

Integrated Report of Grupa Azoty 2021



INTRODUCTION

Letter from the President of the Management Board

[102-14]

The key events in 2021 at Grupa Azoty S.A. included the announcement of a new Strategy for 2021–2030, which is a highly ambitious, but also a down-to-earth action plan of the Group for the next ten years. We have re-defined our mission and vision, giving priority to climate neutrality and energy transition and our role in building Poland's and Europe's food security. The key objectives for the coming years are to prepare our companies for challenges presented by the European Green Deal and Circular Economy, decarbonise production and reduce the Group's environmental emissions. Grupa Azoty S.A. began to implement green initiatives covering production and energy generation as well as decarbonisation projects with a total budget of nearly PLN 2.7 billion. The 'Green Azoty' project, included in the Strategy, is a comprehensive and coherent plan for the largest green investments ever undertaken in the Polish chemical industry.

We are expanding our range of sustainable products and solutions. Innovative fertilizers and plastics placed on the market in 2021 are helping our customers comply with legal requirements and achieve their own environmental objectives. We seek to maximise our positive impact on climate and natural environment and emphasise our vital role in fostering Poland's and Europe's food security.

We are not only changing our products, but also our production methods. For many years now, we have consistently implemented solutions to reduce the carbon intensity of our plants in order to save energy and decarbonise the value chain. In

line with our Strategy, in 2030 the share of renewable energy in the mix used by the Grupa Azoty Group will reach at least 40%, and by 2050 we want to become carbon neutral.

Environmental matters are an important, but obviously not the only area addressed by our Strategy until 2030. The document presents our plans for managing business segments, finance, raw materials, innovation as well as further pursuit for operational excellence. We consistently strengthen cooperative links between the Group companies to make it possible for them to jointly build competitive advantages. Harmonious cooperation within the Group brings a variety of benefits to all our companies and the entire Polish economy. This is why it is a direction worth pursuing in the coming years as well. I encourage you to read this report for details.

It is almost impossible to discuss 2021 developments in the chemical industry without mentioning massive fluctuations on commodity exchanges and unprecedented hikes in the prices of raw materials, mainly gas, but also propylene, phenol, benzene and phosphate rock. An increase was also seen in the costs of electricity and CO_2 emission allowances. Despite the considerable feedstock pressure, in 2021 the Grupa Azoty Group companies decided not to halt or cut fertilizer production unlike many of their competitors in Europe. We effectively secured supplies of fertilizers for the domestic market, which is crucial for Grupa Azoty S.A. We did not reduce our fertilizer capacities knowing that fertilizer production is fundamental to Poland's and Europe's food security. **Despite high prices of raw materials, we delivered robust financial performance.** In 2021, Grupa Azoty S.A. posted consolidated revenue of PLN 15.90 billion (up PLN 5.38 billion year on year), EBITDA of PLN 1.95 billion (up PLN 624 million year on year), and EBITDA margin of 12.2%. 2021 net profit came in at PLN 634 million, up PLN 279 million year on year.

Grupa Azoty S.A.'s growth would not be possible without investment projects. Our largest investment project, i.e., Polimery Police, is implemented on schedule, with all major equipment delivered to the construction site and installed. The launch of polypropylene production, planned for 2023, will strengthen the Grupa Azoty Group's and Poland's position on the European market of plastic producers, and will help further diversify the Group's business.

We know that innovation is necessary for our companies to maintain their long-term competitive edge. In line with our innovation strategy, we will allocate up to 2–3% of the Group's total revenue to research and development until 2030. These funds and our state-of-the-art research facilities will allow us to develop new or improve existing products in order to best cater to the needs of the ever-evolving world and meet customer expectations.

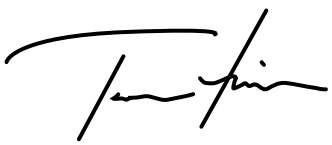
In 2021, we continued to fight the pandemic. Initiatives we took to support hospitals in purchases of necessary equipment and to apply technologies available across our organisation to produce disinfectants confirmed that we take corporate social responsibility seriously and translate it into real action to protect the health and safety of Poles, including our employees, trading partners and customers.

Although this report covers the year 2021, it must mention Russia's war against Ukraine, started in 2022. In the first few days of Russia's military invasion, we focused on helping Ukrainian refugees fleeing their homeland. As part of the financial support, we made donations to Caritas and the Polish Red Cross, among other organisations. The assistance also included provision of lodging and transport, transfer of equipment for Ukrainian fire-fighters, and organising blood donor drives and collections of aid supplies.

We are also analysing the business consequences of Russia's invasion of Ukraine on a daily basis. We are taking steps to mitigate risks associated with the shortage of energy commodities on the market or constrained availability of staff at our trading partners following the general mobilisation order in Ukraine.

We present to you the Grupa Azoty Group integrated report for 2021. **I am positive that the information contained in this report will assure you that we have chosen the right path, and that sustainable development and socially responsible business are of strategic importance to the entire Grupa Azoty Group.**

Best regards,





ABOUT THE GRUPA AZOTY GROUP

Overview of the Group

[102-1] [102-6] [IR - Organisational overview and external environment]

At the Grupa Azoty Group, we believe in the power of the modern chemical industry, which contributes to improving the quality of people's lives and to solving problems of the contemporary world. We are proud to continue to be the largest manufacturer of fertilizers and chemical products in Poland. Our Group is also a major chemical producer in Europe, with a broad portfolio including mineral fertilizers, engineering plastics and OXO products. In 2021, our consolidated revenue rose by more than a half, to nearly PLN 16 billion.





STATEMENT

The source of the Group's strength lies in the resources of its members: a single organisation has brought together companies with different traditions and complementary business profiles, seeking to leverage their potential to implement a common strategy. This structure allows us to offer a diverse product mix, ranging from nitrogen and compound fertilizers, engineering plastics, to OXO products and melamine.

Tomasz Hinc, President of the Management Board

In Poland, the Grupa Azoty Group is the leading producer of mineral fertilizers, polyamides, OXO alcohols, plasticizers, titanium white and melamine. In the European Union, we rank **second in mineral fertilizer production and third in PA6 production.** We owe our success to **fifteen thousand employees working at more than 50 companies**. Our diverse products are appreciated by customers on five continents – the Americas, Asia, Africa and, of course, Europe. Three Group companies – Grupa Azoty S.A., Grupa Azoty Puławy and Grupa Azoty Police – are listed on the Warsaw Stock Exchange.

[102-7]

Grupa Azoty Group in figures:

15

More than 15,000 employees

- Almost 10,000 employees at the 4 key companies

5

Segments[1]

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

4

Main manufacturing plants in Poland

- Tarnów
- Puławy
- Police
- Kędzierzyn-Koźle

10

Key raw materials

- ammonia
- benzene
- electricity
- phenol
- phosphate rock
- natural gas
- propylene
- sulfur
- potassium chloride
- coal

5

Distribution areas

- European Union and other European countries
- Asia

- North America
- South America
- Africa

[1]In October 2021, three segments were established under the Grupa Azoty Group Strategy.

See the organisations of which Grupa Azoty Group is member [102-12] [102-13]

[102-12] [102-13]

Membership of associations and initiatives in 2021

Chemicals and fertilizers:

Polska Izba Przemysłu Chemicznego (Polish Chamber of Chemical Industry) Website	Fertilizers Europe Website	International Fertilizer Industry Association (IFA) Website	European Phosphate Fertilizer Alliance (AEEP) Website	EBIC – European Biostimulants Industry Council Website
Centrum Zaawansowanych Technologii przy Instytucie Chemii Przemysłowej (Advanced Technology Centre at the Industrial Chemistry Institute) Website	IVA (German Agricultural Industry Association) Website	European Plasticizers (ECPI) Website	EPL – European Petrochemical Luncheon International Association Website	European Petrochemical Association (EPCA) Website

SCROLL TABLE

Chemicals and fertilizers:

Stowarzyszenie Inżynierów i Techników Przemysłu Chemicznego (Polish Association of Chemical Engineers)

Website

CEFIC – Sector Group Fertilizers Efficiency Enhancers

Website

Naczelna Organizacja Techniczna – Federacja Stowarzyszeń Naukowo-Technicznych (Polish Federation of Engineering Associations NOT), Tarnów Division

Website

Finance:

Stowarzyszenie Księgowych w Polsce (Accountants Association in Poland)

Website

Stowarzyszenie Polskich Skarbników Korporacyjnych (Association of Polish Corporate Treasurers)

Website

Stowarzyszenie Emitentów Giełdowych (Polish Association of Listed Companies)

Website

Chambers of Commerce:

Chambers of Commerce:

SCROLL TABLE

Izba Energetyki Przemysłowej i Odbiorców Energii (Polish Chamber of Industrial Power and Energy Consumers) Website	Izba Przemysłowo – Handlowa w Tarnowie (Tarnów Chamber of Commerce and Industry) Website	Polska Izba Odzysku i Recyklingu Opakowań (Polish Chamber of Packaging Recovery and Recycling) Website	Izba Gospodarcza Transportu Lądowego (Land Transport Commercial Chamber) Website	Zachodniopomorska Okręgowa Izba Inżynierów Budownictwa (West Pomeranian Regional Chamber of Civil Engineers) Website
Opolska Izba Gospodarcza (Opole Chamber of Commerce) Website	Staszowska Izba Gospodarcza (Staszów Chamber of Commerce)	Staropolska Izba Przemysłowo-Handlowa (Staropolska Chamber of Industry and Commerce) Website	Izba Gospodarcza Gazownictwa (Polish Chamber of Natural Gas Industry, IGG) Website	

Economic development:

Związek Pracodawców Business & Science Poland (Business & Science Poland Union of Employers) Website	Polskie Forum ISO 9000 (Polish ISO 9000 Forum) Website	Związek Przedsiębiorców i Pracodawców (Association of Entrepreneurs and Employers) Website	Puławskie Centrum Przedsiębiorczości (Puławy Entrepreneurship Centre) Website

Logistics and safety:

Logistics and safety:

Konsorcjum Bezpieczeństwo Gospodarcze Polski (Polish Economic Security Consortium) Website	Forum Liderów Bezpiecznej Pracy (Forum of Safe Work Leaders) Website	Krajowa Sieć Informatyczna Europejskiej Agencji Bezpieczeństwa i Zdrowia w Pracy (National IT Network of the European Agency for Safety and Health at Work) Website	System pomocy w transporcie materiałów niebezpiecznych SPOT (SPOT System of Assistance in Hazardous Material Transport) Website
International Security Systems Association (ISSA) Website	GCU Bureau Sprl (General Contract of Use for Wagons) Website	VPI – Verband der Guterwagenhalter in Deutschland E.V. Website	

SCROLL TABLE

Energy:

Towarowa Giełda Energii S.A. (Polish Power Exchange) Website	Towarzystwo Obrotu Energią (Association of Energy Trading) Website	Heat Transfer Research INC. (HTRI) Website	European Clean Hydrogen Alliance Website

Other:

Other:

Instytut Audytorów Wewnętrznych Polska (Institute of Internal Auditors Poland) Website	Transparency Register Website	Stowarzyszenie Elektryków Polskich (Association of Polish Electrical Engineers), Tarnów Division Board Website	Klub Polskich Laboratoriów Badawczych POLLAB (POLLAB Club of Polish Research Laboratories) Website	CEFLEX Website
DIN (German Institute for Standardization) Website	Stowarzyszenie Inspektorów Ochrony Danych (Data Protection Officers' Association) – SABI Website	Klub Sportowy Azoty-Puławy (Azoty-Puławy Sports Club) Website	Lubelski Klaster Biotechnologiczny „LKBio" ('LKBio' Lublin Biotechnology Cluster) Website	

SCROLL TABLE

Awards we received in 2021

Good business



- Grupa Azoty has been included in the 'National Champions' ranking prepared by the editors of *Polityka Insight*. The ranking comprises 15 largest Polish companies which stood out with the best results in four key categories: economy, industry, foreign operations and innovation.
- We won in the *Fertilizer Manufacturer* category of a ranking compiled by the *Wprost* weekly, and took the second place overall in the *Golden 100 of Polish Agriculture* list.
- The Grupa Azoty Group was among the winners of the Decarbonisation Initiatives Ranking compiled by the PTWP Group, publisher of the wnp.pl website. The ranking presents the most interesting, imaginative and effective initiatives to reduce greenhouse gas emissions.
- The Grupa Azoty Group's biodegradable starch product was awarded at the *Potato Poland Fair*.
- The Grupa Azoty Group ranked first among chemical companies in the *Most Valuable Polish Brands Ranking*, organised by the *Rzeczpospolita* daily.
- The Grupa Azoty Group's projects were recognised by European Clean Hydrogen Alliance.
- The e-plastics website was distinguished during the *2021 Plastpol Fair*.

Community involvement and contribution to the Group's



environment

- Grupa Azoty Kędzierzyn was among the winners of the national stage of the LODOŁAMACZE (ICEBREAKERS) competition, designed to distinguish employers that are socially sensitive and support professional development of the disabled.

Labour practices and decent work



- Grupa Azoty Kędzierzyn received the Gold Card of Safe Work Leader, awarded by the Central Institute of Labour Protection – National Research Institute.
- Grupa Azoty Puławy received the Gold Card of Safe Work Leader awarded in 2022–2023 by the Central Institute of Labour Protection – National Research Institute in recognition for the company's use of science and technology advancements to improve working conditions, occupational safety and human protection.



ABOUT THE GRUPA AZOTY GROUP

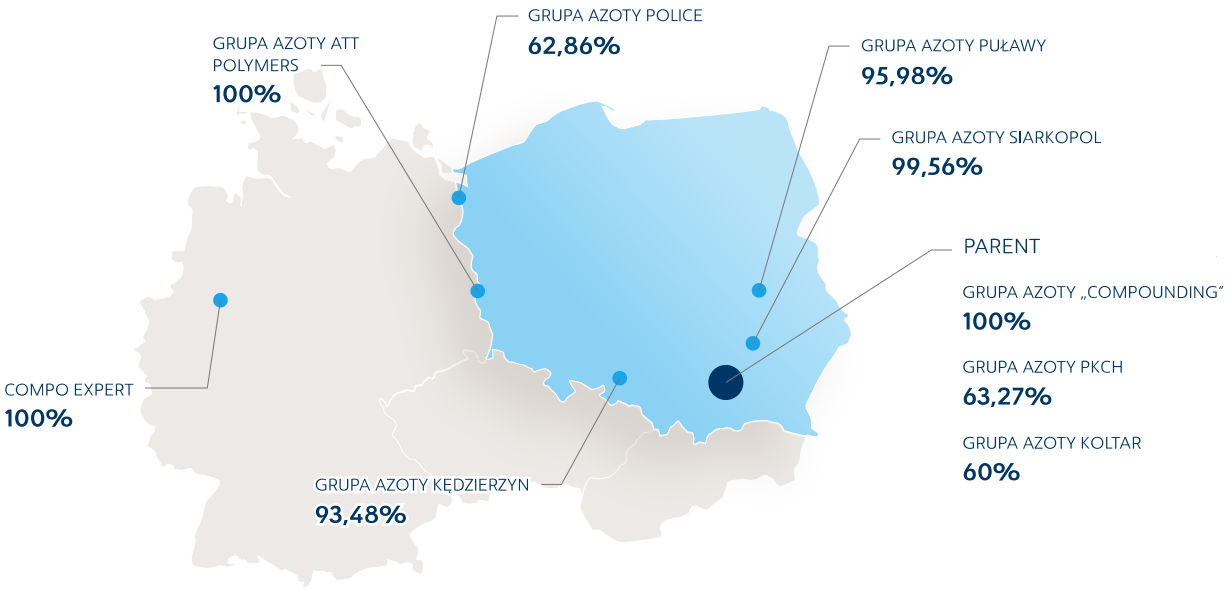
Group structure

[102-3] [102-4] [IR - Corporate governance]

At the end of 2021, the Group consisted of Grupa Azoty S.A. (the parent) and nine direct subsidiaries together with indirect subsidiaries and associates. Grupa Azoty S.A.'s registered office is located in Tarnów. Although our Group is made up of many companies, we operate as a single integrated Grupa Azoty brand. This centralisation helps us achieve synergies to better leverage the potential of each production plant while increasing revenue and bringing down costs. The key economic decisions are made at the Group's level while preserving the subsidiaries' identities and legal autonomy.

The parent, i.e., Grupa Azoty S.A., is engaged in manufacturing and trading in engineering plastics, engineering plastics intermediates and nitrogen fertilizers, as well as related services. In addition to being listed on the Warsaw Stock Exchange since 2008, the Company is also a constituent of foreign indices: MSCI Emerging Markets.

The Parent and its subsidiaries as at December 31st 2021



Source: Company data.

See information about the business profiles of the other Grupa Azoty Group companies and our structure [102-5] [102-18]

Grupa Azoty S.A.'s subsidiaries making up the Grupa Azoty Group:

- **Grupa Azoty Puławy**

specialisation: manufacture of nitrogen fertilizers, granular urea, ammonium nitrate, ammonium sulfate and urea-ammonium nitrate solution (RSM®), melamine, hydrogen peroxide, caprolactam.

registered in: Puławy (Poland)

- **Grupa Azoty Police**

specialisation: manufacture of nitrogen fertilizers, compound fertilizers and titanium white

registered in: Police (Poland)

- **Grupa Azoty Kędzierzyn**

specialisation: manufacture of nitrogen fertilizers, OXO alcohols and plasticizers

registered in: Kędzierzyn-Koźle (Poland)

- **Grupa Azoty Compounding**

specialisation: specialised engineering plastics manufactured through the compounding of plastics

registered in: Tarnów (Poland)

- **Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol Grzybów**

specialisation: production and processing of sulfur, manufacture of liquid, prilled, insoluble, milled, granulated and flaked sulfur

registered in: Grzybów (Poland)

- **Grupa Azoty Polskie Konsorcjum Chemiczne** specialisation: end-to-end design services for investment projects in the chemical industry

registered in: Tarnów (Poland)

- **Grupa Azoty Koltar**

specialisation: railway transport services, repair of rail car chassis and tanks used in the transport of hazardous materials

registered in: Tarnów (Poland)

- **Grupa Azoty ATT Polymers Guben**

specialisation: manufacture of polyamide 6 (PA-6)

registered in: Guben (Germany)

- **COMPO EXPERT Holding Münster**

specialisation: manufacture of speciality fertilizers

registered in: Münster (Germany)

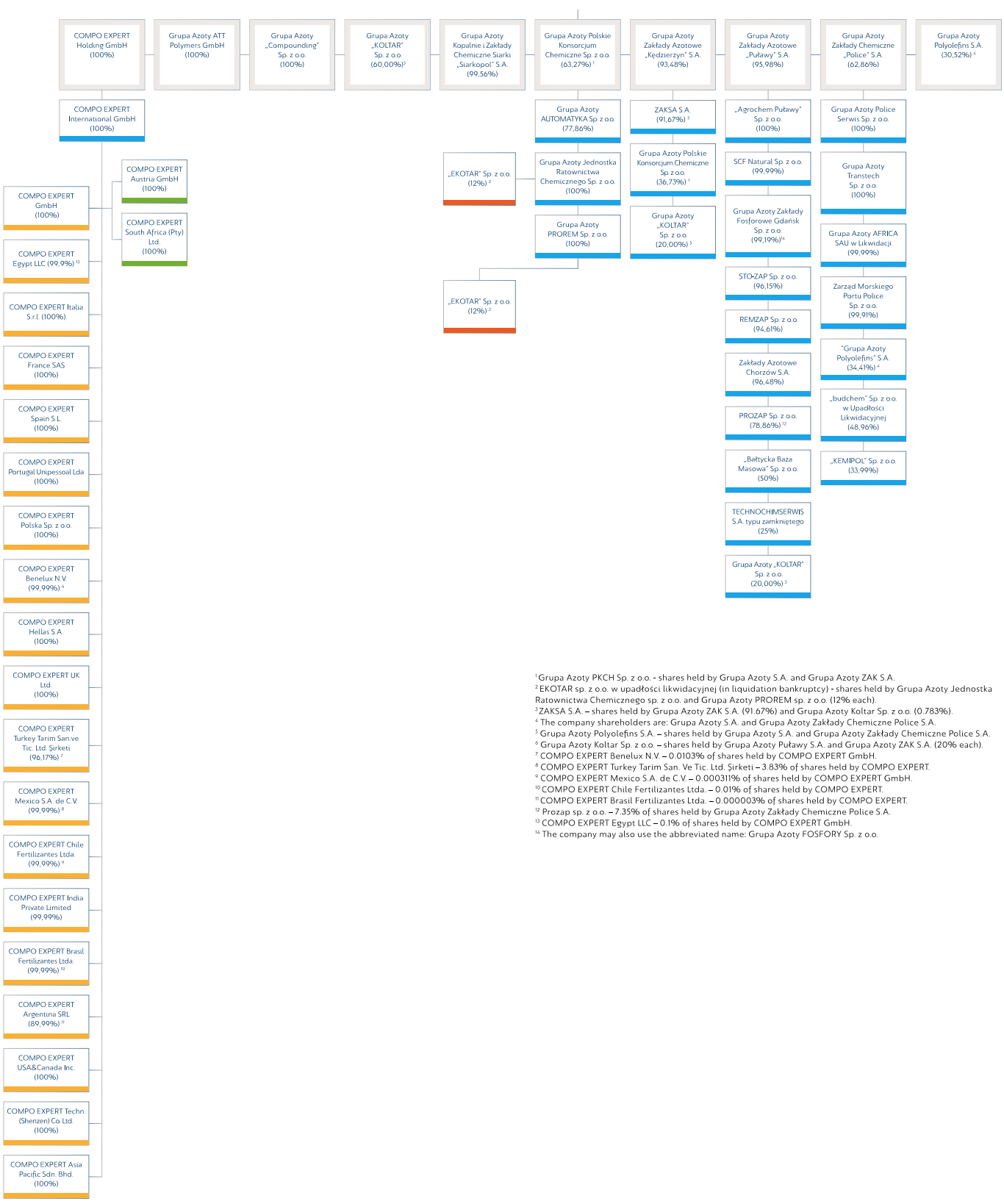
- **Grupa Azoty Polyolefins**

specialisation: the company responsible for the Polimery Police project

registered in: Police (Poland)

[102-5] [102-18]

Structure of the Grupa Azoty Group as at December 31st 2021



[1] Grupa Azoty PKCH Sp. z o.o. - shares held by Grupa Azoty S.A. and Grupa Azoty ZAK S.A.
[2] EKOTAR sp. z o.o. w upadłości likwidacyjnej (in liquidation bankruptcy) - shares held by Grupa Azoty Jednostka Ratownictwa Chemicznego sp. z o.o. and Grupa Azoty PROREM sp. z o.o. (12% each).
[3] ZAKSA S.A. – shares held by Grupa Azoty ZAK S.A. (91.67%) and Grupa Azoty Koltar Sp. z o.o. (0.783%).
[4] The company shareholders are: Grupa Azoty S.A. and Grupa Azoty Zakłady Chemiczne Police S.A.
[5] Grupa Azoty Polyolefins S.A. – shares held by Grupa Azoty S.A. and Grupa Azoty Zakłady Chemiczne Police S.A.
[6] Grupa Azoty Koltar Sp. z o.o. – shares held by Grupa Azoty Puławy S.A. and Grupa Azoty ZAK S.A. (20% each).
[7] COMPO EXPERT Benelux N.V. – 0.0103% of shares held by COMPO EXPERT GmbH.
[8] COMPO EXPERT Turkey Tarim San. Ve Tic. Ltd. Şirketi – 3.83% of shares held by COMPO EXPERT.
[9] COMPO EXPERT Mexico S.A. de C.V. – 0.000311% of shares held by COMPO EXPERT GmbH.
[10] COMPO EXPERT Chile Fertilizantes Ltda. – 0.01% of shares held by COMPO EXPERT.
[11] COMPO EXPERT Brasil Fertilizantes Ltda. – 0.000003% of shares held by COMPO EXPERT.
[12] Prozap sp. z o.o. – 7.35% of shares held by Grupa Azoty Zakłady Chemiczne Police S.A.
[13] COMPO EXPERT Egypt LLC – 0.1% of shares held by COMPO EXPERT GmbH.
[14] The company may also use the abbreviated name: Grupa Azoty FOSFORY Sp. z o.o.

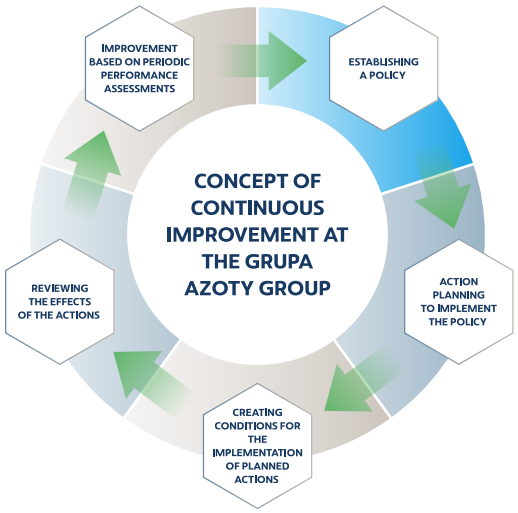
See key ownership changes at our companies in 2021 [102-10]

[102-10]

Below are presented the main ownership changes at Grupa Azoty Group companies in 2021. For more detailed information, please see the Directors' Report on Grupa Azoty S.A.'s and the Grupa Azoty Group's operations in the 12 months ended December 31st 2021, available on the Grupa Azoty website.

- Cancellation of shares in Prozap
- Cancellation of shares in Remzap
- Exit of Grupa Azoty Jednostka Ratownictwa Chemicznego from the EKO TECHNOLOGIES consortium
- Capital increases at COMPO EXPERT Turkey Tarim Sanai ve Ticaret Ltd. Şirketi
- Repurchase of Grupa Azoty SIARKOPOL shares
- Merger of Grupa Azoty POLICE's subsidiaries with Supra Agrochemia

We manage our Group in a manner that ensures the achievement of strategic objectives. We have implemented an integrated management system based on international standards and structured around the principles of giving priority to customers, reducing environmental losses and mitigating the risk of hazards. We rely on the concept of continuous improvement.



Our priorities remain unchanged for years:

- high product quality,
- technological and plant safety,
- care for the environment,
- process safety,
- working conditions meeting the OHS requirements,
- improvement of energy efficiency.

See our management structure [102-18]



Management Board The operations of Grupa Azoty S.A. are managed by the Management Board. As at December 31st 2021,

the composition of the Grupa Azoty S.A. Management Board was as follows[1]:

as follows:

[102-18]



Tomasz Hinc - President of the Management Board

- Corporate management
- Corporate supervision
- HR
- Internal audit
- Communication, PR, sponsorship and CSR
- Compliance
- Legal support
- Representing Grupa Azoty S.A.



Mariusz Grab - Vice President of the Management Board

- Procurement processes
- ICT processes
- Safety and cybersecurity management
- Raw materials and intermediate products integration
- President of the Management Board of Grupa Azoty Police



Filip Grzegorczyk - PhD Vice President of the

Management Board

- Energy transition and New Green Deal
- Regulations, public affairs and market protection
- Corporate risks
- Logistics



Tomasz Hryniewicz - Vice President of the Management Board

- Sales management in the Agro and Plastics segments
- Customer service quality management
- Product portfolio management
- President of the Management Board of Grupa Azoty Puławy



Grzegorz Kądzielawski - PhD Vice President of the Management Board

- Research and development
- Innovation
- Protection of intellectual and industrial property rights
- Collaboration with universities
- Monitoring of investment project implementation
- Social dialogue
- Strategic planning and monitoring of strategy implementation
- Strategic project management
- New Green Deal and Circular Economy



Marek Wadowski - Vice President of the Management Board

- Financial management and accounting policies
- Monitoring of budget implementation
- Planning, budgeting and controlling
- IR



Zbigniew Paprocki - Member of the Management Board, Director General

- Director General
- Integration of production processes across Grupa Azoty S.A.
- Maintenance of production assets, shutdowns and repairs
- Critical infrastructure
- Plant, fire and environmental safety

[1] On May 13th 2021, the Supervisory Board resolved to remove from office Witold Szczypiński, Vice President of the Management Board, and Artur Kopeć, Member of the Management Board, with effect from May 17th 2021. On May 13th 2021, the Supervisory Board also resolved to appoint, with effect from May 18th 2021, Marek Wadowski as Vice President of the Management Board and to approve the results of the election of a candidate for the position of member of the Management Board of the 12th term of office held among employees, whereby the election of Zbigniew Paprocki to that position was acknowledged.

For a detailed description of the remits of individual members of the Management Board, see the Directors' Report on Grupa Azoty S.A.'s and the Grupa Azoty Group's operations in the 12 months ended December 31st 2021.

Grupa Azoty S.A. Supervisory Board

The Supervisory Board is responsible for ongoing supervision of Grupa Azoty S.A.'s operations. Its powers and responsibilities are described in the Company's Articles of Association and include:

- appointing and removing from office Management Board members;
- assessing the Management Board's recommendations on the appropriation of profits or coverage of losses;

- assessing the Directors' Reports on the operations of Grupa Azoty S.A. and the Grupa Azoty Group;
- approving the Company's long-term strategic plans;
- issuing opinions to the General Meeting on all matters submitted by the Management Board for consideration;
- granting approval for the Management Board to execute material transactions.

As at December 31st 2021, the composition of the Grupa Azoty S.A. Supervisory Board was as follows:

- Magdalena Butrymowicz – Chair of the Supervisory Board
- Wojciech Krysztofik – Deputy Chair of the Supervisory Board
- Robert Kapka – Secretary of the Supervisory Board
- Monika Fill – Member of the Supervisory Board
- Bartłomiej Litwińczuk – Member of the Supervisory Board
- Michał Maziarka – Member of the Supervisory Board
- Marcin Mauer – Member of the Supervisory Board
- Janusz Podsiadło – Member of the Supervisory Board
- Roman Romaniszyn – Member of the Supervisory Board.

Grupa Azoty Council

The Management Board of Grupa Azoty S.A. is assisted by the Grupa Azoty Council, comprising the management boards of the Group's key companies. The Council provides advice and opinions and initiates measures to improve management and key changes at the Group. The Council's powers and responsibilities include providing opinions on company budgets and objectives for long-term plans. The Council also serves as a platform enhancing communication, cooperation and information sharing.

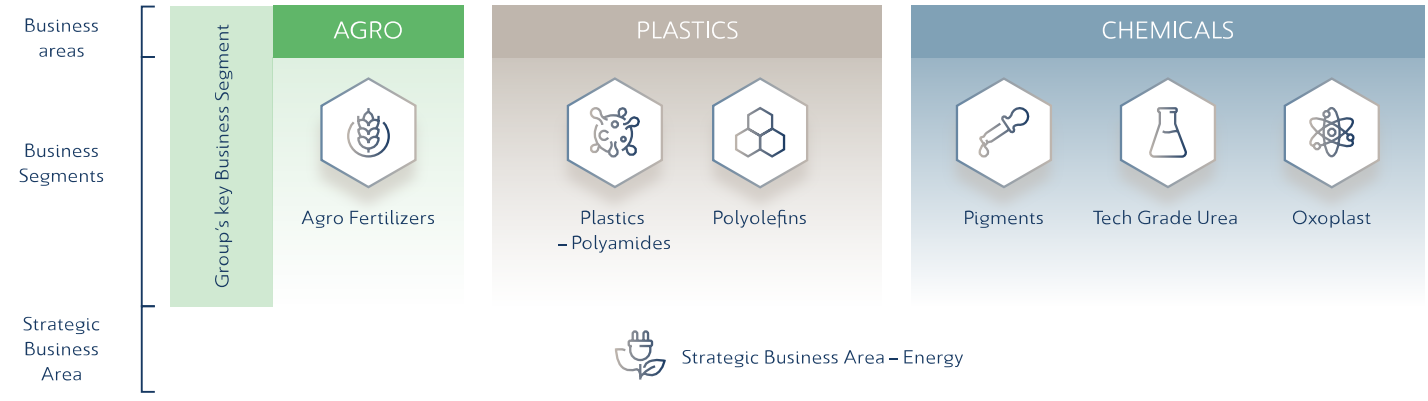


ABOUT THE GRUPA AZOTY GROUP

Our products

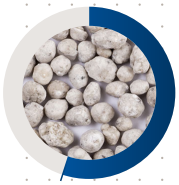
[102-2]

The Group's business is focused on three areas: fertilizers, plastics and chemicals. Our products are widely used in agriculture, as well as the food, automotive, electrotechnical and furniture industries. Chemicals produced by the Grupa Azoty Group also find applications in many everyday objects, e.g. household appliances, sports equipment, paints and varnishes.



[102-7]

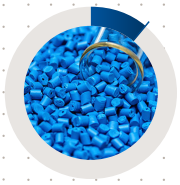
Contribution to the Grupa Azoty Group's revenue in 2021



55%
AGRO FERTILIZERS



29%
CHEMICALS



12%
PLASTICS



2%
ENERGY



2%
OTHER ACTIVITIES

[102-2]

Agro Fertilizers

The most important and largest area of the Group's business are **mineral fertilizers,** including nitrogen, compound and speciality products. They facilitate modern, efficient and sustainable crop cultivation, which improves the profitability of agricultural business and makes food prices affordable. We create fertilizers that satisfy the requirements of specific plant species in variable climate and soil conditions. The fertilizer manufacturing activities are conducted by our companies based in Tarnów, Puławy, Kędzierzyn, Police, Gdańsk, Chorzów, as well as in Germany and Spain. We are Poland's largest and European Union's second largest manufacturer of mineral fertilizers.

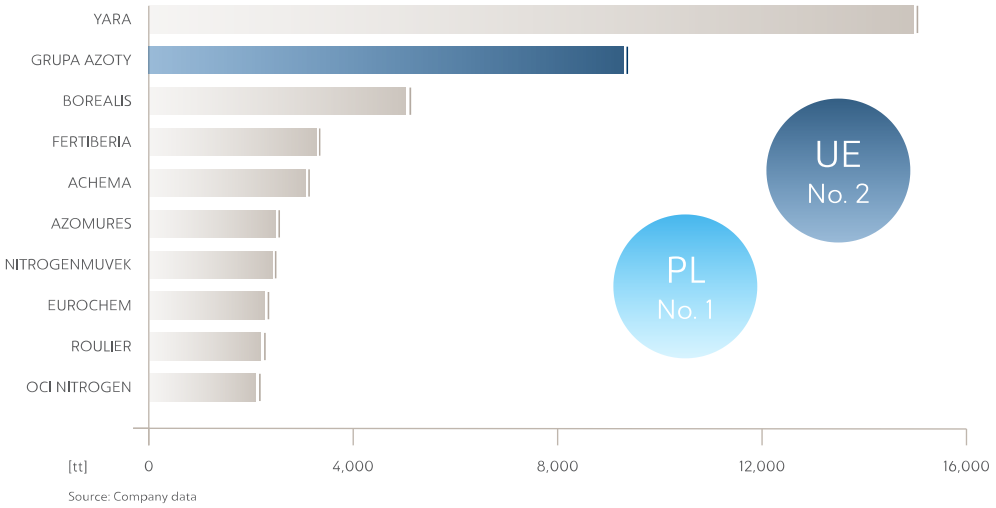
Agro Fertilizers Segment's product portfolio:

- nitrogen fertilizers
- nitrogen-sulfur fertilizers
- two-component fertilizers (NP, NK, PK)
- compound fertilizers
- speciality fertilizers (COMPO EXPERT)

Financial performance

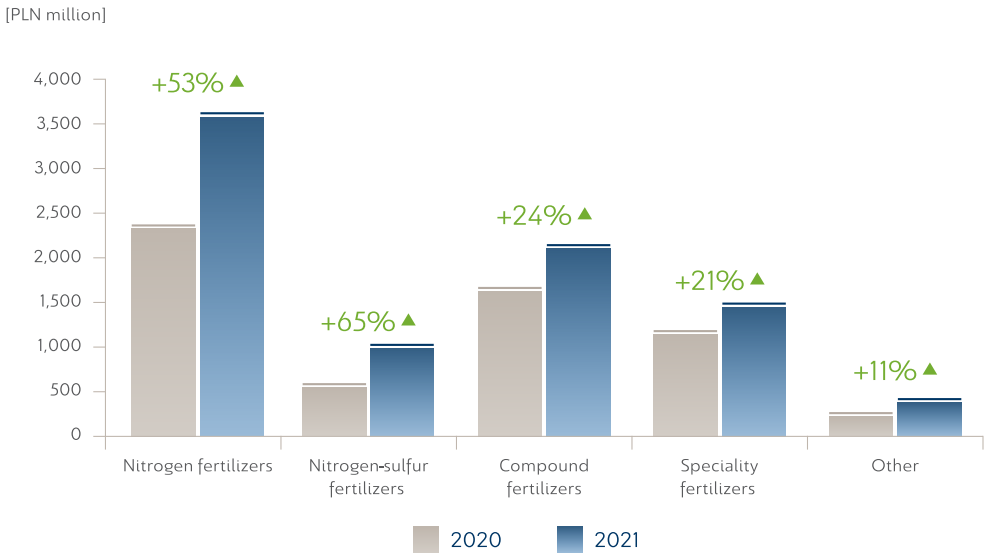
(PLN million)	2020	2021	Change
REVENUE	6,364	8,767	38%
EBITDA	821	772	-6%
EBITDA MARGIN	13%	9%	-4 pp

Grupa Azoty Group's production capacities vs competition (mineral fertilizers)

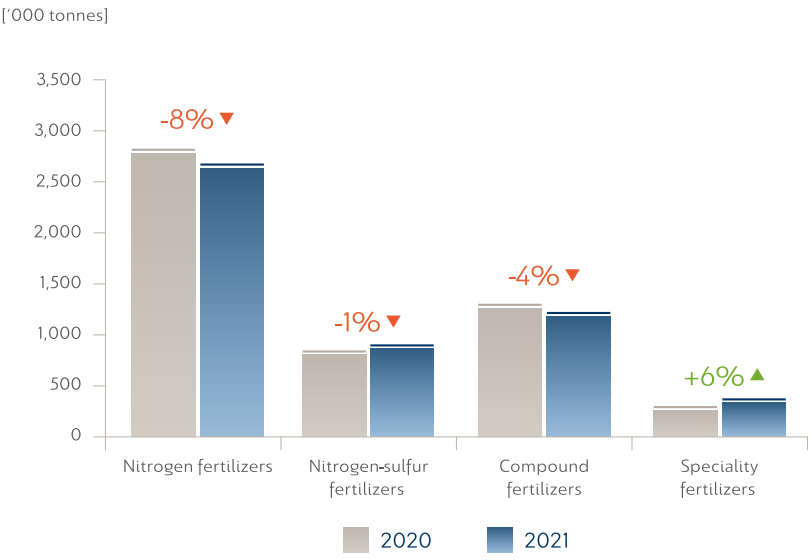


Source: Company data

Revenue



Sales volume





Learn more about our fertilizers



Urea

is a nitrogen fertilizer with a 46% nitrogen content. It is produced by our plants in Puławy, Police and Kędzierzyn-Koźle. In granular form or as a solution, it can be used for all types of crops during different growth phases, which makes it a universal fertilizer. Urea also finds application outside of agriculture, for instance in the production of adhesive resins for the wood-based panel industry. It may also be further processed into urea-ammonium nitrate solution (UAN – RSM®), a liquid fertilizer, or into melamine.



We offer nitrate fertilizers in three forms:

- Ammonium nitrate is a fertilizer which is easily dissolved in water, with a 30% to 34% nitrogen content.
- Calcium ammonium nitrate (CAN) is a nitrogen fertilizer with a nitrogen content of up to 28%. It is a universal product, suitable for all types of soil. Its easy solubility makes it readily absorbable by plants.
- Urea-ammonium nitrate solution is a liquid nitrogen fertilizer coming in three varieties: with a 32%, 30% and 28% nitrogen content. Thanks to its form, it is easily absorbed by plants. It is also produced with an admixture of sulfur.



Sulfur-nitrogen fertilizers

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



Compound fertilizers

are universal fertilizers which, depending on composition, can be applied to various types of crops and soil. Apart from primary components, that is nitrogen, phosphorus and potassium, these fertilizers also contain magnesium, sulfur and calcium, and may also contain micronutrients such as boron or zinc. Compound fertilizers can be used to provide nutrients to all types of arable crops. The Group's current portfolio includes more than 40 types of compound fertilizers. We also offer products with formulations meeting specific customer needs.



Speciality fertilizers

are designed to meet the requirements of various sectors, including fruit and vegetable growing, horticulture or maintenance of green areas.

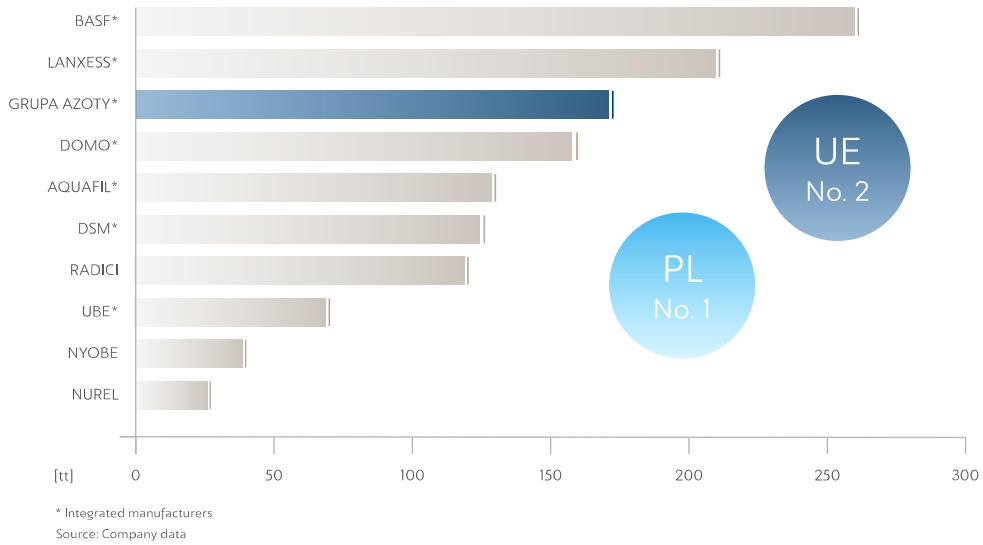
Plastics

We produce **plastics** that exhibit high thermal resistance and good mechanical properties. They are successfully used by the automotive, construction, electric engineering, food and textile industries, among others. Our plastics can also be found in household appliances. We manufacture polyamide-6 (PA-6) and polyamide 6-based modified plastics as well as other engineering plastics. The Grupa Azoty Group also manufactures modified plastics with specific compositions designed to suit individual customers' needs.

Financial performance

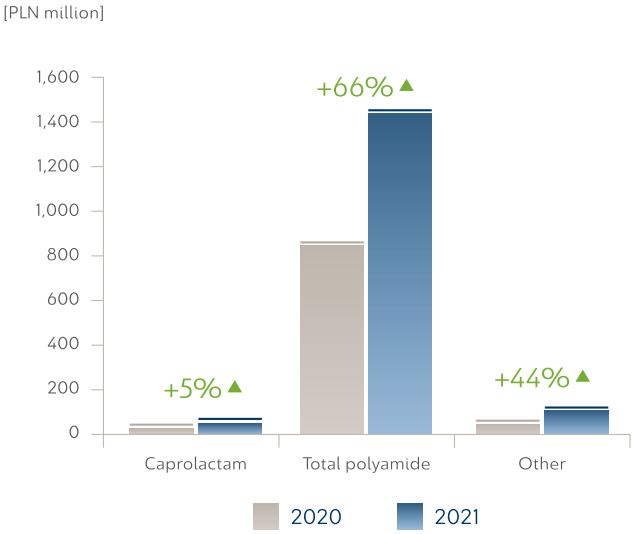
(PLN million)	2020	2021	Change
REVENUE	1,135	1,829	61%
EBITDA	-32	178	656%
EBITDA MARGIN	-3%	10%	13 pp

Grupa Azoty Group's production capacities vs competition (Polyamide 6)

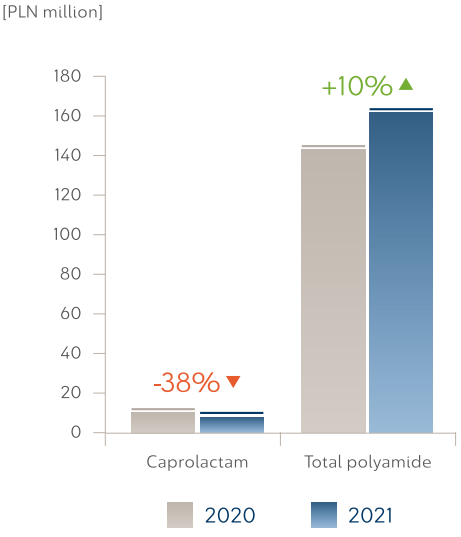


* Integrated manufacturers
Source: Company data

Revenue



Sales volume



The Group's Plastics business line comprises two segments: Polyamide Plastics and Polyolefins[1].

Product portfolio of the Polyamide Plastics segment:

- polyamide-6
- caprolactam
- compounds based on PA6, PP, PBT and PA6.6 polyamides
- sulfuric acid
- oleum
- cyclohexanone oxime (Tarnoks)
- cyclohexanol

Planned products of the Polyolefins segment:

- polypropylene
  - PP homopolymers
  - PP copolymers

[1] Production of plastics in the Polyolefins segment will begin after the launch of production by Grupa Azoty Polyolefins (planned for 2023).

Chemicals

The third key area of our operations is the Chemicals segment. It comprises three units: Pigments, Oxoplast and Tech Grade Urea.

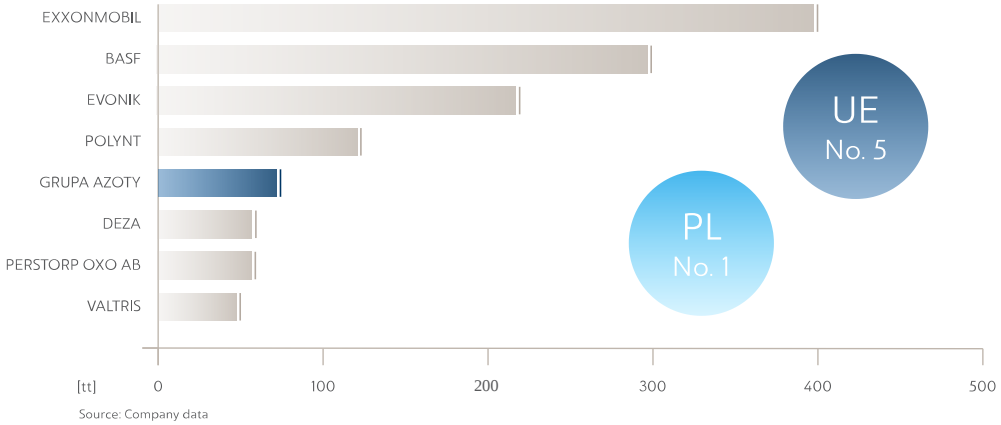
Product portfolio of the Chemicals segment:

- titanium white
- iron sulfate III
- aldehydes
- OXO alcohols
- plasticizers
- technical grade urea
- RedNOx products
- melamine
- technical grade nitric acid
- concentrated nitric acid
- mixed acids
- ammonium nitrate solution

Financial performance

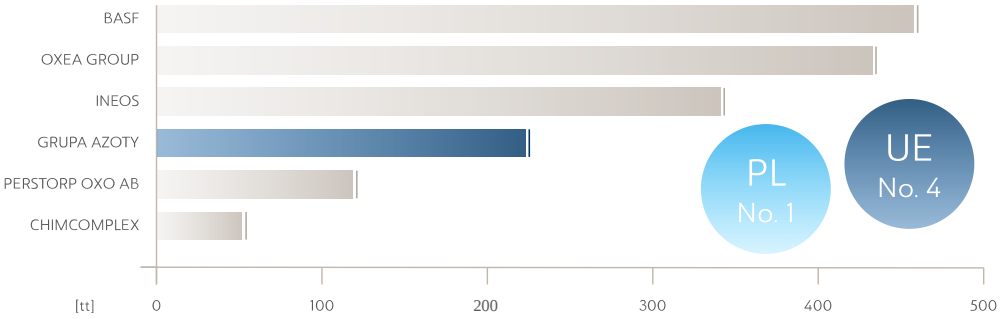
(mln PLN)	2020	2021	Change
REVENUE	2,522	4,630	84%
EBITDA	266	693	161%
EBITDA MARGIN	11%	15%	4 pp

Grupa Azoty Group's production capacities vs competition (Plasticizers)



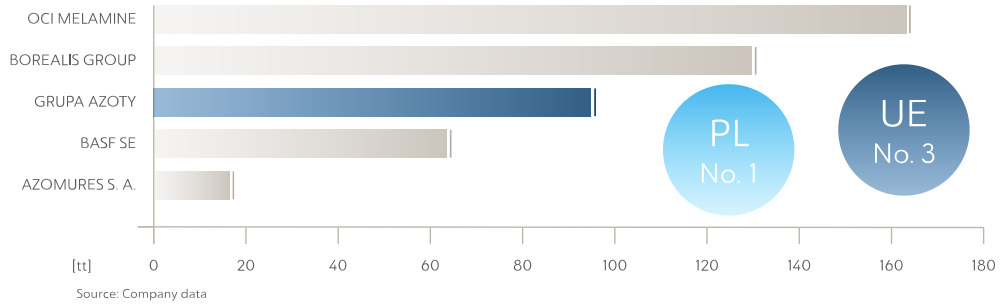
Source: Company data

Grupa Azoty Group's production capacities vs competition (OXO)



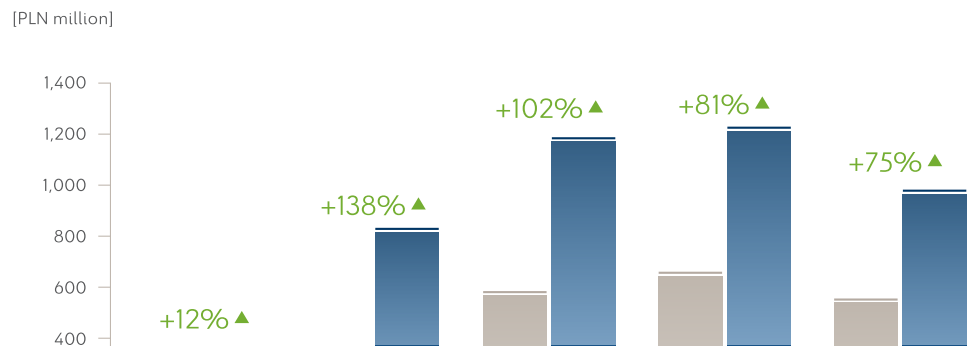
Source: Company data

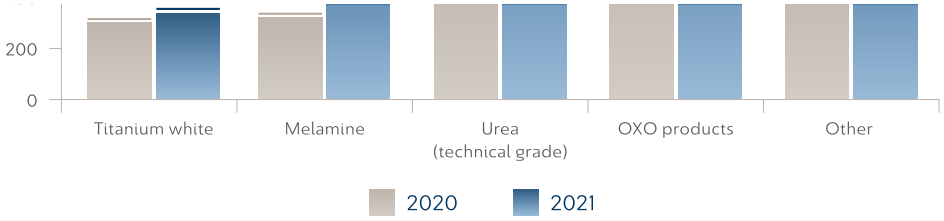
Grupa Azoty Group's production capacities vs competition (Melamine)



Source: Company data

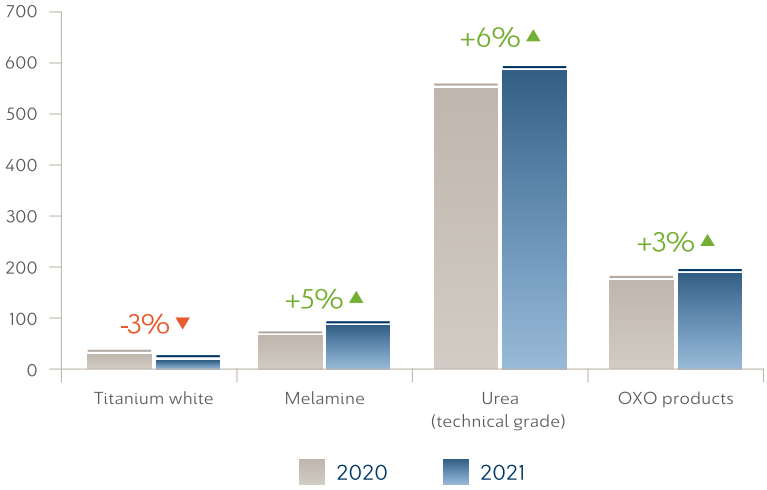
Revenue





Sales volume

['000 tonnes]

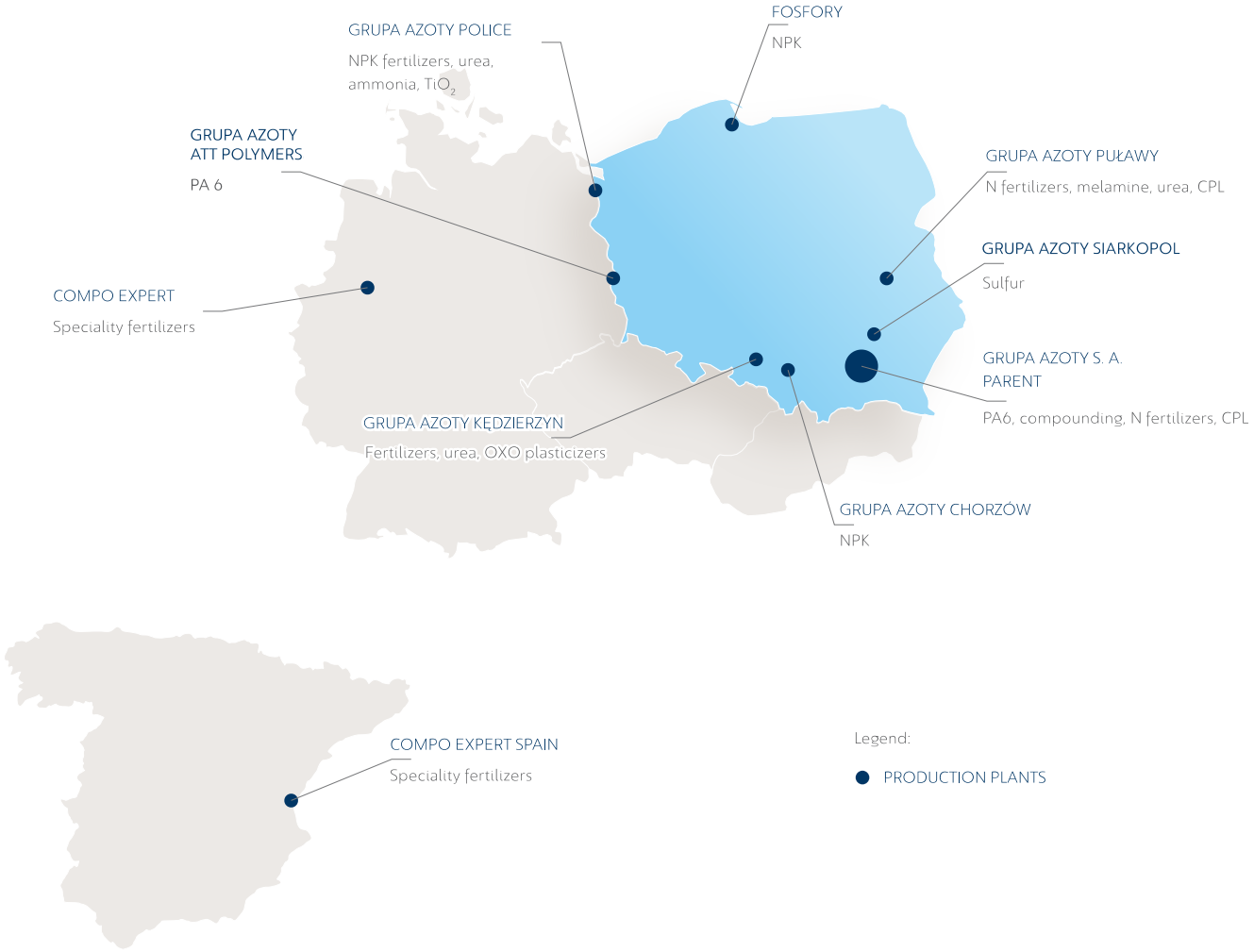


See the applications of our chemicals segment products

- OXY alcohols are used in the manufacture of plasticizers, paints and varnishes as well as in the textile industry and oil refining processes. They are also applied as a solvent for vegetable oils, animal fats, resins, waxes and petrochemicals.
- Mined sulfur is used in the production of sulfuric acid applied in the chemical industry.
- Melamine is a non-toxic and non-flammable white powder used, among other things, in the production of synthetic resins, thermosetting plastics, adhesives, paints, varnishes and fire retardants.
- Titanium white is the most widespread category of inorganic pigments characterised by the highest refractive index. Its other properties include the capacity to strongly absorb harmful ultraviolet radiation. Industrial applications of titanium white include the manufacture of paints and varnishes, plastics, paper, synthetic fibres, ceramics, rubber, cosmetics, pharmaceuticals and food products.
- Technical grade nitric acid finds its applications in nitrogenation processes, in cleaning of apparatus and equipment made of acid-resistant steel, in horticulture for substrate acidification, in metal treatment processes and in the plastics industry.

[102-4]

See the location of our production plants



Most of our products are manufactured in Poland, but we also operate plants in Germany and Spain. As we want to fully utilise our plants' capacities and maintain the continuity of production processes, we ensure secure supplies of strategic raw materials to the Group. We have diversified our supply sources, and our specialists keep monitoring the market to identify new and alternative suppliers. We may also consider the establishment of equity links with suppliers of raw materials. At the same time, we minimise the cost of raw material purchases by leveraging the economies of scale offered by the integration of the Grupa Azoty Group.

[102-6]

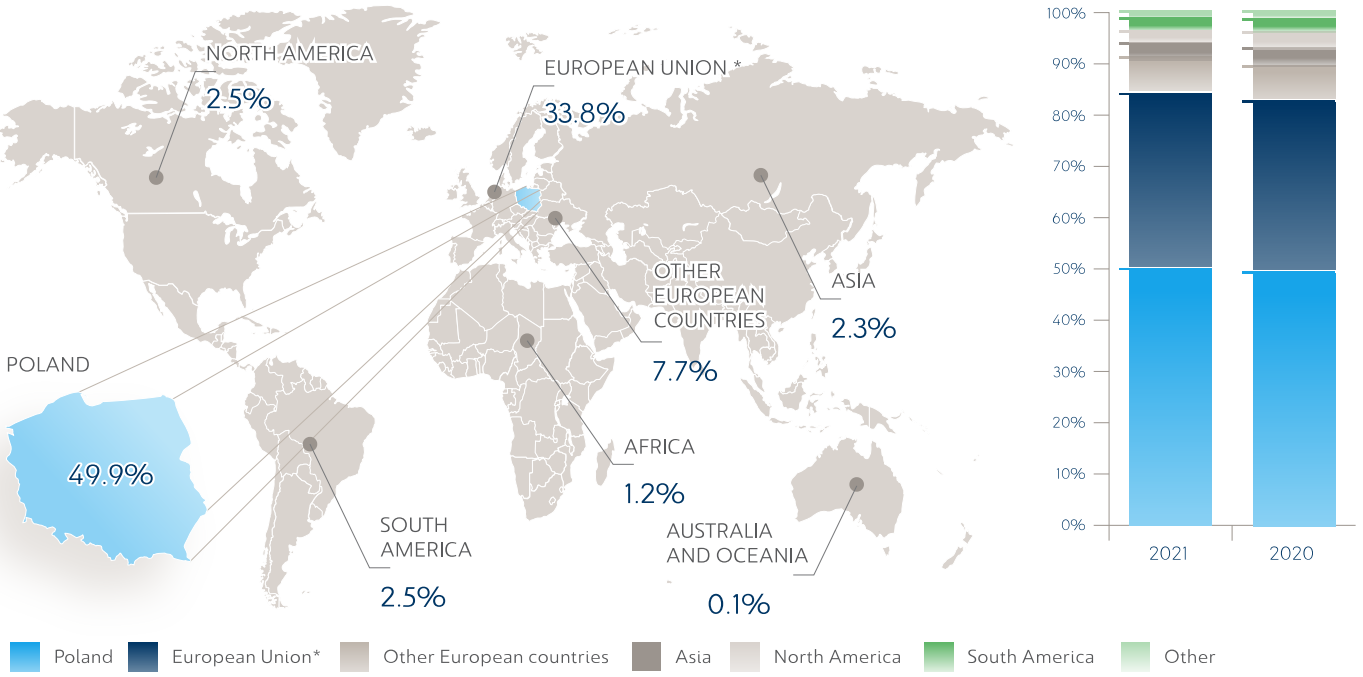
See where we sell our products

Our main market is Poland, but our products are available virtually worldwide. Outside of Poland, the largest volumes are sold in Germany, the United Kingdom, the Czech Republic, Italy, France and Belgium. On the domestic market, we sell fertilizers and products manufactured by our Chemicals segment. To European countries, we export mainly fertilizers, plastics and OXO alcohols, and to Asia – polyamide-6. Fertilizers manufactured by the Grupa Azoty Group are also sold in South America, North America and Africa.

Our customer base comprises mainly producers and processors active in the agricultural, food, chemical, automotive, transport, construction, paper, textiles, plastics, energy, mining and medical industries, as well as scientific and research institutions.

[102-6] [102-7]

Group's sales by geographies (based on revenue in 2021)



Source: Company data

* Excluding Poland



Value creation model

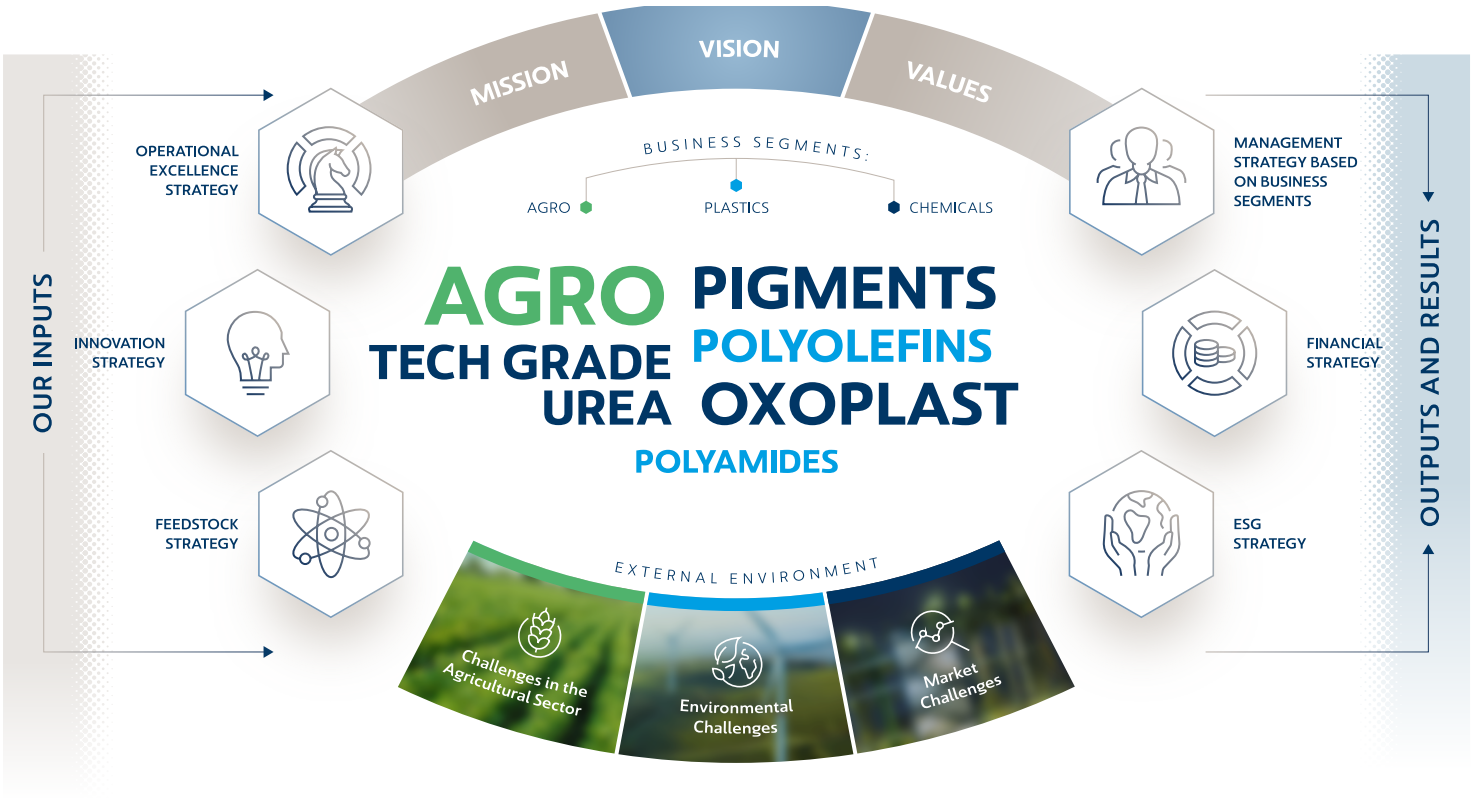
[IR - Business model] [IR - Presentation of results]

We want the Grupa Azoty Group's operations to stimulate growth of the Polish chemical sector and related industries. We are the leader of research and development initiatives in the Polish chemical industry, and our activity is creating opportunities to reduce the trade deficit in chemicals. By harnessing innovation, we are changing the Group's revenue structure by moving towards high-margin, fine speciality chemicals.

We are building our brand in a balanced way, based on innovation, knowledge, responsibility and professionalism. Our operations in 2020 were underpinned by the business model presented below. In 2021, the business model and the strategy were updated.

GRUPA AZOTY S.A.

Value creation model



Stable management and funding structure

INPUT

- At Grupa Azoty S.A., we regularly identify, analyse and control business risks, taking into account ESG risks (related to environmental, social and governance aspects, including climate risks) and regulatory risks.
- In 2021, the Group had total assets of PLN 23,644,705 thousand, including non-current assets of PLN 14,905,836 thousand.
- Financing sources of the Grupa Azoty Group in 2021:

  - The Group's equity comprises retained earnings, share premium and share capital. Equity amounted to PLN 8,932,167 thousand.

  - The key components of the Group's external sources of finance were bank borrowings of PLN 3,954,499 thousand, other borrowings of PLN 504,647 thousand and reverse factoring liabilities of PLN 1,755,695 thousand.

  - The Net Debt to EBITDA ratio [1] was 0.96.
- The Group received over PLN 1,039,742 thousand in financial assistance from the government [201-4]
- Three Group companies (Grupa Azoty S.A., Grupa Azoty Zakłady Azotowe Puławy S.A. and Grupa Azoty Zakłady Chemiczne Police S.A.) are listed on the Warsaw Stock Exchange.
- Stable management based on market standards – we manage the quality, environmental and safety aspects of our operations in accordance with the recognised framework of ISO standards, including: ISO 9001, ISO 14001, ISO 45001, and applicable industry systems.
- The Grupa Azoty Group has been taking numerous measures to prevent and offset its negative impacts on natural resources. We measure our Scope 1 and 2 carbon footprint, seeking to mitigate our impact on the

climate, including by implementing the TCFD recommendations (since 2020) and analysing risks and opportunities arising from climate change.

