limits for the Group companies in PLN, EUR and USD, and the total global liquidity limit.

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 companies with surpluses at others. As a result, the Group has access to undrawn credit facilities and surplus cash as well as discretion in their redistribution, which significantly reduces the probability of short-term liquidity loss by the Group or its individual companies. This mechanism also significantly reduces the Group's borrowing costs.

The Group also has the option to defer the payment of liabilities to suppliers and service providers under the reverse factoring agreements it has executed. The agreements offer a lower cost of financing and full contracting and repayment flexibility, also helping reduce the cost of traditional debt financing.

The Group is also able to finance its receivables from trading partners under factoring agreements executed together with the Group companies.

The above instruments effectively satisfy the Group's current liquidity needs and provide financing for a part of its investment programme.

The Parent and the Group's other leading companies have remained fully solvent, with a solid credit standing. In the six months ended June 30th 2023, the Group paid all of its liabilities under borrowings and other financial liabilities when due.

In view of the risk of exceeding, as at June 30th 2023, the Net Debt to EBITDA ratio cap permitted under the Grupa Azoty Group financing agreements, the Company's Management Board held negotiations with the institutions providing financing to the Grupa Azoty Group. The goal of the negotiations was to obtain consent for the Group to waive some of the lending terms, including in particular waiver of the ratio specified above and waiver by the Financing Parties of the rights arising from the possible breach of the required ratio cap. On June 1st 2023, the Company's Management Board provided the Financing Parties with Waiver and Amendment Letters containing a proposal of the provisions agreed upon by the parties. For detailed information, see Section 4.2 of this Report.

The Group fulfils all debt service and repayment obligations under the financing agreements on an ongoing basis, and the limits available under the financing agreements ensure full liquidity and secure financing for the Group and its suppliers as well as continuity of operations.

Risk related to the prices and availability of natural gas

Group, Parent - increased risk with medium probability

The 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 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 satisfies at least 90% of the Group's requirement, enabling partial diversification of supplies. It 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 reduced 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 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 intraday 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 CO₂ Emission Allowances along with the Gas Market Analysis and CO₂ Emission Allowance Team which uses fundamental and technical analysis to determine, among other things, change trends, 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 2023, natural gas was supplied under the contract with Orlen S.A. at spot prices and in forward transactions, in accordance with the gas price hedging policy. Despite concerns about the continuity of natural gas supplies to Europe, triggered by the ongoing war in Ukraine, gas supplies to the Parent and the other Group companies continued without any disruptions. The gas market experienced a shift in supply directions, resulting in a decrease of Russia's overall share in the EU market, which reduced the risk of gas supply interruption to the Grupa Azoty Group companies.

The price of gas declined year on year, but was still highly volatile on account of maintenance work on the Norwegian gas infrastructure and the weather, which affects demand for electricity through temperatures and the volume of renewable energy production. In the coming months, demand for LNG in Asia will also be an important driver of gas prices, as its growth may result in some LNG cargoes being redirected to that region.

Risk related to prices and availability of coal

Group - medium risk with medium probability

Parent - high risk with very high probability

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 basic feedstock for the Group's key companies, necessary for the production of process steam required in manufacturing. The individual Group companies set the level of emergency stocks and the level of safe stocks, which are monitored on an ongoing basis to mitigate the risk of failure to maintain the required emergency stocks.

Coal supplies to the Grupa Azoty Group are secured mainly under long-term contracts. Currently, Polska Grupa Górnictwa S.A. is the strategic supplier of coal. Where long-term contracts are insufficient to fully secure supplies to the Group companies, joint corporate tender procedures are carried out to arrange supplementary supplies.

The prices of coal continued to decline in the first half of 2023 compared with the same period of the previous year. However, considering the persistent volatility in the fuel and energy markets, it cannot be ruled out that risks associated with the prices and availability of coal could have a material effect on the Grupa Azoty Group's business in subsequent periods. The Grupa Azoty Group monitors energy markets, prepares analyses and action scenarios and takes preventive measures in the event of problems with securing coal of the required quantity and quality as well as a significant increase in its prices. In the coming months, coal prices will be affected, among others, by the geopolitical situation, level of demand for coal in Europe, transport costs, weather conditions, price fluctuations in other commodity markets and regulations on decarbonisation.

Risk of lower nitrogen and compound fertilizer sales as a result of uncontrolled supply increase, including higher imports.

Group, Parent - increased risk with high probability

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. Risk associated with increased production capacities, which result in changes in local and global fertilizer processing and trade markets, and with 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 be launched 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, especially urea, in Poland is visibly growing.

Resumed fertilizer production in Europe, coupled with a strong rebound in supply, prompted a series of price cuts during the first half of 2023. Demand for fertilizers did not see any significant improvement, which led to a decline in fertilizer sales. The level of demand for fertilizers, typical of spring, was dampened by high stocks of urea-based fertilizers at customers (after the lifting of import duties), which - as a cheaper alternative - enjoyed more popularity with end users. The unfavourable demand situation was further aggravated by wintry and rainy weather, hardly conducive to farming activity or field work. Additionally, in the case of compound fertilizers, a year-on-year increase in the prices of key raw materials (phosphate rock, potassium chloride) caused the prices of these fertilizers to grow. Coupled with a slump in demand, this led to a lower output and sales of compound fertilizers compared to the same period last year. A year-on-year decline in the prices of natural gas, being the key feedstock for the manufacture of nitrogen fertilizers, did not offset the drop in product prices and sales volumes.

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 sale and 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.

The Grupa Azoty Group intends to pursue its sales policy for nitrogen and compound fertilizers until the end of 2023 with the goal of maximising production and selling fertilizers on the markets which ensure the highest possible margins. Stepping up sales efforts will be supported by promotional activities designed to reach the target customer.

Risk of deteriorated supply-demand balance for polyamide PA6

Group, Parent - medium risk with high probability

A risk of demand and supply imbalance due to a drop in demand for or increased supply of PA6 on the global market.

During the first half of 2023, the European market continued to be affected by the unstable geopolitical situation, challenging economic conditions, fears of a global recession, and changes in consumers' buying sentiment due to high inflation. This ultimately translated into weak demand for both CPL and PA6 as well as a price decline reflecting lower energy costs, overcapacity on the polyamides market and pressure from buyers. The market witnessed heightened competition with an increase in imports of more affordable PA6 chain products, particularly from Asia.

In the months to come, the main factor determining the prices of PA6 chain products will be the demand and supply forces on the application markets, which in turn will be driven by macroeconomic conditions and prices of petrochemical feedstocks. The short-term market sentiment is weak with mixed demand prospects, depending on the application sector.

Lower energy prices, if they stay at current levels, should bolster the competitiveness of European producers, which could also, to some extent, stimulate the downstream markets for plastics. Production costs in Europe remain significantly higher than those in the US and China.

The Group monitors the demand and supply situation 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. Simultaneously, proactive measures are being taken to enhance the Group's cost position.

Risk of unauthorised access to OT systems

Group, Parent - medium risk with low probability

Effective operation of the OT systems employed by the Group companies may be compromised due to cyberattacks, including acts of terrorism, sabotage, or espionage, posing threats to the safety and health of employees and local communities as well as to the financial standing and reputation of the companies.

The Group companies engaged in energy supply activities have implemented internal procedures and instructions in compliance with the requirements of the National Cybersecurity System Act. The OT Systems Cybersecurity Office operates within the IT area. Incidents involving industrial automation systems, including unauthorised access to the systems, are monitored on an ongoing basis. Each time, the procedures provide for steps to be taken to determine the causes of an incident, verify the action taken and security levels, and remove or mitigate the effects of detected vulnerabilities. In addition, regular user training is held on OT system safety and potential threats.

In the first six months of 2023, the Parent and its key subsidiaries did not report any incidents involving unauthorised access to OT systems.

Risk to the security of information on the use of IT tools and systems

Group - increased risk with very high probability

Parent - medium risk with high probability

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 cyberattacks, in particular those taking advantage of defects or security gaps in ICT systems, not yet 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: 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. The first six months of 2023 saw a surge in the number of events detected by the Parent's security systems. However, despite a higher probability of cybersecurity attacks, in 2023 the Parent and its subsidiaries did not see any significant increase in the number of handled cybersecurity incidents directly affecting the Group companies' operations.

Risk related to physical security in connection with Russia's aggression against Ukraine, threat of potential escalation of the conflict to Poland

Group, Parent - medium risk with medium probability

Russia's invasion of Ukraine has increased the risk of the Grupa Azoty Group incurring losses due to criminal actions aimed at damaging or destroying assets, process installations, control systems and stocks of raw and other materials, as well as the loss of health and life of employees as a result of an armed attack, terrorist, sabotage, diversionary actions or cyberattacks, or a hostile takeover of sensitive information.

Mitigating measures have been applied to minimise the risk, including increasing the frequency of checks on vehicles and individuals before entering plant sites and the frequency of rounds and patrols by security guards

to ensure physical security. In addition, drivers from countries deemed to pose a substantial security risk were subjected to enhanced surveillance while on the Grupa Azoty Group's premises. Mobilisation activities and analogue communication systems within the Group were reviewed.

