Directors' Report on the operations of the Grupa Azoty Group for H1 2020

Contents

1. General information on the Grupa Azoty Group

1.1. Organisation and structure

The Grupa Azoty Group is one of Central Europe's major chemical groups with a strong presence on the market of mineral fertilizers, engineering plastics, OXO products, and other chemicals.
Grupa Azoty has brought together companies with different traditions and complementary business profiles, seeking to leverage their potential to deliver a common strategy. This has led to the creation of Poland's largest chemical group and a major industry player in Europe. 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 2020, the Grupa Azoty Group (the "Group") comprised: Grupa Azoty S.A. (the Parent) and ten direct subsidiaries together with entities included in their respective groups.

Parent

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

Parent's subsidiaries

Grupa Azoty Zakłady Azotowe Puławy S.A.
The company's registered office is located in Puławy.
Grupa Azoty Zakłady Azotowe Puławy S.A. ("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. It 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. It 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 provides countrywide railway transport 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).

(all amounts in PLN '000 unless indicated otherwise)

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. Its business model 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.

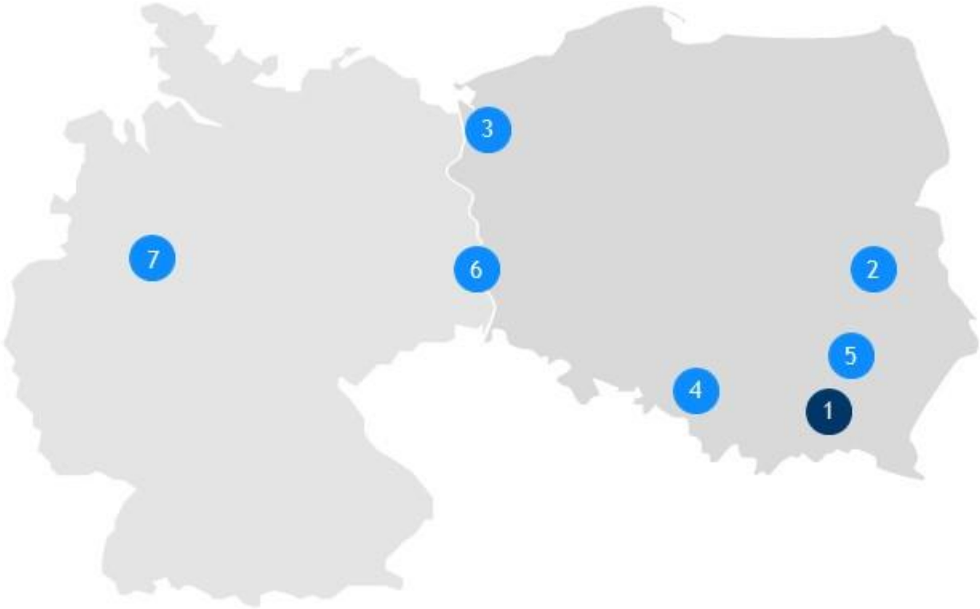
Grupa Azoty Folie Spółka z ograniczoną odpowiedzialnością w likwidacji (in liquidation)
On December 31st 2019, the Extraordinary General Meeting passed resolutions to dissolve Grupa Azoty Folie Sp. z o.o. and to put the company into liquidation, remove the company's Management Board members and appoint a Liquidator.

Parent's equity interests in the subsidiaries as at June 30th 2020

(in relevant currency)

Company	Registered office/address	Share capital	Equity interest (%)
COMPO EXPERT Holding GmbH	Krögerweg 10 48155, Münster, Germany	EUR 25,000	100.00
Grupa Azoty ATT Polymers GmbH	Forster Straße 72 03172 Guben, Germany	EUR 9,000,000	100.00
Grupa Azoty Compounding Sp. z o.o.	Chemiczna 118 33-101 Tarnów, Poland	PLN 72,007,700	100.00
Grupa Azoty Folie Sp. z o.o. w likwidacji (in liquidation)	Chemiczna 118 33-101 Tarnów, Poland	PLN 5,500,000	100.00
Grupa Azoty SIARKOPOL	Grzybów, 28-200 Staszów, Poland	PLN 60,620,090	99.56
Grupa Azoty PUŁAWY	al. Tysiąclecia Państwa Polskiego 13 24-110 Puławy, Poland	PLN 191,150,000	95.98
Grupa Azoty KĘDZIERZYN	ul. Mostowa 30 A skr. poczt. 163 47-220 Kędzierzyn-Koźle, Poland	PLN 285,064,300	93.48
Grupa Azoty PKCh Sp. z o.o.	Kwiatkowskiego 7 33-101 Tarnów, Poland	PLN 85,630,55(	63.27
Grupa Azoty POLICE	ul. Kuźnicka 1 72-010 Police, Poland	PLN 1,241,757,680	62.86
Grupa Azoty KOLTAR Sp. z o.o.	Kwiatkowskiego 8 33-101 Tarnów, Poland	PLN 54,600,00(	60.00

The Parent and its subsidiaries as at June 30th 2020



1 **Parent**

- Grupa Azoty „Compounding” Sp. z o.o. **100%**
- Grupa Azoty „Folie” Sp. z o.o. w likwidacji **100%**
- Grupa Azoty KOLTAR Sp. z o.o. **60%**
- Grupa Azoty PKCh Sp. z o.o. **63.27%**

2 Grupa Azoty PUŁAWY **95.98%**

3 Grupa Azoty POLICE **62.86%**

4 Grupa Azoty KĘDZIERZYN **93.48%**

5 Grupa Azoty SIARKOPOL **99.56%**

6 Grupa Azoty ATT Polymers GmbH **100%**

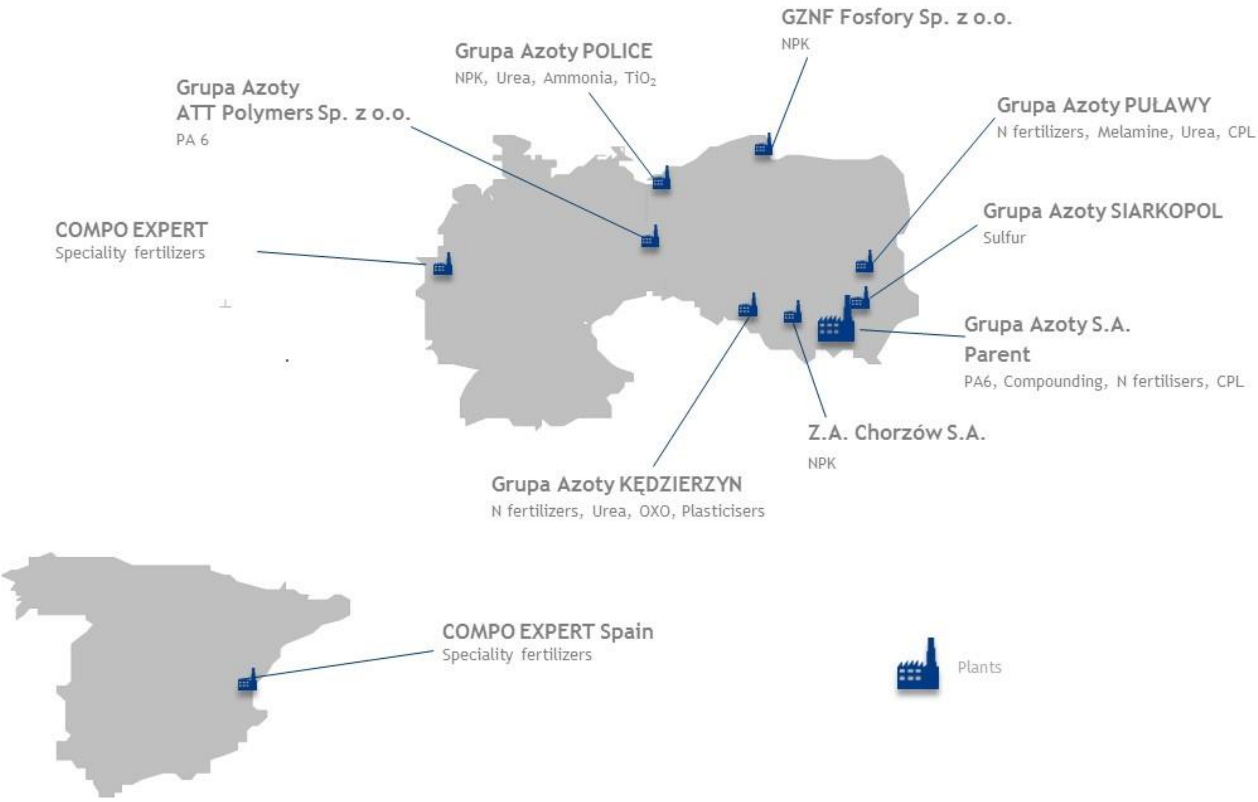
7 COMPO EXPERT Holding GmbH **100%**

Source: Company data

1.2. Business segments

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

Grupa Azoty – core business areas



Source: Company

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

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

Agro Fertilizers

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

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

Plastics

The segment's key products are engineering plastics (polyamide 6 (PA6) and modified plastics) as well as auxiliary and intermediate products, such as caprolactam and other chemicals. They are manufactured by three companies – in Tarnów, Puławy, and Guben (Germany). The Group is the leading manufacturer of PA6 in Poland and the third largest producer of this polyamide in the European Union.

Chemicals

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

They are manufactured in Kędzierzyn, Puławy, Police, and Grzybów. The Group is a major manufacturer of melamine globally and the third largest in the European Union. As regards OXO products, the Group is the only manufacturer of OXO alcohols in Poland and the fifth largest in the European Union. The Group is Poland's only producer of titanium white.

Energy

Electricity and heat generated by the Energy segment are used primarily for the Group's own production needs, with small volumes sold locally, in the immediate vicinity of the Group companies. The segment's key customers are companies of the Group. Outside the Group, the segment's products are sold on the electricity and hot water markets to customers connected to local heat and electricity distribution networks. The Group companies operate their own energy distribution networks.

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 operations in such areas as environmental protection, administration, research, and infrastructure management.

1.3. Overview of key products

AGRO FERTILIZERS

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

Nitrogen fertilizers

Nitrogen fertilizers are substances or mixtures of substances where nitrogen is the primary plant nutrient. The Group's product range includes a number of nitrogen fertilizers: urea, nitrate fertilizers (including ammonium nitrate, calcium ammonium nitrate, UAN), 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 key feedstock for nitrogen fertilizers production.

Urea

Urea is a nitrogen fertilizer containing 46% nitrogen; it is produced in Puławy (as PULREA®), Police (as mocznik.pl®), and Kędzierzyn. Urea is a universal fertilizer – it can be used for all crops at various growth stages, both in the granular form and as a solution.
Outside agriculture, urea is used for technical purposes, mainly for manufacturing of adhesive resins, which find application in the chipboard industry. Urea may also be further processed into urea-ammonium nitrate solution (UAN − RSM®), a liquid fertilizer, or into melamine.

Nitrate fertilizers

- Ammonium nitrate is a nitrogen fertilizer which is easily dissolved in water, Containing between 30% and 34% nitrogen. The Group offers this product in a wide variety of granule forms and sizes, such as mechanically granulated ZAKsan®, with excellent sowing properties; the PULAN® beaded ammonium nitrate,
- Calcium ammonium nitrate (CAN) is a nitrogen fertilizer with a nitrogen content of up to 28%. It is a universal fertilizer, suitable for all types of soil, well soluble and easily absorbed by crops. The Group markets CAN in a number of granule varieties; the offering includes the granulated Salmag® fertilizers (including varieties with a sulfur or boron content), and bead fertilizers such as Saletrzak 27 (CAN 27) standard and Saletrzak 27 with boron.
- Urea-ammonium nitrate solution (UAN – RSM®) is a liquid nitrogen fertilizer coming in three varieties: with 32%, 30% and 28% nitrogen content. Thanks to its form, UAN–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 fertilizer is also marketed under the trade name Saletrosan® 30, with different proportions of nitrogen and sulfur (30% and 6%).

- Polifoska® 21 is a nitrogen fertilizer with sulfur; it is an ammonium sulfate-urea mix, containing 21% nitrogen and 33% sulfur.
- Ammonium sulfate, marketed under the trade names AS 21 and Pulsar®, is a simple nitrogen fertilizer with sulfur, containing 21% nitrogen and 24% sulfur. It is a by-product in the manufacture of caprolactam and in flue gas desulfurisation. The Group manufactures a wide range of ammonium sulfate in various granule forms and sizes: selection, macro, standard, and crystalline.
- PULASKA® is a liquid nitrogen fertilizer with sulfur, obtained by blending urea and ammonium sulfate, and has a 20% nitrogen and a 6% sulfur content.

Compound fertilizers (NPK, NP)

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

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

Speciality fertilizers

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

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

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

Ammonia

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

PLASTICS

Engineering plastics

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

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

Polyamide 6 (PA 6)

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

Caprolactam is an organic chemical compound and an intermediate product used for the manufacture of polyamide 6 (PA6). It is produced mainly from benzene and phenol. Synthesis of caprolactam yields ammonium sulfate as a by-product.

CHEMICALS

OXO products

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

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

Plasticizers manufactured by the Grupa Azoty Group:

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

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

Melamine
It is 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.

SOURCES OF STRATEGIC RAW MATERIALS

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

Ammonia
The procurement strategy is based primarily on the optimisation of intragroup supplies. Intragroup supplies are transacted on arm's length terms. The Grupa Azoty Group is the largest ammonia manufacturer in Poland and a major one in CEE, operating several ammonia units. It is also one of the largest consumers of ammonia in the region, with a significant potential in logistics.
Having satisfied its own needs, the Group sells a surplus on the market. The Group's ability to effectively secure ammonia supplies largely depends on conditions prevailing on the fertilizer market and in the natural gas sector.

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

Electricity
The Group purchases electricity from major Polish suppliers trading with large accounts. Following a number of tenders for 2020, the Group companies signed electricity supply contracts under their existing framework agreements. Thanks to the joint procurement strategy for electricity supplies, they secured competitive prices and favourable terms of the contracts. Given the volatility of the electricity market and its changing legal framework, the Group's policy is to purchase electricity under forward contracts concluded for various periods and on the SPOT market, including on the Polish Power Exchange.

Phenol

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

Phosphate rock

Phosphate rock is purchased under term 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 GZNF Fosfory Sp. z o.o.

Natural gas

High-methane gas and gas from local sources was supplied by PGNiG S.A. under long-term contracts. Any additionally required volumes were bought by the Group at the Polish Power Exchange.

Propylene

The bulk of the Group's purchases of propylene are made under annual contracts, with supplementary purchases made on the spot market. To a large extent, propylene prices are driven by oil prices. The Group pursues a diversified procurement strategy, based chiefly on supplies from the EU and countries east of Poland. Supplies from the latter largely reduce the overall cost of propylene procurement.

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. The Group also has the largest logistics facilities in Poland, which is a source of additional competitive advantage. 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

With substantial natural resources and competitive commercial terms, producers from the Commonwealth of Independent States (Russia, Belarus), as well as Canada and Germany, are the primary suppliers of potassium chloride. The Group's procurement strategy is chiefly based on quarterly framework agreements, with supplementary deliveries sourced from Western Europe. The Group pursues a centralised procurement strategy by making joint purchases for Grupa Azoty POLICE and GZNF Fosfory Sp. z o.o.

Coal

The Group purchases coal mainly on the domestic market. Purchasing large volumes of coal of the required quality from geographically remote markets is not economically viable given the transport costs and price formulae (ARA).

On the domestic market, the prices of pulverised coal used in power generation are not directly linked to ARA rates, which only serve as pricing benchmarks for Polish coal producers.

Since 2018, the Group companies follow a strategy of purchasing coal under multi-year contracts with a guaranteed price change range. Such long-term contracts cover all of the Group's needs for coal supplies.

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

Compensation
The Parent, Grupa Azoty PUŁAWY, Grupa Azoty KĘDZIERZYN and Grupa Azoty POLICE received, by electronic mail, the President of the Energy Regulatory Office's decision granting them compensation for 2019, payable under the Act on the Compensation Scheme for Energy-Intensive Sectors and Subsectors.
As at June 30th 2020, the compensation was recognised under other income at PLN 79,593 thousand. Compensation expected to be received for 2020 is recognised as a deduction of current costs of electric energy consumed. The expected compensation for H1 2020, accounted for as a deduction of costs, was PLN 44,556 thousand.
As a result, the total amount of income from compensation for energy-intensive businesses recognised in H1 2020 was PLN 124,149 thousand.

Impact of COVID-19 pandemic on Grupa Azoty Group's business
Having recorded declines in revenue, the Parent and some of its subsidiaries have taken steps to avail themselves of the financial support mechanisms under the Act on Special Measures to Prevent, Counteract and Combat COVID-19, Other Infectious Diseases and Related Crisis Situations of March 2nd 2020, version 4.0. The amount of support for the Grupa Azoty Group is estimated at approximately PLN 50m, including approximately PLN 16m for the Parent.
For information on the impact of the COVID-19 pandemic on the Grupa Azoty Group's business, see Section 4.1.

Exchange rates
The macroeconomic factors and events with bearing on the Grupa Azoty Group's financial performance in the first half of 2020 include mainly the consequences of COVID-19, which triggered major turbulence virtually the world over.
These developments resulted in a depreciation of PLN over H1 2020 relative to both EUR and USD, by approximately 4.9% and 4.8% versus the respective levels recorded on December 31st 2019. It should be noted that PLN weakened significantly at the onset of the epidemic in Poland, i.e. at the end of March 2020, and then partly recouped losses in the second quarter of 2020. In comparison with the second half of 2019, the average PLN/EUR and PLN/USD exchange rates depreciated to a lesser extent, by about 2.6% and 3.3%, respectively.
The weakening of PLN relative to EUR as at June 30th 2020 compared with December 31st 2019 had a negative impact on the value of Grupa Azoty's foreign currency bank loans in EUR. However, the loan maturity dates are usually far in the future (until 2028). In addition, these loans are repaid out of excess cash from export sales, which naturally hedge the related currency exposure.
Since the average depreciation of PLN against USD and EUR in H1 2020 was limited compared with H2 2019, the Group's performance in the period was not materially affected thereby (with respect to the EUR and USD currency exposure of the Group).
The Group reduces the risk resulting from its currency exposure by using selected instruments and taking measures to hedge against the currency risk based on the current and planned currency exposure. In the reporting period, the main hedging tools used by the Group included natural hedging; factoring and discounting of receivables denominated in foreign currencies; and currency forwards entered into on a rolling basis to cover up to 80% of the remaining currency exposure with time horizons of less than 6 months, and up to 50% of the remaining currency exposure with time horizons between 6 and 12 months.
The structure of the Grupa Azoty Group's physical cash pooling in the euro allows the Group companies to use the Group's global liquidity limit in that currency, which further reduces their exposure to the currency risk in the euro by correcting potential mismatches in revenue and expenditure over time.
In H1 2020, the Group's hedging tools were EUR and USD forward swaps, executed in the periods of depreciation of the Polish złoty to supplement forward hedges for the sale of EUR and USD as well as EUR/USD currency pair contracts, reflecting its planned net exposure in both currencies.
The Group's net result on hedging transactions settled in H1 2020 was a loss of PLN (3,000) thousand, with a negative net result on remeasurement of hedging instruments at PLN (9,972) thousand, which was due to the appreciation of EUR against PLN at the end of Q1 2020.

The Group's overall net result on the settlement of hedging transactions and remeasurement of hedging instruments in Q1 2020 was negative at PLN (12,972) thousand.
Furthermore, in H1 2020 Grupa Azoty POLYOLEFINS entered into forward transactions for purchase of EUR to hedge the planned equity contributions from the Group in PLN and expected expenditure of Grupa Azoty POLYOLEFINS in EUR under contractual payments for the *Polimery Police* project. As at June 30th, there were open forward contracts for purchase of EUR 617m.
Also, Grupa Azoty POLYOLEFINS bought options to swap approximately PLN 519m for EUR (in respect of the planned contribution by Grupa Lotos S.A. to the *Polimery Police* project), locking in the exchange rate used in the *Polimery Police* Model, and options to swap ca. USD 350m for EUR (in respect of the planned equity contribution and subordinated loans from Korea Overseas Infrastructure & Urban Development Corporation and Hyundai Engineering Co. Ltd. and in respect of the USD senior loans), also locking in the exchange rate used in the Model.
As at June 30th 2020, the total result on the measurement of open forwards and options acquired by Grupa Azoty POLYOLEFINS, including the cost of option premiums, was PLN 7,918 thousand.
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 2020 to September 2028. The hedging covers currency risk. The hedge are two euro-denominated credit facilities of:

- EUR 90,810 thousand as at June 30th 2020, repayable in the period from December 2018 to June 2025 in 14 equal half-yearly instalments of EUR 9,081 thousand each;
- EUR 100,000 thousand as at June 30th 2020, repayable from March 2021 to September 2028 in 15 equal half-yearly instalments of EUR 3,333 thousand each.

The carrying amount of both facilities as at June 30th 2020 was PLN 851,498 thousand. The hedging reserve in H1 2020 included PLN 32,906 thousand on account of the effective hedge.
In H1 2020, the Group did not reclassify any hedge accounting amounts from other comprehensive income to the statement of profit or loss.

Prices of CO_2 emission allowances
In the first half of 2020, the prices of CO_2 emission allowances (EUA) on the exchange market ranged between EUR 14 and EUR 27. From the beginning of the year to mid-March, the exchange prices remained within a broad consolidation range from EUR 22 to EUR 26. On March 16th 2020, the prices broke out of the sideways trend to plunge to approximately EUR 14. By mid-April they went up to EUR 22.5, and then dropped again to bottom out at EUR 18.5 in mid-May. Since then, the exchange prices of emission allowances have followed a strong upward trend and are now far above forecasts for the current year.
In the first half of 2020, allowances for this year and for 2021–2022 were purchased based on the Grupa Azoty Group's corporate management model for CO_2 emission allowances and an approved procurement plan. As at the end of H1 2020, the Group's requirement for EUA emission allowances for 2020 was covered in 93%.