OUTPUT

- The Group's readiness to address potential ESG risks in the future.
- Improved operating performance of the Grupa Azoty Group in 2021:

  - Consolidated revenue was PLN 15,901,259 thousand (up PLN 5,376,732 thousand on 2020)

  - EBITDA was PLN 1,947,314 thousand (up PLN 624,242 thousand on 2020)

  - EBITDA margin of 12.2% in 2021, expected to reach >16% by the end of 2030

  - Consolidated net profit of the Grupa Azoty Group was PLN 633,687 thousand (up PLN 278,277 thousand on 2020)
- The Group paid PLN 147,825 thousand in income tax for 2021.
- The Grupa Azoty Group focuses on financial security and access to green project funding.
- The Grupa Azoty Group mitigates its harmful emissions through coal use reduction, decarbonisation, and development of renewable energy and carbon-free sources. It also seeks to protect ecosystems and natural resources.

[1]The Net Debt to EBITDA ratio was calculated in accordance with the definition set out in the financing agreements of the Grupa Azoty Group.

Non-current assets and investment readiness

INPUT

- Over 50 Grupa Azoty Group companies
- We run production facilities in Poland, Germany, Spain, and other countries.
- Our business comprises three segments: Agro, Plastics and Chemicals.
- In 2021, we spent PLN 2,561,479 thousand in capital expenditures, of which approximately 50% was growth CapEx (2020: 60%).
- We open new production facilities. In July 2019, Grupa Azoty Compounding commenced operations. Its business consists in the manufacture and sale of modified plastics.
- In 2019–2021, Grupa Azoty Police started 115 capital investment projects and completed 81 projects, which helped raise production efficiency and product quality.

- In 2019–2021, Grupa Azoty S.A. commenced or completed 42 CapEx projects involving its production and auxiliary facilities.
- We are continuing capital projects started in recent years.. In 2021, we allocated over PLN 828,605 thousand to our largest project, Polimery Police, aimed to construct an integrated chemical complex that would comprise a marine gas terminal, a propane dehydrogenation (PDH) unit, a polypropylene production unit with logistics infrastructure, auxiliary facilities and interconnections. The total budget of the project, the largest such investment in Poland's chemical industry in recent years, is PLN 7,210,957 [2] thousand.

OUTPUT

- The Group is among the largest consumers of raw materials in Central and Eastern Europe, with the cost of raw materials used in 2021 totalling PLN 10,390,000 thousand.
- The Grupa Azoty Group is Poland's largest and European Union's second largest manufacturer of mineral fertilizers.
- The Grupa Azoty Group contributes to strengthening Poland's position on the European plastics market, including through addition of biodegradable plastics into its product mix. The Plastics Business Segment started work on implementing the ISCC Plus standard for polyamide 6.

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

Innovation-driven growth

INPUT

- The amount of research and development work expensed in 2021 totalled PLN 19,524 thousand (PLN 5,549 thousand more than in 2020).
- In line with its innovation strategy, the Group will allocate up to 2–3% of its total revenue to research and development until 2030.
- In 2021, the research infrastructure of the Grupa Azoty Puławy Research Laboratory was upgraded with a focus on the development of new nitrogen fertilizers and biotechnological processes. A new Research and Development Centre is being developed in Puławy.
- In 2021, Grupa Azoty Kędzierzyn added new equipment to its Fertilizer Application Laboratory. New research equipment was also procured for the Alternative Fuels Laboratory.
- Work began to transform the existing Plastics Laboratory into the Plastics Application Design and Development Centre.
- In 2021, Grupa Azoty S.A. had two ongoing acceleration programmes, KPT ScaleUP and IMPACT_POLAND 2.0, financed by the Polish Agency for Enterprise Development.
- We have a long-standing relationship with the Łukasiewicz Research Network – Institute of New Chemical Syntheses.

OUTPUT

- The four leading companies of the Grupa Azoty Group were awarded 16 patents in 2021.[3]
- 

  The Grupa Azoty Group mitigates its negative environmental impacts through pro-environmental investments, including in flue gas desulfurisation, industrial wastewater treatment, and reduction of water and electricity consumption. Compared with 2020:

  - we reduced hard coal consumption by almost 13%

  - we reduced sulfur dioxide emissions by over 36%

  - we reduced our carbon footprint (Scope 1 and 2) by 104 thousand Mg CO2e, or approximately 1% in relative terms.
- Agricultural innovations of the Grupa Azoty Group:

  - A pilot line for the production of humic acids was launched at the Grupa Azoty S.A. Implementation Centre. In 2021, we had the capacity to produce 552 Mg of Tohumus (the main product) per year.

  - Grupa Azoty Puławy brought online a granulated fertilizer plant comprising production lines with a daily capacity of 1,200 tonnes of granulated ammonium nitrate or 1,400 tonnes of calcium ammonium nitrate as well as Poland's most advanced packing and seasoning facilities.
- 

  Green innovations:

  - As part of the Green Amber project, we continue work to develop an environmentally-friendly succinic acid production technology.

  - We have developed a commercially viable method of producing ε-caprolactone, a feedstock for biodegradable plastics made from raw materials available at Grupa Azoty Puławy.
- Other innovations:

  -

  The deployment of advanced process controls (APC) has reduced the carbon footprint of one of the eight ammonia lines by more than 20 kg CO2 per tonne of ammonia.

  - Grupa Azoty Kędzierzyn completed the implementation of an innovative oxygen dosing technology for the TK IV and TK V nitric acid units in 2021.

  - We signed an agreement with Microsoft to use cloud computing for precision agriculture and other applications.

[3] The number of patents awarded to each company: Grupa Azoty S.A.: 1 patent, Grupa Azoty Puławy: 8 patents, Grupa Azoty Kędzierzyn: 6 patents, Grupa Azoty Police: 1 patent.



Stable market position

INPUT

- The leading Group companies worked with 4,886 local and international suppliers in 2021.
- The Grupa Azoty Group sells its products to 109 countries, expanding its distribution capabilities in the following five geographical regions: European Union and other European countries, Asia, North America, South America, and Africa.
- The Grupa Azoty Group is an active participant in industry organisations and initiatives, including organisations promoting sustainable development. In 2021, we signed a letter of intent with the State Forests National Forest Holding concerning thermoplastic starch production [102-13] .

OUTPUT

- Our four leading companies added 1,243 new accounts to their customer base in 2021.
- Net margin, calculated as net profit or loss to revenue, posted by the Grupa Azoty Group increased to 4 from 3.4 in 2020.
- Expansion on new markets, including through COMPO EXPERT's distribution network and business links with traders on distant markets.
- The Grupa Azoty Group is Poland's largest producer of:

  - mineral fertilizers (second largest producer in the EU)

  - polyamides (third largest producer in the EU)

  - OXO alcohols (fourth largest producer in the EU) and plasticizers (fifth largest producer in the EU)

  - melamine (third largest producer in the EU)

Diversification and development of products and services

INPUT

- Using the existing and constantly developed infrastructure, the research and development staff at the Group companies have the opportunity to test new technologies and conduct their own research.
- In 2021, the Grupa Azoty Group spent PLN 2,425,000 thousand in CapEx directly related to product development.
- We are responsible for our products along the entire supply chain. We operate the Product Stewardship Programme as a member of Fertilizers Europe.

OUTPUT

- 
  The Grupa Azoty Group is CEE's first producer to offer fully biodegradable plastics.
- We add new speciality plastics to our product portfolio, including our first polymeric speciality plasticizer OxofineTM Poly2K.
- 
  We use efficient fertilizer formulas that help reduce greenhouse gas emissions, such as Fosfarm, which perfectly fits with the ambitions outlined in the EU's farm-to-fork strategy.
- 
  The Grupa Azoty Group seeks to identify the carbon footprint for all its products.
- Our ambition is to maintain the lead in fertilizer production on the Polish market through ongoing identification of farmers' and consumers' needs. Some examples of our farmer support programmes include Grounded in Knowledge, Nawozy.eu, SatAgro, etc.



Experienced team

INPUT

- The Grupa Azoty Group employs over 15,000 employees (almost 10,000 at the four leading companies), maintaining an unwavering commitment to employee development.
- In 2021, the four main companies of the Grupa Azoty Group spent nearly PLN 2,000 thousand on employee training and development.
- We develop courses of study in partnership with two universities.
- In 2021, we continued the Grupa Azoty Brand Ambassador programme, which aims at building lasting relations between the academic community and industry. In 2021, the Grupa Azoty Group worked with six students promoting the Grupa Azoty brand in academic and scientific communities.

OUTPUT

- The Group is the largest employer in the regions where it operates.
- 31% of managerial positions were held by women [405-1] in 2021.
- We expand our intellectual capital by investing in employee development.
- In 2021, the average number of training hours per employee was 6.6 for women and 7.0 for men [404-1] .



Social and economic development of local communities

INPUT

- We have implemented the Grupa Azoty Group Social and Sponsorship Policy (since 2013) and the CSR Policy for Grupa Azoty Group Companies (since 2020). Through charitable donations, the Grupa Azoty Group seeks to actively respond to the needs of its local communities, and its CSR Policy defines the rules for conducting CSR activities.
- The total amount of donations to social causes made across the Grupa Azoty Group was PLN 3,353 thousand in 2021, including PLN 2,311 thousand at the four key companies.
- In 2021, the Grupa Azoty Group's leading companies paid over PLN 124,244 thousand in local taxes [203-2] .
- As part of our outreach and charitable activities, we have established relationships with about ten nationwide and 100 local non-governmental organisations and institutions, including Noble Gift and Caritas.
- Our employees at Grupa Azoty Group companies engage in employee volunteering initiatives.
- In 2021, we again supported local communities in their fight against coronavirus.

OUTPUT

- We expand our social and economic capital by building stakeholder trust.
- We build relationships with our neighbours and customers.
- We seek to make the regions where the Group operates more attractive as places to live, work, pursue passions and fulfil ambitions.
- The Grupa Azoty Group is a key partner to many nationwide sports, educational and charitable projects promoting physical activity, entrepreneurship and innovation, and helping those in need.



STRATEGY

2021–2030 Strategy

[IR - Strategy and resource allocation] [102-16] [103-1] [103-2] [103-3]

We would like the Grupa Azoty Group to become a high-performing and flexible group of companies with a divisional structure focused on production in Europe by 2030. In pursuit of this objective, we will rely on our mission, vision, values and the Grupa Azoty Group Strategy for 2021–2030, published in October 2021.

MISSION 2030

In harmony with the environment, we manufacture fertilizers, plastics and chemical products. We improve the well-being of people who live in Europe and actively contribute to building our continent's food security.

VISION 2030

Grupa Azoty is a supplier of effective solutions and a reliable manufacturer of fertilizers, plastics and green chemical products.

VALUES 2030

- People
  - active contribution to meeting food needs of Europeans

- addressing the need to increase agricultural efficiency
- meeting the needs of modern agriculture

- Development
  - implementation of new, environmentally-friendly and climate neutral products
  - product diversification

- Environment protection
  - implementation of the 'Green Azoty' strategic project
  - taking Group-wide action to protect the environment

- Energy
  - reducing energy consumption in chemical processes
  - improving the energy efficiency of chemical processes and power generation.
  - energy transition to increase the share of renewable and low-carbon energy generated.

We are aware of the huge challenges faced today by the chemical industry as a whole, but also of how essential its products are for everyday needs. We keep an eye on legislative changes resulting from climate warming and the need to reduce adverse environmental impacts.

We are also aware of the need for change – our plans and ambitions are incorporated in the new Strategy for 2021–2030. We spent many months to develop, in cooperation with top-notch experts, a plan for our climate neutrality and energy transition. We have prepared a realistic strategy, tailored to our organisation. It is a carefully designed and comprehensive multi-annual investment plan that addresses challenges faced by the entire Group.

Over the next ten years, we will probably carry out what is meant to be the most meaningful and important sustainability transition in the Polish chemical industry. Our detailed agenda for green industrial energy, significant emission reductions and decarbonisation is included in the Green Azoty project.

Our Strategy for 2021–2030 is a public document, available for download here.



The three most pressing challenges faced by the contemporary world that guided our Strategy until 2030 are:

- **Environmental commitment and regulatory changes**

We understand that climate change and environmental degradation represent an important threat to Europe and the whole world. The chemical industry, which releases large amounts of greenhouse gases for technological reasons, must accept its responsibility towards the public to slow down these changes by pursuing decarbonisation and investing in green energy and sustainable products. We will carry out sustainability initiatives within our Group, but we also intend to successively require our suppliers of raw materials and semi-finished products to demonstrate such attitudes.

Initiatives designed to minimise our adverse environmental impacts have been included in our ESG Strategy and Green Azoty project.

- **Food production and sustainable agricultural development**

Land is a public good, and in addition to economic value, it also has environmental and social value. Arable land resources are limited, unevenly distributed over the planet, and their area is gradually diminishing, with a negative effect on food production capacity as demand continues to grow. In the near term, 90% of the achieved growth in food production will result from crop intensification and only 10% from an increase in arable land. Key goals set by the EU for the coming years include biodiversity and improved fertilizer efficiency.

- **COVID-19 pandemic**

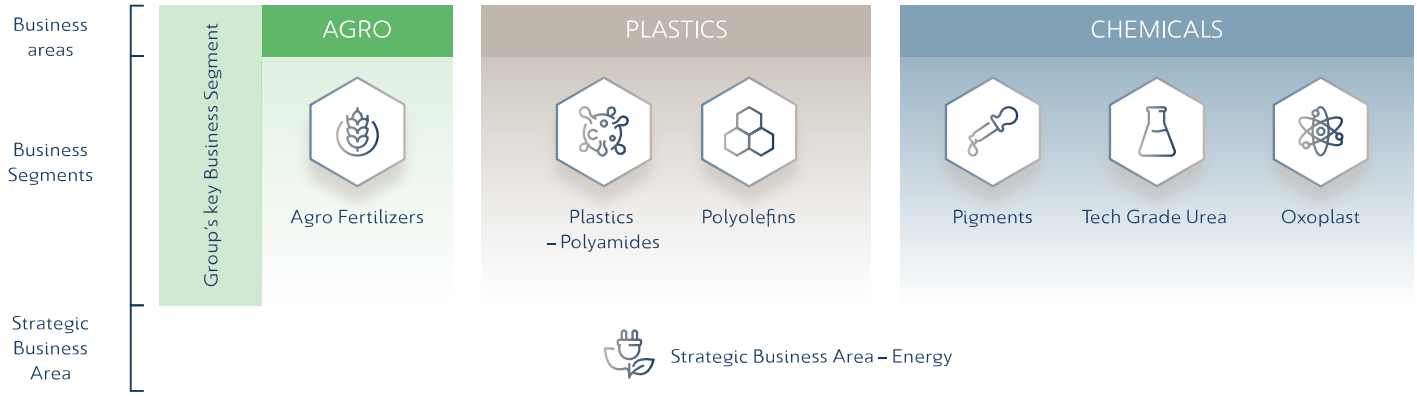
The COVID-19 pandemic has made consumers and businesses aware of the extent to which supply chains are globalised and interdependent across different regions of the world, highlighting the importance of their flexibility and diversification. As the pandemic progressed, a need emerged to change the approach towards employees (by shifting to remote work) and customers (social distancing).

[103-2]

In formulating our new mission and vision, as well as our values, aspirations and plans until 2030, we identified:

Management strategy based on business segments

The new Strategy necessitates the introduction of a new organisational model to fully realise the synergies between our companies that we have been consistently unlocking. We will completely integrate some support functions and introduce a management approach based on key business segments. Until 2030, our priority areas will be Agro, Plastics and Chemicals, together with their underlying business segments.



- The key task in the Agro area will be to strengthen our leading position in fertilizer production and sales at the national and regional level by expanding our product portfolio. In 2030, we want to be recognised by the market as a supplier of complete fertilizer systems, rather than just a fertilizer manufacturer. The Agro Fertilizers Segment's offering will be developed in parallel with the 'Farm to Fork' strategy, which prioritises sustainable agriculture.
- In Plastics (the Plastics Segment (polyamides)), we will develop our polyamide product portfolio in line with the circular economy concept. New products will rely more heavily on waste recycling – both from our own facilities and from the external market.
- There will be a new segment within Plastics: Polyolefins, closely linked to the Polimery Police project. Our ambition is to enter the polypropylene market, build a network of customers and distributors, achieve a stable position in Europe, and grow in the advanced polymer products industry.
- In Chemicals, we intend to continue the business of the Oxoplast and Pigments segments. In the former, our plans include product portfolio diversification, greater production flexibility and a stronger presence outside of Europe. In the latter, we will aim to concentrate the sales of titanium white and to harness AI for process modelling, optimisation and advanced control. The 2021–2030 Strategy has also identified a new segment within Chemicals: Tech Grade Urea. We want to maintain our lead in urea production and expand our portfolio to include technical grade urea, NOXy and more.

Strategic Business Area – Energy

The primary objective of the Energy Segment is and will be to support the Grupa Azoty Group's core business by providing energy carriers powering its chemical processes and by supporting strategically important areas while seeking to decarbonise the generation sources. As greenhouse gas emissions from energy generation account for approximately a half of the Group's total emissions, it is necessary to take action to transform captive heat and power generation, reduce energy consumption and improve the energy efficiency of chemical units.

Our objectives for the Strategic Business Area – Energy include:

- diversification of energy sources, followed by gradual phase-out of coal in favour of natural gas and renewables as alternative green sources in order to reduce the organisation's carbon footprint

- maximising synergies between energy generation and chemical processes, e.g. in the area of energy generation from steam created by chemical units
- reducing unit energy consumption. Including a 30% reduction of the energy intensity of the SMR process by 2024
- deployment of new technological solutions, including the use of new types of equipment with enhanced energy efficiency, increase of energy yields, and use of smart control techniques (APC, DCS)
- aligning the energy installations of the Group companies' with the BAT conclusions through flue gas denitrification and desulfurisation research into SCR catalysts for the energy generation industry in Poland.

Key activities undertaken within the Strategic Business Area – Energy will form part of the 'Green Azoty' corporate project.

Financial strategy

One of our strategic financial objectives is to continue the consolidation of the finance function, which will improve the management of the Grupa Azoty Group at the level of individual business segments.

We also want to ensure that the financing structure is fully aligned with the needs and capabilities of the Group to enable the implementation of key investment projects. The underlying purpose of the financing structure is to ensure short- and long-term sources of finance on competitive terms and in amounts sufficient to fund day-to-day operations, CapEx programmes and potential acquisitions.

We are well aware that new projects require additional funding. Therefore, we intend to launch 'green financing' in the form of bonds or credit, which will allow us to finance our energy transition investments. We also count on the use of funds allocated under the National Recovery Plan and other planned support measures. These funds are expected to provide financing for lower-return projects essential for our energy transition. Additionally, we may extend our corporate financing agreements or enter into new arrangements of that type.

The key financial targets include delivering a stable EBITDA margin of more than 16% by 2030 and achieving a net debt to EBITDA ratio below 3.0 from 2025 onwards. Once the Group's strategic CapEx programme (including climate transition projects) is completed, the Grupa Azoty Group will be capable of paying dividends above 40% of consolidated net profit.

ESG Strategy

We will develop the Grupa Azoty Group sustainably, meaning that we will consider environmental protection, concern for the society and responsible corporate governance (ESG aspects) in the process. The Group will continue to support the implementation of the United Nations 2030 Sustainable Development Goals.

The Grupa Azoty Group is subject to regular ESG ratings (including Sustainalytics ESG Risk Rating and S&P) in order to have its performance evaluated and identify areas for improvement.

ESG Strategy pillars:



Climate and environment

We seek to reduce the negative environmental impacts of the Grupa Azoty Group by curbing greenhouse gas emissions and decarbonising production. For this reason, we are switching from existing energy sources to green alternatives. Our strategic corporate project designed to advance that goal is Green Azoty. We also responsibly manage climate risks, including regulatory, physical, technology and sales restriction risks.

Priorities and objectives until 2030:

- **Decarbonisation and emissions reduction**
  - 34% reduction in CO_2 emissions from energy generation sources of Grupa Azoty relative

to 2020 baseline
- 51% reduction in emissions from purchased energy generation relative to 2020 baseline
- 65% reduction in coal consumption relative to 2020 baseline
- implement recycling technology with waste utilisation
- lower our organisation's carbon footprint

- **Energy transition**
  - incorporate gas-fired sources into the energy mix in the transition period; ultimately grow the share of renewable energy sources in power generation to 40%

- **Energy efficiency**
  - reduce energy consumption per product unit
  - step up efforts to recover waste energy from chemical processes

Sustainable products



We offer a guarantee of efficient, innovative and environmentally-friendly production processes and we strive to estimate the carbon footprint across all products of the Grupa Azoty Group. We aim to expand our sustainable product portfolio by promoting the efficient use of raw materials and constantly reducing the energy intensity of our processes. We contribute to food security while taking care to develop effective fertilizer formulas that reduce greenhouse gas emissions into the atmosphere.

Priorities and objectives until 2030:

- **Circular economy**
  - implement waste processing projects
  - upgrade systems supporting the management of natural resources within the organisation

- **Sustainable agriculture**
  - educate and support farmers in precision fertilization and practical application of Grupa Azoty's new green products
  - run a sustainable agriculture awareness campaign

- **Green products**
  - implement the 'Green Azoty' project
  - cooperate with third parties in the development of green products
  - implement new solutions under ongoing accelerator programmes
  - advance internal research to improve existing and create new green products

Sustainable supply chain



We aim to quantify our carbon footprint in order to set accurate climate targets, in alignment with the Paris agreement. We act and expect our business partners to act in an ethical, socially responsible and environmentally sustainable manner.

Priorities and objectives until 2030:

- **Cooperation based on shared values and goals**
  - evaluate the selection of suppliers of goods and services based on ESG criteria
  - implement a programme to reduce the carbon footprint of our products, build or deploy a system to collect emissions data and reduce emissions

- **Shared responsibility for the climate, environment, and society**
- **Shared responsibility for shaping the value chain**
  - support partners in operating sustainably and improving their social and environmental

practices
- train business partners to facilitate change
- transparently communicate standards of ethics and rules of business partnership

Immediate environment



We want to make a positive difference in the social and economic environment. We foster relationships to educate and train future staff, expand projects benefitting our customers, and engage in dialogue with the local communities in accordance with the Friendly Neighbourhood principle.

Priorities and objectives until 2030:

- **Partnership of equals as a key development driver for the organisation and region**
  - engage in dialogue with potential future employees, for instance by holding training sessions and courses
  - educate farmers on sustainable agriculture and other topics
  - support academic institutions and scientific research centres through internship, traineeship and knowledge transfer opportunities
  - maintain regular dialogue with the immediate environment and deliver key goals
  - support local associations, groups and initiatives upholding the same ethical values as Grupa Azoty
- **Responsibility for the immediate environment**
  - community engagement and sponsorship
  - strengthen the role of CSR as a component of the corporate culture, including employee volunteer service to support social institutions
  - further develop communication tools to raise awareness of Grupa Azoty's operations, including safety aspects, among local communities
- **Stakeholder dialogue**
  - maintain dialogue with all stakeholder groups
  - provide reliable, timely and accurate information
  - communicate the economic situation and prospects of Grupa Azoty to its shareholders and potential investors in a transparent way and report non-financial data in line with stakeholder expectations.

Friendly and safe workplace



Employee safety is our paramount concern. We respect codes of ethics and the principles of equality using clear hiring and promotion criteria. We foster gender, education, age and work experience diversity among our workforce. We apply the principles of equal treatment and non-discrimination.

Priorities and objectives until 2030:

- **Equality, diversity, openness**
  - ensure equal pay for women and men in similar jobs
  - put a formal diversity policy in place at the Group, encompassing gender, education, age and professional experience
- **Employee safety**
  - implement uniformly robust safety standards through an OHS policy
  - pursue a zero accident target at the Group's plants
  - implement programmes promoting healthy lifestyles among employees

- **Professional development**
  - offer professional development opportunities and carry on the Intellectual Capital Development Programme among current and future employees
  - launch cascade skills development – reinforce the role of line managers as persons responsible for employee development
  - promote up-to-date, effective professional training sessions and courses by developing an in-house e-learning platform available to all employees
  - regularly survey employee engagement and satisfaction

See how we support the UN goals

Our commitment	UN goals	Supporting pillars and strategic priorities
Energy transition and sustainable products		▪ Sustainable products ▪ green products ▪ circular economy ▪ Climate and environment ▪ decarbonisation of production ▪ energy efficiency ▪ energy transition ▪ Sustainable supply chain ▪ select suppliers based on shared values and goals
Education and community dialogue		▪ Sustainable products ▪ sustainable agriculture ▪ Sustainable supply chain ▪ shared responsibility for shaping the value chain ▪ Immediate environment ▪ partnership of equals as a key development driver for the organisation and region ▪ responsibility for the immediate environment
Equality, diversity and transparent dialogue		▪ Immediate environment ▪ partnership of equals as a key development driver for the organisation and region ▪ stakeholder dialogue ▪ Friendly and safe workplace ▪ professional development ▪ equality, diversity, openness ▪ occupational health and safety

Feedstock strategy

The bulk of raw materials used by our organisation come from third-party suppliers. Therefore, our key strategic goal in the feedstock area is to ensure the security and continuity of supplies. At the same time, we are aware that the cost of raw material purchases has so far accounted for as much as 70% of the Grupa Azoty Group's total operating expenses. For this reason, we intend to continue efforts aimed at more efficient utilisation of our own feedstock assets.

Feedstock sourcing will focus on growing the share of green energy in the Group's mix and improving control over the carbon footprint of raw materials sourced from third-party suppliers.

Objectives of our feedstock strategy:

- preserve the continuity of natural gas supplies,
- maximise in-house feedstock production capacities,
- improve feedstock management at the level of the Group and individual business segments,
- continue to purchase energy feedstocks under the Group's common procurement policy,
- work with partners who produce feedstocks with the minimum carbon footprint.

Innovation strategy

Our goal is to deliver new and improved products of high quality and maintain our competitive advantage in the long term. We estimate our expenditure to be incurred on research, development, pilot units and innovation in 2030 at 2–3% of the Grupa Azoty Group's revenue.

Innovation strategy is about:

- Supporting corporate projects
  - by the end of 2024 – creation of common agronomic research infrastructure for all Group entities
  - providing corporate support for non-product innovations to streamline the Group's business areas and services at the companies.
- Developing an innovation system
  - implementing by 2025 and maintaining in place a defined innovation management system and developing tools to support R&D&I
  - implementing and developing programmes designed to drive innovation, including internal programmes dedicated to employee innovation and innovation financing schemes.
- Innovation projects
  - harmonising the new product development system at the Grupa Azoty Group by 2022 for more efficient use of internal resources
  - providing high quality new and improved products
  - maintaining long-term competitive advantage by flexibly and swiftly responding to market trends relevant to products offered and by creating new trends in niche technologies.
- Innovation geared towards minimising the impact of regulatory risks
  - readiness of the R&D area to protect Grupa Azoty's existing products against the impact of regulatory changes and preservation of existing sale markets
  - participating in consultation of draft regulatory changes to be able to influence such changes initiating new solutions and thus build competitive advantage
  - setting up a system for monitoring products, feedstocks and technologies used by the Grupa Azoty Group.

Our innovations implemented in 2021 are described in more detail here.



Operational excellence strategy

The three pillars of operational excellence strategy are as follows:

Logistics

- fast and efficient fulfilment of the needs of business segments
- development of IT tools in logistics
- advancing intermodal transport with a focus on environmentally-friendly modes
- expansion of the sea port in Police
- development of the river port in Kędzierzyn-Koźle
- exploiting the potential of the Oder Waterway
- expansion of the companies' storage resources
- reduction of the cost of using external warehouses.

Capital assets management

- improving energy efficiency of chemical processes
- implementing IT tools to support the process of production monitoring and planning, leading to improved product quality, increasing production efficiency and raising employee awareness.

IT

- uniform, coherent and integrated IT architecture
- central IT security management and implementation of monitoring systems based on artificial intelligence
- developing and building IT capabilities, improving service levels within the Grupa Azoty Group and offering IT services to external customers.

2030 Strategy in figures:

>16%

EBITDA margin

<3.0

debt to EBITDA ratio as of 2025

>40%

of consolidated net profit

following completion of the strategic CapEx programme

by 65%

reduction of Grupa Azoty Group's coal consumption

relative to 2020

PLN 2.7 bn

approximately for green and decarbonisation projects

min. 40%

average share of RES in electricity generation

51%

reduction in CO2 emissions

related to purchased electricity

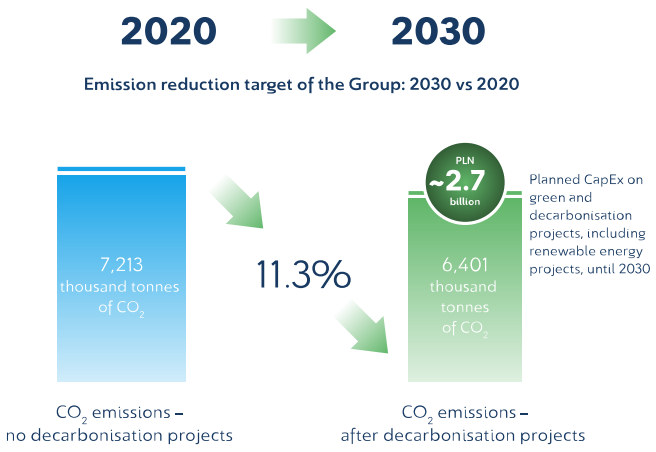
Learn more about the Green Azoty Project

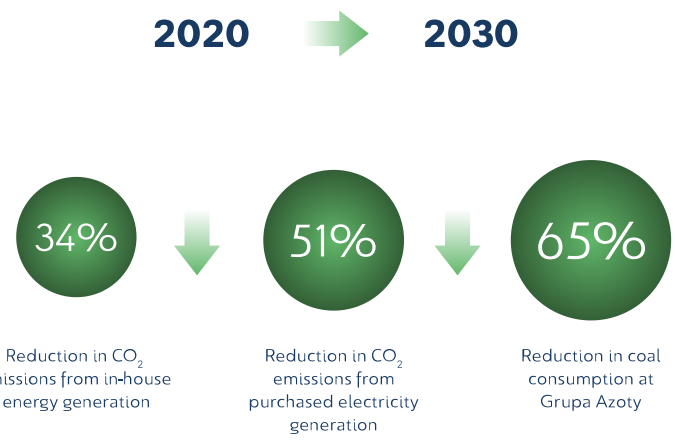
'Green Azoty' is the flagship project of the 2030 Strategy, which will change the environmental identity of our Group.

Key objectives of the Green Azoty project:

- environmentally-minded diversification of raw material supplies
- delivery and reporting of the ESG Strategy
- implementation of technological solutions involving renewables as alternative green energy sources
- striving towards decarbonisation and reduction of harmful environmental emissions
- R&D projects corresponding to the objectives of the European Green Deal
- Green Hydrogen and Green Ammonia projects.

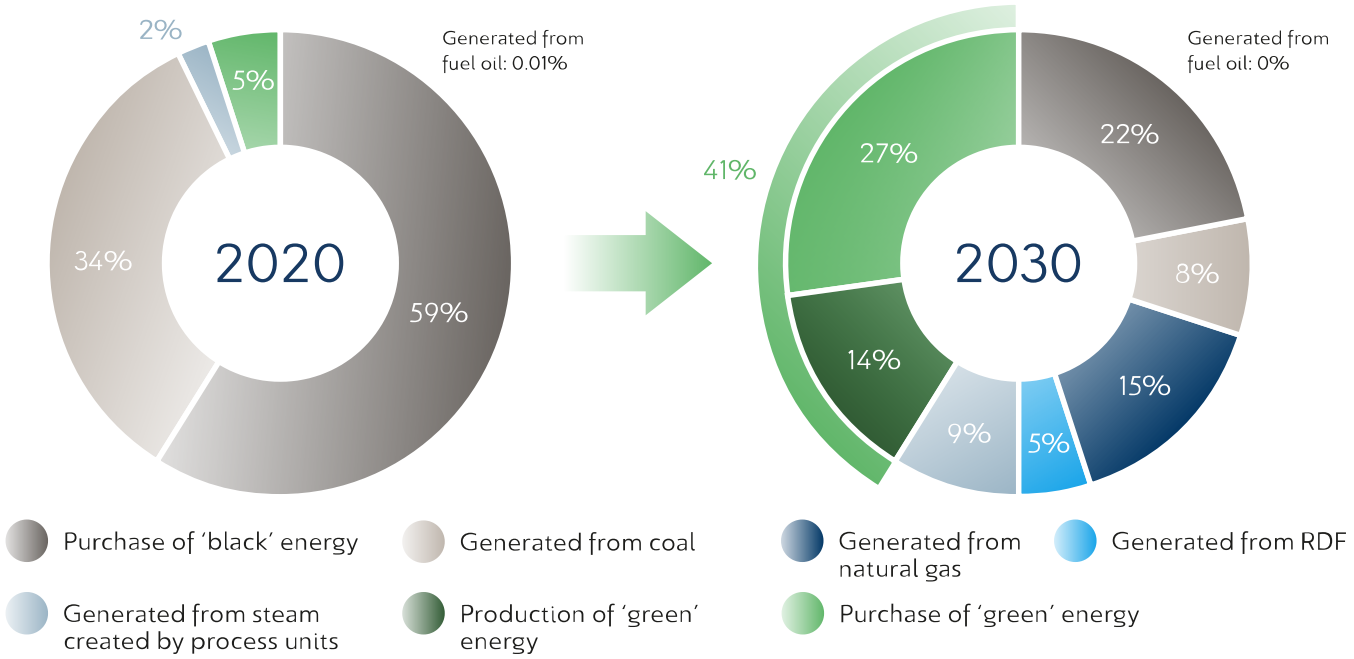
We understand the gravity of climate change and environmental degradation, which pose a genuine threat to the contemporary world. At the same time, the chemical industry is characterised by large greenhouse gas emissions. This is why we feel responsible towards society for slowing down the ongoing climate change. Over the next decade, we will implement an ambitious decarbonisation programme to reduce our estimated CO_2 emissions by over 800,000 tonnes in 2030.





We will seek opportunities to harness renewable energy sources, including those based on solar PV, wind, biomass and waste heat from process units. Through these efforts we will seek to achieve the status of a renewable energy producer.

Energy generation at Grupa Azoty, by source



The planned renewable energy investments will be made mainly using our own assets, but we will also seek opportunities to attract external investors. Coupled with other planned measures, such as upgrades of our coal-fired boilers and construction of new gas-fired units, RES investments will significantly reduce the carbon footprint of Grupa Azoty's finished products.

We plan to allocate PLN 2.7 billion to energy transition initiatives by 2030. Such projects will generate annual energy savings estimated at PLN 200 million.



~300 MW

Total new renewable energy capacity

PLN 200 million

Avoided cost of energy purchase

Our active participation in developing the European hydrogen market will be one of the pillars of the Green Azoty project. We are the largest hydrogen producer in Poland and a major hydrogen processor in Europe. We will carry out research and development work related to the production and use of green hydrogen, and continue economic and technical studies related to the production of electricity from our own renewable sources. Our goal is to reduce our carbon footprint and ultimately produce green hydrogen from electrolytic generators powered by such electricity. Work will also be continued on fuel cell development and the launch of a quality accreditation laboratory testing hydrogen for fuel cell applications in transport. As a member of the European Clean Hydrogen Alliance, in the coming years the Grupa Azoty Group will actively participate in the work on European regulations regarding the classification of hydrogen of a green fuel. In addition, the Group intends to actively search for technological, investment and acquisition opportunities related to green ammonia.

See our participation in developing the hydrogen market in Poland

The Green Azoty project will bring about change with respect to a significant part of our R&D activities. We want to direct the efforts of our Group's experts towards the achievement of climate objectives. The new projects will include: biodegradable coatings for granular fertilizers developed in collaboration with Compo Expert, fertilizers for application in forest areas, urease and nitrification inhibitors and fertilizer formulas enriched with micronutrients from utilised waste streams. We will step up our efforts in precision farming, thus contributing to the European Commission's overall objective for the Agro area, which is to increase the efficiency of fertilizer use.



BEST PRACTICE

‘Green Azoty’ is also about:

- activities related to electric mobility and development of fuel cells and materials for their production,
- implementation of recycling technologies for polymer plastics (polyolefins, polyamides),
- phosphorus and potassium recovery from alternative sources,
- exploring the possibility of carbon sequestration, that is injecting CO_2 into depleted mining sites,
- exploring the possibility of building small modular reactors (SMR) at our largest plants, thus helping to stabilise the Group’s energy mix.



Read more about the alternative fuel laboratory

EU Hydrogen Strategy:

PHASE 1 – 2020-2024:

- establishing a regulatory framework for the hydrogen market
- seeking to bolster supply and demand in the pioneer markets

PHASE 2 – 2025-2030:

- converting part of the gas grid to support transmission of renewable hydrogen over longer distances
- developing a framework for a pan-European hydrogen logistics network
- creating an open and competitive hydrogen market

PHASE 3 – 2030-2050:

- decarbonising ‘difficult’ sectors of the economy, including aviation, shipping and construction
- using around one-fourth of renewable electricity to generate renewable hydrogen, which will contribute to increased production of energy from renewable sources.

The fuel cell system in hydrogen-powered vehicles requires high quality hydrogen – even traces of impurities may adversely affect the performance and durability of the fuel cell. This is why at Grupa Azoty Kędzierzyn we are developing an alternative fuel laboratory, which will focus in particular on hydrogen analysis. The laboratory cooperates with a certified London laboratory and is able to assess the quality of hydrogen output and adapt it, if needed, to the requirements of ISO 14687:2019. This standard defines strict requirements for the purity of hydrogen to be used in fuel cells, including the maximum allowed contents of 13 gaseous pollutants and two other pollutants in hydrogen. We would like our laboratory to be a future centre of hydrogen fuel quality inspections in Poland.



STRATEGY

Our future

[103-3] [201-2] [IR - Prospects for the future] [IR - Organisational overview and external environment]

We take comprehensive and wide-ranging measures to drive our Group's further growth and maintain its market position. As a major European organisation with multiple business pursuits, we are aware of the numerous challenges which the fast changing world will bring in the future. Although the pandemic proved that not everything can be foreseen, at the Grupa Azoty Group we carefully analyse trends, study changes in the areas where we operate, and monitor stakeholders' expectations. Although not everything is within our control, like for instance raw material prices, our Strategy 2030 prepares us for various scenarios and provides a solid platform for building the future of our Group and our readiness to address key challenges of the contemporary world.

See how we prepare for challenges facing agriculture

Agriculture is naturally one of the areas of greatest interest for the Grupa Azoty Group. Currently, food for nearly half of the world's population is produced using mineral fertilizers.[1] The expected population growth must translate into an increase in food production, without, however, increasing the size of arable areas. It is estimated that as much as 90% on the increase in agricultural production will come from agricultural intensification on the existing arable land.[2] More efficient use of fertilizers combined with preservation of biodiversity is a critical factor in this context. To this approach, very much in the spirit of EU law, we have already responded, and thanks to our Strategy we will embrace it even more in the future.

[1] https://ourworldindata.org/how-many-people-does-synthetic-fertilizer-feed
[2] https://www.fao.org/fileadmin/templates/wsfs/docs/Issues_papers/HLEF2050_Global_Agriculture.pdf

Our response to challenges facing the agricultural sector:

What we already do:

- precise fertilizer application and helping farmers and agricultural producers to achieve better efficiency thanks to satellite technology and artificial intelligence,
- environmentally-friendly Fosfarm fertilizers aligned with the objectives of the EU's Farm to Fork strategy,
- humic acid plant contributing to sustainable agriculture,
- 'Grounded in Knowledge' soil testing programme run in cooperation with accredited Laboratories of Regional Chemical and Agricultural Stations,
- our experts provide agronomic advice, including advice on fertilization.

In line with the 2030 Strategy, we plan to expand our product portfolio by adding:

- new formulae of liquid products, including potassium and microelements among other nutrients,
- granulated fertilizers with nitrification inhibitors and microelements, and mineral-organic fertilizers,
- calcium fertilizers,
- line of products for organic farming,
- other new products, including soil conditioners, nitrification inhibitors,
- fertilizers based on beneficial microorganisms.

We are aware that our products support food security both in Poland and in many other countries across the globe. For this reason, in 2020 and 2021 – despite high costs of raw materials and the need to properly protect its employees against the pandemic – the Grupa Azoty Group was one of the few chemical manufacturers that did not discontinue their production activities. In 2021, decisions to scale down or suspend operations were made by leading manufacturers, including companies from Germany, Norway, Lithuania, Spain and the Netherlands. The continuity of our operations ensured uninterrupted production of food by our customers, i.e. farmers and agricultural producers.



BEST PRACTICE

As in the previous year, our activities in 2021 continued to be impacted by the COVID pandemic. We were taking appropriate measures to protect our employees ever since the state of epidemic had been declared in Poland back in 2020. We set up a task team for minimising the risk of a coronavirus spread and a crisis management team. All instances of COVID infections among our employees were investigated. We also developed detailed instructions

on how to behave safely in the pandemic situation, including how to apply disinfectants and hand sanitizers, use common space and give over duties in a shift-work system. Where required, we used ozone treatments and installed flow UV lamps. We have limited face-to-face contacts by offering our office staff an option to work from home. All recommendations and procedures were communicated to employees when needed, in a newsletter and over the intranet.

According to the 'Polish rural areas and agriculture' survey,[3] commissioned by the Ministry of Agriculture and certain other entities, in 2020 farm owners spent on average 22% of their direct payments to purchase fertilizers. At the Grupa Azoty Group, we are aware of the immense role EU funds play and will continue to play in terms of driving demand in the Polish agricultural sector. For this reason, we closely monitor trends in EU funding. According to the Agency for Restructuring and Modernisation of Agriculture, in 2021 applications for direct payments were submitted by approximately 1.3 million farmers and the allocated financial envelope was PLN 15.63 billion, while the entire budget for area payments in 2021 exceeded PLN 3 billion. Advance payments for direct payments were disbursed until November 30th 2021 – 1.21 million farmers received direct payments of approximately PLN 9.88 billion, and more than 858 thousand farms were given PLN 2.21 billion in RDP area payments. Final payments started to be made on December 1st 2021.[4]

We seek to ensure compliance of our agricultural products with new regulations. We help farmers comply with the statutory ban on using granulated urea as a fertilizer (except for urea containing a urease inhibitor or biodegradable coating), which was introduced in Poland on August 1st 2021. The regulations contribute to protecting air quality and reducing ammonia emissions. We responded by adding to our portfolio Pulrea +INu, i.e. urea with an addition of urease inhibitor increasing the absorption of nitrogen from the fertilizer. Pulrea +INu is fully compliant with the new regulations.

We also comply with Regulation (EU) 2019/1009 of the European Parliament and of the Council laying down rules on the making available on the market of EU fertilising products. Most of the provisions of this Regulation will be effective as of July 16th 2022. The new regulations provide for:

- sustainable and 'greener' agriculture,
- resource-efficient use of nutrients in line with the Circular Economy,
- harmonisation of standards for fertilizers made from organic or secondary raw materials in the EU,
- regulating the rules for the placing on the market of all products with a fertilizer value that meet the quality requirements laid down in the Regulation and are environmentally friendly and safe.

[3] https://www.gov.pl/attachment/1b8b386b-f998-4314-aaa1-fbde8ed3c105
[4] https://www.gov.pl/web/arimr/doplaty-za-2021-r-ponad-17-mld-zl-na-kontach-rolnikow

Once the Regulation enters into force, the classification of fertilizers will be changed from EC to CE. CE marked fertilizer products are subject to conformity assessment procedures carried out, among others, by certified bodies. The new classification also means more information provided on fertilizer packaging. In addition to general information, the following details are also displayed on the label:



See what changes will be brought in by regulation 2019/1009 for manufacturers

In 2021, the Grupa Azoty Group continued to bring its products into compliance with the Regulation.

See how we prepare for environmental challenges

Reducing the environmental footprint remains one of the major challenges facing the Group. Although for years we have consistently implemented successful initiatives to mitigate the adverse environmental impact of our production processes, we are well aware that there is still a long way to go. Our internal conviction of the need to protect the natural environment corresponds to regulatory changes that have already been introduced or are proposed to be enacted. One of the key documents in this respect is the EU Commission's *Fit for 55*, adopted in July 2021 as part of the European Green Deal to strengthen the position of the EU as a global climate leader. The purpose is to update existing EU legislation with the aim of ensuring that EU policies are in line with the climate goals for 2030. This will help bring about transformative changes needed in the economy, society and industry to achieve climate neutrality by 2050 and to reduce net greenhouse gas emissions by at least 55% compared with 1990 by 2030.

The package includes:

- changes in the Emissions Trading System (EU ETS),
- Effort Sharing Regulation,
- Renewable Energy Directive,
- Energy Efficiency Directive,
- new mechanism for adjusting prices at borders to take account of CO_2 emissions.

Due to the ongoing climate change, the Grupa Azoty Group is aware that in the coming years the chemical industry is likely to be under strong regulatory and science-backed pressure to decarbonise. The pressure on emissions reporting will also grow.

What we already do:

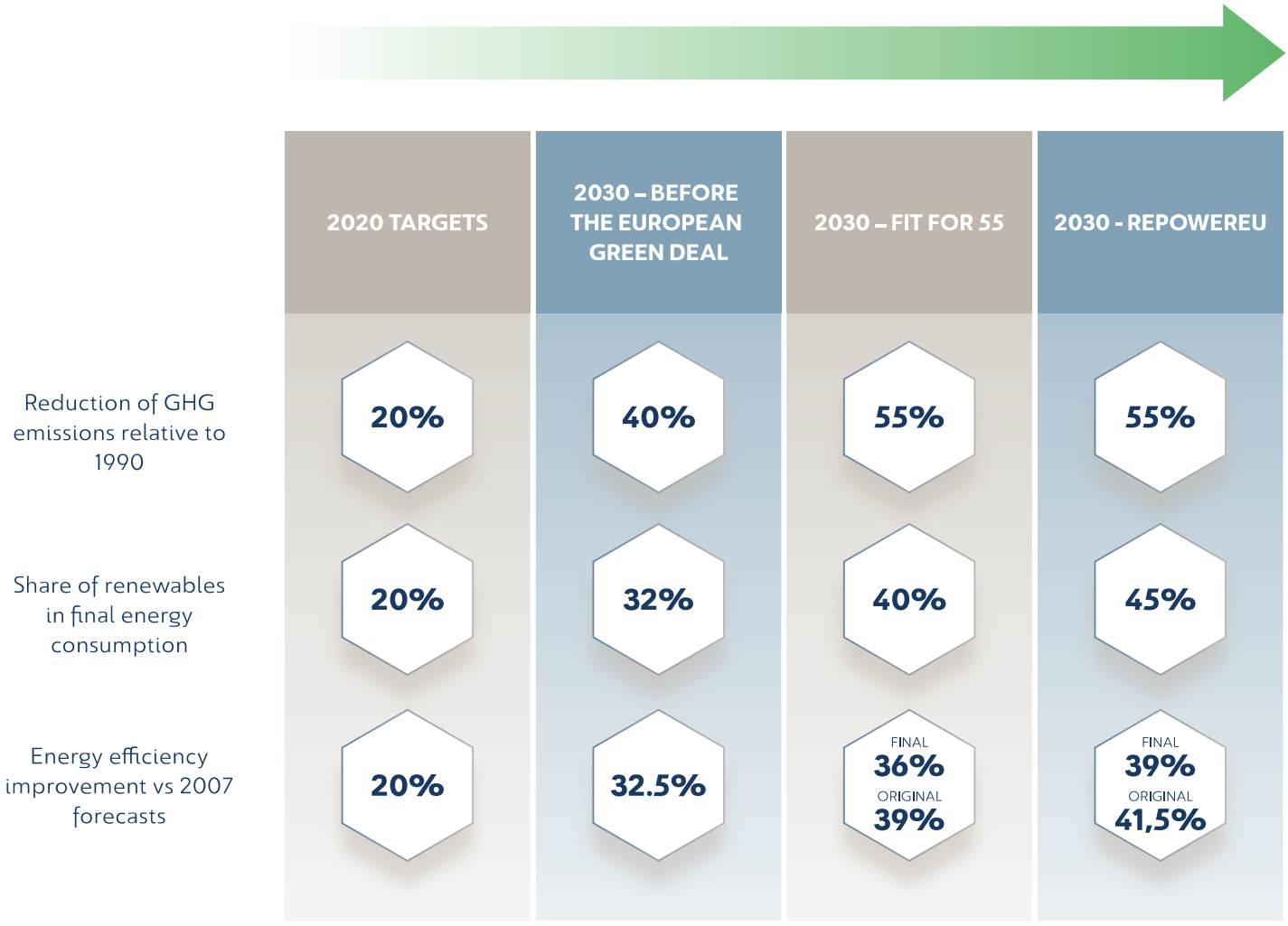
- we implement solutions to reduce pollutant emissions,
- we constantly monitor our carbon footprint and report it on a regular basis,

- we adopt solutions supporting the circular economy,
- our AdBlue product helps reduce emissions of nitrogen oxides from vehicles with diesel engines,
- we are building Polimery Police – CEE's first company to offer fully biodegradable plastics.

Our plans in line with the 2030 Strategy:

- 'Green Azoty' and the numerous related strategic projects,
- diversification of energy sources, followed by gradual phase-out of coal in favour of natural gas and renewables as alternative green sources in order to reduce the organisation's carbon footprint,
- maximising synergies between energy generation and chemical processes, e.g. in the area of energy generation from steam created by chemical units,
- reduction of unit energy consumption rates, including 30% reduction of energy intensity of the SMR process by 2024,
- deployment of new technological solutions, including the use of new types of equipment with enhanced energy efficiency profiles, increase of energy yields, and use of smart control techniques (APC, DCS),
- aligning the Group companies' energy installations with the BAT conclusions through flue gas denitrification and desulfurisation, research into SCR catalysts for the energy generation industry in Poland.

Increased ambition of the European Union's climate and energy targets



See how we prepare for market challenges

Fertilizer production involves the consumption of large volumes of natural gas. Its price is the key factor behind the price competitiveness of fertilizer products. 2021 saw a several-fold increase in the price of gas at European hubs relative to the end of 2020, reaching its highest level since 2008. At the end of December 2021, the price of gas for delivery in January on the Dutch TTF exchange, a benchmark for most contracts concluded in Western Europe, exceeded EUR 180/MWh, i.e. was 10 times higher than the year before. Similarly, on December 22nd the price of gas on the Polish Power Exchange hit a record level of PLN 828.64/MWh, while in early 2021 it approximated PLN 91/MWh.

€28.64/MWh, while in early 2021 it approximated PLN 91/MWh.

The pandemic-induced crisis on the global energy commodity market, which surfaced in 2021, was further aggravated following Russia's invasion of Ukraine in February 2022. In response to the challenges and disturbances on the global energy market, the European Commission presented its REPowerEU plan for saving energy, producing energy from renewables and diversifying its supplies.

Fertilizer production costs in the EU are driven by additional regulations, including limits on CO2 emissions. The prices of CO2 emission allowances skyrocketed in November 2020 as soon as the effectiveness of COVID-19 vaccines was confirmed and lockdowns in Europe were gradually lifted. This strong upward trend helped in particular to alleviate the effects of depressed demand amid ultra-loose monetary policy of central banks in the United States and Europe. Since November 2020, the prices have risen by approximately 240%.[5]

[5] https://www.kobize.pl/uploads/materialy/materialy_do_pobrania/raport_co2/2021/KOBiZE_Analiza_rynku_CO2_grudzień_2021.pdf

All this is dampening the price competitiveness of chemical products made in the European Union and increasing the volume of fertilizer imports.

Our response to market challenges:

What we already do:

- we have joined the discussion on the EU CBAM, which is putting a carbon price on certain goods imported from outside the European Union that is based on CO_2 emissions – we have presented our proposals to the European Commission,
- we enter into long-term contracts for the supply of energy commodities with reliable and proven suppliers.

Our plans in line with the 2030 Strategy:

- ensuring the continuity and security of supplies based on our raw materials strategy,
- 'Green Azoty' and the numerous related strategic projects, including energy diversification and green energy projects.



RISK

Risk management

[102-11] [102-15] [103-2] [IR - Risks and opportunities] [IR - Corporate governance]

At the Grupa Azoty Group, we have adopted an integrated approach to enterprise risk management based on ISO 31000:2018 'Risk Management – Guidelines'. The process adopted by the Group is behind some of our corporate governance arrangements, and its effective implementation provides our management bodies, supervisory bodies and shareholders with up-to-date, reliable and well-structured information on risks related to the Group's business. Risk management is part of a corporate management process geared towards reducing uncertainty and building lasting protections for the Group's value.

We pursue operational excellence through the implementation of effective risk management solutions by:

- building good governance and ensuring compliance with the corporate governance rules for companies listed on the WSE Main Market, i.e. 'Best Practice for WSE Listed Companies 2021' effective from July 1st 2021, which were adopted by the WSE Supervisory Board by way of Resolution No. 13/1834/2021 of March 29th 2021,
- creating a coherent organisational culture rooted in a system of values and a code of ethics,
- enhancing employee engagement and innovativeness,
- managing supply chain responsibility,
- ensuring cybersecurity,
- participating in ESG (Environmental, Social and Governance) reviews and ESG initiatives,
- tracking of key indicators and integrated reporting in line with widely recognised standards and guidance.

To establish a framework for activities in this area, we have developed a procedure entitled Enterprise risk management at the Grupa Azoty Group, which sets out the scope of responsibilities and procedures for each entity participating in the enterprise risk management process. Senior managers involved in risk management are required to communicate the requirements to their subordinate staff, who are obliged to comply with the procedure. Direct supervision of the implementation and contents of the document is exercised by the head of the corporate risk management department at Grupa Azoty S.A., while the Vice President of the Grupa Azoty S.A. Management Board is responsible for monitoring its implementation.

The objective of the risk identification process is to identify sources of information on risks and opportunities and to define key variables in the internal and external environment. Risk assessment includes qualitative analysis, identification and establishment of the key controls, and quantitative analysis that yields specific quantitative parameters. The value of a risk is estimated based on the risk map, which specifies the impact and probability of the risk. After that, risks are prioritised against the Group's strategic objectives. The risk map is updated when and as needed, at least once a year, and all residual risks are assessed annually. The purpose of these efforts is to allow the Group to assess the effectiveness of its risk mitigation measures.

The Group uses a two-tier risk classification into the following six categories: strategy, organisation and management, financial and credit risks, core business risks, social and environmental risks, safety risks, and market and regulatory risks.



RISK

Climate risk management

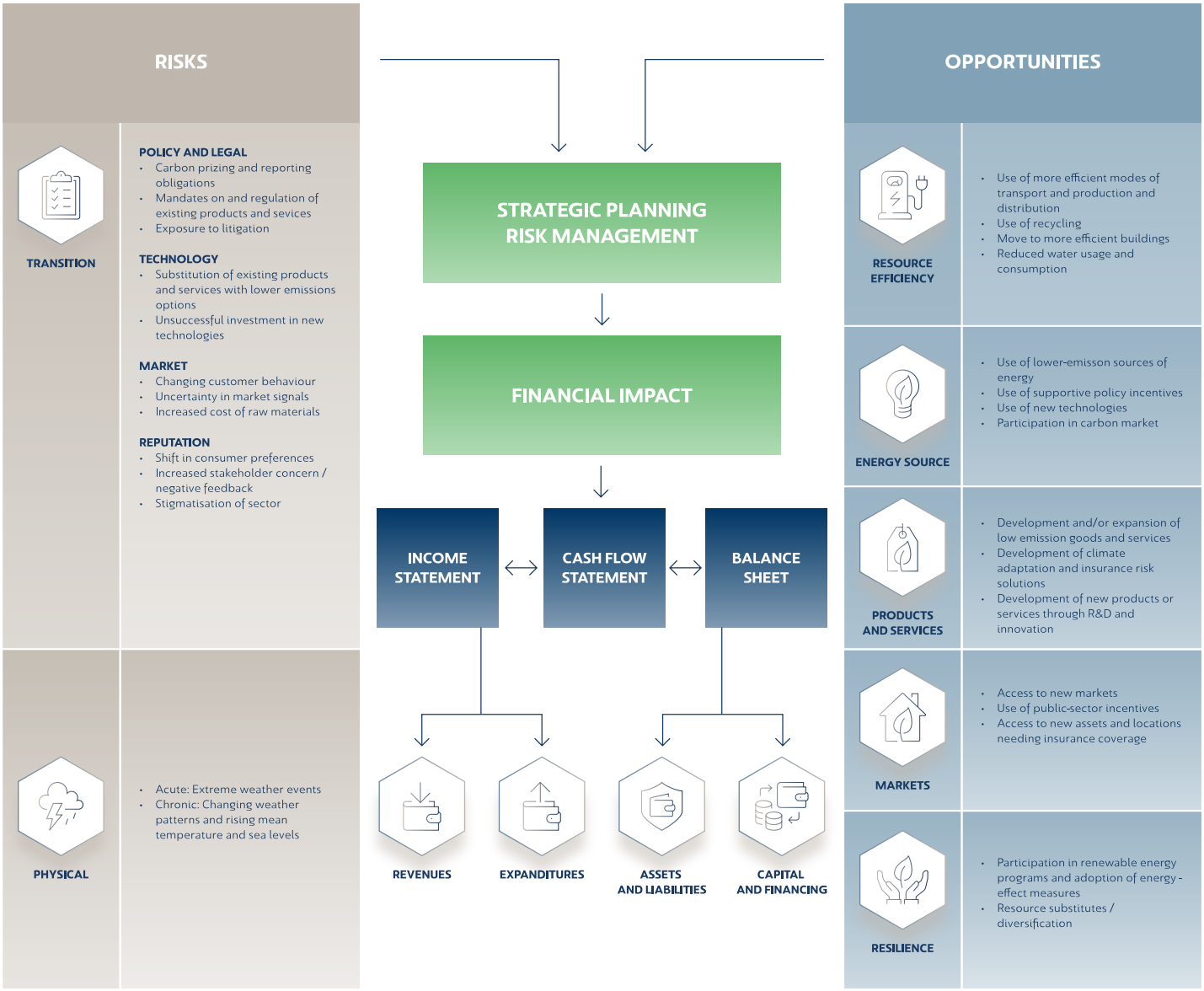
[IR - Risks and opportunities]

TCFD recommendations with respect to disclosure of climate-related risks and opportunities

W Grupie Azoty rozpoczęliśmy w 2020 r. wdrażanie rekomendacji Grupy Zadaniowej ds. Ujawniania Informacji Finansowych Związanych z Klimatem (Task Force on Climate-Related Financial Disclosures, TCFD) w ramach naszych procesów zarządzania i sprawozdawczości. Poniższy przegląd obejmuje szczegółową ocenę podejścia Grupy Azoty do identyfikowania ryzyka oraz szans klimatycznych, możliwości związanych z transformacją do gospodarki niskoemisyjnej oraz zarządzania nimi. Staramy się łączyć adaptację do zmiany klimatu oraz ograniczenie negatywnego wpływu Grupy Azoty na klimat z naszymi systemami, procesami oraz strategią biznesową.

Climate-related risks and opportunities

The Task Force identifies several categories of climate-related risks and opportunities that may give rise to financial impacts on revenues, expenditures, assets and liabilities, and capital and financing.



TCFD was established to develop clear recommendations on the disclosure by companies of the information needed by investors, lenders and insurers to properly assess and measure climate-related risks and opportunities. TCFD recommendations are structured around four thematic areas that represent core elements of how organisations operate: governance, strategy, risk management, as well as metrics and targets. The areas are interconnected and should operate in conjunction with one another to provide an effective framework for managing the climate change risk.



Governance

Supervision and role of the Management Board and senior management in managing climate-related opportunities and risks



Strategy

The Grupa Azoty Group Strategy for 2021–2030 reaffirms the Group's priority commitment to a climate neutrality and energy transition.



Climate risk management

Risk identification at the Grupa Azoty Group is a continuous process carried out by directors, unit heads and managers in charge of individual business areas.



Metrics and targets

In response to climate risks and plans to mitigate such risks, the Grupa Azoty Group, in accordance with the principles of the enterprise risk management system, defines relevant actions, targets and metrics.

Governance

Supervision and role of the Management Board and senior management in managing climate-related opportunities and risks

The Group has a three-lines risk management model in place.

Overall supervision of the enterprise risk management system lies with the Management Board of Grupa Azoty S.A. At least once a year the Management Board assess the system for effectiveness, also in terms of how well it handles climate risks.

Areas of climate-related risk have been addressed by the Grupa Azoty Group Strategy for 2021–2030. All aspects related to climate change are overseen and monitored at the highest level, within areas identified as key in the Strategy development process. There is also a Group Development Committee at the Grupa Azoty Group, whose role is to support the Strategy implementation, giving opinions on planned investment projects and activities spanning research, development and innovation. All such planned activities are assessed for compliance with the EU taxonomy according to Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.

In 2021, the following persons were responsible for overseeing sustainability at the level of President of the Management Board as well as Members of the Management Board within their respective remits:

- Tomasz Hinc – President of the Management Board – compliance, legal support, representation of the Grupa Azoty Group before stakeholders, sponsorship and CSR,
- Dr hab. Filip Grzegorczyk – Vice President of the Management Board – energy transition and ensuring compliance with requirements of the European Green Deal in the energy segment, regulatory area and enterprise risk management,
- Dr Grzegorz Kądzielawski – Vice President of the Management Board – monitoring of investment project implementation at the Group, strategic planning and monitoring of the Strategy implementation, strategic project management (excluding energy transition), ensuring compliance with requirements of the European Green Deal, adaptation of the Group to the circular economy concept and social dialogue.

In addition, persons responsible for climate and environmental risks have been appointed at individual companies.

Persons responsible for climate and environmental risks at Grupa Azoty S.A. in 2021:

- risks related to environmental protection and industrial accidents – head of the Corporate Technology and Energy Department,
  risks related to the need to adapt to low-carbon economy requirements and achieve decarbonisation targets – head of the Corporate Strategy and Development Department.

Persons responsible for climate and environmental risks at Grupa Azoty Kędzierzyn in 2021:

- risks related to decarbonisation – head of the Fertilizers BU, head of the OXOPLAST BU and head of the Energy BU,
- risks related to industrial accidents, noise, waste and biodiversity – head of the Safety Department,
- risks related to energy – head of the Energy BU,
- risks related to wastewater management – head of the Safety Department,
- risks related to emissions – head of the Safety Department and head of the Energy BU.

Persons responsible for climate and environmental risks at Grupa Azoty Puławy in 2021:

- risks related to industrial accidents – head of the Production Division and director of the Production Division of the Plastics Business Segment, director of the Energy Division,
- risks related to energy – energy manager in the Energy Division,
- risks related to emissions – Chief Emission Management Officer in the Technology and Development Division and Chief Environmental Protection Officer in the Support Division,
- risks related to noise, biodiversity – Chief Environmental Protection Officer in the Support Division,
- risks related to wastewater and waste management – Chief Environmental Protection Officer in the Support Division,
- risks related to land pollution – director of the Production Division of the Plastics Business Segment, director of the Energy Division and director of the Corporate Logistics Department in the Sales Division,
- risks related to decarbonisation – director of Technology and Development Division.

Persons responsible for climate and environmental risks at Grupa Azoty Police in 2021:

- risks related to industrial accidents, noise, wastewater, waste, biodiversity, and land pollution – head of the Plant Safety Department,
- risks related to energy and emissions – head of the Power Centre,
- risks related to decarbonisation –head of the Technology Department.

The second line includes an Enterprise Risk Committee, comprising presidents responsible for risk management at individual companies. The role of the Committee is to initiate and consult the general directions of strategic changes to the risk management system, prepare recommendations with respect to the list of key risks, and assess enterprise risks in emergency situations. Material recommendations of the committee are submitted quarterly at the Management Board's meetings. An annual

assessment of the enterprise risk consists in updating risk charts, strategies for addressing individual risks, relevant indicators and mitigation measures. Once assessed, every year the risks are prioritised with key risk areas identified, which are then discussed by the Enterprise Risk Committee and at meetings of the Management Board. At least once a year, climate risk issues are reviewed by the Management Board and, depending on that body's decision, relevant information is then reported at meetings of the Supervisory Board. Risk owners (first-line roles) are able to carry out risk assessments along similar paths within their respective divisions through subject matter committees when significant variables are noted, to be reported to the Management Board.

Within the first line, climate risks are assigned to risk owners with operational responsibility for identification, classification, analytical appraisal, determination of the scale (qualitative and quantitative analysis), prioritisation and development of management strategies with respect to each such risk. Where justified by quantitative assessment, the owners of individual risks are also required to monitor the KRI (Key Risk Indicators) as well as any instances of exceeding the risk tolerance and appetite thresholds at their level, in principle on a monthly basis, and to report to the second line: Corporate Risk Management Department. The owners of individual climate risks can consult the risk charts to identify relevant teams whose activities may mitigate particular risks.

Responsibility for various risks

	Risk name	Risk owner
	risk of an increased number of accidents and management risk in the case of extreme weather events	Corporate Technology and Energy Department, auxiliary role: company crisis management team taking action in response to specific crisis events
	risk of fertilizer sales declining due to physical effects of climate change (droughts, floods), lower purchasing power of farmers and constrained demand for fertilizers due to crisis situations	Corporate Agro Sales Department
	risks related to monitoring and consumption of electric energy	Corporate Technology and Energy Department, auxiliary role: ISO 50000 Energy Management Team
	risk related to transition to a low-carbon and climate change resilient economy	Corporate Strategy and Development Department, auxiliary role: Corporate Energy Transition Team and Carbon Footprint Team
	risk of restrictions on sales of plastics and chemicals due to market constraints and consumer behaviour changes as a result of more widespread adoption of pro-environmental attitudes	Corporate Communication and Marketing Department
	regulatory risks related to implementation of the European Green Deal, Extended Producer Responsibility and 'Fit for 55' package	Corporate Regulation and Public Affairs Department
	risks related to biodiversity impacts	newly identified risk – currently under appraisal

One of the key areas of climate risk, addressed in the Group Strategy for 2021–2030, is related to the transition to a low-carbon and climate change resilient economy. This risk may be mitigated through measures described in the Strategy, which means that its monitoring is tantamount to monitoring of the performance of tasks set out in the Strategy.



Strategy

Identified climate-related risks and opportunities

The Grupa Azoty Group Strategy for 2021–2030 reaffirms the Group's priority commitment to a climate neutrality and energy transition. Measures planned by the Group involve a consistent focus on investing in innovation and seeking new environmentally-friendly solutions and products. Grupa Azoty's products and technologies will facilitate the achievement of our customers' targets in production, sales and environmental protection. In response to diagnosed risk areas, including those related to climate change, the Strategy aims to improve the quality of life of European citizens through positive impacts on climate and the environment as well as active contribution to food security on our continent and elsewhere in the world. As part of its strategic initiatives, the Group will focus on increasing the share of green energy with certificates of origin in the overall energy mix, with rigorous procedures in place for monitoring the carbon footprints of externally sourced raw materials. The Strategy is the Grupa Azoty Group's response to the expectations of its customers who want a reduction of the carbon footprint of production processes.