Risk mitigation was supported by monitoring systems, including a Video Surveillance System, an Intrusion Detection System and an Access Control System. The implementation of modern Technical Security System solutions was initiated, and property insurance contracts were concluded. Cooperation also began with the Polish Air Navigation Services Agency to improve the administration of the zone and with the Police for the protection of the facilities.

As part of the risk supervision, task teams have been set up to respond to identified risks as and when needed.

These measures were taken in line with the implemented system regulations, such as Security Plans, Internal Orders, Rules and Instructions to determine how to tackle incidents on an ongoing basis, enhance security and minimise the occurrence of the above risk.

4. Other information

4.1. Other significant events

Implementation of the Polimery Police project

In the six months to June 30th 2023, Grupa Azoty POLYOLEFINS continued the implementation of 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.

EPC Contract amendment proposal

On May 24th 2023, a letter was received from the General Contractor initiating the procedure for an amendment to the EPC Contract (the "Amendment Proposal"). The EPC Contract amendments proposed by the Contractor concern matters relating to increasing the Contractor's fee by a total amount of EUR 24.15m. As the reason for submitting the Amendment Proposal the Contractor cites in particular the impact of European sanctions imposed on Russia and the war in Ukraine on the implementation of the Project, as well as other events beyond the Contractor's control, in particular the COVID-19 pandemic, which impeded the implementation of the Project.

The Amendment Proposal is being thoroughly reviewed and verified in terms of its appropriateness under the EPC Contract, in accordance with the procedure provided for in the EPC Contract, and under other agreements between Grupa Azoty POLYOLEFINS and the General Contractor, as well as in the light of facts. The term of the Amendment Proposal has been extended to October 31st 2023 due to the extensive scope of work involved in its assessment, the amount of materials, and the continued provision of more documents by the General Contractor.

Market environment

Early 2023 saw an increase in prices of propane driven by increased demand from the petrochemical industry, seasonal requirement and more intense competition from Asia for propane exported from the US. Propane prices at the end of January reached USD 650/tonne. Stable supplies from the US brought prices down to around USD 420/tonne. Towards the end of the reporting period, the propane market in Europe was already balanced: the product was available and demand dropped, as a result of which its prices settled at normal levels.

Lower transaction activity was seen on the polypropylene market due to fears of a global recession. High inflation across Europe was the main factor hampering demand. In the first half of 2023, demand for polypropylene in Europe was below the expected average for the period, but the reporting period's end witnessed a modest pick-up in demand from the agricultural and construction sectors. Demand from the packaging industry was eroded by inflation. Demand from automakers improved slightly with the easing of semiconductor shortages. The spreads are lower than those recorded in previous years. It should however be noted that the Project's profitability and economics are not based on short-term market assumptions but rather on long-term market growth projections. The long-term stable expectations as to propane-polypropylene spreads remain unchanged.

Risks

New staff with relevant experience are planned to be recruited in the coming months. Although Grupa Azoty POLYOLEFINS has taken a number of measures to mitigate risks associated with the recruitment process, it cannot entirely rule out problems with the availability of workforce on the local labour market.

Activities performed by the General Contractor for the commissioning phase are being monitored with increased attention. Delays are possible due to a significant number of equipment units on individual sub-projects, resulting in a risk of technical issues.

Grupa Azoty POLYOLEFINS is monitoring progress on the Project and other risk factors in terms of their possible impact on projected cash flows. Evidence of an impending economic slowdown, including volatility across the key raw material and product markets, may have an adverse effect on the company's ability to service its obligations.

Owing to the current geopolitical situation in Central and Eastern Europe, Grupa Azoty POLYOLEFINS is carrying out analyses and making assessments, applying the best available remedial measures to mitigate the risks and successfully complete the Project.

Stage of completion

As at June 30th 2023, the overall stage of completion under the EPC Contract was 99.69%. The overall stage of completion is understood as obtaining the required permits, procurement and supply of equipment and materials, construction work, completion testing and commissioning.

Work on the Project involved removal of defects identified during the construction phase and Mechanical Completion, functional testing, mechanical run testing (MRT) of rotating machinery and commissioning. After the high-pressure steam boiler was cleaned and its lining dried, the HP steam boiler was put into operation and the steaming of the HP, MP, and LP steam pipelines began. A PSA (pressure swing adsorption) unit was put into operation. Between March 27th and March 30th, an ethylene cargo was unloaded from a vessel into a storage tank.

Key events related to acceptance and commissioning in the first half of 2023:

- On January 31st 2023, construction and installation works were completed for PDH, PP and AUX (Mechanical Completion);
- On January 31st 2023, a document was signed to enable the operation of the Auxiliary and Interconnection Facilities (AUX);
- On February 28th 2023, documents were signed to enable the operation of the PDH, PP and PPL units;
- On June 22nd 2023, an official ceremony was held to mark the start of polypropylene production.

Handling and Storage Terminal (HST)

On March 27th 2023, the first delivery of ethylene (as the working medium for the commissioning process) arrived at the Handling and Storage Terminal. The delivery involved certain process-related operations, including gas injection into the facility and ethylene unloading. The second propane cargo was delivered on April 23rd 2023. The Guaranteed Parameters were tested at the time, including tests of the propane unloading rate, and the net capacity of propane and ethylene tanks was verified.

In the reporting period, the terms and conditions for carrying out guaranteed parameter tests for the Terminal were agreed. The correctness of the net capacity testing of the propane and ethylene storage tanks was confirmed. The process parameters of the propane and ethylene BOG compressors were adjusted, with any previously detected defects removed. The following commissioning operations were performed on the Terminal units: connection tests on the liquid nitrogen unloading systems, ethylene transfer to the battery limit of the PP unit, propane transfer to the battery limit of the PDH unit and to the PDH buffer tank, road works.

Propane dehydrogenation (PDH) unit

In January 2023, construction and assembly work was completed on the PDH unit and defects identified during the construction phase were removed. Functional tests were also performed. In late January 2023, reviews of all process and non-process systems on the PDH unit were completed. Inspections were carried out by representatives of the General Contractor, the Employer and the Contract Engineer.

On January 31st 2023, the General Contractor submitted the Mechanical Completion Certificate for the PDH unit, which was signed on February 14th after review. In February 2023, commissioning work was carried on the unit. On February 28th 2023, the General Contractor submitted the Ready for Start-up (RFSU) Completion document for the PDH facilities, confirming their readiness for start-up and feeding of process utilities, which was signed in March after review. In the reporting period, commissioning operations performed on the PDH unit included mechanical run testing of rotating machinery, loading of catalysts to reactors, loading of solvent and DMDS, acceptance of propane transported via pipeline from port tanks in the PDH unit, testing of fire protection systems and gas monitoring systems, drying of furnace lining, drying of the Coldbox separation system catalysts and apparatus in the operating system, leakage testing of individual systems and removing defects.

In the first half of 2023, employees (automation and process specialists) of UOP (the Licensor) were present at the unit to check the work performed by the General Contractor and take part in individual commissioning operations.

Polypropylene (PP) unit

In the first half of 2023, defects identified during the construction and Mechanical Completion phases were removed and functional tests as well as mechanical run testing of equipment were performed at the PP unit. The chemical cleaning of donor tanks, steam blowing of pipelines, and installation of screw agitators at the Extruder unit were completed, and PP powder for mechanical run testing of the Extruder was loaded into the Product Purge Bin (PPB).

On January 31st 2023, the General Contractor submitted the Mechanical Completion Certificate for the PP unit, which was signed on February 14th after review. On February 28th 2023, the General Contractor also submitted the Ready for Start-up (RFSU) Completion document for the PP unit, which was signed in March after review.

Once the PP unit reached the RFSU status, hazardous media, i.e., propylene, natural gas, hydrogen and PP powder, were fed into the unit. Commissioning operations continued on the regeneration of filtration beds in the purification section of the PP unit, compressor and pump testing using target media, followed by a test run of the extruder with the additive dosing system. Next was the start-up sequence of the unit using third-party propylene, leakage testing of the process systems was performed, purging of the reactor system and PPB with PP powder was carried out, and finally the propylene was fed into the reactor system and the polymerisation reaction by feeding the catalyst was initiated on June 30th 2023, when the first batch of polypropylene was produced at the PP unit.

Polypropylene (PPL) logistics infrastructure

In the first half of 2023, as regards the PPL sub-project, defects identified during the construction and Mechanical Completion phases were removed, functional testing of automation systems and mechanical run testing (MRT) of mechanical systems were continued, pre-marketing activities and on-job training on the operation of machinery and equipment were carried out. Steam blowing of steam systems was completed, the HVAC system was put into operation and the cleaning of storage silos was completed to prepare them for polypropylene storage.

On February 28th 2023, the General Contractor submitted the Ready for Start-up (RFSU) Completion document for the PPL facilities, which was signed in March after review.

Once the RFSU was achieved, removal of the identified defects was continued, granulate was distributed as part of pre-marketing activities, and adjustment run under nominal load was carried out for bagging and palletising machines.

Auxiliary and Interconnection Facilities (AUX)

On January 31st 2023, the General Contractor submitted the Mechanical Completion Certificate for the AUX units, which was signed on February 14th after review. The Ready for Start-up (RFSU) Completion document was also signed.