2.2. Market overview

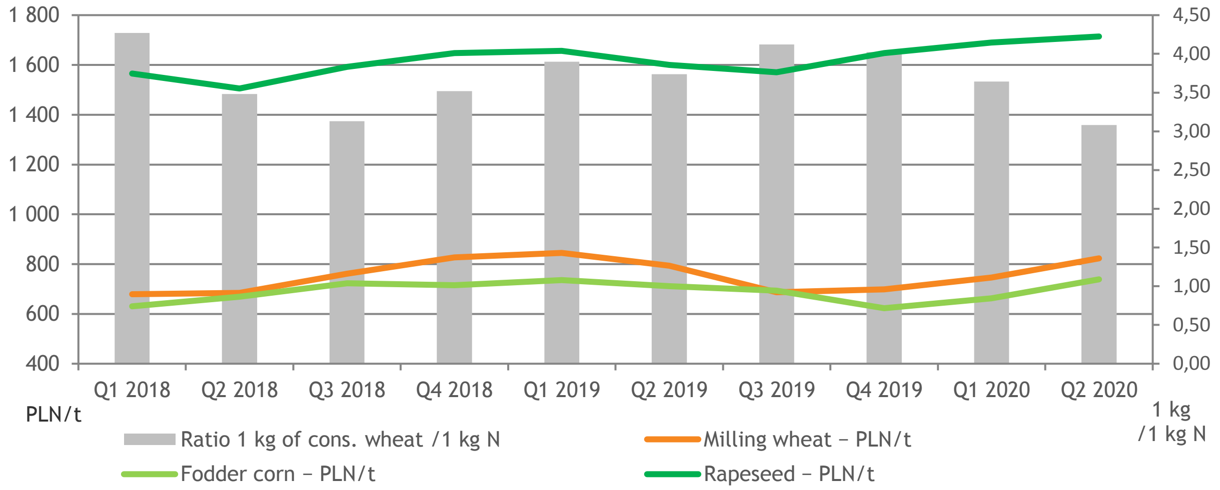
AGRO FERTILIZERS

Economic conditions in agriculture

In the first half of 2020 in Poland, the prices of the vast majority of main agricultural produce were lower year on year. The average price of wheat was around PLN 784/tonne, which means a year-on-year decline of 4.3%. A similar change was also recorded in maize prices, which averaged PLN 700/tonne in the period under review, a 3.2% decline year on year. Rapeseed prices were an exception, ranging around PLN 1,702/tonne, having increased by 4.5% year on year.
The condition of the crops in the first half of 2020 was determined by the prevailing weather conditions. While in the first half of the year low rainfall levels posed a problem, deteriorating the soil water balance after the snowless and warm winter (drought), the rainfall later on in the period improved the condition of most crops. Despite the improved weather at the end of the period, forecasts of grain production in Poland, compared with estimates made at the beginning of the year, were slightly lowered, while still remaining above the previous year's figures. According to Stratégie Grains data of July 16th 2020, wheat, barley and maize yields in Poland in 2020/2021 are estimated at, respectively, 11.41 million tonnes (+2.7%), 3.58 million tonnes (+6.23%) and 4.46 million tonnes (+13.8%). The situation looks quite different in the European Union, where this year's total grain output is estimated at 301.1 million tonnes compared with 312.1 million tonnes last season (-3.5%).

Prices of wheat, maize and rapeseed

(all amounts in PLN '000 unless indicated otherwise)



Source: Ministry of Agriculture and Rural Development.

Due to the two years of drought and low prices of agricultural produce, the economic situation of the Polish agricultural sector in the first half of 2020 continued to be viewed as relatively poor. As in previous years, direct payments, disbursed by June 2020 for the year 2019, continued to be a supporting factor. The amount of direct payments received by Polish farmers totalled PLN 15.2bn. Drought assistance payments to farmers (with PLN 1.9bn out of PLN 2.3bn disbursed so far) were another important factor.

Average prices of wheat, maize and rapeseed

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	PLN/t	*PLN/t*	*%*	*PLN/t*	*PLN/t*	*PLN/t*
Milling wheat	820	784	4.3↓	824	731	829
Maize	724	700	3.2↓	753	654	753
Rapeseed	1,628	1,702	4.5	1,713	1,681	1,719

Source: Ministry of Agriculture and Rural Development.

Market of nitrogen fertilizers

In H1 2020, the prices of nitrate fertilizers on the markets under review were lower year on year. The average CAN price on the German market fluctuated around EUR 165/tonne CIF Inland, down 15.1% on H1 2019. A year-on-year decrease in prices was also seen in the case of AN on the French market, with the average price at EUR 235/tonne CPT, down 15.7% year on year. The main reason for the year-on-year decline in nitrogen fertilizer prices was cheaper natural gas, as the main feedstock for their production, which allowed fertilizer manufacturers to better align their prices with the market conditions prevailing in the period.

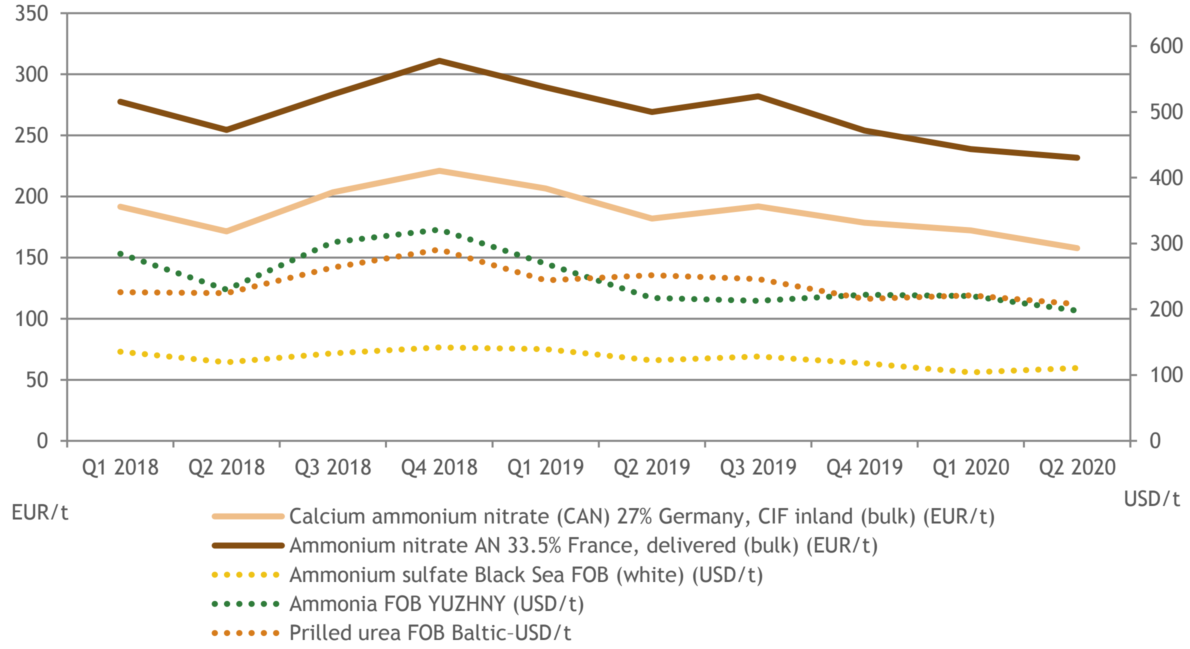
Given the sufficient product supply on the market, demand for nitrogen fertilizers changed rapidly at times. In anticipation of falling prices, the agricultural sector withheld fertilizer purchases until the very last moment, adjusting the purchase volume to current demand. In this respect, the weather conditions during the period were a material factor behind the distribution and volume of demand for fertilizers. The warm and snowless winter (continued vegetation of crops) accelerated the application of the first and subsequent doses in spring, which stimulated demand from the agricultural market. On the other hand, the drought recorded in Poland supressed demand, especially during the first half of the reviewed period. The uncertainty as to future weather, the condition of crops and this year's harvest did not encourage the sector to invest in means of agricultural production (including fertilizer products). The rains recorded later in the period alleviated these concerns, as evidenced, for instance, by the application of the third nitrogen dose (quality dose) and an increase in demand for fertilizer products for grassland. In June, demand for fertilizer products slowed down, which is typical for the period.

The ammonia prices fell by 14.1% year on year. In the period under review, the average price of ammonia was USD 209/tonne FOB Yuzhny. The COVID-19 pandemic put an abrupt brake on the international ammonia market, with a limited number of spot transactions. Traders were not eager to purchase volumes for which they could not be able to find buyers, while producers tried to focus more on contracted sales than on spot sales at reduced prices. Low demand from industrial users (such as caprolactam and acrylonitrile (ACN) producers) due to the coronavirus pandemic, especially in the Asia and Pacific region, contributed to greater availability of ammonia, pushing down its prices.

(all amounts in PLN '000 unless indicated otherwise)

The lower prices induced the US Nutrien to take offline one of its four units with an annual capacity of 600 thousand tonnes, for at least three months. At the end of May, demand for ammonia for agricultural purposes in the US weakened, in accordance with a seasonal pattern. In the first half of the year, ammonia capacities increased, mainly in the North Africa, where an Egyptian chemicals and fertilizers manufacturing company launched an ammonia and urea complex. The fertilizer complex comprises an ammonia unit (with a capacity of 1,200 tonnes per day), a technical grade urea unit (approximately 1,600 per day) and a granular urea unit (approximately 1,600 per day).
The urea prices fell by 13.5% year on year. In the period under review, the average price of urea was USD 214/tonne FOB Baltic. The global prices of urea were stable throughout most of January 2020, although the short-term outlook was uncertain, given in particular the tensions between the United States and Iran. In early February, the trend on the urea market was set by the United States. Traders then declared about 300,000 tonnes of spot cargoes to the US, with another 100,000 tonnes being discussed. The February demand for urea imports into the US was estimated at 0.8 million to 1 million tonnes, of which around a half had already been delivered from regions such as North Africa or the Persian Gulf. Since early March, the urea market contracted by approximately 10% in volume terms, as coronavirus-related disruptions adversely affected demand and logistics. MMTC (the Indian state-owned trading agency) announced in April two procurement campaigns for a total of 1.6 million to 2 million tonnes. In both cases, MMTC announced stricter conditions that could delay payments to sellers. Situation on the urea market improved at the beginning of June ahead of an expected pickup in demand in Brazil. Combined with seasonal purchases in Brazil, demand in India was a factor supporting prices during the period under review. However, sentiment became more cautious due to China’s return to the export market. In mid-July, the 15-year 1.8 million tonnes pa purchase agreement of the Indian government with Oman India Fertiliser Company (OMIFCO) expired and was not renewed. The Ramagundam unit in Telangana, India, with a capacity of 1.27 million tonnes/year launched in September could partially compensate the losses sustained by OMIFCO, but it may take several months for the production to stabilise.

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



Source: ICIS, Argus FMB, Profercy.

Average prices of nitrogen fertilizers

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/t	*EUR/t*	*%*	*EUR/t*	*EUR/t*	*EUR/t*
CAN 27% Germany CIF inland (bulk)	194	165	15.1↓	148	148	174
AN 33.5% France, delivered (bulk)	279	235	15.7↓	228	228	243

(all amounts in PLN '000 unless indicated otherwise)

	USD/t	USD/t	%	USD/t	USD/t	USD/t
Ammonia (FOB Yuzhny)	243	209	14.1↓	183	183	221
Urea (FOB Baltic)	248	214	13.5↓	210	198	233
AS (Black Sea FOB white)	131	107	17.9↓	108	99	117

Source: ICIS, Argus FMB, Profercy.

Market of compound fertilizers

In the first weeks of 2020, demand for NPK in many European countries was still negligible. Movements were only seen in Russia and Ukraine. However, at the end of the first quarter, the market picked up and the demand was already stronger. Increased interest in compound fertilizers was also seen in Slovakia, Ireland and the UK. In late March and early April, restrictions imposed by European governments to fight the coronavirus caused noticeable delays in road transport. However, there was no disruption to rail transport, and the ports operated smoothly or with minor delays. The 15:15:15 NPK prices (FOB Baltic) in the first part of the period remained on a gentle upward trend, to decrease slightly later. Finally, the average for H1 2020 was USD 232/tonne, down approximately 14% year on year. At the end of the first quarter and beginning of the second one, the consumption of fertilizers, including NPK, was negatively affected by dry soil. The drought had an adverse impact on the NPK markets across Europe, with the situation particularly bad in Italy, Central Europe and the Balkans. In the first week of May, Poland and a large part of Europe saw rainfall, which prompted farmers to purchase more fertilizers for selected crops (maize) and grassland. However, the prolonged rains recorded in Poland in May and June hindered the fertilization of fields. In the first half of 2020, the average DAP price was USD 292/tonne FOB Baltic, down approximately 21% year on year.

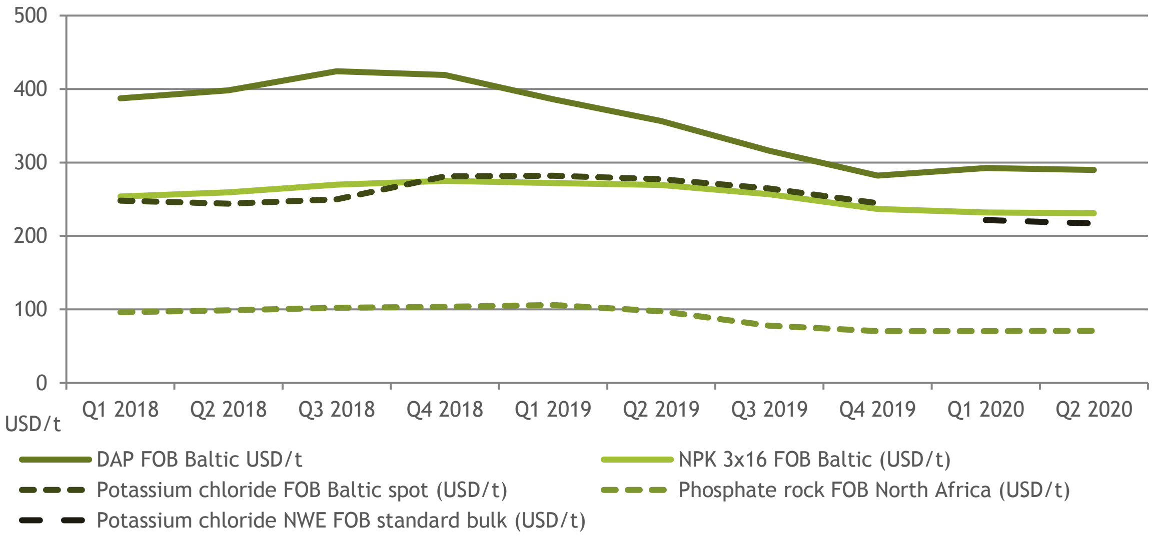
Players in the potassium chloride market showed limited activity in the first half of 2020. Lockdown measures related to COVID 19 led to logistics constraints, with producers facing a sharp drop in demand. Supply cuts, typically resorted to by key potassium chloride producers, failed to drive up the prices this time. As a result, in the second quarter of 2020 leading customers in China were able to negotiate contracts for the supply of potassium chloride (MOP) until the end of June 2021, with the prices down approximately USD 70/tonne CFR relative to 2018/2019 contracts (USD 220/tonne CFR). Customers in India managed to negotiate the price of USD 230/tonne CFR, which was also significantly lower compared with 2019 contracts. Aware of these developments, the individual markets are trying to adjust the terms of business with potassium chloride producers, seeking mainly to lower the purchase prices for the coming quarter.

Analysts do not expect any significant price rises in a longer term. Marginal price increases are forecast for standard grade potassium chloride (MOP), with the prices of granular potassium chloride for delivery to Brazil likely to rise more markedly.

In the first half of 2020, the global prices of phosphate fertilizers followed an upward trend, reflecting a recovery after sharp declines in the DAP and MAP prices in the second half of 2019 (in some markets, including the US, the DAP prices hit a 13-year low). The prices stabilised later in the first half of 2020 and were subject only to minor movements. The coronavirus pandemic did not lead to a decline in the prices of phosphate fertilizers due to the exclusion of Chinese manufacturers in the initial period, who – aside from producing for the home market – supplied a large part of Asia and Australia. On the one hand, demand declined, but on the other, various logistic issues (such as force majeure declared at Indian ports) and supply constraints increased the price benchmarks for phosphate fertilizers. Some local governments (in Jordan, Peru) ordered a temporary shutdown of phosphate fertilizers and phosphate rock production. In mid-April the situation started to normalise, with production in China restored and shut down fertilizer plants and phosphate rock mines brought back online. Market concerns that the COVID 19 situation in Brazil could hurt demand did not materialise, and Brazil increased imports of MAP fertilizers. India also increased DAP purchases.

(all amounts in PLN '000 unless indicated otherwise)

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



Source: WFM, FERTECON, Profercy.

Average prices of compound fertilizers and raw materials for their production

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	USD/t	*USD/t*	*%*	*USD/t*	*USD/t*	*USD/t*
DAP (FOB Baltic)	371	292	21.5↓	290	275	305
NPK3x16 (FOB Baltic)	271	232	14.3↓	237	224	237
Potassium chloride (NWE MOP FOB standard bulk)*		257		259	240	282
Phosphate rock (FOB North Africa)		84		86	83	86

** change of base*

Source: ICIS, Argus FMB, Profercy.

PLASTICS

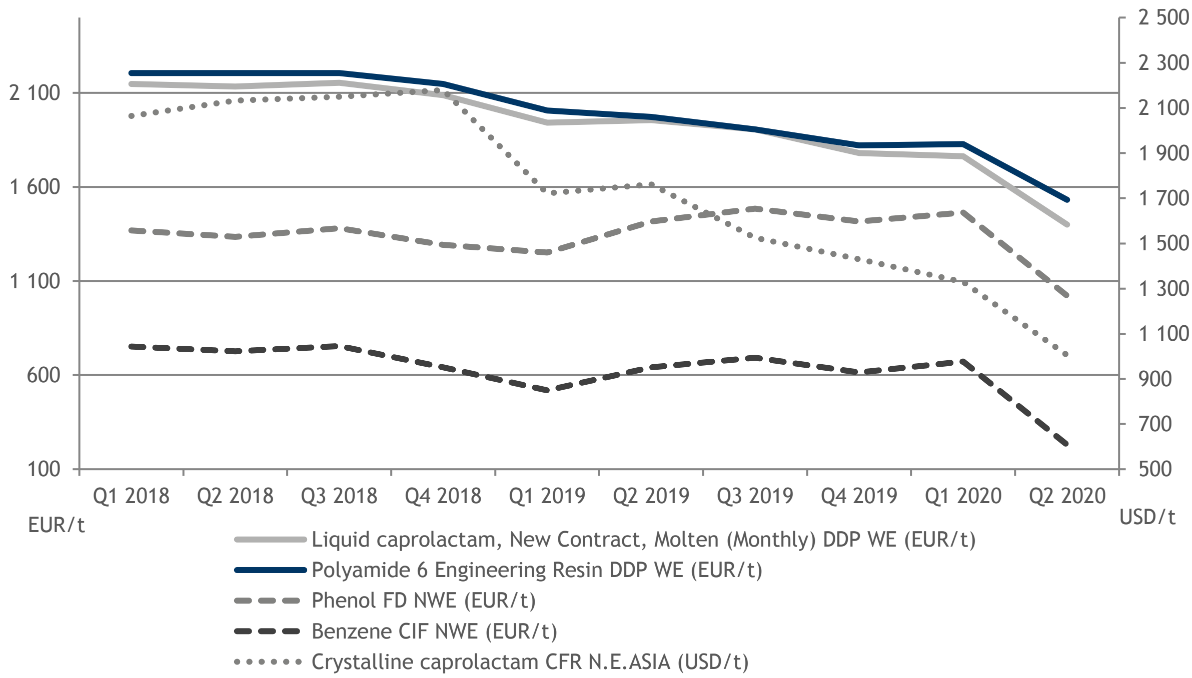
Polyamide 6 chain

In the first half of 2020, the market situation for the entire segment continued to be shaped by supply and demand forces on end-use markets and by fluctuations in crude oil prices. Global markets were increasingly affected by the spread of COVID-19, which caused both demand-side shocks (due to measures limiting global population movements) and supply-side shocks (with serious disruption in supply chains). Quarantine restrictions, country lockdowns and temporary plant closures in certain industries pushed consumption to unprecedented low levels, especially in the second quarter of 2020.
The uptrend in the prices of petroleum-derived feedstocks (benzene and phenol) that lasted from December 2019 to February 2020 reversed in March 2020. Following the collapse of crude oil prices and increasingly subdued activity in processing sectors, the April contract prices of benzene fell to historical lows. The growth in commodity prices seen in the following months only partially offset the April declines. For comparison, the June contract prices of benzene were over EUR 380/tonne lower than the January prices. Compared with the first half of 2019, the average European contract prices of benzene (CIF NWE) were down 22.2% and of phenol (FD NWE) – down 6.9%.
The same happened for caprolactam and polyamide 6 in Europe: after their growth in January and February, the contract prices declined in March. The steepest drop was recorded on settlement of April contracts, with the prices of European caprolactam down on average by EUR 300/tonne and of polyamide 6 down EUR 250/tonne. Compared with the first half of 2019, average the half-year contract prices of European caprolactam (Liq. DDP WE) fell 18.8% and of polyamide 6 (PA6, Engineering Resin Virgin, DDP WE) – by 15.5%. The half-year average caprolactam prices in Asia (CFR NE Asia) were 33% lower.
The polyamide 6 market in Europe saw weak demand and strong supply in the first half of 2020. Some producers reduced operating rates for both CPL and PA6 in order to adjust output to demand. Many

(all amounts in PLN '000 unless indicated otherwise)

market participants believe the trend may continue until market conditions improve. Disruption in raw material supply and product sale chains occurred in regions with a high epidemic risk, particularly at the end of the first and beginning of the second quarter.
The challenging situation caused by COVID-19 led to a decrease in consumption by polyamide 6 end-use industries. With the exception of the food packaging and medical industries, sales to all segments fell to varying degrees, depending on the application and region. Consumption remained subdued in electronics, textiles and household appliances. The COVID-19 pandemic sparked an unprecedented crisis in the automotive sector, a key PA6 end-use sector, effectively halting the production and distribution of cars in Europe for several weeks. Sales stopped, investment fell sharply, and launches of new models were postponed. The gradual easing of restrictions in Europe prompted car makers to slowly resume production in late April and May.
The only end-use market that showed strong demand was the market for PA6 film packaging used for fresh food and medical applications. Peak demand in that market was recorded at the beginning of April, with the demand falling slightly in May and stabilising at the end of the quarter due to the lifting of restrictions in countries affected by the pandemic.
Mid-year a slight recovery was seen, which, however, was too weak to radically change the supply-demand dynamics. However, the focus on increasing expenditure and building consumer confidence should spur a slow but steady increase in demand. The starting point for the gradual recovery in demand is at an unprecedented low level and, therefore, overall demand remains significantly below the pre-epidemic and prior-year levels.