The Group has taken steps to assess risks associated with the environmental impacts of its day-to-day operations as well as its medium- and long-term objectives. We have started a review of the resilience of our business model, taking into account the target benchmarks of emissions and pollutant concentrations. In developing the new Grupa Azoty Group Strategy for 2021–2030, we considered the need for innovation and sustainability initiatives, providing, among other things, for the launch of low-or zero-carbon heat and power generation projects.

Climate risks have been factored indirectly in the Group's Strategy. Climate change issues have been identified as part of the regulatory transition risk as well as market, financial, technological, environmental and reputational risks and attendant opportunities.

Grupa Azoty also sees opportunities for its business in changing the perception of environmental and climate issues. The risk identification process has taken into account the opportunities for raising funds for innovative technology projects or development of new environmentally-friendly products, and has also identified potential for improving energy and cost efficiency.

See our risk and opportunity map

Climate risk management

1. Climate risk identification and assessment processes:

Risk identification at the Grupa Azoty Group is a continuous process carried out by directors, unit heads and managers in charge of individual business areas. Hazard identification involves the definition of risk sources and determination of possible risk

impacts, including the extent of those impacts based on historical data, observations, in-house expertise and personnel's knowledge, expert opinions, computation analyses, audit findings, review of the regulatory and market environments or other methods supporting risk identification.

2. Organisational processes in climate risk management:

In addition to identification and classification, the risk management process includes: risk mapping and qualitative analysis, quantitative analysis and quantification, assessment of risk controls in place, planning and implementation of risk response measures, as well as measurement and reporting of specific risks. Responsibility for managing a specific risk rests always with the relevant risk owner.

3. Integration with the overall risk management system in the organisation of processes related to identification, assessment and management of climate risks:

Given the strategic nature of climate-related risks, the Grupa Azoty Group has integrated the management of those risks with the overall enterprise risk management (ERM) system so it conforms with the rules of the organisation's general risk management model and procedures.

Climate risks have been classified into all categories of the risk management framework developed at the Grupa Azoty Group:

- the category of: Strategy, organisation and management risks – includes issues related to climate risk management, corporate governance of climate risks and relevant strategy
- the category of: Financial and credit risks – includes finance-related risks
- the category of: Core business risks – includes risks arising from physical effects of climate change adversely affecting the business of the Grupa Azoty Group companies and risks arising from transition to a climate change resilient economy
- the category of: Safety risks – includes crisis management risks
- the category of: Social and environmental risks – includes risks related to the environment and its protection
- the category of: Market and regulatory risk – includes risks of transition to a low-carbon economy

The risk materiality assessment and prioritisation are undertaken once a year and reflected in the risk chart according to a five-stage risk assessment and probability matrix. The financial impacts of each risk are assessed according to an impact matrix. Based on the valuation of a risk reflected in its risk chart and assessment of the degree of the risk control, individual risk maps are drawn up for each company followed by a Group-wide valuation process. As a result, the risks concerned are prioritised and may be included in the list of key risks. The risk materiality assessment is also informed by conclusions from the monitoring of relevant risk indicators (to determine whether there have been risk materialisation incidents), an analysis of global reports and a benchmarking exercise. The data thus collected is used to draw up a list of key risks that is presented by the Enterprise Risk Committee to the Management Board.

Work is currently under way to consolidate the risk management systems of all companies in order to further strengthen the Grupa Azoty Group's resilience.

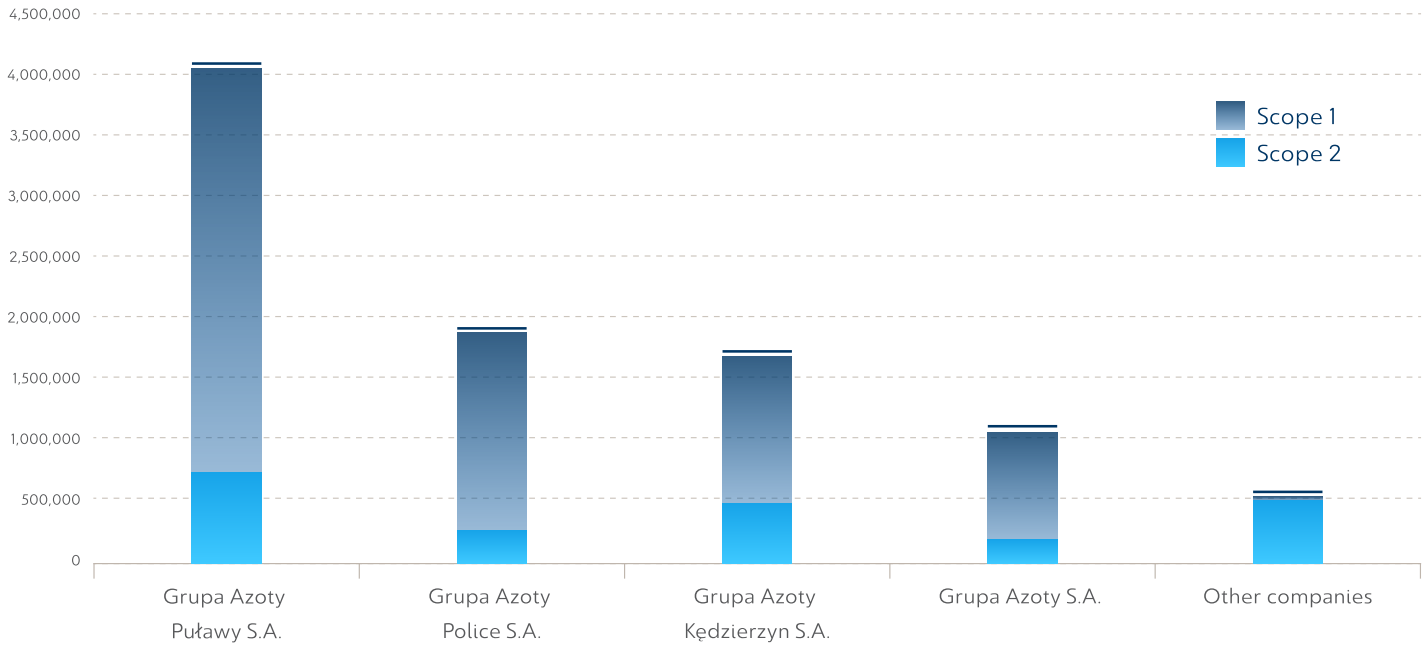
Metrics and targets

In response to climate risks and plans to mitigate such risks, the Grupa Azoty Group, in accordance with the principles of the enterprise risk management system, defines relevant actions, targets and metrics.

Each year, the Group calculates and prepares a report on performance indicators, including environmental indicators pertaining to greenhouse gas emissions or to the consumption of energy, water and materials. The indicators enable the Group to assess its efforts to meet its own emission targets, but also provide a basis and context for an assessment of climate risk and opportunities, mainly with respect to the transition risk.

The Group considers GHG emissions as the main area of its direct environmental and climate impacts. In calculating GHG emissions the Group uses the GHG Protocol, which covers all activities envisaged for monitoring in Scope 1 and 2. Scope 1 are direct emissions from the company's operations and the use of electricity and heat. Scope 2 emissions are emissions associated with the purchase of energy from external suppliers.

Scope 1 and 2 emissions summary chart



Read more about our emissions

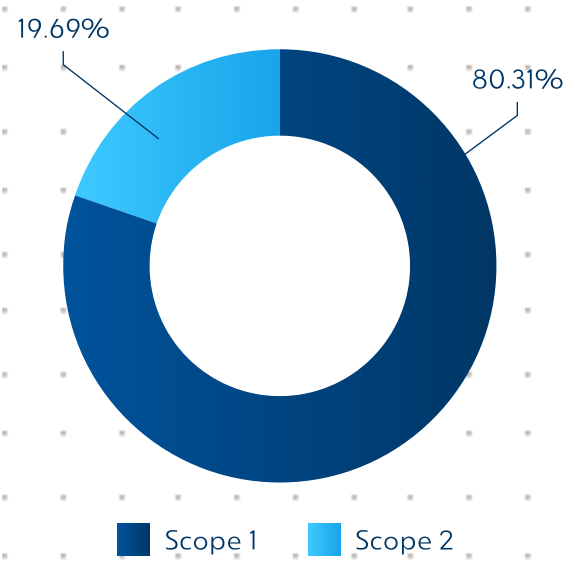
Results of quantification of GHG emissions at the organization level

Direct emissions (scope 1) were:

CFO_{Z1} = 7.491 million tonnes of CO_2e

Direct emissions (scope 2) were:

CFO_{Z2} = 1.837 million tonnes of CO_2e





RISK

Map of ESG risks and opportunities

[103-2] [201-2] [403-2] [413-2] [IR - Risks and opportunities]

The Grupa Azoty Group is a complex of chemical plants that produce and store hazardous materials and substances, potentially posing a threat to the local communities, employees and the natural environment. In 2021, the enterprise risk register of the Grupa Azoty Group was updated. Below we present the key ESG risks included in the updated enterprise risk register for 2021, with an indication of areas directly or indirectly related to climate change.

Regulatory and legal risks

inter alia:

- carbon pricing
- reporting obligations
- commitments and regulations covering existing products and services
- exposure to penalties
- exposure to claims

The Group continuously monitors

Risk	Impact	Odpowiedź na ryzyko
Implementation of the European Green Deal reforms	Change in regulatory environment – costs of adapting operations to new requirements	projects and proposals of administrative bodies regarding changes to existing laws or new legislation. It takes an active part in the work of registration consortia and European associations, and partners with Polish institutions to respond to upcoming changes in legislation. The Group analyses risks associated with legislative trends and draft amendments or proposed new regulations. The impact of new regulations on its operations and marketed products is examined by the Group on a case-by-case basis. Amendments to EU directives and regulations applicable to the Group's principal manufacturing and trading activities give rise to a potential risk that the use of the company's products by customers in the EU countries may be restricted. The risk of failure to comply with EU climate policy requirements was mitigated by introducing additional criteria for the selection of investment projects which are in line with the EU taxonomy for sustainable activities as part of preparation of the Long-Term Investment Plan. In addition, steps were taken to identify environmental projects and to examine whether they are in compliance with the EU taxonomy for sustainable activities according to Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020. The Grupa Azoty Group has in place a circular economy and extended producer responsibility monitoring team that participates in designing and implementing development programmes for strategic products and materials. The responsibilities of the team include monitoring of proposed legal changes which affect or are likely to affect the Plastics business.
Implementation of 'Fit For 55' legislative changes		
Risk of introduction of unfavourable guidelines for the adoption of the circular economy concept and the extended producer responsibility strategy		
Risk of restrictions on sales of plastics and chemicals due to legislative constraints		
Risk of excessive emissions of GHG and other air pollutants as a result of a company's operations and risk of failure to take sufficient measures to reduce the emissions	Non-compliance with emission limits set out in environmental permits	Emission measurements are made at the intervals specified in the relevant integrated permits and are reflected in the annual pollutant emission measurement schedules. All the companies operate on the basis of appropriate permits and submit their mandatory reports to external

Risk	Impact	Odpowiedź na ryzyko
		mandatory reports to external supervisory authorities in a timely manner. GHG emissions from energy generation processes account for around a half of total emissions generated by the Grupa Azoty Group. This is why the Group Strategy for 2021–2030 envisages steps to upgrade the Group's onsite energy generation assets, reduce energy consumption and improve the energy efficiency of its chemical units. Planned decarbonisation projects will allow Grupa Azoty to reduce its estimated CO2 emissions by over 800 thousand tonnes in 2030. At present, the company is adjusting the FGD unit of boiler K5, which is the main source of heat for the parent, to the new requirements set out in Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions for large combustion plants. Upon completion, the project will provide a peak-load/reserve source meeting the emission requirements arising from BAT conclusions and enabling the parent to maintain a sustained generation capacity of its process heat source. Moreover, the implementation of energy efficiency improvement projects, related, among others, to the steam policy, will lead to a drop in emissions from combustion at the captive CHP plant, and the thermal upgrade of reaction columns and pipelines will enable carbon emissions to be reduced.
Possibility of imposing stricter requirements for reducing air pollutant emissions (including NOx, SOx and particulate matter) and possibility of exceeding the applicable air emission limits (including NOx, SOx and particulate matter)	Possibility of incurring significant costs in connection with plant upgrades or the need to purchase new equipment to replace assets which do not comply with emission standards, and possibility of incurring penalties for exceeding applicable emission limits	The Grupa Azoty Group holds all necessary environmental permits for its operations. It regularly monitors and responds as needed to any changes in emission limits and European laws, including those relating to the energy and climate package requirements, as well as to changes in Polish law. The

Risk	Impact	Odpowiedź na ryzyko
		well as to changes in Polish law. The Group monitors its emissions on an ongoing basis. Measurements are made at the intervals specified in the relevant integrated permits and are reflected in the annual pollutant emission measurement schedules.
Possibility of tightening the existing requirements or introducing new requirements applicable to water abstraction and wastewater discharge	Necessity to incur expenditure to adapt infrastructure to new requirements	The Group keeps monitoring amendments introduced to the Water Law in order to identify any new requirements that may apply to the company with respect to water abstraction and wastewater discharge, or to identify any tightening of existing requirements. The Grupa Azoty Group monitors and responds to legislative changes in water and wastewater management on an ongoing basis.
Risk of non-compliance with water and wastewater management requirements (excessive water quantities consumed in the course of operations, quantity or quality of discharged effluents non-compliant with permits held) and risk of failure to take sufficient measures to reduce the amount of water used	In the event of non-compliance with water and wastewater management regulations, which includes exceeding any parameters set in the applicable decisions, sanctions are imposed.	The Grupa Azoty Group holds all relevant legal permits related to water and wastewater management. When designing process units and applying for permits, the Group companies estimate and account for the effect of the unit/equipment on the volume of pollutants released into the environment. The entity conducts regular analyses of the quantity and quality of wastewater discharged and water abstracted. The Grupa Azoty Group responds to regulatory changes in the area of water and wastewater management on an ongoing basis. The Company is constructing a unit for biological treatment of wastewater from production units of the parent. The project will make it possible to carry out tests to develop an upgrade concept for the biological wastewater treatment plant.
Risk related to non-compliance with waste management requirements – generation and storage of excessive waste amounts, storage on a site other than that specified in the environmental permit, failure to take sufficient measures to reduce waste quantity and to reuse waste	Failure to comply with the legal requirements may result in fines being imposed on the company by way of administrative decisions. The changing legal requirements make it necessary to adjust waste quantities and pay the costs of exceeding the applicable waste limits	When designing a unit and in applications for integrated permits, the unit's effect on the volume of generated waste is taken into account. The Grupa Azoty Group holds all legal permits related to waste management and regularly monitors and responds as needed to regulatory changes in

Risk	Impact	Odpowiedź na ryzyko
There is a risk of a Group company's failure to comply with good corporate governance practices and capital market regulations, including the provision of untrue information outside the Group, delays/errors in the company's current and periodic reports due to lack of precision in the company's communication with external stakeholders.	Adverse effect on the Company's or the Group's reputation and investor relations	To ensure uniform legal interpretation of disclosure requirements and uniform compliance, the Grupa Azoty Group companies that are issuers use the services of the same legal advisor with respect to their disclosure obligations. A uniform information policy ensures oversight of information flow and communication processes at the Group, in line with the adopted management model. The effectiveness of the efforts taken is ensured by providing training on disclosure requirements and information policy and by continuous monitoring of electronic mail by persons whose email addresses have been designated for providing notifications with respect to the Group's information policy.
Risk of violation of laws governing compliance management with regard to corruption, competition protection, embezzlement, prevention of money laundering and terrorist financing, human rights, exports control, caused by acts or omissions of employees, subcontractors acting on behalf of the Company or a subsidiary.	Possibility of violating national or international laws, reputational harm to the brand and, consequently, potential loss of contracts, customers and trade partners	In the event of any breach of legislation, the Group may potentially incur penalties imposed following inspections conducted by authorised supervision authorities. In connection with adverse occurrences, [...] provisions for potential damages that may be sought in court or arbitration proceedings have been created. In accordance with the Code of Ethical Conduct, the Group monitors legislative environments in its areas of interest in order to timely identify any changes to the applicable laws or new requirements.

Technology risk

inter alia:

- replacement of existing products and services with equivalents generating lower emissions
- unsuccessful investments

Risk	Impact	Risk response

Risk	Impact	Risk response
Process and technological risks related to the need to adapt to low-carbon economy requirements and achieve decarbonisation targets and risk of substitution of products and production technologies	Weakening of the competitive position as a result of late implementation of low-carbon solutions and innovations	In the agreement on cooperation in implementing the LIFE EKOMAŁOPOLSKA integrated project, the parent made commitments across the following areas: striving to achieve climate neutrality in its production processes and activities carried out in the Małopolska Region by 2050, implementing projects supporting energy transition, including in particular those involving the use of renewable energy sources and reducing GHG emissions by 2030, striving to decarbonise industrial activities and minimise carbon footprint, developing green ammonia and green hydrogen technologies, implementing R&D projects that will contribute to the achievement of environmental and climate objectives of the European Green Deal. In 2021, Grupa Azoty Puławy was working on a number of environmental investment projects, including upgrade of steam generator no. 2, upgrade of the nitric acid unit, construction of new nitric acid units, neutralisation, production of new fertilizers based on nitric acid, expansion of the decarbonisation station, and utilisation of emissions.
Risk of excessive energy consumption as a result of the company's operations, failing to use renewable energy sources or insufficient measures to reduce energy consumption	Rising energy prices leading to higher expenditure compared with competitors who modernise their energy sources	Grupa Azoty continuously improves its processes and implements energy saving initiatives by using innovative solutions and conducting energy audits. In 2021, the Group carried out an energy review under the ISO 50001:2018 system, which helped it gather complete information on energy consumed by the organisation. Modernisation of the hot water network is in progress. This investment will help reduce heat losses in transmission pipelines and ensure security of heat supplies to customers. The implementation of the New Energy Concept is under way. Benefits will include lower demand for electricity and steam required in industrial processes and partial replacement of coal with gas in steam production. The Company is carrying out a range of projects to reduce heat consumption, such as the construction of a turbine generator which will enable the use of waste heat for electricity generation.

Risk	Impact	Risk response
Risks related to the implementation of investment projects	There is a risk that some of the projects within the Group's investment programme will be revised, delayed or not completed or that they will fail to bring the expected results or there will be budget overruns on the projects.	Implementation of strategic investment projects is among the principal areas of Grupa Azoty's activity, critical to maintaining the Company's value and driving its growth. The investment projects are carried out in accordance with internal procedures. Grupa Azoty has implemented monthly reporting, for which project managers are responsible, as well as quarterly corporate reporting. The reports contain analyses identifying potential increases in the risk of deadline or budget overruns for specific projects.



Market risk

inter alia:

- changes in buyer behaviour
- ambiguous signals from the market
- increase in raw material costs

	Risk	Risk Impact	Risk response
Upstream	Negative impact of prices on the CO2 emission allowances trading market in the EU ETS	Higher expenditure on purchase of CO2 emission allowances	The management of CO2 emission allowances at the Grupa Azoty Group is supervised by the internal EU ETS Management Committee and the EU ETS Executive Team, based on the CO2 emission allowance trading policy in place. The Company purchases allowances according to an annual procurement plan, following a recommendation from the EU ETS Committee and the Financial Committee. The EU ETS Management Committee, which supervises the common model for managing CO2 emission allowances at the main companies, tracks the implementation of procurement plans and carbon price developments.

	Risk	Risk Impact	Risk response
			In addition, the EU ETS Executive Team monitors the prices of emission allowances on the market on an ongoing basis and analyses price trends in the short and long term. The policies and procedures in place are designed to ensure smooth trading in CO2 emission allowances, ensure its efficiency, minimise the cost of operation of the EU ETS at the Group, and reduce the risks associated with participation in the scheme. They are also designed to reduce spending on the purchase of emission allowances by entry into futures transactions. The Group has signed framework agreements with three banks, under which it has been granted trading limits to purchase greenhouse gas emission allowances under futures contracts. The potential risk related to full utilisation of existing trading limits at banks has been mitigated by negotiating new, increased limits.
	Risk related to the prices and availability of natural gas	Growing pressure on the prices and availability of gas due to demand volatility driven by: the growing share of renewables in energy generation, supplemented by flexible gas-fired units, the level of gas consumption for heating in winter, globalised LNG market, with Europe's own production declining and price arbitrage between the European and Asian markets, perceived by many suppliers as competing markets.	The issue of gas supplies is under constant monitoring. Contingency scenarios have been developed in case manufacturing operations have to be curtailed in the event of a reduction in natural gas supplies, including in particular a reduction of the load on production units and acceleration of annual maintenance shutdowns. In order to mitigate the impact of significant gas price movements on the spot market on gas costs incurred by the Grupa Azoty Group companies, measures mitigating the risk were taken in 2021, consisting in locking in gas prices for a portion of the required volumes through

	Risk	Risk Impact	Risk response
			transactions with fixed delivery prices. Furthermore, work was initiated to develop a comprehensive market risk management model.
	Risk related to the prices and availability of electricity and heat	Higher expenditure on purchase of electricity and heat	Grupa Azoty continuously improves its processes and implements energy saving initiatives by using innovative solutions and conducting energy audits.
	Risk related to prices and availability of coal	Increase in expenditure on coal purchases	Execution of amendment agreements to coal purchase contracts, introducing a flexible approach to reducing purchased coal volumes in the following years of the contract terms, which is consistent with Grupa Azoty Group Strategy for 2021–2030 with respect to decarbonising power generation.
Downstream	Risk of increases in the volumes of fertilizers imported into Poland from other EU countries and from third countries, risk of a decline in economic performance as a result of squeezed product margins, and risk of substitution of products and production technologies	Risk of failure to achieve targeted revenue from sales of fertilizers	Mitigating the risks by strengthening and consolidating position in the segment of fertilizer production and sale. The Group monitors the volume of fertilizer imports and the share of each company in the fertilizer market, adapting its sale policies to market developments, for instance by adjusting price paths to current trends on the European and key global markets and taking steps to optimise the production costs and expand the portfolio of products and services offered to customers.
	Risk of restrictions on sales of plastics and chemicals		The Group monitors the demand and supply situation throughout the value chain. It optimises the

	Risk	Risk Impact	Risk response
	due to market constraints and consumer behaviour changes as a result of more widespread adoption of pro-environmental attitudes	Risk of failure to achieve targeted revenue from sales of plastics and chemicals	product and application portfolios to certain product streams can be allocated to the market segments in which sales efforts deliver the best economic results.
	Risk of a decline in sales of certain plastic materials as a result of tighter requirements on plastic recycling	Risk of failure to achieve targeted revenue from sales of plastic materials and the need to incur expenditure on bringing the business in line with new requirements	The Grupa Azoty Group has in place a circular economy and extended producer responsibility monitoring team that participates in designing and implementing development programmes for strategic products and materials. The responsibilities of the team include monitoring of proposed legal changes which affect or are likely to affect the Plastics business. Moreover, Polimery Police is one of the largest projects currently under way in the Polish and European chemical industry, which fulfils the requirements of the strategy for a climate neutral circular economy and takes into account the process of decarbonisation throughout the entire life cycle of highly durable multi-use plastics replacing single-use products.

Reputational risk

inter alia:

- changes in consumer preferences

- increased stakeholder concerns/negative feedback
- stigmatised industry

Risk	Impact	Risk response
Risks related to availability and effectiveness of capital and other financing sources, including risks and opportunities related to investment projects undertaken to meet decarbonisation requirements	Difficulties and/or delays in planned investments	In autumn 2021, a work team appointed by the parent's Management Board developed criteria for the evaluation of investment projects with a view to obtaining bank and non-bank financing and their compliance with the EU taxonomy. These measures will enable meeting the EU commitments made in the Paris Agreement at the level of the Grupa Azoty Group, reducing the risk of implementing investment projects that do not meet decarbonisation requirements. In addition, green financing in the form of bonds or credit facilities will provide funds for investments aimed at taking the Group through the energy transition process, primarily including investments in PV and wind sources developed on the Group's own land and in improving the energy efficiency of our production processes. Funds granted under the National Recovery Plan and other planned support measures are to finance capital projects with lower rates of return, necessary to enable technological transformation. Corporate financing roll-over will involve extension or conclusion of new corporate financing agreements providing funding for new projects undertaken at the Group until 2030.

Risk	Impact	Risk response
Risks of negative impacts on the image of the Group and its companies caused by negative publicity from competitors, unfair practices applied by competitors, poor quality, service and sale-related activities resulting in customer dissatisfaction, emergence of counterfeit products on the market, bad product publicity in the media, inadequate communications on investment projects, or as a consequence of accidents at work, disasters and plant failures.	Unfavourable perception of the Grupa Azoty Group by the public and media and loss of brand reputation	The Company monitors the media, responds to press inquiries, and develops communication concepts for image-building projects (encompassing core business, CSR and sponsorship), taking into account the internal and external communication procedure and the Grupa Azoty Group's Communication Policy. To mitigate negative activity, the Group has implemented internal rules and regulations governing its social and sponsorship policies and a communication policy, which incorporate the Group's rules on image building. In addition, the contracts and agreements contain appropriate provisions to safeguard the interests of third parties, the parties' representations, as well as anti-corruption and confidentiality rules. Should trading parties fail to comply with their terms and conditions, the following steps can be taken: imposing contractual penalties, taking legal action, terminating cooperation or performing inspections/audits.
Reputational risk, stigmatisation of the chemical sector and downgrades of ESG ratings due to insufficient information activity, incomplete reporting of ESG activities and insufficient preventive measures.	Reputational harm to the brand and, consequently, potential loss of contracts, customers and trading partners	Sustainable development was recognised as a priority under the Group's Strategy until 2030. Initiatives already undertaken in these areas will be included in the Grupa Azoty Group's ESG Strategy, organised around five strategic pillars. These efforts will contribute to delivering the UN's 2030 Sustainable Development Goals, with the 'Green Azoty' strategic corporate project demonstrating the Group's commitment to environmental and social responsibility.



Physical risk

	Risk	Impact	Risk response
Sudden developments, such as extreme weather events	Risk of extreme weather events and natural disasters as physical consequences of climate change: sudden storms, floods, heat waves, hurricanes, tornadoes, lightning strikes, and other weather events	Risk of increased exposure to major industrial accidents or plant failures disrupting the operation of key production units and necessitating adaptation of industrial infrastructure and production technologies to climate change	Grupa Azoty has in place reliable safety systems as well as preventive and prediction measures at al organisational and technological levels, ensuring occupational health and safety as well a protection against industri accidents. The adequacy safety measures is assesse by internal and external auditors and accreditation/certificatio bodies. The strategy for managing the risk of majo industrial accidents or pla failures focuses in the firs place on measures to prevent critical situatio However, should any such event occur, the risk is shared with the insurer. Measures to prevent emergency situations at t Grupa Azoty Group companies include ongoi monitoring of hazards related to technological processes and operation machinery and equipmen ongoing assessment of th technical condition, and monitoring of threats in storage and transport. Th Group's plants and units a equipped with safety and protection systems to minimise the risk of ma accidents and environmental contamination, as well as risks to human life and health. The Group's units Best Available Techniques (BAT) compliant. The unit are kept in a proper working order also by carrying out schedule technical stoppages and maintenance shutdowns, periodic inspections and

	Risk	Impact	Risk response
			routine rounds as require in the technological and instruction manuals. The relevant execution resources are provided. I a failure or accident occu they are thoroughly analysed in order to iden their causes. Following su analysis, preventive measures are taken to minimise the risk of reoccurrence. Accident prevention programmes and legal safety requirements (including those prescribed by SEVESO II Directive) h been developed and implemented: detailed routine accident analyses based on emergency preparedness instruction review of technical risks i production asset operati and thermodynamic condition of selected machinery, ongoing monitoring of hazards in technological processes, plant and equipment operation, and monitori of hazards in storage and transport. Risk analysis based on actual secondar data and materiality of events is currently under way. The analysis will provide the basis for developing appropriate action scenarios.
		As a result of a fire/explosion (in a production facility, warehouse or during transport), the company's	In-house fire brigade unit responsible for oversight fire-fighting activities at th Grupa Azoty Group companies have fire-fight and rescue equipment to extinguish fires and remove other local hazar and effects of natural disasters. The Group operates an automated hazard reporting system, and its fire prevention system provides ongoing fire safety oversight. As a result of their activities, state authorities impose

SCROLL TABLE

	Risk	Impact	Risk response
	Risk related to fire safety	assets may be damaged or destroyed and its operations will be limited or suspended. The risk is also associated with loss of health or life by employees, potential contamination of the environment, significant damage to property, and related financial or other consequences.	restrictions on the transp of hazardous substances, which may result in temporary or permanent unavailability of parts of t transport infrastructure used by a company. In or to minimise the probabili of adverse events, the Group monitors the supp of hazardous materials or ongoing basis, in accordance with the inter regulation on the transpo of hazardous materials. In addition, contracts with companies that rent their rolling stock and with carriers licensed and equipped to carry out transport operations incl appropriate provisions or the carriage of hazardous materials.
	Risks of restrictions on sales of fertilizers due to major and unforeseeable weather changes and extreme weather events (hail, severe frost, summer heat waves, droughts, heavy rainfall, floods, storms)	Possible decline in the purchasing power of farmers and a drop in fertilizer sales resulting in revenue falling below expectations.	Measures taken by the Grupa Azoty Group to mitigate this risk consis adjusting the prices, term of sales and product mix to the market situation.
Chronic, *inter alia*: changes in weather patterns, higher average temperature, increase in the sea level	Risk of restrictions on fertilizer sales due to physical climate change	As a result of physical climate change risks of a chronic nature* and the water crisis** the purchasing power of farmers and fertilizer sales may decline, resulting in revenue falling below expectations. *Changes in the vegetation period of plants due to increased temperatures, lower availability of water and intensified water cycle, as well as increased occurrence of extreme weather events. **Limited water availability and intensified water cycle (summer heat waves, droughts, heavy rain, floods, storms).	Measures taken to mitiga the risk to the Grupa Azo Group consist in adjusting the prices, terms of sales and product mix to the market situation. The Gru Azoty Group's activities include efforts to introdu new fertilizers containing organic matter, soil de-acidifying fertilizers and products improving soil water holding capacity (some of them are alread available). The Group wo with universities and scientific institutions to develop advanced fertilizer application technologies, including technologies related to agricultural specialisat

Strategy, organisation and management risks

An operational risk consisting in inadequate handling of climate change issues by the organisation's management bodies

Risk	Description	Risk response
Risk related to the management of CO2 emission allowances	The CO2 emissions trading market is highly unpredictable due to its high volatility and sudden spikes in CO2 emission allowance prices.	Once implemented and completed, the decarbonisation programme will allow the Grupa Azoty Group to reduce estimated carbon dioxide (CO2) emissions in 2030 by more than 800 thousand tonnes compared with 2020 and by 3.7 million tonnes per year relative to 1990, the EU's reference year. The Grupa Azoty Group assumes in the Strategy that, relative to 2020, CO2 emissions from its captive plants will be reduced by 34%, while CO2 emissions from electricity purchased from third parties will be reduced by 51%. In line with the Strategy, by 2030 coal consumption at the Grupa Azoty Group will be reduced by 65% compared with 2020. The 'Green Azoty' project aims to reduce the use of grid electricity from coal to less than 50% of total energy consumed. By 2030, capital expenditure on green and decarbonisation projects will amount to approximately PLN 3 billion. CO2 emission allowances are managed by a dedicated EU ETS Management Committee and EU ETS Executive Team in accordance with the CO2 emission allowance trading policy in place. Allowances are purchased according to an annual procurement plan, following a recommendation from the EU ETS Committee and the Financial Committee. The EU ETS Management Committee, which supervises the common model for managing CO2 emission allowances at the main companies, tracks the implementation of procurement plans and carbon price developments. In addition, the EU ETS Executive Team continuously monitors the market prices of emission allowances and analyses price trends in the short and long term.

Risk	Description	Risk response
Risk of adopting inappropriate strategy objectives, inconsistent strategy operationalisation, and lack of proper supervision and correct assessment of the delivery of strategic goals	Risk that the objectives set will not lead to making full use of opportunities, building competitive advantage and achieving good results in climate neutrality transition	In line with the adopted plans, the business strategy, of which the Sustainable Development Strategy until 2030 forms an integral part, will be regularly reviewed and updated to take account of changes in the external environment, new challenges or emerging solutions and tools. The strategy sets out the directions for environmental changes at the Grupa Azoty Group, resulting from new European laws. In addition, progress in defining and implementing management policies with regard to climate risk and opportunities prepare the Group to effectively pursue its strategic objectives.
Risk related to ineffective financial and economic projections	Risk of low level of financial and economic warning in the area of climate neutrality transition	The process of deepening the diagnosis of and managing climate risks in accordance with the TCFD recommendations contributes to effective forecasting of trends and preparing for changing regulatory and economic environments.
Risk of ethical misconduct, corruption, conflicts of interest and violation of the rules of fair competition.	Possibility of reputational harm to the brand from issues related to the impact on climate change and preparation for climate neutrality transition	The Group has implemented and applies the Grupa Azoty Code of Ethical Conduct, the Trading Partners Code of Conduct, the Anti-Corruption Code, the Whistleblowing Policy, the Conflicts of Interest Policy, and the Gift Policy. Regular staff training is conducted to increase staff awareness of possible misconduct. The Group operates a Compliance Management System.
Risk of non-implementation or incomplete implementation of corporate regulations at the companies	Possibility of reputational harm to the	The Group keeps a register of implemented corporate standards based on resolutions and information received from the subsidiaries. Reporting is required for the progress of document implementation, plus an assessment made by the supervisory

Risk	Description	Risk response
corporate regulations at the companies due to none or limited oversight (lack of coherence in the companies' documentation with excessive formal requirements in communication and decision-making processes)	brand from issues related to the impact on climate change and preparation for climate neutrality transition	assessment made by the supervisory boards of the individual companies. The Group maintains regular contact with the leaders responsible for implementing corporate regulations at the subsidiaries, as well as with the chairs of supervisory boards – with respect to assessment of the implementation status of corporate standards.
There is a risk of a Group company's failure to comply with good corporate governance practices and capital market regulations, including the provision of untrue information outside the Group, delays/errors in the company's current and periodic reports due to lack of precision in the company's communication with external stakeholders.	Possibility of reputational harm to the brand from issues related to the impact on climate change and preparation for climate neutrality transition – leading to potential loss of contracts, customers, and trading partners.	To ensure uniform legal interpretation of disclosure requirements and uniform compliance, the Grupa Azoty Group companies that are issuers use the services of the same legal advisor with respect to their disclosure obligations. A uniform information policy ensures oversight of information flow and communication processes at the Group, in line with the adopted management model. The effectiveness of the efforts taken is ensured by providing training on disclosure requirements and information policy and by continuous monitoring of electronic mail by persons whose email addresses have been designated for providing notifications with respect to the Group's information policy.

Environmental risk

Risk	Description	Risk response
Regulatory risk related to increasing environmental requirements	The risk relates to the possible tightening of air emission, water and wastewater management, waste management, noise emission and land pollution requirements.	The Grupa Azoty Group holds all necessary environmental permits for its operations. It monitors its air emissions on an ongoing basis. Measurements are made at the intervals specified in the relevant integrated permits and are reflected in the annual pollutant emission measurement schedules. The Group responds to changes in regulations applicable to environmental emissions on an ongoing basis.
	An accident occurring on a Grupa Azoty company's premises gives rise to a risk of soil contamination and	The Grupa Azoty Group holds all relevant legal permits regarding soil

Risk	Description	Risk response
Risk of land pollution and related costs	incurring significant costs related to its remediation/reclamation, as well as a risk of administrative decisions being issued against the company, obligating it to clean up legacy contamination. As a result, a Grupa Azoty company may be required to carry out remediation work on the affected site and restore it to its previous condition. In the case of legacy contamination, the company may be required, by way of an administrative decision, to draw up and deliver a site remediation plan.	contamination. To mitigate the risk of soil pollution, underground water on legacy pollution sites is monitored and places where hazardous substances are loaded, unloaded and stored are inspected. A detailed assessment is carried out based on the type and quantity of substances in a process unit and the measures taken to prevent the substances from polluting the soil. The Grupa Azoty Group responds to regulatory changes in the area of land pollution requirements on an ongoing basis.
Risk related to the use of radioactive substances	Radioactive substances used by the Grupa Azoty Group may adversely affect the health or life of employees or persons present in the area of their potential impact, or the legal conditions for their use may not be met. There is a risk of leakage from storage containers for radioactive substances, a risk of using defective equipment/apparatus that operates using radioactive substances, or a risk of inappropriate protection of such equipment/apparatus against access by third parties. A loss of a radioactive source due to theft or misplacement, as well as detachment of a radioactive source from its apparatus, are very unlikely as long as the apparatus containing the source is normally	In order to eliminate such risks, all radioactive sources in the operating apparatus are placed in transport and work containers with built-in locks preventing easy removal of the source without using special keys and the containers are screwed to the supporting structure. Radioactive sources used in process units operating in open space are additionally secured using padlocks with patented lock systems. All apparatus with radioactive sources have output signals incorporated in the units' computer systems. During unit shutdowns or overhaul work in the immediate vicinity of radioactive sources, these sources are placed in transport and work containers in the isotope storage room. Once a year, the Grupa Azoty Group carries out drills to review and update the contingency plan in the event of

Risk	Description	Risk response
	operated.	a radiological emergency. Sealed radioactive sources are used during such drills.
Risk of exceeding environmental noise limits	The risk that a company will generate excessive noise emissions in the course of its operations and that it will not take sufficient measures to reduce its noise emissions.	During the unit design phase equipment with appropriate parameters is selected, and the location of the unit takes into account the environmental impact of noise emissions. The Group holds all legal permits regarding environmental noise. In the existing units, soundproofing cabins and acoustic silencers have been installed. In accordance with the integrated permits, the Group companies regularly monitor and analyse the measurements of noise emitted to the environment. The Grupa Azoty Group responds to regulatory changes relating to noise emissions as soon as they are introduced.
Risk of adverse impacts on biodiversity and wild natural habitats	The risk that a company's operations will lead, directly or indirectly through its supply chain, to loss of biodiversity and destruction of wild fauna and flora.	The Group has not identified any material direct or indirect impact of its operations on biodiversity. The Group mitigates its impact on biodiversity and wildlife by conducting its operations in a responsible and environmentally sound manner.
Risk of obtaining invalid test results or of failure to perform environmental and workplace pollution tests	The risk of obtaining invalid results (in the context of validation of results in compliance with ISO/IEC 17025) of environmental and workplace pollution tests due to laboratory error, lack of equipment, equipment failure or staff error. The risk of failure to obtain the required accreditation for tests performed.	The Grupa Azoty Group has applied a process-based approach to managing environmental issues relying on interactions compliant with relevant procedures. The system of responsibility and accountability for managing key activities of the Group defines the methods of analysing incompatibilities, opportunities and threats, which is important in order to identify the action needed.

Social risk

Risk	Description	Risk response
		The Group has implemented and

Risk	Description	Risk response
Risk of loss of positive public perception due to violation of human rights by employees of the Company or its business partners	The risk of negative public attitude resulting from a breach or alleged breach of or failure to comply with due diligence procedures for monitoring violations of human rights by employees of the Company or its business partners.	applies the Grupa Azoty Code of Ethical Conduct, the Trading Partners Code of Conduct, the Whistleblowing Policy, and the Workplace Bullying and Anti-Discrimination Policy of Grupa Azoty S.A. Regular staff training is conducted to increase staff awareness of human rights and their possible violations.
Risk of failure to meet expectations of the public	The risk of a company taking outreach initiatives that are not compatible with stakeholder needs due to lack of dialogue with the local community.	The Group has implemented and applies the Social and Sponsorship Policy, the Donation Policy and Donation Rules, the CSR Policy and the Communication Policy. Regular dialogue is maintained with local communities, meetings are held between the management and local government representatives, and media monitoring and perception surveys are conducted.
Risk related to misalignment of shareholder interests	There is a risk of misalignment between shareholder interests, which may lead to difficulties and slow down decision-making processes of corporate bodies, including through the exercise of the right to veto or the right to contest a resolution.	The Grupa Azoty Group adopted a Declaration of Compliance with Corporate Governance Principles and Best Practice for WSE Listed Companies 2016. The transparent information policy presented on the up-to-date corporate website, with easy and clear access to all materials submitted for consideration by the General Meeting, ensures that strategic intentions are communicated effectively. Measures have been taken to limit the voting right to one-fifth, except for the State Treasury votes, in line with the provisions of the Grupa Azoty S.A. Articles of Association. In order to minimise this risk, Management Board plans are presented with appropriate rationale and the Company organises conferences for investors and brokerage houses. In addition, the Company prepares investor presentations, publishes current reports and presents complete information on its website.
		The Group continuously monitors compliance with the rules of personal data protection and personal data processing safeguards implemented at workstations. Personal data is processed pursuant to outsourcing agreements for data processing, and the responsibility for processing lies

Risk	Description	Risk response
		with the owner of the IT system processing the personal data and/or the process. In the case of a joint controllership agreement, the responsibility rests with the owner of the IT system processing the personal data and/or the process by means of which the data is processed, and the data is jointly controlled by two or more operators. The provisions of agreements for personal data processing are defined based on the Grupa Azoty Group's manual on contracting and contract performance. GDPR privacy notices, consent clauses and privacy policies are created on an ongoing basis to address the business needs and satisfy the information requirements under the GDPR. Any arrangements in this respect are made at the level of the Data Protection Committee of Grupa Azoty.
Risk of personal data breach	The Grupa Azoty Group has identified a risk of personal data breach that may potentially lead to an accidental or unlawful destruction, loss, alteration, unauthorised disclosure of and access to personal data (GDPR).	
Risk of infringing on or interfering with employees' right to freedom of association and collective bargaining	The risk of infringing on or interfering with employees' rights to freedom of association or their right to strike, organise and bargain collectively; risk of industrial disputes.	The Grupa Azoty Group does not prevent employees from unionising – there are several trade unions active at the Group. The relations between the employer and employees, based on partnership and mutual respect, takes place in accordance with the Collective Bargaining Agreement. The trade unions use the employer's property.
Risk of accidents at work, occupational ill-health and other threats	The work performed at the Grupa Azoty Group companies entails the risk of production stoppages caused by an accident or emergency resulting in a serious injury or fatality on the premises of a Grupa Azoty Group company.	OHS staff at the Grupa Azoty Group carry out regular on-site inspections and participate in accident and emergency teams. Any near-miss incident reported by employees in electronic or paper form is reviewed by the OHS function. A register of hazards, near-miss incidents and 'STOP Accidents' observations is kept and updated on an ongoing basis in an online database. In order to prevent any unsafe situations, the Grupa Azoty Group companies share information by publishing conclusions from investigation of near-miss incidents on an online platform.
Risk of loss of employees with competencies of key importance to a company due to a high attrition rate	The risk of failure to secure availability of personnel with relevant competencies to carry out day-to-day operations and development projects as a result of difficulties in hiring and retaining employees and employees retiring.	In order to ensure the highest standards across all areas of its operations, the Group offers its employees attractive pay, training opportunities and non-pay benefits.

Risk	Description	Risk response
Risk to employee health and safety arising from widespread incidence of communicable diseases	Employees of Grupa Azoty Group companies may contract infectious diseases or suffer (potentially considerable) ill health, which may cause significant absence rates leading to a partial or complete shutdown of units.	In connection with the spread of SARS-COV-2 pandemic in Poland and globally, a number of mitigation measures were identified and planned. Work organisation was changed at Grupa Azoty to reduce contact between employees. The measures taken included: ban on meetings, procedures for changing work patterns so that employees working one shift did not contact those working the next, working from home, procedures in the event of a confirmed infection, testing employees for COVID-19. Grupa Azoty also established a COVID-19 crisis management team to continuously monitor the situation, make decisions on preventive measures and issue guidelines on what steps to take. Moreover, epidemiological forecasts issued by central authorities, the National Sanitary Inspectorate, the Ministry of Health and the Sanitary Inspectorate are monitored on a regular basis.

Climate opportunities table

As part of its risk management model and qualitative risk analysis, Grupa Azoty identifies both risks and opportunities associated with a given risk.



Efficiency of resource use

Opportunity	Opportunity response
▪ More efficient use of means of transport and production and distribution processes ▪ Recycling ▪ Conversion of buildings towards improved energy efficiency ▪ Reduction of water consumption	Grupa Azoty continuously improves its processes and implements energy saving initiatives by using innovative solutions and conducting energy audits. In 2021, the Group carried out an energy review under the ISO 50001:2018 system, which helped it gather complete information on energy consumed by the organisation. An upgrade of the hot water network is currently in progress. The project will help reduce heat losses in transmission pipelines and ensure security of heat supplies to customers. The implementation of the New Energy Concept is under way. Benefits will include lower demand for electricity and steam required in industrial processes and partial replacement of coal with gas in steam production. The Company is carrying out a range of projects to reduce heat consumption, such as the construction of a turbine generator which will enable the use of waste heat for electricity generation. Moreover, Grupa Azoty Kędzierzyn is implementing a key project aimed at ensuring the company's energy security and good outlook for the future, and at driving down the consumption of primary raw materials, carbon dioxide emissions, and energy intensity of the company's core production. The new power generation concept will be largely based on the use of process heat from chemical installations rather than on investments in new coal-fired boilers.



Energy sources

Opportunity	Opportunity response

Opportunity	Opportunity response
▪ Use of lower-emission energy sources ▪ Use of support policy incentives ▪ Use of new technologies ▪ Participation in the market of carbon allowances	Grupa Azoty will work towards becoming an emission-free energy producer by 2030. It plans to implement renewable energy projects using mainly its own assets, but does not rule out the possibility of becoming involved in third-party projects. The new renewable energy sources are planned to deliver a total of about 300 MW in 2030. The Grupa Azoty Group expects that the planned projects will allow it to save more than PLN 200 million per year on electricity purchases, and the average share of renewables in the energy mix will reach 40%.



Products and services

Opportunity	Opportunity response
▪ Development and/or expansion of low-emission goods and services ▪ Development of adaptation to climate change and insurance risk solutions ▪ Development of new products or services through R&D&I	In its innovation strategy, the Grupa Azoty Group will focus on innovation in the following four areas: innovative projects, development of an innovation system, support for corporate projects and innovation geared towards minimising the impact of regulatory risks. The goal will be to deliver high quality new or improved products and to maintain a long-term competitive advantage. The necessary expenditure expected to be incurred on research, development, pilot units and innovation in 2030 is estimated at 2–3% of the Grupa Azoty Group's revenue.
	Biodegradable coatings for granular fertilizers being developed in collaboration with Compo Expert, fertilizers for application in forest areas, urease and nitrification inhibitors and fertilizer formulas enriched with micronutrients from utilised waste streams. Speciality fertilizers reduce losses of nutrients, and the efficiency of using such products is 50% higher than that of traditional ones, with fertilizer application reduced by 20%.
	Placing on the market of the Fosfarm product line, comprising modern and environmentally-friendly NPK fertilizers manufactured in accordance with the principles of sustainable development, including circular economy.
	Grupa Azoty will step up its efforts in the field of precision farming, contributing to the European Commission's overall objective for the agro area, which is to increase fertilizer use efficiency. With the use of AfroCeres scanners for rapid soil analysis, the results are available within a few minutes after the test, together with precise recommendations on the minerals the soil needs, thanks to which only the necessary nutrients are introduced into the soil.
	Grupa Azoty is the first producer in Central and Eastern Europe to offer fully biodegradable plastics. The Tarnów-based company has launched a pilot line able to produce 300 tonnes of thermoplastic starch per year. It uses a proprietary technology (patented in 2020) for

Opportunity	Opportunity response
	a proprietary technology (patented in 2020) for manufacturing biodegradable polymers for the needs of the packaging industry of the future.
	Implementation of the technology for recycling polymer plastics (polyolefins, polyamides) or recovery of phosphorus and potassium from alternative sources.
	Production of polyamide 6 and its compounds – the automotive industry uses this material to reduce the weight of cars and thus fuel consumption.



Markets

Opportunity	Opportunity response
▪ Access to new markets ▪ Use of public sector incentives ▪ Access to new assets and locations	Key initiatives undertaken in the energy area are among the most significant steps in the 'Green Azoty' flagship project. Grupa Azoty's active participation in the development of the European hydrogen market will be one of the pillars of the project. As the largest hydrogen producer in Poland and a major hydrogen processor in Europe, the Grupa Azoty Group will carry out research and development activities relating to the production and use of green hydrogen. The Group is carrying out economic studies and technical analyses of electricity production from its own renewable sources. The aim is to reduce the carbon footprint and to ultimately produce 'green hydrogen' using electrolytic cells powered by this renewable electricity. Work will also be continued on fuel cell development and the launch of a quality accreditation laboratory testing hydrogen for fuel cell applications in transport. As a member of the European Clean Hydrogen Alliance, in the coming years the Grupa Azoty Group will actively participate in the work on European regulations regarding the classification of green hydrogen. The Company was among the signatories to a letter of intent, signed at the initiative of the Ministry of Climate and Environment, to establish a partnership for building a hydrogen economy and signing a sectoral hydrogen agreement. Grupa Azoty is also a member of the European Clean Hydrogen Alliance, a project launched by the European Commission, which aims to deploy hydrogen as an alternative energy carrier in Europe. Grupa Azoty is carrying out a number of development initiatives which include projects focused on fuel-cell hydrogen technologies. The solutions may be instrumental in providing an efficient source of power for rolling stock and developing hydrogen and ammonia production from renewable energy sources, serving as a fuel for rail transport.

Opportunity	Opportunity response
	In accordance with the European Green Deal, a significant part of Grupa Azoty's research and development resources will be geared towards climate neutrality targets. As part of 'Green Azoty', Grupa Azoty will also implement projects in such areas as electric mobility, i.e. development of fuel cells and materials used in their production. Grupa Azoty is also analysing the prospects of building small modular reactors at its main plants. Such reactors could help stabilise the Grupa Azoty Group's energy mix and guarantee a competitive price of energy utilities.

Grupa Azoty has taken steps to address the risks and tap the opportunities brought by the approaching changes and to ultimately integrate them as part of its enterprise risk management system. Risk assessment in the short, medium and long term and a scenario analysis assuming an increase in average temperature by less than two degrees Celsius were assigned to risk owners as mitigating and monitoring measures in the risk charts in 2021. The results of the risk analysis over different time horizons will be available and verified in the next reporting period.



Our management approach

[IR - Corporate governance]

We have established consistent and comprehensive policies adherence to which supports our management processes and ensures compliance of the Grupa Azoty Group's operations with the law, internal regulations, standards of ethics, and best business practices. Our Compliance Management System comprises codes and policies adopted by resolutions of the management boards of individual Group companies.

The Compliance Management System includes:

Code of Ethical Conduct [102-16] [103-2] [206-1] [102-41]

[102-16] [103-2]

We operate ethically at the Grupa Azoty Group. We are a responsible corporate citizen that stakeholders can trust. We operate in line with the adopted rules of conduct, which are consistent with the values embraced by all Grupa Azoty Group companies. The way we operate is based on the Code of Ethical Conduct, which sets out the priorities in fostering good employee conduct and building relations with our external stakeholders. The document specifies what conduct is to be expected from the Grupa Azoty Group and its employees. We take all declarations contained in the Code of Ethical Conduct with the utmost seriousness and feel obliged to fulfil them, so that the way we operate fully reflects our commitments defined in the Code. The Code also applies to our customers, business partners, shareholders and other stakeholders. The Code of Ethical Conduct is part of our compliance

management system enabling effective control and supervision of compliance with the laws, internal regulations, industry standards and good practices. The right to implement the system and to monitor its operation and effectiveness rests with the Compliance Officer.

Grupa Azoty Group Code of Ethical Conduct is a public document available on our corporate websites.

Grupa Azoty Group Code of Ethical Conduct

- defines the ethical values and principles applying to the conduct of business with stakeholders, suppliers and local communities,
- declares the intention to ensure equal employment, promotion and training opportunities for our employees,
- describes the procedure for reporting incidents involving ethics violations to a line manager or the Compliance Officer,
- defines measures to manage conflicts of interest and corruption risk.

We strive to ensure that each of the many thousands of our employees knows and observes the Code in their everyday work. The heads of individual organisational units of the Group are required to familiarise their subordinates with the applicable internal regulations. As of 2020, all new employees and suppliers wishing to collaborate with our Group are required to confirm in writing that they have read our Code of Ethical Conduct and the related policies. Following policy updates, in 2021 such confirmations were also required from persons hired before 2020.

Good management – understood as responsible management of the Grupa Azoty Group's tangible and intangible assets based on a cost-benefit analysis. All our assets are managed so as to maximise benefits to our shareholders and other stakeholder groups.

Professionalism – making every effort to ensure that our management approach, as well as operating standards and control systems are well designed, effective, and support the delivery of our business strategy. For us, to be professional is to apply the highest standards of care and to make proper use of our expertise, skills and business competence in day-to-day work.

Cooperation – arranging our mutual relations with stakeholders so as to maximise benefits to the Grupa Azoty Group, with due regard to and respect for the other party's interests. This involves communication aimed at achieving a win-win situation, building mutual trust, and pursuing common goals.

Respect – refraining from any acts or decisions and from making any statements that could violate another person's dignity. It involves a duty on our part to respect any nationality, race, gender, age, disability, religion, political views, sexual orientation, as well as different beliefs and opinions.

Transparency – we openly communicate all our decisions and actions, their underlying circumstances, as well as our expectations and standards. We are guided by this approach in all areas of our activity, except for those which must remain confidential for business or legal reasons.

Responsibility – whatever we do, we are committed to the safety and well-being of our employees, customers and other people who may be affected by our activities, to protecting the natural environment and improving the quality of life of local communities where we operate, and to exercising due care for tangible and intangible resources we have been entrusted with.

[206-1]

In 2021, there were no pending lawsuits regarding breaches of fair competition rules against any parent company of our Group.

Trade unions

We manage relations with trade unions in a responsible and lawful manner. We respect the right of employees to associate in trade unions. We also want to foster good relations with trade union representatives, based on dialogue and understanding of mutual needs. No works council has been appointed at any of the Grupa Azoty Group's plants.

Number of trade unions and number of employees who are members of trade unions

	Number of trade unions	Number of employees who are members of trade unions (headcount)

	Number of trade unions		Number of employees who are members of trade unions (headcount)	
Structure level	2020	2021	2020	2021
Grupa Azoty KĘDZIERZYN	3	3	946	991
Grupa Azoty POLICE	6	6	1,869	1,791
Grupa Azoty PUŁAWY	9	8	2,401	2,438
Grupa Azoty S.A.	5	5	1,360	1,480
Total	**23**	**22**	**6,576**	**6,700**



BEST PRACTICE

Grupa Azoty Puławy has in place a Dialogue Forum, i.e. regular meetings between the employer and all trade unions active at the company during which information on key aspects of Grupa Azoty Puławy's operations is presented, and employee-oriented proposals and initiatives are discussed. The company has also established a collective bargaining agreement negotiation team to discuss amendments to the provisions of the collective bargaining agreement and to consult them with trade unions. The negotiations concern proposals put forward by the employer or by the trade unions.

[102-41]

Employees covered by collective bargaining agreements

	Grupa Azoty KĘDZIERZYN[1]		Grupa Azoty POLICE[2]		Grupa Azoty PUŁAWY		Grupa Azoty S.A.[3]	
Percentage of employees covered by collective bargaining agreements	2020	2021	2020	2021	2020	2021	2020	2021
	98%	98.7%	100%	100%	100%	100%	99%	99%

SCROLL TABLE

[1] At Grupa Azoty Kędzierzyn, the collective bargaining agreement does not apply to the Management Board members and senior executives.
[2] At Grupa Azoty Police, the collective bargaining agreement does not apply to the Management Board members.
[3] At Grupa Azoty S.A., the collective bargaining agreement does not apply to persons employed under managerial contracts.

Anti-Corruption Code

[102-16] [102-17] [205-2] [205-3]

[102-16]

The Grupa Azoty Group takes a zero-tolerance approach to corruption. All employees must strictly observe the Anti-Corruption Code, which further specifies the anti-corruption rules set out in the Code of Ethical Conduct. The Anti-Corruption Code expressly and in a manner that leaves no room for misinterpretation prohibits any direct or indirect types or forms of corruption. Offering, providing, promising or authorising the provision of any financial benefits, as well as accepting such benefits in any form, is prohibited at all levels of the Grupa Azoty Group's organisational structure. Our Code also prohibits nepotism, cronyism, and provision of benefits to political parties or candidates for public offices.

The Code is available to all employees, including on the corporate intranet in the COMPLIANCE MANAGEMENT section. The section contains the definition of misconduct, relevant regulations and information on dedicated red mailboxes located on the premises of our companies, together with photographs of their location.

[102-17]

The Anti-Corruption Code requires all employees who suspect corruption, nepotism or cronyism to report their concerns within seven days to the Compliance Officer. Employees can report such misconduct through a dedicated channel described in the Whistleblowing Policy. In addition, the home page on our intranet features the 'Report misconduct' section. Clicking the button opens a page with an address to which any instance of misconduct can be reported, and a link to the Whistleblowing Policy.

We follow and expect our business partners to follow our anti-corruption rules. Signing an agreement/contract with the Grupa Azoty Group is conditional on the acceptance of our anti-corruption rules. This requirement follows from the Business Partners Code of Conduct. Our trading partners must confirm in writing that they are not involved in fraudulent tax practices and that the products they offer are not derived from criminal activity and are not traded in carousel fraud.

[205-2]

In 2021, 93% of our employees read the Code and the anti-corruption procedures. All newly recruited employees are required to read those documents and acknowledge this fact by signing a relevant representation. Such representations are filed on a monthly basis. We also make sure that senior management of the Grupa Azoty Group are familiar with the anti-corruption rules. Members of the management boards of the Group companies confirm this fact when taking office.

We also make sure that senior management of the Grupa Azoty Group are familiar with the anti-corruption rules. Members of the management boards of the Group companies review those rules when taking office. In 2021, all members of the management bodies read the organisation's anti-corruption policies and procedures.





BEST PRACTICE

In 2021, all employees of our leading companies who supervise the work of at least one employee were required to take part in compliance training covering internal anti-corruption regulations. They must also become familiar with materials prepared by the Polish Central Anti-Corruption Bureau (CBA) concerning business corruption.

[205-3]

In 2021, there were no cases of corruption or fraud at Grupa Azoty Group companies.

Investigation into fraudulent acts against Grupa Azoty Police

The Szczecin District Prosecutor's Office continues to investigate possible criminal offences, including fraud and failure to comply with obligations to the detriment of the company. According to announcements issued by the Prosecutor's Office in connection with presentation of further charges and application of preventive measures, extensive evidence was gathered in that case (including expert opinions and documents relating to the proceedings conducted by the Polish Financial Supervision Authority), which indicates that an offence was perpetrated in connection with the acquisition and performance of an agreement for the acquisition of shares in African Investment Group S.A. by Grupa Azoty Zakłady Chemiczne Police S.A. The criminal acts involved, among other things, intentional overstating of the value of shares in African Investment Group S.A., and failure to meet the terms of payments during the performance of the share purchase agreement, which allegedly led to a disadvantageous disposal of the company's assets by spending more than USD 28 million until August 2015.

[205-2]

Number of employees who have read the organisation's anti-corruption policies and procedures, by employee category

Position	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.[4]
	2021	2021	2021	2021
Operators	680	1,161	1,042	No data available
Other blue-collar jobs	130	420	1,020	No data available
Managers	105	112	168	No data available

Position	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.
Laboratory staff	127	187	157	No data available
Supervisors	90	143	262	No data available
Senior staff	130	6	152	No data available
Specialist staff	280	459	612	No data available
Senior management	20	30	62	No data available
Total	**1,562**	**2,518**	**3,475**	**-**

[4] In 2021, 1,970 (87%) employees of Grupa Azoty S.A. read the organisation's anti-corruption policies and procedures. The Company does not aggregate such data by employee category.

Percentage of employees who have read the organisation's anti-corruption policies and procedures, by employee category

Position	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A. [5]
	2021	2021	2021	2021
Operators	94.71	93.10	93.20	No data available
Other blue-collar jobs	98.48	91.30	93.32	No data available
Managers	94.59	97.39	90.32	No data available
Laboratory staff	96.95	91.67	82.63	No data available
Supervisors	95.74	90.51	97.04	No data available
Senior staff	91.55	85.71	88.37	No data available
Specialist staff	93.02	93.48	95.33	No data available
Senior management	95.24	96.77	88.57	No data available
Average	**94.67**	**92.81**	**92.35**	**-**

[5] In 2021, 1,970 (87%) employees of Grupa Azoty S.A. read the organisation's anti-corruption policies and procedures. The Company does not aggregate such data by employee category. The percentage was calculated as the ratio of the employees who read the procedures to the total number of employees as at December 31st 2021 and those who left in 2021.

Number of management body members who read the organisation's anti-corruption policies and procedures

	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	Total
2021	5	4	4	7	**20**

Percentage of management body members who read the organisation's anti-corruption policies and procedures[6]

	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	Total
2021	100.00	100.00	100.00	100.00	**100.00**

[6] The figures reported reflect only the number of employees as at December 31st 2021.



Gift Policy

[102-16]

[102-16]

At the Grupa Azoty Group, we sometimes permit offering and accepting gifts as this is believed to help forge and foster business relationships. However, we also realise that some gifts may be seen as a form of corruption or may compromise the reputation of the Grupa Azoty Group. For this reason, we have developed and implemented the Gift Policy across the Group. It specifies in detail the general principles set out in the Code of Ethical Conduct and the Anti-Corruption Code. Our Policy provides employees with knowledge of what gifts may be given or received in connection with their work. Offering or accepting gifts must always be justified by business circumstances and the value of a gift may not exceed PLN 200. Gifts must be presented in a transparent manner and may not affect the recipient's objectivity or freedom of judgement. It is forbidden to regularly present gifts to one person (with a value in excess of PLN 400 in one year). Our employees are not allowed to offer gifts to persons who hold public offices, except for precisely defined official situations in which flowers, cards or items bearing the Grupa Azoty logo worth up to PLN 200 may be presented.



Conflicts of Interest Policy

We are committed to ensuring that our employees' private social, family or financial relations do not affect their professional decisions. Our Conflicts of Interest Policy defines potential conflict of interest situations and provides guidance on the steps to be taken when they occur. All employees are required to inform their respective line managers at least seven days in advance of situations where making a decision could give rise to a conflict of interest.



Whistleblowing Policy

[102-17] [406-1]

[102-17]

We want to respond promptly to any instances of misconduct that may occur at our Group. To this end, we have implemented a coherent and effective Whistleblowing Policy. Addressed to all stakeholders of our companies, the Policy is applicable at each level of the Group's organisational structure. Our employees are obligated to immediately report their concerns about possible misconduct:

- in person to the line manager or to a permanent Member of the Management Board;
- by telephone to the Compliance Officer;
  by email on a 24/7 basis to: sygnalista@grupaazoty.com;
- by letter sent through traditional post or put in one of the red mailboxes located on the premises of the Grupa Azoty Group companies.

Unless otherwise stated by the reporting person, all incoming reports will be treated as confidential. We guarantee full anonymity – the identity of a whistleblower may only be disclosed if such disclosure is an obligation imposed on the relevant Group company under generally applicable laws. We do not seek to establish the identity of persons who have not provided their details in misconduct reports. Persons reporting their concerns in good faith will not face any retaliatory action. In particular, they will be protected against any form of discrimination, bullying, intimidation, ostracism and other types of improper or unequal treatment by companies of the Grupa Azoty Group or other employees. Any reported instance of misconduct is investigated by way of an internal procedure.

[102-17] [406-1]

In 2021, Grupa Azoty Police received three misconduct reports. The Whistleblowing Policy Team conducted investigations, which identified one unconfirmed case of workplace bullying, one case of harassment and a case of violation of ethical standards between two employees. Following relevant proceedings, a recommendation was issued to develop and put in place a procedure for counteracting discrimination, workplace bullying, harassment, including sexual harassment, and other undesirable behaviour. It was also recommended that regular training be prepared and provided to all company employees to raise their awareness of discrimination, workplace bullying, and other undesirable behaviour, as well as on methods to prevent such behaviour and its consequences.

[406-1]

Number of incidents of discrimination[7]

Structure level	Instances of discrimination	
	2020	2021
Grupa Azoty KĘDZIERZYN	0	0
Grupa Azoty POLICE	0	2
Grupa Azoty PUŁAWY	0	0
Grupa Azoty S.A.	1	0

[7] According to the GRI standards, discrimination is understood as an act and the result of treating people unequally by imposing unequal burdens or denying benefits rather than treating each person fairly on the basis of individual merit. Discrimination may also include harassment, understood as repeated comments or acts that are unwelcome to the person being the target of such behaviour. The summary includes incidents of discrimination on the grounds of race, colour, sex, religion, political views, national origin or social background as defined by the International Labour Organisation, and other relevant forms of discrimination involving employees and external stakeholders.

All documents in Polish and English have been published and are available in the Internet on our corporate websites.



INNOVATIONS

Our approach to innovation

[IR – Corporate governance]

We are convinced that the adoption and deployment of innovations may be an engine of growth in the chemical sector. We look for innovative solutions that can advance and improve our products and technologies. New ideas emerge from initiatives proposed by the Grupa Azoty Group's employees or are inspired by external stakeholders. We analyse market trends, consider customer needs and monitor legal regulations that may have bearing on the Group's future.

In defining our mission and vision until 2030, we identified an innovation strategy, integrated into the Grupa Azoty Group Strategy for 2021–2030. Its goal is to deliver high quality new or improved products and to maintain a long-term competitive advantage. The necessary expenditure expected to be incurred on research, development, pilot units and innovation in 2030 is estimated at 2–3% of the Grupa Azoty Group's revenue.

We intend to focus on innovation within four areas:

- Innovation projects;
- Development of an innovation system;
- Support for corporate projects;
- Innovation geared towards minimising the impact of regulatory risks.

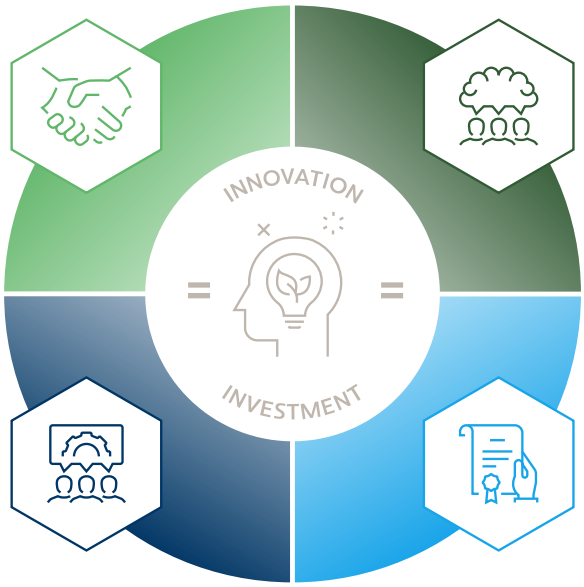
At the Grupa Azoty Group, we have modern research and development facilities manned by an excellent staff of scientists. As a result, we can test new technology solutions internally and conduct our own research projects. We are also open to partnerships with institutions of science and prospective start-ups. In 2021, we improved our knowledge development and sharing process by implementing a repository to store digitised R&D documents and reports complete with specialised machine-learning models for automatic extraction of key data.