In the reporting period, the removal of defects identified during the construction phase and new ones arising during the operation of the successively commissioned units continued. After the high-pressure steam boiler was cleaned and its lining dried, the HP steam boiler was put into operation and the steaming of the HP, MP, and LP steam pipelines began. Steam was also fed into Grupa Azoty POLICE units.

In the first half of the year, four cargoes of propylene, totalling approximately 4,000 tonnes, were transported by rail tankers, and the new unloading infrastructure was tested.

The auxiliary facilities that have already been put into operation include most of the systems providing the necessary process media for the PDH and PP units, including a high-pressure steam boiler together with boiler water preparation and surface blowdowns discharge systems, raw and cooling water preparation system, and a compressed air and nitrogen plant. In the event of plant failure, hydrocarbons can be safely discharged from the unit using a flare stack with a discharge system.

Claims raised

On July 10th 2023, the General Contractor provided Grupa Azoty POLYOLEFINS with notifications of Force Majeure in connection with:

- unpredictable and above-average technical issues consisting in overheating of cables supplying power to HPC (Heat Pump Compressor) and REC (Reactor Effluent Compressor),
- unpredictable and above-average technical issues relating to the soft start module of the PP extruder.

According to the General Contractor's estimates, the issues will delay the completion of the Project by at least 54 days and result in the suspension of the start-up work which is on the critical path.

On July 21st 2023 and July 28th 2023, Grupa Azoty POLYOLEFINS replied to the General Contractor, stating its position that the explanations contained in the General Contractor's notifications did not contain the required details of the force majeure event and, as such, did not meet the conditions set out in the EPC Contract, i.e., it was not an event which the party could not foresee acting with due professional care or it was not an event beyond the party's control.

Extension of Project duration

On August 29th 2023, Grupa Azoty POLYOLEFINS received a letter from the General Contractor of the Project, stating that the Project completion would be delayed by two to three months. The General Contractor cited unforeseen equipment problems during the commissioning phase of certain units as the reason for the delay in completing the Project work.

Financing

At present, Grupa Azoty POLYOLEFINS draws funds under the term and VAT credit facilities to meet its needs according to the progress in implementing the Project. For details of the annexes to the loan agreements signed to finance the Project, see Section 4.3 of this Report.

On April 27th 2023, the composition of the syndicate providing financing to Grupa Azoty POLYOLEFINS under the Senior Credit Facilities Agreement of May 31st 2020 changed. The change involved transfer of a part of the share in the EUR tranche of the Term Facility from Santander Bank Polska S.A. to Haitong Bank, S.A., Warsaw Branch. The transfer did not affect the terms and conditions of the financing.

In the reporting quarter, Grupa Azoty POLYOLEFINS was party to the Senior Credit Facilities Agreement of May 31st 2020 (the Credit Facilities Agreement), providing the company with financing in the form of:

- a term credit facility of EUR 488m and USD 538m,
- a VAT facility of PLN 150m,
- a working capital facility of USD 180m,

and liabilities under subordinated loan agreements with the Shareholders made on May 31st 2020.

In the first half of 2023, the conditions for disbursement of USD 35m under the working capital facility were met. Under the annex to the Credit Facilities Agreement, signed on June 6th 2023, the available amount was increased to USD 80m and will remain effective until the last Provisional Acceptance Report is obtained, when the available working capital facility will be increased to its full amount (USD 180m).

Stoppage of caprolactam production and temporary stoppage of melamine production at Grupa Azoty PUŁAWY

On March 9th 2023, the Management Board of Grupa Azoty PUŁAWY decided to suspend production of caprolactam (the Plastics segment) and the operation of the Melamine III unit (the Agro segment) from March 10th 2023. Production at the other two melamine units (Melamine I and Melamine II) had been halted in the summer of 2022, due to the prevailing supply and demand situation in the European market.

On May 17th 2023, the Management Board of Grupa Azoty PUŁAWY decided to commence work on the re-start of production from the Melamine III unit. Its output will be aligned with the current supply and demand situation. At 90 tonnes per day, the capacity of the Melamine III unit represents about a third of the company's total rated capacities in melamine.

Another concentrated nitric acid unit commissioned by the Parent in Tarnów

In January 2023, the Parent launched a new facility for the production of concentrated nitric acid with a design capacity of 40,000 tonnes per year, doubling its existing capacities. This is a second production line for above 98% concentrated nitric acid now operating in Tarnów. It has brought the Parent's total annual capacities for that product to 80,000 tonnes. As Grupa Azoty is the only Polish producer of concentrated nitric acid, the project is key to ensuring supplies of input materials for the manufacture of fine chemicals.

The newly commissioned unit will strengthen the Parent's leading market position in Europe among the suppliers of feedstocks to manufacturers of nitrocellulose, fuel additives, and the branch of organic synthesis, with organic compounds used widely as intermediates for fine chemicals.

The construction of the second production line, permitted in April 2020, took two and a half years. The related capital expenditure amounted to PLN 57.1m, and the unit's test run confirming achievement of the design capacity took place by mid-December 2022.

Concentrated nitric acid is made by concentrating 60% nitric acid in the extractive rectification process. The main applications of concentrated nitric acid on the European market are for the manufacture of polyurethane foams, dyes, crop protection products, fuel additives reducing exhaust emissions and other organic syntheses.

Grupa Azoty KĘDZIERZYN completed energy projects worth over PLN 65m

In February 2023, two projects were completed at Grupa Azoty KĘDZIERZYN under the New Energy Concept, a key capital investment programme currently under way at the company. The projects will help increase production and improve the energy and raw material efficiency. The total value of the projects is PLN 65.6m.

Both projects were implemented on the site of the Ammonia Department, enabling increased ammonia production.

A key component of the first project comprising the upgrade of the partial combustion unit was the replacement of a burner in the partial combustion reactor. This will lower the steam-to-carbon ratio during hydrogen production. The partial combustion process will take place without soot being formed, extending the useful life of catalysts and reducing emissions.

The other project comprising the design and construction of the interior of the E-102 boiler and the E-117 steam superheater will increase the flexibility and safety of the process taking place in the boiler and steam superheater unit. This has been achieved by using heat-resistant materials in the equipment.

The New Energy Concept is a portfolio of projects providing an alternative to implementing phase two of Grupa Azoty KĘDZIERZYN's CHP plant. The concept is largely based on the use of process heat from the ammonia unit to produce electricity and other energy carriers. Two projects remain to be completed under the New Energy Concept: purchase and installation of a new oxygen compressor (in the Ammonia Department) and construction of a peak-load and reserve boiler house (in the Energy Business Unit).

Grupa Azoty POLICE and the West Pomeranian University of Technology setting up the Hydrogen Academy in Szczecin as part of the West Pomeranian Hydrogen Valley project

On March 8th 2023, Grupa Azoty POLICE and the West Pomeranian University of Technology signed an agreement to organise and run the Hydrogen Academy. As a result, the Academy, established as part of the West Pomeranian Hydrogen Valley project set up in late November 2022, was formally launched. Enrolment for the first edition of the programme began on March 7th 2023.

Hydrogen Academy classes will be delivered mainly by hydrogen technology professionals and experts as well as academics from the West Pomeranian University of Technology. The Hydrogen Academy will include the same lectures and laboratory or workshop sessions covering the same thematic scopes as those attended by undergraduate and graduate students of the University. The programme will be delivered from May to July on weekends, in the University's buildings, while future editions will also take place on the premises of Partners. The best students will be given an opportunity to test their own innovative hydrogen projects developed in the course of study at the R&D units of the Grupa Azoty Group. To apply for an internship at the Grupa Azoty Group, candidates will need to obtain a certificate of completion of the Academy programme.

The Academy is addressed to students and graduates of technical or agricultural S1 and S2 courses with a GPA of 4.0 or more in the last semester, or graduates who completed studies with a GPA of 4.0 or more. This opportunity is also open to postgraduate students who have authored or co-authored at least one publication listed in the Journal Citation Reports. The Hydrogen Academy will admit people who are under thirty years of age on the day of submission of the application form. In addition to meeting the formal criteria, candidates will also need to complete a writing assignment.

Update on aid received under the Act on the Rules of Implementation of Business Support Programmes in View of the Situation on the Energy Market in 2022-2024

On March 10th 2023, the Grupa Azoty Group was notified that it was awarded financial support of PLN 234,180 thousand from the National Fund for Environmental Protection and Water Management ("NFOŚiGW"), granted based on the governmental programme 'Aid to energy-intensive sectors related to sudden increases in natural gas and electricity prices in 2022' (the "Programme"). This amount is equivalent to the maximum permitted amount of public aid (EUR 50m).

In a letter of June 30th 2023 sent to the Management Board of the Parent, NFOŚiGW stated that the Parent failed to satisfy the criteria or conditions for receiving state aid dedicated to supporting energy-intensive sectors in connection with sudden increases in natural gas and electricity prices, and, therefore PLN 52,285 thousand in aid granted to the Parent was awarded illegitimately and, as such, must be repaid with interest. The claims asserted by NFOŚiGW are based on a different interpretation of the codes of the Polish Classification of Activities registered with the National Court Register and to which the Parent's revenue is assigned.