Prices of PA6, caprolactam, benzene and phenol



Source: TECNON, ICIS.

Average prices of polyamide 6, caprolactam and raw materials used in their production

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/t	*EUR/t*	*%*	*EUR/t*	*EUR/t*	*EUR/t*
Benzene (CIF, NWE)	580	451	22.2↓	293	171	742
Phenol (FD, NWE)	1,334	1,243	6.9↓	1,085	963	1,534
Caprolactam (Liq., DDP, WE)	1,948	1,582	18.8↓	1,397	1,377	1,807
Polyamide 6 (PA 6) (DDP, WE)	1,989	1,680	15.5↓	1,515	1,515	1,865
	USD/t	*USD/t*	*%*	*USD/t*	*USD/t*	*USD/t*
Caprolactam	1,742	1,168	33.0↓	1,085	950	1,383

(all amounts in PLN '000 unless indicated otherwise)

(CFR, NE Asia)						
	USD/bbl	*USD/bbl*	*%*	*USD/bbl*	*USD/bbl*	*USD/bbl*
Crude oil (BRENT)	65.88	42.56	35.4↓	40.38	28.89	63.60

Source: ICIS, Tecnon, Rzeczpospolita.

In the second half of the year, prices along the polyamide chain will mainly be driven by supply and demand forces on the end-use markets, which in turn will continue to be strongly determined by the COVID-19 situation. Another factor with bearing on the segment's market are prices of petrochemical feedstocks, putting pressure on price movements along the entire product chain.
The economic and social impact of the COVID-19 crisis on the automotive sector has been particularly strong. The automotive industry was among those worst hit by plant closures due to the pandemic and is still experiencing that pressure. It has been affected by a number of factors, including disruption in the supply chain and structural changes in demand. Since mid-2019, even before it was hit by the coronaviorus crisis, the automotive industry has been forced to deal with new laws on exhaust gas emissions and environmental protection. It is expected that in 2020 the total automotive output will fall in most regions below the 2019 levels.
In 2020, the packaging sector has seen faster growth compared with 2019, driven by higher online sales, stronger sales of food to retail customers and increased demand for additional hygiene products. Particularly strong growth was recorded in the food industry and the healthcare sector. Many market participants expect stable demand from this sector to continue at least in the short term. However, sustainable development trends may actually halt the process in the medium term, as brands and retailers continue to sign commitments to reduce the use of plastics. Legislation concerning single-use plastic products is still being implemented, albeit the pace of the process varies by country and region.
Market players do not expect a significant improvement in overall demand this year, but after the usual slowdown in the summer months, demand may gradually pick up in September. However, this outlook is subject to the risk that further waves of coronavirus infections could prompt affected countries to reintroduce lockdown restrictions.

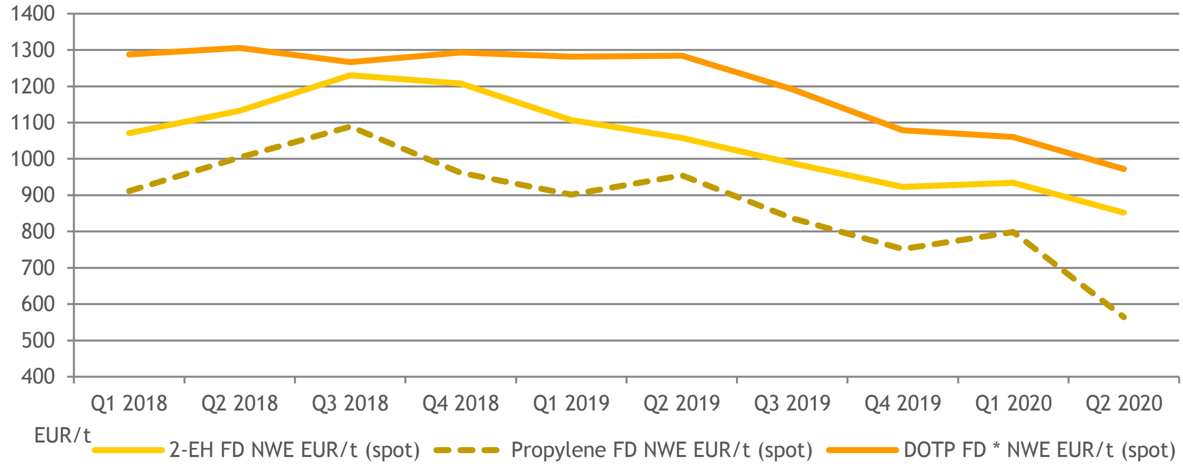
CHEMICALS

OXO product chain

In H1 2020, the prices of 2-EH went down 17.5% year on year, due mainly to lower prices of raw materials used in its production, its wide availability, and very weak demand in Q2 2020.
The availability of OXO alcohols in H1 2020 was considered very high. In late February, after the declaration of force majeure by OXEA, the amounts of 2-EH and n-butanol available on the market declined.
Towards the end of March, first logistic problems were reported in the wake of the coronavirus pandemic in Europe and associated restrictions leading to longer delivery times. Imports of OXO alcohols into the European market decreased relative to H1 2019, due to lower prices of the products in Europe. Demand for OXO alcohols had remained relatively good until mid-April, but began to fall dramatically after individual countries started imposing restrictions to prevent the coronavirus spread. The only area where demand remained robust was the broad sector of health protection products. At the end of H1 2020, demand in other OXO processing segments began to gradually rebound.
In H1 2020, the prices of DOTP were down 20.8% year on year.

(all amounts in PLN '000 unless indicated otherwise)

Prices of 2-EH, DOTP and propylene



Source: ICIS.

The supply of plasticizers in Europe remained very strong in Q1 2020, as local output was supported by imports from other parts of the world (Korea, Turkey, US, Russia). At the end of March, the availability of DOTP (mainly on the spot market) decreased following the occurrence of force majeure at OXEA and a decline in 2-EH supply. Demand for plasticizers remained low early in 2020. However, at the end of January, it started gradually growing, reaching a level above the forecast in March. Unfortunately, at the beginning of Q2 2020 demand for plasticizers began to fall sharply due to the coronavirus pandemic and restrictions imposed by European countries, which also affected the manufacturing industry. The only segment where demand remained relatively robust was that of health protection products.
In H1 2020, the spot prices of propylene were down approximately 26.6% year on year, while contract prices fell by around 25%.
In the case of propylene, supply and demand remained fairly stable. In Q1 2020, the supply of feedstock (particularly polymer) deteriorated slightly quarter on quarter, which was attributable to strikes that broke out across France in early January, as well as to maintenance and emergency shutdowns at several propylene producers. In Q2, the market availability of propylene improved gradually. Demand for the product kept growing early in the year, but the spreading coronavirus pandemic forced propylene processors to gradually reduce production, which suppressed demand in Q2 2020. The only sector where demand for propylene remained solid was propylene processing for the purposes of food packaging and health protection products.
In the coming months, the prices of propylene are expected to keep rising, driven by further growth in demand for the product and higher prices of crude oil and kerosene. Situation on the market will also depend on whether there is another wave of coronavirus infections. If so, countries may reintroduce production lockdowns, which will again cause the demand for propylene to fall, driving down its prices.

Average prices of 2-EH, DOTP and propylene

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/t	*EUR/t*	*%*	*EUR/t*	*EUR/t*	*EUR/t*
2-EH (FD NWE spot)	1,082	893	17.5↓	809	809	968
DOTP (FD NWE spot)	1,283	1,016	20.8↓	943	943	1,073
Propylene (FD NWE spot)	928	681	26.6↓	560	522	808

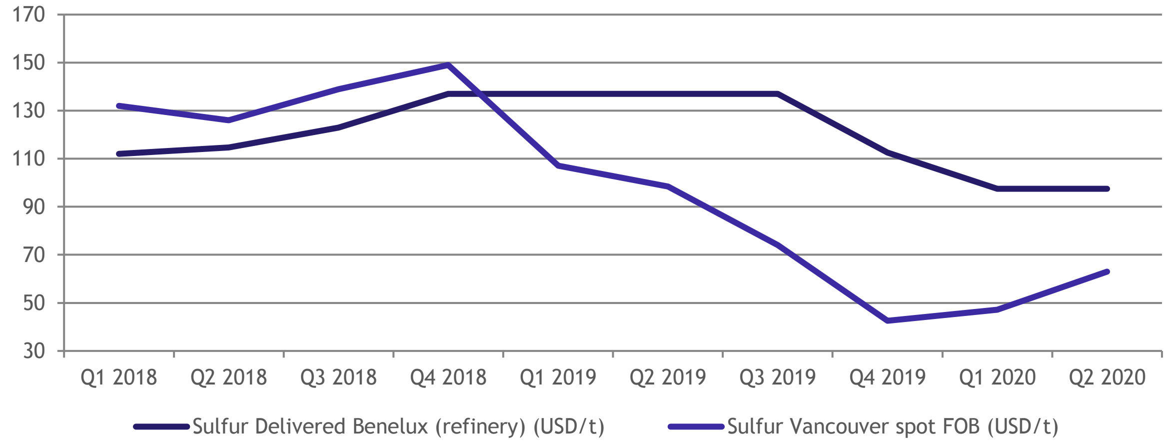
Source: ICIS.

Sulfur

H1 2020 saw no strengthening of the sulfur market, which had been troubled from the beginning of 2019. Significant weakening of the phosphate fertilizers market depressed the market for sulfur, which is primarily used in the production of phosphoric acid and then DAP, MAP and NPK fertilizers. In H1 2020, the prices of prilled sulfur (Vancouver SPOT FOB) fell by about 47% year on year. The outbreak of COVID-19 strongly affected the production of phosphate fertilizers in China, mainly in Q1 2020. Due to factory closures, interest in the purchase of sulfur was weak. However, no declines in sulfur prices were recorded in the period and in some markets the prices even went slightly up. This was attributable to reduced output from the petrochemical industry, the main supplier of sulfur. Any deeper price declines were prevented by supply constraints.

(all amounts in PLN '000 unless indicated otherwise)

Sulfur prices



Source: FERTECON.

Price declines on the European market for liquid sulfur were slightly lower. Compared with H1 2019, the average price of liquid sulfur (Benelux Delivered) was approximately 29% lower in H1 2020. Despite resistance from manufacturers (refineries, gas plants), the price of liquid sulfur had to follow the global prices of the prilled product. After price declines in Q4 2019, the European liquid sulfur market continued to follow a downward trend, leading to a price correction in Q1 2020 and a roll-over in Q2 2020.

Average prices of sulfur

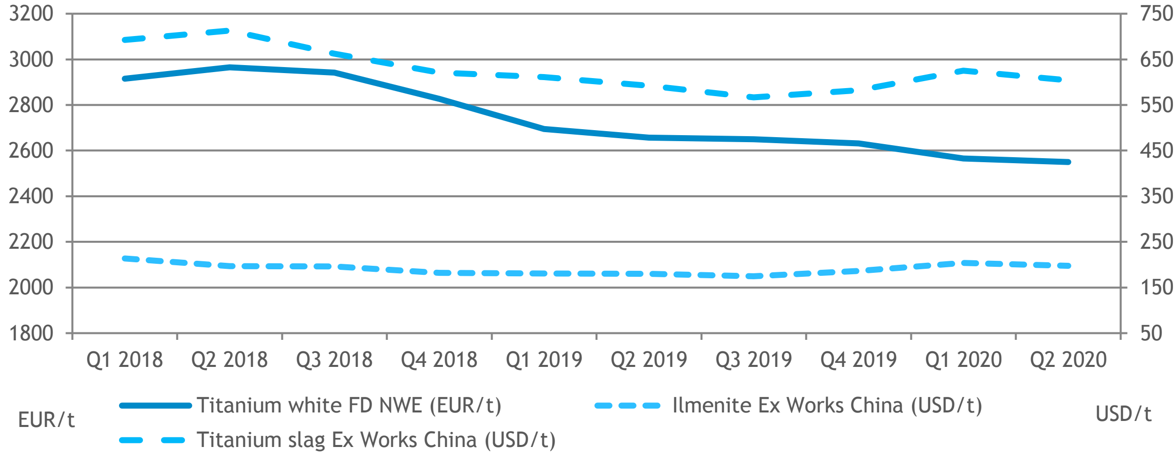
	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	USD/t	*USD/t*	*%*	*USD/t*	*USD/t*	*USD/t*
Sulfur (Delivered Benelux refinery)	137	98	28.8↓	98	98	98
Sulfur (Vancouver spot FOB)	103	55	46.6↓	63	42	63

Source: FERTECON.

As for an outlook for the next two quarters of 2020, it is difficult to predict how the coronavirus pandemic will develop and whether the situation will be serious enough to force authorities to close or significantly restrict production in certain regions of the world. This also applies to producers of phosphate fertilizers, as the main customers for sulfur, and the petrochemical industry, as its main producer. In the best-case scenario, the prices of prilled sulfur are expected to increase slightly in Q4 2020. At the same time, conditions in the European market for liquid sulfur are likely to remain unchanged. However, if the prices of prilled sulfur grow later in the year, the prices of liquid sulfur are likely to follow suit in late Q3 and early Q4. Other factors on the supply side should also be taken into account, e.g. an unexpected refinery failure, which could result in lower availability of the product and local price rises.

Pigment chain
In H1 2020, the price of titanium white in Europe declined 4% year on year, mostly at the beginning of the year.

Prices of titanium white, ilmenite and titanium slag



Source: ICIS, CCM.

The EU's industrial and chemical production has slowed down since the beginning of the year. A material factor affecting the market balance are competitive imports of cheaper titanium white from China into Europe, further compounded by the launch by Lomon Billions, in Jiaozuo, of new capacities based on the chloride process (total target capacities of 200 thousand tonnes per year). China's export potential to Europe is on the rise, and the quality of Chinese titanium white has considerably improved. Lomon Billions has signed an agreement with Germany's Ti-Cons, which specialises in upgrading titanium white production processes, also those based on the chloride technology.
Despite the pandemic, China is carrying on with its ambitious investment plans to modernise and construct new sulfate- and chloride-based units. At the same time, large manufacturers of titanium white are pursuing their acquisition projects.
On February 14th 2020, China reduced its customs duties on certain goods imported from the United States, including TiO_2. However, the COVID-19 pandemic has transformed global policies and markets. In the face of the growing humanitarian crisis and immense turmoil across the global economy, the trade war issue has temporarily receded into the background.
At the end of Q1 2020, the onset of the coronavirus pandemic took its toll on Europe. As the economic situation was unstable, there was no major upturn in demand in the second quarter despite the peak season typically seen in that period. The supply of the product was good, while the demand remained limited. On the one hand, the behaviour of buyers reflected the effects of measures designed to combat the pandemic and, on the other, their buying decisions were dictated by the need to secure appropriate stock levels.
Sulfate TiO_2 is more easily available, while in certain cases the flexibility of supply of titanium dioxide produced by the chloride process is more limited.
End-use sectors continue to struggle, with widely varied demand due to the coronavirus pandemic; a slight recovery in demand at the end of H1 varied depending on the application. The automotive sector was badly hit by the global pandemic, with demand declining as many automotive plants were temporarily shut down. It is the industrial, automotive and furniture applications that suffered the most serious blow from the coronavirus in the second quarter of the year. The construction and architectural industries began to gradually recover at the end of the first half of the year, albeit no significant upturn in demand was observed in the period usually marking the beginning of a high season. The market is far from regaining equilibrium, the backlog is weak, and many projects are still on the shelf.
Most automotive production in North America was stopped on March 19th 2020 after Ford Motor, General Motors (GM) and Fiat Chrysler Automobiles (FCA) (the Big Three) announced their decision to halt it for coronavirus-induced fears.
Logistic problems were compounded by stringent pandemic-related security controls at the borders and insufficient availability of lorries and drivers.
The ultimate impact of the pandemic on the titanium white market is still unknown, as the situation has been changing rapidly. Month by month, demand is slowly picking up depending on the end-use, country and range of measures to prevent the spread of COVID-19. Market sentiment is affected by recession-related concerns and the economic slowdown. The global chemical industry must brace for a prolonged economic downturn and lower prices of crude oil.
On May 13th 2020, Member Companies of the Titanium Dioxide Manufacturers Association (TDMA), as part of a wider group of TiO_2 producers and users, submitted an action in annulment to the General Court of the European Union against the harmonised classification of TiO_2 as a suspected carcinogen.

(all amounts in PLN '000 unless indicated otherwise)

The appeal challenges the classification as there is no reliable, acceptable or available data to suggest that TiO_2 causes cancer.
A decision by the General Court is not expected sooner than in two to three years, and therefore will be issued after the classification takes effect on October 1st 2021. In the meantime, TDMA and its members will focus on finding a way to implement the regulation from that date, despite uncertainties surrounding the classification.

Average prices of titanium white and raw materials for its production

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/t	*EUR/t*	*%*	*EUR/t*	*EUR/t*	*EUR/t*
Titanium white FD, NWE	2,676	2,558	4.4↓	2,550	2,550	2,595
	USD/t	*USD/t*	*%*	*USD/t*	*USD/t*	*USD/t*
Ilmenite ex Works China	180	201	11.3	190	190	224
Titanium slag ex Works China	602	615	2.2	561	561	642

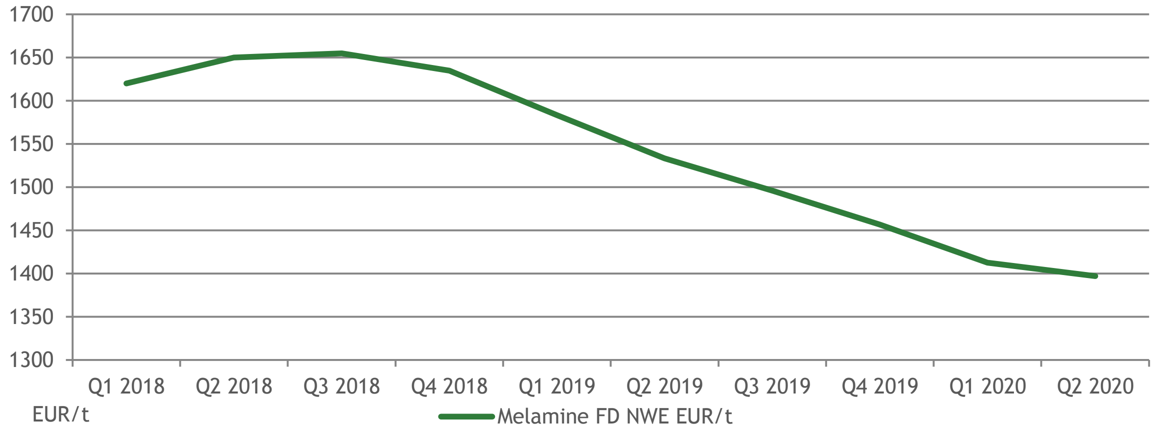
Source: ICIS, CCM.

Outlook for the remaining part of the year on the titanium white market is unclear, given that most countries in Europe will continue to struggle with the pandemic. All players are focused on watching the market, but the upcoming trends are very hard to predict. Conditions in Q3 2020 may be driven by poor demand recorded in the second quarter (without optimistic prospects for Q3), an expected second wave of coronavirus infections and strong competition from Asian exports of TiO_2 produced by the sulfate process. Moreover, limited potential to launch new construction projects due to the economic meltdown may continue to adversely affect the construction sector in the coming months. Residential construction is expected to continue to slow down and prospects for the automotive industry are unlikely to improve any time soon.
The ilmenite prices stabilised at a high level in the first half of 2020. However, in Q2, as the coronavirus pandemic began to wreak havoc globally, there was room for their reduction on weaker demand from titanium white manufacturers scaling down their production. On the representative Chinese market, the price of ilmenite in the first half of 2020 rose 11% year on year, while in the second quarter of 2020 it fell by approximately 3% on Q1 2020.
Titanium slag is produced by smelting ilmenite with coke. As no investments are made in new furnaces, the titanium slag market is undersupplied, especially with respect to 74%-76% titanium slag used in the sulfate-based production of titanium white. Some of the manufacturers discontinued the production of titanium slag with a lower titanium content and switched to producing slags with a 90% or higher TiO_2 content, due to higher sales margins achieved in chlorine-based production of titanium white. Thus, despite the falling prices of titanium white, the global price of titanium slag remains elevated. However, lower demand caused by the pandemic outbreak opened the way for a price reduction also in the case of this raw material. In the first half of 2020, on the representative Chinese market the average price of titanium slag used in the manufacture of sulfate titanium white grew by 2% year on year, while in Q2 2020 it fell by 3% quarter on quarter.
Developments on the markets of both titanium-bearing materials are difficult to predict amid the ongoing coronavirus pandemic. Falling demand may give rise to a continued downward trend in the prices even in 2021. Despite the declines recorded in the second quarter of the year, the prices of titanium-bearing materials are still viewed as high. The pace of market changes will depend on how quickly global economies are able to pull out of the pandemic-driven recession.

Melamine
In the first half of 2020, the global melamine market remained strongly affected by the spreading coronavirus pandemic. The melamine capacity utilisation rates in Asia fell to 63% at the end of March 2020 in a response designed to protect profit margins amid low demand and growing stock levels. The largest Chinese exporters started to offer additional price reductions for melamine, following the introduction of a special governmental discount scheme with a refund of 13% of the tax on export sales. However, this did not change the demand for melamine from other regions, all the more so that many countries have closed or significantly restricted cross-border traffic. Since February 2020, Chinese melamine processors have been slowly resuming production, thanks to reduced staff absence rates and the easing of transport restrictions by certain Chinese cities with high COVID-19 incidence.

Prices of melamine

(all amounts in PLN '000 unless indicated otherwise)



Source: ICIS, Global Bleaching Chemicals.

Producers in Europe shut down or significantly reduced production and customers were drawing on their stocks. Melamine demand in Europe fell as much as 50% in the second half of the period under review. In the reporting period, the average contract prices of melamine fell 4.9% relative to the previous half-year period and 9.9% year on year.
The spot prices fell 7.6% compared with the previous half-year period and 15% year on year.
In the coming months melamine demand is expected to rise gradually, unless the epidemiological situation deteriorates.