Supporting corporate projects

- Creating shared agronomic research infrastructure for all Group companies by the end of 2024
- Providing corporate support for non-product innovation implementations to streamline the Group's business and services

Developing an innovation system

- Implementing by 2025 and maintaining in place a defined innovation management system and developing tools to support R&D&I
- Implementing and expanding innovation support programmes, including internal initiatives dedicated to employee innovation and innovation financing systems



Innovation projects

- Harmonising the new product development system at the Group by 2022 for more efficient use of internal resources
- Providing high quality new and improved products
- Maintaining long-term competitive advantage by quick flexibly responding to market trends relevant to products offered and creating new trends in niche technologies

Innovation geared towards minimising the impact of regulatory risks

- R&D area ready to protect Grupa Azoty's existing products against the impact of regulatory changes to preserve existing sale markets
- Actively participating in consultation of draft regulatory changes to be able to influence such changes, initiate new solutions and thus build competitive advantage
- Setting up a system for monitoring products, feedstocks and technologies used by the Group.



BEST PRACTICE

In 2021, the research infrastructure of the Grupa Azoty Puławy Research Laboratory was upgraded with a focus on the development of new nitrogen fertilizers and biotechnological processes. Grupa Azoty Kędzierzyn, on the other hand, added new equipment to its Fertilizer Application Laboratory. New research equipment was also procured for the Alternative Fuels Laboratory.





BEST PRACTICE

We have an ongoing project to construct a Research and Development Centre in Puławy. For the purpose of the project, the former sodium perborate production building will be adapted and a separate facility with an area of approximately 400 m2 will be built. Work carried out at the R&D Centre will be focused on two strategic areas for Grupa Azoty Puławy, i.e. fertilizers and biotechnologies. Our research projects are expected to revolve around such themes as the production of PET plastics not derived from crude oil, biodegradable plastics and substances enhancing plant resilience to stress factors. The Research and Development Centre project is scheduled for completion in 2023.

We are aware of the changes lying ahead. **In the coming years, a significant part of our R&D resources will be dedicated to the achievement of climate neutrality targets.** The new projects will include: granular fertilizers with biodegradable coatings, fertilizers for application in forest areas, urease and nitrification inhibitors, and fertilizer formulas enriched with micronutrients from utilised waste streams. We also plan to step up activities in precision agriculture to advance the European Commission's main goal with respect to Agro, i.e. improved effectiveness of fertilizer application.



BEST PRACTICE

In 2021, the R&D activities of Grupa Azoty Kędzierzyn included:

- three innovative solutions developed by the R&D department
- cooperation with six universities on ten research projects
- 19 doctoral theses for practical application ('implementation doctorates')
- six patents and four patent applications
- nine externally co-funded projects with a total value of nearly PLN 182 million
- development of research infrastructure of the Alternative Fuels Laboratory and Fertilizer Application Laboratory

Read more about our innovation strategy

Learn more about our partnerships with science

We collaborate with several dozen leading universities and member institutes of the Łukasiewicz Research Network. We jointly implement both commercial projects and projects partly financed with European funds obtained via the National Centre for Research and Development under the Smart Growth Operational Programme.

In 2021, we continued the **Grupa Azoty Brand Ambassador programme**, which aims at building lasting relations between the academic community and industry. The programme is addressed to undergraduate and graduate students, who have the opportunity to learn first-hand about working for the largest chemical company in Poland. The role of selected Ambassadors is to promote our brand among students and doctoral candidates, and help us organise workshops and seminars. The programme participants are also able to attend meetings with managerial level staff of individual Group companies and to receive support in carrying out their own projects related to fertilizers or chemicals. The Ambassadors receive a monthly salary, and the best ones are entitled to apply for paid internships at the Grupa Azoty Group. During the 2021/2022 academic year, Grupa Azoty is represented by six Ambassadors designated by the Group's key companies.

In cooperation with the Foundation for the Development of the Education System, we ran the national qualifiers of the **WorldSkills Poland programme** in the chemical laboratory technician category. The winner of the Polish edition received our expert support and equipment necessary to prepare for the international stage of the competition held in Shanghai. We also provided training support during the EuroSkills competition in Graz. The Grupa Azoty Group is the first major industrial partner from Poland engaged in promoting vocational education globally.

Our cooperative links with higher education institutions include the **'implementation doctorates'** programme (with doctoral theses dedicated to practical application). Employees of the Group companies have been able to combine doctoral studies with professional work since the programme was launched in 2017. Doctoral programmes are conducted in partnership with the Silesian University of Technology, Wrocław University of Technology, Warsaw University of Technology and Jagiellonian University. Between 2017 and 2022, the Group's employees took up 51 research themes as part of their implementation doctorates. Three doctoral theses were submitted and successfully defended.





BEST PRACTICE

In July, we signed an agreement with the West Pomeranian Maritime and Technology Education Centre. The cooperation will involve unpaid work placements for students learning to become Mechanical Technicians and Mechatronics Technicians, as well as future mechanics attending the 1 degree Vocational School. In addition, the five most talented students will be granted scholarships. Grupa Azoty Police will also support events organised by the school, promoting the professions related to applied mechanics and mechatronics.

We have also partnered with the Maritime University of Szczecin: under an agreement signed in 2021, its Faculty of Mechanical Engineering launched a new course of study in Industrial Engineering and Offshore Wind Power Plants (specialisation: Industrial Systems Diagnostics) and a new edition of the course in Mechanical Engineering and Machinery Construction (specialisation: Construction and Operation of Offshore Energy Systems).

In 2021, Grupa Azoty Police signed a cooperation agreement with the University of Szczecin, providing, among other things, for the organisation of student and employee projects, provision of internship openings, support for students working on their graduation assignments and doctoral theses relevant to the company's business, as well as joint research and development projects.

In 2021, Grupa Azoty Police and Grupa Azoty Polyolefins engaged in partnership with the Szczecin University of Technology, signing an agreement on a programme of expert lectures to be given by employees of the companies, scholarship contests, internship opportunities at the Grupa Azoty Group, and launch by the University of a course of study in Chemical and Process Engineering (specialisation: Operation of Petrochemical Plants) to train students in that specialist field.

In December 2021, we also signed an agreement with the Warsaw University of Technology on the provision of internship opportunities and joint R&D activities.

See how we engage with primary and secondary schools

Learn more about our collaboration with start-ups

We are open to innovative ideas originating from start-ups. We know that some of them can improve certain areas of our business. In 2021, Grupa Azoty S.A. had two ongoing acceleration programmes, KPT ScaleUP and IMPACT_POLAND 2.0, financed by the Polish Agency for Enterprise Development. As part of IMPACT_POLAND 2.0, eight pilot projects were implemented, one of which – a digital repository of R&D projects – was successfully delivered on a commercial basis.

As part of KPT ScaleUP, the Company collaborated with 10 start-ups supporting them for a half year in running pilots of their products, services and technologies. In 2021, four ideas were validated and six were advanced to the acceleration phase. Two of the solutions received positive opinions:

- system for simultaneous humidity, temperature, pressure, UV radiation, noise and particulate matter measurements based on the LoRaWAN technology, including a visualisation platform and warning system. The system has been implemented at Grupa Azoty S.A.'s fertilizer storage facilities,
- virtual reality tool for training the operators of a non-pressurised ammonia storage and distribution facility. The solution met with great interest of Grupa Azoty Puławy and is now being assessed for business viability.

In 2021, Grupa Azoty Puławy was engaged in the Eastern Business Accelerator platform operated by the Puławy Science and Technology Park, and in the Connect Poland Prize platform operated by the Lublin Science and Technology Park.



INNOVATIONS

Innovations in 2021

We combine our ambitious plans for the future with ongoing projects and innovative implementations. Projects carried out in 2021 included:

[203-2]

Agricultural innovations:

- **SatAgro**

Analysis of satellite images provides farmers with information on the condition of field crops and their variation over space and time. In this way we support precision farming in soil analysis, fertilizer application, sowing and plant protection. SatAgro also helps farmers keep records of agricultural treatments as well as collect crop maps, results of electromagnetic soil scanning, etc. In 2021, the programme covered 228 farms cooperating with the Grupa Azoty Group, spanning approximately 59,000 hectares.

SatAgro keeps developing with new functionalities added. The additions in 2021 included:

- profitability module for mapping the profitability of arable land and detailed analysis of its components, i.e. costs and revenue, taking into account their spatial variation over different periods,
- field notes, i.e. the possibility of adding comments and photographs to a field section,
- possibility of integration with the Trimble platform,
- products and machinery search engine,

- support of manure fertilization,
- PDF reports with soil sampling areas and results of sample analysis,
- new types of treatments – sowing, harvesting and irrigation / fertigation.



- **Soil scanners**

Our goal is to precisely match fertilizers with specific farmlands. To this end, we use state-of-the-art soil scanners that provide farmers cooperating with the Group with precise fertilizer recommendations within minutes. This helps choose the best fertilizer for a given crop and season while reducing its consumption by about 30%. The effect is an improved production efficiency of arable land. In 2021, 206 farms used soil scanning, with 1,986 soil scans performed.

- **Production of liquid fertilizer with increased sulfur content**

Grupa Azoty Kędzierzyn launched the production of a new liquid fertilizer with increased sulfur content. RSM S 28-5 is a urea-nitrate solution containing 28% of nitrogen and 5% of sulfur. The fertilizer is designed for use in all types of soil, for all field crops, amenity grassland and vegetables. It is produced with due regard to the natural environment. The production unit does not generate any hazardous waste or pollutant air emissions. After filtration, the process wastewater is recirculated to a tank.

- **New calcium fertilizer from Grupa Azoty Chorzów**

Grupa Azoty Chorzów added to its portfolio CalHumus TM Extra, a speciality calcium fertilizer, produced from 07a chalk deposits with high organic matter and humic acids content. CalHumus is intended for agricultural and specialised crops to improve the physico-chemical properties of the soil and to increase crop yields. It is environmentally friendly and meets the European Green Deal objectives.

- **State-of-the-art and environmentally-friendly NPK fertilizers**

Fosfarm® is a new line of compound fertilizers manufactured in accordance with the principles of sustainable development, including circular economy. They are enriched with calcium, sulfur and micronutrients, such as copper and zinc. The phosphorus content, as well as the calcium, magnesium and micronutrients, come from renewable sources only. The new fertilizers allow agricultural producers to comply with the applicable environmental regulations and requirements.

Fosfarm® is one of a dozen or so projects run by the Group which will comply with the European Green Deal.

- **Marketing urea with urease inhibitor**

We have marketed urea with urease inhibitor under the trade name Pulrea® + INu. It is a universal nitrogen fertilizer that can be used for all crops. It is recommended to be used for presowing of spring plants, i.e. maize, sunflower, spring cereals, and top dressing of winter plants, including winter cereals and winter rapeseed. The inhibitor temporarily blocks urease, i.e. a natural enzyme that causes decomposition of urea. This prolongs the effect of the fertilizer application and significantly reduces nitrogen losses caused by volatile ammonia escape. The use of urea with urease inhibitor makes it possible to meet the requirements of the EU NEC Directive for fertilizers, providing for a reduction of ammonia emissions into the atmosphere. What is more, lower ammonia emissions into the atmosphere are one of the objectives of the European Green Deal.

- **Humic acid line**

A pilot line for the production of humic acids, with an annual capacity of 2,500 tonnes of Tohumus (the main product), was launched at the Grupa Azoty S.A. Implementation Centre. The new line was developed through research work carried out at the Grupa Azoty Research and Development Centre in Tarnów. It also marks another step taken by Grupa Azoty in its pursuit of the European Green Deal objectives.

Tohumus supports regenerative agriculture by recreating and maintaining crop yield potential. Soils in Poland have a low humus content. Natural factors such as climate, the high share of sandy soils and their acidification are not conducive to accumulating and retaining a stable content of humic substances – the main components of soil organic matter. Tohumus is a response to these challenges, as introduction of humic compounds into the soil is one of the methods to increase production of good quality food while maintaining soil fertility.

Humic acids are produced based on a proprietary technology for making growth stimulators from a natural raw material, that is lignite. The process takes place in relatively low temperatures (40–50°C), which do not cause thermal degradation of humic acid chains, thus increasing their efficacy in agricultural applications. The efficacy of Tohumus was evaluated by the Institute of Soil Science and Plant Cultivation – State Research Institute in Puławy and by the National Institute of Horticultural Research in Skierniewice. Both institutions confirmed a considerable crop yield potential of the product. The production of Tohumus is consistent with the idea of circular economy and does not generate any additional waste.

- **Granulated fertilizer unit**

Grupa Azoty Puławy brought online a granulated fertilizer plant. Apart from the production lines, it includes Poland's most advanced packing and seasoning facilities. The first line was pre-commissioned in July 2020, with continuous fertilizer production launched in 2021. The plant is one of the largest fertilizer projects completed in Poland in recent years, creating new jobs at Grupa Azoty Puławy.

Mechanically granulated ammonium nitrate and calcium ammonium nitrate manufactured at the plant are an answer to the growing demand from large-scale agriculture in Poland and Europe. The application of fertilizers in the form of larger-diameter granules offers a wider spread pattern, which improves sowing efficiency, especially on large farms. They are therefore a product of first choice for foreign customers, and demand for such fertilizers is expected to grow also in the Polish market given the ongoing land consolidation process.

In addition to the production units, the project also involved the construction of infrastructure and logistics facilities for unloading and processing of raw materials, as well as a warehouse for finished products and a packing facility, which was equipped with fully automated machines for packing fertilizers into flexible containers (big bags), the only solution of this type deployed in Poland. Under the operator's supervision, the machines take empty containers, fill them with the product, secure the packaging against spilling, label it and transport it over a line of conveyors to the reception and dispatch point. The capacity of two packing machines is about 180 tonnes per hour (some 4,300 tonnes/day).

- **Technology for obtaining potassium thiosulfate**

At the end of November 2021, Grupa Azoty Puławy completed four years of work on an innovative project entitled 'Development of a technology for the production of potassium thiosulfate using flue gases from sulfuric acid plants and production of potassium thiosulfate-based compound liquid fertilizers'. The purpose of the P-Thios project was to develop a technology for obtaining potassium thiosulfate solution using waste gases containing small amounts of sulfur oxides from the sulfuric acid unit and compound fertilizers based on urea-ammonium nitrate solution and potassium thiosulfate. The project delivered a complete production technology, tested on a prototype unit constructed as part of the project.

A potassium sulfate production technology was developed as a result of absorption of sulfur dioxide from the sulfuric acid unit. This reduced emissions of sulfur dioxide and nitrogen oxides into the atmosphere by approximately 90%, which lowers GHG emissions and fits into the circular economy model. The innovative technologies enable the production of ultra high purity product with high UV radiation stability. The solution can be used as a stand-alone liquid potassium and sulfur fertilizer, as well as a feedstock for the production of liquid compound fertilizers.

Following the official completion of the research and development phase, the project entered a durability period. Work is under way to implement the project deliverables.

- **Strategic partnership with Microsoft**

We have entered into an agreement with Microsoft to use the cloud technology in, among others, precision agriculture, fostering technological initiatives that change the manufacturing sector, and expanding the competencies of the Group's employees. Under the agreement, Grupa Azoty, supported by Microsoft and Microsoft Technology Center experts, will launch an incubator for start-ups – technological initiatives at an early growth stage, focusing on the chemical industry. Moreover, the use of Innovation Alley and Microsoft Technology Center will allow our teams and young entrepreneurs to hold strategy sessions and prototype new solutions in an innovative environment, as well as jointly develop their competencies in using cloud computing. One of the areas of cooperation between the Grupa Azoty Group and Microsoft will be the development of satellite imaging techniques used in precision agriculture based on cloud computing. Ground-breaking solutions in non-invasive soil analytics relying on satellite data will support Grupa Azoty customers in wide-ranging optimisation of agricultural crop management.

Innovation in the Plastics segment:

- **Green amber**

We continue our work to develop an environmentally-friendly technology for succinic acid production. We intend to develop a method for succinic acid biosynthesis using a safe and high-efficiency microbiological biocatalyst which could be used in the processing of renewable and waste materials that have not found their applications in other industries. In 2021, we tested, among other things, the effect of genetic modifications of a micro-organism on the process. The business objective of the research is to construct, under a separate investment process, and subsequently launch a production unit with an annual capacity of 45 thousand tonnes based on the developed technology.

- **KAPROPOL**

We have developed a commercially viable as well as economically and technologically efficient method of producing ε-caprolactone, a feedstock for biodegradable plastics made from raw materials available at Grupa Azoty Puławy. The construction of a pilot production unit was completed in 2020, while in 2021 the work focused on optimising the heating and cooling systems to improve the efficiency of the test unit. The business objective of the project is to construct, under a separate investment process, a production unit with an annual capacity of 5 thousand tonnes.

- **Plastics Application Design and Development Centre**

Work began to transform the existing Plastics Laboratory into the Plastics Application Design and Development Centre. It will include specialist departments which will be responsible for developing new plastic and compounding products, customer service and research. The new structure will allow us to fully adapt to ever-growing requirements of our customers.

- **Accreditation from Polish Centre for Accreditation (PCA)**

he Plastics Business Segment has applied for PCA accreditation of the Plastics Application Design and Development Centre in accordance with Standard 17025. The accreditation will help us meet the expectations of our customers, including the automotive sector, in terms of compliance with the requirements of the IATF 16049 standard, while improving the credibility of our research. The Centre will also expand its commercial activities to include analyses of biodegradable plastics.

[102-12]

- **Thermoplastic starch production technology and inclusion of biodegradable plastics in the product portfolio**

Grupa Azoty S.A. has launched a pilot line for the production of thermoplastic starch, with a capacity of 300 tonnes per year. It has also acceded to cooperation agreements with Polska Grupa Opakowaniowa Opakomet S.A. and the Forestry Research Institute, and signed a letter of intent with the State Forests National Forest Holding. Thermoplastic starch is fully biodegradable and perfectly suitable for producing eco-friendly plant pots, packaging and fertilizers. The polymer is made from potatoes.

- **Start of work on implementing the ISCC+ system**

The Plastics Business Segment started work on implementing the ISCC Plus standard for polyamide 6. The standard covers the use of sustainable feedstocks, semi-finished products and products (including circular ones) in industrial production. The objective of the ISCC Plus standard is to reduce the consumption of fossil resources in favour of renewable materials.

Production innovations:

- **Expansion of the Oxoplast Segment's product portfolio**

The Oxoplast™ Segment's portfolio has now been expanded to include new speciality products, i.e. Oxofine™ TOTM and Oxofine™ Poly2k – the first polymeric speciality plasticizer in the offering. Compared with other monomeric plasticizers and other TOTMs available on the market, Oxofine™ TOTM stands out for its high resistance to chemicals. It also ensures increased resistance to high temperatures. The new plasticizer guarantees long-lasting performance characteristics of the finished product. Oxofine™ TOTM is mainly used in the production of electric cables and wires, the automotive industry and medicine.

Oxofine™ Poly2K is the first polymeric plasticizer in the Oxoplast™ segment's product portfolio. Created as a result of intensive research and development work, the plasticizer is manufactured using the Grupa Azoty Group's proprietary technology. Oxofine™ Poly2k is designed to be used in plastics processing. It is a functional additive that gives finished products specific qualities, although in some applications it can be used as the main plasticizer. We recommend using Oxofine™ Poly2k in the production of toys, cables, cords, garden hoses, textiles, paints, varnishes, etc.

- **Advanced control system (APC) for ammonia units**

The deployment of the advanced control system has reduced the carbon footprint of one of the eight ammonia lines by more than 20 kg CO2 per tonne of ammonia. This helped reduce natural gas consumption per tonne of ammonia by at least 1% and improve the process steam balance at the unit by at least 1.3%. The positive effects justify implementation of the APC system on the other ammonia lines, and in the future the system will be introduced for other technological processes as well. The system was developed as one of the R&D projects carried out in Puławy under the INNOCHEM sectoral programme.

- **Implementation of oxygen dosing technology**

Grupa Azoty Kędzierzyn completed the implementation of an innovative oxygen dosing technology for the TK IV and TK V nitric acid unit. The project was implemented in partnership with the Łukasiewicz Research Network – New Chemical Syntheses Institute, and led to ramping up nitric acid production by approximately 120 tonnes of 100% nitric acid equivalent per day. This means a nearly 8% increase in production.

[102-12]

- **Development of Polish catalysts**

Grupa Azoty S.A. and the Łukasiewicz Research Network – New Chemical Syntheses Institute have signed a letter of intent confirming further reinforcement of their long-standing cooperation in catalyst development. The cooperation will be expanded by leveraging the parties' experience, knowledge and know-how. The letter was signed during the Conference of Polish Catalyst Manufacturers and Users. We jointly declared that we would continue our scientific, research and implementation work, taking into account the specific nature of catalysts as well as their commercial and scientific potential, and that we would search for and develop new catalyst manufacturing technologies. In line with the letter, Grupa Azoty S.A. and the Łukasiewicz Research Network – New Chemical Syntheses Institute will also step up their promotional, marketing and sales activities. The parties will continue to share information and experience in the field of catalysts.

Other innovations

- **Training simulator in Puławy**

An innovative training system was pilot-implemented at the non-pressurised ammonia storage and distribution facility and at one section of the ammonia unit (Synthesis Department) in Puławy. Since 2021, employees of Grupa Azoty Puławy have been able to put their emergency response skills to test in the virtual world. Three scenarios were developed to train operators in emergency situations and provide instructional on-the-job training in the virtual working environment.

- **'Development Directions of Energy Innovations' at Grupa Azoty Kędzierzyn**

Grupa Azoty Kędzierzyn is in the process of implementing the New Energy Concept, a key project to ensure energy security of the company and Kędzierzyn-Koźle residents. It is largely based on the use of process heat from chemical units to produce electricity and other energy carriers.



INNOVATIONS

Key projects in 2021

[IR - Presentation of results]

The Grupa Azoty Group's growth requires investment, its size and momentum being determined by the scale of our operations. In 2021, we continued the already commenced projects and were preparing for new ones in line with our Strategy until 2030. We are fully capable of financing our investment projects and of securing additional sources of financing for expenditures made in the implementation of the Green Azoty project and aligned with the objectives of our ESG Strategy.

In 2021, our growth CapEx was close to PLN 1.3 billion, with more than PLN 828 million allocated to the construction of Polimery Police, our largest project.

Read more about Polimery Police Project

Ongoing CapEx projects

as at Dec 31 2021



Polimery Police project

BUDGET SPENT

83%

BUDGET: USD 1,838 MILLION

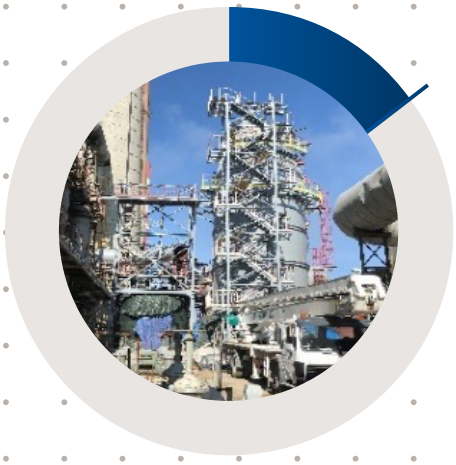


220/110 kV main transformer station upgrade in Police to connect and supply propane dehydrogenation and polypropylene units

BUDGET SPENT

83%

BUDGET: PLN 56 MILLION



Recycling of hydrogen originating from the propylene unit to be used at the ammonia unit

BUDGET SPENT

15%

BUDGET: PLN 30 MILLION



Making production of demineralised water independent of variable salinity of the Oder River and increasing the ability to produce special waters in the water preparation units

BUDGET SPENT

88%

BUDGET: PLN 108 MILLION



WA II tower replacement Line 7

BUDGET SPENT

98%

BUDGET: PLN 16.35 MILLION

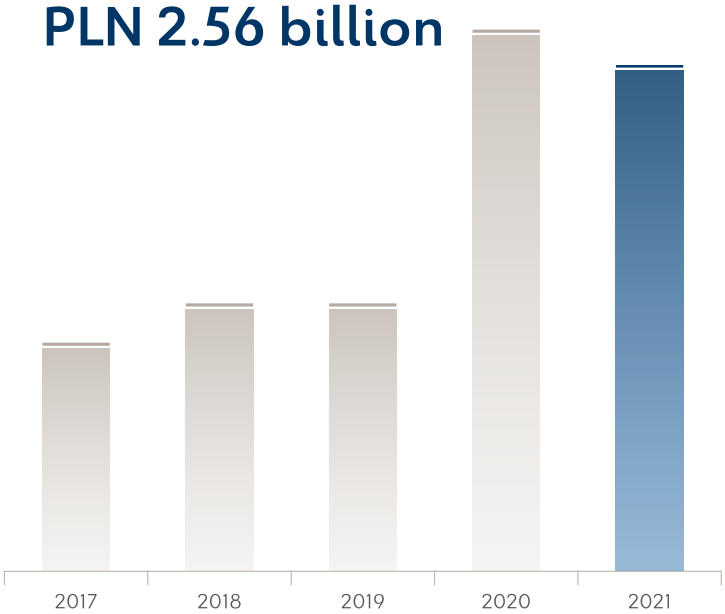
[203-1]

Capital expenditure

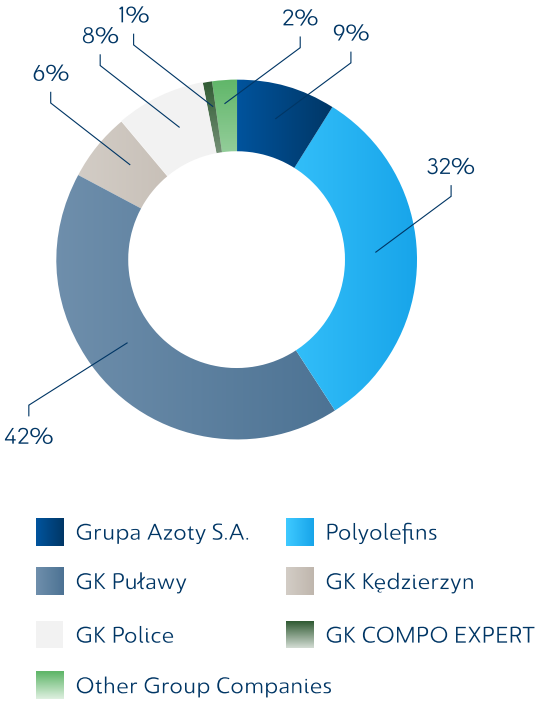
(PLN million)

Amount spent on investment projects in 2021:

PLN 2.56 billion

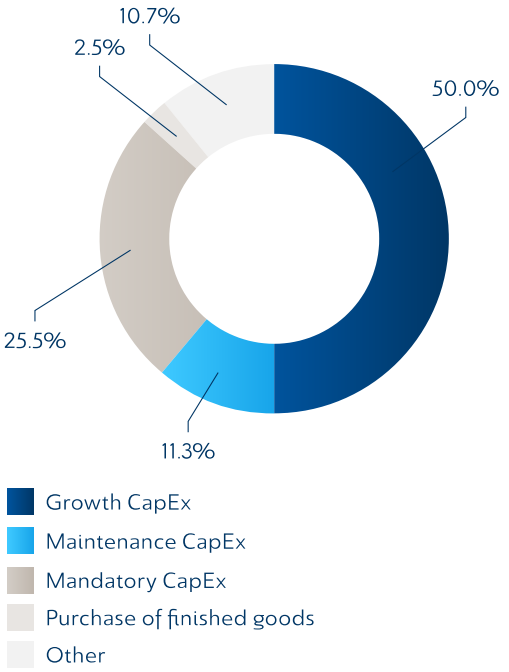


Grupa Azoty Group's capital expenditure:



Breakdown of Grupa Azoty Group's capital expenditure:

	2020	2021
Growth CapEx	PLN 1,744,675 thousand	PLN 1,279,866 thousand
Maintenance CapEx	PLN 323,542 thousand	PLN 288,618 thousand
Mandatory CapEx	PLN 449,395 thousand	PLN 654,268 thousand
Purchase of finished goods	PLN 54,520 thousand	PLN 62,883 thousand
Other (components, major overhaul work, other)	PLN 182,592 thousand	PLN 275,844 thousand



[201-4]

Significant financial assistance received from government (in PLN), by type[1]

We also received financial assistance from the government in 2021. The subsidies, grants, tax relief and tax credits we received supported, among other things, our capital expenditure on investment projects.

Category of financial assistance		2020	2021
Government grants	Government grants to finance property, plant and equipment	11,839,023	9,740,705
	Other government grants	315,935,956	319,392,404
Investment grants, research and development grants, and other relevant types of grant	State aid related to operation within a special economic zone	10,652,482	Change in the data reporting method

Category of financial assistance		2020	2021
	Grants – in a special economic zone	Data not reported in 2020	54,148,137
	Other investment grants and research and development grants	Data not reported in 2020	654,818,723
Tax relief and tax credits	Tax credits for research and development projects	3,467,484	1,624,700
Total		**34,1894,945**	**1,039,724,669**

[1] Due to an update of the scope of Disclosure 201-4 reporting, not all amounts can be compared with the data presented in the Grupa Azoty Group's integrated report for 2020. In 2021, the Grupa Azoty Group did not receive any financial assistance from government in the following categories: awards, royalty payment suspension, financial assistance from Export Credit Agencies (ECAs), financial incentives and other financial benefits received or receivable from any government for any operation. The government of the Republic of Poland holds a 33% stake in the share capital of Grupa Azoty S.A.

See our companies' key projects

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedul comple date
Grupa Azoty POLYOLEFINS					

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
Polimery Police	7,210,957[2]	3,105,949	828,605	The project is to build an on-purpose propylene dehydrogenation plant (PDH) and a polypropylene production plant with associated infrastructure, including the expansion of the Police Sea Port to include a propane and ethylene handling and storage terminal. Expansion of the Police Sea Port will help expand the existing portfolio and extend its reach globally. The fairway dredging will allow the Police Sea Port to manage larger ships, which in turn will translate into gains from lower freight rates for the transport of phosphate rock and loading of fertilizers. Laying of tracks will connect the port with the railway network. This in turn will contribute to the development of intermodal transport and allow all Group companies, especially the plants in Tarnów, Kędzierzyn, Puławy and Grzybów, to handle outbound and inbound flows of raw materials. Once constructed, the new terminal for Polimery Police will allow both LNG as well as propane and ethylene carriers to dock, which will open new waterways and facilitate winning of new contracts.	2023
Grupa Azoty POLICE					
Making production of demineralised water independent of variable salinity of the Oder River and increasing the ability to produce special waters in the units	108,000	95,037	34,866	The upgrade and expansion of the water treatment and demineralisation station will help protect Grupa Azoty Police against periods of elevated salinity in the Oder river and will enable the use of the Oder river as the only supply source. The project will also secure the supply of demineralised water to Grupa Azoty POLYOLEFINS units.	2022

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
220/110 kV main transformer station upgrade in Police to connect and supply propane dehydrogenation and polypropylene units	56,000	46,533	26,540	The upgrade of the transformer/switching station of the Main Point of Power Supply (GPZ) Police will secure the distribution of electricity for the purposes of the planned propane dehydrogenation and polypropylene production unit. The first autotransformer was commissioned and connected to the National Power Grid. The second autotransformer was removed and work is under way to construct a new autotransformer station. Upgrade of facilities and transmission networks for the second autotransformer started.	2022
Recycling of hydrogen originating from the propylene unit to be used at the ammonia unit	30,000	4,396	4,396	The purpose of the project is to utilise a stream of pure hydrogen, a by-product of propane dehydrogenation (PDH), at the ammonia unit, and to ensure that the hydrogen stream can be delivered from the ammonia unit to start the PDH unit. Contracts for the lining of secondary reformers and for the construction of new hydrogen, boiler water and steam pipelines were signed. The supplier of catalysts for methanisation units was selected. The construction site for new steam expanders was handed over. Progress of work on the contract for the supply of I&C systems is 30%.	2023
WA II tower replacement Line 7	16,350	16,096	5,436	The replacement of the absorption tower is aimed at ensuring continuing operation of the sulfuric acid production plant and preventing an unexpected accident creating a risk of sulfuric acid leakage.	2022

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
Purchase of equipment for loading fertilizers onto ships	15,200	1,216	1,216	Starting to replace the old loading equipment with a new device with a higher loading capacity to ensure safe and failure-free loading of ships up to 40,000 DWT, with a width of up to 30 metres. Design plans and specifications were developed and prefabrication of equipment commenced.	2022
Grupa Azoty PUŁAWY					
Construction of coal-fired power generation unit	1,200,000	959,285	547,208	To bring Grupa Azoty PUŁAWY's energy generation units in line with the latest environmental requirements, while increasing the share of the autoproducer CHP plant in the electricity volumes consumed by the production units, and to ensure uninterrupted supplies of energy (process steam and heating water).	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	393,102	40,631	Increase in the efficiency of nitric acid production and the economics of production of nitric acid-based fertilizers. Any excess of nitric acid will be processed on the new line for the production of speciality fertilizers: magnesium nitrate, calcium nitrate and potassium nitrate.	2028

SCROLL TABLE

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
Facility for production of granulated fertilizers based on ammonium nitrate	430,000	414,732	26,367	The project is being implemented in the Starachowice Special Economic Zone and is a key component of the fertilizers production development project at Grupa Azoty Puławy. It will bring about a fundamental change in the overall process of manufacturing granulated ammonium nitrate and ammonium nitrate-based fertilizers. The key elements of the projects are: ▪ construction of a new fertilizer complex producing, packing and dispatching calcium ammonium nitrate, granulated ammonium nitrate and Pulmix. The complex will comprise two mechanical granulation lines along with a dolomite station, two milling units, two bulk product seasoning halls, a facility packing products in big or smaller bags, and the necessary technical infrastructure. The first mechanical granulation line was launched in 2021. The construction of the second line of the ammonium nitrate and calcium ammonium nitrate mechanical granulation unit is nearing completion, its commissioning scheduled for 2022. ▪ Construction of a new and upgrade of the first line of the nitric acid unit. The project will enable the production of new fertilizers and reduce emissions of nitrous oxide, one of the main greenhouse gases.	2022

Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
Upgrade of steam generator OP-215 No. 2 to reduce NOx emissions	145,000	90,738	30,442	Bringing the generator into compliance with new NOx emission standards and refurbishing the generator, which is to become a principal generating unit at the captive CHP plant along with generators Nos. 4 and 5.	2022
Replacement of the TG-1 turbine generator set	85,000	67,230	38,639	Increasing the efficiency of electricity and heat cogeneration by replacing the TG-1 30 MWe pass-out and condensing turbine with a new 34 MWe turbine as part of the power system upgrade.	2022
Grupa Azoty KĘDZIERZYN					
Upgrade of the synthesis gas compression unit supplying the Ammonia Plant	180,000	85,742	19,135	Rebuilding the synthesis gas compression capacities for the Ammonia Plant through the installation of new compressors. The project will reduce maintenance expenditure and the energy intensity of the ammonia production process, significantly lowering department overheads.	2023
Peak-load/reserve boilers	110,087	18,842	9,542	The peak-load/reserve boiler house functioning as a peak-load source will interoperate with steam generators at the existing CHP plant. In the event of downtime of coal-fired boilers, the peak-load/reserve boiler house will operate as a stand-alone reserve steam generator.	2024
Purchase and installation of new oxygen compressor	72,800	59,300	25,006	The objective is to replace old steam turbine driven oxygen compressors K-101 A and K-101 B with one electric compressor. The project follows the concept of innovative management of heat from ammonia production processes as an alternative to heat generation in coal-fired boilers.	2022

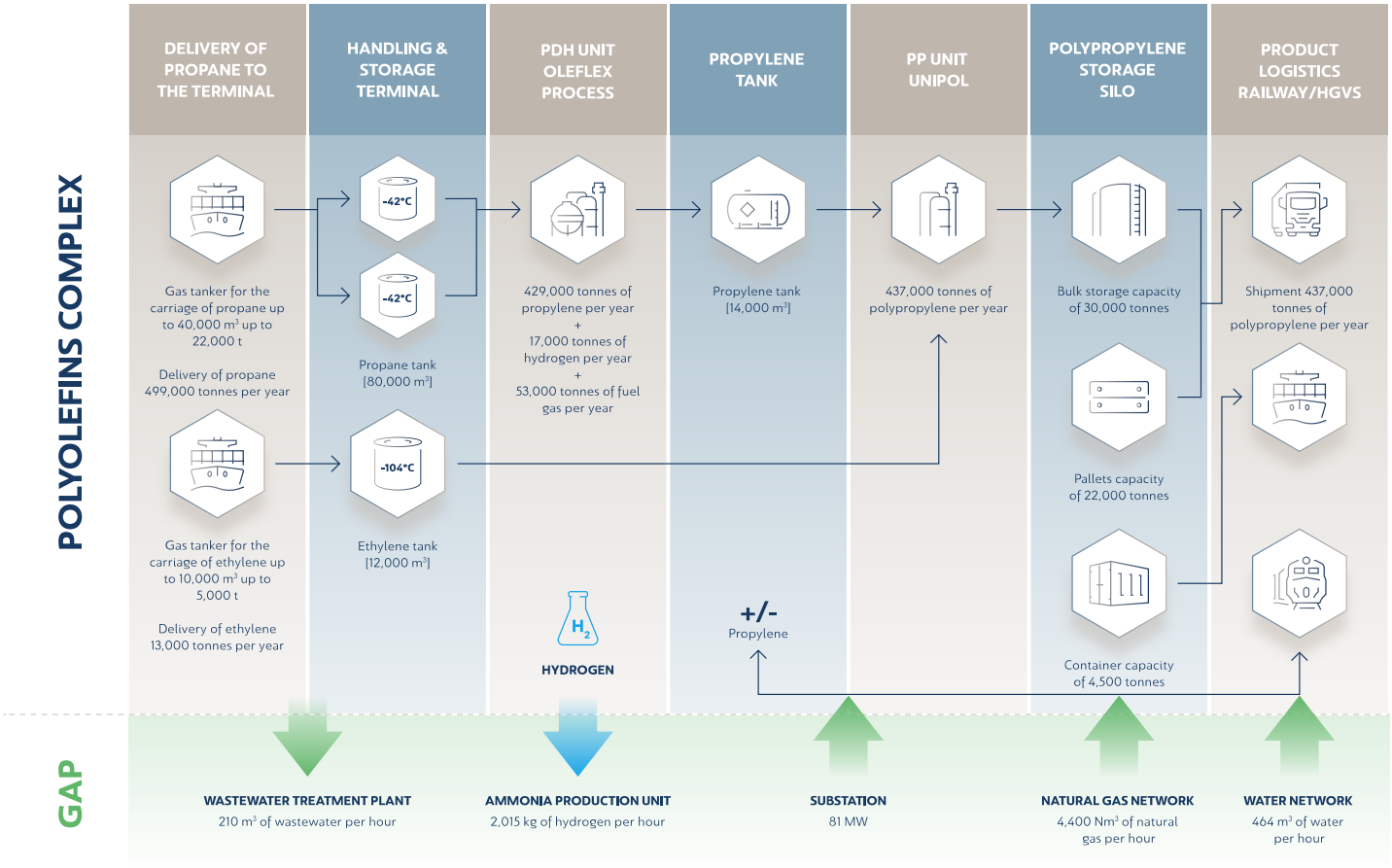
Project name	Budget (PLN '000)	Expenditure incurred (PLN '000)	Expenditure incurred in 2021 (PLN '000)	Project purpose	Schedu comple date
2-ethylhexanoic acid unit	120,000	2,108	2,108	Enabling the production of 20,000 tonnes of 2-EHA per year.	2024
Grupa Azoty S.A.					
Concentrated Nitric Acid Plant II (with a capacity of 40,000 t/a)	57,100	53,555 (after August 2022)	15,763	Construction of Concentrated Nitric Acid Plant II – the project involves the construction of a second, stand-alone nitric acid concentration plant based on the existing, operating plant using a technology for obtaining nitric acid with a concentration of at least 98.5% of HNO3 from technical-grade nitric acid with a concentration of 50–61% based on the extraction rectification process using magnesium nitrate as a dehydration agent.	Decem 2022

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



Polimery Police

Polimery Police is one of the largest projects in the Polish and European chemical industry, which fulfils the requirements of the strategy for a climate neutral circular economy and ensures decarbonisation of plastics throughout their entire life cycle. It will help diversify the Group's business, improving Poland's position among plastics manufacturers and strengthening its independence in terms of energy and raw material supplies. Its purpose is to build propylene and polypropylene units with auxiliary systems and associated infrastructure, as well as to construct a port terminal with feedstock storage facilities. Polypropylene is a chemical compound that can be used in the chemical, pharmaceutical, textile, food, packaging, electronics and automotive industries.



The start of commercial operation is scheduled for 2023. In 2021, the project was 83.23% complete. A vast majority of the equipment and apparatus are on the construction site, which means the approaching completion of the procurement phase. This significant progress is due to the effective process of procurement of equipment and apparatus (long-lead items). 95% of large-scale equipment and apparatus had been delivered by the end of 2021, and the stage of completion of the procurement phase was 97.98%.

Work included the installation of propylene tanks, distillation columns, reactors, compressors, a continuous catalyst regeneration module, a residual gas compressor, blending silos and two PP reactors which will be used to produce homopolymers and copolymers. In addition, 60 polypropylene storage silos were assembled.

As regards the terminal construction project, two propane tanks and one ethylene tank were covered. Work to install inner shells of the tanks was completed. The construction of a pumping station, transformer station and the main terminal building was continued.

In September 2021, the Police County Building Inspection Office issued the first operation permit (out of the required 22), concerning the 110 kV power grid and optic fibre network project.



Financial performance

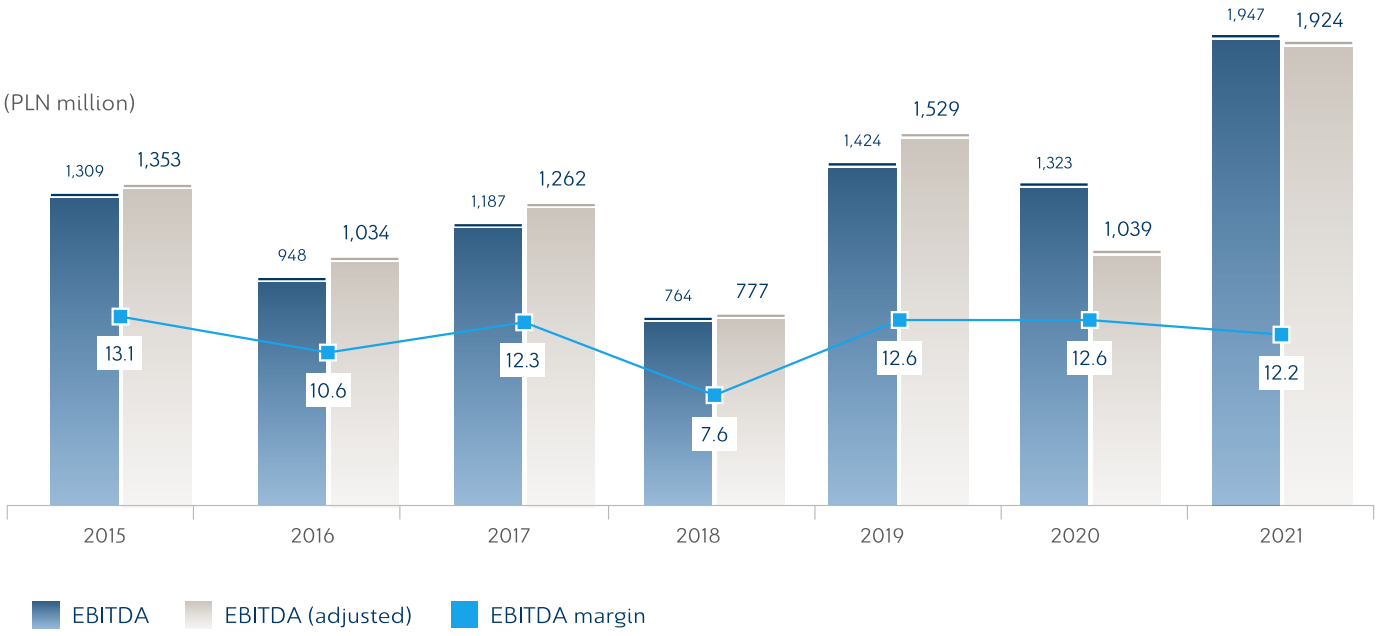
[IR - Presentation of results]

Despite the very challenging market environment in 2021, the Grupa Azoty Group delivered strong results on the back of a well-diversified business and process streamlining. 2021 was a record year in terms of raw material prices and strong volatility of all prices, in particular that of natural gas. The Grupa Azoty Group reported a significant increase in consolidated revenue to PLN 15.9 billion, up 51% year on year. Among key factors driving the revenue growth were higher sales in the Chemicals and Plastics segments. The Group managed to maintain its margins in the Agro Fertilizers Segment even though the prices of its fertilizer products were among the lowest in the European Union.

[102-7]

	2020 (PLN million)	2021 (PLN million)	Δ
Revenue	10,525	15,901	51%
EBITDA	1,323	1,947	47%
EBITDA MARGIN	13%	12%	-1pp

	2020 (PLN million)	2021 (PLN million)	Δ
EBIT	556	877	58%
NET PROFIT/(LOSS)	355	634	79%
FINANCIAL OUTLAYS	2,769	2,561	-8%



2021 saw an update of the approach to the comparability of EBITDA (taking into account compensation payments for energy-intensive sectors and the anti-crisis shield – data in the 2021 stock market presentation), and therefore the 2020 data differs from that contained in last year's report.

The full 2021 financial statements of the Grupa Azoty Group are available on our corporate websites.

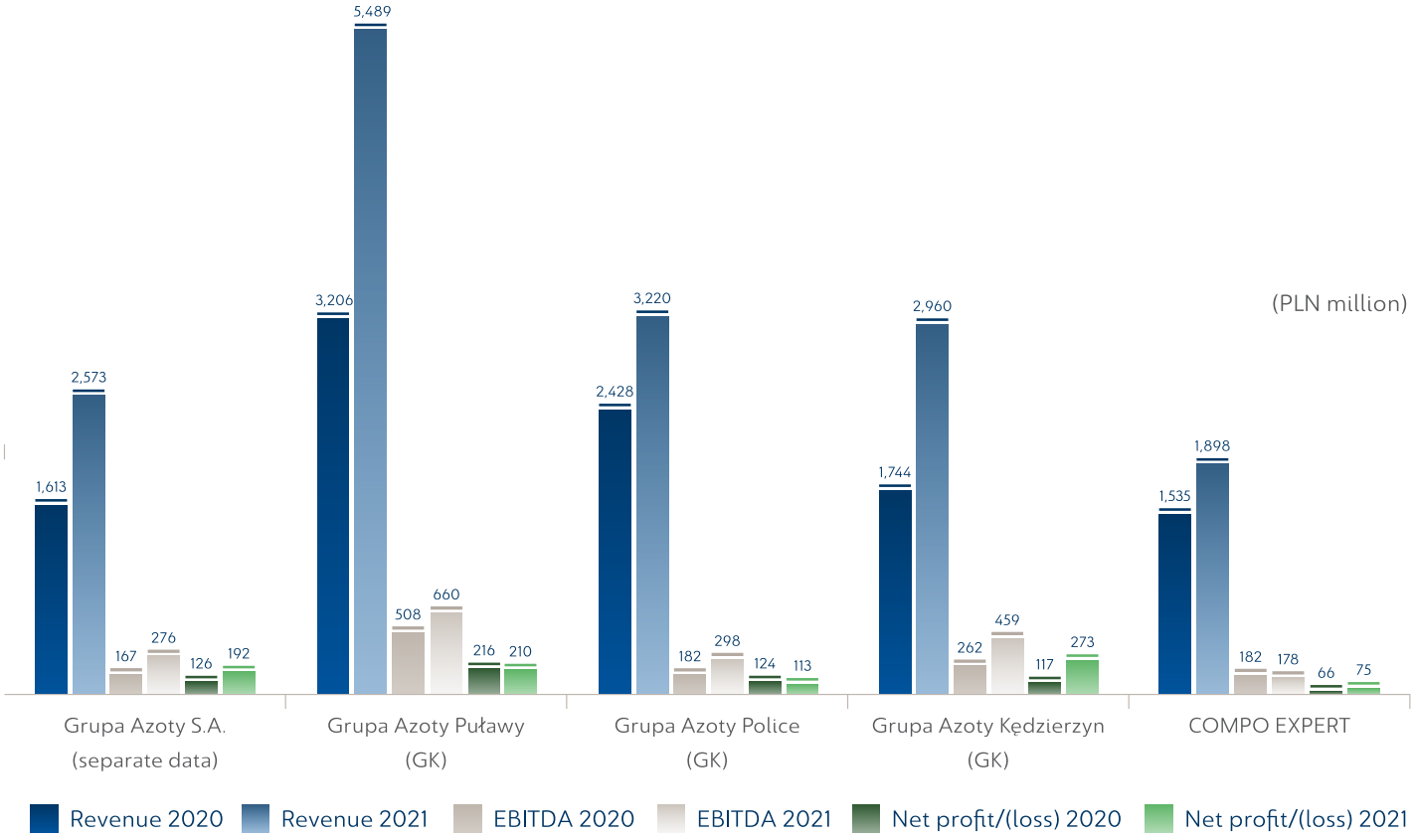
Group companies' financial highlights

Grupa Azoty Group 2020:

Revenue: **PLN 10,525 million**, EBITDA: **PLN 1,322 million**, Net profit/(loss): **PLN 355 million**

Grupa Azoty Group 2021:

Revenue: **PLN 15,901 million**, EBITDA: **PLN 1,947 million**, Net profit/(loss): **PLN 634 million**



[102-7]

Net sales and capitalization

	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.
	2021 (PLN '000)		
Net sales	3,189,949	4,950,318	2,573,341
Capitalisation			
Non-current liabilities + equity	2,528,270	4,187,931	8,117,911
Non-current liabilities	576,822	414,824	2,996,495
Equity	1,951,448	3,773,107	5,121,416
Total assets - total liabilities	1,951,448	3,773,107	5,121,416
Total assets	4,239,600	7,065,648	11,667,861
Total liabilities	2,288,152	3,292,541	6,546,445

Consolidated statement of profit or loss and other comprehensive income

(all amounts in PLN '000 unless stated otherwise)

Profits and losses	for the period Jan 1 – Dec 31 2021	for the period Jan 1 – Dec 31 2020	for the period Jan 1 – Dec 31 2019	for the period Jan 1 – Dec 31 2018	for the peri Jan 1 – Dec 31 2017
Revenue	15,901,259	10,524,527	11,307,915	9,998,967	9,617,495
Cost of sales	(12,822,820)	(8,351,020)	(8,833,939)	(8,406,271)	(7,457,734)
Gross profit	**3,078,439**	**2,173,507**	**2,473,976**	**1,592,696**	**2,159,761**
Selling and distribution expenses	(1,057,156)	(915,699)	(902,195)	(658,602)	(673,555)
Administrative expenses	(829,280)	(804,475)	(886,734)	(812,368)	(757,767)
Other income	95,940	164,040	65,518	49,604	50,200
Other expenses	(411,438)	(61,614)	(137,741)	(90,186)	(181,425)
Operating profit	**876,505**	**555,759**	**612,824**	**81,144**	**597,214**
Finance income	62,453	36,126	29,407	55,057	32,107
Finance costs	(220,674)	(100,675)	(96,265)	(108,740)	(68,931)
Net finance costs	**(158,221)**	**(64,549)**	**(66,858)**	**(53,683)**	**(36,824)**
Share of profit of equity-accounted investees	15,601	14,939	12,493	13,092	16,015
Profit before tax	**733,885**	**506,149**	**558,459**	**40,553**	**576,405**
Income tax	(100,198)	(150,739)	(150,786)	(32,793)	(87,579)
Net profit	**633,687**	**355,410**	**407,673**	**7,760**	**488,826**
Other comprehensive income					
Items that will not be reclassified to profit or loss					
Actuarial gains/(losses) from defined benefit plans	41,532	(20,061)	(29,908)	(19,428)	(7,991)
Net gain on remeasurement of equity instruments at fair value through other comprehensive income	3,943	0			
Tax on items that will not be reclassified to profit or loss	(8,034)	3,404	4,995	3,633	1,510

ROLL TABLE

Profits and losses	for the period Jan 1 – Dec 31 2021	for the period Jan 1 – Dec 31 2020	for the period Jan 1 – Dec 31 2019	for the period Jan 1 – Dec 31 2018	for the period Jan 1 – Dec 31 2017
Total items that will not be reclassified to profit or loss	**37,441**	**(16,657)**	**(24,913)**	**(15,795)**	**(6,481)**
Cash flow hedges – effective portion of fair-value change	(12,365)	(67,494)	4,952	(16,724)	27,808
Exchange differences on translating foreign operations	(8,375)	71,541	(11,043)	4,786	1,157
Income tax relating to items that are or will be reclassified to profit or loss	(1,928)	12,900	(941)	3,178	(5,296)
Total items that are or may be reclassified to profit or loss	**(22 668)**	**16 947**	**(7 032)**	**(8 760)**	**23 669**
Total other comprehensive income	**14,773**	**290**	**(31,945)**	**(24,555)**	**17,188**
Comprehensive income for the period	**648,460**	**355,700**	**375,728**	**(16,795)**	**506,014**
Net profit /(loss) attributable to:					
Shareholders of Grupa Azoty S.A.	581,813	311,617	372,856	9,869	456,663
Non-controlling interests	51,874	43,793	34,817	(2,109)	32,163
Comprehensive income for the period attributable to:					
Shareholders of Grupa Azoty S.A.	598,122	314,300	342,337	(13,739)	470,204
Non-controlling interests	50,338	41,400	33,391	(3,056)	35,810
Earnings per share:					
Basic (PLN)	5.87	3.14	3.76	0.10	4.60

Financial strategy 2021–2030

In response to the major challenges faced by today's industry, the Management Board of Grupa Azoty S.A. – as a leading fertilizer and chemical group in Europe – presented the new Grupa Azoty Group Strategy for 2021–2030. The Strategy highlights the strategic importance of the Group's sustainable development and socially responsible business.

One of the pillars of the Grupa Azoty Group Strategy for 2021–2030 is the financial strategy. Progress in the implementation and delivery of the strategy will be measured against the **three specified benchmarks**:

>16%

EBITDA margin

<3.0

Net debt/EBITDA

from 2025

>40%

of consolidated net profit

on completion of the strategic CapEx

The first benchmark refers to delivering a stable EBITDA margin of more than 16% from 2030, the second one concerns achieving a net debt to EBITDA ratio below 3.0 by 2025, while the third provides for continued ability to pay dividends once the strategic CapEx programme related to the Group's energy transition has been completed, at a level above 40% of consolidated net profit.

Delivery of the strategy and the significant pool of strategic investment projects will require adequate and **stable sources of funding**, i.e. green funding in the form of bonds or credit facilities. The projects will focus on energy transition – in the first place, they will involve solar PV and wind sources developed on the Group's own land and energy efficiency improvement of production processes.

Investment projects with lower rates of return, necessary to enable technological transformation of the Group, will be financed with funds granted under the National Recovery Plan and other planned support measures.

See our segments' financial data

In 2021, our revenue was up 51.1% year on year, and gross profit rose by PLN 904,932 thousand, or 41.6%, relative to 2020. Total operating profit was PLN 876,505 thousand, up 57.7% year on year.

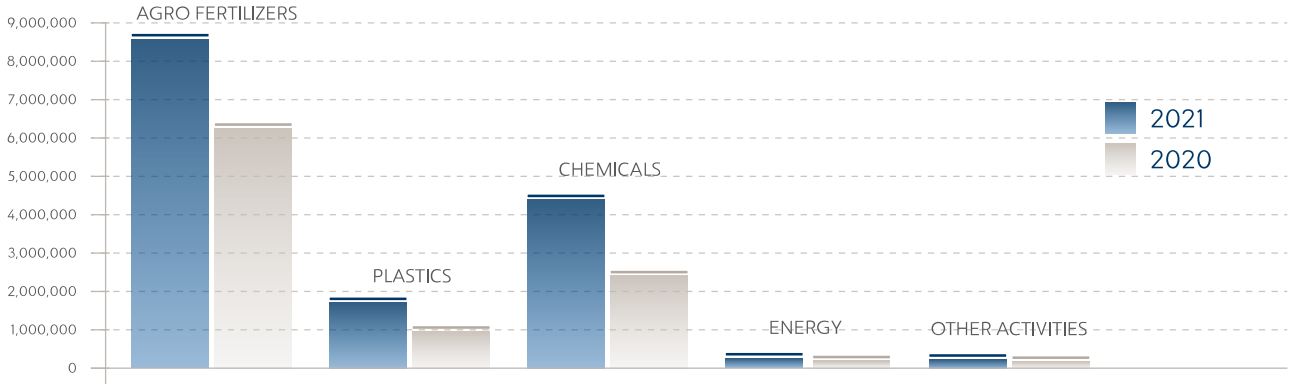
	Agro Fertilizers				Plastics				
	2020	2021	Nominal change	% change	2020	2021	Nominal change	% change	2020

	Agro Fertilizers				Plastics				
External revenue ['000]	6,364,624	8,766,890	2,403,266	38%	1,135,442	1,828,968	693,526	61%	2,522,07
EBIT ['000] [1]	492,957	437,877	-55,080	-11%	-105,245	-45,207	60,038	57%	157,340
EBITDA ['000] [2]	821,267	771,732	-49,535	-6%	-31,929	178,412	210,341	659%	265,768

SCROLL TA

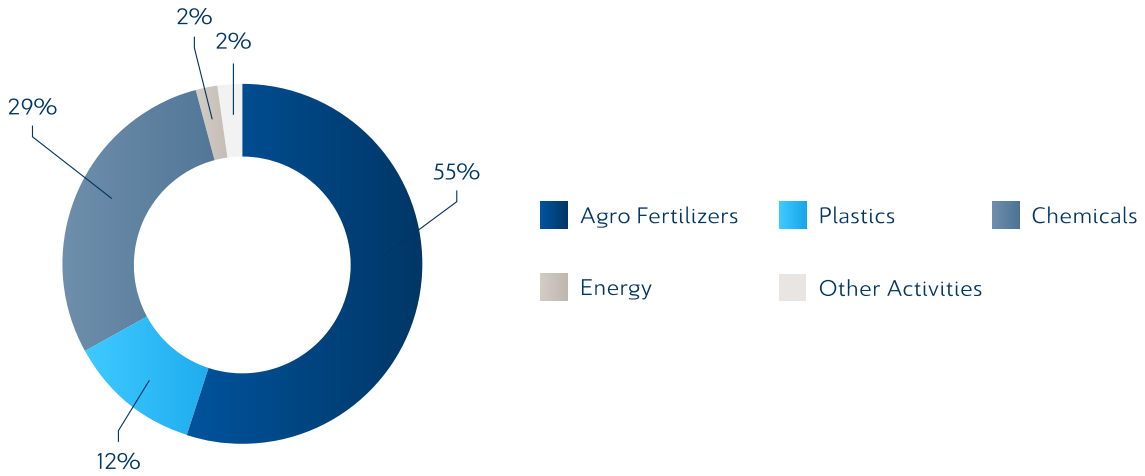
Source: Company data
[1] EBIT is calculated as operating profit/(loss) as disclosed in the statement of profit or loss, adjusted for gain on a bargain purchase.
[2] EBITDA is calculated as operating profit/(loss) before depreciation and amortisation, adjusted for gain on a bargain purchase.

Revenue by segment



Source: Company data.

Revenue by segment



Fertilizers

In 2021, the Fertilizers segment posted revenue of PLN 8,767 million relative to PLN 6,364m the year before. The strong revenue growth was accompanied by a large increase in costs, translating into a lower EBITDA margin, of 8.8% (2020: 12.9%). The segment was under strong pressure from all-time high prices of gas, which pushed up fertilizer prices. This global trend was further exacerbated by the demand-supply imbalance resulting from major supply constraints in the EU market due to temporary production stoppages or scale-downs by European producers. It should be stressed that in 2021 the Grupa Azoty Group neither

suspended nor cut down its fertilizer production. In volume terms, fertilizer sales in 2021 shrank by 4.7%, mainly in the case of urea – owing to a ban on using urea without an inhibitor or biodegradable coatings for agricultural purposes, introduced in August – and NPK fertilizers. In line with global market trends, in 2021 fertilizer prices grew on average by 43.9% relative to the previous year, driven by rising production costs. It should be noted that prices of natural gas in that period rose 298.0% year on year.

Plastics

The segment's aggregate revenue in 2021 was PLN 1,829 million, an increase of 61.1% year on year (from PLN 1,135 million). Following the cost and price optimisation, the segment's results markedly improved on the back of higher sales, with EBITDA margin rising from -2.8% in 2020 to +9.7% in 2021. In 2021, the plastics market continued on an upward trend, fuelled by large growth in demand, mainly in the automotive (persistent problems with the availability of semiconductors stifled demand in the fourth quarter), BCF carpet fibers and films sectors. The favourable market conditions helped achieve higher transaction prices and margins. The prices of key production feedstocks (benzene, phenol) rose significantly year on year, by 94.6% and 63.1%, respectively, which – coupled with higher prices of gas and energy – put a lot of upward pressure on product prices.

Chemicals

Year on year, the Chemicals segment reported a record-high increase in revenue, of 83.6%, to PLN 4,630 million, with strong growth of EBITDA margin, which improved by 4.5pp, to 15.0%. Revenue growth was reported on sales of all products, with melamine (up 138.3% y/y) and technical grade urea (up 101.6%) topping the list. The main price growth driver in Chemicals was strong demand accompanied by supply disruptions experienced by other producers. The volume of products sold also increased. Similarly to the other segments, the prices of raw materials rose markedly, but without reducing the segment's margin.

See our expert comment

Structure of assets

In 2021, the Grupa Azoty Group's assets rose to PLN 23,644,705 thousand, by PLN 5,437,555 thousand relative to the end of 2020.

Assets	Note	As at Dec 31 2021	As at Dec 31 2020
Non-current assets			
Property, plant and equipment	9	11,957,685	10,573,104
Right-of-use assets	10	804,863	834,690
Investment property	11	68,046	57,364
Intangible assets	12	998,614	1,027,310
Goodwill	12.1	319,922	331,683
Shares	13.1	12,915	9,168
Equity-accounted investees	13	92,658	91,461
Other financial assets	13.2	2,626	2,484
Other receivables	16	542,552	489,827
Deferred tax assets	7.4	105,446	94,125
Other assets	18	509	509
Total non-current assets		**14,905,836**	**13,511,725**
Current assets			

Assets	Note	As at Dec 31 2021	As at Dec 31 2020
Inventories	14	2,313,143	1,534,011
Property rights	15	1,560,172	529,199
Derivative financial instruments	28.5	1,801	43,471
Other financial assets	13.2	1,997	-
Current tax assets		28,015	19,621
Trade and other receivables	16	2,453,579	1,628,244
Cash and cash equivalents	17	2,362,193	923,328
Other assets	18	17,969	17,456
Non-current assets held for sale		-	95
Total current assets		**8,738,869**	**4,695,425**
Total assets		**23,644,705**	**18,207,150**

Structure of equity and liabilities

Liabilities	Note	As at Dec 31 2021	As at Dec 31 2020
Equity			
Share capital	19.1	495,977	495,977
Share premium	19.2	2,418,270	2,418,270
Hedging reserve	28.6	(58,403)	(48,540)
Translation reserve		54,936	63,311
Other capital reserves		(17,700)	(17,700)
Retained earnings		5,048,783	4,427,756
Equity attributable to owners of the parent		**7,941,863**	**7,339,074**
Non-controlling interests		**990,304**	**7,339,074**
Total equity		**8,932,167**	**7,339,074**
Liabilities			
Borrowings	20	3,640,671	3,322,320
Derivative financial instruments	28.5	91,072	-
Lease liabilities	21	347,159	355,774
Other financial liabilities	22	630,360	579,438
Employee benefit obligations	24	420,136	490,864
Trade and other payables	25	21,415	18,609
Provisions	26	193,381	211,022
Government grants	27	196,725	196,973
Deferred tax liabilities	7.4	410,241	529,419
Total non-current liabilities		**5,951,160**	**5,704,419**

Liabilities	Note	As at Dec 31 2021	As at Dec 31 2020
Borrowings	20	818,475	193,443
Derivative financial instruments	28.5	6,183	6,086
Lease liabilities	21	60,940	71,422
Other financial liabilities	22	1,759,195	670,459
Employee benefit obligations	24	57,263	54,863
Current tax liabilities		120,892	70,013
Trade and other payables	25	5,827,116	3,092,693
Provisions	26	89,958	40,504
Government grants	27	21,356	14,346
Total current liabilities		**8,761,378**	4,213,829
Total liabilities		**14,712,538**	9,918,248
Total equity and liabilities		**23,644,705**	**18,207,150**

Consolidated statement of cash flows

In 2021, the Group generated positive net cash from operating activities of PLN 5,784,827 thousand, up by PLN 3,079,666 thousand on 2020.

Cash flows from operating activities	Note	for the period Jan 1 – Dec 31 2021	for the period Jan 1 – Dec 31 2020
Profit before tax		**733,885**	**506,149**
Adjustments			
Depreciation and amortisation		761,656	765,788
Impairment losses		308,080	3,230
Gain on investing activities		(43,671)	(876)
Gain on disposal of financial assets		(2)	(1,879)
Share of profit of equity-accounted investees		(15,601)	(1,879)
Interest, foreign exchange gains or losses		74,934	136,890
Dividends		(389)	(127)
Fair value gain on financial assets		(92,197)	(29,972)
Increase in trade and other receivables	29	(973,993)	(235,497)
(Increase)/Decrease in inventories and property rights		(1,817,288)	101,940
Increase in trade and other payables	29	6,994,892	1,466,412
Increase in provisions	29	24,688	9,563
Increase/(decrease) in employee benefit obligations	29	(29,922)	9,563
Increase/(decrease) in grants		(4,486)	3,876
Other adjustments		12,066	21,037
Income tax paid		(147,825)	(49,540)

Cash flows from operating activities	Note	for the period Jan 1 – Dec 31 2021	for the period Jan 1 – Dec 31 2020
Net cash from operating activities		**5,784,827**	**2,705,161**
Cash flows from investing activities			
Proceeds from sale of intangible assets, property, plant and equipment, and investment property	29	61,732	21,267
Purchase of intangible assets, property, plant and equipment, and investment property		(2,479,061)	(3,002,934)
Dividend received		259	7
Purchase of other financial assets		(1,997)	(80,004)
Proceeds from sale of other financial assets		-	255,289
Government grants		-	1,804
Repayments of loans		9	109
Other cash provided by (used in) investing activities		(4,378)	(27,031)
Net cash from investing activities		**(2,423,436)**	**(2,831,493)**
Cash flows from financing activities			
Net share capital issuance proceeds/(disbursements)		-	205,172
Dividends paid		(5,651)	(9,447)
Proceeds from borrowings		1,975,659	923,499
Repayment of borrowings		(1,055,861)	(318,054)
Interest paid		(78,479)	(128,627)
Payment of lease liabilities		(67,787)	(64,540)
Repayment of reverse factoring liabilities		(2,702,128)	(954,154)
Other financing cash proceeds/(disbursements)		16,411	600,972
Net cash from financing activities		**(1,917,836)**	**254,821**
Total net cash flows		**1,443,555**	**128,489**
Cash and cash equivalents at beginning of period		**923,328**	**770,087**
Effect of exchange rate fluctuations on cash held		(4,690)	24,752
Cash and cash equivalents at end of period		**2,362,193**	**923,328**

See how our shares performed on the stock exchange

Stock Exchange

Grupa Azoty S.A.