In the Parent's opinion, the Parent's business activities, i.e., manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms, clearly satisfy the prerequisites for receiving financial support under the state aid programme dedicated to supporting energy-intensive sectors in connection with sudden increases in natural gas and electricity price. Accordingly, based on an external legal analysis, the Parent is convinced that NFOŚiGW's claims are without merit. The Parent has requested NFOŚiGW for clarification of its assertions and has taken all measures available under law to retain the aid it has received.

Grupa Azoty POLICE, Ultra Safe Nuclear Corporation and West Pomeranian University of Technology signed an agreement to develop 4th Generation MMR research reactor in Police

On March 29th 2023, Grupa Azoty Police, the US-based Ultra Safe Nuclear Corporation (USNC) and the West Pomeranian University of Technology in Szczecin signed an agreement to develop and construct a nuclear energy research facility based on the ultra safe MMR® (Micro-Modular™ Reactor) technology to be provided by USNC. Over the next six months, the parties will prepare a comprehensive research programme and will jointly develop a plan for the construction, operation and maintenance of the MMR.

As envisioned, the first stage of the collaborative project will consist in the construction of a 30 MWt MMR to serve as a training, research and test facility. It will be connected to the existing energy infrastructure of Grupa Azoty POLICE, providing a unique opportunity to study, test, optimise and integrate the MMR as a zero-carbon generation source into an industrial plant. The collaboration will ultimately lead to the development of a plan for full-scale use of nuclear energy to power chemical processes and to generate steam and hydrogen at Grupa Azoty POLICE's plant. This will represent another major step towards decarbonisation of the Grupa Azoty Group's industrial processes.

Headquartered in Seattle, Washington, the US, USNC is a global leader and prominent vertical integrator of nuclear technologies and services both on Earth and in outer space. The USNC-developed MMR is a fourth generation high-temperature, gas-cooled nuclear battery, using Fully Ceramic Microencapsulated (FCM®) fuel to achieve the highest level of safety. MMR offers a simple, scalable, carbon-free source of energy, providing protection to the industrial facilities it powers. It is a crucial element in decarbonising industrial applications. Ultra Safe Nuclear has active microreactor deployment projects in Canada at Canadian Nuclear Laboratories in Chalk River, in the United States at the University of Illinois Urbana-Champaign, and at LUT University in Lappeenranta, Finland. Further projects are under development in the US, Canada and Europe.

The agreement has been signed as part of the US-Polish collaboration in this field, which was officially established by an intergovernmental agreement in February 2021. The high-temperature gas-cooled MMR is considered a vital solution for decarbonising the industrial sector.

Non-disclosure document signed in connection with negotiations to be held with PKN ORLEN S.A. and Grupa Azoty PUŁAWY

The Management Board of the Parent announced that following an expression of interest by PKN Orlen S.A. (currently Orlen S.A.), a non-disclosure document setting out a procedure for sharing information between the parties was signed by the Parent, Orlen S.A. and Grupa Azoty PUŁAWY on June 6th 2023 in connection with the parties' intention to enter into discussions regarding a potential acquisition by Orlen S.A. (the "Transaction") of Grupa Azoty PUŁAWY, to be preceded by due diligence.

The non-disclosure document defines the rules for sharing information during the due diligence review of Grupa Azoty PUŁAWY. It does not constitute a commitment by either party to pursue the Transaction.

Temporary production shutdown at Grupa Azoty KĘDZIERZYN due to plant failure

On September 5th 2023, the Management Board of Grupa Azoty KĘDZIERZYN sent a notice of plant failure at the ammonia unit. As a result of the failure, production processes at the company's key units, which include the production of fertilizers, nitric acid, UAN, urea, and OXO alcohols, have been temporarily suspended.

On September 22nd 2023, the Management Board of Grupa Azoty KĘDZIERZYN announced the estimated costs and planned date of removing the failure. According to the notice, the production of nitric acid at the company is expected to be resumed in the 39th week of 2023, followed by the production of mineral fertilizers at minimum loads. The restart of other units and ramp-up of production back to full capacity will continue until around mid-October 2023, when repair work on the ammonia plant's boiler system is scheduled for completion.

The financial impact of the plant failure at the operating level has been provisionally estimated at about PLN 20m, comprising lost profits on sales of products (fertilizers, nitric acid, UAN, urea and OXO alcohols) that would have likely been earned had the units operated at normal rates. The cost of repairing the ammonia plant is estimated at approximately PLN 1.4m.

Other material events

For information on other material events in the reporting period and subsequent to the reporting date which have not been listed above, see the interim condensed consolidated financial statements of the Grupa Azoty Group for the six months ended June 30th 2023.

4.2. Significant agreements

Trade contracts

Contract to purchase propane signed by Grupa Azoty POLYOLEFINS

On April 27th 2023, Grupa Azoty POLYOLEFINS signed a propane purchase contract with TOTSA Total Energies Trading SA of Switzerland (the "Seller").

The contract provides that propane will be delivered by the Seller to Grupa Azoty POLYOLEFINS from April 2023 to the end of November 2024, in accordance with the agreed schedule and commercial terms. Propane volumes delivered under the contract will be supplementary to other deliveries and in 2023 will cover approximately 46% of the company's total requirement for this key production feedstock.

The value of the deliveries to be made under the contract is estimated at approximately USD 90m.

Execution of amendments to contract to purchase propane signed by Grupa Azoty POLYOLEFINS

On September 14th 2023, Grupa Azoty POLYOLEFINS executed Amendment 1 and Amendment 2 to the contract for the purchase of propane with Trafigura PTE Ltd. of Singapore.

The amendments are aimed at aligning the contract with Grupa Azoty POLYOLEFINS's current needs reflecting the progress made on the Polimery Police project, whose duration is expected to be extended. Under the amendments, the propane deliveries schedule has been revised, additional propane deliveries have been contracted, and the contract term has been extended until December 12th 2025.

The value of the additional deliveries is estimated at approximately USD 80m.

Execution of annex to Framework Agreement and annexes and new Individual Contracts for gas supply with PKN Orlen S.A.

On June 20th 2023, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN, Grupa Azoty SIARKOPOL, Grupa Azoty FOSFORY (jointly referred to as the "Buyers" and each individually as the "Buyer") and PKN Orlen S.A. (currently "Orlen S.A."), executed an annex to the Framework Gas Supply Agreement and new bilateral Individual Contracts. The total estimated value of the contracts for the entire Group over their four-year term will be approximately PLN 18bn, VAT exclusive.

The Framework Agreement, executed on April 13th 2016 for an indefinite term, sets out a uniform procedure for all Buyers for concluding and terminating Individual Contracts, the processes for placing orders, making payments and withholding and reducing supplies, renegotiation clauses, and the rules for joint settlement of deliveries. Its provisions, as amended by the annex, apply to deliveries made as of July 1st 2023.

The new Individual Contracts have been concluded for a four-year period of deliveries, starting October 1st 2023, under the 3+1 formula, i.e., after three years of the contract term, the fourth year is optional and no contractual penalties are charged for termination of the contract after three years provided that a termination notice is given by September 30th 2025.

An Individual Contract is an implementing agreement to the Framework Agreement, concluded for a definite period in the form of a comprehensive agreement (applies to sale at a physical point), specifying quantities, schedule, payment terms, price formulas based on exchange indices and detailed commercial parameters for the supply of gaseous fuel to a Buyer. The terms of the Individual Contracts do not differ from standard terms used in contracts of this type.

The annex to the Framework Agreement, together with the new Individual Contracts, will secure, during their term, at least 90% of the total gas demand of the Buyers from the Grupa Azoty Group. In addition, further to Current Report No. 23/2016 of April 13th 2016 on the execution of an agreement with Polskie Górnictwo Naftowe i Gazownictwo S.A. (currently Orlen S.A.), No. 22/2017 of June 21st 2017 on the execution of Individual Contracts with Orlen S.A., and No. 30/2019 of May 23rd 2019 and No. 20/2022 of July 7th 2022 on their extension, it was announced that on June 20th 2023 the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN and Grupa Azoty SIARKOPOL executed annexes to the Individual Contracts currently in force, under which the commercial terms of gas deliveries by Orlen S.A. in the period from July 1st 2023 to September 30th 2023 will be the same as those defined in the new Individual Contracts applicable from October 1st 2023.