Average prices of melamine

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/t	*EUR/t*	*%*	*EUR/t*	*EUR/t*	*EUR/t*
Melamine	1,558	1,405	9.9↓	1,393	1,393	1,428

Source: ICIS, Global Bleaching Chemicals.

ENERGY

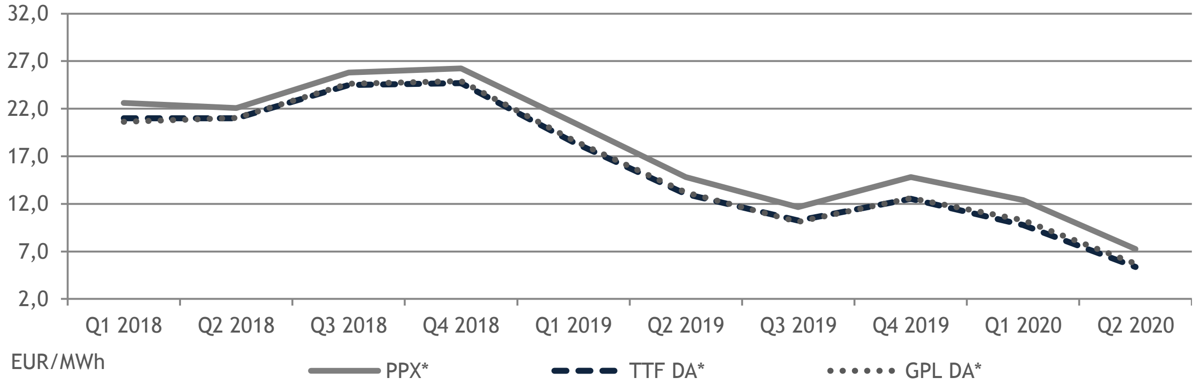
Natural gas

The Gaspool spot prices of natural gas at the beginning of the year were above EUR 13/MWh. Subsequently, the prices fell steadily (with several minor corrections) to a low of EUR 3.57/MWh on May 22nd 2020. Initially, the prices were under strong downward pressure from the exceptionally warm weather, high stock levels, as well as growing LNG and regular pipeline supplies (an agreement was signed on the transit of gas from Russia via Ukraine). The mild winter in Europe, coupled with high wind levels, reduced demand for heating gas and gas for power generation. This translated into a much slower pace of stocks exhaustion. As at the end of the first quarter of 2020, 600 TWh of gas was in storage across Europe (54% of total capacity), which was 285 TWh above the five-year average. On the other hand, an oversupply of LNG on the global market pushed down the gas prices in Asia. As a result, spot LNG deliveries from the Atlantic region were directed to Europe, where they fetched higher prices. Compared with the previous winter, LNG supplies to Europe rose by 60%.
In March, the impact of fundamental factors was compounded by the coronavirus epidemic, which led to a sharp decline in energy demand. Most businesses stopped or scaled down their operations. The decline in fuel demand caused by the epidemic led to a sharp drop in the prices of crude oil, coal and CO_2 emission allowances. A price war between Russia and Saudi Arabia caused the WTI crude price in the US to enter negative territory for the first time in history. The price of gas was plummeting in response to news of the spreading pandemic. In May, the gas prices fell below break-even points for Russian and Norwegian fields and below the cost of export of US LNG, which resulted in the cancellation of at least 25 US LNG cargoes due for delivery in June.
Demand for fuels improved as the lockdown restrictions were eased in individual countries. The gas prices were supported by rising prices of other commodities within the energy mix. Also, lower output of renewable energy strengthened demand for gas as a power generation fuel, which offset the coronavirus-related decline in industrial consumption. The prices at Gaspool rose from EUR 3.6 to EUR 5.5/MWh in the first week of June and remained around that level until the end of the month. Room for further increases was limited by falling gas prices in the US (as the market was oversupplied due to lower exports), as well as high and still growing stock levels. As at the end of the first half of 2020, gas stocks in the European Union reached 890 TWh, representing over 80% of total storage capacity.

(all amounts in PLN '000 unless indicated otherwise)

In the third quarter, the gas market in Europe will remain jittery, and the prices, still under pressure from fundamental factors, will be subject to significant fluctuations driven by LNG deliveries, variable volumes of renewable power and lower supply during scheduled maintenance shutdowns of gas pipelines in Russia (July) and in Norway (September). A possible second wave of coronavirus infections could also adversely affect the global economy and nip in the bud the recovering demand for commodities.

Prices of natural gas



** Excluding transmission.*

Source: PGNiG tariff, ICIS.

Average prices of natural gas

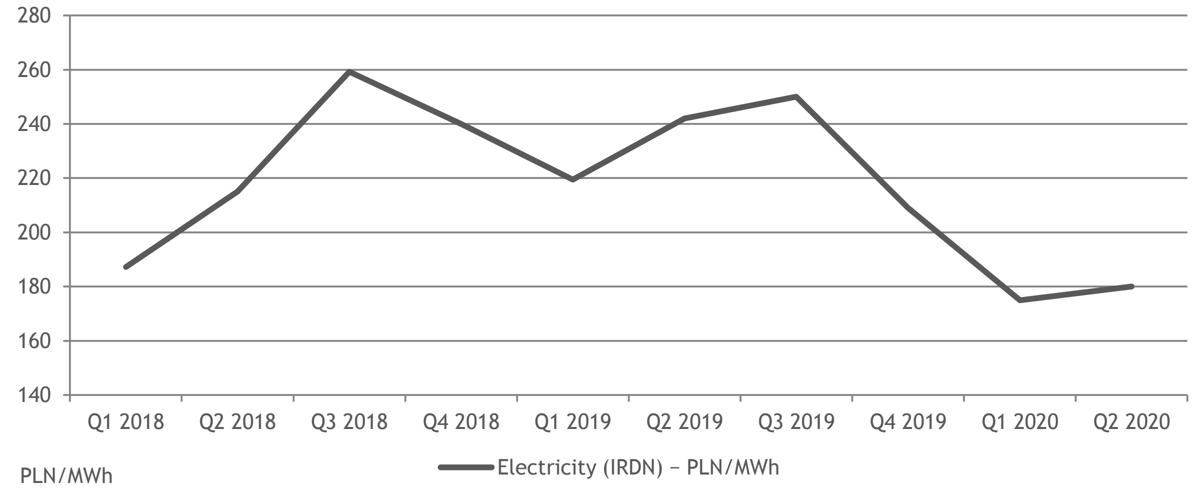
	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	EUR/MWh	*EUR/MWh*	*%*	*EUR/MWh*	*EUR/MWh*	*EUR/MWh*
TTF DA*	15.8	7.6	52.0↓	8.6	4.6	11.3
GPL DA*	15.9	8.0	49.8↓	5.0	5.1	11.8
PPX*	17.7	9.8	44.5↓	6.3	6.3	14.0

** Excluding transmission.*

Source: PGNiG tariff, ICIS.

Electricity

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: The Polish Power Exchange

(all amounts in PLN '000 unless indicated otherwise)

The average electricity prices fell by more than 23% year on year and rose 3% quarter on quarter. The Polish market is largely affected by climate regulations, the legal regime, as well as the need to upgrade generation capacities (low emission standards - BAT) and maintain the operating capacity reserve (effect on production costs).
Electricity prices will be driven by the following factors:

- Price fluctuations on other commodity markets;
- Situation related to COVID-19 in Poland and globally, pushing the demand for electricity down as manufacturing and services are restricted;
- Changes to the RES support system;
- Lower demand for key energy commodities in Poland and globally;
- Sensitivity of electricity prices to prices of CO_2 emission allowances.

Average prices of electricity

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	PLN/MWh	*PLN/MWh*	*%*	*PLN/MWh*	*PLN/MWh*	*PLN/MWh*
Electricity	230.52	177.45	23↓	218.18	76.86	335.66

Source: The Polish Power Exchange.

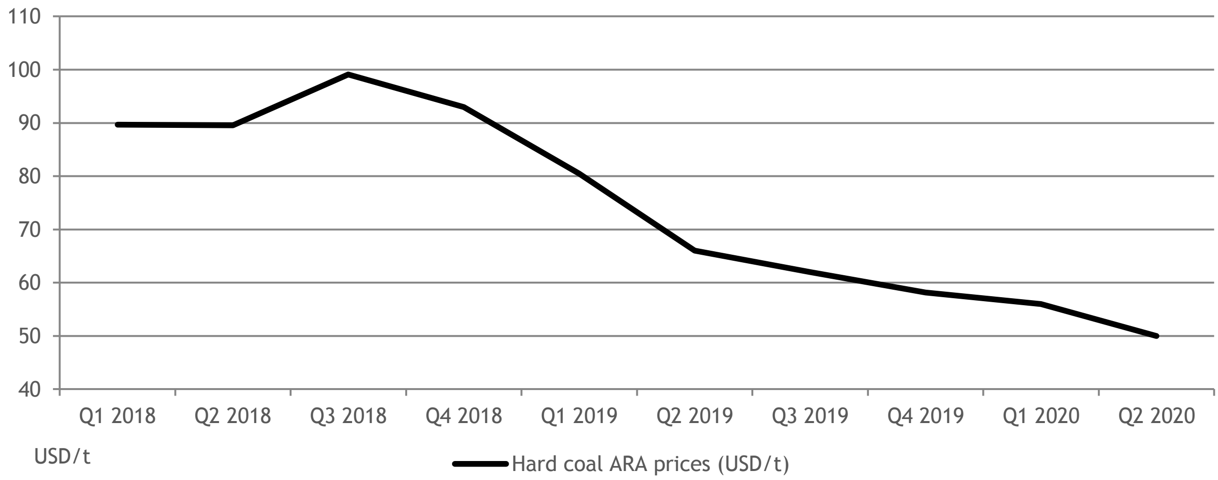
Coal

The downward trend, which set in two years before, continued during the first half of 2020, with the coal price falling 27.9% year on year. In the first half of the year, the average price hit another low of USD 47.49/tonne.
The current situation on the international coal market is described as highly volatile. The coal prices are under downward pressure, which will be driven by:

- Stock levels in Europe;
- European policy of reducing coal consumption in favour of gas, which is becoming more accessible and attractively priced on the European market;
- Coronavirus pandemic leading to limitation or discontinuation of certain production activities and services;
- Price fluctuations in other commodity markets.

Analysts expect the average ARA prices to remain below USD 60 per tonne in 2020.

Prices of hard coal



Source: ARA prices.

Average prices of hard coal

	Average H1 2019	Average H1 2020	y/y	Jun 2020	MIN 2020	MAX 2020
	USD/t	*USD/t*	*%*	*USD/t*	*USD/t*	*USD/t*
Coal	73.34	52.90	27.9↓	50.73	47.49	63.10

Source: ARA prices.

(all amounts in PLN '000 unless indicated otherwise)

2.3. Key financial and economic data

2.3.1. Consolidated financial information

Consolidated data

Item	H1 2020	H1 2019*	change	% change
Revenue	5,372,618	6,102,509	(729,891)	(12.0)
Cost of sales	(4,193,867)	(4,714,806)	520,939	(11.0)
Gross profit	**1,178,751**	**1,387,703**	**(208,952)**	**(15.1)**
Selling expenses	(480,124)	(457,543)	(22,581)	4.9
Administrative expenses	(406,984)	(426,902)	19,918	(4.7)
Profit on sales	**291,643**	**503,258**	**(211,615)**	**(42.0)**
Net other expenses	80,724	(32,671)	113,395	(347.1)
Operating profit	**372,367**	**470,587**	**(98,220)**	**(20.9)**
Net finance income/(costs)	(62,442)	(30,440)	(32,002)	105.1
Share of profit of equity-accounted investees	7,080	6,127	953	15.6
Profit before tax	**317,005**	**446,274**	**(129,269)**	**(29.0)**
Income tax	(94,900)	(103,890)	8,990	(8.7)
Net profit	**222,105**	**342,384**	**(120,279)**	**(35.1)**
EBIT	**372,367**	**470,587**	**(98,220)**	**(20.9)**
Depreciation and amortisation	380,424	405,449	(25,025)	(6.2)
EBITDA	**752,791**	**876,036**	**(123,245)**	**(14.1)**

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.
Source: Company data.

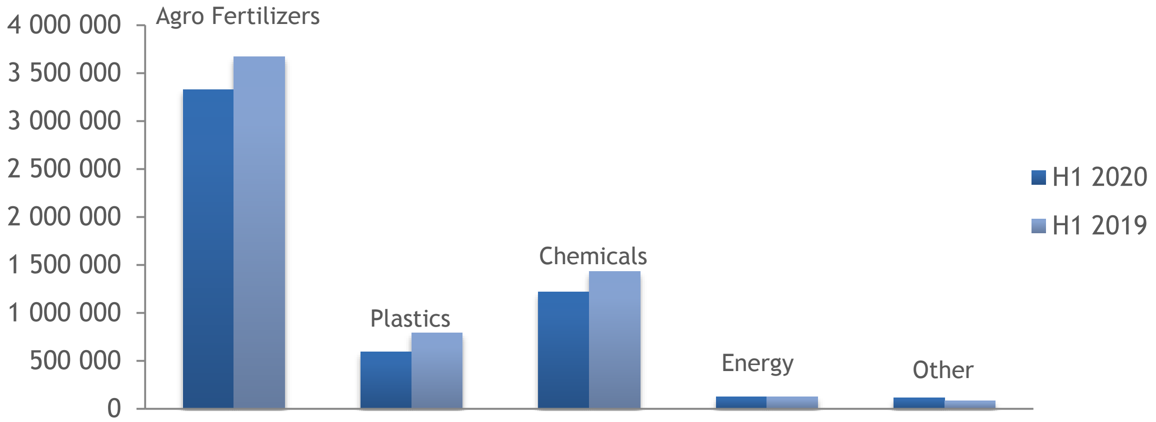
2.3.2. Segment results

EBIT by segment

	Agro Fertilizers	Plastics	Chemicals	Energy	Other Activities
External revenue	3,327,892	591,468	1,216,118	123,710	113,430
Profit/(loss) on sales	248,134	(57,401)	121,053	(14,663)	(5,480)
EBIT	291,522	(48,512)	148,776	(11,779)	(7,640)

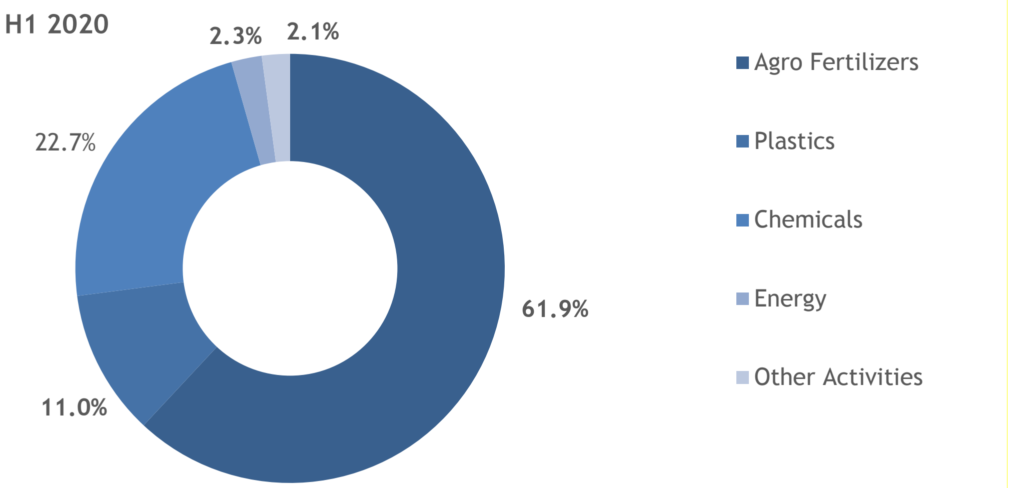
Source: Company data.

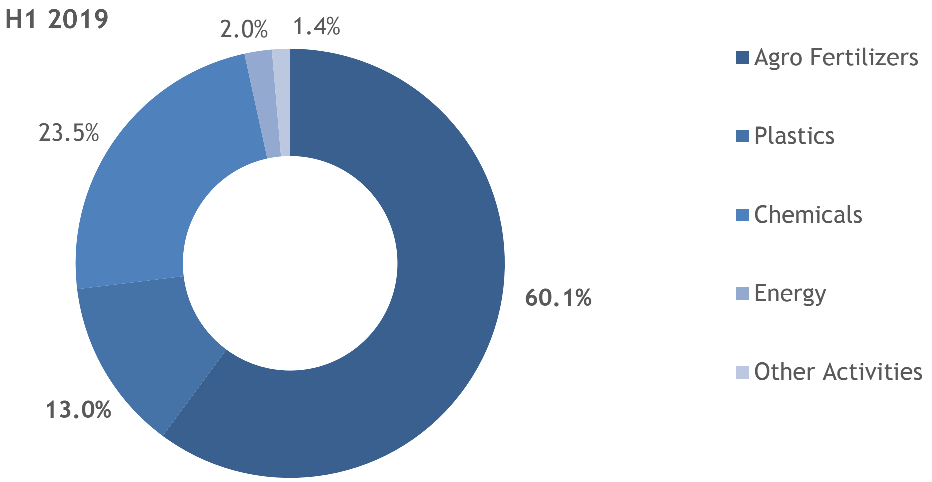
Revenue by segment



Source: Company data.

Revenue by segment





Source: Company data.

Agro Fertilizers

In the first half of 2020, revenue in the Agro Fertilizers segment was PLN 3,327,892 thousand and accounted for 61.9% of the Group's total revenue. The segment's revenue went down 9.3% year on year, with an increased share of revenue generated from Agro Fertilizers in the Group's total revenue. The Agro Fertilizers segment reported a profit on sales and positive EBIT of PLN 291,522 thousand. Sales on the domestic market accounted for approximately 52.6% of the segment's revenue.

(all amounts in PLN '000 unless indicated otherwise)

Plastics

In the first half of 2020, revenue in the Plastics segment was PLN 591,468 thousand and accounted for 11.0% of the Group's total revenue. Year on year, the segment's revenue decreased by 25.2%. The segment also reported a loss on sales and negative EBIT.
More than 88.0% of the segment's revenue was derived from sales on foreign markets.

Chemicals

In the first half of 2020, revenue in the Chemicals segment amounted to PLN 1,216,118 thousand, having decreased 15.2% year on year. The segment's revenue accounted for 22.7% of the Group's total revenue. The segment reported a profit on sales and positive EBIT of PLN 148,776 thousand.
Sales on foreign markets accounted for approximately 59.0% of the Chemicals segment's revenue.

Energy

In the first half of 2020, revenue in the Energy segment was PLN 123,710 thousand and accounted for approximately 2.3% of the Group's total revenue. Year on year, the segment's revenue decreased by 1.5%. Its EBIT was negative.

Other Activities

In the first half of 2020, the Other Activities segment reported revenue of PLN 113,430 thousand, up 36.3% year on year, accounting for 2.1% of the Group's total revenue. Its EBIT was negative.

2.3.3. Structure of operating expenses

Operating expenses by nature of expense

	H1 2020	H1 2019*	change	% change
Depreciation and amortisation	378,047	403,490	(25,443)	(6.3)
Raw materials and consumables used	2,710,860	3,354,697	(643,837)	(19.2)
Services	581,239	551,499	29,740	5.4
Salaries and wages, including surcharges, and other benefits	932,603	882,240	50,363	5.7
Taxes and charges	275,825	252,515	23,310	9.2
Other expenses	83,835	81,715	2,120	2.6
Total	**4,962,409**	**5,526,156**	**(563,747)**	**(10.2)**

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

Structure of operating expenses [%]

	H1 2020	H1 2019*
Depreciation and amortisation	7.6	7.3
Raw materials and consumables used		60.7
Services	11.7	10.0
Salaries and wages, including surcharges, and other benefits	18,8	16.0
Taxes and charges	5.6	4.5
Other expenses	1.7	1.5
Total	**100.0**	**100.0**

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

(all amounts in PLN '000 unless indicated otherwise)

2.3.4. Assets, equity and liabilities

Structure of assets

	H1 2020	H1 2019*	change	% change
Non-current assets, including:	**11,813,828**	**10,342,386**	**1,471,442**	**14.2**
Property, plant and equipment	8,771,262	7,741,348	1,029,914	13.3
Intangible assets	1,003,243	1,006,792	(3,549)	(0.4)
Right-of-use assets	836,362	877,423	(41,061)	(4.7)
Other receivables	641,051	179,979	461,072	256.2
Goodwill	322,035	308,168	13,867	4.5
Current assets, including:	**4,635,284**	**4,286,003**	**349,281**	**8.1**
Inventories	1,551,827	1,499,693	52,134	3.5
Trade and other receivables	1,535,367	1,598,491	(63,124)	(3.9)
Cash and cash equivalents	906,759	550,613	356,146	64.7
Property rights	500,820	458,939	41,881	9.1
Total assets	**16,449,112**	**14,628,389**	**1,820,723**	**12.4**

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

Structure of equity and liabilities

	H1 2020	H1 2019*	change	% change
Equity	**8,102,557**	**7,654,292**	**448,265**	**5.9**
Non-current liabilities, including:	**4,801,956**	**4,056,720**	**745,236**	**18.4**
Borrowings	2,978,677	2,401,830	576,847	24.0
Deferred tax liabilities	510,021	468,905	41,116	8.8
Employee benefit obligations	503,745	425,565	78,180	18.4
Lease liabilities	354,237	382,452	(28,215)	(7.4)
Provisions	214,569	157,492	57,077	36.2
Government grants received	196,491	198,433	(1,942)	(1.0)
Current liabilities, including:	**3,544,599**	**2,917,377**	**627,222**	**21.5**
Trade and other payables	2,303,468	2,011,314	292,154	14.5
Other financial liabilities	442,751	278,670	164,081	58.9
Borrowings	345,191	264,809	80,382	30.4
Government grants received	238,545	204,414	34,131	16.7
Total equity and liabilities	**16,449,112**	**14,628,389**	**1,820,723**	**12.4**

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

2.3.5. Financial ratios

Profitability ratios [%]

	H1 2020	H1 2019*
Gross profit margin	21.9	22.7
EBIT margin	6,9	7.7
EBITDA margin	14.0	14.4
Net profit margin	4.1	5.6

(all amounts in PLN '000 unless indicated otherwise)

	H1 2020	H1 2019*
ROA	1.4	2.3
ROCE	2.9	4.0
ROE	2.7	4.5
Return on non-current assets	1.9	3.3

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

Ratio formulas:
Gross profit margin = gross profit (loss) / revenue (statement of comprehensive income by function)
EBIT margin = EBIT / revenue
EBITDA margin = EBITDA / net revenue
Net profit 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

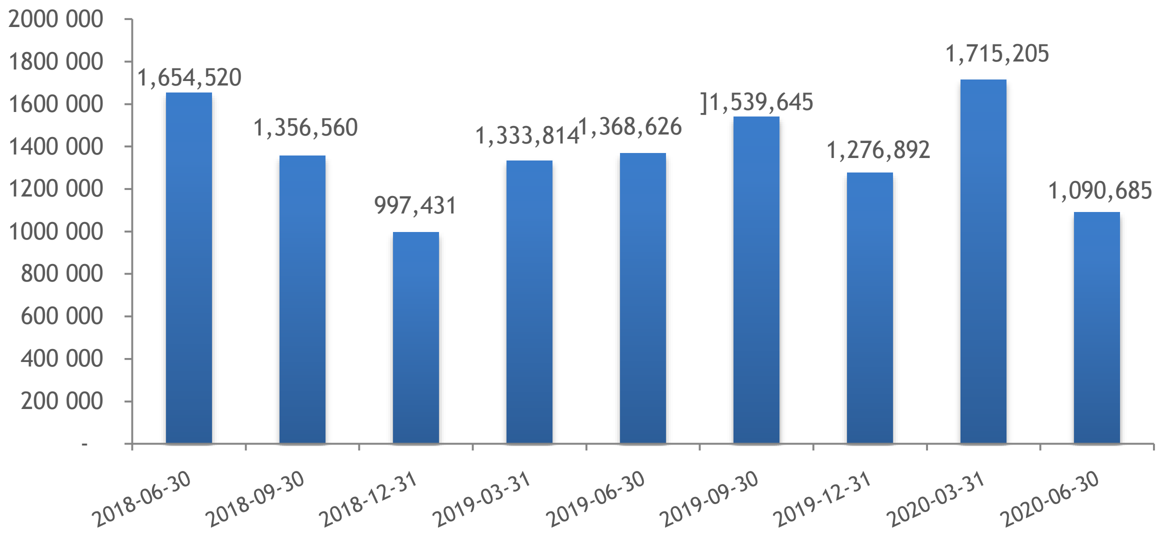
Liquidity ratios

	H1 2020	H1 2019
Current ratio	1.3	1.5
Quick ratio	0.9	1.0
Cash ratio	0.3	0.2

Source: Company data.