The price of Grupa Azoty shares was highly volatile throughout 2021, having increased by over 23% year on year, to PLN 33.8 at year's end.

Grupa Azoty S.A. share price in 2020



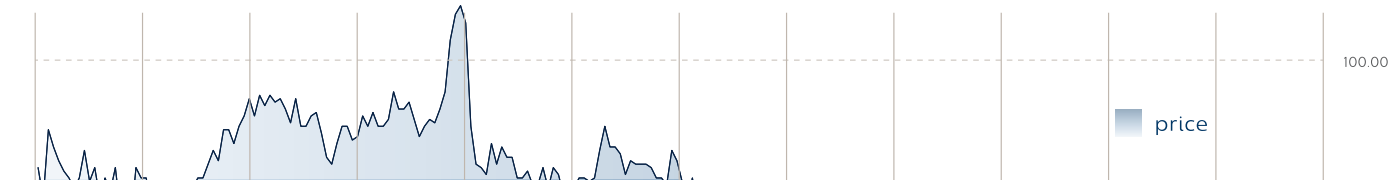
Grupa Azoty Police

In 2021, the price of Grupa Azoty Police shares was relatively stable, having fallen over the last quarter to PLN 11.3 at year's end. Year on year, the price of the shares went down 8%.



Grupa Azoty Puławy

The price of Grupa Azoty Puławy shares declined gradually over 2021. Year on year, the price of the shares decreased by over 8%, to PLN 78.8 at year's end.





See our companies' results







Consolidated annual report for 2021

SEE REPORT

See notes to the financial statements

Click the following link to view Notes to the financial statements.

All financial performance figures may also be downloaded from the Grupa Azoty Group's Performance Data Centre.

See the market landscape in 2021

2021 was an extremely challenging period for the chemical industry. Key factors affecting the Grupa Azoty Group's business in

2021 included a sharp rise in the prices of gas, energy commodities and CO2 emission allowances, as well as new regulatory requirements.

Market environment of individual segments

Agro Fertilizers

The prices of cereals in 2021 increased year on year. The prices of rye, rape, maize and wheat rose by, respectively, 43%, 39%, 30% and 28%. The main reasons for this increase were the weather conditions and poor supply of grains in the agricultural sector. Due to the emergence of a new global factor, namely the outbreak of the war in Ukraine, the prices of cereals are expected to remain high in the coming periods. Concerns about limited availability of products from countries affected by the war are driving up prices on the fertilizer markets. In an attempt to make savings, the agricultural sector may choose to reduce fertilizer dosage, which may lead to a decrease in fertilizer consumption.

Plastics

In 2021, prices were high along the entire plastics product chain. Production costs rose sharply as a consequence of soaring prices of energy, further aggravated by supply disruptions due to the unavailability of materials. In addition, geopolitical unrest is likely to keep the prices at high levels. Manufacturers will take a more short-term focus, seeking to retain as much flexibility as possible in their purchasing decisions.

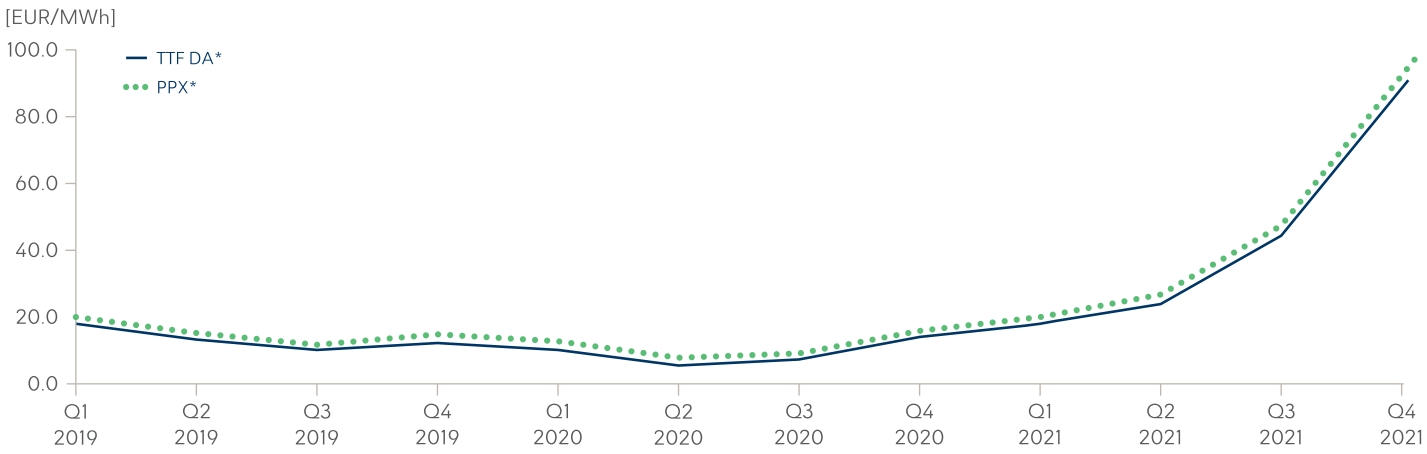
Chemicals

The prices of chemicals in 2021 also increased year on year due to growing prices of raw materials, poor availability of products and continuing demand.

Energy

Another driver of the Group's operating expenses were record-high prices of natural gas. In the first quarter of 2021, the price of natural gas in Europe was at a previously seen level of EUR 20/MWh. However, subsequent periods saw a steady and slow increase in the natural gas prices, to EUR 85/MWh at the end of the third quarter, due to low temperatures and low wind levels, as well as the growing prices of CO2 emission allowances and coal, making the use of gas more economically attractive. The fourth quarter of 2021 witnessed record-high daily prices of natural gas, which amounted to almost EUR 185/MWh before Christmas, driven by revised weather forecasts predicting lower temperatures and a drop in the average wind power output. Natural gas prices in the coming periods will depend on the weather and the war in Ukraine. However, taking into account the current conditions, we expect the average price of gas in Europe to be higher than in the previous year.

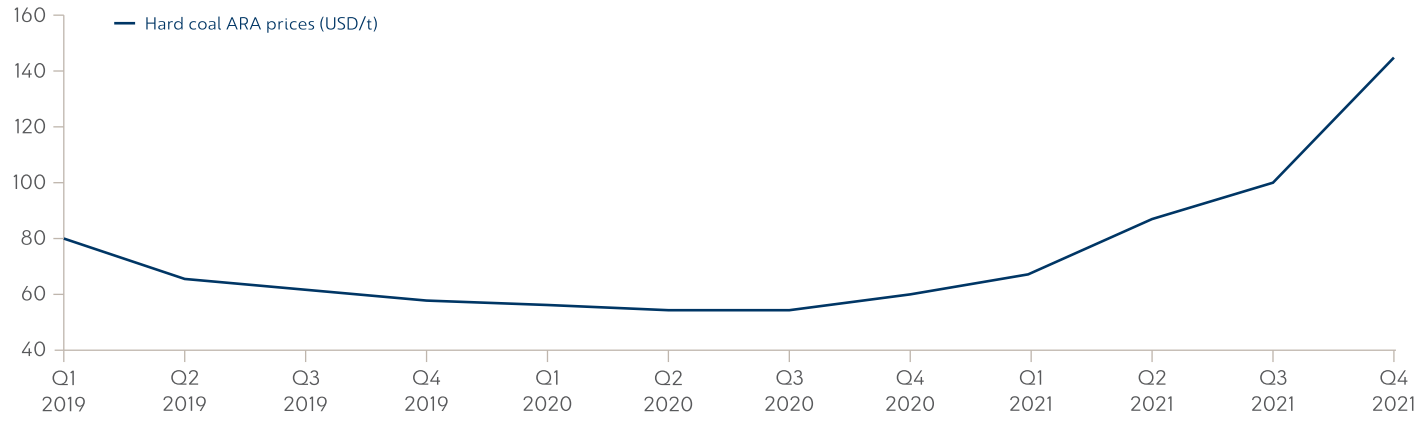
Prices of natural gas



In 2021, coal prices rose 2.5-fold, driven by stronger demand from Asia, Europe and the post-pandemic economic recovery. The prices of coal in the coming periods will be affected, on the one hand, by the EU's policy geared towards reducing its consumption and, on the other, by continuing demand for electricity.

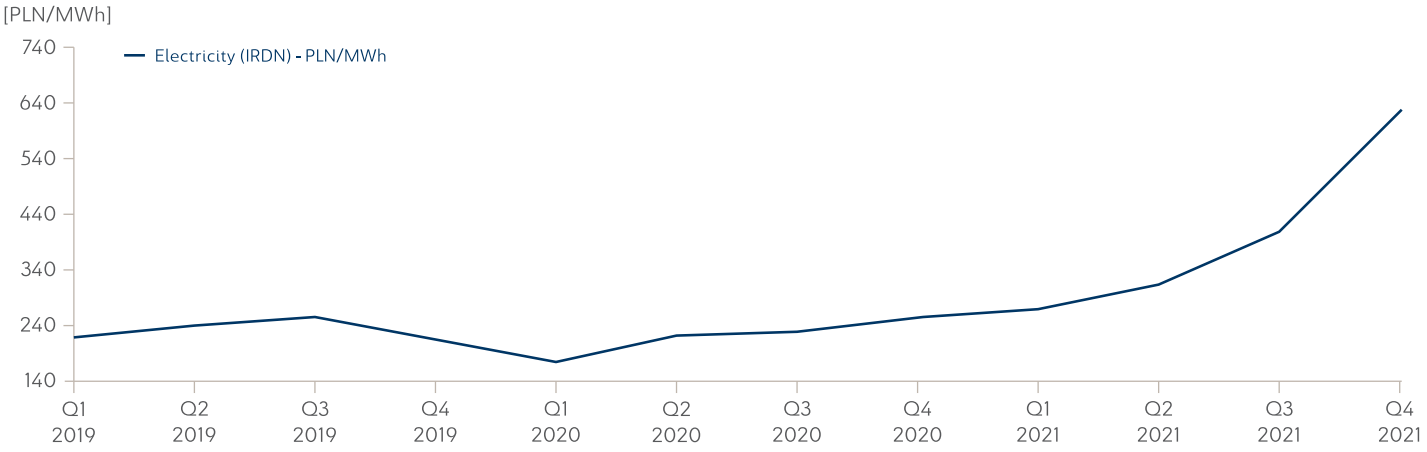
Prices of hard coal

[USD/t]



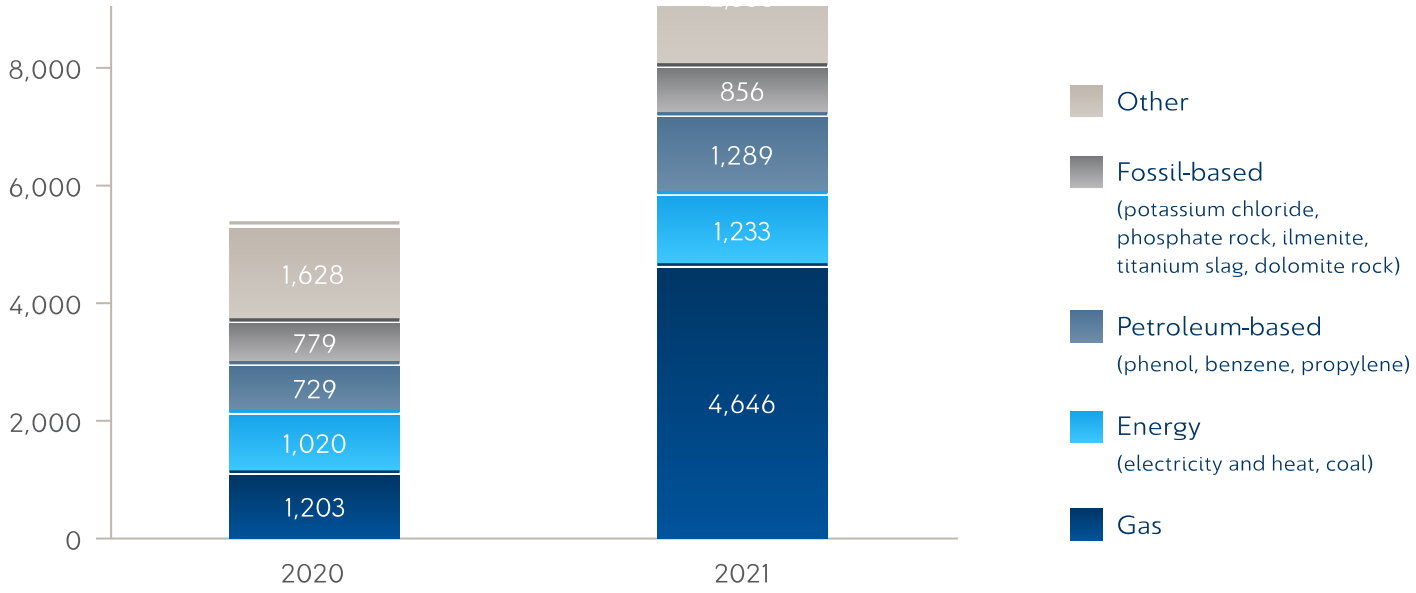
The average annual price of electricity rose by over 90% year on year, on account of higher demand due to the economic recovery and higher prices of energy commodities. The prices of electricity are expected to stay high in the following periods.

Prices of electricity



Cost of raw materials





See our financial condition in 2021

In 2021, the Grupa Azoty Group was fully solvent, with a sound credit standing of all the Group companies. The liquidity management policy operated by the Group consisted in maintaining surplus cash and available credit facilities as well as limits under the intragroup financing agreement, and in ensuring that their level was safe and adequate to the scale of the Group's business. The pandemic situation is monitored on an ongoing basis.

All liabilities under the Grupa Azoty Group's borrowings were repaid when due, and there was no threat to its ability to continue servicing its debt. The Group has access to umbrella limits under PLN-, EUR- and USD- overdraft facilities covered by physical cash pooling arrangements and under a multi-purpose credit facility, which may be used as directed by Grupa Azoty S.A. in accordance with changes in funding requirements of any of the subsidiaries. The Group also has access to bilateral overdraft limits and multi-purpose facilities available to the Group companies. As at the reporting date, the amounts available to be drawn by the Group totalled PLN 7,135 million. The Group's financial standing is sound, and there are no material threats or risks of its deterioration in the future. The Group may use credit facilities if there is a need to increase its debt finance.

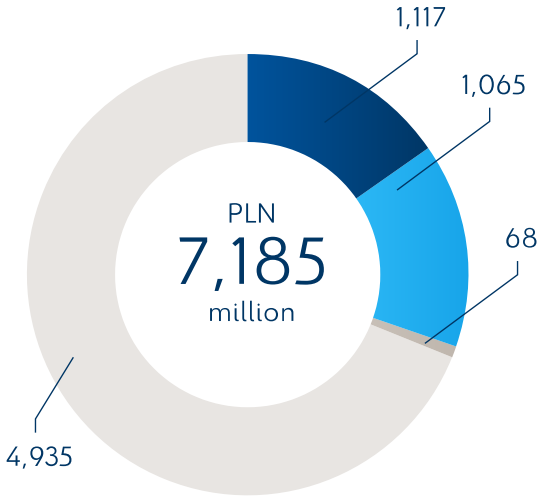
To optimise its interest income and expenses and to effectively manage the global liquidity limit, in 2021 the Group held short-term funds in current accounts in PLN, EUR and USD with PKO BP S.A., linked under a physical cash pooling structure with the individual companies' sublimits in those currencies. As at December 31st 2021, the Group held a total of PLN 2,362 million in bank accounts and as short-term deposits.
Net debt as at December 31st 2021 was PLN 1,923 million, having decreased by PLN 713 million year on year. Net debt to EBITDA was 0.96, down from 2.1 in 2020.

The major drivers determining Grupa Azoty S.A.'s development in 2022, including growth of the Group's financial resources and assets, will include prices of the key feedstocks (including natural gas) and ability to generate positive margins on the main products sold both in Poland and abroad. Future financial results will also be influenced by USD and EUR exchange rates and the economic situation in agriculture and in the industries which are final customers.

Secured corporate finance and project finance	(PLN million)
PKO and bank syndicate	
Revolving and umbrella credit facilities	3,895
EIB and EBRD	

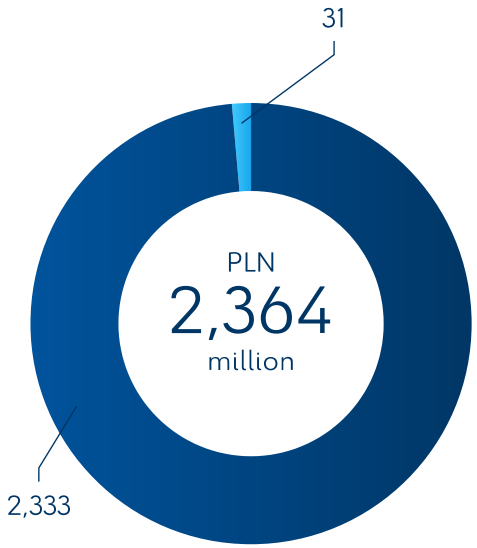
Term Loan Agreement Secured corporate finance and project finance	1,476 (PLN million)
Bank syndicate – Polimery Police	
Credit Facilities Agreement – project finance	5,269
Total corporate finance and project finance	**10,640**

Available funding



- Corporate credit facilities
- Overdraft and multi-purpose facilities
- Credit facilities of Polimery Police
- Other financing sources

Cash

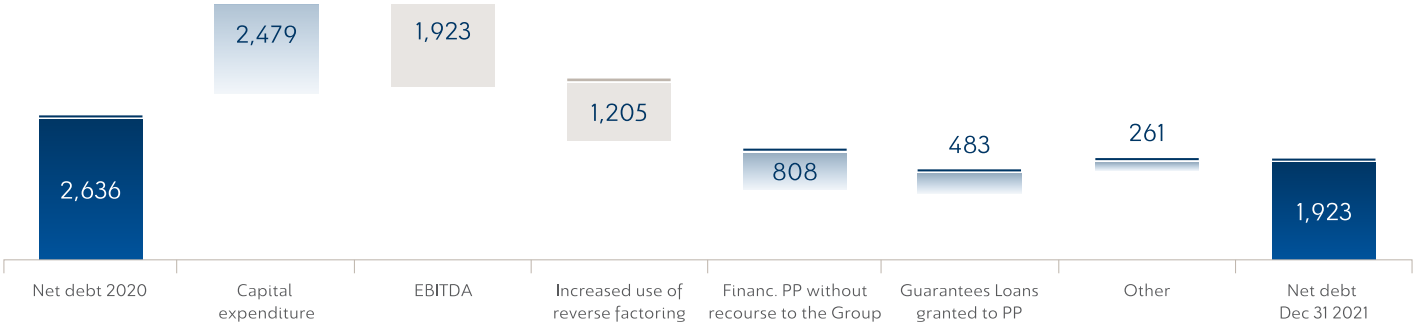


- Cash of the Group
- Cash of Polimery Police

Net debt	31.12.2020	31.12.2021
Net debt calculated as per bank agreements (PLN million)	2,636	1,923
Net debt/12M EBITDA (x)	2.1	0.96
Total debt ratio (%)	54.4	62.3

Net Debt Bridge

[PLN million]



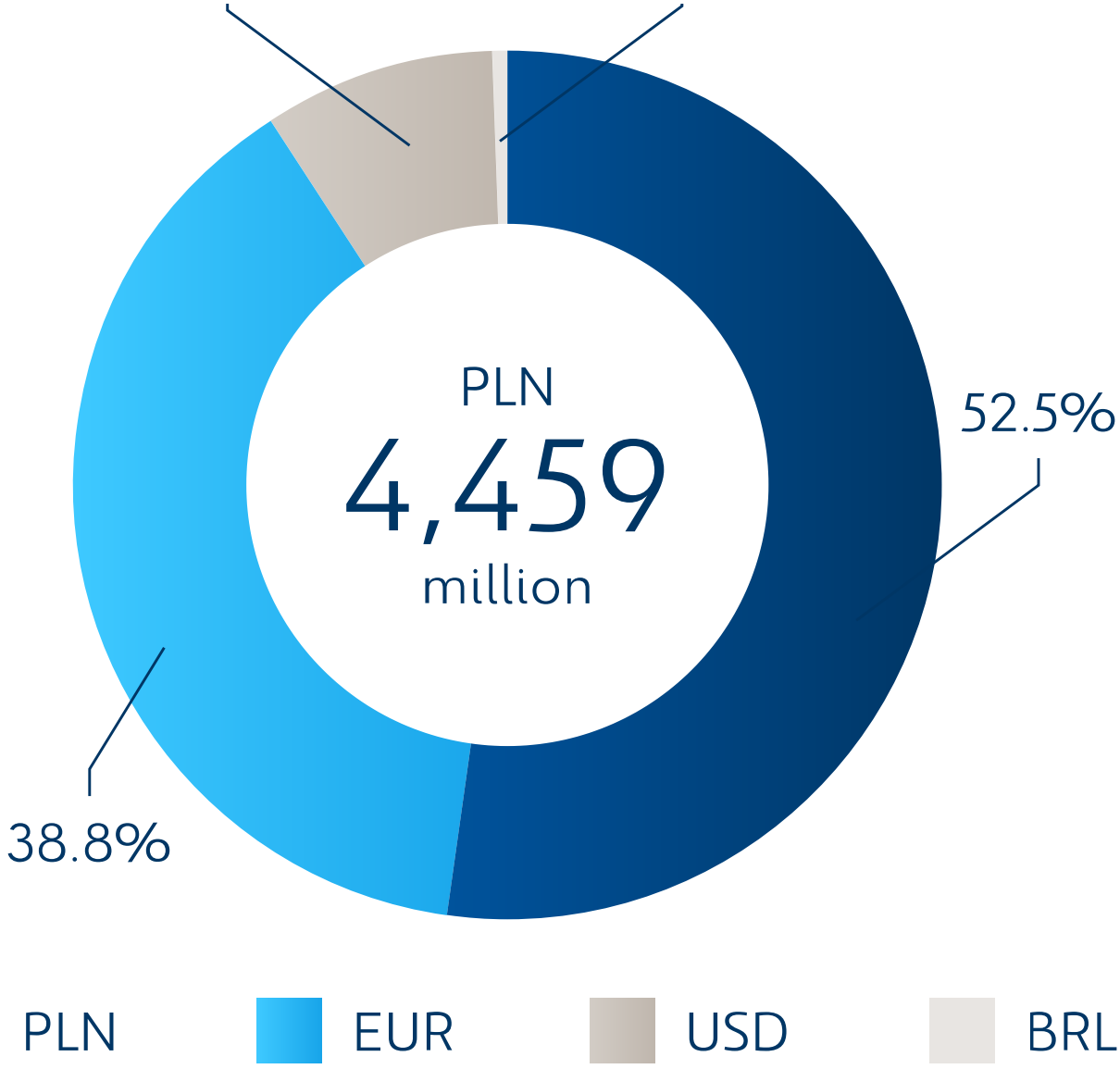
Currency structure of GRUPA AZOTY Group's borrowings

as at Dec 31 2021

Currency structure of borrowings	millions in relevant currency	PLN million
Borrowings in PLN	2,339	2,339
Borrowings in EUR	375	1,709
Borrowings in USD	95	389
Borrowings in BRL	30	22
Total		**4,459**

8.7%

0.5%



See our projects in figures



Taxonomic disclosures

In March 2018, the European Commission adopted an action plan on financing sustainable growth. One of the Commission's objectives under the plan was to shift capital flows towards sustainable investment. The main tool to achieve this objective is the system of uniform classification of sustainable activities, commonly referred to as the EU taxonomy, which was implemented into European law by Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18th 2020 ("Regulation 2020/852").

The EU taxonomy as a classification system has established a list of environmentally sustainable economic activities. An environmentally sustainable activity is one that makes a significant contribution to one or more of the six environmental objectives:

- climate change mitigation,
- adaptation to climate change,
- sustainable use and protection of water and marine resources,
- transition to a circular economy,
- pollution prevention and control,
- protection and restoration of biodiversity and ecosystems.

In addition, such activities must not cause serious harm to any of the other objectives, whilst providing the minimum safeguards, including human rights safeguards, and technical criteria for classification laid down for particular activities.

The examination of taxonomy alignment is required by the regulator for reports published from January 1st 2023, while pursuant to Article 10 of the delegated act published in the Official Journal of the European Union in December 2021, reports published

from January 1st to December 31st 2022 must only comply with simplified rules for the verification of activities against the taxonomy disclosure requirements for, among others, non-financial undertakings (taxonomy eligibility).

During the period, non-financial undertakings are required to disclose the proportion of taxonomy-eligible and taxonomy non-eligible economic activities in:

- turnover,
- capital expenditures (CapEx),
- operating expenditures (OpEx).

Disclosures of potential taxonomy eligibility cover only the first two environmental objectives: climate change mitigation and climate change adaptation, for which delegated acts have been published so far. Also required are qualitative disclosures on accounting policies, assessment of compliance with Regulation 2020/852, and contextual information.

Assessment of compliance with Regulation 2020/852

Mandatory taxonomy disclosures apply to undertakings that meet the criteria specified in Article 19a or 29a of Directive 2013/34/EU. As a company that is subject to the obligations under the directive and prepares non-financial reports in accordance with the amended Accounting Act, Grupa Azoty is obliged to make taxonomy disclosures for 2021. The reporting of taxonomy disclosures by the Group complies with Regulation 2020/852 and the delegated acts thereto.

In order to calculate the required ratios, all activities described in the taxonomy were analysed in terms of their share in the Group's revenues. To identify turnover from taxonomy-classified activities, the descriptions of economic activities in the Climate Delegated Act to Regulation 2020/852 were used. The analysis of revenues at each of the Grupa Azoty Group companies ensures that each revenue item was taken into account only once. For the purposes of calculating the CapEx and OpEx KPIs, the relevant expenditures on assets and processes were analysed and the associated business activities described in the Climate Delegated Act were identified. Since the analysis was conducted individually for each item of the expenditures in all Group companies, we are satisfied that no item of the expenditures was taken into account more than once.

Company-specific data was collected and analysed by departments and business units responsible for reporting data by line of business. The Consolidation Department of the Group's Corporate Controlling Department was responsible for data collection and aggregation.

Analysis of Grupa Azoty's activities in terms of taxonomy eligibility

The manufacturing and selling activities of Grupa Azoty are conducted by five segments:

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

The principal business of the Group, i.e. the manufacture of mineral and compound fertilizers, is not captured in the taxonomy classification. Although the NACE code for the fertilizer manufacturing activities is described in the Delegated Act, Grupa Azoty has adopted a conservative approach and has not classified revenues from the manufacturing of mineral and compound fertilizers as taxonomy eligible. This approach followed a recommendation from the European Commission described in the December 2021 and February 2022 Taxonomy FAQ documents, which indicate the need to examine the compatibility of activities with the activity description in the Delegated Act and not to treat NACE codes as the sole determinant of taxonomy eligibility.

It is worth noting, however, that the manufacture of the main components for the production of mineral and compound fertilizers (i.e. ammonia and nitric acid) by some Group companies for use by other Group companies (intragroup revenues eliminated on consolidation) is classified as taxonomy eligible. Therefore, on a non-mandatory basis for taxonomy disclosure, we report that external revenues from sale of mineral and compound fertilizers based on ammonia and nitric acid (feedstocks included in the taxonomy classification) manufactured by the Group were PLN 7,263 million in 2021.

Revenues of Grupa Azoty	PLN million	%

Revenues of Grupa Azoty	PLN million	%
Total revenue from taxonomy non-eligible activities	15,339	96.5%
Including revenue from sales of mineral and compound fertilizers based on ammonia and nitric acid manufactured by the Group	7,263	47.3%
Total revenue from taxonomy-eligible activities	562	3.5%
Revenues of the Group	**15,901**	**100%**

The analysis of other activities carried out by the Grupa Azoty Group indicates that a part of turnover qualifying as taxonomy eligible was contributed by the following activities:

- 3.10. Manufacture of hydrogen
- 3.14. Manufacture of organic basic chemicals
- 3.15. Manufacture of ammonia
- 3.16. Manufacture of nitric acid
- 3.17. Manufacture of plastics in primary forms
- 4.9. Transmission and distribution of electricity
- 4.15. District heating/cooling distribution
- 4.25. Production of heat/cooling using waste heat
- 5.1. Construction, extension and operation of water collection, treatment and supply systems
- 5.3. Construction, extension and operation of wastewater collection and treatment systems
- 5.4. Renewal of wastewater collection and treatment
- 6.2. Freight rail transport
- 6.16. Infrastructure enabling low-carbon water transport

For capital expenditures (CapEx) and operating expenditures (OpEx), some of the taxonomy-eligible costs were related to the following activities:

- 3.6. Manufacture of other low-carbon technologies
- 3.10. Manufacture of hydrogen
- 3.14. Manufacture of organic basic chemicals
- 3.15. Manufacture of ammonia
- 3.16. Manufacture of nitric acid
- 3.17. Manufacture of plastics in primary forms
- 4.1. Electricity generation using solar photovoltaic technology
- 4.9. Transmission and distribution of electricity
- 4.15. District heating/cooling distribution
- 4.25. Production of heat/cooling using waste heat
- 5.1. Construction, extension and operation of water collection, treatment and supply systems
- 5.2. Renewal of water collection, treatment and supply systems
- 5.3. Construction, extension and operation of wastewater collection and treatment systems
- 5.4. Renewal of wastewater collection and treatment
- 5.5. Collection and transport of non-hazardous waste in fractions segregated at source
- 6.2. Freight rail transport

- 6.14. Infrastructure for rail transport
- 6.16. Infrastructure enabling low-carbon water transport
- 7.2. Renovation of existing buildings
- 7.3. Installation, maintenance and repair of energy efficiency equipment
- 8.2. Data-driven solutions for GHG emissions reductions
- 9.1. Activity close to market research, development and innovation

Accounting policies

Under the 2021 disclosure obligations, key performance indicators include: the proportions of taxonomy-eligible and non-eligible activities in turnover, capital expenditures (CapEx) and operating expenditures (OpEx), as well as additional qualitative information, without verification of the technical screening criteria.

Descriptions of the three key indicators are provided below:

Turnover

- **The denominator** includes revenue consistent with the disclosure in the consolidated financial statements as at December 31st 2021. Turnover includes revenue recognised in accordance with International Accounting Standard (IAS) 1.82(a).
- **The numerator** is equal to the portion of net revenue from the sale of products or provision of services, including intangible assets, related to the eligible business activities.

Capital expenditures (CapEx)

- **The denominator** covers additions to property, plant and equipment and intangible assets during the financial year before depreciation, amortisation and any revaluations, including those resulting from revaluations and impairments, for the financial year, excluding changes in fair value. The denominator also includes additions to property, plant and equipment and intangible assets resulting from business combinations.
- The individual values are presented in the consolidated financial statements as at December 31st 2021 in the following line items: Property, plant and equipment (note 9) and Intangible assets (note 12): increase due to purchase, production, manufacturing, increase due to business combinations, decrease due to commissioning; Investment property (note 11): increase due to purchase, production, subsequent expenditure, increase due to accounting for business acquisition, decrease due to commissioning; Right-of-use assets (note 10): increase due to execution of new contracts, decrease due to commissioning.
- **The numerator** is equal to the portion of capital expenditures (CapEx) that relate to assets or processes related to taxonomy-eligible activities, involve purchase of products from taxonomy-eligible activities, or when they are part of a plan to meet the eligibility criteria.

Operating expenses (OpEx)

- **The denominator** covers direct non-capitalised costs that relate to research and development, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment by the undertaking or third party to whom activities are outsourced that are necessary to ensure the continued and effective functioning of such assets.
- The denominator does not include any other expenditures in the other direct expenditures category.
- **The numerator** is equal to the portion of operating expenses (OpEx) that are related to assets or processes associated with taxonomy-eligible activities, purchases of products from taxonomy-eligible activities, or when they are part of a plan to meet the eligibility criteria.

Calculation of key performance indicators

Turnover

- Having analysed all the activities described in the taxonomy, the Group concluded that the taxonomy-eligible revenues represent 3.5% (PLN 562 million) of total revenues generated by the Group in the financial year 2021. Non-eligible revenues account for 96.5% (PLN 15,339 million) of total revenues generated by the Group in the financial year 2021.
- The taxonomy-eligible revenues were derived primarily from the following activities: 3.17. Manufacture of plastics in primary forms (41% of taxonomy-eligible revenues), 4.9. Transmission and distribution of electricity (31% of taxonomy-eligible revenues), 3.16. Manufacture of nitric acid (11% of taxonomy-eligible revenues), 3.15. Manufacture of ammonia (10% of taxonomy-eligible revenues).

- The turnover KPI denominator is PLN 15,901 million.

Company [1]	Revenue (PLN million)	% of revenue from taxonomy-eligible activities	% of revenue from taxonomy-non-eligible activities
Grupa Azoty	15,901	3.5%	96.5%
Grupa Azoty S.A.	2,573	0.6%	99.4%
Grupa Azoty Puławy Group	5, 489	0.9%	99.1%
Grupa Azoty Puławy	4,950	1%	99%
Grupa Azoty Police Group	3,220	9.9%	90.1%
Grupa Azoty Police	3,190	10%	90%

[1] Grupa Azoty Kędzierzyn is not a listed company and is therefore not subject to EU taxonomy.

Capital expenditures (CapEx)

- The analysis of all capital expenditures (CapEx) shows that taxonomy-eligible expenditure accounted for 63.6% (PLN 1,541 million) of the Group's total capital expenditures (CapEx) in the financial year 2021. Non-eligible capital expenditure (CapEx) accounted for 36.4% (PLN 884 million) of the Group's total capital expenditures (CapEx) in the financial year 2021.
- The taxonomy-eligible capital expenditures (CapEx) were primarily associated with the following activities: 3.14. Manufacture of organic basic chemicals (31% of taxonomy-eligible capital expenditures), 3.17. Manufacture of plastics in primary forms (16% of taxonomy-eligible capital expenditures), 3.16. Manufacture of nitric acid (10% of taxonomy-eligible capital expenditures). The CapEx KPI denominator is PLN 2,425 million.

Company [2]	CapEx (PLN million)	% of CapEx from taxonomy-eligible activities	% of CapEx from non-eligible activities
Grupa Azoty	2,425	63.6%	36.4%
Grupa Azoty S.A.	241	55.3%	44.7%
Grupa Azoty Puławy Group	920	45.9%	54.1%
Grupa Azoty Puławy	902	45.6%	54.4%
Grupa Azoty Police Group	182	31.1%	68.9%
Grupa Azoty Police	178	31.8%	68.2%

[2] Grupa Azoty Kędzierzyn is not a listed company and is therefore not subject to EU taxonomy.

Operating expenses (OpEx)

- The analysis of all operating expenditures (OpEx) shows that taxonomy-eligible expenditures accounted for 13.6% (PLN 40m) of the Group's total operating expenditures (OpEx) in the financial year 2021. Non-eligible operating expenditures accounted for 86.4% (PLN 253 million) of the Group's total operating expenditures (OpEx) in the financial year 2021.
- The taxonomy-eligible operating expenditures (OpEx) were primarily associated with the following activities: 3.16. Manufacture of nitric acid (27% of taxonomy-eligible operating expenditures), 3.17. Manufacture of plastics in primary forms (17% of taxonomy-eligible operating expenditures).
- The OpEx KPI denominator is PLN 293 million.

Company [3]	PLN million	% of OpEx from taxonomy-eligible activities	% of OpEx from non-eligible activities
Grupa Azoty	293	13.6%	86.4%
Grupa Azoty S.A.	89	16.5%	83.5%
Grupa Azoty Puławy Group	142	3.6%	96.4%
Grupa Azoty Puławy	133	3.7%	96.3%
Grupa Azoty Police Group	21	24.8%	75.2%
Grupa Azoty Police	99	5.1%	94.9%

[3] Grupa Azoty Kędzierzyn is not a listed company and is therefore not subject to EU taxonomy.



CLIMATE AND ENVIRONMENT

Environmental management

[103-2]

Environmental protection is an integral part of our approach to sustainable development because we know this is what our customers, suppliers and local communities expect. Environmental management at the Grupa Azoty Group is part of the integrated management system, and one of its priorities is to minimise environmental losses. All the Group companies (except for Grupa Azoty Koltar) have implemented an environmental management system conforming to the ISO 14001 standard, which supports the activities related to environmental protection and prevention of contamination. The system also requires the companies to assess compliance of their activities with applicable laws and other standards, and to pursue continuous improvement of the environmental protection methodologies they apply.

[1] An environmental management system has not been implemented as this is not mandatory for Grupa Azoty KOLTAR Sp. z o.o. Grupa Azoty KOLTAR Sp. z o.o. has signed a contract with a third party for the provision of environmental protection services that include preparation of reports, reporting, representation of the company before environmental protection authorities, supervision of waste and packaging management, review of the results of analyses and measurements, and monitoring of the performance of obligations under applicable decisions and agreements.

In 2022, Grupa Azoty S.A. plans to put an Environmental Policy in place that would define the Grupa Azoty Group as an organisation focused on clean production, striving to reduce consumption of natural resources, driving a continuous effort to reduce consumption of raw materials and utilities, minimising pollutant emissions and efficiently managing waste.



OUR STRATEGIC GOALS UNTIL 2030

DECARBONISATION OF PRODUCTION

34% reduction in CO_2 emissions from energy generation sources of Grupa Azoty relative to 2020 baseline

51% reduction in emissions from purchased energy generation relative to 2020 baseline

65% reduction in coal consumption relative to 2020 baseline

implement recycling technology with waste utilisation

reduce the organisation's carbon footprint

ENERGY EFFICIENCY

reduce energy consumption per product unit

step up efforts to recover waste energy from chemical processes

incorporate gas-fired sources into the energy mix in the transition period; ultimately grow the share of renewable energy sources in power generation to 40%

We make every effort to ensure compliance with relevant laws and permits. In the event of any breach – resulting in penalties or increased fees – we always implement corrective actions at the companies.

But our ambitions go beyond compliance with the law. In our Strategy we have set a path for our climate neutrality and energy transition known as 'Green Azoty'. We take measures to reduce emissions, and we have adopted a decarbonisation programme that will be combined with the development of renewable and emission-free energy sources. We aim to cut the share of electricity from burning coal to less than 50% of total energy consumed in 2030 and achieve carbon neutrality by 2050.



BEST PRACTICE

[102-12]

Grupa Azoty S.A. and the Province of Kraków will closely cooperate to protect air and climate as part of the project 'LIFE EKOMAŁOPOLSKA – Implementation of the Regional Action Plan for Climate and Energy'. In 2021, we signed

an agreement with the local authorities declaring our commitment to achieving climate neutrality in production processes and activities carried out in the Małopolska Region by 2050.

[102-20]

Executive-level responsibility for economic, environmental, and social topics. We have divided responsibilities in these areas at the leading Group companies in the following way:

Grupa Azoty S.A.:

- economic matters: Head of the Corporate Finance Department and Head of the Corporate Controlling Department
- social matters: Head of the Corporate Organisation and Human Resources Department
- environmental matters: Head of the Corporate Technology and Energy Department

Grupa Azoty Kędzierzyn:

- economic matters: Head of the Finance Department, Head of the Controlling Department
- social matters: Head of the Management and Human Resources Department
- environmental matters: Head of the Safety Department

Grupa Azoty Puławy:

- economic matters: Head of the Finance Division/Chief Controller
- environmental matters: Head of the Support Division
- social matters: Head of the Human Resources Division/ Head of the Corporate Division

Grupa Azoty Police:

- economic matters: Head of the Finance Department and Head of the Controlling Department
- environmental matters: Head of the Plant Safety Department and the Project Manager for GHG Emissions, Technological and Environmental Analysis
- social matters: Head of the Human Resources and Management Department.

Persons in these roles report directly to the management board.



BEST PRACTICE

In 2021, Grupa Azoty Kędzierzyn and Grupa Azoty Puławy had certification for their Responsible Care Framework Management System (implemented under the Odpowiedzialność i Troska® programme) extended until 2025, confirming the Group's compliance with the guidelines issued by the European Chemical Industry Council and with the principles and criteria of the Polish Chamber of Chemical Industry.

The Responsible Care Programme, adopted in Poland in 1992 under the name 'Odpowiedzialność i Troska', is an international initiative of the chemical industry, supervised in Poland by the Polish Chamber of Chemical Industry. The programme enables chemical companies to integrate joint projects in the fields of health, process safety and environmental protection. Grupa Azoty Kędzierzyn has implemented the programme since 1994. Some of the positive changes delivered by the programme since its inception include:

- reduction of overall air emissions of pollutants – by ca. 80%,
- reduction of the water abstraction level – by more than 53%,
- reduction of the wastewater discharge level – by more than 55%,
- reduction of landfilled waste – by over 90%,
- reduction of the load of organic compounds discharged into the Oder River – by over 70%,
- reduction of the load of ammoniacal nitrogen in discharged wastewater – by over 99%.

Grupa Azoty Puławy has implemented the programme since 1995. Some of the positive changes delivered by the programme since its inception include an over 75% reduction in air emissions of pollutants, an over 40% reduction in water abstraction, and a ca. 90% reduction in waste going to landfill.

Read more about Green Azoty Project

See an example of remediation projects at Grupa Azoty sites



See our participation in developing the hydrogen market in Poland [102-12] [102-13]

Our Group is the largest hydrogen producer in Poland and a major one in Europe. Our production accounts for over 35% of all domestic hydrogen output, and Polish production is, notably, the third largest in Europe[2].

[2] https://forsal.pl/biznes/energetyka/artykuly/7999371,polska-produkcja-wodoru-jestesmy-na-trzecim-miejscu-w-europie.html

Grupa Azoty Police

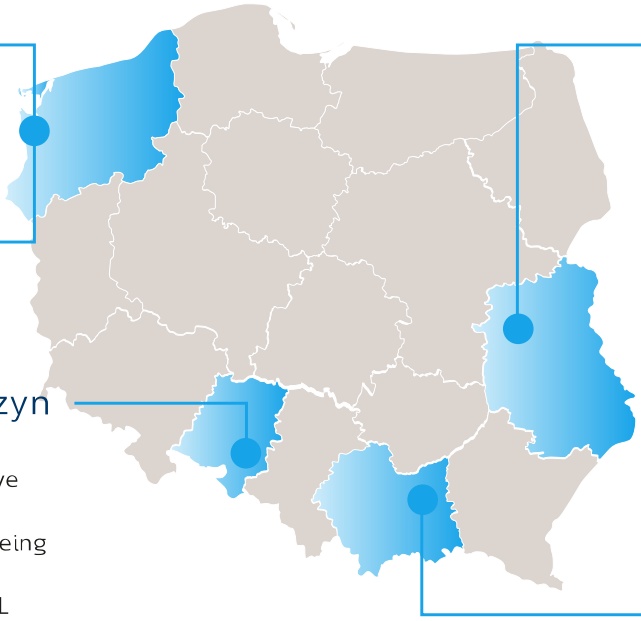
106,000 y/y
utilisation of green hydrogen from GA Polyolefins

Grupa Azoty Polyolefins

20,000 tonnes/year

Grupa Azoty Kędzierzyn

82,000 tonnes/year
A laboratory for testing alternative fuels, with a special focus on ISO 14687-2-compliant hydrogen, is being developed in Kędzierzyn-Koźle in partnership with the certified NPL laboratory of London



Grupa Azoty Puławy

203,000 tonnes/year
Pilot and then full-scale renewable power generation plant.

The project also provides for increased volumes of hydrogen produced by conventional methods and for analytical tools to guarantee the required product quality.

Grupa Azoty S.A. of Tarnowie

40,000 tonnes/year

[102-13]

We naturally plan to engage in the development of a hydrogen market and participate in the implementation of the European Union's hydrogen strategy. These efforts will be aided by our membership in the European Clean Hydrogen Alliance, which we joined in 2021. We are carrying out economic and technical analyses of electricity production from renewable sources, which in the long term will reduce the carbon footprint of our production processes and allow us to produce green hydrogen through electrolysis using renewable power. Our membership in the Alliance gives us an opportunity to form partnerships with key players in the energy sector, as well as to exert a tangible impact on shaping Europe's hydrogen market.

In 2021, Grupa Azoty, PKP Cargo and PESA declared their intent to cooperate in advancing zero-carbon rail freight transport. We want to jointly implement research and development projects seeking to find optimum ways to use hydrogen to power rail vehicles and develop methods for transporting hydrogen and refuelling rail vehicles. Creating hydrogen fuel transport, storage and refuelling infrastructure is vital in facilitating the development of rail transport using hydrogen propulsion in Poland. The letter of intent signed during the TRAKO International Railway Fair opens a new chapter of the joint effort to work out optimal solutions in these fields based on the partners' previous experience.

We believe our fuel cell based hydrogen technologies can provide efficient propulsion for rolling stock and contribute to advancing production of hydrogen and ammonia from renewable energy sources as a fuel for rail transport.



Given the size of demand for hydrogen-powered rail vehicles, the development of hydrogen technologies for rail transport could be a major catalyst of accelerated uptake of hydrogen as a fuel across all transport modes. This would be of great importance to the entire Polish economy considering the European Green Deal implemented by the European Commission, seeking to reduce CO_2 emissions in transport by 30% by 2030, and to achieve climate neutrality in the European Union by 2050.

[102-12]

Our Group signed the letter of intent to build the Lower Silesian Hydrogen Valley during the 30th Economic Forum in Karpacz in 2021. The signatories declared their intention to cooperate in creating a business, technology and R&D environment that would promote development of the Lower Silesian Hydrogen Valley. The letter of intent aims to create conditions for and foster collaboration in the development of hydrogen technologies in Poland. Prepared by the Ministry of Climate and Environment in cooperation with representatives of the public and private sectors, the document defines measures to be undertaken to develop a full value chain of hydrogen economy based on Poland's contribution, including solutions developed by Polish science and R&D industry as well as Polish implementations and patents. Under the agreement, the implementation and development of the hydrogen economy in Poland will be accompanied by several dozen measures comprising four strategic objectives to be achieved by 2030.

Environmental fines and sanctions in 2021 [307-1]

[307-1]

Grupa Azoty S.A.

- In 2022, the Company received a decision of the Provincial Inspector for Environmental Protection imposing a fine of PLN 70.92 per day for the period from mid-September to the end of December 2021 for exceeding permitted noise emission levels. Proceedings to determine an annual fine were pending at the date of this report.

Grupa Azoty Puławy

- An analysis of data from the continuous emissions monitoring system at the on-site CHP plant showed instances of exceeding the permitted emission levels for sulfur dioxide, nitrogen oxides and particulate matter in 2020. As a consequence, in March 2021 the Lublin Provincial Inspectorate for Environmental Protection imposed a fine of PLN 5,573,283 on the company. Given projects implemented to remove the causes of the fine, on June 2nd 2022 the due date for payment of the fine was postponed at the request of the company until December 31st 2023 – in the case of nitrogen oxide emissions, and until March 31st 2024 – in the case of emissions of sulfur dioxide and particulate matter from fuel combustion.
- An analysis of data from the on-site CHP plant showed instances of exceeding the permitted emission levels for sulfur dioxide, nitrogen oxides and particulate matter in 2021. No fines were imposed on the company for exceeding the limits as at June 30th 2022.

Grupa Azoty Kędzierzyn

- In 2021, Grupa Azoty Kędzierzyn was charged a fee of PLN 4,240,590 for air emissions of pollutants from a fuel combustion unit that were not compliant with the terms of the integrated permit. The fee follows from a change in the concept for an upgrade of the in-house CHP plant (the New Energy Concept), which is based on an innovative project to use heat from ammonia production and which would enable old coal-fired units to be shut down and coal to be partially replaced by gas fuel. The New Energy Concept fits into the decarbonisation and climate neutrality strategy and with the European Green Deal. It also supports Poland's long-term economic objectives defined in the 'Development Directions of Energy Innovations', which will be pursued in 2021–2050 through activities enhancing the competitiveness of the Polish chemical and energy sectors. Also, the New Energy Concept will help improve the condition of the natural environment in the region where the company operates. The due date for payment of the fee was postponed by a decision of the Opole Province Marshal until April 2024 based on a schedule of corrective measures.

Grupa Azoty Police

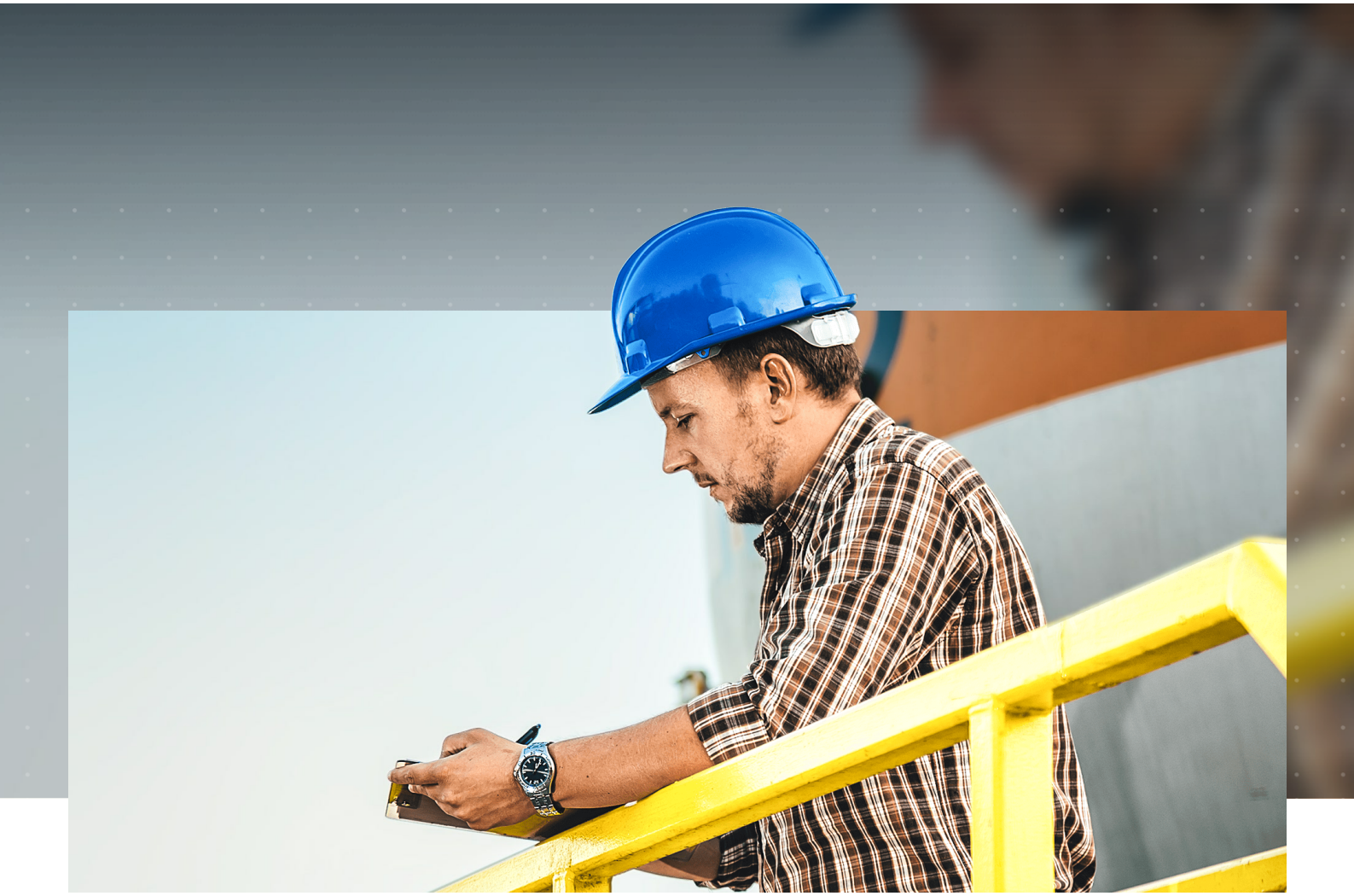
- In 2021, the Provincial Inspectorate for Environmental Protection carried out an inspection of compliance with environmental laws and administrative decisions. It covered the fuel combustion unit and the titanium white production unit. The inspection found that the terms and conditions of the permit to use the environment were breached, including through excessive SO2, NOX and total particulates emissions from the emitter of the EC II CHP plant. No administrative proceedings were initiated in the case as at the date of this report. No irregularities were recorded for the titanium dioxide production unit.

No administrative or judicial sanctions were imposed in 2021 on the other Grupa Azoty Group companies (including Grupa Azoty Police) for non-compliance with environmental regulations. No environmental disputes were brought against the companies in 2021.

[307-1]

Monetary value of fines for non-compliance with environmental laws and/or regulations [PLN]

	2020	2021
Grupa Azoty KĘDZIERZYN	0	4,240,590
Grupa Azoty POLICE	0	0
Grupa Azoty PUŁAWY	5,573,283	0
Grupa Azoty S.A.	0	0
Total	**5,573,283**	**4,240,590**



CLIMATE AND ENVIRONMENT

Raw materials

[103-1] [103-2]

At the Grupa Azoty Group, we use natural resources to produce energy for our own needs and to manufacture fertilizers and chemicals. Most production materials, goods and services are purchased in Poland and other European Union countries. Some raw materials, including phosphate rock, titanium slag and potassium chloride, are supplied by our partners from outside the European Union. Ammonia and some sulfur supplies are sourced internally within the Group.

We have been consistently reducing the required volumes of raw materials at our companies for many years now. We implement solutions allowing us to improve productivity while reducing feedstock consumption and to combine earnings growth with improved environmental and climate performance.

[301-1]

Consumption of raw materials and materials, by weight and volume[1]

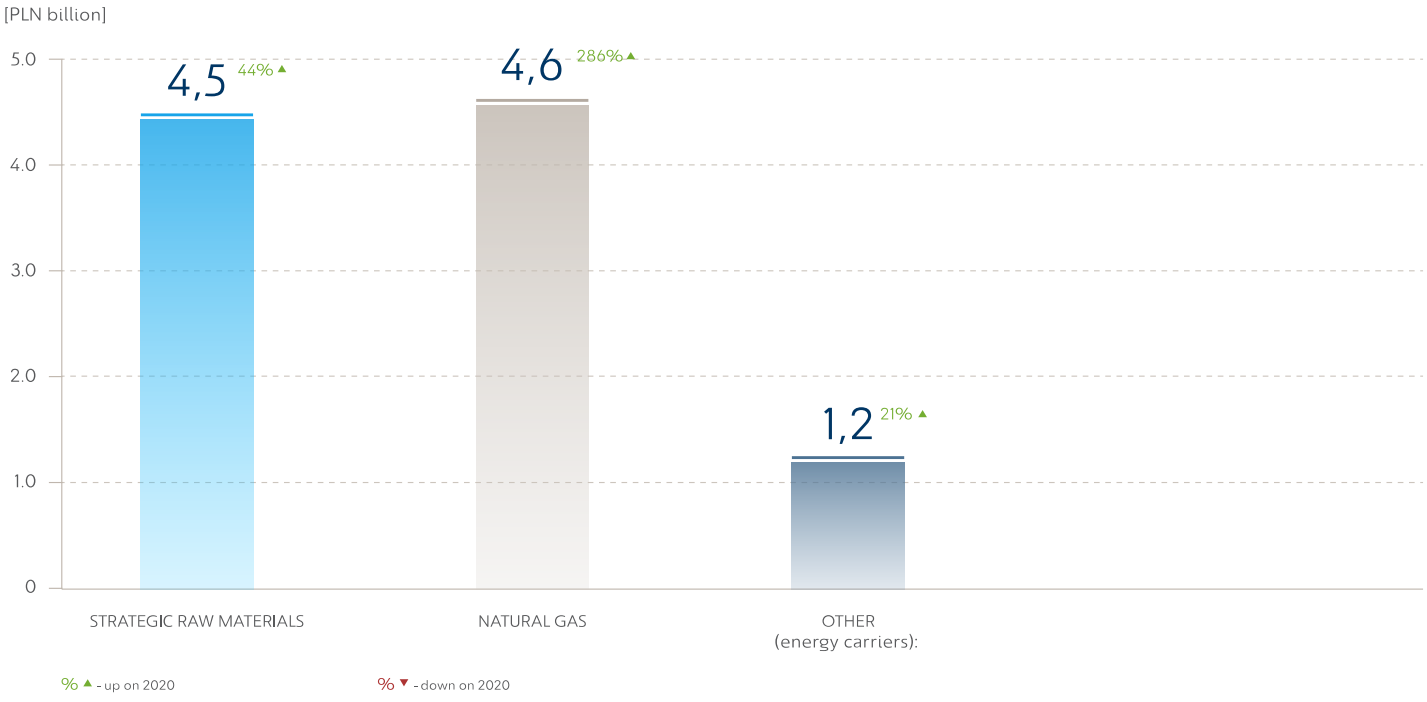
Strategic raw materials used	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	Total

Strategic raw materials used	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	Total
	2021				
Natural gas [m^3][2]	375,293,262	433,940,117	996,522,250	207,029,960	2,012,785,5
Minerals [t][3]	90,412	202,965	46,240	169,790	509,407
Other energy carriers [t][4]	211,943	277,102	656,264	209,566	1,354,875
Other strategic raw materials [t][5]	26,838	1,443,162	1,008,174	472,459	2,950,632
Petroleum-derived raw materials [t][6]	152,809	415	62,525	87,656	303,405

SCROLL TABLE

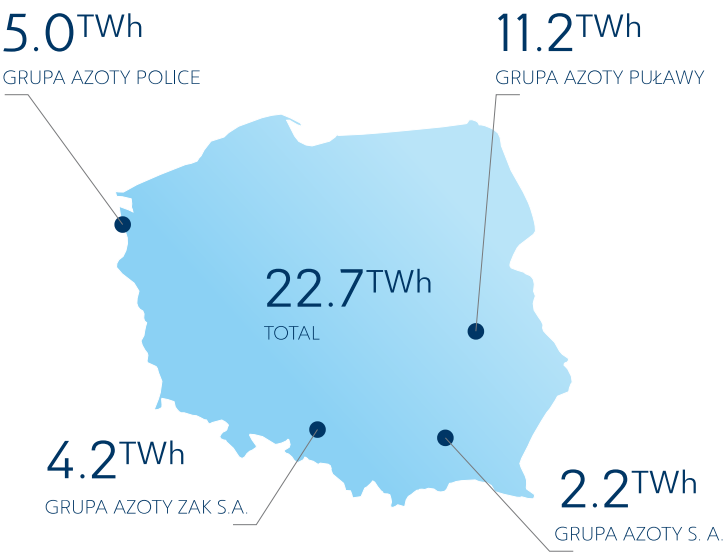
[1] Reported non-renewable materials and raw materials. A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.
[2] High-methane and nitrogen-rich natural gas.
[3] Liquid sulfur, dolomite rock.
[4] Hard coal, light fuel oil, fine coal.
[5] Liquid ammonia, technical-grade nitric acid, technical-grade sulfuric acid, technical-grade methanol, polyethylene, phosphate rock, potassium chloride, ilmenite, slag. The table omits oxygen (246,193 thousand cubic metres) and nitrogen (24,309 thousand cubic metres) for Grupa Azoty Puławy as the company has no data expressed in other units (t).
[6] Phenol, benzene, heavy fuel oil, terephthalic acid, propylene.

Consumption of raw materials and energy:

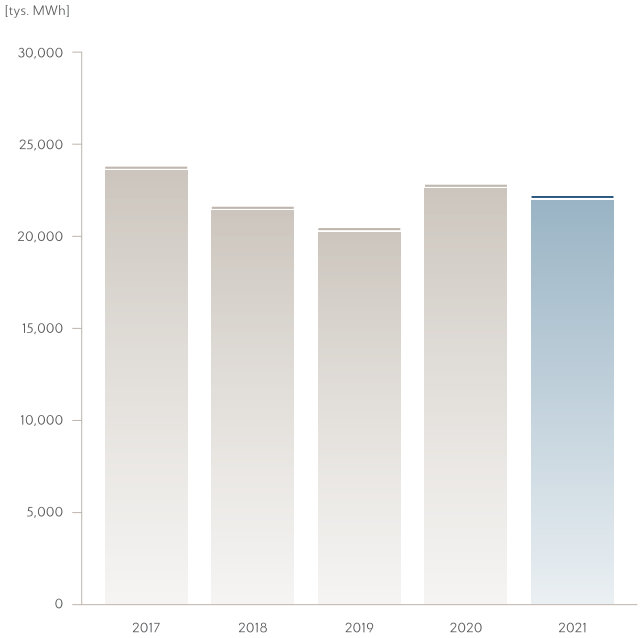


2021 was an exceptional period in our history, marked by record-breaking prices of raw materials and unprecedented volatility across global markets. In particular, the highest ever prices of natural gas led to a previously unheard-of spike in production costs.

Total gas consumption in 2021
(22,689 thousand MWh)



Annual volumes of gas consumption at Grupa Azoty Group



See how our key companies use raw materials

Grupa Azoty S.A.

- Grupa Azoty S.A. uses natural gas mainly to produce ammonia and hydrogen.
- Natural gas can also be used by the CHP plant as a reserve fuel to generate heat and electricity.
- The Company also uses dolomite rock and technical-grade nitric acid to make fertilizers.
- Liquid ammonia purchased by Grupa Azoty S.A. is used in the manufacture of nitrate fertilizers and caprolactam.
- Other necessary inputs in the production of caprolactam are phenol and liquid sulfur.
- Fuel oil and hard coal are feedstocks in heat and electricity generation.

Grupa Azoty Puławy

- At Grupa Azoty Puławy, high-methane natural gas is used to make ammonia. It is used in the production of caprolactam and melamine and as an auxiliary fuel at the CHP plant.
- Coal is the primary source of energy at the company.
- Benzene is used to produce cyclohexanone, a semi-finished product applied in the production of caprolactam.
- Sulfur is used to make sulfuric acid, another input in the production of caprolactam.
- Ammonia and nitric acid are the main intermediate products for fertilizer production. Ammonia manufactured internally is periodically supplemented with volumes sourced from third-party suppliers.

Grupa Azoty Police

- Grupa Azoty Police uses potassium chloride, phosphate rock, sulfur and sulfuric acid procured from third-party suppliers to produce compound fertilizers.
- Sulfuric acid, ilmenite, titanium slag and natural gas are key raw materials in the production of titanium white.
- Natural gas is used in the production of ammonia intended for sale and ammonia used as a semi-finished product to make urea and compound fertilizers.

Grupa Azoty Kędzierzyn

- The company uses ammonia in the production of fertilizers and nitric acid.
- Sulfuric acid is used to manufacture fertilizers containing sulfur.
- Dolomite rock is used in the production of granulated fertilizers.
- The company uses terephthalic acid to make plasticizers.
- Propylene is used in the production of aldehydes.

- Natural gas is used as a feedstock for fertilizers.



CLIMATE AND ENVIRONMENT

Waste

[103-2] [306-1] [306-2]

We recognise the daunting challenge presented by waste. We have taken numerous initiatives over past years to reduce waste amounts and optimise waste management. The Grupa Azoty Group has assembled a Circular Economy (CE) and Extended Producer Responsibility (EPR) Monitoring Team which contributes to creating and implementing product and strategic material development programmes.

We also run research and development projects seeking methods to effectively utilise by-products and waste. Our efforts support the objectives outlined in the European Green Deal.

See how we utilise by-products from plastic production

There is a programme of selective waste collection, including recyclable waste (waste paper, plastics, wood, glass, used batteries, and used electric and electronic equipment), operated on the premises of the Grupa Azoty Group. In all contracts with external providers of waste collection services and other services involving waste we incorporate a clause requiring the providers to reuse or dispose of the waste collected from the company in accordance with environmental protection laws and the Waste Act. The Grupa Azoty Group also works with packaging recovery organisations and the Polish Chamber of Commerce to meet the appropriate targets applicable to recovery and recycling of packaging waste, including composite and hazardous materials.

The Grupa Azoty Group companies are required to obtain an appropriate level of packaging recovery and recycling.

Grupa Azoty S.A.

- The largest waste type generated in 2021 was ash collected using a hydraulic conveyor system. The ash is utilised by Grupa Azoty Jednostka Ratownictwa Chemicznego. The second largest type of waste was fly ash from coal, which was provided to external customers for commercial use.
- The Company manages its waste in compliance with EU directives and the Waste Act. The Group seeks to minimise waste generation by including waste reduction criteria in the design or procurement of new technologies. The majority of raw materials and auxiliary materials used in production are supplied by rail cars or road tankers, which reduces the amount of packaging waste. Unit packaging in which production raw materials are supplied is collected and sent for recycling. The Company participates in the packaging collection and recycling scheme under an agreement with the Province Marshal. It has established a partnership with the Packaging Recovery Organisation, which fulfils the obligation to recover and recycle product packaging placed on the domestic market.

Grupa Azoty Puławy

- The company holds all legally required environmental certificates, permits and decisions and has undergone all environmental reviews required for its operations.
- Ash and slag mixtures from wet bottom ash removal are the main type of waste generated by the company. They are transferred for use or disposal to a licensed third-party operator.
- Products are sold in bulk or packaged in various types of bags. The company keeps records of packaging in line with relevant procedures in place and fulfils its obligations under packaging and packaging waste management regulations through an agreement signed with a packaging recovery organisation and a self-regulatory business organisation.
- Grupa Azoty Puławy consistently implements solutions to reduce generated waste volumes. Some examples of waste reduction initiatives are listed below:
  - reclassification of fly ash waste from coal combustion as a by-product,
  - reduction of the volumes of ash and slag mixtures stored by the company by transferring them for use by third-party operators,
  - dewatering of sludge, which can then be transferred to third parties for further use,
  - work to develop technologies for sludge processing into fertilizer products.

Grupa Azoty Police

- The main type of waste recovered by the company is sludge from the on-site wastewater treatment plant. All sludge (330,370.0 Mg) was treated in a recovery process. The by-products generated by Grupa Azoty Police are iron sulfate, fly ash and slag, and hydrolytic acid. The main type of waste transferred to licensed third-party operators is waste iron sulfate (103,198.120 Mg).
- Grupa Azoty Police's products are sold in bulk and transported by specialist road, rail and sea carriers. Some of the products are packed in bags. The company keeps records of packaging and has signed relevant agreements with a packaging recovery organisation and a self-regulatory business organisation, which help it fulfil its obligations under packaging and packaging waste management regulations. Under an agreement signed by Grupa Azoty S.A. with RIGK GmbH and agreements concluded with other Grupa Azoty Group companies, the company is required to account for packaging placed on the German market.

Grupa Azoty Kędzierzyn

- At Grupa Azoty Kędzierzyn, the main waste type is waste generated at the fuel combustion unit: slag, fly ash, ash and slag mixtures, waste from flue gas desulfurisation and waste from industrial wastewater treatment. **Most** of the waste is stored separately in designated waste storage areas.
- When selecting raw material suppliers, the company draws on its process experience gained from process unit operation, which helps to maintain technological regimes and set strict quality criteria for the substances/materials used, in order to minimise generated waste, for example by extending the useful life of catalysts. **The company also seeks to reduce generated waste volumes by:**
  - reduction of the amounts of landfilled waste by transferring it for commercial use (ash and slag waste is extracted from the landfill site and transferred to third parties),
  - use of process by-products to recover useful components,
  - purchases of raw materials in reusable packaging.
- Packaging volumes are reduced through regular collaboration with a packaging recovery organisation, which collects waste packaging from the market on behalf of the company and ensures the required level of packaging recovery and recycling.