Financing agreements

Harmonisation changes to Grupa Azoty Group's Credit Facility Agreements

In order to make a harmonised change of covenants, consisting in a modification of the debt ratio and introduction of conditions for excluding from that ratio subordinated debt of the Grupa Azoty Group and the debt of the Group companies investing in renewables and financed on a project finance basis with no recourse to the Group, the following agreements and annexes were signed:

- Agreement Amending and Restating the Credit Facility Agreement of April 23rd 2015 - on February 6th 2023, the Parent and PKO BP S.A., Bank Gospodarstwa Krajowego, Santander Bank Polska S.A., ING Bank Śląski S.A. and CAIXA Bank S.A., acting jointly as the "Lenders", signed an agreement amending and restating the Credit Facility Agreement of April 23rd 2015, together with a letter of February 16th 2023 concerning correction of a manifest error in that agreement,
- Annex to the Multi-Purpose Credit Facility (MPCF) agreement with PKO BP S.A. - on February 6th 2023, the Parent and the Grupa Azoty Group companies signed with PKO BP S.A. Annex 9 to the Multi-Purpose Credit Facility Agreement of April 23rd 2015, as amended, and on February 20th 2023 - Annex 10 to the aforesaid agreement, concerning correction of a manifest error,
- Annex to the Reverse Factoring Agreement with ING Commercial Finance Polska S.A. - on February 9th 2023, the Parent and Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed with ING Commercial Finance Polska S.A. Annex 2 to the Reverse Factoring Agreement of April 29th 2021, as amended,
- Annex to the Payment Services and Financing Agreement with CaixaBank S.A. - on February 10th 2023, the Parent and Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed with CaixaBank

S.A., Polish Branch, Annex 2 to the Payment Services and Financing Agreement of April 29th 2021, as amended,

- Annex to the Supply Financing Agreement of with Pekao Faktoring Sp. z o.o. - on February 17th 2023, the Parent and Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed with Pekao Faktoring Sp. z o. o. Annex 3 to the supply financing agreement of May 31st 2021, as amended,
- Annex to the Factoring Agreement of with Pekao Faktoring Sp. z o.o. - on February 17th 2023, the Parent and Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed with Pekao Faktoring Sp. z o. o. Annex 3 to the Factoring Agreement of May 31st 2021, as amended,
- Annex to the Factoring Agreement with BNP Paribas Bank Polska S.A. - on February 20th 2023, the Parent and Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed with BNP Paribas Bank Polska S.A. Annex 2 to the Factoring Agreement of May 31st 2021, as amended,
- Amendment to the Multi-Purpose Premium Credit Facility agreement with BNP Paribas Bank Polski S.A. - on February 14th 2023, the Parent, together with the key and other Group companies signed with BNP Paribas BP S.A. Amendment 2 to a Multi-Purpose Premium Credit Facility agreement with a credit limit of PLN 240m to be used for opening and servicing guarantees and letters of credit,
- Agreements Amending the Credit Facility Agreements with the European Bank for Reconstruction and Development - on March 9th 2023, the European Bank for Reconstruction and Development and the Parent signed Agreements Amending the Credit Facility Agreement of May 28th 2015 (EBRD I) and the Credit Facility Agreement of July 26th 2018 (EBRD II),
- Agreements Amending the Credit Facility Agreements with the European Investment Bank - on April 25th 2023, the European Investment Bank and the Parent signed Agreements Amending the Financing Agreement of May 28th 2015, as amended (EIB I) and the Financing Agreement of January 25th 2018 (EIB II).

Declarations of submission to enforcement in favour of the EIB

In the six months ended June 30th 2023, Grupa Azoty KĘDZIERZYN, Grupa Azoty PUŁAWY and Grupa Azoty POLICE submitted declarations of voluntary submission to enforcement (each company for up to PLN 220m) to the European Investment Bank with respect to monetary liabilities under the guarantee agreement of May 28th 2015 signed with the bank. The guarantee agreement serves as security for a financial contract concluded on May 28th 2015 by the Parent with the European Investment Bank.

In the six months ended June 30th 2023, Grupa Azoty KĘDZIERZYN, Grupa Azoty PUŁAWY and Grupa Azoty POLICE submitted declarations of voluntary submission to enforcement (each company for up to EUR 58m) to the European Investment Bank with respect to monetary liabilities under the guarantee agreement of January 25th 2018 signed with the bank. The guarantee agreement serves as security for a financial contract concluded on January 25th 2018 by the Parent with the European Investment Bank.

On May 16th 2023, the Parent submitted declarations, certified by a notary public, on voluntary submission to enforcement for up to 120% of the amounts outstanding after March 31st 2023 under the 1st Credit Facility Agreement with the European Investment Bank (EIB Facility 1), i.e., for up to EUR 54.5m, and under the 2nd Credit Facility Agreement with the European Investment Bank (EIB Facility 2), i.e., for up to EUR 131.2m.

The above declarations of voluntary submission to enforcement were made in the performance of the amending agreements to EIB Facility 1 and EIB Facility 2.

Annex to Reverse Factoring Agreement with ING Commercial Finance Polska S.A.

On March 14th 2023, 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, as amended, with ING Commercial Finance Polska S.A. which amended the price terms.

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

On March 21st 2023, the Parent and its subsidiaries Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN, COMPO EXPERT GmbH and COMPO EXPERT Hellas S.A. on the one hand and CaixaBank S.A. Polish Branch on the other hand signed amended Appendix 1 to the Payment Services and Financing Agreement of April 29th 2021, as amended. As part of the amendments made by the Appendix, the facility amount was increased from PLN 800m to PLN 950m (or its equivalent in EUR or USD). The facility under the Agreement is available until April 30th 2024. The claims of CaixaBank S.A. under the Agreement are secured by a notarised statement of submission to enforcement made by the Parent, for up to 120% of the facility amount increased by the Appendix.

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

On April 7th 2023, 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, as amended, with Pekao Faktoring Sp. z o.o., which amended the price terms.

Annex to the Factoring Agreement with Pekao Faktoring Sp. z o.o.

On April 7th 2023, the Parent and its subsidiaries Grupa Azoty PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN signed an Annex to the Factoring Agreement of May 31st 2021, as amended, with Pekao Faktoring Sp. z o.o., which amended the price terms.

Annex to the Factoring Agreement with BNP Paribas Bank Polska S.A.

On May 18th 2023, the Parent and its subsidiaries Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN, Grupa Azoty COMPOUNDING, Agrochem Puławy Sp. z o.o. and Grupa Azoty CHORZÓW signed Annex 3 to the Factoring Agreement of May 31st 2021, as amended, with BNP Paribas Bank Polska S.A. Under the annex, the price terms were amended and new companies became parties to the Agreement.

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

On June 29th 2023, the Parent and its subsidiaries: Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN, COMPO EXPERT GmbH and COMPO EXPERT Hellas S.A., signed Annex 3 to the Payment Services and Financing (reverse factoring) Agreement with CaixaBank S.A., Branch in Poland, dated April 29th 2021, as amended, and made amendments to the Individual Terms and Conditions of the Payment Services and Financing Agreement in order to replace the USD LIBOR rate with the TERM SOFR rate and to change the price terms.

Annex 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, as amended

On July 17th 2023, the Parent and its subsidiaries Grupa Azoty PUŁAWY, Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN and COMPO EXPERT GmbH signed Annex 5 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, as amended, 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. The Annex changed the price conditions and transferred the servicing of COMPO EXPERT to the Polish branch, i.e., Santander Factoring Sp. z o.o.

Execution of Waiver and Amendment Letters

In view of the risk of exceeding, as at June 30th 2023, the Net Debt to EBITDA ratio cap permitted under the Grupa Azoty Group financing agreements, the Company's Management Board entered into talks with the institutions providing financing to the Grupa Azoty Group, namely: Powszechna Kasa Oszczędności Bank Polski S.A., Bank Gospodarstwa Krajowego, ING Bank Śląski S.A., Santander Bank Polska S.A., Caixabank S.A. (Spółka Akcyjna) Branch in Poland, BNP Paribas Faktoring Sp. z o.o., ING Commercial Finance Polska S.A., Pekao Faktoring Sp. z o.o., BNP Paribas Bank Polska S.A., Santander Factoring Sp. z o.o. and Banco Santander S.A., as well as the European Bank for Reconstruction and Development and the European Investment Bank (the "Financing Parties").

As a result of the negotiations conducted to obtain consent for the Group to waive some of the lending terms, including in particular waiver of the ratio specified above and waiver by the Financing Parties of the rights arising from the possible breach of the required ratio cap, on June 1st 2023 the Company's Management Board provided the Financing Parties with Waiver and Amendment Letters containing a proposal of the provisions agreed upon by the parties.

The Waiver and Amendment Letters were signed by the Financing Parties, the Parent (acting also for the other Grupa Azoty Group companies which are party to the Agreements) and Grupa Azoty POLICE (as party to the bilateral credit facility agreements signed with Bank Gospodarstwa Krajowego) on August 31st 2023, and the effective date of the Waiver and Amendment Letters was set at June 30th 2023.

Under the Waiver and Amendment Letters, the Financing Parties waived their rights arising from the occurrence of Events of Default as defined in the Agreements, including, without limitation, in the event of exceeding the Net Debt to EBITDA ratio cap as at June 30th 2023. The Grupa Azoty Group agreed to maintain, as at the end of each calendar month starting from June 30th 2023, the minimum levels of the Available Cash Ratio (being the sum of cash and available and undrawn confirmed limits under credit and loan agreements of the Group, excluding Grupa Azoty POLYOLEFINS) and the Liquidity Ratio (being the sum of the Available Cash Ratio and available undrawn non-confirmed limits under Factoring Agreements and other agreements of the Group, excluding Grupa Azoty POLYOLEFINS). At the same time, in accordance with the requirements of the Waiver and Amendment Letters, on August 31st 2023 additional security was created with respect to liabilities under the Agreements through the execution by the Company's subsidiary Compo Expert Holding GmbH, acting as the guarantor, of a guarantee agreement with the Financing Parties. The guarantor's potential liability towards the Financing Parties is limited by German law to the value of its net assets.