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

Changes in net working capital*



* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

Source: Company data.

Operational efficiency ratios

	H1 2020	H1 2019*
Inventory turnover	67	57

(all amounts in PLN '000 unless indicated otherwise)

	H1 2020	H1 2019*
Average collection period	51	47
Average payment period	100	77
Cash conversion cycle	18	27

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

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 [%]

Ratio	H1 2020	H1 2019*
Total debt ratio	50.7	47.7
Long-term debt ratio	29.2	27.7
Short-term debt ratio	21,5	19.9
Equity-to-debt ratio	97.1	109.8
Interest cover ratio	831.3	2030.4

* Financial data restated as described in Section 1.3.2 of the interim condensed consolidated financial statements for the six months ended June 30th 2020.

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

Although their situation is clearly linked to developments in the market environment, the Parent as well as the key Group companies are fully solvent, with good credit standing. This means the Group companies are able to pay their liabilities as they fall due and generate free operating cash flows, which maintain their financial liquidity at an adequate level. In H1 2020, all of their liabilities under borrowings, public charges and trade payables were paid when due, with no threat to their continued ability to settle such liabilities in a timely manner.
The liquidity management policy operated by the Group consists in maintaining surplus cash and available credit facilities as well as limits under the intragroup financing agreement (the purpose of which is to effectively distribute funds within the Group).
The Group is monitoring the spread of the COVID-19 pandemic and its impact on the Group’s economic environment. The Group has identified the following risk areas related to the pandemic outbreak that may affect its liquidity:
- potential risk of deterioration in the financial liquidity of some of our trading partners as a result of payment backlogs,
- volatility of exchange rates.

For further information on the impact of the COVID-19 pandemic on the Group’s condition, see Section 4.1. Since the actual magnitude of effects of the unfolding COVID-19 pandemic and their impact on the Grupa Azoty Group’s business is difficult to estimate, it is not possible to determine the future impact of the pandemic on the Group’s financial condition.

2.5. Borrowings

In H1 2020, the Group paid all of its borrowing-related liabilities when due, and there is no threat to its ability to continue servicing its debt.

The Group has access to umbrella overdraft limits related to the PLN and EUR physical cash pooling arrangements and under a multi-purpose credit facility, which may be used as directed by the Parent at times of increased demand for funding from any of the Group companies. Additionally, the Group has access to bilateral overdraft limits and multi-purpose facilities available to its companies.
The amount of limits under overdraft and multi-purpose credit facilities available to the Group as at June 30th 2020 was PLN 845m.
In addition, as at the reporting date, the Group had access to corporate credit facilities of approximately PLN 1,652m.
The Group also had access to special purpose loans totalling PLN 52m.
As at June 30th 2020, under the agreements specified above the Group had access to total credit limits of approximately PLN 2,550m.
Moreover, as at June 30th 2020, the Group had access to an undrawn amount of PLN 242m under a payment services agreement to finance its liabilities towards suppliers.
The Group's financial standing is sound, and there are no material threats or risks of its deterioration in the future. The Group complies with the uniform covenants of its facility agreements which enable it to significantly increase financial debt when and as needed.

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

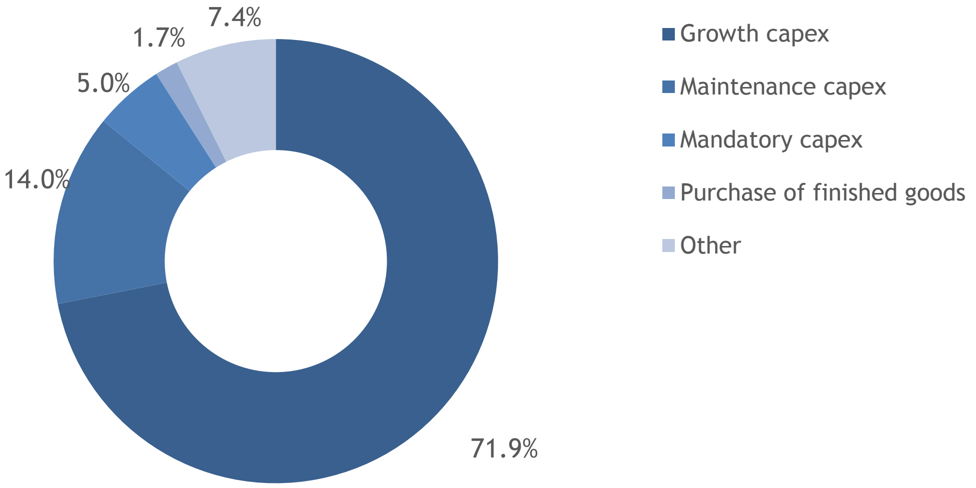
One-off items which materially affected assets, equity and liabilities, capital, net profit/loss or cash flows were compensation payments and pandemic-related state aid received, as described in detail in Section 2.1.

2.7. Key investment projects

In the first half of 2020, the Group incurred expenditure of PLN 911,631 thousand to purchase intangible assets and property, plant and equipment.
Structure of capital expenditure:

- Growth capex — PLN 655,533 thousand
- Maintenance capex — PLN 127,208 thousand
- Mandatory capex — PLN 46,444 thousand
- Purchase of finished goods — PLN 15,413 thousand
- Other (components, catalysts, etc.) — PLN 67,033 thousand

Structure of the Group's capital expenditure in H1 2020



Source: Company data.

(all amounts in PLN '000 unless indicated otherwise)

The Group's capital expenditure in H1 2020:

- Parent PLN 49,948 thousand
- Grupa Azoty POLYOLEFINS PLN 530,348 thousand
- Grupa Azoty PUŁAWY Group PLN 207,535 thousand
- Grupa Azoty POLICE Group PLN 60,623 thousand
- Grupa Azoty KĘDZIERZYN Group PLN 40,887 thousand
- Grupa Azoty KOLTAR Sp. z o.o. PLN 8,316 thousand
- COMPO EXPERT PLN 7,479 thousand
- Grupa Azoty SIARKOPOL PLN 3,041 thousand
- Grupa Azoty PKCh Sp. z o.o. PLN 1,846 thousand
- Grupa Azoty Compounding Sp. z o.o. PLN 1,130 thousand
- Grupa Azoty ATT Polymers GmbH PLN 478 thousand

Key investment projects implemented by the Group

Project name	Project budget	Expenditure incurred	Expenditure incurred in H1 2020	Project purpose	Scheduled completion date
Grupa Azoty POLYOLEFINS					
Propane Dehydrogenation (PDH) unit with related infrastructure, and polypropylene (PP) production unit	USD 1,801,109 thousand	1,255,266	530,348	Construction of a propylene dehydrogenation plant (PDH) and a polypropylene production plant with associated infrastructure, including the expansion of the Police Sea Port to include a propane and ethylene handling and storage terminal.	2022
Grupa Azoty PUŁAWY					
Construction of a coal-fired power generation unit	1,200,000	37,765	27,070	Adaptation of energy generation units to environmental requirements, while increasing the share of the autoproducer CHP plant in electricity consumption by production units and ensuring continuity of energy supply	2022
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	309,021	68,029	To raise the efficiency of nitric acid production and improve the economics of production of nitric acid-based fertilizers	2024
Facility for production of granulated fertilizers based on ammonium nitrate	430,000*)	372,216	8,769	To improve the quality of fertilizers by applying modern mechanical granulation	2021
Upgrade of steam generator OP-215 No. 2 to reduce NO_x emissions	93,000	38,479	8,007	To bring the steam generator into compliance with new NO_x emission standards and restore it to proper working condition	2021
Replacement of the turbine generator set	85,000	9,438	9,229	To increase the efficiency of electricity and heat cogeneration by replacing a pass-out and condensing turbine with a new unit	2021

(all amounts in PLN '000 unless indicated otherwise)

*) On May 25th 2020, the Extraordinary General Meeting granted its consent for Grupa Azoty Zakłady Azotowe Puławy S.A. of Puławy to enter into legal transactions whereby it would purchase non-current assets for the purpose of implementing the 'Ammonium nitrate-based granulated fertilizer unit' project, with a total value increased from PLN 385m to PLN 430m.

Project name	Project budget	Expenditure incurred	Expenditure incurred in H1 2020	Project purpose	Scheduled completion date
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 units	108,000	14,320	13,271	Upgrade and expansion of the water treatment and demineralisation station as a means of protection against periodic salinity increases in the Oder river for Grupa Azoty POLICE companies	2022
Grupa Azoty KĘDZIERZYN					
Upgrade of the synthesis gas compression unit supplying the Ammonia Plant	140,000	60,651	1,329	To rebuild the capacity of synthesis gas compression for the Ammonia Plant through the installation of new compressors	2021
Peak-load/reserve boilers	123,000	122	23	The peak-load/reserve boiler house as a peak-load source will operate in conjunction with steam generators; in the event of downtime of coal-fired boilers, the peak-load/reserve boiler house will operate as a stand-alone reserve steam generator.	2023
Purchase and installation of an oxygen compressor	72,800	19,376	11,901	Replacement of old steam turbine driven oxygen compressors with one electric compressor	2021

Source: Company data.

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

Exchange rates
The Grupa Azoty Group expects that in H2 2020 the Polish złoty will continue to be predominantly influenced by global factors, which may involve its potential further depreciation against both the euro and the US dollar in that period. It should be borne in mind that the emergence from the worst of the economic crisis caused by the COVID-19 pandemic is expected to begin in Q3 2020 at the earliest.
In the short to medium term, the złoty may come under the pressure of interest rate cuts implemented in March and April 2020, coupled with quantitative easing measures taken by the National Bank of Poland (NBP). As a result, the PLN/EUR and PLN/USD exchange rates may temporarily weaken even further.
In the medium term until the end of 2020, PLN may strengthen moderately from the positive effects of easing the administrative restrictions on business activities and implementation of anti-crisis shield measures in Poland and Europe. The process could be threatened by a second, strong wave of COVID-19 and a greater than expected deterioration in the condition of businesses and banks, or a sovereign debt crisis and insolvency risk affecting major economies.
The forecast currency exchange trends are not expected to bear materially on the Group's performance in the second half of 2020, as its positive currency exposure in EUR from operating activities should offset any adverse changes in the value of EUR-denominated loans.
The effect of the złoty's depreciation against convertible currencies should not significantly jeopardise the achievement of the Group's currency exposure targets in H2 2020.

Interest rates in Poland
In H1 2020, the Polish Monetary Policy Council significantly reduced the interest rates in March, April and May, by a total of 1.4pp. Thus, the main reference rate applicable to credit facilities contracted by the Group (1M/3M WIBOR) fell from approximately 1.7% to about 0.3%, and is expected to stay there in a longer term. This will help stabilise the Group's borrowing costs at a relatively low level

and reinforce its debt service capacity, also if the Group plans to increase debt to finance its investing activities.
Taking into consideration the adverse effect of the COVID-19 pandemic on the eurozone countries, the European Central Bank continues its quantitative easing programme and a policy of negative interest rates, which should remain at current levels at least until the end of 2020, considering that core inflation remains low following a long period of deflation.
In the first half of 2020, also the US Fed lowered its interest rates to zero to counter the effects of the COVID-19 spread in the United States, and is not likely to raise them at least in the medium term.
To conclude, any adverse changes to the current very low interest rates on debt in currencies used by the Group to finance its business (PLN and EUR) are unlikely before the end of 2020. Therefore, the risk of the Group's financial condition or results of operations deteriorating on higher debt service costs is considered low.
It is expected that the ECB, the Fed, as well as the Polish Monetary Policy Council and NBP, will focus on implementing non-standard instruments to ease the monetary policy and sustain liquidity of the interbank sector.
A limited rise of the WIBOR and/or EURIBOR rates is unlikely before 2021 if inflation escalates or the economic conditions in Poland and globally improve significantly after the COVID-19 pandemic is over and an effective medicine or vaccine is developed.
In terms of market rates, a relatively narrow spread between credit and deposit rates available to the Group is expected to continue.
Due to a steep reduction of interest rates on corporate deposits, the Group's finance income from interest on surplus cash pooling and time deposits will be very low in the coming periods.

Regulatory area
In H1 2020, the European Commission continued its work on delegated acts to the New Fertilizers Regulation (Regulation (EU) 2019/1009 of the European Parliament and of the Council of June 5th 2019). In the first half of 2020, the European Commission's advice on fertilizer product labelling was to be published, but the document will probably be formally adopted in October 2020. In April 2020, the Polish Centre for Accreditation commenced the accreditation of conformity assessment bodies for notification purposes in the area covered by the New Fertilizers Regulation. The Regulation will become fully binding in July 2022 after a three-year *vacatio legis* period. Currently, Poland is continuing to adapt the provisions of national legislation, including the Polish Fertilizers and Fertilization Act, to the requirements of the EU Regulation.
The European Commission is engaged in continued work on the European Green Deal concept to achieve the European Union's climate neutrality by 2050, by bringing down greenhouse gas emissions to zero and transforming the European Union into a fair, resource-efficient and competitive economy:

- On April 8th 2020, the European Commission opened a consultation process on the presentation of the sustainable finance strategy, which lasted until July 15th 2020.
- On May 14th 2020, public consultation began on a new EU strategy to adapt to climate change; which will continue until August 20th 2020.
- Consultation on the roadmap for the presentation of the sustainable chemicals strategy was open from May 9th to June 20th 2020.
- On May 20th 2020, the biodiversity strategy for 2030 was announced, designed to restore Europe's biodiversity for the benefit of people, climate and the planet. The 'Farm-to-Table' strategy was also announced, aimed at sustainable development throughout the value chain, expected to lead to a healthy and environmentally friendly food system.
- On May 27th, consultation on the European Union Climate Pact (EU Climate Pact) concluded; the main objective of the Pact is to engage the public in developing climate initiatives.
- June 3rd 2020 saw the closing of consultation on the roadmap for proposals of stringent emission standards for internal combustion engines vehicles.
- On June 8th 2020, consultation on the roadmap for a hydrogen strategy was closed.
- On June 11th 2020, the European Commission concluded public consultation on the revision of the Non-Financial Reporting Directive with a view to maximising public transparency.
- On June 23rd 2020, public consultation ended on the plan for raising the EU emission reduction targets to 50–55% in 2030 (relative to 1990), and on sectoral action and policy design related to the implementation of the European Green Deal.
- Commercial policy/post-COVID-19 world initiatives linked indirectly to the European Green Deal:
  - On May 26th 2020, the European Commission proposed a comprehensive recovery plan for Europe, fully leveraging the EU budget.
  - On June 16th 2020, consultation commenced on the roadmap for a review of the EU's trade and investment policy.

  - September 23rd 2020 is the closing day of public consultation on the publication of the White Paper concerning foreign subsidies, announced on June 17th 2020.
- On May 27th 2020, the European Commission published the updated 2020 Commission Work Programme. The revised document notes that, given the nature and extent of the crisis caused by the ongoing COVID-19 pandemic and the resulting need to focus on crisis management, a timetable for certain proposed actions has been reviewed. According to the updated 2020 Commission Work Programme, an expected revision of the EU ETS State Aid Guidelines is scheduled for Q4 2020.

In addition, the presentation of the sustainable finance strategy, as well as the revision of the Non-Financial Reporting Directive, were postponed until Q4 2020. The publication of a new EU strategy for climate change adaptation and legislative initiative aimed at enabling consumers to effect the 'green' transition were postponed until the first quarter of 2021.
The Act of May 7th 2020 Amending the Fertilizers and Fertilization Act and the Act on the National Plant Health and Seed Inspection, which implements the EU Fertilizers Regulation (EU) 2019/1009 into Polish law, was promulgated on June 22nd 2020 and came into force on June 23rd 2020.

- The EU legislation requires Member States to designate a notifying authority which will be responsible for the development and application of procedures necessary for the evaluation and notification of conformity assessment bodies for EU fertilizer products and for the monitoring of the notified bodies. In the Republic of Poland, the minister competent for the economy has been designated as such notifying authority.
- It was also proposed that the evaluation and monitoring of the assessment bodies be carried out by the Polish Centre for Accreditation.
- The amended Act stipulates that starting from August 1st 2021 granulated urea may only be used if it contains a urease inhibitor or has biodegradable coating. The reduction of ammonia emissions into the air is consistent with the European Green Deal concept (including the 'Farm-to-Table' Strategy) and aims to meet the requirements of the EU NEC Directive for Poland. Fertilizers containing a urease inhibitor improve the fertilization efficiency, because they work longer, which increases the nutrient availability time, while reducing fertilizer application costs and the number of fertilizer applications.
- In addition, the amended legal provisions transfer the competence for supervision of the placing of fertilizers and plant growth enhancers on the market from the Agricultural and Food Product Quality Inspection (IJHARS) to the National Plant Health and Seed Inspection (PIORiN).

June 24th 2020 saw the entry into force of Shield 4.0, i.e. the Act on Interest Subvention for Bank Loans Granted to Businesses Affected by COVID-19 and on Simplified Procedure for Approving Arrangements with Creditors in Connection with the Occurrence of COVID-19 of June 19th 2020 which, among other things, has introduced a new solution concerning relations between employers and employees.
On June 30th, the German Presidency of the Council of the European Union plans to put climate action high on its agenda for the six months from July to December 2020 as the achievement of climate neutrality is one of the main challenges currently facing the EU. Measures planned by the German Presidency also include strengthening of the emission allowance trading scheme and discussions on introducing a carbon border tax.
On June 30th 2020, the European Council's conclusions on the response to the COVID-19-induced crisis in the energy sector highlighted the need to encourage an emissions reduction and to facilitate the energy transition.

International trade policy
On January 31st 2020, the United Kingdom left the European Union in accordance with the withdrawal agreement. The transitional period will last until the end of 2020, with trade continuing on the pre-Brexit rules. Future trade relations between the European Union and the United Kingdom will likely be governed by a free trade agreement. Although several months of the negotiations failed to produce a trade agreement, the United Kingdom did not request an extension of the transitional period (this was only possible until the end of June, with the extension option of up to two years). The negotiations are expected to be stepped up in the second half of the year, with the end date set for December 31st 2020.
The European Commission is engaged in continued work on the expiry review of anti-dumping measures applicable to imports of ammonium nitrate originating in Russia, initiated in September 2019 following the submission of relevant applications by EU fertilizer manufacturers. The European Commission is obliged to decide, within 15 months after the review, whether to lift or keep the duties for another five years. The currently applicable anti-dumping measures on imports of ammonium nitrate from Russia were announced on November 16th 2018 following a review carried out at the

request of EU agricultural producers' associations. The decision is scheduled to be announced by December 22nd 2020.

Continued work is under way to challenge the European Commission's 2019 decision to impose an anti-dumping duty on UAN imports from Russia, the US and Trinidad and Tobago by Methanol Holdings (of Trinidad and Tobago) and Eurochem (of Russia).

Negotiations of the European Union's trade agreements with the following third countries are in progress: Mexico (the provisions of the agreement are now undergoing a legal review), Chile (the provisions of the agreements are being drafted through bilateral negotiations – their eighth round is scheduled to take place in September 2020), Uzbekistan (the provisions of the agreements are being drafted through bilateral negotiations – their next round is scheduled to take place in September 2020), Australia and New Zealand (the provisions of the agreements are being drafted through bilateral negotiations – their next rounds are scheduled to take place in September 2020), Indonesia (the provisions of the agreements are being drafted through bilateral negotiations – their latest round took place in June 2020), China (the provisions of the agreements are being drafted through bilateral negotiations – their next round is scheduled to take place in September 2020) and the United States.

At the end of April 2020, the European Commission published a list of applications for duty suspensions or tariff quotas which, after prior approval by EU Member States and further decision-making within the EU, are to take effect on January 1st 2021. The list includes Turkey's request for a duty-free tariff quota for 2-ethylhexan-1 ol.

On June 24th 2020, the Interdepartmental Commission on International Trade decided to discontinue two proceedings concerning imports of fertilizers into Ukraine, initiated on August 28th 2019 against imports of compound nitrogen and mineral fertilizers into Ukraine. As the proceedings were discontinued, no limits or additional duties will be imposed on imports of mineral fertilizers into Ukraine.