Pozostałe spółki Grupy

- At **Grupa Azoty Siarkopol**, waste management is regulated and conducted in accordance with applicable laws: a waste generation permit and the Mining Waste Management Programme in connection with the operation of the Osiek Sulfur Mine and an integrated permit for the Dobrów Chemical Plant. Grupa Azoty Siarkopol fulfils the obligation to meet the targets applicable to recovery and recycling of packaging by cooperating with Branżowa Organizacja Odzysku Opakowań (an industry packaging recovery organisation).
- **Grupa Azoty Fosfory** prepared an environmental impact report relating to the processing of hazardous and non-hazardous waste in a fertilizer production unit and conversion of existing infrastructure into waste storage facilities on the company's premises. The report will enable the company to obtain an environmental permit and enhance waste recovery at Grupa Azoty Fosfory units. Approximately 9,700 tonnes of ash were recovered at the fertilizer production unit, which reduced the amount of landfilled waste.



BEST PRACTICE

All phosphorus, calcium and zinc used in our new 'fosfarm 4-10-15' fertilizer product are derived from waste fly ash.



BEST PRACTICE

The RSM®, Pulaska® and RSM®S liquid fertilizers are loaded into rail and road tankers. They do not require disposable packaging, which reduces the quantity of materials used (plastic film, bags, pallets) and any potential waste.

[306-3]

Waste generated by type [Mg][1]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
	2020	2021	2020	2021	2020	2021	2020	202
Non-hazardous	86,337	86,503	4,180,914	4,231,367	54,867	86,824	40,733	48,1
Hazardous	4,543	5,727	9,044	13,367	500	471	119	23
Total	**90,880**	**92,230**	**4,189,958**	**4,244,734**	**55,367**	**87,295**	**40,852**	**48,1**

SCROLL TABLE

[1] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.

[306-4]

Hazardous diverted from disposal, by recovery method and waste handling location [Mg]

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
Waste handling location	Waste recovery method	2020	2021	2020	2021	2020	2021	2020	202
On-site	Other recovery methods	0	0	1 137	1 274	0	0	0	0
	Directed to reuse	0	0	0	0	0	0	0	0

TABLE

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.	
	Directed to processing (recycling)	0	0	0	0	0	0	0	0
Off-site	Other recovery methods	4,030.266	13	7	0.34	492	390	20.37	0.8
	Directed to reuse	23.283	2,066	0	0	0	0	0	0
	Directed to processing (recycling)	0	0	0	0	0	0	0	0
Total		**4,053.549**	**2,078**	**1,144**	**1,274**	**492**	**390**	**20.37**	**0.8**

SCROLL TABLE

Non-hazardous waste diverted from disposal, by recovery method and waste handling location [Mg]

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
Waste handling location	Waste recovery method	2020	2021	2020	2021	2020	2021	2020	2021
On-site	Other recovery methods	0	0	362,839	332,963	0	142	0	0
	Directed to reuse	0	0	0	0	0	0	0	0
	Directed to processing (recycling)	0	0	0	0	0	0	0	0
Off-site	Other recovery methods	532	523	119,154	105,013	62,894	65,113[2]	24,574	18,9
	Directed to reuse	83,718	74,595	0	0	0	0	0	22,6
	Directed to processing (recycling)	3,644	1,510	0	0	0	0	387	53

SCROLL TABLE

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
Total		**87,984**	**76,628**	**481,993**	**437,976**	**62,894**	**65,255**	**24,961**	**42,2**

[2] Grupa Azoty Puławy receives relevant waste management information (whether a recovery (R) or disposal (D) process) from third parties. Therefore, this value refers to the total volume of all waste directed to recovery, including recycling.

[306-5]

Hazardous and non-hazardous waste directed to disposal, by disposal method and waste handling location [Mg]

		Grupa Azoty KĘDZIERZYN				Grupa Azoty POLICE				G
Waste handling location	Disposal method	Hazardous waste		Non-hazardous waste		Hazardous waste		Non-hazardous waste		Hazard waste
		2020	2021	2020	2021	2020	2021	2020	2021	2020
On-site	Other waste storage methods	0	0	0	9,728	7,899	12,044	1,877,861	3,790,392	0
Off-site	Other waste storage methods	0	3,236	156	149	0	0,622	0	22,367	6
	Landfilling	0	0	0	0	0	0	0	0	0
	Incineration without energy recovery	0	0	0	0	0	0	0	0	0
	Incineration with energy recovery	400	358	0	0	0	0	0	0	0
Total		**400**	**3,594**	**156**	**9,877**	**7,899**	**12,045**	**1,877,861**	**3,812,759**	**6.465**

SCROLL TABLE

[301-3]

Percentage of reclaimed products and their packaging materials (by type of material) [%] [3]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	202
Wood	16	16	16	16	16	16	16	16
Paper and cardboard	61	61	61	59.8	61	61	61	6
Packaging that held hazardous substances	0	0	52	53.2	52	53.2	51	53
Steel and sheet steel	51	51	51	51	51	51	51	51
Plastic	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.
Composite packaging	0	0	0	0	0	0	38	43

SCROLL TABLE

[3] The index is calculated as the ratio of the quantity of reclaimed products and their packaging materials and the volume of packaging placed on the market, by type of material. Data obtained from third-party organisations.



CLIMATE AND ENVIRONMENT

Energy

[103-1] [103-2]

We constantly improve energy efficiency at the Grupa Azoty Group companies. We streamline processes, embrace up-to-date energy-efficient technological solutions and support energy-saving initiatives across the organisation. The projects run in 2021 ranged from relatively easy-to-implement projects, such as energy efficient light fittings, to major process upgrades that significantly reduced energy consumption. These efforts helped to significantly reduce our annual energy consumption.

[302-4]

Total savings from reduced energy consumption and improved energy efficiency [GJ][1]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Az S.A.	
Total savings from reduced energy consumption and improved energy efficiency [GJ]	2020	2021	2020	2021	2020	2021	2020	2
	8,550	9,782	51,001	32,000	74,637	88,300	11,177	12

SCROLL TABLE

[1] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.

Lowering the use of energy helps save money. Measures implemented allowed the leading Group companies to generate cost savings in excess of PLN 5.3 million in 2021. The cost savings achieved through reduced energy consumption and improved energy efficiency rose almost PLN 200 thousand year on year in 2021.

See how we save energy [302-4]

[302-4]

Grupa Azoty S.A.

- construction of a new draft cooling tower for the Lactam Department,
- optimisation of the prilling tower operation (Stage 1) – savings of 2,694 GJ annually,
- installation of inverters on two pumps supplying ammonium nitrate solution to the pressure tank at the 11th level of the prilling tower building – savings of 202 GJ annually,
- construction of a dry slag collection unit at the Grupa Azoty S.A. Power Centre, once completed, the hydraulic conveyor system will be decommissioned and the consumption of electricity and water will be reduced. Furthermore, the project will allow us to discontinue slag storage and to recover dry slag for use in road construction,
- construction of a turbo generator set using steam from the Sulfuric Acid Department and the Dual-Pressure Nitric Acid Unit, and 4 MPa steam pipeline, as a result, waste heat will be utilised to generate electricity,
- upgrade of power-generation facilities to provide Grupa Azoty S.A. with a peak-load/reserve source that would meet the emission requirements arising from BAT conclusions as well as to maintain a sustained generation capacity of the process heat source for Grupa Azoty S.A.,
- adapting the flue gas desulfurisation unit to BAT Conclusions, the project will result in the upgrade of boiler K5, i.e. the main source of heat for Grupa Azoty S.A., to meet the new requirements set out in Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions for large combustion plants,
- neutralisation unit (for ammonium nitrate), the project will reduce steam heat consumption in the production process and mitigate negative environmental impacts of the production process.
- upgrade of the heating water network, consisting in replacement of old pipelines insulated using a technology from 50 years ago with a new system of pre-insulated pipes, will significantly reduce heat losses.

Grupa Azoty Puławy

- purchase and installation of a second section of the E-503 cooler on the third and fifth PA synthesis units; which reduced heat consumption by 7,113 GJ,
- construction of a water heater station for water from the Kurówka river at the Water Preparation and Pre-Processing Department using waste heat from the PPA unit; which reduced heat consumption by 32,390 GJ,
- upgrade of the vacuum unit in the TK distillation columns system, which reduced heat consumption by 48,797 GJ,
- upgrade of the unit for CO_2 absorption in potassium carbonate solutions for Line 4 of the gas pretreatment unit at the Ammonia Department, which reduced the overall energy intensity of the process and brought down the wastewater discharge volumes.

Grupa Azoty Police

- replacement of five water supply pumping units at the EC-1 CHP plant (total drive capacity: 1.5 MW),
- change of the method of control of thrust fans at the EC2 CHP plant; the new solution is based on frequency converters, which allows energy consumption to be reduced; the agitator power supply and control systems were also upgraded,
- replacement of luminaires with energy-efficient ones; these measures helped reduce energy consumption by 3,752 MWh,
- replacement of inserts in central-heating heat exchangers,
- regeneration of exchangers in the EC2 system.

Grupa Azoty Kędzierzyn

- thermal upgrade of columns at the Alcohol and Aldehyde Department,

- replacement of ammonia compressors,
- thermal upgrade of the 7MPa steam pipeline with energy consumption reduced by 2,872 GJ,
- thermal upgrade of Oxoplast units with energy consumption reduced by 3,249 GJ.



The energy management system operated by Grupa Azoty Kędzierzyn was certified for compliance with the ISO 50001:2018 standard in 2021. The system fully controls processes related to the economically efficient use of heat and electricity at the company.

Other Group companies

- **Grupa Azoty Fosfory** implemented technical solutions to reduce the use of a seawater pumping plant for cooling sulfuric acid. As a result, the company's energy consumption went down by 641 GJ.
- **Grupa Azoty Koltar** reduced electricity consumption by 50 GJ by replacing lighting points, including trackway lighting towers.

[302-1]

Energy consumption within the organisation, including information on the type of energy carrier used[2]

Fuels used to self-generate electricity, by category of energy carrier (GJ)

Category of energy carrier[3]	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	202
Natural gas and high-methane natural gas	0	0	1,517,373	1,401,236	0	0	0	0

Gaz ziemny oraz gaz ziemny wysokometanowy	0	0	0	0	4,136	6,802	14,785	0
MEK	0	0	0	0	74,210	100,784	0	0
Mazut	0	0	1,693	3,091	0	0	0	0
Fine coal and thermal coal	952,668	926,801	1,239,060	1,128,040	2,440,631	2,756,992	2,888,584	2,944
Fuel oil	1,601	1,500	0	0	0	0	0	18,4
Total	**953,693**	**928,301**	**2,758,126**	**2,532,367**	**2,518,977**	**2,864,578**	**2,914,397**	**2,962**

SCROLL TAB

[2] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.
[3] All categories of fuels used in electricity generation are derived from non-renewable energy sources. The companies do not use renewable fuel sources.

Direct and indirect energy consumption within the organisation [GJ]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	20
Electricity, heat, cooling and steam purchased for consumption (GJ)	2,256,555[4]	2,537,974	1,581,432	1,721,856	3,973,150	4,287,560	961,139[4]	1,115
Electricity, heat, cooling and steam generated by the organisation (GJ)	6,228,080[4]	6,111,199	9,328,019	8,909,067	16,581,682	17,259,855	2,308,762[4]	2,54
Electricity, heat, cooling and steam sold by the organisation (GJ)	1,496,749[4]	1,784,016	454,755	555,036	1,266,193	1,536,008	325,053[4]	527
Total energy consumption within the organisation (GJ)	6,987,886[4]	6,865,157	10,454,696	10,075,887	19,288,639	20,011,408	2,944,848[4]	3,13

SCROLL TABLE

[4] A restatement was made relative to energy consumption data disclosed in the Grupa Azoty Group's 2020 integrated report.

[302-3]

Energy intensity ratio (EIR)[5] [%]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S	
Year	2020	2021	2020	2021	2020	2021	2020	20
Total	33.64	30.86	33.04	33.23	47.51	50.81	50.55	49
Δ2021/2020	-8%		+1%		+7%		-3%	

SCROLL TABLE

[5] Pursuant to the Regulation of the Minister of Climate on the method of calculating the electricity intensity ratio by industrial consumers, the ratio is defined as cost of electricity used for own needs to gross added value, calculated as the arithmetic mean from the last three years preceding the year in which the obligation is performed.



CLIMATE AND ENVIRONMENT

Emissions

[103-1] [103-2]

We recognise the crucial role a reduction of our air emissions plays for environmental and economic reasons. Hence our consistent efforts to minimise harmful emissions. Particulate matter emissions can be reduced thanks to the use of wet scrubbers, cyclones, multicyclones and electrostatic precipitators; Reduced levels of gaseous pollutants are achieved by using scrubbers and thermal reducers, and thanks to the desulfurisation and NOx removal units.

Grupa Azoty S.A. measures emission volumes and concentration levels of pollutants released into the air in line with applicable laws and administrative requirements. As the in-house CHP plant and chemical plants have participated in the emissions trading scheme since 2005 and 2013, respectively, the Company has its annual reports verified and obtains rights on an annual basis.

Grupa Azoty monitors air quality at five sites across Tarnów on a continuous basis. The locations of the monitoring stations were selected to span the wide area that may be affected by particulate matter and gas emissions from the plant.

The main sources of GHG emissions at **Grupa Azoty Puławy** are the CHP plant as well as the ammonia and nitric acid manufacturing facilities, while the ammonium nitrate unit is the main source of dust emissions. In 2021, the ammonium nitrate unit was upgraded to manage waste gas emissions from the ammonium nitrate solution production unit. The construction of a complex of the first granulated ammonium nitrate production line was also completed, which added new products with a lower environmental impact (Pulan® Macro, Saletrzak (CAN), Pulmix®) to the company's portfolio.

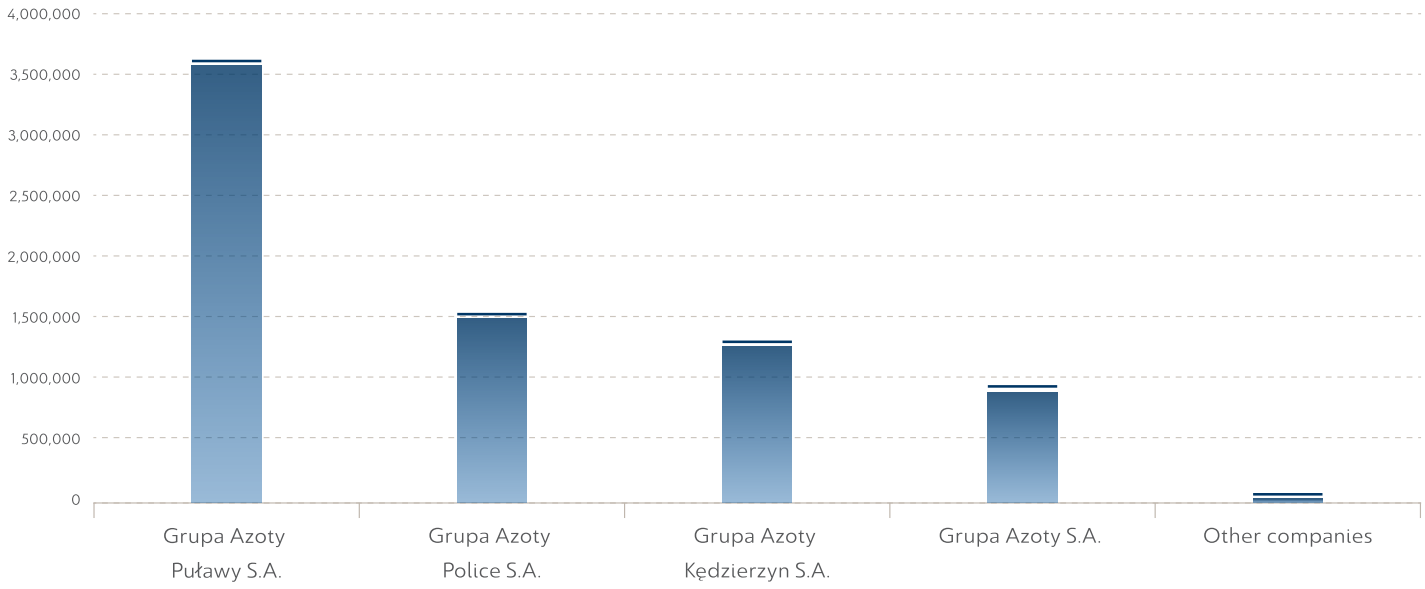
Grupa Azoty Police verifies its emissions data to check whether the units located at the plant operate in compliance with applicable laws.

Grupa Azoty Kędzierzyn conducts continuous and periodic measurements of particulate matter and gas emissions into the air, operates various equipment to limit emissions and complies with the reporting obligations.

[305-1]

Total direct greenhouse gas (GHG) emissions and volume expressed as CO_2 equivalent [t] (Scope 1) for the entire Grupa Azoty Group were 7.491 million tonnes of CO_2e. The four key Group companies account for 99% of Scope 1 emissions: 7.424 million tonnes of CO_2e.

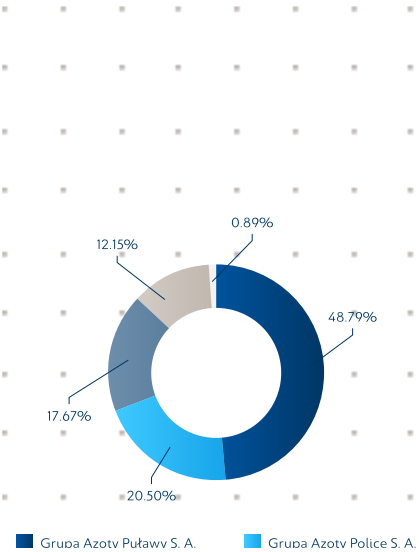
Scope 1 carbon dioxide emissions [t]

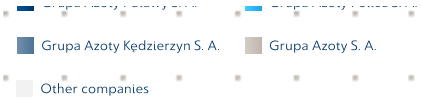


Calculation methodology

- The 2021 emissions were calculated using the GHG Protocol. Scope 1 includes: CO_2, CH_4, N_2O, HFC and PFC. There were no emissions of SF6 or NF3. Base year = calculation year – 2021.
- Biocarbon emissions (wood pellet fuel): 37.1 tonnes of CO_2e.
- Global warming potential: according to AR6.
- An integrated approach has been applied – interest in capital with corporate supervision.

Carbon dioxide emissions include emissions from coal combustion and from the use of natural gas for heating and technological purposes. The emissions are calculated on the basis of the ETS.





[305-1]

Total direct greenhouse gas (GHG) emissions and volume expressed as CO2 equivalent, by GHG category [t][1]

	Greenhouse gas category	2017	2018	2019	2020	2021	Zmian 2020 v 2021
Grupa Azoty KĘDZIERZYN	Carbon dioxide	1,172,569	1,163,313	1,099,624	1,075,602	1,180,845	+9,8%
	Nitrous oxide	111,608	116,857	103,923	89,557	143,100	+59,8%
Grupa Azoty POLICE	Carbon dioxide	1,653,948	1,450,644	1,204,708	1,701,274	1,535,939	-9,7%
	Nitrous oxide	0	0	0	0	0	-
Grupa Azoty PUŁAWY	Carbon dioxide	3,273,991	3,313,366	3,358,454	3,211,085	3,418,516	+6,5%
	Nitrous oxide	171,882	197,858	211,111	196,206	236,320	+20,4%
Grupa Azoty S.A.	Carbon dioxide	1,053,743	971,748	955,953	928,640	855,825	-7,8%
	Nitrous oxide	106,884	119,626	55,927	20,618	54,192	+162,8%
Total	**Carbon dioxide**	**7,154,251**	**6,899,071**	**6,618,739**	**6,916,601**	**6,991,125**	**+1,1%**
	Nitrous oxide	**390,374**	**434,341**	**370,961**	**306,381**	**433,611**	**+41,5%**

SCROLL TABLE

[1] Emissions from installations covered by the EU ETS. A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.

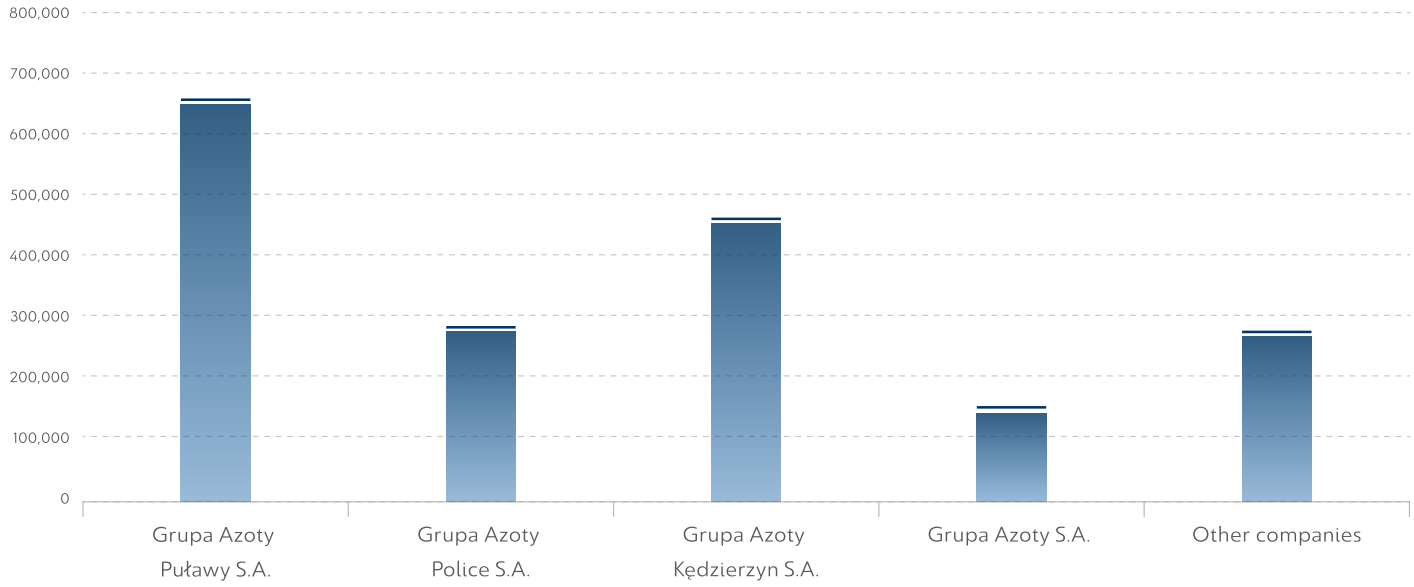
The year-on-year reduction in carbon dioxide and nitrous oxide emissions reported by Grupa Azoty S.A. in 2021 was due to longer-than-expected scheduled maintenance shutdowns of the ammonia and nitric acid units.

The year-on-year increase in nitrous oxide emissions at Grupa Azoty Kędzierzyn in 2021 was attributable to frequent failures of the nitric acid unit that occurred during the year.

[305-2]

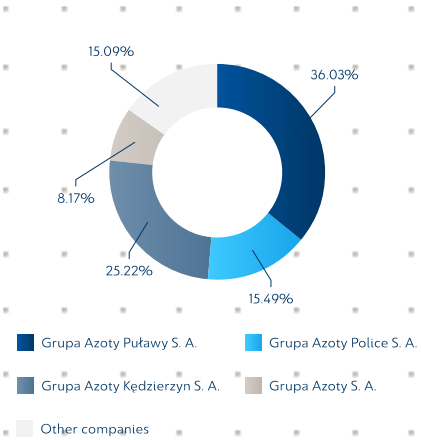
The Group's total indirect (Scope 2) greenhouse gas emissions were 1.837 million tonnes of CO_2e. The four key Group companies are responsible for 85% of the Scope 2 emissions: 1.559 million tonnes of CO_2e.

Scope 2 carbon dioxide emissions [t]



Calculation methodology

The calculation takes into account CO_2 from the combustion of purchased fuels for the generation of imported energy. Base year = calculation year – 2021.
Global warming potential: according to AR6.
An integrated approach has been applied – ownership interest with corporate supervision.



[305-4]

Greenhouse gas (GHG) emissions intensity[2]

CO2 and N2O emissions against the ETS benchmark and BAT recommendations [t]

	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A

	2020	2021	2020	2021	2020	2021	2020	20
CO2 emissions intensity ratio [t CO_2/t NH_3][3]	1.62	1.708	1.836	1.839	1.699	1.705	1.861	1.8
N2O emissions intensity ratio [kg N_2O/t HNO_3]	0.58	0.996[4]	Na	Na	0.767	0.984[5]	0.197	0.2

SCROLL TABLE

[2] The GHG emissions intensity ratio relates to direct emissions from the ammonia unit only.
[3] The GHG emissions intensity ratio relates to emissions from the ammonia unit only.
[4] Grupa Azoty Kędzierzyn operates modern nitric acid production units which meet BAT requirements and emit N2O volumes below the benchmark level. The units experienced frequent failures in 2021, hence the significant increase in N2O emissions relative to previous years.
[5] The increase in nitrous oxide emissions was attributable to deteriorated operation of catalyst kits and the emission reduction catalyst. The 2021 and 2020 ratios were significantly lower than the Best Available Techniques (BAT) recommendations for existing medium-pressure installations (1.85 kg N2O/tHNO3).

[305-5]

Reduction of GHG emissions [$MgCO_2e$]

	2018	2019	2020	2021
Grupa Azoty KĘDZIERZYN	81,773	44,642	9,556	0
Grupa Azoty POLICE	2,500	1,066	0	0
Grupa Azoty PUŁAWY	0	0	0	0
Grupa Azoty S.A.	52,354	63,699	35,309[6]	2,616[7]
Total	**136,627**	**109,407**	**44,865**	**2,616**

[6] The value refers to 2019.
[7] The value refers to 2020.

See how we reduce greenhouse gas emissions [305-7]

Grupa Azoty S.A.:

- in late 2018 catalyst baskets were sealed at the Dual-Pressure Nitric Acid Unit, which helped reduce nitrous oxide emissions by over ten percent,
- the company changed suppliers of catalytic gauzes and had catalyst baskets replaced in mid-2019, which helped achieve further significant emissions reductions.

The effectiveness of these measures is demonstrated by the 101,624 Mg reduction in CO_2(e) emissions from the Dual-Pressure Nitric Acid Unit, from 119,626 Mg in 2018 to 18,002 Mg in 2021.

Grupa Azoty Kędzierzyn:

The Group is implementing capital projects related to the New Energy Concept, using process steam generated from ammonia production. The new system will help reduce emissions, with the start of operation scheduled for late 2022 and early 2023.

Grupa Azoty Puławy:

Listed below are the key capital investment projects designed to reduce emissions that were implemented in 2021:

- construction of a water heater station for water from the Kurówka river at the Water Preparation and Pre-Processing Department using waste heat from the ammonia unit,
- upgrade of the circulation water system at the Ammonia Department,
- replacement and upgrade of the E-E2 stripper at the Urea 2 synthesis section,
- upgrade of the unit for CO_2 absorption in potassium carbonate solutions – Line IV of the Gas Pre-Treatment System,
- utilisation of waste gas from the ammonium nitrate solution production hub at the Ammonium Nitrate and UAN Department.

The CO_2 emissions intensity ratio in ammonia production is stable at approximately 1.7 $tCO_2/t\ NH_3$ (CO_2 emissions were calculated based on total natural gas consumption by the ammonia unit).

[305-7]

Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions, by type of substance (Mg)[8]

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	202
Ammonia (NH_3)	268	265	385	381	984	948.83	249	21
Sulfur dioxide (SO_2)	794	811	1,768	1,482	936	1,029	409	53
Carbon dioxide (CO_2)	874,160	870,975	1,705,879	1,528,069	1,696,294	1,836,010	928,640	893,(
Sulfuric acid (H_2SO_4)	0	0	51	52	0	0	79	71
Volatile organic compounds (VOC)	35	37	4.23	4	42	43	0	0
Methane (CH_4)	159	161	0	0	6	8	9	9
NO_2	693	753	822	780	2,230	2,436	4,779	4,58
Nitrous oxide (N_2O)	301	539	0	0	779	796	167	19
Melamine dust	0	0	0	0	6.36	7	0	0
Urea dust	37	63	83	54	26	26	0	0
Ammonium nitrate dust	96	97	0	0	340	292	0	0
Ammonium sulfate dust	0	0	1.68	2	7	8	2	3
Particulate matter	141	151	0	0	0	0	101	10

SCROLL TABLE

	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
Particulate matter from fuel combustion	44	61	21	13	133	107	8	19,7
Carbon monoxide (CO)	264	274	128	185	201	163	49	36
Aliphatic hydrocarbons	14	14	0	0	41	22	0	0
Fluorine compounds	8	9	5	4	0.34	0.254	0	0
Other	41[9]	364[10]	0	0	36.83[11]	72[12]	2[13]	8[14]

[8] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.
[9] Chlorine and its inorganic compounds
[10] Alcohols and aliphatic aldehydes, hydrogen chloride
[11] Sulfur trioxide, hydrogen cyanide, benzene, aromatic hydrocarbons, hydrated lime dust, fertilizer dust, chlorine, mercury, nickel, chromium, lead, zinc, copper, cadmium, arsenic, PCDD/PCDF and PAH.
[12] Sulfur trioxide, hydrogen cyanide, benzene, aromatic hydrocarbons, hydrated lime dust, fertilizer dust, chlorine, mercury, nickel, chromium, lead, zinc, copper, cadmium, arsenic, hydrofluorocarbons
[13] Cyclohexanone
[14] Cyclohexanol, cyclohexanone, sulfur trioxide, formaldehyde and other

See our position on CO2 emission allowances

We believe the green transition can happen in a fully effective way if EU and non-EU producers can compete on a level playing field in terms of climate policy costs. We are convinced that for the European Commission's carbon border adjustment mechanism (CBAM) to bring the desired effects, it is necessary to maintain free emission allowances[15]. Otherwise, the position of non-EU businesses that do not observe the equally high environmental and climate protection standards will be strengthened. The key proposals in this respect were put forward by Grupa Azoty during a meeting of the representatives of Fertilizers Europe with Frans Timmermans, Executive Vice President of the European Commission. We stressed the need to support the green transition of European industry by helping the sector on the investment front, with a special focus on operating costs generated by zero- and low-carbon technologies in industrial applications.

The report towards a WTO-compatible EU carbon border adjustment mechanism is to ultimately put a carbon price on certain goods imported from outside the European Union based on carbon emissions associated with their production, similar to that paid by European producers under the existing emissions trading scheme. However, there is still uncertainty about how effective the proposed CBAM will prove to be. Foreign exporters will only pay a carbon price under CBAM for their exports to the EU, while their output sold on other markets will not be subject to any climate charges. For this reason, it is important that the introduction of CBAM does not put an end to free allocation of emission allowances for EU producers, together with support for RES. The lack of equivalent mechanisms may create a continuing financial incentive for consumers to buy more carbon-intensive goods imported from third countries that do not pursue the same ambitious climate policies, and thus ultimately increase global emissions rather than reduce them.

[15] https://grupaazoty.com/aktualnosci/grupa-azoty-apeluje-o-rowne-warunki-konkurowania-producentow-unijnych-i-pozaunijnych-w-odniesieniu-do-kosztow-polityki-klimatycznej



CLIMATE AND ENVIRONMENT

Water

[103-2] [303-1]

Group Azoty S.A. uses water for industrial purposes, as a cooling agent, treats water to make it suitable for drinking, and uses it to produce process waters and for fire fighting. Water used by the Company is abstracted from a surface intake on the right bank of the Dunajec river and an underground intake from Quaternary water-bearing formations (first aquifer). Permitted water abstraction volumes are specified in water-law permits.

The Company supplies drinking water to third parties, both businesses and households. The drinking water treatment station has a HACCP system in place, under which the drinking water production process is monitored along the entire chain, from water intake, through treatment, to distribution. High quality of that water is ensured by a food safety management system compliant with the ISO 22000:2005 standard. Water quality is monitored through continuous testing performed by the Laboratory of the Utilities Production and Distribution Department and analytical oversight provided by the County Sanitary and Epidemiological Station in Tarnów as part of its monitoring activities. Given the analytical scope of the monitoring, analytical tests are contracted out to the municipal water supply and sewerage company (MPWiK) in Kraków.

At Grupa Azoty S.A., water drawn from the industrial water system and used at the Luwy unit is then recirculated to three cooling circulation systems to compensate for water losses. Unused excess water from the Luwy unit is fed back into the industrial water system. The Group has also launched a reverse osmosis unit and a system of water recovery from the condensate processing facility. Steam condensates are returned from the production units to the condensate processing facility, where they undergo demineralisation and then are fed back into the system for further use in the form of pre-processed (demineralised) water. This

water is fed into utiliser boilers. In addition, it is also used in the Tarnoform unit start-up process and to compensate for losses in the heating water network. Any excess is returned into the demineralised water system. The amount of water reused in 2021 was 1.484 million cubic metres, accounting for 13% of the total water abstracted by the Company.

Grupa Azoty Police

Grupa Azoty Police draws water from two main sources: the western arm of the Oder river and the Gunica river.

The water is used for industrial purposes, as a cooling agent, and for fire-fighting applications. The volume of water drawn from the two rivers is continuously measured by means of flow meters, while the quality of water is examined at regular intervals (once every two months) by an accredited laboratory. Abstraction of water from the Oder does not materially affect the water quality or resources of the river.

The company's water footprint, i.e. the amount of water it uses directly and indirectly, is monitored. As Grupa Azoty Police draws water mainly from internal sea waters, there is no risk of its shortage. There is a shortage of water from the Gunica, from which water is abstracted periodically depending on the salinity of water from the Oder. The water intake from the Gunica river was constructed along with a surface water storage and pressure-equalising tank, which is to secure sufficient amount of water without exploiting water resources of the river. Due to high salinity of the Oder, the company also constructed an internal sea waters desalination unit to eliminate the risk of exceeding the annual water abstraction limit for the Gunica river.

Grupa Azoty Puławy

Grupa Azoty Puławy abstracts surface water from the Vistula and Kurówka rivers, as well as underground water for industrial, energy, sanitary and drinking purposes in its own facilities and for external users. The company operates its own water intake points and water treatment systems. The water used for production and cooling undergoes decarbonisation or demineralisation processes, as appropriate.

Grupa Azoty Kędzierzyn

Grupa Azoty Kędzierzyn uses water for industrial purposes, as a cooling agent, as sanitary and drinking water, to produce process waters, and for fire-fighting applications. Grupa Azoty Kędzierzyn abstracts water from surface intake points on the Oder river and the Łącza stream, and from Tertiary and Quaternary reservoirs (deep wells). The company also purchases water from ground dewatering at the sand quarry of Kopalnia Piasku Kotlarnia S.A. 2021 was another year in which the water abstraction volume decreased (by 3.6% on 2020), while the product output grew (up 2.9%) on the back of upgrade work on the ammonia unit performed as part of the New Energy Concept. In 2021, there was also a favourable shift in the structure of water abstraction – the company reported a decrease (from 22% to 15%) of the share of groundwater in the total volume of water drawn. The improvement was possible thanks to better availability of surface water from the Łącza stream (an increase of 509.8 thousand cubic metres, or 18.3%).

Other Group companies

- At **Grupa Azoty SIARKOPOL**, a closed water circuit is used in the Osiek Sulfur Mine, as a result of which no wastewater is discharged to the environment. Thus the amount of reused water at Grupa Azoty Siarkopol in 2021 was 2.202 million cubic metres, that is 83% of the total volume of water abstracted by the company.
- **COMPO EXPERT** – most of the surface (river) water abstracted by the Krenfeld plant in Germany is reused for technological processes up to three times before being discharged to the public sewage network.
- **Grupa Azoty Jednostka Ratownictwa Chemicznego** – in the process of hydrotransport of ash at the Czajka 1 and Czajka 2 landfill sites, water is returned and reused in closed circuit to reduce water consumption.

The Group does not operate in water stress areas.

[303-3]

Water withdrawal from all areas, by source [m^3 / Ml][1]

Water source	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A

Water source	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	20
Other groundwater	0	0	5	14	0	0	0	
Fresh groundwater	1,542,174	974	0	0	5,325,331	5,875	395,000	32
Other third-party water	0	0	0	0	0	0	0	
Other internally produced water	0	0	0	0	0	0	0	
Other seawater	0	0	148,739,456	144,884	0	0	0	
Desalinated seawater	0	0	0	0	0	0	0	
Fresh surface water	3,747,795	3,654	1,785,700	1,693	72,987,482	77,850	10,770,000	10,9
Fresh groundwater from third parties	1,773,026	2,404	311,085	274	0	0	0	
Total	**7,062,995**	**7,032**	**150,836,246**	**146,851**	**78,312,813**	**83,725**	**11,165,000**	**11,**

SCROLL TABLE

[1] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. Grupa Azoty Puławy and Grupa Azoty Kędzierzyn do not withdraw water from water stress areas. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres.

[303-3]

Water withdrawal from water stress areas [m^3 / Ml][2]

Water source	Grupa Azoty POLICE		Grupa Azoty S.A.	
	2020	2021	2020	2021
Other groundwater	0	0	0	0
Fresh groundwater	0	0	395,000	327
Other seawater	0	0	0	0
Fresh surface water	1,785,700	1,693	10,770,000	10,994
Fresh groundwater from third parties	0	0	0	0
Total	**1,785,700**	**1,693**	**11,129,000**	**11,321**

[2] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. Grupa Azoty Puławy and Grupa Azoty Kędzierzyn do not withdraw water from water stress areas. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres.

[303-4]

Water discharge by discharge point [m^3 / Ml][3]

Discharge point	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
	2020	2021	2020	2021	2021	2021	2020	20
Other organisations	0	0	116,000	0	0	0	0	
Third parties excluding other organisations	0	0	0	0	0	0	1, 370,000	
Seawater	0	0	110,669,343	108,268	0	0	0	
Surface water	6,412,268	5,981	142,723,638	32,540	68,053,158	67,238	3,523,000	4,
Total	**6,412,268**	**5,981**	**253,508,981**	**140,808**	**68,053,158**	**67,238**	**4,893,000**	**4,**

SCROLL TABLE

[3] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres.

Water discharge in all areas, by type of water [m^3 / Ml][4]

Water type	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
	2020	2021	2020	2021	2020	2021	2020	20
Fresh	6,412,268	5,981	0	0	0	67,238	4,893,000	4,7
Other	0	0	110,669,343	140,808	0	0	0	0
Total	**6,412,268**	**5,981**	**110,669,343**	**140,808**	**0**	**67,238**	**4,893,000**	**4,7**

SCROLL TABLE

[4] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres.

Water discharge in water stress areas, by type of water [m^3 / Ml][5]

Water type	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.

Water type	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
	2020	2021	2020	2021	2020	2021	2020	20
Fresh	0	0	0	0	0	0	4,893,000	4,7
Other	0	0	0	0	0	0	0	0

SCROLL TABLE

[5] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres.

Water discharge by stage of treatment [m^3 / Ml][6]

Treatment stage	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
	2020	2021	2020	2021	2020	2021	2020	20
No treatment	0	0	110,669,343	108,268	0	0	287,000	2
Primary	2,452,010	2,429[7]	32,054,295	32,540[8]	1,392,210	1,623[9]	3,236,000	3,1
Secondary[11]	2,452,010	2,429	0	0	1,683,820	1,644	1,370,000	1,3
Tertiary	6,412,268	5,981[12]	0	0	68,044,158	67,238[13]	0	0
Total	**11,316,288**	**5,981**	**142,723,638**	**140,808**	**68,044,158[14]**	**67,238[14]**	**4,893,000**	**4,7**

SCROLL TABLE

[6] The Group does not classify water as low-mineralised water and other water, as such division does not apply to its operations. The data for 2020 is presented in cubic metres. Since 2021, water data has been reported in megalitres

[7] The mechanical wastewater treatment process at the Central Mechanical Wastewater Treatment Plant includes removal of debris, sands and fatty substances from wastewater

[8] Neutralisation, aeration, coagulation, sedimentation, sediment separation, wastewater deeper treatment in pressure-equalising tanks

[9] Central Industrial Wastewater Treatment Unit (COŚP) – mechanical and chemical treatment plant

[10] Cooling water

[11] Mechanical and chemical treatment process

[12] Removal of debris and fatty substances from wastewater at the Piskorzowiec plant. Wastewater is self-purified in the system of earth sediment and pressure-equalising tanks

[13] Tertiary biological treatment unit (pond) – natural biological and physico-chemical processes of self-purification from nitrogen and organic compounds. Through the discharge channel, wastewater generated by the company, including that treated on individual treatment units, flows up to the tertiary biological wastewater treatment unit (pond)

[14] All wastewater discharged by Grupa Azoty PUŁAWY, including wastewater that has received primary and secondary treatment, undergoes tertiary treatment



CLIMATE AND ENVIRONMENT

Wastewater

[103-2] [303-1] [303-2]

Production processes run at our plants involve the generation of wastewater. The Group has implemented methods of its treatment and disposal to minimise the resulting environmental nuisance.

Grupa Azoty S.A.

Grupa Azoty S.A. generates process wastewater, sanitary sewage, spent cooling water, and stormwater. They are transported to treatment facilities. Industrial wastewater and sanitary sewage undergo treatment at the Central Wastewater Treatment Plant, while the Biological Wastewater Treatment Plant receives industrial wastewater containing biodegradable substances. This type of wastewater is then additionally streamed to the Wastewater Treatment Facility operated by the Tarnów Water and Sewage Utility (Zakład Oczyszczalni Ścieków Tarnowskich Wodociągów Sp. z o.o.). Stormwater and spent cooling water from Grupa Azoty S.A.'s premises is transported by means of separate collectors via the retention pond, and then discharged through the Sutro weir into the Dunajec river.

The company has put in place solutions to prevent negative consequences of a potential failure of one of the wastewater management components. The system can be shut off by closing the stormwater outflow valve and pumping all wastewater to the Central Treatment Plant to prevent pollutants escape. It is also possible to direct the entire volume of wastewater generated by Grupa Azoty S.A. to the Wastewater Treatment Facility operated by the Tarnów Water and Sewage Utility.

Parameters of the wastewater are monitored on an ongoing basis by means of remote analysers. In addition, wastewater samples are laboratory-tested for pollutants. The discharged wastewater meets the parameters defined in the integrated permit.



BEST PRACTICE

Group Azoty S.A. has implemented a project to construct a pilot-plant unit for biological treatment of wastewater from production units. The project will make it possible to carry out tests to develop an upgrade concept for the Biological Wastewater Treatment Plant.

Grupa Azoty S.A. has successfully pilot-tested recirculation of wastewater treated at the Central Wastewater Treatment Plant to the industrial water network.

Grupa Azoty Kędzierzyn

The company generates process wastewater, spent cooling water and stormwater. Grupa Azoty Kędzierzyn has a modern, regularly upgraded multi-stage wastewater treatment and disposal system, making the company self-sufficient in wastewater treatment.

The system consists of the Central Mechanical Wastewater Treatment Plant, the Central Mechanical and Biological Wastewater Treatment Plant, and the Piskorzowiec Treatment Plant. The treated wastewater is discharged into the Oder river.

An upgrade (completed in 2018) helped improve the nitrification and denitrification process, with a unique wastewater heating unit installed for effective removal of nitrogen compounds, also during winter. The upgrade also included replacement of the fine bubble submerged aeration system, replacement of air blowers and of the automatic control system for the oxygen dosing process. At Grupa Azoty Kędzierzyn, wastewater is thoroughly monitored both at the stage of its generation at individual units and at the time of discharge.

The wastewater treatment system at Grupa Azoty Kędzierzyn meets the BAT CWW Conclusions, which are much more stringent than standards set out in the Minister of Water Management's Regulation on substances particularly harmful to the environment.

The integrated permits set the permitted levels of wastewater pollutants generated at individual units. As part of the ISO 14001 environmental management system, system documents (work instructions and process descriptions) have been developed transposing the provisions of the integrated permits.

In 2021, no wastewater quality parameter was exceeded at the company. Compared with 2020, the volume of wastewater fell by 431.4 thousand cubic metres, i.e. 6.7%, thanks to increased use of the system of wastewater recirculation for the production of industrial water (an increase of 1,050.0 thousand cubic metres, i.e. 65.5%). As for discharge of pollutant loads, a decrease was recorded in both organic compounds (down 17.5%) and nitrogen compounds (down 32.7%).

Grupa Azoty Puławy

Grupa Azoty Puławy generates industrial wastewater, including wastewater from cooling circuits of process units, sanitary sewage, stormwater and spent cooling water from the CHP plant.

The company has implemented a multi-stage wastewater treatment system. Its first component is comprised of pretreatment facilities located at individual units. Pretreated wastewater is then transported to the central wastewater treatment facility, built as a multi-unit system that uses different technologies for specific types of wastewater. The system consists of a biological blackwater treatment unit, a biological industrial wastewater treatment unit, a central mechanical and chemical industrial wastewater treatment unit, and a tertiary biological treatment unit.

The wastewater discharge channel functions as a collector of the entire wastewater system. It is an open channel which, through separate connections, collects wastewater treated at individual sections of the wastewater treatment system, as well as other wastewater from the company's units and from third parties. Wastewater is transported through the discharge channel to the tertiary biological treatment unit (pond), where natural biological and physico-chemical processes of self-purification from nitrogen and organic compounds occur, and afterwards is discharged to the Vistula river.

The wastewater discharge channel is fitted with a system linking it to a channel transporting surface water withdrawn by the company and enabling recirculation of some (approximately 15%–30%) of the wastewater discharged.

Permitted volumes of pollutant discharges are specified in the company's integrated permit. As the existing system does not ensure compliance with the requirements of the BAT CWW Conclusions, Grupa Azoty Puławy commenced the construction of a new central biological wastewater treatment plant. In 2021, work was continued to select a contractor for the project design. Laboratory tests of discharged wastewater streams were completed, final test reports were received and tender documentation was prepared. The company has been granted a temporary derogation from the BAT CWW Conclusions for the purpose of completing the construction of the new wastewater treatment plant.

The quantity and quality of water withdrawn and discharged are monitored in accordance with the provisions of the company's integrated permit.

Grupa Azoty Police

Industrial wastewater from production processes is treated at the company wastewater treatment plant. Spent cooling water and stormwater from the plant premises are discharged directly into the surface waters of the Oder. Spent cooling water undergoes automatic pH monitoring on a continuous basis.

To ensure legal compliance, the treated wastewater is monitored in accordance with the terms of the integrated permit. The volume of discharged wastewater is measured on an ongoing basis, while the quality of wastewater discharged into water is examined at regular intervals by an accredited laboratory.

The company meets all the requirements set out in its integrated permit, the regulation of the Ministry of Maritime Economy and Inland Navigation, and the BAT Conclusions.



CLIMATE AND ENVIRONMENT

Biodiversity

[103-2] [304-1] [304-2]

At the Grupa Azoty Group, we demonstrate that it is possible to carry out large-scale industrial activities in a responsible and environmentally sound manner. We have been taking preventive measures to offset our adverse environmental impacts for years. Some of the Group companies are located in the vicinity of or manage protected areas. In 2021, we did not identify any significant adverse impacts of the companies' operations on biodiversity in protected areas or in high biodiversity areas outside of protected areas.

Grupa Azoty S.A.

Grupa Azoty S.A.'s premises are located in Mościce, a district of Tarnów located in the western part of the city. In 2021, Grupa Azoty did not identify any adverse effects of its products and services on biodiversity. In the Company's risk management system, the risk related to the impact on biodiversity is a newly identified risk, which in 2021 was under appraisal.

See our approach to TCFD recommendations

The Group has registered its products in accordance with the REACH Regulation and chemical safety reports have been prepared. Appropriate instruction manuals and data sheets describing their possible effects on living organisms have been prepared for each product. Periodic inspections by administrative authorities revealed no irregularities.

Grupa Azoty Puławy

Grupa Azoty Puławy is situated in a forest complex, on the right bank of the Vistula river, approximately three kilometres from the town of Puławy. The following Natura 2000 protected areas are located in the vicinity of the Company's site:

- Puławy area,
- Lower Wieprz River,
- Nałęczowski Plateau,
- Middle Vistula River Valley,
- Lesser Poland Vistula Gorge.

The company's site also neighbours with the following nature reserves, parks and protected landscape areas:

- Piskory nature reserve,
- Łęg na Kępie nature reserve in Puławy,
- Czapliniec nature reserve near Gołąb,
- Kazimierski Park Krajobrazowy landscape park,
- Pradolina Wieprza (Wieprz River Glacier Valley) protected landscape area,
- Kozi Bór protected landscape area.

It is located in an enclave surrounded by the ecological corridors of the Middle Vistula River Valley, Lower Wieprz River Valley and Vistula River Gorge of Lesser Poland. Calculations of air pollution dispersion made for the purposes of the documentation prepared to obtain the integrated permit show that the company does not breach the air quality standards outside the area it owns.

The amount of noise from noise emitters on the premises of Grupa Azoty Puławy does not exceed the permitted night- and day-time noise levels in acoustically protected areas.

Since 2005, there has been a peregrine falcons' brooding nest on the flue gas stack of Grupa Azoty Puławy's FGD unit. Every year since 2013, the birds have been laying eggs in the nest. More than 20 young falcons have already left the nest. The flue gas stack, part of the CHP plant, is 160 metres tall and provides an excellent location for the peregrine falcon's nest. There are tens of avian species present on the company's site. Ornithologists observe the birds' environment, taking care of the nest and ringing falcon hatchlings each year. The programme was continued in 2021.

Grupa Azoty Police

Grupa Azoty Police does not own any areas of significant natural value. No part of the company's premises is subject to national or EU nature protection regulations. However, the nature reserves of Białodrzew Kopicki, Olszanka, Uroczysko Święta, and Świdwie are located in the vicinity of the company's site. The company also neighbours with Natura 2000 sites:

- Police Kanały (Police Canals) – about 400 metres from the plant site,
- Zalew Szczeciński (Szczecin Lagoon) – about 2 kilometres from the plant site,
- Ostoja Wkrzańska (Wkra Refuge, formerly Puszcza Wkrzańska) – about 2 kilometres from the plant site,
- Oder Estuary and Szczecin Lagoon – about 2.5 kilometres from the plant site.

The Police-based company operates two landfills on its premises. Thanks to the strict technological regime, their environmental impact has been reduced to a minimum. For more than a quarter of a century, Grupa Azoty Police has been consistently introducing higher vegetation cover on the landfill site. The area is covered mainly with aspen, acacia, hybrid willow, birch, poplar, elderberry, pine, silverberry shrubs and Syberian peashrub. The condition of the grass sod, the extent to which it covers the site, the visual appearance of the plants and their ability to go through all development phases, including growth of fertile shoots, demonstrate that numerous plant species develop normally in this environment. For a number of years, the landfill site has been a habitat for many plant species and animals, such as beech martens, otters, stoats, foxes, roe deer, boars and about 100 species of birds.

Based on observations by ornithologists from the Szczecin University, the area adjacent to the landfill site has been found comparable to the Świdwie reserve in terms of the number and diversity of bird species.





BEST PRACTICE

Nesting boxes for peregrine falcons have been installed on one of the flue gas stacks of Grupa Azoty Police's plant. The company covers the costs of online broadcast from the nest and from the front of the nesting box. The project, continued in 2021, has been run in cooperation with the 'Sokół' ('Falcon') Wildlife Protection Association of Włocławek since 2016.



BEST PRACTICE

At the Grupa Azoty Group, we are aware that big changes are sometimes made up of small steps. On the fencing of Grupa Azoty premises at Chemiczna Street in Tarnów, the company employees planted Virginia creeper cuttings. The vine grows very fast and can absorb up to 500 kg of CO_2 per year. It will process the absorbed carbon dioxide into oxygen, and its climbers are capable of capturing and accumulating heavy metals, as well as removing fine dust and impurities from the air. The project was joined by representatives of the Grupa Azoty Management Board and a sizeable group of employees of the Tarnów-based company. Tools used in the 'Green Fence' campaign were provided by a company which manufactures them using plastics produced by the Grupa Azoty Group.

See an example of remediation projects at Grupa Azoty sites

Wherever possible, we seek to compensate nature for the effect of our industrial activities. One example is our Osiek Sulfur Mine, where sulfur is produced using the underground smelting method, in boreholes that run 130-170 metres deep, with closed circulation of formation water. In this method, hot water is injected through the boreholes into the deposits, causing sulfur to melt. Molten sulfur is then lifted to the surface by compressed air. Sulfur production interferes with the natural environment, but not so much as to threaten the equilibrium and affect biodiversity.

With thick vegetation cover, the mine site does not look like a mining area at all. The mine operates in harmony with nature and the extraction process itself is environmentally sound. In addition, Grupa Azoty Siarkopol, which manages the mine, has for years been running an ambitious remediation programme, with the ultimate goal to achieve full restoration of the natural environment. The mining field in Osiek and the areas already remediated have become an excellent habitat for wildlife and birds. More than 100,000 trees in total have been planted, and the aggregate area of restored land exceeds 45 ha.



Sustainable products

[103-1] [103-2]

We want our product offering to be sustainable and responsive to challenges of the contemporary world. We are developing a portfolio of sustainable products, both fertilizers and plastics. We are also changing our manufacturing practices by managing raw materials more efficiently and cutting energy consumption. Production operations conducted in an efficient, innovative and environmentally sound manner are the priority of our sustainable development.



OUR STRATEGIC OBJECTIVES UNTIL 2030

GREEN PRODUCTS

- implement the 'Green Azoty' project
- collaborate with external partners in developing green products
- implement new solutions under the ongoing accelerator programmes
- expand in-house research to refine and develop new green products

CIRCULAR ECONOMY

- implement waste processing projects
- upgrade systems supporting the management of natural resources within the organisation

SUSTAINABLE AGRICULTURE

- educate and support farmers in precision fertilization and practical application of Grupa Azoty's new green products
- run a sustainable agriculture awareness campaign

We want all entities engaged in agricultural production to see the Grupa Azoty Group as much more than just a manufacturer of fertilizers. We have comprehensive, reliable and up-to-date knowledge of effective agricultural technologies. We know how the size and structure of an agricultural farm, production methods or the machinery park affect the results of agricultural production. We are able to provide valuable advice on how to increase the quantity and quality of crops by adding nitrification inhibitors to fertilizers that increase nitrogen uptake. As a result, the effects of the fertilizer application are prolonged and its losses are significantly reduced. We also advise farmers on how to reduce nitrogen doses and better adapt fertilization timing to the timing of other agricultural treatments and weather conditions.

We manufacture fertilizers tailored to the specific needs of different fields and crops. In this way soil receives only those nutrients it actually needs. Our services to farmers, based on a satellite technology and advanced scanners, support and popularise precision agriculture and help reduce fertilizer consumption by up to 30%. We share our fertilizer expertise with farmers and food producers through a wide range of nationwide educational initiatives.

Read more about our educational initiatives for farmers

Read more about our initiatives for precision agriculture

Sustainable products are increasingly becoming the specialisation of our Plastics segment. In 2021, we continued research and development work aiming to expand our product portfolio in line with the principles of circular economy. We focused our research efforts on the development and implementation of new specialised, high-margin plastics technologies. In 2021, we also consistently took steps to curtail the consumption of energy and raw materials in our production processes. We identified three key nodes of the product chain that have an impact on environmental protection in general. Given their bearing on sustainability, the implementation of these three key tasks has become a priority in driving innovation for the Plastics segment.

Read more about our plastics application design and development centre

In line with our ESG strategy:

- we support food security
- we design and manufacture biodegradable plastics
- we apply effective fertilizer formulas helping reduce greenhouse gas emissions.

See our green products [102-12]

Modern and environmentally-friendly NPK fertilizers

Fosfarm is a line of modern and environmentally-friendly NPK fertilizers, representing a rational and effective source of nutrients. The new line developed by the Grupa Azoty Group's Gdańsk-based company is another step towards achieving the goals of the European Green Deal. The fertilizers are manufactured in accordance with the principles of sustainable development, including circular economy. They are enriched to include calcium, magnesium, sulfur and micronutrients, such as copper and zinc. The phosphorus content, as well as the calcium, magnesium and micronutrients, come from renewable sources only. Our new fertilizer formulas allow agricultural producers to comply with the applicable environmental regulations and requirements. Fosfarm fertilizers facilitate the uptake of phosphorus by plants, stimulating the synergism of elements. The phosphorus contained in the fertilizers is soluble in ammonium citrate and water (one-quarter of the phosphorus is water soluble). Phosphorus compounds soluble in those two substances show comparable effectiveness regardless of when they are applied, provided they are placed at the correct depth in the soil. Fosfarm makes it possible to obtain optimum and quality crops while reducing pollution and protecting the production potential of the environment.

Marketing urea with urease inhibitor

Since August 1st 2021, the use of traditional urea has been prohibited in Poland. To help food producers adapt to the new regulations, we have placed on the market a urea product with urease inhibitor under the trade name Pulrea + INu. Pulrea +INu increases the uptake of nitrogen from the fertilizer and provides a stable source of nitrogen for plants. The fertilizer does not have to be mixed with soil. The inhibitor in the fertilizer temporarily blocks urease, which is a naturally occurring enzyme that decomposes urea. As a result, the effects of the fertilizer application are prolonged and nitrogen losses caused by volatile ammonia escape are much lower. Rain allows urea to be carried into the soil, where it is decomposed into ammonium cations absorbed by plants. The use of urea with urease inhibitor makes it possible to meet the requirements of the EU NEC Directive for fertilizers, providing for a reduction of ammonia emissions into the atmosphere. What is more, lower ammonia emissions into the atmosphere are one of the challenges of the European Green Deal.

Humic acid line

A pilot line for the production of humic acids, with an annual capacity of 2,500 tonnes of Tohumus (the main product), was launched at the Grupa Azoty S.A. Implementation Centre. The new line was developed through research work carried out at the Grupa Azoty Research and Development Centre in Tarnów. It also marks another step taken by Grupa Azoty in its pursuit of the European Green Deal objectives.

Soils in Poland have a low humus content. Natural factors such as climate, the high share of sandy soils and soil acidification are not conducive to accumulating and retaining a stable content of humic substances – the main components of soil organic matter. To address those challenges, the Grupa Azoty Group is launching a new line of products to introduce humic acids into soil.

The presence of humic acids can stimulate vital processes of soil organisms, support plant growth, and also accelerate decomposition of postharvest leftovers. The introduction of humic compounds into soil increases plant vigour and root growth, which is particularly critical during drought. The introduction of humic compounds into soil is one of the methods to increase production of good quality food while maintaining soil fertility.

Humic acids are produced by the Grupa Azoty Group based on a technology for making growth stimulators from a natural raw material, that is lignite. The process takes place in relatively low temperatures (40–50°C), which do not cause thermal degradation of humic acid chains, thus increasing their efficacy in agricultural applications. The product's efficacy was evaluated by the Institute of Soil Science and Plant Cultivation – State Research Institute and by the National Institute of Horticultural Research in Skierniewice, both of which confirmed a significant effect on root-mass growth and increase in crop yields.

The production of humic acids is part of the efforts to ensure a circular flow of raw materials. The production line does not generate any additional waste and the technology itself was fully developed by the Grupa Azoty Group's in-house team in response to the needs of modern agriculture. The resulting product is 100% bioorganic.

Work on inhibitors

Grupa Azoty Chorzów is currently in the process of applying for a patent for two nitrogen stabilisers for use in nitrogen fertilizers containing amide nitrogen. Azovilen G is based on NBPT as the active substance. The use of Azovilen G reduces urease activity in

soil, which prevents excessive transformation of urea into ammonia and carbon dioxide, thus reducing their emissions into the atmosphere. This increases the efficacy of nitrogen in the fertilizer and improves crop yields and their quality. Azovilen S will be used as an additive for urea-ammonium nitrate solutions and application over urea.

Granulated fertilizer unit

Grupa Azoty Puławy brought online a granulated fertilizer plant. Apart from the production lines, it includes Poland's most advanced packing and seasoning facilities. The first line was pre-commissioned in July 2020, with continuous fertilizer production launched in 2021. The plant is one of the largest fertilizer projects completed in Poland in recent years, creating new jobs at Grupa Azoty Puławy.

Mechanically granulated ammonium nitrate and calcium ammonium nitrate manufactured at the plant are an answer to the growing demand from large-scale agriculture in Poland and Europe. The application of fertilizers in the form of larger-diameter granules offers a wider spread pattern, which improves sowing efficiency, especially on large farms. They are therefore a product of first choice for foreign customers, and demand for such fertilizers is expected to grow also in the Polish market given the ongoing land consolidation process.

In addition to the production units, the project also involved the construction of infrastructure and logistics facilities for unloading and processing of raw materials, as well as a warehouse for finished products and a packing facility, which was equipped with fully automated machines for packing fertilizers into flexible containers (big bags), the only solution of this type deployed in Poland. Under the operator's supervision, the machines take empty containers, fill them with the product, secure the packaging against spilling, label it and transport it over a line of conveyors to the reception and dispatch point. The capacity of two packing machines is about 180 tonnes per hour (some 4,300 tonnes/day).

[102-12]

Thermoplastic starch production technology

Grupa Azoty S.A. has launched a pilot line for the production of thermoplastic starch, with a capacity of 300 tonnes per year. It has also acceded to cooperation agreements with Polska Grupa Opakowaniowa Opakomet S.A. and the Forestry Research Institute, and signed a letter of intent with the State Forests National Forest Holding. Thermoplastic starch is fully biodegradable and perfectly suitable for producing eco-friendly plant pots, packaging and fertilizers. The polymer is made from potatoes.

Polyamide 6

Polyamide 6 is an engineering plastic used in many sectors of the economy, which substantially improves or reduces human impact on the environment. In the food industry, it is used in the manufacturing of cling film that significantly extends the shelf-life of food, preventing its wastage. In the automotive industry, parts made of polyamide 6 markedly reduce the weight of cars, translating into lower fuel consumption and indirectly protecting the environment. Polyamide 6 is also used in the textile industry as it extends the useful life of clothes and carpets. The Grupa Azoty Group manufactures polyamide 6 according to state-of-the-art technologies developed by leading Western providers, such as Zimmer and Uhde Inventa-Fischer. In recent years, the production technologies have been modernised and their environmental impact has been materially reduced. The consumption of raw materials and energy has also been lowered.

In 2021, we began efforts to obtain the ISCC Plus certificate for our polyamide 6 product. The ISCC Plus standard ensures that raw materials and intermediate production inputs are sourced in a sustainable manner, thus reducing the consumption of fossil resources and increasing the use of renewables. With the ISCC Plus certification, we will be able to offer polyamide 6 to all producers who want to create green, environmentally sustainable products.

ε-caprolactone

In 2021, Grupa Azoty Puławy worked on an innovative technology to obtain ε-calcolactone – a biodegradable monomer for the production of polycaprolactone, which increases the flexibility of plastics. Polycaprolactone is used as a raw material for producing films, fibres, threads, polymeric compositions, etc. It blends easily with many other polymers and is used as a plasticizer that increases the flexibility of plastics and their biodegradability. As such, it can be used to produce single-use biodegradable plates or cups. The application of PCL is particularly important in medicine, where it is used to make special degradable biomaterial implants, coatings in capsules of sustained release drugs, bioresorbable surgical threads, or as a component of resins for root canal filling.

The complete technology for obtaining ε-calcolactone was tested on a prototype pilot unit. Industrial research confirmed the possibility of using the intermediate products made by the company, the optimum process parameters were established and the first product was obtained. The innovative ε-calcolactone technology developed as part of the project is covered by patent protection. The project received funding from the National Centre for Research and Development.

NO_X

To bring down environmental pollution, the European Union has set requirements for exhaust gas emissions from heavy and light goods vehicles powered by diesel engines. One of the methods used by car makers to ensure compliance with the EU requirements is SCR (selective catalytic reduction), which chemically reduces NOx emissions by using an additive (urea) in the exhaust system of engines, i.e. AdBlue® (NOXy® manufactured by the Grupa Azoty Group) with an appropriate content of urea. Using the liquid with an appropriate content of urea is crucial to maintaining the efficiency and ensuring proper operation of the system. In 2021, we continued research with a view to developing the NOXy product line and supplementing our NOXy offering with additives that would enable:

- higher NOx emissions reduction compared with the traditional AdBlue,
- higher particle number reduction compared with the traditional AdBlue,
- reduction of carbon dioxide emissions,
- reduction of fuel consumption,
- extension of the useful life of SCR catalyst.

As the research results show that the objectives for the new product have been achieved, Grupa Azoty is working to start its mass production and sales.

NovaTec

We have added to our product range the NovaTec nitrogen stabilizer and granulated nitrogen fertilizer. They temporarily block the activity of Nitrosomonas bacteria by interrupting the nitrification process for up to three months. The slowing down of nitrogen release triggers a number of positive effects for both plants and the natural environment:

- significant reduction of nitrogen leaching,
- ensuring stable supply of nitrogen to crop plants,
- high efficiency even in light soils,
- reducing the number of runs on the field,
- improving crop yields and quality.

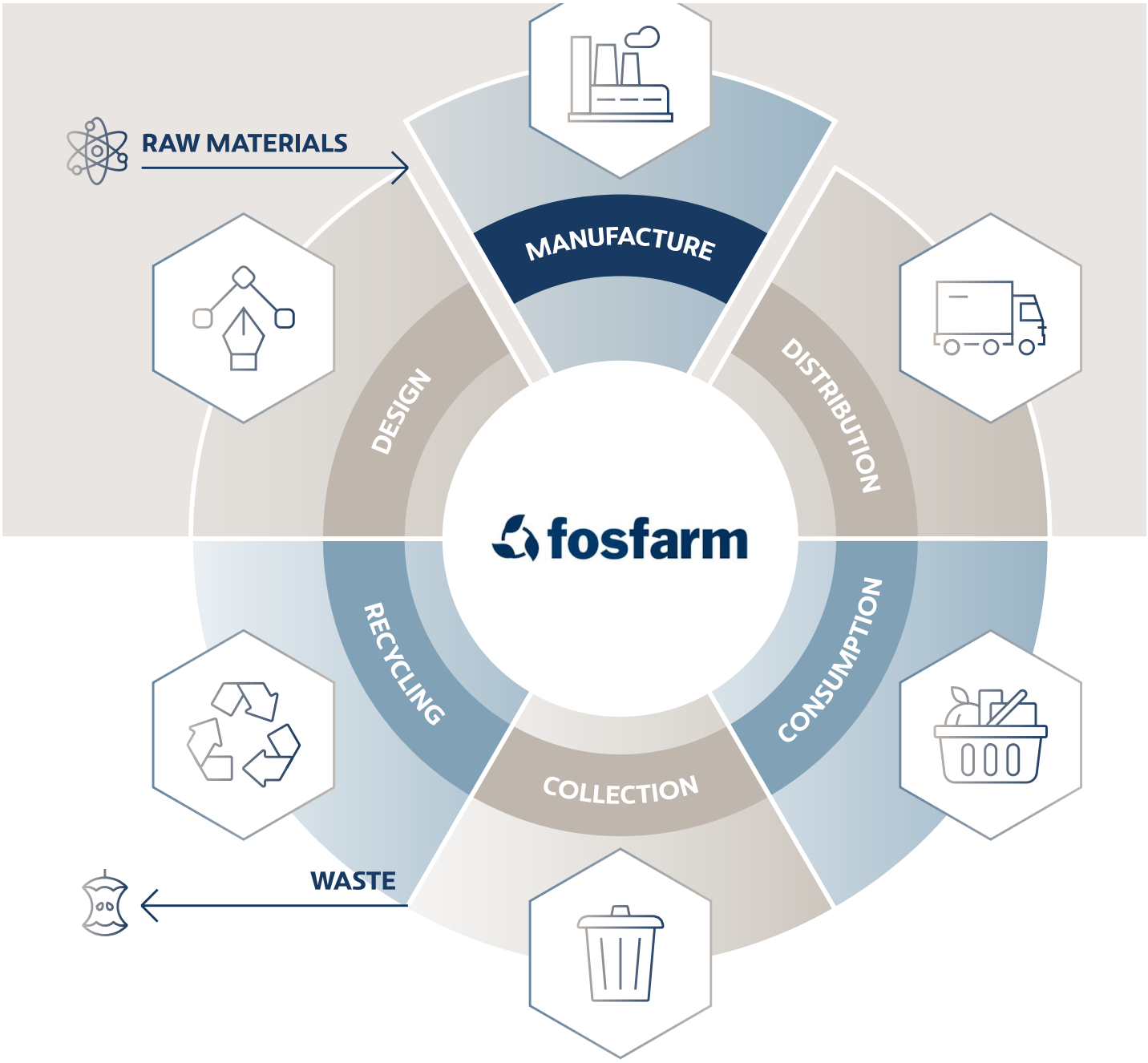
See how we support the circular economy [103-2]

[103-2]

We want to achieve the highest standards of circular economy. We are aware of the need to reduce the consumption of raw materials, recover materials and recycle waste, and to develop biodegradable plastics. The Grupa Azoty Group is able to meet the increasingly stringent EU regulations, which point to the need to transform the economy towards the circular model to the widest extent possible.