The terms of the Waiver and Amendment Letters do not differ from standard terms used in such agreements.

Pursuant to the Waiver and Amendment Letters, the Financing Parties maintained the limits available to the Group under the Agreements at an unchanged level. The Group consistently fulfils all its obligations to service and repay its debt as per the agreements, ensuring timely payments. The limits made available to the Group

companies provide them with full financial liquidity, secure the financing for the Group and its suppliers, and enable it to continue operations in a substantially unchanged manner.

In addition, the Financing Parties agreed to conduct further negotiations in good faith in order to develop, as soon as practicable, a mutually satisfactory solution enabling the Group to operate and fulfil its obligations under the Agreements in accordance with their terms, also in subsequent periods, subject to such changes as the Financing Parties deem required or desirable considering the change in circumstances under which the Group currently operates and under which it will operate in the coming years, reflecting the resulting change in the risk profile of the Group, the Company and its subsidiaries.

Insurance agreements

Consolidated Group Insurance Programme with TUW PZUW

Under a Master Agreement for the Consolidated Property Insurance Programme, executed with TUW PZUW by Grupa Azoty Group companies - members of the Grupa Azoty Mutual Insurance Union operating within TUW PZUW for a period of three years, i.e., from March 1st 2022 to February 28th 2025, policies were issued for the second year, i.e., from March 1st 2023 to February 28th 2024, 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).

CARGO insurance

A policy for the second annual insurance period, i.e., from July 1st 2023 to June 30th 2024, has been issued under the property in national and international transit insurance (CARGO) master agreement, concluded with TUW PZUW for a period of three years, i.e., from July 1st 2022 to June 30th 2025.

Third party liability insurance

On July 28th 2023, for the period August 1st–September 30th 2023, Annexes were signed to the master agreement for business and property owner's liability insurance (OC) concluded with TUW PZUW for a period of two years, i.e., from August 1st 2021 to July 31st 2023 and to the policy issued under the agreement.

Trade credit insurance at the Parent and Grupa Azoty KĘDZIERZYN

On July 27th 2023, trade credit insurance policies of the Parent (with coinsurance cover for Grupa Azoty SIARKOPOL, Grupa Azoty CHORZÓW, Grupa Azoty FOSFORY, Agrochem Putawy Sp. z o.o., Grupa Azoty COMPOUNDING, and Grupa Azoty KOLTAR) and on July 31st 2023 - trade credit insurance policies of Grupa Azoty KĘDZIERZYN, taken out with Korporacja Ubezpieczeń Kredytów Eksportowych S.A. and providing global cover for the companies' receivables, were renewed for the period August 1st 2023 - July 31st 2027.

Project co-financing agreements

In the first six months of 2023, Grupa Azoty KĘDZIERZYN signed:

- Annex to the co-financing agreement for the project 'New formulations of speciality organic and mineral fertilizers', extending the expenditure eligibility period under the project until December 31st 2023,
- Annex to the co-financing agreement for the project 'New formulations of nitrogen-rich CRF/SRF fertilizers based on ammonium nitrate and biodegradable coatings' concerning changes to the methodology of research.

4.3. Sureties and guarantees

Guarantees

In the first half of 2023, the total amount of all guarantees issued at the request of the Group companies was PLN 13,324 thousand. Guarantees for the highest amounts, totalling PLN 7,435 thousand, were issued at the request of Grupa Azoty POLICE on January 17th 2023 to the State Treasury (Chief Inspectorate of Environmental Protection).

Letters of credit

In the six months ended June 30th 2023, no material letters of credit were issued at the request of the Grupa Azoty Group companies. Subsequent to the reporting date, on August 11th 2023, at the request of the Parent a EUR 3,414 thousand letter of credit was issued for the delivery of the baseline project for the ammonium nitrate neutralisation unit, to thyssenkrupp Uhde GmbH (Germany).

Intragroup loans

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

Grupa Azoty POLYOLEFINS signed annexes to loan agreements of May 31st 2020:

- On January 10th 2023, with the Parent, Annex 5 in connection with capitalisation of another portion of commission and interest for the next period. In accordance with the Annex, as a result of the capitalisation as of December 31st 2022 the loan principal was PLN 439,271 thousand;
- On January 10th 2023, with Grupa Azoty POLICE, Annex 5 in connection with capitalisation of another portion of commission and interest for the next period. In accordance with the Annex, as a result of the capitalisation as of December 31st 2022 the loan principal was PLN 495,348 thousand;
- On July 25th 2023, with the Parent, Annex 6 in connection with capitalisation of another portion of commission and interest for the next period. In accordance with the Annex, as a result of the capitalisation as of July 14th 2022 the loan principal was PLN 475,006 thousand;
- On July 25th 2023, with Grupa Azoty POLICE, Annex 5 in connection with capitalisation of another portion of commission and interest for the next period. In accordance with the Annex, as a result of the capitalisation as of July 14th 2023 the loan principal was PLN 535,645 thousand.

In the case of Orlen S.A. (formerly 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 12th 2022 were signed by Grupa Azoty POLYOLEFINS on January 24th and February 20th 2023, while annexes in connection with the capitalisation of interest for the next period ended July 13th 2023 were signed on July 19th and August 2nd 2023.

Loans granted by Grupa Azoty PUŁAWY

In the first half of 2023, the Grupa Azoty PUŁAWY Group advanced to its subsidiaries the following loans for a total amount of PLN 53.6m, including:

- a PLN 52.0m loan to Grupa Azoty CHORZÓW, and
- a PLN 1.6m loan to SCF Natural Sp. z o.o.

In January 2023, Grupa Azoty CHORZÓW requested Grupa Azoty PUŁAWY to postpone by one year the repayment dates for instalments of the PLN 5m loan granted under the Loan Agreement of January 8th 2020.

On June 5th 2023, Grupa Azoty PUŁAWY signed with Grupa Azoty CHORZÓW: Annex 5 to the Loan Agreement of April 2nd 2014 and Annex 3 to the Loan Agreement of January 8th 2020. The annexes changed the interest rate on the loans. Annex 5 also changed the repayment schedule in line with the above request.

On June 19th 2023, Grupa Azoty PUŁAWY signed with SCF Natural Sp. z o.o.: Annex 6 to the Loan Agreement of May 7th 2014 and Annex 4 to the Loan Agreement of January 16th 2017. The annexes changed the interest rates on the loans.

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 22nd 2023 (in accordance with the information provided in the interim report for the first quarter of 2023)

Shareholder	Number of shares	Ownership interest (%)	Number of votes	% of voting rights
State Treasury	32,734,509	33.00	32,734,509	33.00
Nationale-Nederlanden 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
Other	28,390,113	28.62	28,390,113	28.62
Total	99,195,484	100.00	99,195,484	100.00

* Related parties of Viatcheslav Moshe Kantor.

** Direct subsidiaries of Norica Holding S.à r.l.

On April 6th 2022, Mr Vyacheslav Moshe Kantor, who holds a controlling interest in the Russian chemical company ACRON, was placed on the United Kingdom sanctions list, on April 8th 2022 - on the European Union sanctions list, and on April 25th 2022, together with the entities through which he controls 19.82% of the Parent shares - on the Polish sanctions list. As a result of the sanctions, all assets in respect of funds (including shares) held by the listed persons are subject to a freeze, which consists of a prohibition on moving, transferring, altering, using, accessing or otherwise dealing with the funds in any way which would result in any change to their volume, amount, location, ownership, possession, character, destination, or any other change that would enable the funds to be used, including portfolio management.

On July 11th 2023, the Minister of Development and Technology issued decisions on the establishment of temporary administration for a period of six months with respect to:

- Norica Holding Sàrl with its registered office at 121 Avenue de la Faïencerie L-1511, Luxembourg,
- Rainbee Holdings Limited with its registered office at Kastoros 2, Nicosia, 1087, Cyprus,
- Opansa Enterprises Limited with its registered office at Kastoros 2, Nicosia, 1087, Cyprus,

in order to take over the title to these entities' shareholdings in the Parent. The Minister of Development and Technology designated Mr Radosław Leszek Kwaśnicki as the person carrying out the temporary administration.

The temporary administration was imposed by way of an administrative decision issued under Art. 6b of the Act on Special Measures to Prevent Supporting Aggression against Ukraine and Protect the National Security of April 13th 2022 (the "Sanctions Act"), and the primary purpose of this legal instrument - in the case at hand - is to take over the ownership of the financial resources, funds or economic resources of the Sanctioned Companies in favour of the State Treasury or an entity other than the State Treasury. The ownership takeover as described above will take place under a decision of the minister in charge of economic affairs. Until then, the administrator individually manages the assets of the Sanctioned Companies, acting in accordance with the rules of conduct set out in the aforementioned Act.