On June 25th, the US administration published a list of European goods on which retaliatory duties may be imposed by the US as a result of a dispute involving subsidies for Airbus. This was done pursuant to a provision of commercial law whereby the retaliatory list resulting from WTO sanctions is reviewed every six months for possible changes.

3. Risks and threats

Risks related to employee health and disruption in the Group's operations due to SARS-CoV-2 epidemic

Group – medium risk / Parent – medium risk

Risk related to health and safety of employees, potential disruptions in production and supply chain, and adverse financial consequences resulting from the public health emergency caused by the SARS-CoV-2 epidemic.

The Group is constantly monitoring the epidemic situation in Poland and analysing various scenarios relating to the current and projected consequences of the public health emergency affecting the Parent's and the Group's operations. The analyses and forecasts consider the introduced legislative changes and changes in behaviour in the market environment.

In order to enable the Grupa Azoty Group to operate in a possibly smooth manner, procedures have been put in place to ensure prompt response by appropriate services. In addition, recommendations were issued to disinfect premises, work from home (where possible) and maintain social distancing in order to reduce the risk of employees contracting the coronavirus.

A team has also been set up at the Group to coordinate activities undertaken in connection with the public health emergency.

In Q2 2020, the Grupa Azoty Group recorded a sharp decline in revenue, especially on lower sales volumes and prices of plastics and chemical products. Therefore, efforts are being made to attract new customers willing to buy the output.

There are no reports of increased staff absence that would disrupt the continuity of production.

Risks associated with the execution of investment projects

Group – medium risk / Parent – medium risk

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

Implementation of strategic investment projects is among the Group's major areas of activity, critical to its value growth. The Group's strategy envisages both implementation of projects in its core business areas and expansion into new segments.

Investment decisions are made on a case-by-case basis in the context of compliance with the Group's strategy, the project's expected economic viability, and the level of risk associated with achieving the targets. In consequence, considering the nature of the Group's investment projects, including the time required for their preparation and implementation and the impact of new regulations on their profitability, there is a risk that some investment projects included in the Group's investment programme will be modified, their completion will be delayed or that they will not be implemented at all.

Each investment project is implemented in line with internal procedures and is fully supervised by the Investment Corporate Supervision Department. Monthly reporting by Project Managers and quarterly corporate reporting have been put in place at the Parent. The reports contain analysis identifying potential increases in the risk of exceeding the deadline and/or overrunning the budget of a specific project.

Risk associated with price and availability of key raw materials

Group – medium risk / Parent – medium risk

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

Continuity of the Group's production depends on availability and quality of key raw materials. No assurance can be given that terms of business with some suppliers will not deteriorate or that the supply of raw materials used in production will not be interrupted. In particular, a limited number of potential suppliers and monopolisation on some markets for commodities used by the Group may be a source of risk. The continuity of supply of raw materials to the Group may be disrupted by factors such as technical failures, natural disasters, adverse market conditions resulting from the lack or limited supply of certain raw materials, significant adverse weather conditions or events of force majeure. Furthermore, no assurance can be given that contracts for the supply of raw materials will not contain clauses unfavourable to the Group companies, which would unduly or ineffectively protect the Group companies' interests in the event that a given supplier fails to perform or improperly performs its obligations under such contracts.

The key raw materials and feedstocks for fertilizer production at the Parent include ammonia, phenol, sulfur, natural gas and coal. The raw materials and feedstocks used by other Grupa Azoty Group companies also include benzene, propylene, phosphate rock and potassium chloride.

Risk related to price and availability of natural gas

Group – medium risk / Parent – medium risk

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

In its search for competitive sources of gas, the Group seeks to diversify both the geographical regions and suppliers of gas, providing details of its efforts in press releases and reports. Negotiations with gas suppliers are conducted at the Group level, which allows the Group to leverage its stronger bargaining position. The Parent 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 has concluded a long-term contract with a reliable strategic partner. The contract secures 80–100% of the needs, making it possible to partially diversify supplies. The contract provides for a price formula based on market quotations and allows the Parent to hedge prices based on forward products. The abolishment of tariffs on the Polish gas market and conclusion of a long-term contract with pricing formulas based on the German market (the largest gas market in Europe) limited the risk of having to pay significantly higher prices than the direct EU competitors.

Furthermore, the risk of supply constraints due to disruption in gas supplies to Poland has been mitigated by the extension of cross-border interconnectors, launch of the LNG terminal and Regulation (EU) 2017/1938 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply. Moreover, the gas availability and price risk is mitigated by the supplies of substitute and cheaper gas 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 is purchased on the Polish Power Exchange and supplied as part of within-day capacity.

Risk of major industrial accidents or technical failures disrupting the continuity of processes and operation of key production units

Group – medium risk / Parent – medium risk

The risk of major industrial accidents defined in accordance with the Environmental Protection Law or technical failures disrupting the continuity of processes and operation of production units of key importance for the implementation of the enterprise's objects.

The Parent is classified as an establishment with a high risk of a major industrial accident (upper-tier establishment – UTE). Therefore, the Company has developed and implemented incident prevention programmes and regularly monitors and implements legal safety requirements, including requirements of the SEVESO III Directive. The Parent has reliable safety systems and preventive and prediction measures in place at all organisational and technological levels, including occupational health and safety as well as protection against industrial accidents. The relevance of adopted safety measures is assessed by internal and external inspection authorities as well as by accreditation/certification bodies.
The strategy for managing the risk of major industrial accidents or technical failures focuses in the first place on measures to prevent critical situations, and if any such event occurs, the risk is shared with the insurer.
Measures to prevent emergency situations at the Grupa Azoty Group companies include ongoing monitoring of hazards related to technological processes and operation of machinery and equipment, ongoing assessment of their technical condition, and monitoring of threats in storage and transport. The Parent's plants and units are equipped with safety and protection systems to minimise the risk of major accidents and environmental contamination, as well as risks to human life and health. The Group's units are Best Available Techniques (BAT) compliant. The units are kept in a proper working order also by carrying out scheduled technical stoppages and maintenance shutdowns, periodic inspections and routine rounds as required in the technological and job instruction manuals. The relevant execution resources are provided.
If a failure or accident occur, they are thoroughly analysed in order to identify their causes. Based on such analysis, preventive measures are taken to minimise the risk of such incidents taking place again.

Risk of higher fertilizer imports
Group – high risk / Parent – high risk
Risk of failure to achieve target revenue from sales of fertilizers due to higher fertilizer imports. The risk of periodically increasing volumes of fertilizers imported into Poland from other countries and worsened economics as a result of squeezed product margins caused by the emergence of new market players and a significant volume of imported fertilizers. Consequently, there is a risk of failure to achieve targeted revenue from sales of fertilizers.
Recent years saw a significant increase in imports of NP and NPK fertilizers as well as UREA, AN, UAN and CAN fertilizers both to the EU and Poland. Competitors from eastern markets have access to cheap raw materials, such as natural gas, potassium chloride and phosphate rock, which are the key cost components in fertilizer production. Fertilizer production costs in the European Union are driven by a number of regulations, including limits on CO_2 emissions, which are not applied in Eastern European or Asian markets.
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 by adapting its sale/pricing policies to market developments, for instance by adjusting price paths to current trends on the European and key global markets and taking steps to optimise the production costs and expand the portfolio of products and services offered to customers.

Risk of tightening of EU or local regulations which would restrict the use or application of products
Group – medium risk / Parent – medium risk
The Group monitors and implements new requirements on an ongoing basis. The Group takes an active part in the work of registration consortia and European associations, and cooperates with Polish institutions to respond to upcoming changes in legislation.
In each case, the impact of new regulations on operations and marketed products is reviewed. Amendments to EU directives and regulations applicable to the Group's key 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.
The following risks are being analysed: restrictions on sales of nitrogen fertilizers owing to tighter emission limits for greenhouse gases, ammonia, and reducing water pollution caused by nitrates from agricultural sources, as well as preventing the process from continuing.
The risks of more stringent EU regulations on the content of heavy metals (cadmium, nickel and lead) in fertilizer products, restrictions on sales of certain plastic materials due to stricter requirements on plastic recycling, and potential restrictions on sales of iron-chromium catalyst, resulting from a potential future ban on using chromium compounds are also being monitored.

Risk of rising prices of carbon emission allowances

Group – medium risk / Parent – medium risk

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

To supervise this risk, the Grupa Azoty Group has established an EU ETS Management Committee and an EU ETS Executive Team. In order to mitigate the risk of a negative impact of CO_2 emissions trading prices on the results delivered by the Company and other key Group companies, the emission allowances market is monitored on an ongoing basis, and emission allowances are purchased on the futures market on a rolling basis, with additional futures transactions executed if the market conditions are favourable. Such approach ensures mitigating the risk that allowances would be purchased at unfavourable prices.

In addition, a part of future emission allowances are purchased under forward contracts, i.e. purchase of emission allowances in transactions that give rise to an obligation to deliver allowances on future dates, immediately prior to their redemption. The potential risk related to the drawdown of existing trading limits at banks has been mitigated by signing relevant documents with another bank, enabling the purchase of greenhouse gas emission allowances under forward contracts and the execution of a procurement plan within the trading limit granted by that bank.

The policies and procedures in place are designed to ensure smooth trading in CO_2 emission allowances, ensure its efficiency, minimise the cost of operation of the EU Emissions Trading Scheme at the Grupa Azoty Group, and reduce the risks associated with participation in the scheme. They also aim to reduce spending on the purchase of emission allowances by entry into forward transactions, which maximally delay the related cash outflows.

Currency risk

Group – medium risk / Parent – medium risk

Risk of excessive finance costs resulting from foreign exchange losses.

The Group has positive exposure to the euro and the US dollar, which is hedged based on ongoing monitoring of movements in the euro and US dollar exchange rates. The Group companies hedge their currency exposures using natural hedging, currency forwards and, to a lesser extent, options. Since 2014, the Group has applied the Financial (Currency and Interest Rate) Risk Management Policy. In 2015, a centralised financing model was put in place at the Group, supporting a long-term hedge horizon by contracting a portion of long-term financing in the form of a euro-denominated credit facility. As of 2017, the Group also reduces its euro-denominated currency exposure by increasing natural hedging.

The Group has in place a Risk Committee which analyses and determines the consolidated currency exposure of the Group, and recommends target levels and time horizons of hedges, types of hedging instruments, and exchange rates for hedge transactions. Hedge transactions are executed by the Group companies with the hedged currency exposure. The methods applied by the 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 completely. In addition, currency risk may affect the domestic nitrate fertilizer market in the context of bilateral trade with other EU countries. Strong fluctuations in exchange rates may affect the Group's business, financial condition or performance.

The Group applies hedge accounting with respect to the relationship between the long-term EUR loan and an expected excess of operating cash inflows over outflows in the foreign currency. In line with the hedging relationship, the long-term EUR loan is repaid out of the excess inflows.

Interest rate risk

Group – low risk / Parent – low risk

The Parent's net exposure to the interest rate risk is partly limited as the Parent has credit facilities bearing variable interest at 1M WIBOR plus the banks' margins. At the same time, the Parent grants the Grupa Azoty Group companies loans bearing interest at the same variable rate and a slightly higher margin. From the Group's perspective this risk is not hedged, so it is limited by entering into some credit facility agreements (in EUR) based on a fixed interest rate.

The Group also uses surplus cash in PLN and EUR to balance the debt owed by the Group companies in PLN and EUR under Overdraft Agreements connected with physical cash pooling agreements (from 2016 in PLN and from 2018 in EUR). This limits the Group's net exposure to interest rate risk. In addition, by 2017 the Company had utilised the long-term fixed-rate loan facility from the European Investment Bank (EIB), which was disbursed for 10 years in tranches up to an agreed aggregate amount in the euro. The Group also has access to transaction limits with banks, which enable it to enter into

fixed-rate hedging transactions if the risk of a significant increase in financing costs due to higher variable market interest rates grows. Currently, the base interest rates are at a minimum level (in PLN) or in the negative territory (in EUR), triggering a recent significant decrease in finance costs.
Furthermore, the Group has implemented a Financial (Currency and Interest Rate) Risk Management Policy. The Group has a Risk Committee which periodically assesses the consolidated exposure to interest rate risk of the Parent and other key Group companies, and examines the validity of measures designed to mitigate that risk.
When market interest rates are low, risk indicators are calculated and risk assessment is performed based on a scenario analysis with regard to the Parent's and the Group companies' actual exposure to that risk. If the risk exposure and/or market interest rates significantly increase, the Risk Committee considers calculating the value exposed to interest rate risk in accordance with the VaR methodology. Interest rate risk hedges should be executed by the Parent as the entity which centrally manages the Group's finances. Under the loan agreement with the European Investment Bank, the Group is obliged to keep its consolidated EBITDA to net interest expense ratio at no less than 6x.
In 2020, due to the COVID-19 pandemic, interest rates in PLN were significantly reduced, with the NBP base rate down from 1.5% to 0.1%. At the same time, base interest rates in EUR were negative. Despite growing inflation, current market forecasts and efforts taken by the governments of developed countries worldwide to support the economy and ensure liquidity do not imply any significant interest rate increases over the next few years.

Liquidity risk
Group – low risk / Parent – low risk
Liquidity risk is the risk of unexpected cash shortage or unavailability of credit facilities, resulting in temporary loss of ability to meet financial liabilities or the need to raise financing on unfavourable terms.
The Group is exposed to financial liquidity risk consisting in the Group's inability to repay its financial liabilities when they fall due. Risk of failure to raise new financing or refinance existing debt can increase liquidity risk.
The Parent has established the Grupa Azoty 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 and its companies. The Parent is also the agent under the umbrella agreements, authorised to allocate sub-limits of those credit facilities to individual Group companies. The Parent has entered into an intragroup financing agreement with the key Group companies, under which it has provided the companies with financing limits. On October 1st 2016, the Group launched a physical cash pooling service in PLN and, on November 2nd 2018, also in EUR, enabling the Group companies to take advantage of the Group's overall liquidity position, including for short-term financing of deficits at some companies with surpluses at others. As a result, the Group has access to credit facilities/surplus cash as well as mechanisms for their free redistribution, which significantly reduces the probability of short-term liquidity loss by the Parent or individual Group companies. The mechanism also significantly reduces the Group's finance costs.
The above instruments effectively satisfy the Group's current liquidity needs and provide financing for its investment programme. However, if there is an accumulation of both external and internal negative factors, the liquidity risk mitigation methods applied by the Group may prove insufficient, which may have a material adverse effect on the Group's operations, financial condition and results. Therefore, the key issue is to ensure compliance with the covenants provided for in the credit facility agreements, in particular the ratio of the Group's net debt to consolidated EBITDA. This ratio is calculated on a rolling 12 month basis and monitored semi-annually, i.e. at the end of the first half of a calendar year and at the end of the year. The Group monitors projections concerning changes in this ratio on the basis of its annual budget and by preparing long-term budgets, taking into account both base-case and conservative scenarios. However, in the event of accumulation of adverse macro- and microeconomic factors, such risk may materialise. At present, none of the covenants under the credit facility agreements are expected to be breached in this respect. Therefore, operating and financial performance must be monitored on an ongoing basis, and operating expenses and capital expenditure at individual Group companies must be monitored and managed effectively.

Risk related to the security of IT systems
Group – medium risk / Parent – medium risk
In their operations, the Group companies use IT systems whose operation can be disrupted by errors in software or ICT infrastructure failures. In addition, some of the systems may be subject of cyber attacks, in particular those taking advantage of defects or security gaps in ICT systems, 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 security of ICT systems is monitored and ICT incident handling procedures have been implemented.

4. Other information

4.1. Other significant events

Progress of the *Polimery Police* project

Technical stream

In the first half of 2020, Grupa Azoty POLYOLEFINS (a special purpose vehicle) continued to implement *Polimery Police*, the Grupa Azoty Group's key investment project, comprising the construction of propylene and polypropylene units with auxiliary systems and associated infrastructure, as well as a port terminal with feedstock storage facilities (the "Project"). After the preparatory work, carried out for a number of years, had finally been completed on December 23rd 2019, the Project's General Contractor Hyundai Engineering Co., Ltd. (the "General Contractor" or "Hyundai") was issued a Full Notice to Proceed. The Project is being delivered on a turn-key lump-sum basis.
Currently, Grupa Azoty POLYOLEFINS is implementing the stage of construction and assembly work on the Project. As at the date of this Report, the General Contractor had obtained all permits for the performance of critical path work. Under the building permits, work is being carried out on all the sub-projects: (I) handling and storage terminal (marine gas terminal), (II) PDH unit, (III) PP unit, (IV) auxiliary systems and inter-unit connections, (V) PP logistics. Moreover, the development of a detailed engineering design (3D model) is nearing completion.
Hydrogen, process steam, demineralised water and natural gas connections have been installed as part of the ongoing construction work, while the piling work using DSM and CFA columns (polypropylene logistics area) has been completed. In addition, work has begun to concrete the foundations and assemble steel trestle frames on the premises of the production plant and the handling and storage terminal. Also hydraulic engineering work related to the wharf construction is in progress at the handling and storage terminal; the foundations for propane and ethylene tanks have been laid and installation of the tanks has begun.
The foundation work for key facilities and units is under way on all the sub-projects.
On January 29th 2020, Grupa Azoty POLYOLEFINS and Przedsiębiorstwo Robót Czerpalnych i Podwodnych sp. z o.o. concluded a contract for the 'Planning and performance of dredging work to increase depth from 10.5 to 12.5 metres (within the port terminal on the Police channel) as part of the *Polimery Police* project' for a price of PLN 15.3m.
On May 7th 2020, Grupa Azoty POLYOLEFINS and Hyundai signed annex 1 ("Annex 1") to the EPC contract for the *Polimery Police* project, dated May 11th 2019 (the "EPC Contract"). Annex 1 provided for amendments to the scope of work to be performed by Hyundai, amendments to reflect the current status of optional work under the EPC Contract, amendments to align the EPC Contract with the amended terms of the licence agreement concerning the UNIPOL® process for the polypropylene unit, amendments with respect to the insurance cover and implementation schedule required by the providers of financing for the Project, as well as other formal changes. Annex 1 did not change the amount of payment due to Hyundai or the Project's key completion deadlines.

Since the SARS-Cov-2 pandemic was declared, and as a result of the related restrictions and legislative changes, i.e. since March 2020, Grupa Azoty POLYOLEFINS has recorded slower progress on the construction work due, among other things, to the difficulty in mobilising its employees. However, no significant delays on the Project schedule have been recorded so far. Nevertheless, in connection with the General Contractor's request to amend the EPC Contract as described below, Grupa Azoty

POLYOLEFINS has identified the risk of delays on the Project implementation schedule and increase in its budget due, among other factors, to the impact of the COVID-19 pandemic.

Financial stream

On May 31st 2020, Grupa Azoty S.A., Grupa Azoty Zakłady Chemiczne Police S.A., Grupa Azoty POLYOLEFINS, Grupa Lotos S.A., Hyundai, and Korea Overseas Infrastructure & Urban Development Corporation ("KIND") signed agreements for financing of the *Polimery Police* project. Grupa LOTOS agreed to invest in the Project a total amount of PLN 500m by: (i) making a cash contribution of PLN 300m to cover the increased share capital of and acquire new shares in Grupa Azoty POLYOLEFINS and (ii) providing Grupa Azoty POLYOLEFINS with a subordinated loan of PLN 200m.
Further, Hyundai agreed to invest a total of USD 73m in the Project by making a cash contribution to cover the increased share capital of and acquire new shares in Grupa Azoty POLYOLEFINS, while KIND agreed to invest a total of USD 57m in the Project by (i) making a cash contribution of USD 5m to cover the increased share capital of and acquire new shares in Grupa Azoty POLYOLEFINS and (ii) providing Grupa Azoty POLYOLEFINS with a subordinated loan of USD 52m.
In accordance with the Project financing agreements, Grupa Azoty S.A. agreed to contribute additional equity to Grupa Azoty POLYOLEFINS, of up to PLN 297m, and to extend a subordinated loan of PLN 344m. Moreover, the Company's subsidiary Grupa Azoty Zakłady Chemiczne Police S.A. agreed to contribute additional equity to Grupa Azoty POLYOLEFINS, of up to PLN 335m (in addition to the equity contributed by May 31st 2020), and to extend a subordinated loan of PLN 388m. The equity contributions from Grupa Azoty S.A. and Grupa Azoty Zakłady Chemiczne Police S.A. were made by July 21st 2020. On August 3rd 2020, the District Court for Szczecin-Centrum in Szczecin, 13th Commercial Division of the National Court Register, registered an increase in the share capital of Grupa Azoty POLYOLEFINS from PLN 467,339,000 to PLN 599,283,310. Currently, the total number of shares of all issues is 59,928,331, with a par value of PLN 10 per share. The shareholding structure remained unchanged, with Grupa Azoty S.A. holding 47% and Grupa Azoty Zakłady Chemiczne Police S.A. – 53% of the shares.
Disbursement of the subordinated loan instalments commenced in August. The entire amount of the subordinated loans is to be disbursed to Grupa Azoty POLYOLEFINS by the end of October 2020.
On May 31st 2020, a credit facility agreement was concluded with a syndicate of financial institutions, comprising: Alior Bank S.A., Bank Gospodarstwa Krajowego, Bank Ochrony Środowiska S.A., Bank Polska Kasa Opieki S.A., BNP Paribas Bank Polska S.A., the European Bank for Reconstruction and Development, Industrial and Commercial Bank of China (Europe) S.A. Poland Branch, mBank S.A., Powszechna Kasa Oszczędności Bank Polski S.A., Powszechny Zakład Ubezpieczeń S.A., Powszechny Zakład Ubezpieczeń na Życie S.A., PZU Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych BIS 2 and Santander Bank Polska S.A. (the "Syndicate"). Bank Polska Kasa Opieki S.A. is the bank coordinating the Project financing transaction. Under the credit facility agreement, the Syndicate will advance to Grupa Azoty POLYOLEFINS:

- a term loan facility of up to EUR 487.8m,
- a term loan facility of up to USD 537.7m,
- a VAT facility of up to PLN 150.0m,
- a working capital facility of up to USD 180.0m.

For more information on these facilities, see Current Reports No. 37/2020 and 38/2020.