We want our new products to contribute to economic growth while protecting natural resources and preserving the balance of agroecosystems globally. We focus on rational and efficient use of fertilizer nutrients, which means that we can ensure optimum crop yields of desired quality while reducing pollution and protecting the production potential of the environment.

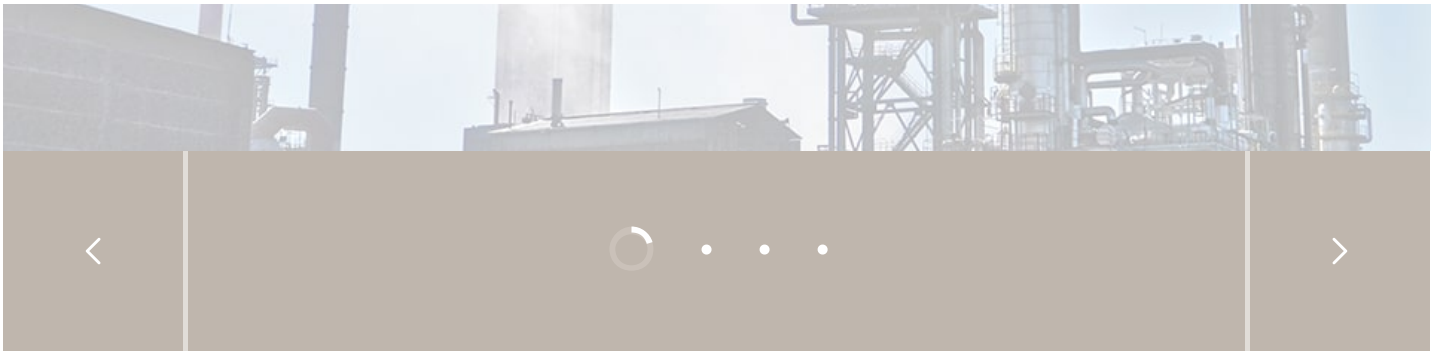
An example of products consistent with the idea of circular economy is the Fosfarm line of fertilizers. They are enriched with calcium, magnesium, sulfur and micronutrients, such as copper and zinc. The phosphorus content, as well as the calcium, magnesium and micronutrients, all come from renewable sources only, including sewage sludge incineration ash.



CIRCULAR ECONOMY

Manufacture

The formula of Fosfarm fertilizers has been designed to minimise the use of the product and maximise its effectiveness. They are enriched with calcium, magnesium, sulfur and micronutrients, that is copper and zinc, which significantly contribute to improving soil quality. Fosfarm fertilizers contain ammoniacal nitrogen, magnesium and sulfur as components facilitating absorption of phosphorus by plants, i.e. stimulating what is called synergism between elements. The phosphorus contained in the fertilizers is soluble in ammonium citrate and water (one-fourth of the phosphorus is water soluble). Phosphorus compounds soluble in those two substances show comparable effectiveness regardless of when they are applied, provided they are placed at the correct depth in the soil.



The closed loop in raw materials is also supported by activities of our Plastics segment, which has long used its by-products to make complete products. In 2021, a large-scale project was launched to increase the potential of mechanical recycling of polyamide 6 and add other recycling methods. We want the new method to be based mainly on recycling technologies using plastic waste which will make it possible to add to our portfolio new products containing recycled materials or to recover plastic monomers.

Read about the safety of our products

[103-2] [103-2] [416-1] [416-2] [417-1] [417-2] [417-3] [419-1]

[103-2]

At the Grupa Azoty Group, product safety and quality are strategic priorities. We are well aware of the risks (for both people and the environment) associated with the use of potentially hazardous chemicals. For this reason, we have implemented strict internal regulations and fully comply with the world-class standards for production activities. The underlying legal framework includes the Environmental Protection Law, the Water Law as well as the Waste Acts and other legal regulations on environmental protection, occupational health and safety and fire safety.

Our products are sold to food producers and farmers, meaning that their quality has a direct impact on consumer safety and health. Aware of this responsibility, we have set the following objectives throughout the Group:

- to offer mineral fertilizers supporting efficient and environmentally-friendly crop production to make agriculture profitable and guarantee the supply of affordable food,
- to contribute to the security of food supply, thereby reducing poverty and supporting human development,
- to prevent degradation of soil and restore it to original condition with a view to achieving wider environmental goals, such as prevention of desertification,
- to eliminate (wherever possible) or mitigate the negative environmental impacts of our fertilizers and agricultural production.

At the leading companies, our commitments are enforced under the Food Safety Management Policies in place at each company. In line with the Policies, parameters affecting the quality and safety of products are monitored on an ongoing basis, high standards of hygiene are adhered to at the production, storage and distribution stage, and the infrastructure and manufacturing technologies are constantly upgraded and improved. The Policies also underline the need to raise the awareness of health safety issues among staff and to exchange information internally and externally on the risks to product safety throughout the food chain.

We are responsible for our products along the entire supply chain. As part of Fertilizers Europe, our Group runs the Product Stewardship programme, based on a set of international quality standards and regulations.

[416-1]

All companies of the Grupa Azoty Group are obliged to ensure that their fertilizer products, as well as all raw materials and intermediates used in their production, are processed, transported, stored, distributed and used in a responsible manner, causing no harm to human health and safety or to the natural environment. In 2021, 100% of key product categories across the Group were assessed for potential impact on consumer health and safety and on the natural environment (based on the REACH Regulation[1] or other applicable procedures).

[1] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency.

[416-2]

In 2021, no incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of products and services were identified.



BEST PRACTICE

We use our chemical expertise to improve everyday safety. For many years, we have been conducting research into antimicrobial additives, as well as research designed to develop biocidal and biostatic properties in plastics manufactured by Grupa Azoty. As part of this work, we checked the efficacy of various solutions and additives, and our analyses resulted in developing a special formula to achieve optimal antimicrobial properties without adversely affecting the processing parameters or strength of plastics.

Tarnamid MB AMB developed by Grupa Azoty is an antimicrobial concentrate containing silver, with polyamide 6 produced by the company as its base plastic. The use of Tarnamid MB AMB as an additive to plastics creates antimicrobial properties in products without affecting their existing parameters. Efficacy tests were carried out at specialised external bodies with appropriate authorisations and experience. The use of just 2% of Tarnamid MB AMB in a selected polyamide 6 variety led to a significant decline in bacterial multiplication. In this solution, molecular silver is present throughout the product and on its surface, and the antimicrobial effect is not diminished even if the product's surface wears out.

[103-2] [417-1]

Appropriate labelling, instruction manuals and data sheets describing possible effects on living organisms are prepared for all products leaving our plants. The integrated management system implemented at the Group, which includes procedures and instructions for product labelling, protects consumers' interests, providing assurance about the safety and quality of the goods

they purchase. We strive to ensure that packaging labels clearly identify the product and help understand any potential hazards and restrictions on its use. Trade names, manufacturer contact details and product weight are provided on all packaging.

- Substances and mixtures classified as dangerous are subject to the CLP Regulation and the companies' internal regulations. Hazard warning labels for dangerous substances and mixtures contain key information on the hazardous components, routes of exposure and procedures in case of an accident.
- The labelling requirements for fertilizer products are set out in Regulation (EC) No 2003/2003. In the case of packaged fertilizers, the identification markings are affixed to the packaging or the attached labels. In the case of fertilizers in bulk, such markings are contained in the accompanying documents. In the case of fertilizers, the product information we provide includes fertilizer type, the 'EC Fertilizer' designation (if applicable), content and form of nutrients, as well as directions for use and basic safety precautions.
- The labelling requirements for feed additives are set out in Regulation (EC) No 1831/2003. We provide information on daily rations and storage life.

[417-1]

Percentage of product and service categories subject to information requirements [%]

	2021
Grupa Azoty KĘDZIERZYN	63
Grupa Azoty POLICE	100
Grupa Azoty PUŁAWY	81.25
Grupa Azoty S.A.	100

[417-2] [417-3]

No incidents of non-compliance concerning product or service information and marketing communications were identified at the Grupa Azoty Group in 2021.

[419-1]

In 2021, no penalties were imposed on any of our companies for non-compliance with laws and regulations governing the supply and use of products at any stage of their life cycle. No fines or non-monetary sanctions for non-compliance with laws and regulations in the social and economic area were imposed on our organisation.

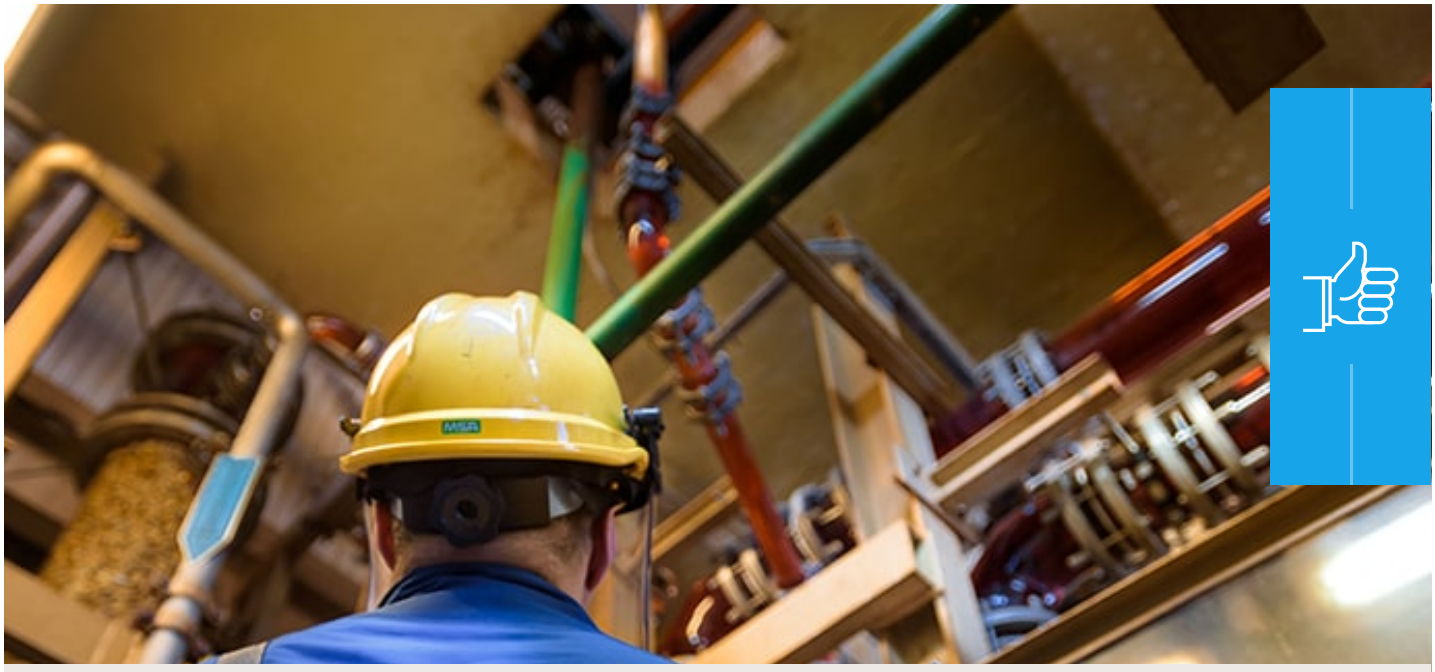


BEST PRACTICE

All Grupa Azoty Group companies complied with the duty to register manufactured substances, and prepared and published appropriate material safety data sheets (or equivalent documents) in accordance with the EU REACH Regulation for all products placed on the market. In 2021, those documents were updated on an ongoing basis, and the process of consolidation of all REACH measures and closer cooperation across the Grupa Azoty Group was continued.

[2] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency.

We take care to ensure the safety of our products in transit. When transporting particularly dangerous goods, we apply the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR, L'Accord européen relatif au transport international des marchandises dangereuses par route). We provide support to our business partners in the event of accidents in transport of hazardous materials. Grupa Azoty S.A., Grupa Azoty Police and Grupa Azoty Puławy have joined the SPOT System of Assistance in Transport of Hazardous Materials, which was established to improve the safety of hazardous materials transport in Poland, and in case of any incidents – to facilitate effective elimination of accident consequences by joint efforts and measures of the national rescue and fire services and the SPOT members.



BEST PRACTICE

All our companies have monitoring systems and safeguards in place and have implemented procedures for accident prevention and mitigation. These procedures include the following:

- preventive plans,
- production process control,
- performance of particularly hazardous work,
- emergency/accident response,
- occupational health and safety monitoring,

- operational control,
- assessment of safety objectives alignment with standards,
- storage.



IMMEDIATE ENVIRONMENT

Stakeholder dialogue



OUR STRATEGIC OBJECTIVES UNTIL 2030

PARTNERSHIP OF EQUALS AS A KEY DEVELOPMENT DRIVER FOR THE ORGANISATION AND REGION

- educate farmers on sustainable agriculture and other topics
- support academic institutions and scientific research centres through internship, traineeship and knowledge transfer opportunities
- maintain regular dialogue with the immediate social environment and deliver key goals
- support local associations, groups and initiatives upholding the same ethical values as Grupa Azoty
- engage in dialogue with potential future employees, for instance by holding training sessions and courses

RESPONSIBILITY FOR THE IMMEDIATE SOCIAL ENVIRONMENT

- community engagement and sponsorship
- strengthen the role of CSR as a component of the corporate culture, including employee volunteer service to support social institutions
- further develop communication tools to raise awareness of the nature of Grupa Azoty's operations, including safety aspects, among local communities

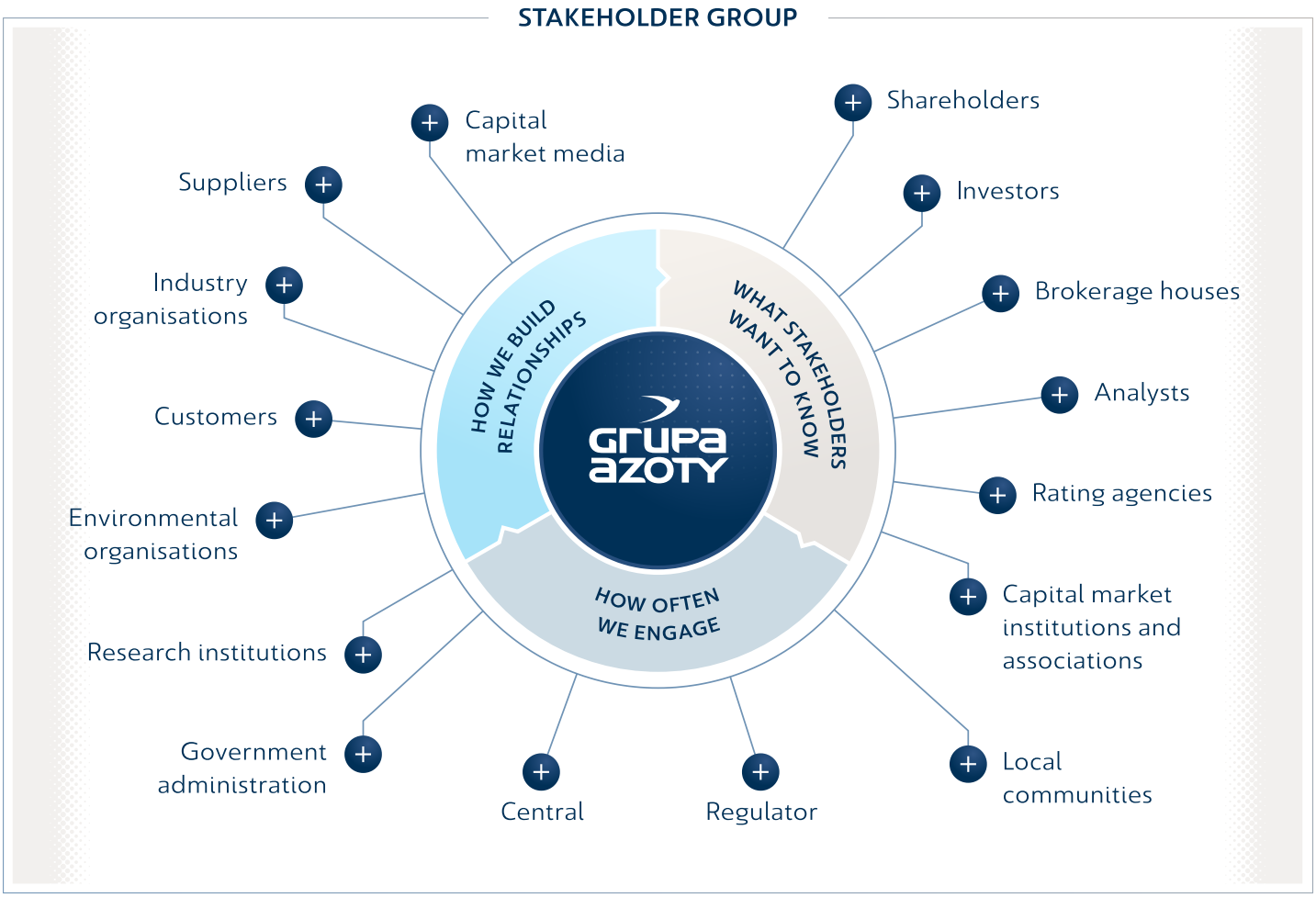
STAKEHOLDER DIALOGUE

- maintain dialogue with all stakeholder groups
- provide reliable, timely and accurate information
- communicate the economic situation and prospects of Grupa Azoty to its shareholders and potential investors in a transparent way and report non-financial data in line with stakeholder expectations

[102-42] [IR - Presentation of results]

We want to communicate our activities, plans, achievements and challenges in a fair, timely and reliable manner. Given the scale of our business we work with numerous stakeholder groups across the country. The Group has implemented the Stakeholder Registers guidelines, which set out the method and procedure for identifying stakeholders, assessing the materiality of stakeholder groups and keeping a stakeholder register. We maintain partner relations with our stakeholders, and we engage in dialogue on topics relevant to specific stakeholder groups and to our organisation. The form and frequency of the dialogue have been aligned with stakeholder needs and expectations. Responsibility for maintaining the dialogue lies with the heads of relevant functional areas of the Group companies.

[102-40] [102-43] [102-44]



Shareholders, investors, brokerage houses, analysts, rating agencies		
What stakeholders want to know:	How we build relationships:	How often we engage:

Shareholders, investors, brokerage houses, analysts, rating agencies		
▪ dividend, share price ▪ impact of COVID-19 on the Group's business ▪ the Group's growth strategy, investment and acquisition plans ▪ status of key investment projects with special focus on Polimery Police ▪ market challenges and opportunities, e.g. with regard to digital transformation and innovation ▪ risk management, with particular focus on ESG, climate and operational risks ▪ environmental management performance and plans ▪ procedures to be followed for share transfer transactions ▪ analysis of financial results ▪ short-term prospects for business segments ▪ effect of acquisitions on the Grupa Azoty Group's performance, synergies achieved ▪ activities planned within the European Green Deal framework ▪ procedures to be followed for share transfer transactions	▪ General Meetings of Shareholders ▪ earnings conferences ▪ one-on-one meetings ▪ newsletter ▪ investor conferences ▪ regular meetings in the form of site visits ▪ special-occasion meetings ▪ Wall Street conference organised by the Polish Association of Retail Investors ▪ investor chats	▪ quarterly financial reporting ▪ quarterly earnings conferences ▪ ongoing communication and publication of current reports ▪ General Meetings of Shareholders convened at least once a year ▪ dialogue and meetings on an as-needed basis
Capital market institutions and associations		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ approach to implementing the new regulatory requirements related to the TCFD package ▪ risk management, with particular focus on ESG and climate risks ▪ inquiries made in connection with compliance with disclosure requirements ▪ opinion polling questions asked when regulatory changes are planned ▪ impact of COVID-19 on the Group's business ▪ corporate governance ▪ opinion polling questions asked when regulatory changes are planned	▪ contact links on the website	▪ ongoing communication in line with disclosure requirements ▪ quarterly earnings conferences ▪ participation in conferences, meetings and training

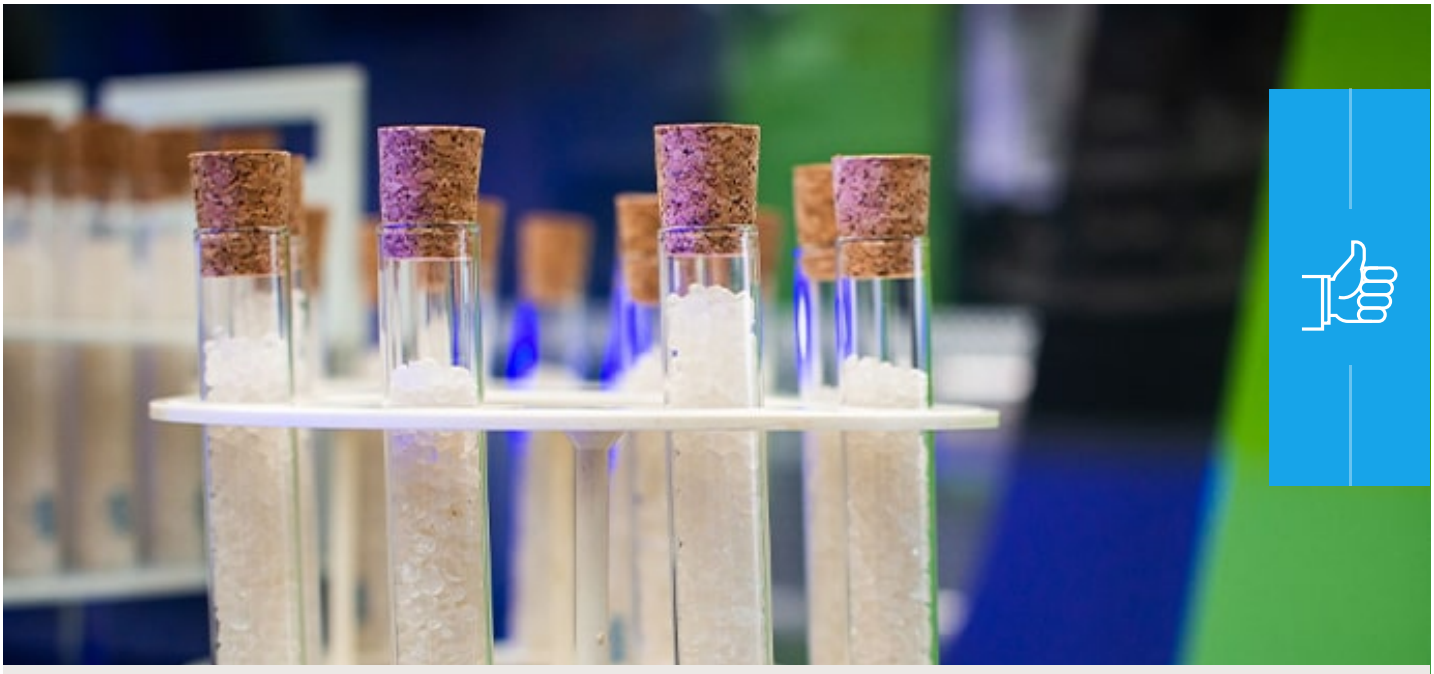
Capital market media		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ requests for the Grupa Azoty Group's comments on current events or its position on specific media or economic news ▪ the Grupa Azoty Group's impact on economic and social development ▪ impact of COVID-19 on the Group's business ▪ situation on the natural gas and CO_2 emission allowances markets ▪ strategy of the Grupa Azoty Group ▪ activities planned within the European Green Deal framework, investment and acquisition plans	▪ cooperation with investor websites ▪ press conferences ▪ email correspondence and telephone contact ▪ participation in meetings held by the Grupa Azoty Group	▪ quarterly earnings conferences ▪ ongoing communication
Local communities		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ expectations as to the continuation of social engagement activities ▪ questions concerning new forms of activity as part of partnership with farmers/rural communities ▪ questions about participation in conferences and events ▪ consultations in the event of regulatory changes	▪ meetings with local community representatives (artists, teachers, athletes, businessmen and others) ▪ site meetings, participation in local events ▪ integrated report ▪ participation of the Grupa Azoty Group employees in projects for the benefit of local communities as part of the employee volunteering programme	▪ dialogue session ▪ site meetings on an as-needed basis ▪ outdoor events
Suppliers		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ consolidation changes at the company and their consequences for the company's trading partners	▪ direct communication with contact persons designated by the Group companies ▪ website ▪ industry meetings, fairs ▪ integrated report	▪ as needed – on an ongoing basis and periodically
Customers		
What stakeholders want to know:	How we build relationships:	How often we engage:

Customers		
▪ loyalty schemes and adaptation of the range of offered products and services to the expectations of a broad group of customers ▪ new channels and methods of communication about the Group's products ▪ implementation of new innovative products and technologies	▪ website and social media ▪ Grupa Azoty Group image surveys ▪ integrated report	▪ ongoing activities, opinion/satisfaction surveys once a year
Industry organisations		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ environmental impact of the Group ▪ environmental initiatives implemented at the Group ▪ strategy of the Grupa Azoty Group ▪ joint project opportunities	▪ participation in industry events ▪ participation of Grupa Azoty representatives in the work and initiatives of industry organisations ▪ promotion of good practices implemented at the Grupa Azoty Group	▪ as needed – on an ongoing basis and periodically
Environmental organisations		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ environmental impact of the Group ▪ environmental initiatives implemented at the Group ▪ strategy of the Grupa Azoty Group with	▪ website and social media ▪ email communication	▪ as needed – on an ongoing basis and periodically
Local and central government administration, regulator		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ approach to implementing new regulatory requirements ▪ consultations in the event of regulatory changes	▪ contact links on the website	▪ as needed – on an ongoing basis and periodically
Research institutions		
What stakeholders want to know:	How we build relationships:	How often we engage:
▪ research and development initiatives carried out at the Grupa Azoty Group ▪ joint R&D project opportunities	▪ participation in events ▪ website ▪ integrated report	▪ as needed – on an ongoing basis and periodically

Read more about knowledge transfers to food producers [103-2]

[103-2]

Farmers and agricultural producers are a special stakeholder group for Grupa Azoty. We recognise that, when selecting a fertilizer, farmers take into account the product quality as well as access to comprehensive expert advice, local training opportunities, the producer's visits at farms, research and development of new fertilizer products and application technologies, and assistance in soil testing. We know that our expertise can contribute to the development of sustainable agriculture across Poland. Therefore, we consistently pursue educational activities targeting both farmers and agricultural consultants/advisors. We educate via the press, television and the Internet, and our advice reaches an audience of millions every year.



BEST PRACTICE

We have run the Grounded in Knowledge nationwide programme of soil pH testing and soil nutrient analysis free of charge for many years now. The programme is implemented in cooperation with accredited laboratories of Regional Chemical and Agricultural Stations. The project is aimed at promoting optimum fertilizer application technologies matching the crop type and nutrient content of soil, as well as fostering the development of new fertilization technologies and fertilizer products that cater to the needs of Polish farmers. Our field consultants provide fertilizer advice to promote sustainable nutrient management. Rational use of nitrogen and compound fertilizers prevents nutrient pollution, while increasing soil pH helps reduce soil degradation.

Some 800 farms participated in the programme in 2021. 9,915 soil samples from approximately 12,000 hectares of land were tested. Under the programme, soil was tested for the presence of accessible forms of phosphorus, and the content of accessible forms of potassium and magnesium, soil acidity and agronomic category were determined. Fertilizer recommendations were provided by Grupa Azoty field consultants to all farmers participating in the Grounded in Knowledge programme.



- Our nawozy.eu fertilizer platform had over 1.98 million unique users in 2021. The platform is a comprehensive source of knowledge in the field of fertilizers and fertilizer application for farmers. We regularly publish expert opinions, advice and precise crop fertilization schedules, disseminating good fertilizer practices. The platform provides farmers and food producers with access to detailed information on the properties, composition and optimal application of fertilizer products offered by the Group. The nawozy.eu platform is also available via a YouTube channel with 26,000 plus subscribers at the end of 2021, over 6,000 more than a year earlier. Our videos were viewed more than 8.6 million times in 2021.
- A popular source of expert knowledge on agriculture and fertilization, our *Agrolider* magazine had close to 10,500 subscribers in 2021.
- We are a knowledge partner in *Agrorewolucje*, an online entertainment and education show with influencers that has gained popularity across the agro industry. The show promotes Grupa Azoty's products through product placement in the natural context of the programme content. Episodes of the show were viewed over 3.8 million times in 2021.
- The 'We care for the Polish land' lottery is a project designed to stimulate customer purchasing activity and increase customer loyalty among farmers. In 2021, the project reached an audience that was over five times larger than in the preceding year.



BEST PRACTICE

Grupa Azoty Police is focused on expanding knowledge and raising environmental awareness among farmers.

The polifoska.pl website provides advice to farmers and information on our products. In 2021, the website recorded 323,500 visits.

The NONSTOP Fertilizers Programme aims to promote good agricultural practices and sustainable fertilizer application. We also want to inform the public of measures taken by the company that have an impact on agriculture and farmers. In 2021, NONSTOP Fertilizers videos were viewed 8.7 million times.

Read more about our soil scanning programme

Read more about our collaboration with research institutions

At the Grupa Azoty Group, we employ people with extensive knowledge of chemicals. Our expertise is consistently enhanced through research work performed in partnership with the Łukasiewicz Research Network – New Chemical Syntheses Institute, a well-known and globally recognised institution that has long-standing relationships with many Grupa Azoty Group companies. Our partnership involves a range of R&D and implementation projects pursued in Poland and abroad, as well as joint development and pilot launches of new products and manufacturing technologies. Together with our partner, we are also working to develop smart fertilizers, that is new formulas tailored to the specific needs of various crops as well as the nutrient content in soils.

We were the first business to take part in the Network's Łukasiewicz Challenge programme, which aimed to develop smart biodegradable polymer-coated fertilizers for use in agricultural production. The project is in the final phase of preparations for implementation. The Łukasiewicz Research Network is also the supplier of catalysts and sorbents for ammonia units across the Group and systems reducing greenhouse gas emissions by up to 95%.





BEST PRACTICE

In 2021, Grupa Azoty S.A. and the Łukasiewicz Research Network – New Chemical Syntheses Institute signed a letter of intent confirming further reinforcement of their long-standing cooperation in catalyst development. The cooperation will be developed by leveraging the parties' experience, knowledge and know-how. The letter was signed during the Conference of Polish Catalyst Manufacturers and Users. The signatories declared that they would continue their scientific, research and implementation work, taking into account the specific nature of catalysts as well as their commercial and scientific potential, and that they would search for and develop new catalyst manufacturing technologies.



BEST PRACTICE

Grupa Azoty has been included in the Łukasiewicz Index, which aims to promote listed companies engaged in R&D activities. The index portfolio includes companies listed on the WSE's regulated market and in its alternative trading system (New Connect) which have collaborative ties with the Łukasiewicz Research Network. The list of the index constituents was announced on April 1st 2021, and the quotations have been published daily since April 12th 2021.

We engage in discussions and exchange knowledge on chemicals with the rest of the industry during the Polish Chemical Industry Congress, a leading industry event. Grupa Azoty has long been a strategic partner of the Congress. Key topics addressed by the Congress in 2021 included the European Green Deal and the impact of the goals defined under its framework on the chemical industry in Poland. Experts also discussed issues related to the regulatory environment, whose stability is key to delivering goals facing the sector.



IMMEDIATE ENVIRONMENT

Grupa Azoty Group at the time of the COVID-19 pandemic in 2021

[203-2]

Our products contribute to ensuring food security of Poland and many other countries around the world. For this reason, despite high costs incurred to adequately protect its employees against the pandemic, the Grupa Azoty Group was one of few chemical manufacturers that did not halt their operations. This, in turn, ensured continued production of food by our customers, i.e. farmers and agricultural producers.

We were taking appropriate measures to protect our employees ever since the state of epidemic had been declared in Poland. We set up a task team for minimising the risk of a coronavirus spread and a crisis management team. All instances of COVID infections among our employees were investigated. We also developed detailed instructions on how to behave safely in the pandemic situation, including how to apply disinfectants and hand sanitizers, use common space and give over duties in a shift-work system. Where required, we used ozone treatments and installed flow UV lamps. We have limited face-to-face contacts by offering our office staff an option to work from home. All recommendations and procedures were communicated to employees when needed, in a newsletter and over the intranet.





BEST PRACTICE

We respond to problems and concerns voiced by the management and employees on an ongoing basis. Examples include our initiative in Puławy, where in response to requests from our employees we made arrangements with the Municipal Transport Company regarding the city bus service to reduce crowds on buses used by employees commuting to and from work.

In an effort to protect people's health and safety, in July 2021 the Grupa Azoty Group became a Partner of the National Vaccination Campaign Lottery.

Specific activities of the Grupa Azoty Group:

- Grupa Azoty Puławy and the Material Reserves Agency signed a contract for the supply of COOLANT®, i.e. dry ice for the transport and storage of vaccines against COVID-19. Prior to signing the contract, tests were performed to confirm that the product manufactured in Puławy was suitable for vaccine logistics.
- Two laminar flow cabinets, worth PLN 100 thousand, used directly for preventing and fighting COVID-19, were transferred to the Laboratory of the Department of Forensic Genetics at the Pomeranian Medical University in Szczecin. Laminar flow cabinets are used for sterile laboratory work. This is where the process of describing and preparing for isolation virus RNA takes place. The purchase was financed by Grupa Azoty Police.
- Grupa Azoty S.A. is one of four state-owned companies which enrolled in the pilot COVID-19 vaccination programme. Starting from early April, vaccination consent declarations were collected from employees of Grupa Azoty S.A. Grupa Azoty Police joined the programme a month later.
- In Kędzierzyn Koźle, 'A Sound Mind in a Sound Body' event was organised to promote the 'Let's get the jab done' vaccine campaign. Grupa Azoty Kędzierzyn was the event partner, and the Golec uOrkiestra band was the star of the evening. However, the most important thing was to encourage people to get vaccinated – each attendee had the opportunity to have a COVID-19 vaccine administered at a mobile vaccination unit.
- Grupa Azoty Kędzierzyn donated almost PLN 90 thousand to the Independent Healthcare Complex in Biała in the Province of Opole for continued fight against the coronavirus.
- Grupa Azoty Kędzierzyn co-financed the purchase of a cardiac monitor for a hyperbaric chamber and financed the purchase of electrocardiogram equipment for two infectious disease hospital wards at the Healthcare Complex in Nysa.



IMMEDIATE ENVIRONMENT

Support to local communities

[IR – Presentation of results] [103-1] [103-2]

At the Grupa Azoty Group, we feel responsible for our immediate social environment. For many years now, we have been a socially engaged organisation that pursues a number of sponsorship activities. We are committed to raising local communities' awareness of the nature of our business, with a particular focus on safety issues. We want to continue to support initiatives, associations and groups that share our ethical values. Every year, we help organise hundreds of events, small and large, that provide entertainment to local residents, broaden their education, raise patriotic awareness, or simply let them enjoy themselves with their families and friends. We support athletes and sports fans, students and teachers, local government officials and activists, artists and all those who wish to admire their works.

We will also strengthen the role of CSR as a component of the Group companies' corporate culture, including employee volunteer service to support social institutions.

We want community outreach initiatives run by our companies to foster the perception of our Group as a valued partner and neighbour. We seek to make the regions where the Group operates more attractive as places to live, work, pursue passions and fulfil ambitions, offering children and young people the best possible education opportunities and conditions supporting their health.

Image-building activities with a countrywide and international reach, which boost the perception of the entire Grupa Azoty Group, are carried out by the Group's corporate department in Tarnów. Each of the companies has in place appropriate social,

sponsorship, CSR and donation policies.

The formal basis of our social and sponsorship activities is the Grupa Azoty Group Social and Sponsorship Policy along with the relevant rules, developed and implemented in 2013, and the CSR Policy for Grupa Azoty Group Companies, developed and implemented in 2020, while charitable activities are subject to the Grupa Azoty Group Donation Policy and the Grupa Azoty S.A. Donation Rules, adopted in 2013. Grupa Azoty Group companies prepare quarterly reports on the performance of their plans of social and sponsorship activities and submit them to Grupa Azoty S.A., which, at the Supervisory Board's request, presents a report on their implementation. Each company submits to the Supervisory Board a report on the effectiveness of its activities involving sponsorship of professional sports. Following the expiry of a sponsorship agreement, the Supervisory Board issues its opinion on the report summarising the sponsorship effectiveness. The information is then made public, in accordance with the Articles of Association, in the Directors' Report.

[own disclosure]

Total donations to social causes

	2021
Grupa Azoty Kędzierzyn	509,178 zł
Grupa Azoty Police	569,457 zł
Grupa Azoty Puławy	900,252 zł
Grupa Azoty S.A.	332,109 zł
Total	**2,310,996 zł**

[415-1]

In accordance with the Grupa Azoty Group Donation Policy, no political contributions were made directly or indirectly in 2021.

We indirectly support local communities by paying local taxes to local government units. In 2021, amounts paid to local governments, injected into the economy thanks to the operations of the Grupa Azoty Group's key companies exceeded PLN 124 million.

[203-2]

Amount of local taxes, by category [PLN]

Tax category	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa A
	2020	2021	2020	2021	2020	2021	2020
Property tax	26,084,961	27,230,205	33,789,217	35,115,894	40,459,463	40,805,715	16,089,594
Forestry tax	7	7	485	492	2,788	2,567	0
Vehicle tax	6,509	6,509	2,973	3,122	23,154	26,054	0

SCROLL TABLE

Tax category	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa A
Agricultural tax	49	49	3,150	3,051	0	0	1,185
Total	**26,091,526**	**27,236,770**	**33,795,825**	**35,122,559**	**40,485,405**	**40,834,336**	**16,090,779**

[203-1] [own disclosure]

All Grupa Azoty Group companies comply with the Social and Sponsorship Policy, Donation Policy and CSR Policy, and take steps to involve local communities in their operations. All operations of the Grupa Azoty Group's four key companies are carried out with the local community involvement, impact assessment or development programmes.

Read more about our social and sponsorship policies

CSR and sponsorship initiatives based on the organisation's **Social and Sponsorship Policy** are key elements contributing to the implementation of the long-term development strategy of the Grupa Azoty Group. Through its engagement in such initiatives, the Group promotes its image of both economically successful and socially responsible business. As an entity using natural resources, the Grupa Azoty Group undertakes social and sponsorship activities dedicated primarily to supporting local initiatives and needs. The Group is particularly committed to support the development of the regions in which its companies operate, but at the same time it seeks to ensure that the reach and impact of projects it chooses to sponsor are supra-regional.

Through donations, governed by the **Donation Policy**, we want to respond to the needs of foundations, associations, schools, non-profit organisations and individuals in difficult circumstances. In particular, we support projects contributing to medical care improvement, social and educational development of children and youth, as well as other initiatives benefiting local communities.



Selected purposes of donations described in the Donation Policy:

- providing social assistance, mainly to families and individuals in difficult circumstances, and promoting equal opportunities for such families and individuals
- supporting activities aimed at social and professional inclusion of individuals who are at risk of social exclusion
- charitable activities
- cultivating and fostering Polish traditions and national identity, strengthening national, civic and cultural awareness
- activities supporting national/ethnic minorities and regional languages
- health protection and promotion
- support for the disabled
- support for equal rights of men and women
- support for the development of technology, inventions and innovation, as well as promotion and implementation of new technological solutions in business
- activities supporting the development of local groups and communities
- science, higher education, schooling, and education systems

- holidays for children and youth
- culture, arts, and protection of cultural property and national heritage
- support for European integration and fostering international contacts and cooperation

The objective of the **CSR Policy** is to define the principles to be followed in undertaking corporate social responsibility projects. We engage in CSR initiatives with a view to establishing a positive reputation of our brand and building respect and favourable attitude of the public. We want to reach entities and circles that are important to the Grupa Azoty Group, both in Poland and abroad.



Selected CSR Policy objectives:

- initiatives of importance to the local community
- projects furthering and promoting the history and tradition of Poland's chemical industry and supporting its development
- scientific and research programmes aimed at protecting the natural environment and preventing the degradation of natural resources
- building respect for Poland's national and cultural identity
- environmental protection
- promotion of knowledge, in particular by participating in conferences, seminars and congresses concerning broadly-defined chemical industry and agriculture
- amateur sport and recreation, including sports of individual sportsmen, children, youth and disabled persons
- activities supporting economic development, including development of entrepreneurship

The principles of engaging with local communities are also incorporated into the Codes of Ethical Conduct of Grupa Azoty S.A., Grupa Azoty Puławy, Grupa Azoty Police and Grupa Azoty Kędzierzyn, which stipulate that the companies should:

- Have an open approach and be ready to engage in dialogue with the local community;
- In dealings with representatives of local communities – respect their dignity and reputation;
- In a situation of conflict – always look for ways to protect the legitimate interests of each party;
- Be sensitive to the needs of the social environment;
- Not let themselves be guided by political views.

See Grupa Azoty S.A.'s sponsorship and social activities

SOCIAL CAMPAIGNS

Selected examples of regional and social development support initiatives:

- Puellae Orantes Girls Cathedral Choir – co-financing of the 'Puellae Orantes & Friends' Jubilee Concert,
- Polish Tourist Society (PTTK) Branch at Grupa Azoty S.A. – regular support for activities of the Polish Tourist Society Branch at Grupa Azoty S.A., carried out mainly for Grupa Azoty S.A.'s employees, their families, and retired employees,
- KANON Association – support for activities of the 'Przystań' Day Care Centre, which supports the community of Mościce, in particular children and teenagers who need care and teaching aid,
- KANA Catholic Youth Education Centre, a meeting point for many generations fostering local community bonds. The Centre's mission is targeted at children, youth and adults, including the elderly,
- Azoty Sports Association of Tarnów – support for activities of the Association established on the initiative of Grupa Azoty S.A. employees. The idea is to revive the tradition of organising sports events for employees and their families as a way of spending free time,
- To mark the Earth Day, Grupa Azoty S.A. invited children to join the 'We Build Insect Houses' competition. The purpose was to build houses that would provide insects with shelter through the winter. More than 100 works were sent in.



Selected examples of initiatives for the protection of human health and life:

- Ich Lepsze Jutro (For Their Better Tomorrow) Association – supporting the Association's activities to improve the quality of children's life. The Association engages in the education, therapy and rehabilitation of disabled children, provides support and assistance to their parents through specialist consultations and classes, and organises recreational meetings for both children and their families,
- 'Prometeusz' Association for the Assistance to Disabled Children and Their Families – supporting the Association's activities, including children's participation in the 10th Nationwide Equestrian Meeting of the Special Olympics,
- START Sports Association for People with Disabilities of Tarnów – supporting the Association in projects dedicated to training of disabled children and teenagers in three sports sections: swimming, track and field, and weightlifting,
- Tytus Chałubiński PCK Blood Donors Club at Grupa Azoty S.A. – supporting the Blood Donors Club's activities. Ever since its inception, members of the Club have donated more than 21,100 litres of blood,
- 'Gift for the Needy' Foundation – supporting the Foundation's activities to help children, youth and adults. The Foundation's key focus is on social assistance, especially on self-help and charity.

In addition, in an effort to help people in need, in 2021 the Company joined the Noble Gift (Szlachetna Paczka) campaign, providing support for three families from the Tarnów region.



Selected examples of support for local professional and amateur sports:

- Roleski Grupa Azoty PWSZ Tarnów Club (volleyball),
- Grupa Azoty Unia Tarnów (handball),
- ZKS Unia Tarnów Sports Club (football, futsal),
- Unia Tarnów Żużlowa Sportowa Spółka Akcyjna (speedway).

Selected examples of support for national professional and amateur sports:

- sponsorship of some members of the Polish national ski jumping team (including Piotr Żyła, Jakub Wolny, Aleksander Zniszczoł)[1] ,
- main sponsor of the FIS Ski Jumping World Cup events in Wisła and Zakopane,
- sponsorship of one of the stages of the Tour de Pologne cycling race,
- patronage of the Polish Chess Championship,
- sponsorship of Malwina Kopron, a female hammer thrower and bronze medallist of the 2021 Olympic Games.

[1] until October 2021.



Selected examples of support for culture:

- day-to-day cooperation with the Paderewski Centre in Kąśna Dolna, which takes initiatives to promote classical music, cultural education, and knowledge of its Patron, Ignacy Jan Paderewski, an outstanding Polish pianist, composer, staunch patriot, and statesman. The Centre hosts cultural events that have long been a fixture in the calendar of music events in Poland,
- cooperation with the ArtContest Artistic Association of Tarnów in the organisation of the 13th Jazz Contest festival;
- cooperation with the Mościce Arts Centre and in the 'Mościce Is in My Heart' open air exhibition located at Grupa Azoty's main gate and at the Mościce Arts Centre building. The exhibition presents several hundreds of photographs spanning the period 1927–1996 that come from the chronicles of the Mościce Arts Centre, the archives of Grupa Azoty S.A., the archives of the Technical School Complex and family albums of various individuals,
- cooperation with Tadeusz Syka, a producer of the film entitled 'Wyszyński – Revenge or Forgiveness'.

The total amount of donations made by Grupa Azoty S.A. to social causes in 2021 was about PLN 332 thousand. The largest beneficiaries included: the Prometheus Association, START Sporting Association for People with Disabilities of Tarnów, Korczak Foundation of Gdańsk, Foundation of the Center for Research and Documentation of the Polish Struggle for Independence, Gift for the Needy Foundation, and Kraków Province Burn Treatment and Plastic Surgery and Replantation of Extremities Centre with the Hyperbaric Therapy Centre at the Ludwik Rydygier Speciality Hospital of Kraków.

See Grupa Azoty Kędzierzyn's sponsorship and social activities



Selected examples of regional and social development support initiatives:

- financial and expert assistance in the preparation of scientific events and seminars organised by the Koźle Region Association, including the publication of the 22nd volume of the Kędzierzyn-Koźle Sketches, edited by Edward Nycz, and the 26th Kędzierzyn-Koźle Scientific Seminar 'Everyday Life During the Silesian Uprisings from the Perspective of a Hundred Years Later',
- assistance in the publication of a fire prevention calendar by the Opole Province Unit of the Voluntary Fire Brigades Association of Poland,
- assisting employee volunteers in organising the annual '10 Metres of Sweets' charity drive; Grupa Azoty Kędzierzyn purchased Christmas presents which, together with gifts prepared by employees, were donated to the following social welfare institutions looking after children from underprivileged backgrounds: The 'Little Prince' Association of Family and Friends of Autistic Persons, St. Charles Nursing Home, County Centre for Family Support, Children's Home in Kędzierzyn-Koźle, 'Promyczek' Communal Self-Help Centre, 'Brzdąc' Association for Assistance to Children, the ARKA Sociotherapy Centre and 'Good Family' Association of Foster Families.



Selected examples of support for amateur sports:

- support for the Bartłomiej Mróz Foundation – Bartłomiej is a parabadminton player who takes part in competitions for people with upper extremity disabilities. He has also set up a foundation of his own name to promote and popularise badminton and

parabadminton in Poland. In 2021, Bartłomiej Mróz represented Poland at the Tokyo Paralympic Games,

- patronage of the Chemik Kędzierzyn-Koźle Football Academy,
- support for Poland's M Class Floating Models Championships,
- support for the 11th edition of 'Koziołki Pływackie', a swimming competition for children and youth,
- support for the Opole Region Summer Swimming Championships,

- assistance in organising a number of running events, including the Nysa Run, Remembrance Run to commemorate the Silesian Uprisings, and the 9th Santa Run,
- support for weightlifter Karolina Michałek during the 'Nationwide Popular Sports Teams Games in Spała' competition,
- assistance in the organisation of the 4th CROSS 'Independent Poland' cycling race for the Grupa Azoty ZAK S.A.'s CEO Cup in Kędzierzyn-Koźle,
- support for the Polish Chess Cup in Opole.



BEST PRACTICE

For years now, Grupa Azoty Kędzierzyn has supported the most successful Polish men's volleyball club. Grupa Azoty ZAKSA Kędzierzyn-Koźle is a nine-times winner of the Polish Champion title and the Polish Cup, a two-times winner of the Polish Super Cup, and a two-times winner, including in 2021, of the CEV Champions League.

Grupa Azoty Kędzierzyn is also the main sponsor of Pogoń Prudnik, one of Poland's oldest basketball clubs, which has played in the first league of men's basketball since the 2014/2015 season.

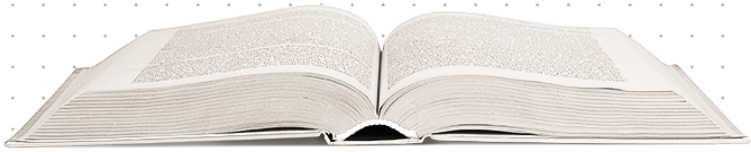




Selected examples of support for cultural initiatives:

- support for the celebrations of the Dutchy of Koźle Days combined with the Cadet Day in Kędzierzyn-Koźle, organised by the Opolskie Orlęta Foundation,
- support in organising the 10th edition of the 'Gitariada 40' open-air music event in Kędzierzyn-Koźle, organised by the Municipal Cultural Centre,
- support for the 'Wrzosowisko' Nationwide Festival of Tourist Songs and Sung Poetry,
- support in organising the Book Fair on the Oder and the 'Fluent reading' campaign organised by the Municipal Public Library,
- assisting in the preparation of the Patriotic Week in Kędzierzyn-Koźle, organised by the Museum of the Koźle Region,
- support for the 5th Gala of the Concert of Four Cultures in Kędzierzyn-Koźle, organised by the Association of Friends of the 'Echo Kresów' Choir,
- support for the 2nd 'Patyk' Sports Coverage Festival in Opole, organised by the Polish Television,
- assisting in the organisation of a star unveiling ceremony on the Polish Song Stars Walk of Fame as part of the 2021 National Polish Song Festival in Opole.

EDUCATION



Selected examples of support for educational initiatives:

- support in the organisation of the 9th 'Chemistry Masterminds' Interschool Chemical Competition at the Company's patronage School Complex No. 3 in Kędzierzyn-Koźle,
- financing of the Marian Górny Prize for innovative technological and technical projects.

In 2021, the total amount of financial support and donations made by Grupa Azoty Kędzierzyn to social causes exceeded PLN 509 thousand. The largest beneficiaries included: the 'Chemik' Sporting Society, Healthcare Complex in Biała, Healthcare Complex in Nysa, St. Charles Nursing Home in Kędzierzyn-Koźle, Bartłomiej Mróz Foundation, and Capital City of Polish Song Foundation.

See Grupa Azoty Police's sponsorship and social activities

SOCIAL



CAMPAIGNS

See Grupa Azoty Police's sponsorship and social activities:

- cooperation with the 'Useful Ones' Social Cooperative, which supports people with disabilities. The cooperative runs two restaurants in which disabled persons can, for instance, raise their qualifications and socialise,
- support for professional inclusion of repatriated persons. In 2021, a relevant letter of intent was signed with representatives of the Police County. Repatriated persons will gain an opportunity to raise their professional qualifications and skills, which will help them find employment at the Grupa Azoty Group.



Selected examples of support for educational initiatives focused on the protection of human health and life:

- Polish Association of Voluntary Blood Donors – the Henri Dunant Voluntary Blood Donors Club of Police. In 2021, 136 volunteers donated more than 60 litres of blood in five blood donation drives hosted on the company's premises. Since 2018, the Association has been operating again under the auspices of Grupa Azoty Police.



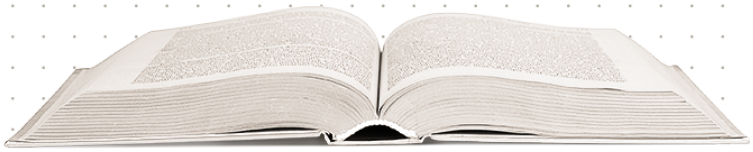
Selected examples of support for professional and amateur sports:

- partnership with the women's Volleyball Club Chemik Police, which in the 2020/2021 season defended the Polish Champion title, won the 9th Polish Cup, and also ranked among the top eight teams in Europe in the Women's Champions League,
- continued partnership with Marcin Lewandowski, a resident of Police, multiple European indoor champion and bronze medal winner of the 2019 World Championships in the 1,500-metre run, who competed in the Olympics in Tokyo in 2021,
- main partner of the West Pomeranian Fencing Association, which in 2021 organised the Polish Senior Cup in épée fencing, and the Northern Poland Cup for children and youth in foil and épée fencing,
- partnership with the Chemik Police Football Club, which plays in the 4th league. The club also runs the Police Youth Football Academy, training the youngest residents of Police, many of them children of Grupa Azoty Police employees. The Academy

joined the elite football academies certified by the Polish Football Association, receiving the brown certificate. Support was also provided to the 'Champion' Students' Sports Club whose members are table tennis players of various ages,

- partnership in sports events – 'Wild Weekend' running event and the Santa Run,
- title partner of a judo camp in Dźwirzyno – the Grupa Azoty Olympic Summer Camp,
- partner of the Polish Women's Football Academic Championship,
- support for the Hulk Team Police Sports Club Association.

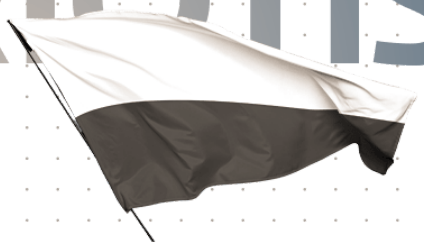
EDUCATION



Selected examples of support for educational initiatives:

- continued cooperation with the Police County to establish a first degree vocational school. It will be set up within the Ignacy Łukasiewicz School Complex in Police starting from the 2022/2023 school year,
- patronage of the chemical engineering class at the Ignacy Łukasiewicz School Complex in Police, the students are given the opportunity to complete work placements at the company and apply for scholarships,
- prizes for winners of the 2nd edition of the 'Energy and Environment' National Competition, as well as the 8th Chemistry Competition for primary school students of the Szczecin Province – both competitions were organised by the Władysław Orkan School Complex No. 2 in Szczecin, Grupa Azoty Police has also partnered with other schools in Szczecin, including the Electricity and Electronics School Complex and the Home Army School Complex No. 4, students of selected classes, like their peers of the Police school complex, can complete work placements at the company and receive scholarships.

PATRIOTISM



Selected examples of support for activities that promote national traditions and patriotic attitudes:

- continued partnership with the Foundation for Polish Values, including through the Package for the Compatriot and Hero Living in the Eastern Borderlands campaign, aiming to donate Easter and Christmas gifts for Poles and their families living east of Poland.

DONATIONS

DONATIONS



Selected examples of donations:

- provision of funding to the Virgin Mary Roman Catholic Parish in Stargard to restore frescoes in the Collegiate Church of the Blessed Virgin Mary, Queen of the World,
- support for the Witold Pilecki Patriotic Foundation in purchasing rehabilitation equipment for a war veteran,
- support for the World Union of the Home Army Veterans in purchasing a Banner for the 14th West Pomeranian Territorial Defence Brigade of Stanisław Jerzy Sędziak (nom de guerre: Warta),
- support for the treatment of a woman from the Police municipality suffering from spinal muscular atrophy,
- provision of funding for the treatment of an employee's child,
- provision of funding to a company employee in rebuilding a house that burnt down,
- support for the Ostoja Teetotal Association,
- support for the Roman Catholic Parish at the John the Baptist basilica in the organisation of the premiere of 'Alius Angelus', a musical work composed for beatification of Cardinal Stefan Wyszyński,
- support for the Queen of Apostles Hospice in Tanów in creating recreational and therapeutic space for patients and their families,
- provision of funding to the ZHP Scout Troop in Police to cover the cost of transport of its members for trips scheduled for 2021.

The total amount of donations to social causes in 2021 was PLN 569 thousand. The largest beneficiaries included the Pomeranian Medical University in Szczecin and the Roman Catholic Parish of the Blessed Virgin Mary, Queen of the World in Stargard.

See Grupa Azoty Puławy's sponsorship and social activities

SOCIAL CAMPAIGNS



Selected examples of support for the development of local communities and the region:

- partnership with the PA-KT Foundation for the Disabled in Puławy,
- partnership with the 'Let's Give Them a Chance' Association for People with Disabilities,

- partnership with the 'Bratek' Catholic Association for People with Disabilities,
- partnership with the Municipal Social Welfare Centre in organising a Christmas gifts drive for families in need,
- collecting plastic bottle caps at the request from the Puławy hospice; for several years, dedicated collection boxes have been placed on the company's premises; the caps brought by the company's staff are collected by hospice employees a few times a year.



BEST PRACTICE

In 2021, for the second time Grupa Azoty PUŁAWY employees decided to make the dreams of those who cannot afford a lavish Christmas party come true. Twelve large families under the Puławy Municipal Social Welfare Centre's care submitted a dream list of Christmas gifts, and the leaders-volunteers coordinated a collection of those items among the company's employees. The initiative was joined by about 100 employees, including all members of the Management Board.

Selected examples of safety support initiatives:

- co-financing the purchase of fire-fighting equipment for volunteer fire brigades in the company's neighbourhood,
- construction of a lighting system along the Aleja Tysiąclecia Państwa Polskiego street,
- construction of a bicycle path – the 300-metre long section connected the existing bicycle path with the bike entrance at the company's gate No. 2. Not only did the project significantly improve the safety of employees commuting to work by bike, but also gave residents of Puławy a new route for bicycle trips. Before that, bikers were forced to share a very busy and narrow street with motorists, which created safety risks.

Selected examples of support for employees:

- implementing a flexible working time arrangement – office staff can now choose their work start and end times – with their line manager's approval they can begin work between 6 and 9 am and finish between 2 and 5 pm;
- pilot project introducing a second additional free hour for office staff, which reduced the working week to 38 hours.





Selected examples of support for professional and amateur sports:

- partnership with the Azoty-Puławy Handball Sports Club, a successful handball team, currently playing in PGNiG Superliga, winners of five bronze medals in Polish championships; in 2021, the team came third in the ranking table,
- partnership with the Wisła Puławy Sports Club, a multi-sports club with a senior football team that was promoted to the second league in 2020/2021, in the autumn round of the 2021/2022 season, they came in tenth in the ranking table,
- partnership with the Speedway Motor Lublin speedway club, the team plays in PGE Ekstraliga and was the Polish vice-champion in 2021,
- partnership with MKS Padwa Zamość, a handball club playing in the first central league,
- partnership with Laura Bernat – a gifted 16-year old swimmer, member of the University Sports Association of Maria Curie-Skłodowska University (AZS UMCS Lublin), 2021 European junior champion in 200-metres backstroke,
- partnership with the LKPS Lublin – Friends of Volleyball Club of Lublin, in 2021, after play-offs, the club was promoted to the premier division of Plus Liga,
- partnership with the Edach Budowlani Lublin Sports Club, which has a premier-league rugby section,
- partnership with the Powiślak Końskowola sports club, a senior football team playing in Group 1 of the Lublin League,
- partner of the Martial Sports Gala and KFN 2 Gala,

- support for initiatives combining sports activities with the promotion of patriotic and civic attitudes – the Wolf's Trail Run, Lublin July 1980 Solidarity Run, Lublin Province Marshal's Cup Flag Run,
- assistance for sports clubs of the Puławy Sports Academy,
- continuation of the Sports Academy programme for children playing football. The main idea behind the programme is to partner with sports clubs and teams from Grupa Azoty Puławy's local community.



BEST PRACTICE

In late October 2021, the Grupa Azoty Arena sports and entertainment hall in Puławy hosted the fourth Tournament of the Grupa Azoty PUŁAWY Sports Academy. More than 100 children from local football clubs took part in the event. Under the new rules of the Polish Football Association, the Sports Academy Tournament was

designed to be fun for all the children. Accordingly, no scored goals were taken into account (except for the classification of scorers), and no winner of the tournament was announced.



Selected examples of support for cultural initiatives:

- partnership with the 'Dom Chemika' Puławy Culture Centre,
- partnership with the Lublin Music Theatre,
- partnership with the Vistula Museum in Kazimierz Dolny and St. John the Baptist and St. Bartholomew Roman Catholic Parish in Kazimierz Dolny in the organisation of summer organ concerts,

- engaging in the production of 'Unknown author', a film documenting the introduction of martial law in Poland and the anniversary of the pacification of striking workers at the 'Wujek' coal mine,
- strategic sponsorship of 'Pasja', an artistic performance on the occasion of Easter,
- partnering in the organisation of Provincial Harvest Festival,
- supporting the renovation of a historical church in Kraśnik,
- supporting the repairs of an 18th-century church altar in Dorohucza,
- sponsorship of the 'Sounds of Words – Three Seas' Music and Theatre Festival,
- sponsorship of the Blacksmith Workshop and Blacksmith Arts Fair in Wojciechów.



Selected examples of support for educational initiatives:

- partnership with the Marie Skłodowska-Curie Technical School Complex in Puławy. In September 2021, a new patronage agreement was signed to extend collaboration between the two entities for the next three years. The company will support the school by funding scholarships and awards for students and specialist equipment for laboratories. Students (future chemical engineering technicians, analytical technicians, electrical technicians, mechanical technicians, IT technicians, ICT technicians, and programmer technicians) will take part in annual apprenticeships at the Group's plants, and those who complete their education with very good grades can be hired.



Selected examples of support for activities that promote national traditions and patriotic attitudes:

- engaging in the organisation of celebrations on the occasion of: the 70th anniversary of death of lieutenant Edward Taraszkiewicz 'Iron',
- the National School Anthems Festival,
- regional events commemorating the 40th anniversary of the introduction of martial law in Poland,
- and the Christmas Wafer meeting for soldiers with the duty of guarding Polish borders.



Selected examples of environmental protection initiatives:

- patronage of environmental campaigns for children, teenagers and senior citizens in local press,
- encouraging employees to bike rather than drive to work,
- 'Green Staff', an employee volunteering programme in which employees carried out eight clean-up projects on green areas of their choice,
- looking after a peregrine falcon's nest located on the CHP plant flue gas stack – in 2021, another brood of peregrine falcon chicks hatched in the nest,
- popularisation of ornithology thanks to regular radio programmes on the company's broadcasting system, presenting the bird species living on and around the company's premises.

The total amount of donations to social causes in 2021 was about PLN 900 thousand. The largest beneficiaries included: the Puławy Town Hall, Friends of Technical School Complex Chemik Association of Puławy, Hetman Sports Club Association of Zamość, Holy Spirit Church in Kraśnik, Art Salon Foundation of Lublin, and Tomaszów County Local Authorities Association.



SAFE AND FRIENDLY WORKPLACE

Our employees

[103-2]

There are about fifteen thousand people working at the Grupa Azoty Group companies. Their professionalism and work ethos build our reputation and customer confidence in the Group's products. The competencies and commitment of our staff allow us to look towards the future with courage and deliver the ambitions outlined in our Strategy 2030. In line with the ESG strategy, the principal objectives for our employees are to drive their professional development, boost the culture of equality, diversity and openness, and provide them with a safe work environment on a daily basis.



OUR STRATEGIC OBJECTIVES UNTIL 2030

PROFESSIONAL DEVELOPMENT

- offer professional development opportunities and carry on the Intellectual Capital Development Programme among current and future employees
- launch cascade skills development – reinforce the role of line managers as persons responsible for employee development
- promote up-to-date, effective professional training sessions and courses by developing an in-house e-learning platform available to all employees
- regularly survey employee engagement and satisfaction

EQUALITY, DIVERSITY, OPENNESS

- ensure equal pay for women and men in similar jobs
- put a formal diversity policy in place at the Group, encompassing gender, education, age and professional experience

OCCUPATIONAL HEALTH AND SAFETY

- implement uniformly robust safety standards through an OHS policy
- pursue a zero accident target at the Group's plants
- implement programmes promoting healthy lifestyles among employees

We offer work in the modern chemical industry and support professional development of our staff. We want each and every member of our workforce to be able to pursue their ambitions together with the Grupa Azoty Group and feel they can count on the employer's support in their professional careers. We hold ourselves responsible for our employees, and their work safety is treated as an absolute priority at each of our Group companies.

Our employees are offered an attractive remuneration package, appropriate to their position, skills and responsibilities, ample benefits and perks, as well as full-time employment. Each of our key companies is a significant and valued employer in its region.

The principles of HR management at our Group are defined in the collective bargaining agreements, which have been individually developed and implemented by each Group company. Matters provided for in the agreements include working hours, rules of remuneration, allowances and other pay components for employees, as well as conditions to payment of benefits other than remuneration for work (pension and death benefits). At Grupa Azoty S.A. and Grupa Azoty Police, the approach to workforce management is additionally governed by the HR policy, which is part of the HR strategy, consisting of procedures, policies and practices for dealing with employees. At Grupa Azoty S.A., Grupa Azoty Puławy and most of Grupa Azoty Puławy Group companies we have also implemented the work rules.

Our management approach

About our workforce [102-7] [102-8] [401-1] [405-1]

As at the end of 2021, the Grupa Azoty Group had 15,796 employees, up by 171 on the previous year. Nearly 10,000 people (62.4%) employed by the Group work at one of the four largest companies. Compared with 2020, the level of employment at these companies remained practically unchanged, with only two new hires. We always operate in accordance with the Labour Code and employ our staff under employment contracts, with almost 93% of them being open-ended contracts.

The data below present the employment level as at December 31st 2021 and include only employees working under employment contracts, excluding any staff working under civil law contracts (i.e. contracts for a specific work, managerial contracts and contracts with management board members) and personnel on unpaid, parental and rehabilitation leave.