On July 17th 2023, the Parent received a notification from Mr Radosław Leszek Kwaśnicki on acquiring control over shares in a public company and exceeding the threshold of 15% of the total number of votes in the Company (the "Notification"). The Notification has been made by Mr Radosław Leszek Kwaśnicki in the performance of the obligation set forth in Art. 69.1.1 in conjunction with Article 69a.1 of the Act on Public Offering and Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies, dated July 29th 2005 (the "Act on Public Offering"). According to the Notification:

I. Date and type of event causing the shareholding change to which the notification pertains.

The Notification has been given in connection with the acquisition by Mr Radosław Leszek Kwaśnicki of control over, including voting rights attached to, the Company shares, following his appointment:

1. under Decision No. DNP-VII.491.3.2023 of the Minister of Development and Technology dated July 11th 2023 - as the administrator of Norica Holding Sàrl with its registered office at 121 Avenue de la Fraincerie L-1511, Luxembourg ("Norica"), with respect to its shareholding in the Company,
2. under Decision No. DNP-VII.491.4.2023 of the Minister of Development and Technology dated July 11th 2023 - as the administrator of Opansa Enterprises Limited with its registered office at Kastros 2, Nicosia, 1087, Cyprus ("Opansa"), with respect to its shareholding in the Company,
3. under Decision No. DNP-VII.491.5.2023 of the Minister of Development and Technology dated July 11th 2023 - as the administrator of Rainbee Holdings Limited with its registered office at Kastros 2, Nicosia, 1087, Cyprus, entered in the Cyprus Companies Registry under no. HE 309661 ("Rainbee"), with respect to its

shareholding in the Company.

As the administrator of Norica, Opansa and Rainbee (collectively, the "Companies under Administration"), under Art. 6a.11.2 and Art. 6a.11.3 in conjunction with Art. 6b.3 of the Sanctions Act, Mr Radosław Kwaśnicki (the "Administrator") has the right to pass resolutions and make decisions on all matters relating to the Company shares held by the Companies under Administration which fall within the remit of the governing bodies of each Company under Administration, including the right to vote the Company shares held by them.

The Companies under Administration hold a total of 19,657,350 shares in the Company, representing approximately 19.82% of the Company's share capital and 19,657,350 voting rights at the Company's General Meeting, accounting for approximately 19.82% of the total voting rights in the Company.

The acquisition of control over the aforementioned Company shares by the Administrator effectively took place on July 12th 2023 (the "Control Acquisition Date"). According to the Sanctions Act, a decision to appoint an administrator is immediately enforceable and takes effect on the day following the day on which the decision is published in the Public Information Bulletin on the website of the Minister of Development and Technology (Art. 6b.2 in conjunction with Art. 6a.2 and Art. 4.3 of the Sanctions Act). All of the decisions referred to in items 1-3 above were published in the Public Information Bulletin on July 11th 2023 and are enforceable as of July 12th 2023.

II. The number of shares held before the change in shareholding and their percentage share in the Company's share capital, and the number of voting rights attached to those shares and their percentage share in total voting rights

Prior to the Control Acquisition Date, the Administrator held 0 shares in the Company, representing 0% of the Company's share capital, 0 voting rights at the Company's General Meeting and 0% of the total voting rights in the Company.

III. The number of shares currently held and their percentage share in the Company's share capital, and the number of voting right attached to those shares and their percentage share in total voting rights.

As of the Control Acquisition Date, the Administrator holds:

1. Directly: 0 shares in the Company, representing 0% of the Company's share capital, 0 voting rights at the Company's General Meeting and 0% of the total voting rights in the Company.
2. Indirectly: 19,657,350 shares in the Company, representing approximately 19.82% of the Company's share capital and 19,657,350 voting rights at the Company's General Meeting, accounting for approximately 19.82% of the total voting rights in the Company, including:
 - through Norica, the Administrator holds 406,998 shares in the Company, representing 0.41% of the Company's share capital and 406,998 voting rights at the Company's General Meeting, accounting for 0.41% of the total voting rights in the Company;
 - through Opansa, the Administrator holds 9,430,000 shares in the Company, representing 9.51% of the Company's share capital and 9,430,000 voting rights at the Company's General Meeting, accounting for 9.51% of the total voting rights in the Company;
 - through Rainbee, the Administrator holds 9,820,352 shares in the Company, representing 9.90% of the Company's share capital and 9,820,352 voting rights at the Company's General Meeting, accounting for 9.90% of the total voting rights in the Company.

IV. Subsidiaries of the shareholder making the notification, holding shares in the Company

The Companies under Administration, i.e., Norica, Opansa and Rainbee, are the only subsidiaries of the Administrator (controlled by the Administrator) that hold shares in the Company.

V. Persons referred to in Art. 87.1.3 of the Act on Public Offering

There are no persons referred to in Art. 87.1.3 of the Act on Public Offering.

VI. The number of voting rights attached to the shares, calculated in accordance with Art. 69b.2 of the Act on Public Offering, which the shareholder is entitled or obliged to acquire as a holder of the financial instruments referred to in Art. 69b.1.1 of the Act on Public Offering and the financial instruments referred to in Art. 69b.1.2 of the Act on Public Offering which are not subject to cash settlement only; the type or name of those financial instruments, their expiry date and the date on which (or the time limit by which) the shares will or may be acquired.

The Administrator does not hold any financial instruments referred to in Article 69b.1 of the Act on Public Offering.

VII. The number of voting rights attached to the shares, calculated in accordance with Article 69b.3 of the Act on Public Offering, to which the financial instruments referred to in Art. 69b.1.2 of the Act on Public Offering relate directly or indirectly; the type or name of those financial instruments and their expiry date

The Administrator does not hold any financial instruments referred to in Article 69b.1 of the Act on Public Offering and therefore does not hold any voting rights attached to shares, calculated in accordance with Art. 69b.3 of the Act on Public Offering.

VIII. The total number of voting rights specified on the basis of items III, VI and VII of this information from the Company and its percentage share in total voting rights

As of the Control Acquisition Date, the total number of voting rights held by the Administrator is as follows:

1. Directly: 0 votes at the Company's General Meeting, representing 0% of the total number of votes in the Company.
2. Indirectly: 19,657,350 votes at the Company's General Meeting, representing 19.82% of the total voting rights in the Company.

Following the imposition of temporary administration for a period of six months against:

- Norica Holding Sàrl with its registered office at 121 Avenue de la Faïencerie L-1511, Luxembourg,
- Rainbee Holdings Limited with its registered office at Kastoros 2, Nicosia, 1087, Cyprus, and
- Opansa Enterprises Limited with its registered office at Kastoros 2, Nicosia, 1087, Cyprus

the shareholding structure is as follows:

Shareholder	Number of shares	Ownership interest (%)	Number of votes	% of voting rights
State Treasury	32,734,509	33.00	32,734,509	33.00
Nationale-Nederlanden OFE	9,883,323	9.96	9,883,323	9.96
Radosław Leszek Kwaśnicki, the temporary administrator with respect to the shares held by Norica Holding S.à r.l. *	406,998	0.41	406,998	0.41
(indirectly: 19,657,350 shares or 19.82%)				
Radosław Leszek Kwaśnicki, the temporary administrator with respect to the shares held by Rainbee Holdings Limited ***	9,820,352	9.90	9,820,352	9.90
Radosław Leszek Kwaśnicki, the temporary administrator with respect to the shares held by 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
Other	28,390,113	28.62	28,390,113	28.62
Total	99,195,484	100.00	99,195,484	100.00

* Related parties of Viatcheslav Moshe Kantor.

** Direct subsidiaries of Norica Holding S.à r.l.

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 July 11th 2023 to the issue date of this Report, the Parent was not notified of any changes in major holdings of its shares, i.e., above 5% of voting rights at the General Meeting.

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

As at January 1st 2023, the Management Board was composed of:

- Tomasz Hinc - President of the Management Board,
- Mariusz Grab - Vice President of the Management Board,
- Filip Grzegorczyk, Dr. Habil. - Vice President of the Management Board,
- Tomasz Hryniwicz - 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.

The composition of the Company's Management Board changed in the six months ended June 30th 2023:

- on January 16th 2023, the Supervisory Board removed from the Management Board one of its Vice Presidents Tomasz Hryniwicz;
- on January 23rd 2023, a recruitment procedure was initiated following which Marcin Kowalczyk was appointed to the Management Board with effect from February 10th 2023.

As a result, from February 10th 2023 to the issue date of this Report the composition of the Management Board was as follows:

- Tomasz Hinc - President of the Management Board,
- Mariusz Grab - Vice President of the Management Board,
- Filip Grzegorczyk, Dr. Habil. - Vice President of the Management Board,
- Grzegorz Kądzielawski - Vice President of the Management Board,
- Marcin Kowalczyk - Vice President of the Management,
- Marek Wadowski - Vice President of the Management Board,
- Zbigniew Paprocki - Member of the Management Board.