Regulatory stream

On January 17th 2020, the Polish Office of Competition and Consumer Protection (UOKiK) cleared the proposed concentration whereby the Parent, Hyundai Engineering Co., Ltd., Korea Overseas Infrastructure & Urban Development Corporation and Grupa LOTOS S.A. would establish a joint venture, i.e. Grupa Azoty POLYOLEFINS.
The General Contractor has obtained all permits for the performance of critical path work under the Project.

Other significant events

In June 2020, the General Contractor notified Grupa Azoty POLYOLEFINS of the need to commence negotiations on possible amendments to the EPC Contract following the occurrence of unforeseen circumstances during the Project implementation, resulting from the outbreak of the SARS-Cov-2 pandemic and some other factors. On July 28th 2020, the Company received a request from the General Contractor to amend the EPC Contract by, *inter alia*, extending the Project completion deadline and increasing the price payable to the General Contractor. As at the issue date of this Report, negotiations were being held with the parties involved in the Project, concerning the possibility of amending the EPC Contract. Signing a relevant annex to the EPC Contract will depend on whether the negotiations held with all the parties involved are concluded, including whether the requisite approvals are given by the syndicate of institutions financing the *Polimery Police* project and the required corporate approvals are obtained.

Grupa Azoty on the 3D printing materials market

On March 5th 2020, Grupa Azoty announced the launch of commercial sales of FDM technology products manufactured at the 3D Printing Materials Centre, offered under the Tarfuse® brand.

The basic raw material for the production of filaments is the high-quality polyamide 6 and its modified varieties produced at Grupa Azoty S.A. The Tarnów-based Centre will also launch a 3D printing campaign targeted at businesses, scientists, and enthusiasts of incremental technologies.

With the launch of sales of FDM (fused deposition modelling) 3D printing filaments, the R&D programme pursued by Grupa Azoty since 2017 entered the commercialisation phase. Under the Tarfuse® brand, Grupa Azoty offers basic, industrial-grade and speciality filaments. Work is also under way to develop speciality polymer powders for SLS printing as well as light-curing polymers (photopolymers) for the SLA and DLP technologies. The 3D Printing Materials Centre, engaged in the research into and production of filaments, is located at the Research and Development Centre in Tarnów.

In order to popularise the FDM technology, Grupa Azoty Group will launch the 3D Printing Academy, in which the 3D Printing Materials Centre personnel together with technology partners will provide training in several cities across Poland for scientists, business owners, and enthusiasts of 3D print technologies. The training sessions will be devoted to the 3D design of incremental technologies and the properties of structural polymers dedicated to spatial printing, and will also include presentation of printout case studies: from concept to functional detail. An online store with filaments for 3D printers was launched in early July 2020.

Launch of granulated fertilizer unit in Puławy

Grupa Azoty PUŁAWY has commenced pre-commissioning and commissioning of the facility for production of ammonium nitrate-based granulated fertilizers. The combined production capacity of the two new lines is 2,600 tonnes of fertilizers per day (up to 820,000 tonnes per year). Granulated ammonium nitrate and calcium nitrate will meet the growing demand from large-scale agriculture.

The completed project’s budget was PLN 430m. The granulated ammonium nitrate (AN – 32% N) line and the calcium ammonium nitrate (CAN – 27% N) line have the daily production capacities of 1,200 tonnes and 1,400 tonnes, respectively. Apart from the production lines, the project included the construction of logistics and auxiliary facilities for unloading and processing of raw materials, as well as packaging and storage of finished products.

The use of larger size fertilizer granules, thanks to a wider spread pattern allowing wide sowing, improves fertilizing efficiency, especially in large-area farms. They are therefore a product of first choice for foreign customers, and demand for such fertilizers is expected to grow steadily also in the Polish market given the ongoing land consolidation process.

The mechanical granulation process at the new plant makes it possible to produce fertilizers with a much more diversified composition than the prilling technology used so far. The production is also more environmentally friendly and safer, as is the transport of fertilizer products. Following completion of the upgrade and extension of the nitric acid unit in 2021, Grupa Azoty PUŁAWY will be Europe’s most advanced nitrogen complex.

Going concern status of Zakłady Azotowe Chorzów S.A.

Following a notification made by the Management Board of Grupa Azoty Zakłady Azotowe Chorzów S.A. in accordance with Art. 397 of the Commercial Companies Code to the effect that that company’s most recent balance sheet showed a loss exceeding the aggregate of the company’s capital reserve, statutory reserve funds and one-third of the share capital, the Extraordinary General Meeting of Zakłady Azotowe Chorzów S.A. passed resolutions on the company’s continued existence as a going concern.

The resolutions were based on the Development Plan for 2020–2022 prepared by the Management Board of Grupa Azoty Zakłady Azotowe Chorzów S.A.

Information on the effects of the COVID-19 pandemic

In connection with the Act on Special Measures to Prevent, Counteract and Combat COVID-19, Other Infectious Diseases and Related Crisis Situations (Dz.U. of 2020, item 374, as amended) and the pandemic announced by the World Health Organisation due to the spread of coronavirus SARS-CoV-2 which causes the COVID-19 disease, the Group has taken immediate measures to protect its business against the consequences of the pandemic. In order to enable the Parent and other Group companies to operate in a possibly smooth manner, procedures have been put in place to ensure prompt response by relevant units. In addition, the Grupa issued instructions to mitigate the risk of infection among its employees, including in particular:

- detailed instructions and guidelines on monitoring the health of the Group's employees and the health of trading partners' employees who come in physical contact with the Group's employees,
- reducing the number of meetings as well as domestic and foreign business travel, and using teleconferencing, videoconferencing and instant messengers as much as possible,
- instructions to enable remote work to the extent it does not disrupt the work of individual organisational units,
- instructions to provide the Group employees with additional personal protection and hygiene supplies.

The Group also monitors the market situation with respect to sales of products and supplies of key raw materials and feedstock, as well as the situation on financial markets in the context of its currency and interest rate risk exposures. Measures of this type have been taken at the Parent and all its subsidiaries, including the COMPO EXPERT Group, with respect to operations at all locations where the companies are present.

Plastics

The Grupa Azoty Group's operations in the Plastics segment are directly related to the electrical engineering and automotive industries, where the effects of the pandemic have been the strongest. Administrative restrictions introduced at the end of March 2020 to limit the spread of COVID-19 affected demand and caused a drop in caprolactam and polyamide prices, both on the European and Asian markets. Before the demand for Grupa Azoty products declined, in March 2020 production activities were discontinued by certain manufacturers in all segments of the plastics value chain. In Q2 2020, the plastics segment reported a 43% year-on-year decline in revenue, attributable to the COVID-19 pandemic and disruption to the demand and supply balance on the market. A gradual recovery is expected after the traditional slowdown in summer months.

Agro Fertilizers

The COVID-19 pandemic had no material effect on the implementation of contract sales schedules in the second quarter of 2020. In Q2 2020, revenue fell by approximately 11% year on year despite higher sales volumes, due to lower prices.
However, there were delays in payments for the goods supplied, but their scale in the second quarter of 2020 was not significant.
Situation in the second half of 2020 will largely depend on the financial condition of the agricultural sector, where weaker competition is being seen, which may adversely affect demand for fertilizers.

Chemicals

In April 2020, the prices of oxo products fell as the result of a downtrend in propylene prices and lower market demand caused by the COVID-19 situation. Since early June 2020, a recovery has been seen in the market of alcohols and plasticizers, accompanied by an increase in prices driven by higher prices of propylene. In Q2 2020, production of oxo alcohols was maintained at maximum levels, and in the case of plasticisers 75% of the production capacity was utilised. The Q2 2020 revenue from oxo alcohols was 32% down on the corresponding period of the previous year.
Deteriorated demand and price levels were also seen in the melamine market. In Q2 2020, revenue from melamine sales was 38% lower year on year. In H2 2020, demand for melamine is expected to recover gradually.
In the titanium white area, no significant impact of COVID-19 was identified in relation to the scale of the Grupa Azoty Group's business, despite a marked decline in demand on certain markets.
The crisis related to the spread of the COVID-19 pandemic also affected the RedNOx product market. Lower fuel consumption supressed demand for NOXy products (the main product in this business area). In other industries, such as power plants or glass, paper and cement manufacturers, where the segment's products are also used, revenue was also lower. In the case of RedNOx products, in Q2 2020 sales were down 5% year on year.

The Grupa Azoty Group is taking steps to minimise the impact of the COVID-19 pandemic on the Group's operations, for instance by using solutions available on the market to support working capital management, optimise the costs of feedstock procurement and adjust the production volumes to sales opportunities. Having recorded revenue declines, the Parent and some of its subsidiaries took steps to benefit from the wage subsidy scheme under the Guaranteed Employee Benefits Fund. The estimated amount of support for the Grupa Azoty Group is approximately PLN 50m, and the funds are expected to be received by the Group companies mostly in Q3 2020.

It should be noted that the Group's financial condition is stable. The Group has additional sources of liquidity, namely cash held, whose amount as at June 30th 2020 was PLN 957m (including cash held as bank deposits), undrawn credit facilities, whose amount as at June 30th 2020 was PLN 2,550m, and

available reverse factoring limit of PLN 242m, adding up to a total of PLN 3,749m. As at August 31st 2020, the amount of cash held was PLN 353m, the amount of available credit limits was PLN 2,443m, and the available limit of the reverse factoring facility was PLN 421m, adding up to a total of PLN 3,217m.
The decrease in the Group's total cash and available limits after the reporting date was largely attributable to the financing of expenditure on the *Polimery Police* project.

In the opinion of the Parent's Management Board, the preventive measures taken have mitigated the risk to business continuity, but the observed impacts of the COVID-19 pandemic are bound to have a materially adverse short- and medium-term effect on the operations of the Grupa Azoty Group, especially
in the Plastics and Chemicals segment. However, these effects will not jeopardise the Group's market position, its liquidity or ability to pursue strategic investment projects.

Selection of another contractor under the New Energy Concept
A consortium of Polimex Energetyka Sp. z o.o. and Polimex Mostostal S.A. will be the contractor responsible for building a gas-fired peak-load/reserve boiler house with a capacity of 100 tonnes of steam per hour at Grupa Azoty KĘDZIERZYN.
The new unit will operate in conjunction with steam generators at the existing CHP plant, serving as a back-up source of steam if they are out of service. The project will be implemented over 36 months, at a cost of nearly PLN 91.6m.
The construction of a new boiler house is an important element of the New Energy Concept, launched at Grupa Azoty KĘDZIERZYN in 2019. Its key envisaged outcome is the use of heat generated in production processes to make electricity and other energy carriers. The project, comprising a package of seven sub-projects, is scheduled for completion in 2023.

For other events after the reporting date, see Note 22 to the interim condensed consolidated financial statements for the six months ended June 30th 2020.

4.2. Significant agreements

The agreements are presented in chronological order.
In H1 2020 and as at the date of this Report for H1 2020, none of the Group companies defaulted on credit facilities or other borrowings under significant agreements or breached any material covenants under significant credit facility or other loan agreements.

Material agreements

Agreements and annexes to contracts of a financial nature

Annexes to credit facility agreements
On January 30th 2020, the Parent and the European Investment Bank executed Annex 4 to the financing agreement of May 28th 2015, as amended, and Annex 3 to the financing agreement of January 25th 2018.
Given the expiry of the availability period of the European Investment Bank's facility on January 25th 2020, an annex to the facility agreement was executed extending the said period until January 25th 2021 and extending the deadlines for delivery of selected projects under the investment and R&D programmes by one year.

Annexes to the physical cash pooling agreement with PKO BP
On February 19th 2020, the Parent, together with other Grupa Azoty Group companies, and PKO Bank Polski S.A. signed Annex 7 to the PLN physical cash pooling agreement of September 20th 2016, as amended, in connection with the merger of Prozap Sp. z o.o. and Koncept Sp. z o.o.

On March 25th 2020, the Parent and the Grupa Azoty Group companies entered into Annex 8 to the agreement with PKO Bank Polski S.A. to amend the terms of interest accrual, and on June 29th 2020 they entered into Annex 9 changing the rates of interest on credit balances.

After the reporting date, on August 10th 2020, the Parent and the Group companies entered into Annex 10 to the above-mentioned agreement with PKO Bank Polski S.A., concerning exclusion of Grupa Azoty Folie Sp. z o.o. w likwidacji (in liquidation) and Grupa Azoty POLYOLEFINS from the physical cash pooling arrangement.

Grupa Azoty POLICE's overdraft facility from Bank Gospodarstwa Krajowego
On January 24th 2020, the PLN 80m overdraft facility agreement with Bank Gospodarstwa Krajowego expired. Accordingly, Grupa Azoty POLICE carried out a RFP procedure for a PLN 100m overdraft

facility. The best proposal was submitted by Bank Gospodarstwa Krajowego, and consequently a PLN 100m overdraft facility agreement was concluded on March 5th 2020 for the period until January 23rd 2023.

Credit line agreements concluded by COMPO EXPERT
In March 2020, COMPO EXPERT increased the credit line at Banco Santander granted under an agreement concluded in September 2019 from EUR 5m to EUR 6m. The agreement is valid for an indefinite period.

In April 2020, COMPO EXPERT's credit line at Commerzbank granted in the amount of EUR 5m under an agreement of May 2019 was increased by PLN 3m. It was arranged to replace COMPO EXPERT Spain S.L.'s EUR 3m credit facility with Banco Sabadell, maturing in June 2020, which was not extended.

Annex to the multi-purpose credit facility agreement with PKO BP
On April 22nd 2020, the Parent, together with Grupa Azoty Group companies, and PKO Bank Polski S.A. executed Annex 6 to the multi-purpose credit facility agreement of April 23rd 2015 (as amended), changing the pricing terms for services related to guarantees and letters of credit.

Credit facility agreements for the *Polimery Police* project
On May 31st 2020, Grupa Azoty POLYOLEFINS signed a credit facility agreement to secure senior debt financing necessary to implement the *Polimery Police* project (the "Project").
The facility agreement was concluded between Grupa Azoty POLYOLEFINS and a syndicate of financial institutions comprising: Alior Bank S.A., Bank Gospodarstwa Krajowego, Bank Ochrony Środowiska S.A., Bank Polska Kasa Opieki S.A. (the bank coordinating the Project financing transaction), BNP Paribas Bank Polska S.A., the European Bank for Reconstruction and Development, Industrial and Commercial Bank of China (Europe) S.A. Poland Branch, mBank S.A., Powszechna Kasa Oszczędności Bank Polski S.A., Powszechny Zakład Ubezpieczeń S.A., Powszechny Zakład Ubezpieczeń na Życie S.A., PZU Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych BIS 2 and Santander Bank Polska S.A. (the "Syndicate"), as well as ICBC Standard Bank PLC (the "Credit Facility Agreement").
The Credit Facility Agreement provides for the following loans to be granted by the Syndicate:

- a term loan of up to EUR 487.8m, mainly for financing or refinancing the Project costs during the construction phase. The final repayment date is November 29th 2030, with the proviso that once the conditions defined in the Credit Facility Agreement have been met, it may be extended until December 15th 2035. The loan bears interest at a variable rate based on the EURIBOR reference rate;
- a term loan of up to USD 537.7m, mainly for financing or refinancing the Project costs during the construction phase. The final repayment date is November 29th 2030, with the proviso that once the conditions defined in the Credit Facility Agreement have been met, it may be extended until December 15th 2035. The loan bears interest at a variable rate based on the LIBOR reference rate;
- a VAT facility of up to PLN 150m, for financing or refinancing VAT paid on the Project costs during the construction phase. The final repayment date falls 6 (six) months after the actual Project completion date, but not later than November 30th 2024. The facility bears interest at a variable rate based on the WIBOR reference rate;
- a working capital facility of up to USD 180m to finance or refinance Polyolefins' operating costs and working capital. The final repayment date falls 5 (five) years after the financial close date, but not later than November 29th 2025. The facility bears interest at a variable rate based on the LIBOR reference rate.

The key security instruments for the credit facilities include: mortgage over Grupa Azoty POLYOLEFINS' (ownership or perpetual usufruct) rights to real property, registered pledges over Grupa Azoty POLYOLEFINS' all assets and rights, registered and financial pledges over receivables under Grupa Azoty POLYOLEFINS' bank accounts, registered and financial pledges over all Grupa Azoty POLYOLEFINS shares held by the shareholders of Grupa Azoty POLYOLEFINS, declarations of voluntary submission to enforcement, as well as security assignments.
In addition, in connection with the Credit Facility Agreement, the Parent and Grupa Azoty POLICE entered into a support loan provision guarantee agreement with Grupa Azoty POLYOLEFINS and Bank Polska Kasa Opieki S.A. (acting as the facility agent and security agent) for up to EUR 105m in the form of a subordinated loan, the main objective of which is to cover a potential liquidity deficit, construction cost overruns, operating costs and debt service costs in the operation phase.
Funds under the Credit Facility Agreement will be made available after the conditions precedent defined therein have been fulfilled.

Execution of transaction documents for equity investment in and financing of the *Polimery Police* project

On May 31st 2020, the Parent, Grupa Azoty POLICE (the "Original Sponsors") and Grupa Azoty POLYOLEFINS concluded with Grupa Lotos S.A. ("Grupa Lotos"), Hyundai Engineering Co., Ltd ("Hyundai") and Korea Overseas Infrastructure & Urban Development Corporation ("KIND", together with Grupa Lotos and Hyundai: the "Co-Sponsors") agreements concerning the conditions of an equity investment and subordinated debt financing (the "Transaction Documents") in connection with the Azoty POLYOLEFINS Group's *Polimery Police* project (the "Project").

The following agreements were executed as part of the Transaction Documents:

- investment agreement between the Parent, Grupa Azoty POLICE, Grupa Azoty POLYOLEFINS and Grupa Lotos,
- loan agreement between Grupa Azoty POLYOLEFINS and Grupa Lotos,
- investment agreement between the Parent, Grupa Azoty POLICE, Grupa Azoty POLYOLEFINS, Hyundai and KIND,
- loan agreement between Grupa Azoty POLYOLEFINS and KIND,
- loan agreement between the Parent and Grupa Azoty POLYOLEFINS,
- loan agreement between Grupa Azoty POLICE and Grupa Azoty POLYOLEFINS,
- shareholders' agreement between all the Parties.

Under the Transaction Documents, Grupa Lotos agreed to invest a total amount of PLN 500m in the Project (the "Lotos Investment") through:

- cash contribution in a total amount of PLN 300m to cover the increased share capital and acquire new shares in Grupa Azoty POLYOLEFINS,
- provision of a PLN 200m subordinated loan to Grupa Azoty POLYOLEFINS.

Further, Hyundai agreed to invest a total of USD 73m in the Project (the "Hyundai Investment") by making a cash contribution to cover the increased share capital and acquire new shares in Grupa Azoty POLYOLEFINS, while KIND agreed to invest a total of USD 57m in the Project (the "KIND Investment" and together with the Lotos Investment and the Hyundai Investment – the "Co-Sponsors Investment") through:

- cash contribution of USD 5m to cover the increased share capital and acquire new shares in Grupa Azoty POLYOLEFINS,
- provision of a USD 52m subordinated loan to Grupa Azoty POLYOLEFINS.

Pursuant to the Transaction Documents, the Original Sponsors agreed to contribute additional equity to Grupa Azoty POLYOLEFINS (the Parent: up to a total of PLN 297,046,245.70, Grupa Azoty POLICE: up to a total of PLN 278,545,884.65) and to provide loans in a total amount of PLN 732,901,520.00 (the Parent: PLN 344,463,738.00, Grupa Azoty POLICE: PLN 388,437,782.00 (the "Original Sponsors Investment").

Performance of the Co-Sponsors' commitments under the Co-Sponsors Investment (the "Closing") is conditional upon the satisfaction of the conditions precedent defined in the Transaction Documents, including, *inter alia*, the Original Sponsors' contribution of funds to cover the Original Sponsors Investment, execution of a senior facility agreement with a bank syndicate (the "Debt Financing Agreement") and fulfilment of certain conditions precedent set out in the Debt Financing Agreement.

Pursuant to the Transaction Documents, the target shareholding structure of Polyolefins will be as follows: The Original Sponsors will jointly hold 64.93% of the shares (the Parent directly: 30.52%, Grupa Azoty POLICE: 34.41%); Grupa Lotos, Hyundai and KIND will hold 17.3%, 16.63% and 1.14%, respectively, of the shares. The above percentages represent both the respective ownership interests and shares in total voting rights at the General Meeting of Grupa Azoty POLYOLEFINS.

The Parties agreed that the lock-up period during which Hyundai and KIND would not be able to dispose of their Grupa Azoty POLYOLEFINS shares (with certain exceptions) would last until the expiry of three years from the date of the Project completion, while for Lotos the corresponding period would last until full repayment of all liabilities under the Debt Financing Agreement, but not longer than until December 15th 2035. The Parties also agreed on a procedure for the sale of Grupa Azoty POLYOLEFINS shares by the Co-Sponsors after the lock-up periods expire.

The Transaction Documents provide that the Original Sponsors may carry out a public offering after the expiry of the lock-up period. The Parties agreed on a put option for Hyundai and KIND towards the Original Sponsors and a call option for the Original Sponsors towards Hyundai, in each case with respect to Grupa Azoty POLYOLEFINS shares, with a total value (calculated based on the price originally paid by Hyundai and KIND for the shares) of up to USD 70m, for the same amount expressed

in USD, in the case of the put option – additionally reduced by any dividends paid to Hyundai and KIND. The Parties agreed that the options would expire on or before December 31st 2035.
In the shareholders' agreement, the Parties agreed on a corporate governance framework for Grupa Azoty POLYOLEFINS. Pursuant to the shareholders' agreement, the Management Board of Grupa Azoty POLYOLEFINS will be composed of one to five persons, appointed by the Supervisory Board for a joint three-year term of office. A person designated by the Original Sponsor holding more shares should be appointed by the Supervisory Board to serve as President of the Management Board of Grupa Azoty POLYOLEFINS. The Supervisory Board will be composed of five to seven persons, appointed for a joint three-year term of office. The Supervisory Board members will be appointed in the following manner: The Original Sponsor holding more shares will have the right to appoint from two to three members of the Supervisory Board, including the Deputy Chairperson of the Supervisory Board, and the Original Sponsor holding fewer shares will have the right to appoint from one to two members of the Supervisory Board, including the Chairperson of the Supervisory Board. As long as Grupa LOTOS holds at least 3% of the Grupa Azoty POLYOLEFINS shares, Grupa LOTOS will have the right to appoint one member of the Supervisory Board. As long as Hyundai and KIND jointly hold at least 3% of the Grupa Azoty POLYOLEFINS shares, Hyundai and KIND will have the right to jointly appoint one member of the Supervisory Board. The Parties also provided for a catalogue of matters requiring the Supervisory Board's approval, including those requiring votes "in favour" by the members designated by the Co-Sponsors. The shareholders' agreement further provides for a catalogue of matters reserved for the General Meeting and requiring a qualified majority of 83% of votes "in favour" at the General Meeting. The catalogue of reserved matters does not differ from market standards followed in such transactions. The Parties also agreed on voting rules with respect to specific matters.
The Transaction Documents provide for contractual penalties for a breach of key contractual provisions, due both from the Original Sponsors and in favour of the Original Sponsors or Grupa Azoty POLYOLEFINS, typical of such transactions. Such contractual penalties will depend on the materiality of a breach. Individual agreements entered into as part of the Transaction Documents provide for maximum levels of liability, typical of such transactions, for most of the Original Sponsors' and Grupa Azoty POLYOLEFINS' obligations towards the Co-Sponsors.
Pursuant to the Transaction Documents, until the Closing Date Grupa Lotos, Hyundai and KIND have the right to withdraw from the Transaction if any events or circumstances occur with a material or potentially material adverse effect on the Project or the financial condition of Grupa Azoty POLYOLEFINS, preventing implementation of the Project on the agreed terms.
On July 30th 2020, the Parent's Supervisory Board endorsed the proposal of the Parent's Management Board that the Company's General Meeting grant consent for the Parent to execute legal transactions that could result in disposal of the Company's non-current assets with a market value exceeding 5% of the Company's total assets, as provided for in the assumptions for the Share Pledge Agreement and the Assignment Agreement.
The Extraordinary General Meeting of the Parent held on August 20th 2020 passed a resolution to approve the above legal transactions. The Extraordinary General Meeting also authorised the Management Board to take all formal and legal steps to execute the Share Pledge Agreement and the Assignment Agreement. Execution of the pledge agreement is another stage related to the *Polimery Police* financing agreement executed with a syndicate of Polish and international financial institutions on May 31st 2020.

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 2019 to February 28th 2022), policies were issued for the second year, i.e. from March 1st 2020 to February 28th 2021, covering the following lines of insurance:

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

On June 28th and June 30th 2020, TUW PZUW issued policies for another annual period from July 1st 2020 to June 30th 2021, for the following types of insurance:

- property in national and international transit insurance (CARGO),
- business and property owner's liability insurance (OC).

The policies were issued for the above-mentioned companies included in the Grupa Azoty Mutual Insurance Union under the Master Agreements with TUW PZUW, as follows:

- in the case of the CARGO insurance, for a period of three years, i.e. from July 1st 2019 to June 30th 2022,
- in the case of the OC insurance, for a period of two years, i.e. from July 1st 2019 to June 30th 2021.

D&O insurance
On March 16th 2020, the Parent signed a directors and officers (D&O) liability insurance policy with PZU S.A. (providing insurance cover to the other Group companies), whereby the existing insurance cover was renewed for the period March 17th 2020 – September 16th 2021 (with the total sum insured of PLN 200m).

Trade credit insurance
In January 2020, Grupa Azoty PUŁAWY and Towarzystwo Ubezpieczeń Euler Hermes S.A. (TUEH) renewed two trade credit risk insurance contracts for the period from February 1st 2020 to January 31st 2021.

Project co-financing agreements

On February 26th 2020, the Parent received the final payment of PLN 286 thousand as funding under an agreement signed on September 2nd 2016 with the Minister of Development, acting as the Managing Authority, to finance the 'Construction of Grupa Azoty's R&D Centre in Tarnów' project, co-financed from the European Regional Development Fund. The project is being implemented under the Smart Growth Operational Programme 2014–2020.

Grupa Azoty Zakłady PUŁAWY relies on financing in the form of loans and grants under agreements executed in 2011–2018 with: The National Fund for Environmental Protection and Water Management, the National Centre for Research and Development, the Ministry of Investments and Development, and the Lublin Agency for the Support of Entrepreneurship.

On June 19th 2020, the Parent and the National Centre for Research and Development signed an agreement to co-finance the 'Specialist ammonium nitrate fertilizer products with functional additives' project under Sub-Measure 1.1.1 of the Smart Growth Operational Programme 2014-2020 co-financed by the European Regional Development Fund. The value of the project is PLN 4,882.3 thousand, of which PLN 1,952.9 thousand will be covered by the grant.

On June 29th 2020, Grupa Azoty POLICE repaid the full outstanding amount of the loan granted under the loan agreement of November 5th 2013 with the National Fund for Environmental Protection and Water Management (NFOŚiGW) of Warsaw to finance the 'Upgrade of ammonia synthesis process at Zakłady Chemiczne Police S.A.' project.

Trade contracts

Ilmenite purchase contract
On January 9th 2020, Grupa Azoty POLICE, a subsidiary of the Parent, signed an ilmenite purchase contract with Titania AS of Hauge and Dalane of Norway. The contract was concluded for a definite term from January 1st 2020 to December 31st 2022.
The value of the deliveries to be made under the Contract is estimated at approximately PLN 168m.

Agreements concluded after the reporting date

Transfer of credit commitment from Santander Bank Polska S.A. to CaixaBank S.A.
On July 16th 2020, Santander Bank Polska S.A. transferred a part of its commitment under Tranche A of the Credit Facility Agreement of April 23rd 2015 (as amended) concluded between the Parent and a bank syndicate (PKO BP S.A., Santander Bank Polska S.A., BGK and ING Bank Śląski S.A.), in the amount of PLN 100m, to CaixaBank S.A., Polish Branch. Following the transfer, Santander Bank Polska S.A.'s credit commitment is PLN 200m.

4.3. Sureties for credit facilities or loans, guarantees issued

In H1 2020, the Grupa Azoty Group did not issue any guarantees with a significant aggregate value.
In H1 2020, the Grupa Azoty Group did not sign any annexes to its guarantees with a significant aggregate value. The total amount of all guarantees issued by the Grupa Azoty Group companies in the reporting period amounted to PLN 3,456 thousand.

Letters of credit

In the period from January 1st to June 30th 2020, on the instruction of Grupa Azoty Zakłady Azotowe Chorzów S.A., three documentary letters of credit were opened for a total amount of USD 115.6 thousand, with the following payment dates: April 10th 2020, April 17th 2020 and April 24th 2020.
The beneficiary of the letters of credit is a supplier of magnesium sulfate heptahydrate. As at June 30th 2020, the outstanding credit balance under the letter of credit was PLN 0.

On March 11th 2020, an annex was executed to a letter of credit issued on the instruction of Grupa Azoty KĘDZIERZYN on April 29th 2019 for a total amount of EUR 2,251 thousand. The letter of credit was issued under the multi-purpose credit facility agreement concluded with PKO BP S.A., and the instrument serves as security for the equipment supplied. The beneficiary of the letter of credit is a supplier of catalysts.

Intragroup loans

Loan agreement between Grupa Azoty PUŁAWY and Zakłady Azotowe Chorzów S.A.
On January 8th 2020, a loan agreement was signed under which Grupa Azoty PUŁAWY (Lender) advanced a PLN 5m loan to Zakłady Azotowe Chorzów S.A. (Borrower). The agreement provides for the disbursement of the loan in five tranches available until May 5th 2020. The loan bears interest at a variable rate based on 1M WIBOR plus margin. The disbursement of each tranche will be subject to a separate decision of the Lender. The loan is to be repaid in five instalments, from January 2021 to May 2021. The full loan amount was disbursed, in several tranches, in H1 2020.
On April 22nd 2020, the lender and the borrower signed an agreement for the assignment of rights under an insurance policy as a security instrument under the loan agreement.

Loan tranche disbursement
Under the Intra-Group Financing Agreement of April 23rd 2015, as amended, on January 27th 2020 the Parent disbursed to Grupa Azoty KĘDZIERZYN a PLN 19,400 thousand tranche under the loan for financing of the Fertilizers Unit. After the reporting date, on July 27th 2020, another tranche, of PLN 14m, was disbursed for the same purpose.

Annex to loan agreement between Grupa Azoty PUŁAWY and SCF Natural Sp. z o.o.
On June 23rd 2020, Grupa Azoty PUŁAWY and SCF Natural Sp. z o.o. signed Annex 2 to the loan agreement of May 7th 2014 to postpone the repayment dates for the loan instalments. Pursuant to the Annex, the last instalment is due for repayment on December 31st 2022.

Disbursement of loan tranches after the reporting date
- Under the Intra-Group Financing Agreement of April 23rd 2015, as amended, on July 31st 2020 the Parent disbursed to Grupa Azoty POLICE a PLN 51,420 thousand tranche under the loan for refinancing the PLN 90m loan agreement concluded on November 5th 2013 with NFOŚiGW to finance the ‘Upgrade of ammonia synthesis process at Zakłady Chemiczne Police S.A.’ project.
- Under the PLN 344,463,738.00 loan agreement concluded on May 31st 2020 between the Parent and Grupa Azoty POLYOLEFINS, on August 4th 2020 the Parent disbursed to Grupa Azoty POLYOLEFINS a tranche of PLN 18,429,992.96. The tranche was to bridge the deficit between budgeted and actual costs of the *Polimery Police* project.
- Under the PLN 388,437,782.00 loan agreement concluded on May 31st 2020 between Grupa Azoty POLICE and Grupa Azoty POLYOLEFINS, on August 4th 2020 Grupa Azoty POLICE disbursed to Grupa Azoty POLYOLEFINS a tranche of PLN 20,782,755.33. The tranche was to bridge the deficit between budgeted and actual costs of the *Polimery Police* project.

(all amounts in PLN '000 unless indicated otherwise)

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 21st 2020 (issue date of the most recent financial report)

Shareholder	Number of shares	Ownership interest (%)	Number of votes	% of voting rights
State Treasury	32,734,509	33.00	32,734,509	33.00
ING OFE	9,883,323	9.96	9,883,323	9.96
Norica Holding S.à r.l. (indirectly: 19,657,350 shares or 19.82%)	406,998	0.41	406,998	0.41
Rainbee Holdings Limited*)	9,820,352	9.90	9,820,352	9.90
Opansa Enterprises Limited*)	9,430,000	9.51	9,430,000	9.51
TFI PZU S.A.	8,530,189	8.60	8,530,189	8.60
Other	28,390,113	28.62	28,390,113	28.62
Total	**99,195,484**	**100.00**	**99,195,484**	**100.00**

*) Direct subsidiary of Norica Holding S.à r.l.

In the period from May 21st 2020 to the issue date of this Report, the Parent was not officially notified of any changes in major holdings of its shares.
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 relevant information.

4.5. Parent shares held by management and supervisory personnel

As at the end of the reporting period (June 30th 2020) and as at the date of this Report, no member of the Parent's Management and Supervisory Boards held any shares in the Parent.

4.6. Composition of the management and supervisory bodies

Parent's Management Board
In H1 2020, there were no changes in the composition of the Management Board.
Composition of the Parent's Management Board as at June 30th 2020 and as at the date of this Report:

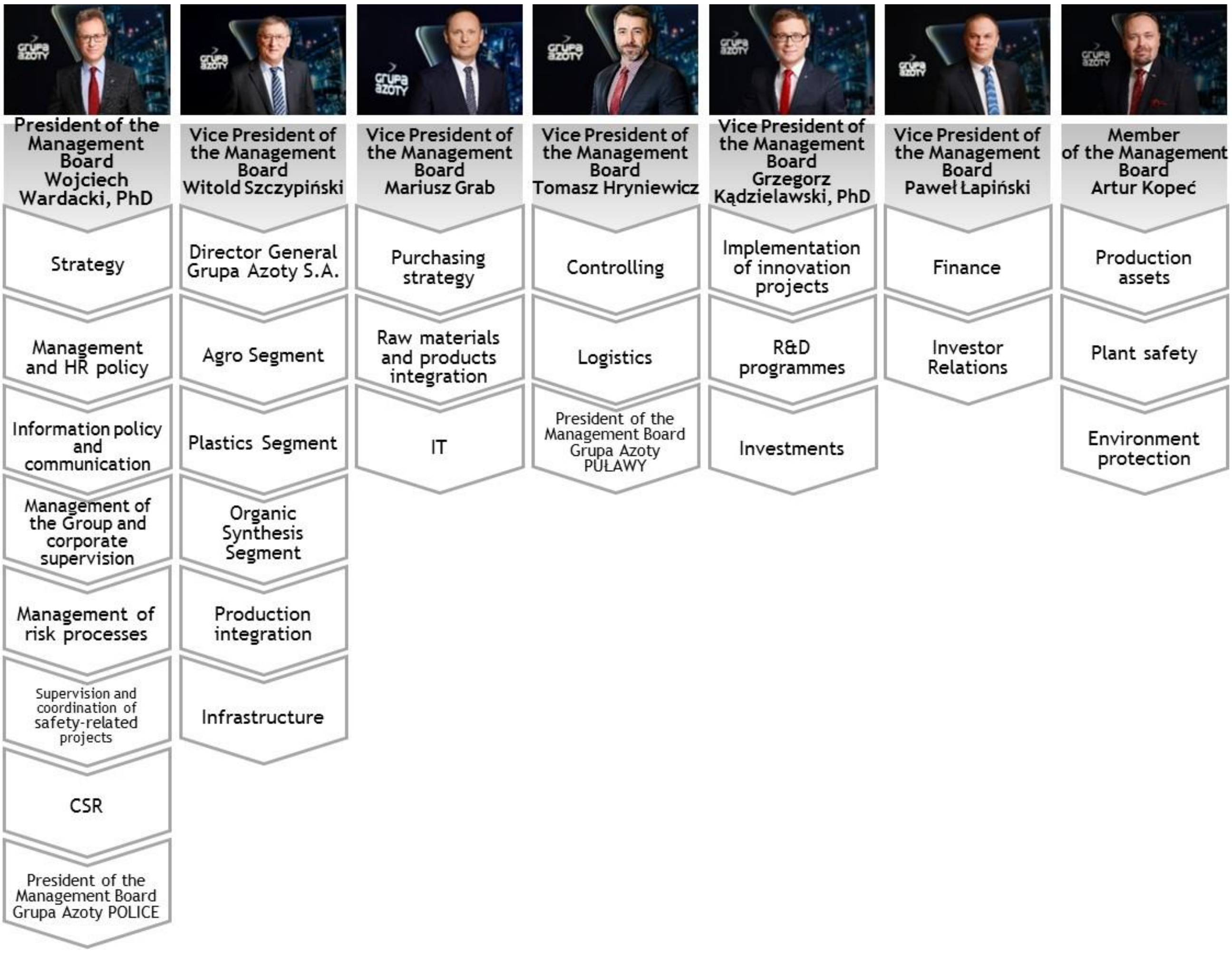
- Wojciech Wardacki – President of the Management Board,
- Witold Szczypiński – Vice President of the Management Board,
- Mariusz Grab – Vice President of the Management Board,
- Tomasz Hryniewicz – Vice President of the Management Board,
- Grzegorz Kądzielawski – Vice President of the Management Board,
- Paweł Łapiński – Vice President of the Management Board,
- Artur Kopeć – Member of the Management Board.

Powers and responsibilities of the Parent's Management Board and Supervisory Board members
On May 7th 2020, the Company's Management Board passed a resolution establishing the following division of responsibilities between the Management Board members:

- Wojciech Wardacki – President of the Management Board: directing the work of the Management Board, supervising and managing the Group, in charge of the strategy and supervision of strategic processes, corporate governance, including owner's supervision, HR policy, information policy,

communication and corporate image (including public relations and CSR), representing the Parent in relations with its shareholders, governing bodies, the government and local authorities;
- Witold Szczypiński – Vice President of the Management Board, Director General of the Parent: integration of production processes, supervising the Agro Segment, the Plastics Segment, and the infrastructure;
- Mariusz Grab – Vice President of the Management Board: procurement, raw materials and IT;
- Tomasz Hryniewicz – Vice President of the Management Board: controlling and logistics;
- Grzegorz Kądzielawski – Vice President the Management Board: innovation, R&D programmes, and investments;
- Paweł Łapiński – Vice President of the Management Board: finance and investor relations;
- Artur Kopeć – Member of the Management Board: production assets, plant safety and environmental protection.
-

Division of responsibilities between the Management Board members as at the date of this Report



Source: Company data.

The Supervisory Board
As at January 1st 2020, the Supervisory Board was composed of:
- Marcin Pawlicki – Chairman of the Supervisory Board,
- Michał Gabryel – Deputy Chairman of the Supervisory Board,
- Zbigniew Paprocki – Secretary of the Supervisory Board,
- Paweł Bielski – Member of the Supervisory Board,
- Piotr Czajkowski – Member of the Supervisory Board,
- Monika Fill – Member of the Supervisory Board,
- Robert Kapka – Member of the Supervisory Board,
- Bartłomiej Litwińczuk – Member of the Supervisory Board,
- Roman Romaniszyn – Member of the Supervisory Board.

On June 29th 2020, pursuant to resolutions of the Company's Annual General Meeting, the following persons were appointed as members to the Company's Supervisory Board of the 11th joint term of office:
- Marcin Pawlicki – Chairman of the Supervisory Board,
- Monika Fill – Member of the Supervisory Board,
- Robert Kapka – Member of the Supervisory Board,
- Wojciech Krysztofik – Member of the Supervisory Board,
- Bartłomiej Litwińczuk – Member of the Supervisory Board,
- Michał Maziarka – Member of the Supervisory Board,
- Zbigniew Paprocki – Member of the Supervisory Board,
- Roman Romaniszyn – Member of the Supervisory Board.

On July 23rd 2020, the Supervisory Board appointed Wojciech Krysztofik as Deputy Chairman and Zbigniew Paprocki as Secretary of the Company's Supervisory Board of the 11th term of office.
On the same day, the Supervisory Board passed resolutions on the assessment of independence of the Supervisory Board members. In the opinion of the Supervisory Board, the independence criteria specified in principle II.Z.6 of the 'Best Practice for WSE Listed Companies 2016' ("Code of Best Practice") in conjunction with Art. 32.1.21 of the Company's Articles of Association, taking into account principle II.Z.3, principle II.Z.4 and principle II.Z.10.2. of the Code of Best Practice as well as the Commission Recommendation of February 15th 2005 on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board (2005/162/EC), together with the independence criteria set out in Annex II thereto, are met by:
- Marcin Pawlicki,
- Monika Fill,
- Michał Maziarka.

The Supervisory Board operates on the basis of:
- Commercial Companies Code of September 15th 2000 (Dz.U. No. 94, item 1037, as amended),
- Act of August 30th 1996 on Commercialisation and Certain Employee Rights,
- Accounting Act of September 29th 1994,
- Company's Articles of Association,
- Rules of Procedure for the Company's Supervisory Board.

Supervisory Board's 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.
Following the appointment of new persons to the Supervisory Board of the 11th joint term of office, which took place on June 29th 2020 by resolutions of the Company's Annual General Meeting, the composition of the Audit Committee was changed.
Composition of the Audit Committee as determined on July 23rd 2020:
- Marcin Pawlicki – Chair,
- Zbigniew Paprocki – Member,
- Michał Maziarka – Member.

As at the date of this Report, its composition remained unchanged.

Responsibilities of the Audit Committee
The Audit Committee operates pursuant to the Rules of Procedure for the Audit Committee, adopted by the Supervisory Board by way of a resolution of July 4th 2013. The main tasks of the Committee include:
- Monitoring of the financial reporting process;
- Monitoring of the effectiveness of the Company's internal control, internal audit and risk management systems;
- Monitoring of financial audit;
- Monitoring of the independence of the auditor and the entity qualified to audit financial statements;
- Monitoring of the audit of full-year separate and consolidated financial statements;
- Monitoring of the work and reports of the independent auditor,
- Analysing selected economic events relevant to the Company's operations.

Other committees of the Supervisory Board
Within the Supervisory Board, a Strategy and Development Committee and a Nomination and Remuneration Committee were established.
As at the date of this Report, the Company's Strategy and Development Committee consisted of:

- Robert Kapka – Chair,
- Zbigniew Paprocki – Member,
- Wojciech Krysztofik – Member.

As at the date of this Report, the Company's Nomination and Remuneration Committee consisted of:

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

Remuneration policy for the Parent's management and supervisory bodies
On August 20th 2020, the Extraordinary General Meeting of the Parent passed a resolution to adopt the Remuneration Policy for Members of the Management Board and Supervisory Board of Grupa Azoty S.A. The remuneration policy defines the rules and terms of remuneration for members of the Management Board and Supervisory Board of Grupa Azoty S.A. within the meaning of the Act on Rules of Remunerating Persons Directing Certain Companies of June 9th 2016, as well as the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies of July 29th 2005 (consolidated text: Dz.U. of 2019, item 623, as amended). Implementation of this Policy supports and ensures the implementation of the Company's business strategy, pursuit of the Company's long-term interests, stability and growth of the Company and increase in its value.

5. Supplementary information

Management Board's position on the achievement of forecasts
As no forecasts for 2020 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).

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

Shares, share issues
In H1 2020, the Parent did not issue, redeem or repay any debt or equity securities. The Company 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 Company which may cause future changes in the percentages of shares held by the existing shareholders and bondholders.
The Company does not operate any control system for employee share ownership plan.

Distribution of profit
On June 29th 2020, the Parent's Annual General Meeting passed a resolution to allocate the entire amount of the Parent's net profit for the financial year 2019, of PLN 58,249,388.32, to reserve funds. The decision was in line with the Management Board's resolution of May 27th 2020 in which the Management Board proposed that, despite the dividend distribution policy in place, the entire net profit generated in 2019 be retained by the Parent,
as this would provide financial security for capex projects in the pipeline, especially *Polimery Police*.

Signatures of members of the Management Board

Signed with qualified electronic signature
....
Wojciech Wardacki, PhD

President of the Management Board

Signed with qualified electronic signature
....
Witold Szczypiński
Vice President of the Management Board, Director General

Signed with qualified electronic signature
....
Mariusz Grab
Vice President of the Management Board

Signed with qualified electronic signature
....
Tomasz Hryniewicz
Vice President of the Management Board

Signed with qualified electronic signature
....
Grzegorz Kądzielawski, PhD
Vice President of the Management Board

Signed with qualified electronic signature
....
Paweł Łapiński
Vice President of the Management Board

Signed with qualified electronic signature
....
Artur Kopeć
Member of the Management Board

Tarnów, September 9th 2020