Remits of the Company's Management Board and Supervisory Board members

As at January 1st 2023, the overall division of responsibilities between the Management Board members was as follows:

- Tomasz Hinc - President of the Management Board, responsible for managing the operation of the Management Board and for corporate governance, corporate supervision, legal services, 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 the areas and processes under his supervision within the Group;
- Mariusz Grab - Vice President of the Management Board, responsible for management of procurement processes (excluding gas), ICT process management, security and cybersecurity management, raw material and semi-finished product integration, production and sale of polypropylene, integration and coordination of the areas and processes under his supervision within the Group;
- Filip Grzegorczyk, Dr. Habil. - Vice President of the Management Board, responsible for strategic management of energy transition projects; management of logistics processes, corporate risk, market regulations and protection; market analyses, coordination of efforts designed to meet the requirements of the Green New Deal in the area of energy, integration and coordination of the areas and processes under his supervision within the Group;
- Tomasz Hryniwicz - Vice President of the Management Board, responsible for management of sales (excluding polypropylene) and customer service standards, product portfolio management, gas procurement management, integration and coordination of the areas and processes under his supervision 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, coordination of the Group's efforts designed to meet the requirements of the Green New Deal (excluding the energy area) and Circular Economy, integration and coordination of the areas and processes under his supervision within the Group;
- Marek Wadowski - Vice President of the Management Board, responsible for finance management, accounting policy management, monitoring of the implementation of plans, planning, budgeting and controlling, mergers and acquisitions, investor relations, integration and coordination of the areas and processes under his supervision 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 the areas and processes under his supervision within the Group.

In connection with the changes made in the composition of the Management Board in the six months ended June 30th 2023, the division of responsibilities between the Management Board members was also changed. The division of responsibilities of the Management Board Members as at June 30th 2023 and the issue date of this Report was as follows:

- Tomasz Hinc - President of the Management Board, responsible for managing the operation of the Parent's Management Board and for corporate governance, corporate supervision, legal services, communication and marketing, human resources management, sponsorship activities, internal audit, compliance management, CSR, representing the Parent in relations with its stakeholders, including shareholders, governing bodies, central and local government authorities, integration and coordination of the areas and processes under his supervision within the Group;
- Mariusz Grab - Vice President of the Management Board, responsible for management of procurement processes (excluding gas, coal, electricity and emission allowances), ICT process management, security and cybersecurity management, raw material and semi-finished product integration, production and sale of polypropylene, integration and coordination of the areas and processes under his supervision 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;
- 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, management of sales and customer service standards in the area of plastics excluding polypropylene, product portfolio management in the plastics area excluding polypropylene, management of integration and coordination of catalyst production processes at the Parent, integration and coordination of the areas and processes under his supervision 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;
- Marcin Kowalczyk - Vice President of the Management Board, responsible for management of sales and customer service standards in the Agro area, management of the product portfolio in the Agro area, management of the energy area, including natural gas, coal and electricity, management of natural gas, coal and electricity procurement processes, integration and coordination of the areas and processes under his supervision within the Group,
- 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, ESG, integration and coordination of the areas and processes under his supervision 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 at the Parent, excluding catalysts, management of maintenance of production assets, shutdowns, repair and overhauls, critical infrastructure management, technical safety, fire and environmental safety, the production area of the Plastics Business Segment, integration and coordination of the areas and processes under his supervision within the Group.

Division of powers between members of the Company's Management Board as at June 30th 2023



Source: Company data.

Supervisory Board

As at January 1st 2023, the Supervisory Board was composed of:

- Magdalena Butrymowicz, LL D - Chair of the Supervisory Board,
- Wojciech Krysztofiak - 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,
- Marcin Mauer - Member of the Supervisory Board,
- Michał Maziarka - Member of the Supervisory Board,
- Janusz Podsiadło - Member of the Supervisory Board,
- Roman Romaniszyn - Member of the Supervisory Board.

The composition of the Company's Supervisory Board changed in the six months ended June 30th 2023:

- On January 3rd 2023, Marcin Mauer resigned as Member of the Supervisory Board;
- In the exercise of the State Treasury's right as a shareholder, based on a written statement from the Minister of State Assets dated January 11th 2023, the State Treasury appointed Marzena Małek to the Supervisory Board.

As a result, the composition of the Supervisory Board from January 11th 2023 to the issue date of this Report was as follows:

- 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,
- Marzena Małek - Member of the Supervisory Board,
- Michał Maziarka - 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 2023, the Supervisory Board had the following committees:

- the Audit Committee,
- the Strategy and Development Committee,
- Corporate Governance 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.

The composition of the Audit Committee as at January 1st 2023 was as follows:

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

The composition of the Audit Committee changed in the six months ended June 30th 2023:

- On January 3rd 2023, Marcin Mauer resigned as Member of the Company's Supervisory Board and Chair of the Audit Committee;
- On January 4th 2023, Robert Kapka tendered his resignation as Member of the Audit Committee;
- On January 5th 2023, the Supervisory Board appointed Michał Maziarka as Chair of the Audit Committee;
- On June 12th 2023, following Monika Fill's resignation as Member of the Audit Committee, the Supervisory Board appointed Wojciech Krysztofik to the Audit Committee.

As a result, the composition of the Audit Committee from June 12th 2023 to the issue date of this Report was as follows:

- Michał Maziarka - Chair,
- Wojciech Krysztofik - Member,

- Janusz Podsiadło - Member.

In the six months ended June 30th 2023, the Audit Committee operated pursuant to the Rules of Procedure for the Audit Committee adopted by the Supervisory Board's Audit Committee under a resolution of February 11th 2021 and approved by the Supervisory Board under a resolution of March 8th 2021.

The Audit Committee's main tasks are those prescribed 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

As at January 1st 2023, the Strategy and Development Committee consisted of:

- Wojciech Krysztofik - Chair,
- Robert Kapka - Member,
- Bartłomiej Litwińczuk - Member.

On June 12th 2023, the Supervisory Board complemented the composition of the Strategy and Development Committee by appointing Ms Monika Fill. As a result, from June 12th 2023 to the issue date of this Report the composition of the Strategy and Development Committee was as follows:

- Wojciech Krysztofik - Chair,
- Monika Fill - Member,
- Robert Kapka - Member,
- Bartłomiej Litwińczuk - Member.

In the six months ended June 30th 2023, the Strategy and Development Committee operated in accordance with the Committee's Rules of Procedure adopted by a resolution of the Strategy and Development Committee of March 2nd 2021 and approved by the Supervisory Board under a resolution of March 8th 2021.

Corporate Governance Committee

The composition of the Corporate Governance Committee as at January 1st 2023 was as follows:

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

On January 16th 2023, Wojciech Krysztofik resigned from the Corporate Governance Committee. On the same day, the Supervisory Board appointed Marzena Małek to the Committee. As a result, the composition of the Committee from January 16th 2023 to the date of this Report was as follows:

- Michał Maziarka - Chair,
- Magdalena Butrymowicz - Member,
- Marzena Małek - Member,
- Roman Romaniszyn - Member.

In the six months ended June 30th 2023, the Corporate Governance Committee operated on the basis of the Rules of Procedure for the Committee, the consolidated text of which was approved by the Supervisory Board under a resolution of August 23rd 2022.

5. Additional information

Management Board's position on the achievement of forecasts

As no forecasts for 2023 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:

- The case brought by the Parent against Cenzin sp. z o.o. for payment of PLN 79,821 thousand (value of

litigation) in connection with claims relating to:

- payment of liquidated damages for delay, extension of CAR/EAR insurance by the Company, 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 for the construction of an FGD unit,
- cost of completion of the FGD project, compensation for the purchase of more expensive coal, compensation for lost benefits from sale of magnesium sulfate,
- compensation for purchase of magnesium oxide,
- determination of the defendant's liability for losses which may arise in the future.

The claim was filed by the Parent with the Regional Court of Kraków on May 7th 2021. On October 27th 2021, a payment order was issued for Cenin Sp. z o.o. to pay the Parent PLN 79,821 thousand. PLN 207 thousand of costs of proceedings was awarded in favour of the Parent. On November 29th 2021, the Parent filed a request to supplement the payment order by issuing a ruling on interest relating to one of the claims covered by the lawsuit. On April 20th 2022, the Parent received an objection against the payment order from Cenin Sp. z o.o., to which it replied on May 4th 2022. The proceedings are pending.

- Proceedings (mediation) pending before the Arbitration Court at the General Prosecutor's Office of the Republic of Poland between Polska Grupa Górnica S.A. and the Parent, following a request filed by Polska Grupa Górnica S.A. for mediation in a dispute arising in connection with long-term coal sale contracts signed by the Parent, Grupa Azoty ZAKŁADY PUŁAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN (each of them separately) with Polska Grupa Górnica S.A. The dispute concerns the existence and renegotiation, if any, of the contracts and claims arising thereunder. The request for mediation with the Parent was filed by Polska Grupa Górnica S.A. with the Arbitration Court on June 16th 2023. Following delivery of the request by the Arbitration Court on June 28th 2023, the Parent agreed to mediation. The disputed amount has not been estimated. Mediations are pending.

Parent's branches

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

Shares, share issues

In the first half of 2023, 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 2023, the Parent's Annual General Meeting passed a resolution to allocate the entire amount of the Parent's net profit for the financial year 2022, of PLN 356,059,831.38, to the Parent's reserve funds.

Signatures of members of the Management Board

Tomasz Hinc
President of the Management Board

Mariusz Grab
Vice President of the Management Board

Filip Grzegorczyk
Vice President of the Management Board

Grzegorz Kądzielawski
Vice President of the Management Board

Marcin Kowalczyk
Vice President of the Management Board

Marek Wadowski
Vice President of the Management Board

Zbigniew Paprocki
Member of the Management Board
Director General

Tarnów, September 27th 2023