Total number of employees by gender and type of employment contract [headcount][1]

		2020		2021	
		F	M	F	M
Grupa Azoty KĘDZIERZYN	Part-time	406	999	394	988
	Full-time	49	74	65	115
	Total	**455**	**1,073**	**459**	**1,103**
Grupa Azoty POLICE	Part-time	499	1,841	500	1,827
	Full-time	28	137	44	146
	Total	**527**	**1,978**	**544**	**1,973**
Grupa Azoty PUŁAWY[2]	Part-time	729	2 573	718	2 600
	Full-time	81	222	77	229
	Total	**810**	**2,795**	**795**	**2,829**
Grupa Azoty S.A.[3]	Part-time	643	1 491	639	1 462
	Full-time	22	62	16	38
	Total	**665**	**1,553**	**655**	**1,500**
Total		**2,457**	**7,399**	**2,453**	**7,405**
		9,856[4]		**9,858**	

[1] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.
[2] The non-financial report includes staff employed under employment contracts and staff employed under civil law, including managerial, contracts.
[3] The non-financial report includes an incorrect breakdown of employees by gender.
[4] The number of employees specified in the Grupa Azoty Group's 2020 integrated report was corrected.

Total number of employees by gender and working time arrangement [headcount][5]

		2020		2021	
		F	M	F	M
Grupa Azoty KĘDZIERZYN	Part-time	3	0	3	1
	Full-time	452	1,073	456	1,102

		2020		2021	
	Total	**455**	**1,073**	**459**	**1,103**
		1,528		**1,562**	
Grupa Azoty POLICE	Part-time	2	1	3	1
	Full-time	525	1,977	541	1,972
	Total	**527**	**1,978**	**544**	**1,973**
		2,505		**2,517**	
Grupa Azoty PUŁAWY	Part-time	1	2	2	0
	Full-time	809	2,793	793	2,829
	Total	**810**	**2,795**	**795**	**2,829**
		3,605		**3,624**	
Grupa Azoty S.A.	Part-time	4	8	3	6
	Full-time	661	1,545	652	1,494
	Total	**665**	**1,553**	**655**	**1,500**
		2,218		**2,155**	
Suma		**2,457**	**7,399**	**2,453**	**7,405**
		9,856		**9,858**	

[5] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.

[405-1]

Governing bodies and employees by gender and age group[6]

There were no significant changes in the workforce structure relative to 2020 at any of our leading companies. The largest group of our employees are blue-collar male workers aged between 30 and 50. Women account for a majority (95%) of laboratory staff and 33% of the staff employed in manager positions. The share of women in senior management positions is over 25%. In 2021, persons aged between 30 and 50 represented a majority of the workforce at each main company of the Grupa Azoty Group. They accounted for approximately 53% of the workforce. The second largest group were employees aged above 50, accounting for approximately 37% of the workforce.

[6] For the sake of data consistency, GRI 405-1 includes only employees working under employment contracts, excluding any staff working under civil law contracts (i.e. contracts for a specific work, managerial contracts and contracts with management board members).

Number of employees by gender and type of position

	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY

	Grupa Azoty KĘDZIERZYN				Grupa Azoty POLICE				Grupa Azoty PUŁAWY				
	2020		2021		2020		2021		2020		2021		
	M	F	M	F	M	F	M	F	M	F	M	F	M
Operators	649	33	657	23	1,163	8	1,151	8	1,076	15	1,081	14	71
Other blue-collar jobs	108	19	109	21	341	70	350	72	921	105	953	94	33
Managers	62	45	59	46	80	26	83	26	123	56	123	54	8
Laboratory staff	13	112	13	114	9	174	8	180	1	177	1	181	2
Supervisors	75	8	82	8	130	17	128	17	244	20	243	19	10
Senior staff	39	95	43	86	0	5	0	6	44	120	46	124	9
Specialist staff	117	138	125	156	234	221	231	230	342	299	337	291	19
Senior management	10	5	15	5	21	6	22	5	44	18	45	18	2
TOTAL	**1,076**	**455**	**1,103**	**459**	**1,978**	**527**	**1,973**	**544**	**2,795**	**810**	**2,829**	**795**	**1,5**
	1,531		**1,562**		**2,505**		**2,517**		**3,605**		**3,624**		

SCROLL TABLE

Management Board composition by gender (number and percentage) as at December 31st 2021

	Grupa Azoty KĘDZIERZYN				Grupa Azoty POLICE				Grupa Azoty PUŁAWY				Grupa Azoty S.A
	2020		2021		2020		2021		2020		2021		2020
	M	F	M	F	M	F	M	F	M	F	M	F	M
Number	3	0	5	0	3	1	3	1	3	0	4	0	7
Percentage (%)	100	0	100	0	75	25	75	25	100	0	100	0	100

SCROLL TABLE

[405-1]

Employees by gender and type of position [%]

	Grupa Azoty KĘDZIERZYN				Grupa Azoty POLICE				Grupa Azoty PUŁAWY			
	2020		2021		2020		2021		2020		2021	
	M	F	M	F	M	F	M	F	M	F	M	F
Operators	42.47	2.16	42.06	1.47	46.43	0.32	45.73	0.32	29.85	0.42	29.83	0.39
Other blue-collar jobs	7.07	1.24	6.98	1.34	13.61	2.79	13.91	2.86	25.55	2.91	26.30	2.59
Managers	4.06	2.95	3.78	2.94	3.19	1.04	3.30	1.03	3.41	1.55	3.39	1.49
Laboratory staff	0.85	7.33	0.83	7.30	0.36	6.95	0.32	7.15	0.03	4.91	0.03	4.99
Supervisors	4.91	0.52	5.25	0.51	5.19	0.68	5.09	0.68	6.77	0.55	6.71	0.52
Senior staff	2.55	6.22	2.75	5.51	0.00	0.20	0.00	0.24	1.22	3.33	1.27	3.42
Specialist staff	7.66	9.03	8.00	9.99	9.34	8.82	9.18	9.14	9.49	8.29	9.30	8.03
Senior management	0.65	0.33	0.96	0.32	0.84	0.24	0.87	0.20	1.22	0.50	1.24	0.50

SCROLL TABLE

Employees by age and type of position [%]

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
Position	Wiek	2020	2021	2020	2021	2020	2021	2020	202
Operators	<30	2.68	2.56	8.22	8.18	4.94	3.67	4.91	1.4
	30–50	23.58	23.37	26.11	26.50	17.70	18.82	16.14	12.6
	50+	18.29	17.61	12.42	11.36	7.63	7.73	12.62	12.7
Other blue-collar jobs	<30	0.46	0.26	1.84	2.42	3.31	2.26	1.04	2.6
	30–50	4.51	4.42	8.50	8.78	13.35	14.65	6.67	8.9
	50+	3.33	3.65	6.07	5.56	11.82	11.98	9.15	10.3
Managers	<30	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.0
	30–50	3.85	3.71	2.63	2.70	2.11	2.04	3.56	3.0

		Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	50+	3.14	3.01	1.60	1.63	2.86	2.84	2.52	2.3
Laboratory staff	<30	1.50	2.05	1.36	1.35	0.81	0.75	1.89	1.4
	30–50	3.66	2.94	3.71	4.17	2.03	2.10	3.79	3.0
	50+	3.00	3.14	2.24	1.95	2.11	2.18	4.15	5.0
Supervisors	<30	0.00	0.13	0.04	0.04	0.06	0.00	0.05	0.0
	30–50	2.35	2.62	3.67	3.89	3.83	3.45	2.07	1.9
	50+	3.07	3.01	2.16	1.83	3.44	3.78	3.07	3.5
Senior staff	<30	1.76	1.73	0.08	0.08	0.17	0.33	1.49	0.9
	30–50	5.55	5.19	0.08	0.12	2.36	2.46	4.69	4.0
	50+	1.44	1.34	0.04	0.04	2.03	1.90	5.68	5.8
Specialist staff	<30	0.00	0.26	1.16	1.23	1.14	0.55	0.63	0.2
	30–50	10.45	11.08	11.10	11.40	11.27	11.18	9.92	11.5
	50+	6.21	6.66	5.91	5.68	5.39	5.60	4.73	5.9
Senior management	<30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	30–50	0.72	1.02	0.68	0.64	0.84	0.72	0.72	1.2
	50+	0.26	0.26	0.40	0.44	0.89	1.02	0.41	0.4

SCROLL TABLE

[401-1]

New employee hires and employee turnover
New hires by gender and age

	Year	2020				2021			
	Gender	F		M		F		M	
Grupa Azoty KĘDZIERZYN	<30	14	54%	16	41%	16	38%	20	2
	30–50	12	46%	22	56%	24	57%	57	6
	50+	0	0%	1	3%	2	5%	7	8

	Year	2020				2021			
	Total	**26**	**24%**	**39**	**12%**	**42**	**28%**	**84**	**2**
Grupa Azoty POLICE	<30	7	54%	54	45%	16	33%	71	5
	30–50	6	46%	64	54%	32	65%	67	4
	50+	0	0%	1	1%	1	2%	4	
	Total	**13**	**12%**	**119**	**36%**	**49**	**33%**	**142**	**4**
Grupa Azoty PUŁAWY	<30	7	22%	61	57%	18	46%	32	
	30–50	24	75%	44	41%	20	51%	65	6
	50+	1	3%	2	2%	1	3%	6	
	Total	**32**	**29%**	**107**	**32%**	**39**	**26%**	**103**	**2**
Grupa Azoty S.A.	<30	15	38%	16	23%	0	0%	10	
	30–50	17	44%	43	62%	17	94%	14	5
	50+	7	18%	10	14%	1	6%	2	
	Total	**39**	**35%**	**69**	**21%**	**18**	**12%**	**26**	**7**
Total <30		43	39%	147	44%	50	34%	133	3
Total 30–50		59	54%	173	52%	93	63%	203	5
Total 50+		8	7%	14	4%	5	3%	19	
TOTAL		**110**	**25%**	**334**	**75%**	**148**	**29%**	**355**	**7**

SCROLL TABLE

Total number of terminations and employee turnover by gender and age

	Year	2020				2021			
	Gender	F		M		F		M	
Grupa Azoty KĘDZIERZYN	<30	2	6%	3	6%	2	6%	6	1
	30–50	7	20%	10	19%	4	11%	9	1
	50+	26	74%	39	75%	50	83%	37	7
	Total	**35**	**24%**	**52**	**17%**	**36**	**22%**	**52**	**1**

	Year	2020				2021			
Grupa Azoty POLICE	<30	3	8%	20	14%	3	8%	25	1
	30–50	8	22%	34	24%	11	29%	45	2
	50+	26	70%	89	62%	24	63%	86	5
	Total	**37**	**26%**	**143**	**46%**	**38**	**23%**	**156**	**4**
Grupa Azoty PUŁAWY	<30	2	5%	4	6%	2	4%	7	
	30–50	11	27%	18	26%	19	32%	18	2
	50+	28	68%	47	68%	38	65%	58	7
	Total	**41**	**28%**	**69**	**22%**	**59**	**36%**	**83**	**2**
Grupa Azoty S.A.	<30	3	9%	4	8%	2	6%	11	1
	30–50	2	6%	10	20%	11	34%	17	2
	50+	27	84%	35	71%	19	59%	47	6
	Total	**32**	**22%**	**49**	**16%**	**32**	**19%**	**75**	**2**
Total <30		10	7%	31	10%	9	5%	50	1
Total 30–50		28	19%	72	23%	45	27%	90	2
Total 50+		107	74%	210	67%	111	67%	226	6
TOTAL		**145**	**32%**	**313**	**68%**	**165**	**31%**	**366**	**6**

SCROLL TABLE

The high rate of employee attrition in the 50+ age group was in a vast majority of cases due to retirement decisions.

What we provide to our employees [103-2] [202-1] [401-2]

[103-2]

The remuneration offered to employees of the Group's leading companies is higher than the minimum wage. Persons who are at the beginning of their professional careers and hold entry-level jobs at our Group may expect, depending on the company, a monthly pay which exceeds the minimum wage by 27% – 160%. The year-on-year decrease in employee remuneration in 2021 relative to the minimum wage is attributable to a higher minimum wage in Poland.

[202-1]

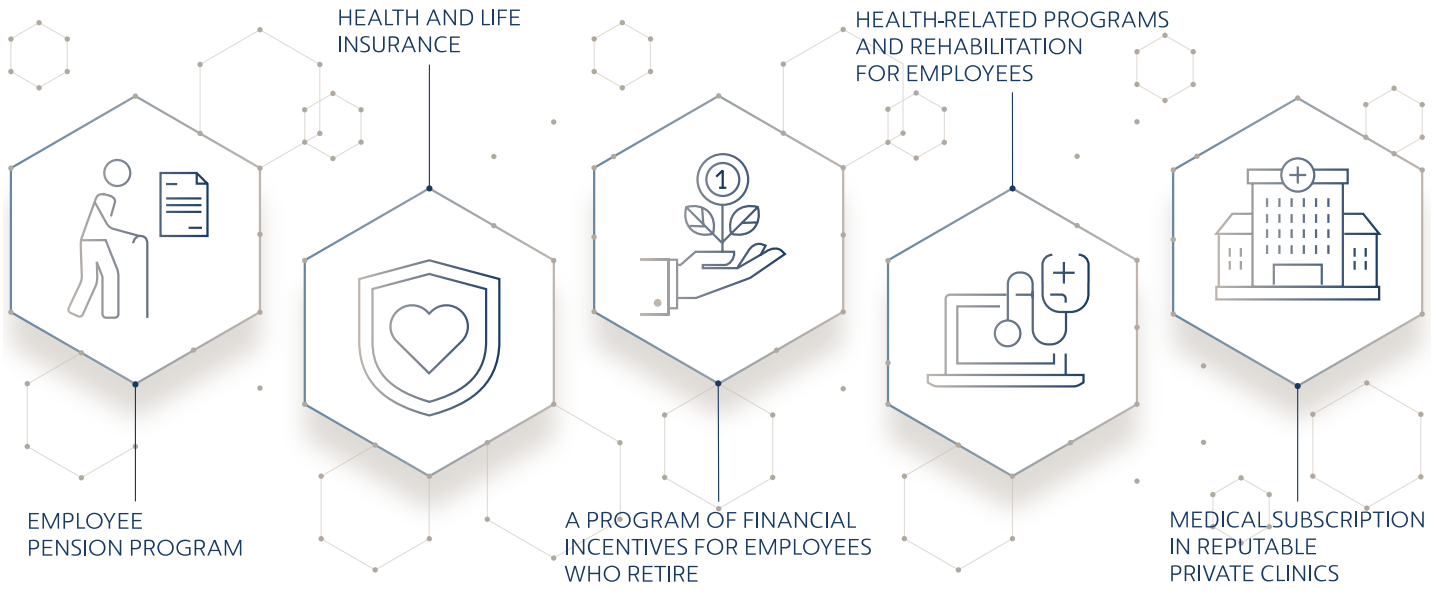
Ratios of standard entry level wage by gender compared to local minimum wage[7]

	F		M	
	2020	2021	2020	2021
Grupa Azoty Kędzierzyn	2.63	1.71	3.01	2.60
Grupa Azoty Police	2.03	1.77	2.32	1.27
Grupa Azoty Puławy	2.10	1.55	2.38	1.60
Grupa Azoty S.A.	2.24	2.01	2.25	1.98

[7] Ratio calculated as the average wage for an entry-level job (with entry-level jobs understood as "Other blue-collar jobs") compared to the minimum wage in Poland in the year stated. In 2020, the minimum wage in Poland was PLN 2,600, up to PLN 2,800 in 2021.

[401-2]

Employee benefits



We offer an attractive employee benefits package at the Grupa Azoty Group. Each company defines the detailed terms of the package on its own to match the needs of its employees.

Grupa Azoty S.A. provides its full-time employees with:

- Occupational Pension Scheme, in which 1,847 employees were registered in 2021,
- co-funding of private medical care, which in 2021 was used by 1,751 employees and 832 employee family members, that is by 2,583 persons in total,
- co-funding of life insurance, which in 2021 was used by 3,293 employees and members of their families.

Grupa Azoty Kędzierzyn provides its full-time employees with:

- additional medical cover,
- Occupational Pension Scheme,
- emergency benefits,

- health promotion programmes,
- partial refund of upskilling expenses.

Grupa Azoty Puławy provides its full-time employees with:

- benefits under the Social Benefits Fund:
  - emergency cash for employees, pensioners, persons on pre-retirement benefits and children of eligible persons,
  - holiday allowance for employees,
  - holiday allowance for pensioners, and persons on pre-retirement benefits,
  - allowance for therapeutic holidays in a sanatorium purchased individually by eligible persons,
  - allowance for children's summer and winter camps, residential trips, holidays, therapeutic holidays in a sanatorium and physical therapy holidays,
  - home loans;
  - cultural, sports and recreation events,
  - use of swimming pools and other sports facilities,
  - Christmas events and purchase of Santa Clause gifts for children,
  - employee trips,
  - 'Spartakiads' – events for employees, pensioners, persons on pre-retirement benefits,
  - vouchers and financial assistance to prepare for Christmas/Easter celebrations for pensioners and persons on pre-retirement benefits,
- group life insurance,
- unit-linked group life insurance,
- medical care with unlimited access to medical consultations, examinations, diagnostic tests, outpatient treatments and rehabilitation,
- Employee Capital Plans.

Grupa Azoty Police provides its full-time employees with:

- benefits under the Social Benefits Fund:
  - allowance for children's holidays organised (or purchased) by the employer and individually by eligible persons, in the form of therapeutic holidays, summer and winter camps for children,
  - allowance for employee holidays, sanatorium treatment, preventive and therapeutic holidays, and trips organised or purchased by the employer and individually by eligible persons,
  - allowance for holidays organised by employees on their own,
  - in-kind and financial assistance provided in emergencies,
  - purchase of Christmas gifts for children (sweets or gift cards),
  - support for home renovation and housing purposes,
  - financial assistance to pensioners,
  - prepaid gift card top-ups for employees before Easter, Chemists' Day and Christmas,
- LUX-MED medical cover and a dental care package,
- Occupational Pension Scheme,
- life insurance,
- prophylactic meals for eligible employees,
- allowance for eye protection spectacles,
- flexible work time – most employees working in the basic system start work between 6:00 am and 8:00 am and finish between 2:00 pm and 4:00 pm,
- 10 additional days off for single- and two-shift workers and for company fire-fighters as compensation for longer working time compared to three-shift workers.



SAFE AND FRIENDLY WORKPLACE

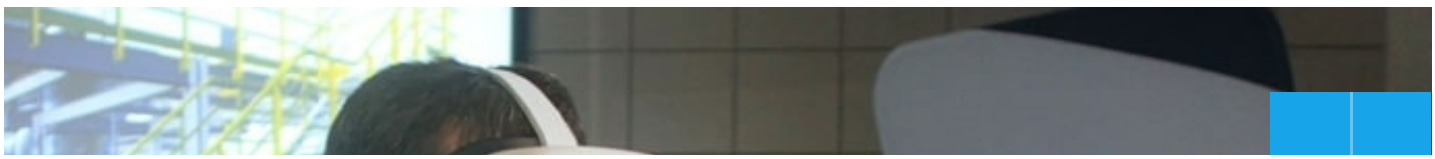
Professional development

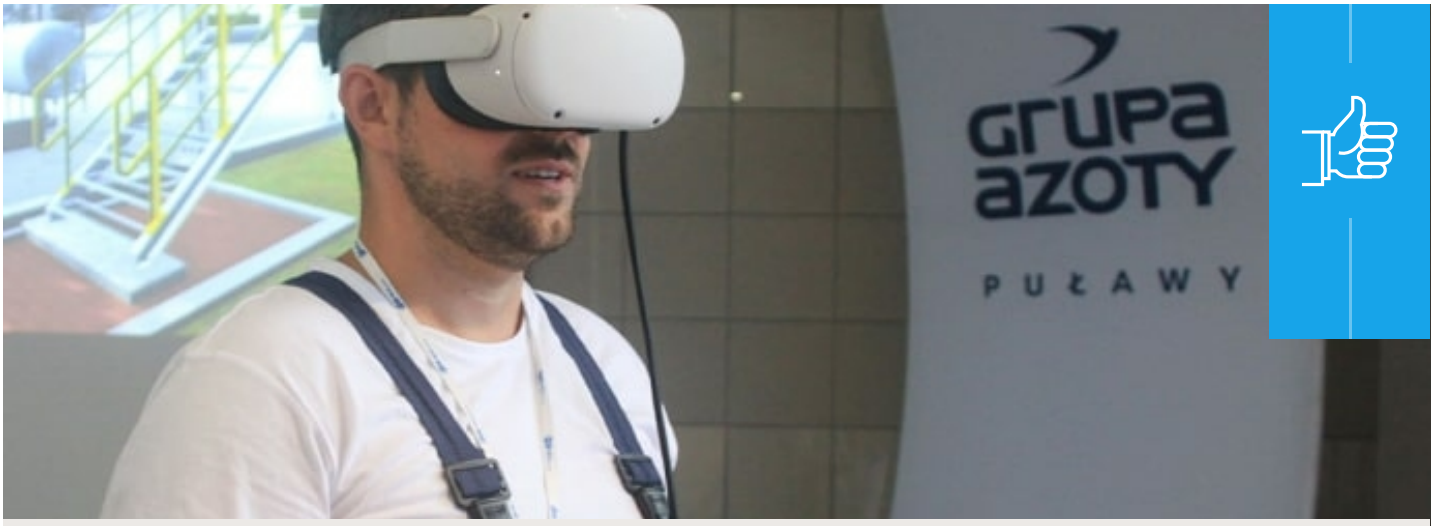
[103-1] [103-2] [404-2]

At the Grupa Azoty Group, we know that the competencies of our employees translate into the competencies of the entire organisation. We are aware that only by investing in continual expansion of our personnel's knowledge can we respond to the challenges posed by the 21st century and deliver or Strategy for 2021-2030. The companies have prepared comprehensive training packages for employees in various positions – we seek to develop worker skills, specialist skills and managerial competencies. We organise internal and external training, with sessions taught both on-site and online. We also strictly follow the regulations applicable to employees' licences required for individual positions, ensuring that they are timely and regularly renewed and that employee knowledge is up-to-date.

In 2021, at the four main companies of the Grupa Azoty Group the average number of training hours per male employee was 7, and 6.6 per female employee, which means a year-on-year increase of 19% and 90%, respectively. The increase was due to the need to make planned renewals of employee licences and to provide training that was not organised in 2020 due to COVID-19.

We offer clear career paths to our employees and support their professional ambitions. Our Group is constantly looking for people who are eager to learn, talented and aspiring to contribute to the creation of a modern chemical industry in Poland.





BEST PRACTICE

Thanks to our cooperation with KPT ScaleUP, the Grupa Azoty S.A. Knowledge Academy was also established as an extensive e-learning platform representing a modern response to the training and information needs of the Company's employees. As part of the Academy, we provide 39 courses on such topics as management, IT, interpersonal skills and work safety. Employees can take those courses at a place and time of their choice. The system also facilitates the creation of individual learning paths and monitoring of learning progress, together with testing of acquired knowledge. The course library will be expanded and updated. In the future, the Knowledge Academy may be available to employees of all Grupa Azoty Group companies.

We combined the pilot implementation of the Academy with a test of training based on augmented reality. An on-the-job training manual was prepared in this way at the Caprolactam Polymerisation Department.



BEST PRACTICE

In 2021, we launched the SMART COMBO project for employees approaching retirement. Our aim is to help them find attractive ways of spending time after leaving the labour market – plan their future as pensioners, discover

their talents and find new interests. The final goal is to develop a tool suitable for the needs related to a future retiree's plans.

We have tested the tool on more than 20 volunteer employees due to retire next year.

[404-1]

Average number of training hours per employee by gender[1]

Year	Gender	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	Average
2020	F	1.73	5.26	4.61	2.29	**3.47**
	M	3.24	13.10	4.39	2.79	**5.88**
2021	F	7.42	8.14	3.48	8.53	**6.60**
	M	3.91	10.52	5.30	7.85	**7.00**

SCROLL TABLE

[1] A restatement was made relative to data presented in the non-financial statement of the Grupa Azoty Group for the 12 months ended December 31st 2021.

Average number of training hours per employee by type of position[2]

Position	Structure level	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	Year	2020	2021	2020	2021	2020	2021	2020	202
Operators		3.16	2.42	12.05	9.43	2.38	3.09	0.08	2.9
Other blue-collar jobs		5.31	2.74	12.29	10.17	2.75	5.63	0.18	1.0
Managers		3.36	10.22	23.48	17.75	12.40	8.36	12.89	31.5
Laboratory staff		1.28	2.43	5.36	6.76	1.35	0.09	0.07	5.6
Supervisors		2.00	0.89	7.32	11.02	2.74	3.35	18.87	0.5
Senior staff		2.32	15.64	0.00	0.00	0.93	1.88	2.37	16.4
Specialist staff		1.56	7.11	9.44	10.56	9.47	7.50	1.35	11.6
Senior management		2.80	13.40	11.52	10.67	19.05	17.11	25.40	52.9
Average		**2.72**	**4.94**	**11.09**	**9.96**	**6.38**	**4.90**	**7.65**	**15.3**

SCROLL TABLE

[2] A restatement was made relative to data presented in the non-financial statement of the Grupa Azoty Group for the 12 months ended December 31st 2021.

[404-3]

In 2021, in view of the state of epidemic and the need to limit direct contact, we decided not to conduct periodic assessments of our employees. At Grupa Azoty Kędzierzyn and Grupa Azoty S.A., employees underwent quarterly assessments in connection with the bonus payment scheme.



SAFE AND FRIENDLY WORKPLACE

Equality, diversity, openness

[103-1]

We follow clear criteria for hiring, evaluating and promoting employees. At each level and stage of employment at the Grupa Azoty Group all that matters are competencies, experience, performance and values represented – this is what determines an employee's professional career in our organisation. Any discrimination in employment and workplace bullying are prohibited. Any reports of such behaviour are investigated and, if confirmed, the guilty party is subject to severe legal and disciplinary sanctions. Equal treatment in employment is ensured by relevant provisions of the companies' articles of association, labour rules and collective bargaining agreements.

Read more about our code of ethics

Despite the lack of any formalised policy for this area, over the years our Group has developed rules that promote greater diversity. We seek to ensure diversity encompassing gender, education, age and professional experience among all employees, especially those in managerial positions and key managers. One of the important values identified in Grupa Azoty's Code of Ethical Conduct is respect, which manifests itself in refraining from any acts or decisions and from making any statements that could violate another person's dignity. It entails a duty to respect any nationality, race, gender, age, disability, religion, political views, sexual orientation, as well as different beliefs and opinions.

One of our strategic objectives until 2030 is to establish a formal policy of workplace diversity with respect to gender, education, age and professional experience, applicable at the entire Grupa Azoty Group.

At all of our parent companies, the difference in individual employees' salaries is natural and does not represent a gender pay gap. We never offer different remuneration based on gender.

[WSE S-P2]

Gender pay gap ratio[1]

	2021
Grupa Azoty KĘDZIERZYN	9.66%
Grupa Azoty POLICE	6.66%
Grupa Azoty PUŁAWY	7.63%
Grupa Azoty S.A.	5.12%

[1] The gender pay gap ratio is calculated as the difference between the average monthly remuneration of men and women employed under employment or managerial contracts (including bonuses, awards and other allowances). The ratio covers staff employed under employment and managerial contracts. It was calculated for the first time for 2021.

[405-2]

Ratio of average gross pay of women to men [2]

Position	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A	
	2020	2021	2020	2021	2020	2021	2020	202
Operators	103.4871	106.8990	86.7678	91.3896	105.1973	97.24	99.4759	91.42
Other blue-collar jobs	86.6675	65.6872	80.9141	80.8945	83.9146	76.89	96.4988	101.8
Managers	91.3445	90.0275	104.8536	104.0458	93.0118	96.11	95.1628	99.30
Laboratory staff	111.535	110.8657	93.6937	84.6263	105.4491	90.50	107.0858	107.1
Supervisors	81.0116	81.9262	79.5239	82.79	88.4968	95.96	98.793	87.41
Senior staff	101.01	87.3115	-	-	84.7168	82.94	90.6125	85.38
Specialist staff	91.5778	90.1222	82.8212	82.2397	90.2679	88.30	91.3927	90.9

SCROLL TABLE

Position	Grupa Azoty KĘDZIERZYN		Grupa Azoty POLICE		Grupa Azoty PUŁAWY		Grupa Azoty S.A.	
Senior management	101.2812	122.1154	116.0147	123.4471	116.4273	106.06	94.6925	85.59

[2] The gender pay gap ratio is calculated as the difference between the average monthly remuneration of men and women employed under employment or managerial contracts (including bonuses, awards and other allowances). The ratio covers staff employed under employment and managerial contracts. It was calculated for the first time for 2021.

[203-2]

In accordance with applicable regulations, contributions to the State Fund for Rehabilitation of the Disabled are paid by all employers who have at least 25 employees, with less than 6% of them being disabled. The largest portion of those funds are transferred directly to employers as wage subsidies. The Fund also supports disabled individuals, non-governmental organisations working for people with disabilities, and specialist projects, such as occupational therapy workshops, or social economy initiatives, such as occupational activity centres.

[Own disclosure]

Total annual contributions to PFRON – the State Fund for the Rehabilitation of the Disabled [PLN]

	2020	2021
Grupa Azoty KĘDZIERZYN	1,123,135.0	1,119,321.0
Grupa Azoty POLICE	2,803,768.0	2,997,670.0
Grupa Azoty PUŁAWY	3,880,515.4	3,970,906.0
Grupa Azoty S.A.	2,576,138.0	2,771,812.0
Total	**10,383,556.4**	**10,859,709.0**



SAFE AND FRIENDLY WORKPLACE

Occupational health and safety

[103-1] [103-2] [403-1]

Occupational health and safety at each Grupa Azoty Group company is far too important to be compromised. We treat work safety as a priority and are aware – given the conditions characteristic of our workplace – that compliance with OHS rules is a matter of human life and health, not just regulations. All our companies have comprehensive occupational health and safety management systems in place. Our OHS Management System is based on ISO 45001:2018, which places strong emphasis on:

- OHS risk assessment;
- preventive health care and prevention of accidents;
- collecting and using information on incidents other than accidents;
- enabling all stakeholders to carry out safety improvement measures, including employees and social partners, in a consultative and participative process.

[403-1] [403-2] [403-5] [403-7]

The OHS function at each Grupa Azoty Group company performs regular inspections and participates in accident and emergency teams. Any near-miss event reported by employees in electronic or paper form is reviewed. A register of hazards, near-miss incidents and observations is kept and updated on an ongoing basis in an online database. In order to prevent any unsafe situations, the companies share information by posting conclusions from investigation of near-miss incidents on an online platform.

See how we promote safety at the Group companies

[403-1] [403-2] [403-3] [403-4] [403-5] [403-6] [403-7]

Grupa Azoty S.A.

[403-1]

At Grupa Azoty S.A., occupational health and safety is governed by the work rules, which set out the rights and obligations of employees and the employer. The Company has also implemented an occupational health and safety management system conforming to ISO-45001.

- The performance of the systems is regularly evaluated through external audits, and conformity to standards is confirmed by relevant certificates. In 2021, an external audit conducted by DNV was successfully completed, confirming compliance with ISO-45001.
- The safety system includes:
  - risk assessment and appropriately selected mitigation measures;
  - an extensive system of non-compliance control and response;
  - active participation of employees (risk reporting, social labour inspection);
  - teams (committees) in place, including the OHS Committee, to evaluate projects and place new plants in service;
  - compliance with all necessary legal requirements;
- We regularly conduct OHS training for our employees.
- We have developed a transparent and clear procedure for the performance of hazardous works by third parties working on the premises of Grupa Azoty S.A.

[403-2]

The Company has implemented appropriate occupational risk assessment activities in line with legal standards, ISO 50001 and an internal procedure. As regards the risk of major industrial accidents, the Company prepares a process safety analysis in the form of a Safety Report. The plant has an electronic system for reporting OHS hazards, near-miss incidents and accidents. The Company also has in place an internal procedure describing how to report and respond to such situations.

[403-3]

As regards occupational medicine, Grupa Azoty S.A. cooperates with the local healthcare establishment Mościckie Centum Medyczne (MCM), which performs all occupational health assessments and provides staff for the company ambulance. In addition, MCM physicians participate in the annual review of workplace conditions. The cooperation also includes preventive vaccination. The Company has implemented appropriate procedures to ensure the confidentiality of employee health data.

[403-6]

The Company's strategy adopted in 2021 includes the objective to promote healthy lifestyle among workforce. The employees were provided with an opportunity to take advantage of sports and fitness membership cards co-financed by the Company. The employees can also use medical services offered by the LUXMED private healthcare chain.





BEST PRACTICE

In the Grupa Azoty S.A. Knowledge Academy online database, we have published six parts of the OHS programme for staff managers.

[403-4]

Grupa Azoty S.A. wants to involve its employees in the process of improving safety performance at the plant. We have created the positions of Company Social Labour Inspector and Divisional Social Labour Inspectors. The persons holding these positions are charged with the task of improving workplace safety and conditions on behalf of employees. The Company OHS Committee, comprising representatives of the trade unions and the Company Social Labour Inspector, meets once every quarter. The role of the Committee is to ensure OHS communication between representatives of the employer and those of the employees.

[403-7]

Our safety efforts also include activities involving other entities, such as local communities and other companies operating nearby, as well as defining safety rules together with subcontractors performing work on the premises of Grupa Azoty S.A.

[403-5]

The Company organises its own induction and periodic OHS training, as well as ADR, RID and chemical rescue courses. The Company has also taken steps to enable its employees to participate in the necessary external training in specialist fields related to electrical engineering licences, loading of dangerous goods into tanker trucks, operating cranes and lifts, etc.

We comply with the legal requirements applicable to upper tier establishments. We make regular updates to the Safety Report, Industrial Accident Prevention Programme, Internal Emergency Plan and information materials for the public on accident risks.

The process safety measures and the emergency response system, including the Company Fire Brigade, undergo constant improvement.

In 2021, no major industrial accident within the meaning of the Environmental Protection Law occurred at the plant.

Grupa Azoty Kędzierzyn

[403-1]

The safety management system is based on ISO 45001 and covers all activities, employees, and workplaces.

[403-2]

Grupa Azoty Kędzierzyn provides each new employee with training on identification of hazards, assessment of occupational risks and minimum health and safety requirements. For identified hazards and significant risks, the company analyses the possibility of removing the risks or mitigating their effect on occupational safety, taking into account the current financial, technical and organisational conditions. Based on approved specific objectives, an OHS improvement plan is prepared every year.

Each manager is required to provide staff under their supervision with information on risks to health and life at the individual workstations and on how to eliminate them. Employees can report risks related to their work and unsafe situations through such means as an anonymous intranet forum, their social representatives or in various ways in person.

Following an accident or near miss, steps are taken to prevent future reoccurrence. At least once a year, the company carries out an aggregate analysis of the causes of accidents and near misses and formulates improvement measures in the form of conclusions included in the periodic Safety Analysis and Assessment. The Group has also defined the rules and procedures to be followed in the event of an industrial accident.

Employees of the Kędzierzyn plant can report risks related to their work and unsafe situations through such means as an anonymous intranet forum, their social representatives or in various ways in person. They are protected from retaliation under the Grupa Azoty Group Code of Ethical Conduct, among other documents.

[403-5]

Appropriate OHS training policies have been implemented at Grupa Azoty Kędzierzyn. The Group conducts, among others:

- general induction training and on-the-job training,
- position-specific training, followed by an examination to determine whether the employee may be permitted to work on their own,
- periodic training,
- ad hoc training with the preventive goal of discussing actual occupational accidents, industrial accidents or unsafe situations leading to risks to health and life or to the environment, and training provided in the event of significant changes in safety regulations,
- periodic training for administrative and office staff, staff managers, engineers and technicians are provided online.

[403-4] [403-3] [403-6]

At Grupa Azoty Kędzierzyn, the safety management system documents are consulted with workers' representatives. Periodic reviews are undertaken of the OHS status and applicable legislation. Employees also have access to an extensive source of OHS information posted on the company intranet. Employee representatives are involved in occupational risk assessments, post-accident investigations, selection of health promotion programmes and a behavioural observation programme. The occupational physician takes part in occupational risk assessments and meetings of the Safety Committee. For many years, employees of Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. have been taking part in health promotion programmes run by the company. All employee health data are duly protected.

Each person holding a managerial position at Grupa Azoty Kędzierzyn is required to provide staff under their supervision with information on the risks to health and life at individual workstations and on protective measures. The provision of such information and its acknowledgement are confirmed by dated signature of a staff member.

[403-7]

Anyone entering the site supervised by Grupa Azoty Kędzierzyn is provided with information on hazards and safe work. We check the completeness of protective clothing and personal protective equipment of all drivers coming to load or unload goods.

Additional safety measures implemented at Grupa Azoty Kędzierzyn include:

- upgrade and automation of production and loading facilities at the company's plant, thanks to which no instances of exceeded energy expenditure limits or excessive hazardous exposures are recorded,
- 5S system has been implemented, which helps create and maintain an ergonomic, clean, and safe workplace,
- company ambulance with a rescue team on board, available to employees on a 24/7 basis,
- portable defibrillators at the company's key facilities,
- general obligation to wear eye protection for all employees and visitors at the production facilities,
- inspections carried out jointly with officers from the Road Traffic Department of District Police in Kędzierzyn-Koźle to check compliance with road traffic regulations and perform sobriety checks.

Grupa Azoty Puławy

[403-1]

Grupa Azoty Puławy has an OHS management system in place compliant with the PN-N-45001 standard. The company has implemented a Quality, Environmental and Safety Policy that embodies its commitment to workplace safety, by setting out specific targets and tasks. Two companies of the Grupa Azoty Puławy Group had their occupational safety regulations incorporated into the integrated management system, while the other Group companies have safety policies in place.

[403-7]

Grupa Azoty Puławy performs regular inspections on its premises involving the Fire and Technical Safety Committee and the OHS Committee. The integrated management system is also subject to internal audits. All occupational health and safety training required by applicable regulations is provided to the company's employees, and the work environment is monitored on an ongoing basis.

[403-2] [403-4]

Occupational risks are assessed by the company on the basis of identified hazards, the results of such assessment prompting relevant OHS improvements. Employees can report risk exposures involved in their work by communicating them anonymously via the OHS feedback box or by informing the Social Labour Inspectorate. OHS matters are discussed during meetings of the OHS Committee, which take place once every three months and are attended by representatives of the company's employees, as well as the technical and technical acceptance boards.

[403-5]

In 2021, the company provided induction and position-specific training as needed. Such training is delivered by qualified engineering staff of Grupa Azoty Puławy's OHS function.

[403-3]

Grupa Azoty Puławy has engaged Medical as a provider of healthcare services. There is also an occupational health service unit at the company, which assists the OHS Committee in an advisory role and trains employees in first pre-medical aid. Under a relevant agreement, a 24/7 medical emergency unit has been set up. All medical data of employees are duly protected.



BEST PRACTICE

[403-6]

In 2021, blood donor sessions were held and free coronavirus tests were performed at Grupa Azoty Puławy.

Grupa Azoty Police

[403-1]

Since 2021, Grupa Azoty Police has operated an OHS management system compliant with the PN-ISO 45001:2018 standard. At Grupa Azoty Police general OHS rules are covered by the collective bargaining agreement, while specific provisions are contained in internal regulations. OHS training for staff,

[403-2] [403-4]

Identification of hazards, assessment of risks and investigation of incidents associated with OHS were carried out in accordance with the dedicated PQ-O-H01 procedure. The company's employees are engaged in the process of developing, implementing and assessing the OHS system, including through participation in the OHS Committee, the Social Labour Inspectorate, as well as meetings between senior executives, department heads, supervisors and technical staff held as part of the Safety Day.

[403-5]

At Grupa Azoty Police, periodic OHS training was provided as self-study courses for all positions. Training materials were sent to employees by electronic means, their knowledge to be confirmed by passing an examination test, as each employee had to return a scanned copy or photograph of the completed and signed test to the OHS Office. Induction training on OHS is provided in the form of on-site sessions.

[403-3] [403-7]

Grupa Azoty Police has engaged Medika, a local medical centre, to provide occupational health services, including enhanced standard outpatient medical rehabilitation and ad hoc medical care. In addition, the company has introduced 'DENT PLUS', a dental care programme available as part of its occupational health package. The occupational health practitioner is a member of the OHS Committee and is also involved in the identification of OHS hazards. All health-related data of employees are duly protected.

The company additionally offers paid medical cover from LUXMED. The available options include Individual Packages (for the employee), Partner Packages (for the employee and one co-insured – spouse/partner/child), Family Packages (for the employee, spouse/partner and children) and Parent Packages (for the employee and parents). The additional medical cover is available via the company's intranet and at the Employee Service Point. In addition, LUXMED holds free online meetings where it offers health protection advice. During the pandemic, free vaccination against COVID-19 was also available at the company.

[403-9]

No work-related fatalities were recorded at the Grupa Azoty Group in 2021, but one person employed by Grupa Azoty Police suffered a severe accident from a spill of concentrated sulfuric acid. After the accident, the company took decisive measures to prevent reoccurrence, providing staff in exposed jobs with specialist protective clothing and informing employees of the circumstances of the accident via internal communication channels. Refresher training was also provided and appropriate safeguards were put in place at the workstations.

There were also minor workplace accidents, in which a total of 118 individuals were injured, including 102 men and 16 women. The most common effects of minor accidents were burn wounds and injuries to upper or lower limbs. All those accidents were investigated in accordance with the procedures in place at the respective companies and, wherever possible, measures were taken to prevent reoccurrence.

[403-9]

Number of workplace accidents involving employees and other workers, by gender of the injured[1]

		2020					2021		
Index	Gender	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Grupa Azoty PUŁAWY	Grupa Azoty S.A.	**Total number of accidents in 2020**	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE	Gru Azo PUŁ
Number of minor workplace accidents involving employees, by gender of the injured	F	1	4	4	1	**10**	1	3	7
	M	3	31	27	11	**72**	13	37	3
Number of minor workplace accidents involving other workers, by gender of the injured	F	0	0	0	0	**0**	0	0	0
	M	0	0	0	0	**0**	0	5	0
Number of severe workplace accidents (excl. fatalities) involving employees, by gender of the injured	F	0	0	0	0	**0**	0	0	0
	M	0	0	0	0	**0**	0	0	0
Number of severe workplace accidents (excl. fatalities) involving other workers, by gender of the injured	F	0	0	0	0	**0**	0	0	0
	M	0	0	0	0	**0**	0	1	0
Number of fatal workplace accidents	F	0	0	0	0	**0**	0	0	0

SCROLL TABLE

		2020							2021
involving employees, by gender of the injured									
	M	0	0	0	0	**0**	0	0	0
Number of fatal workplace accidents involving other workers, by gender of the injured	F	0	0	0	0	**0**	0	0	0
	M	0	0	0	0	**0**	0	0	0
Total		**4**	**35**	**31**	**12**	**82**	**14**	**46**	**4**

[1] A restatement was made relative to data presented in the non-financial report of the Grupa Azoty Group for the 12 months ended December 31st 2021.

[403-9]

Accident rate among employees and other workers, by gender of the injured[2]

		2021[3]			
Index	Gender	Grupa Azoty KĘDZIERZYN	Grupa Azoty POLICE[4]	Grupa Azoty PUŁAWY	Grupa Azoty S.A.
Accident rate for minor workplace accidents involving employees	F	0.3	0.8	1.2	1
	M	1.5	2.6	1.9	1
Accident rate for minor workplace accidents involving other workers	F	0	No data available	0	0
	M	0	No data available	0	0
Accident rate for severe workplace accidents involving employees	F	0	0	0	0
	M	0	0	0	0
Accident rate for severe workplace accidents involving other workers	F	0	No data available	0	0
	M	0	No data available	0	0

		2021			
Accident rate for fatal workplace accidents involving employees	F	0	0	0	0
	M	0	0	0	0
Accident rate for fatal workplace accidents involving other workers	F	0	No data available	0	0
	M	0	No data available	0	0

[2] Accident rate is calculated as follows: number of all accidents recorded /total number of hours worked × 200,000. The rate was not calculated in 2020.

[3] Number of hours worked by employees in 2021: Grupa Azoty S.A. (1,049,520 for women and 2,487,455 for men), Grupa Azoty Kędzierzyn (697,864 for women and 1,768,431 for men), Grupa Azoty Puławy (1,128,722.5 for women and 4,169,020 for men), Grupa Azoty Police (770,950.44 for women and 2,857,928.27 for men)

[4] Grupa Azoty Police has no data on the number of hours worked by individuals performing work under contracts other than employment contracts. The work of such individuals is remunerated on a monthly basis/based on agreed amounts.



Sustainable supply chain

[103-1] [103-2]

In accordance with the Group's ESG strategy, we aim to quantify our carbon footprint in order to set accurate climate targets, in alignment with the Paris agreement. We act and expect our business partners to act in an ethical, socially responsible and environmentally sustainable manner. Our standards of ethics and rules of business partnership are transparent and known to all our suppliers

We want to do business with entities that are guided by the same values and pursue similar goals. We expect our business partners to assume shared responsibility for the climate, environment and social impacts. By 2030, we expect to have in place a system for assessing prospective suppliers of products and services against a set of ESG criteria. We will also implement a programme for reducing the carbon footprint of our products along with a system for collecting emissions data. We will promote sustainability-focused changes and support our trading partners in implementing such changes as part of their social and environmental practices. We have plans to organise relevant training.



OUR STRATEGIC OBJECTIVES UNTIL 2030

SELECT SUPPLIERS BASED ON SHARED VALUES AND GOALS

- evaluate the selection of suppliers of goods and services based on ESG criteria
- put in place a product carbon footprint reduction programme; build or implement an emission data collection system and reduce emissions

SHARED RESPONSIBILITY FOR SHAPING THE VALUE CHAIN

- support partners in operating sustainably and improving their social and environmental practices
- train business partners to facilitate change
- transparently communicate standards of ethics and rules of business partnership.

See our supply chain [102-9] [102-13] [103-2]

[102-9] [103-2]

All plants of the Grupa Azoty Group see a daily outbound flow of products, counted in thousands of tonnes, and receive huge amounts of raw materials needed to produce them. Responsibility for coordinating this complex supply chain lies with the Group's procurement and logistics departments. This is where decisions are made regarding optimal arrangements for both outbound and inbound transport. We manage to combine financial savings in logistics with measurable environmental benefits.

The efficient supply chain allows us to sell our products in the European Union and other European countries, as well as in Asia, North America, South America and Africa.

Our storage depots are located all over Poland. We also use storage facilities of more than 80 external distributors. Wherever we store our products and raw materials, we always adhere to the highest standards and relevant safety requirements.

If possible, we use rail freight as the most environmentally friendly and cost-effective way of transporting materials. Its efficient management for the entire Group is the responsibility of Grupa Azoty Koltar, which also owns a modern locomotive repair and maintenance facility.

Our Group also uses its own port assets in Gdynia, Gdańsk and Police. Product shipments are dispatched in bulk carriers and chemical tankers, and large volumes of goods are also transported in intermodal containers. Our cargoes are handled by the container terminals in Gdynia and Gdańsk and by most shipowners operating on the market. Shipments by sea include fertilizers and chemicals intended for further processing by our customers.

In line with our operational excellence strategy, by 2030 we plan to increase our cargo handling capacities by expanding the storage resources of Group companies, as part of which we want to upgrade logistics of fertilizers and plastics, and by reducing the cost of using third-party storage facilities.



BEST PRACTICE

We operate a modern TMS SOOT system that facilitates transport processes and, among other things, can be used to communicate with the carriers, report transport events, send delivery notices and notify customers of a shipment dispatch.



BEST PRACTICE

In April 2021, in the oldest existing part of the Szczecin shipyard, 30 tonnes of NOXy were loaded from two tanker trucks onto the 'Barbara' vessel, which consumes about 200 litres of the product daily. The loading operation required special preparations, involving the use of hoses more than 50 metres in length. Previously, NOXy was only loaded onto ships at Western European ports.



BEST PRACTICE

[102-13]

In 2021, Grupa Azoty ZAK S.A. was a member of the Agreement between Operators of Transshipment Terminals and Logistics Centres of Central and Eastern Europe. It is an association of entities operating in the transport, forwarding and logistics industries founded on the initiative of Polskie Koleje Państwowe S.A. Grupa Azoty ZAK S.A. is the first production company to have joined the agreement.

See what we expect from our suppliers [102-16] [103-2] [205-2]

[102-16] [103-2]

Given the scale of our operations and contracts awarded, we are regarded as a very attractive employer by contractors across many industries. We want to leverage that influence to promote values that matter to us. Suppliers looking to obtain business from the Grupa Azoty Group must comply with our Trading Partners Code of Conduct, which prohibits such practices as:

- use of child labour throughout the supply chain,
- use of forced or slave labour,
- any form of corruption – 'Zero Tolerance for Corruption',
- financing of political parties,
- money laundering and terrorist financing,
- violations of fundamental labour rights and the law,
- employee discrimination.

By accepting the Code, suppliers also commit to minimising their environmental impacts and to avoiding the use of raw materials sourced from conflict zones.

[205-2]

At the supplier selection stage, the potential contractors are required to acknowledge having read the Trading Partners Code of Conduct and the Grupa Azoty Group Code of Ethical Conduct along with the Anti-Corruption Policy, and then, when signing their contracts, they agree to apply and follow the provisions of both documents. In addition, we sign an agreement with each supplier to assist each other in detecting and combating any cases of misconduct and reporting such cases promptly.



Our report

[102-50] [102-51] [102-52] [IR - Basis of preparation and presentation of the report]

We present to you the integrated report on the Grupa Azoty Group's financial and non-financial performance for the period January 1st–December 31st 2021. The report provides information on the Grupa Azoty Group Strategy for 2021–2030, presenting its value creation model. The document also includes a section on how the Group responds to climate change risks in accordance with the TCFD methodology and an overview of the Group's preparedness for future market and regulatory challenges. The Grupa Azoty Group 2020 integrated report was published in December 2021. Reports are prepared on an annual basis.

[102-54]

This publication was prepared in accordance with the international Global Reporting Initiative Standards (GRI Standards) for non-financial reporting: Core option. The TCFD recommendations concerning disclosure of climate-related information as well as selected indicators from the ESG reporting guidelines of the Warsaw Stock Exchange were also applied. The content and layout of this report are also based on relevant recommendations of the International Integrated Reporting Council (IIRC).

Report scope and boundary, applicable standards and guidelines

[102-45]

This report describes the non-financial activities and performance of the four key companies of the Grupa Azoty Group:

- Grupa Azoty S.A. of Tarnów (the parent);
- Grupa Azoty Zakłady Azotowe Kędzierzyn of Kędzierzyn-Koźle (Grupa Azoty Kędzierzyn; ZAK);
- Grupa Azoty Zakłady Azotowe Puławy of Puławy (Grupa Azoty Puławy);
- Grupa Azoty Zakłady Chemiczne Police of Police (Grupa Azoty Police).

In addition to the companies listed above, the consolidated financial statements of the Grupa Azoty Group cover seven other companies (subsidiaries of Grupa Azoty): COMPO EXPERT Holding GmbH, Grupa Azoty ATT Polymers GmbH (Guben, Germany), Grupa Azoty Polskie Konsorcjum Chemiczne Sp. z o.o. (Tarnów, Poland), Grupa Azoty Koltar Sp. z o.o. (Tarnów, Poland), Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol S.A. (Grzybów), Grupa Azoty Folie Sp. z o.o. w likwidacji (in liquidation), and Grupa Azoty Compounding Sp. z o.o.

Financial data in this report was taken from the consolidated financial statements of the Grupa Azoty Group.

Review of the report

[102-56]

In order to exercise utmost care, we have engaged Deloitte's Sustainability Consulting Central Europe Team to assist in the preparation of this report. Approximately 116 employees of the four key Group companies were involved in the data collection process. The report was also subject to an independent third-party review by KPMG.

[102-10] [102-48] [102-49]

Besides the ownership changes described in the 'About the Grupa Azoty Group' section, there were no other significant changes in the size, structure or value chain of the Group in the reporting period. The following data was restated relative to the Grupa Azoty Group's integrated report for 2020: 102-8 (update of the total workforce) and 302-1 (update of direct and indirect energy consumption by the organisation). In addition, there were changes in the reporting methodology or presentation of GRI disclosures: 405-2 ('Management Board' item removed from employee categories) and 201-4 (change in the classification of financial support).

There were no significant changes in material topics identified relative to the previous year's report.

[102-53]

We want to know your opinion about the report and the scope of information you would like us to provide in its next edition. To share your opinion and to request a copy of the report, please send a message to katarzyna.kapustka@grupaazoty.com

Media enquiries: Grupa Azoty Press Officer rzecznik@grupaazoty.com

Investor enquiries: Investor Relations Team ir.tarnow@grupaazoty.com

[102-43] [102-44] [102-46]

Report drafting process

1. Identification

The drafting process was based around key strategic pillars for 2021–2030 identified by the Grupa Azoty Group in 2021.

Additionally, we relied on the findings of a dialogue session conducted in 2018 with the Group's key external stakeholders, including social institutions, business partners, farmers and public cultural centres. In 2019, we carried out additional surveys among stakeholders and performed an internal analysis of reports prepared by international rating agencies.

2. Prioritisation

In 2018, 2021 and 2022, we conducted anonymous surveys among our employees and external stakeholders. This year's survey covered the new ESG strategy of the Grupa Azoty Group, based on five key strategic pillars: The Grupa Azoty Group's ESG strategy is organised around five strategic pillars: climate and environment, sustainable products, sustainable supply chain,

immediate environment, safe and friendly workplace. The questionnaire was completed by 353 external and internal stakeholders.

Topics identified by stakeholders in the most recent survey were then prioritised by the Group on the basis of matters raised in the previous stakeholder surveys and interviews with the Group's management team.

3. Validation

During a meeting with representatives of the Grupa Azoty Group, the first two stages of defining the report content were summarised and a final list of material topics was confirmed.

[102-44] [102-47] [103-1]

For the Grupa Azoty Group's external stakeholders, the most relevant topics to be reported include:

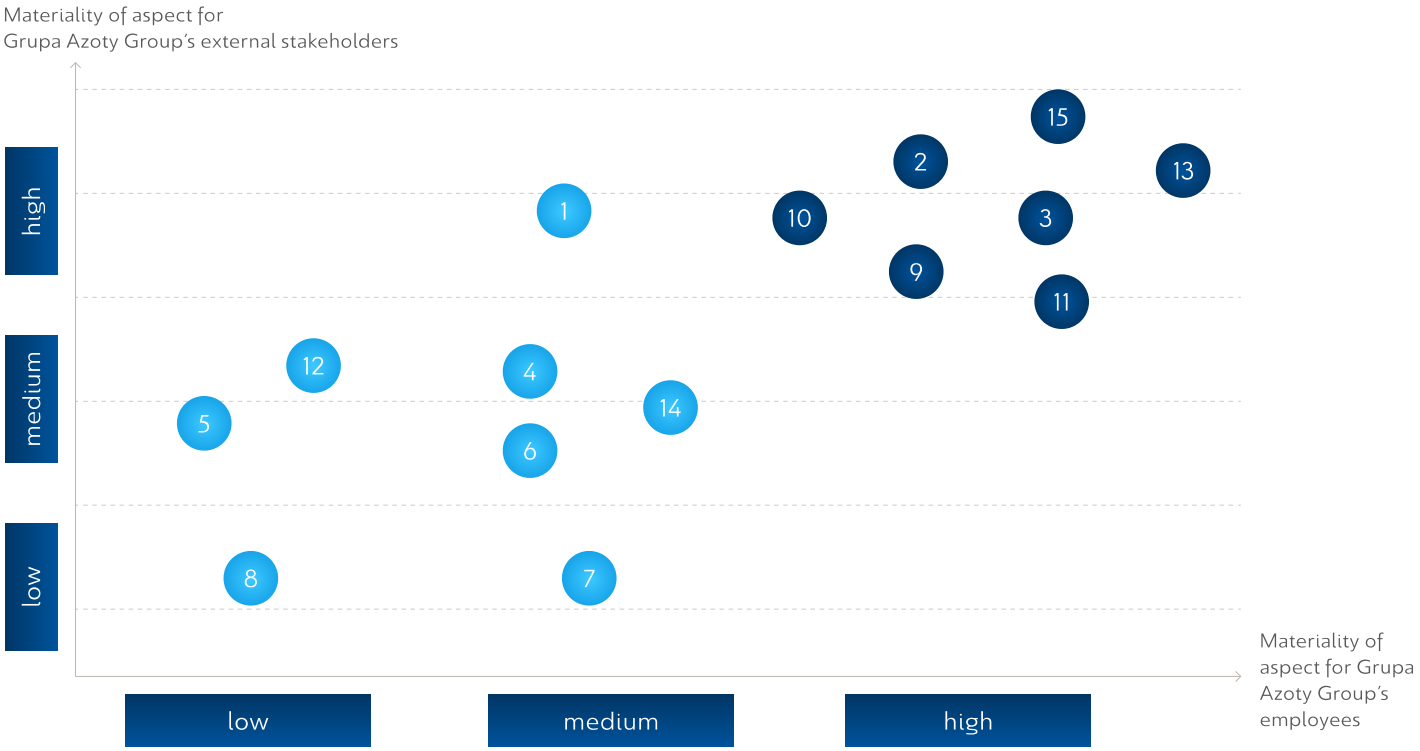
1. Fair and solid relationships with business partners
2. Health and safety
3. Energy efficiency (e.g. reduction of energy consumption)
4. Innovative and environmentally-friendly production
5. Energy transition (e.g. shift to renewable energy sources)

For the Grupa Azoty Group's employees, the most relevant topics to be reported include:

1. Conditions of employment
2. Health and safety
3. Career development, training
4. Energy efficiency (e.g. reduction of energy consumption)
5. Fair and solid relationships with business partners

The prioritisation process determined the materiality of relevant aspects for the Grupa Azoty Group and its stakeholders (i.e. low, medium and high), as shown in the diagram below. The following aspects are addressed in individual sections of this report.

Materiality matrix



1. Decarbonisation and emissions reduction
2. Energy transition (e.g. shift to renewable energy sources)
3. Energy efficiency (e.g. reduction of energy consumption)
4. Circular economy and reduction of resource consumption
5. Green products
6. Sustainable agriculture and raw material sourcing
7. Support for business partners in ensuring compliance with the Codes
8. Supplier selection and evaluation criteria incorporating ESG aspects
9. Collaboration with business partners (joint development of sustainable solutions)
10. Impact on the development of local markets
11. Support to local communities
12. Dialogue with local community representatives
13. Health and safety
14. Equality, diversity, openness
15. Career development, training



OUR REPORT

Index tables

[102-55]

Index table – GRI content index, own disclosures and WSE indicators

GRI Standard	Number of the disclosure	Title of the disclosure
PROFILE DISCLOSURES [2016]		
ORGANIZATIONAL PROFILE		
GRI 102	102-1	Name of the organization
GRI 102	102-2	Activities, brands, products, and services
GRI 102	102-3	Location of headquarters
GRI 102	102-4	Location of operations
GRI 102	102-5	Ownership and legal form

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 102	102-6	Markets served
GRI 102	102-7	Scale of the organization
GRI 102	102-8	Information on employees and other workers
GRI 102	102-9	Supply chain
GRI 102	102-10	Significant changes to the organization's size, structure, ownership, or supply chain
GRI 102	102-11	Reporting whether and how the organization applies the precautionary principle or approach
GRI 102	102-12	A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes, or which it endorses
GRI 102	102-13	Membership of associations
STRATEGY		
GRI 102	102-14	Statement from senior decision-maker
GRI 102	102-15	Key impacts, risks, and opportunities
ETHICS AND INTEGRITY		
GRI 102	102-16	Values, principles, standards, and norms of behaviour
GRI 102	102-17	Internal and external mechanisms for seeking advice about ethical and lawful behaviour, and organizational integrity
GOVERNANCE		
GRI 102	102-18	Governance structure of the organization, including committees of the highest governance body
GRI 102	102-20	Executive-level responsibility for economic, environmental, and social topics
STAKEHOLDER ENGAGEMENT		
GRI 102	102-40	A list of stakeholder groups engaged by the organization
GRI 102	102-41	Percentage of total employees covered by collective bargaining agreements
-	Own disclosure	Number of trade unions and number of employees who are members of trade unions
GRI 102	102-42	Basis for identifying and selecting stakeholders with whom to engage

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 102	102-43	The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group
GRI 102	102-44	Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns, including through its reporting
REPORTING PRACTICE		
GRI 102	102-45	Entities included in the consolidated financial statements
GRI 102	102-46	Defining the report content and topic boundaries
GRI 102	102-47	List of material topics
GRI 102	102-48	Effect of any restatements of information provided in previous reports, and the reasons for such restatements and their effect
GRI 102	102-49	Changes in reporting
GRI 102	102-50	Reporting period
GRI 102	102-51	Date of the most recent report
GRI 102	102-52	Reporting cycle
GRI 102	102-53	Contact point for questions regarding the report
GRI 102	102-54	Claims of reporting in accordance with the GRI Standards
GRI 102	102-55	GRI content index
GRI 102	102-56	Policy and current practice with regard to seeking external assurance for the report
MANAGEMENT APPROACH		
GRI 103	103-1	Explanation of the material topic and its boundary
GRI 103	103-2	The management approach and its components
GRI 103	103-3	Evaluation of the management approach
TOPIC-SPECIFIC STANDARDS		
ECONOMIC		
ECONOMIC PERFORMANCE [2016]		

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 201	201-2	Financial implications and other risks and opportunities due to climate change note: Partially reported. Information on the financial consequences of risks or opportunities before the organization takes action and on the costs of measures taken to manage risks or opportunities would be required for full disclosure.
GRI 201	201-4	Financial assistance received from government
MARKET PRESENCE [2016]		
GRI 202	202-1	Ratios of standard entry level wage by gender compared to local minimum wage
INDIRECT ECONOMIC IMPACTS [2016]		
GRI 203	203-1	Infrastructure investments and services supported
GRI 203	203-2	Significant indirect economic impacts
-	Own disclosure	Total annual contributions to PFRON – the State Fund for the Rehabilitation of the Disabled [PLN]
ANTI-CORRUPTION [2016]		
GRI 205	205-2	Communication and training about anti-corruption policies and procedures note: Partially reported. Information on the number and percentage of business partners who became acquainted with the organization's anti-corruption policy and procedures by partner categories, and on the number and percentage of members of management bodies and employees (by employee category) who received anti-corruption training, would be required for full disclosure.
GRI 205	205-3	Confirmed incidents of corruption and actions taken
ANTI-COMPETITIVE BEHAVIOUR [2016]		
GRI 206	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices
ENVIRONMENTAL		
MATERIALS [2016]		
GRI 301	301-1	Materials used by weight or volume note: Partially reported. Information on materials from renewable sources would be required for full disclosure.

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 301	301-3	Percentage of reclaimed products and their packaging materials for each product category
ENERGY [2016]		
GRI 302	302-1	Energy consumption within the organisation, including information on the type of energy carrier used
GRI 302	302-3	Energy intensity
GRI 302	302-4	Reduction of energy consumption note: Partially reported. Information on the type of energy savings would be required for full disclosure.
WATER AND EFFLUENTS [2018]		
GRI 303	303-1	Interactions with water as a shared resource
GRI 303	303-2	Management of water discharge-related impacts
GRI 303	303-3	Total water withdrawal, by source
GRI 303	303-4	Water discharge
BIODIVERSITY [2016]		
GRI 304	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
GRI 304	304-2	Significant impacts of activities, products, and services on biodiversity
EMISSIONS [2016]		
GRI 305	305-1	Direct (Scope 1) GHG emissions
GRI 305	305-2	Total indirect GHG emissions
GRI 305	305-4	GHG intensity
GRI 305	305-5	Reduction of GHG emissions
GRI 305	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions
WASTE [2020]		
GRI 306	306-1	Waste generation and significant waste-related impacts
GRI 306	306-2	Management of significant waste-related impacts
GRI 306	306-3	Waste generated

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 306	306-4	Waste diverted from disposal note: Partially reported. Information on the total weight of waste diverted from disposal by waste composition would be required for full disclosure.
GRI 306	306-5	Waste directed to disposal note: Partially reported. Information on the total weight of waste directed to disposal by waste composition would be required for full disclosure.
ENVIRONMENTAL COMPLIANCE [2016]		
GRI 307	307-1	Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations
SOCIAL		
EMPLOYMENT [2016]		
GRI 401	401-1	New employee hires and employee turnover
GRI 401	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees
OCCUPATIONAL HEALTH AND SAFETY [2018]		
GRI 403	403-1	Occupational health and safety management system
GRI 403	403-2	Hazard identification, risk assessment, and incident investigation
GRI 403	403-3	Occupational health services
GRI 403	403-4	Worker participation, consultation, and communication on occupational health and safety
GRI 403	403-5	Worker training on occupational health and safety
GRI 403	403-6	Promotion of worker health
GRI 403	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
GRI 403	403-9	Work-related injuries
TRAINING AND EDUCATION [2016]		
GRI 404	404-1	Average hours of training per year per employee
GRI 404	404-2	Programs for upgrading employee skills and transition assistance programs

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 404	404-3	Percentage of employees receiving regular performance and career development reviews by gender and by employee category
DIVERSITY AND EQUAL OPPORTUNITY [2016]		
GRI 405	405-1	Governing bodies and employees by gender, age group, and other diversity indicators
GRI 405	405-2	Ratio of basic salary and remuneration of women to men for each employee category
-	GPW S-P2	Gender pay gap
NON-DISCRIMINATION [2016]		
GRI 406	406-1	Total number of incidents of discrimination and corrective actions taken
LOCAL COMMUNITIES [2016]		
-	Own disclosure	Operations with local community engagement, impact assessments, and development programs
GRI 413	413-2	Operations with significant actual and potential negative impacts on local communities
-	Own disclosure	Total donations to social causes
PUBLIC POLICY [2016]		
GRI 415	415-1	Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country
CUSTOMER HEALTH AND SAFETY [2016]		
GRI 416	416-1	Assessment of the health and safety impacts of product and service categories
GRI 416	416-2	Incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services
MARKETING AND LABELLING [2016]		
GRI 417	417-1	Requirements for product and service information and labelling
GRI 417	417-2	Incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labelling

GRI Standard	Number of the disclosure	Title of the disclosure
GRI 417	417-3	Incidents of non-compliance with regulations and/or voluntary codes concerning marketing communications
SOCIOECONOMIC COMPLIANCE [2016]		
GRI 419	419-1	Non-compliance with laws and regulations in the social and economic area

TCFD Table

Area	Disclosure	Location
Governance Disclosure of the organization's governance around climate-related risks and opportunities.	Description of the board's oversight of climate-related risks and opportunities.	Climate risk management I. Governance
	Description of the management's role in assessing and managing climate-related risks and opportunities.	Climate risk management I. Governance
Strategy Disclosure of the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Map of ESG risks and opportunities
	Impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Climate risk management II. Strategy. Climate-related risks and opportunities identified
	Description of the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	under preparation
Risk management Disclosure of how the organization identifies, assesses, and manages climate-related risks.	Description of the organization's processes for identifying and assessing climate-related risks.	Climate risk management III.1 Processes for identifying and assessing climate-related risks
	Description of the organization's processes for managing climate-related risks.	Climate risk management III.2 The organization's processes for managing climate-related risks
	Description of how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Climate risk management III.3 How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management system
Metrics and targets Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Disclosure of the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Climate risk management IV. Metrics and targets

Area	Disclosure	Location
	Disclosure of Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Climate risk management Chart with a summary of Scope 1 and 2 emissions for 2021
	Description of the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	under preparation

Inclusion of the International <IR> Framework content elements

Content elements	Location
A. Organizational overview and external environment	Overview of the Group; Our future
B. Governance	Group structure; Risk management; Our management approach; Our approach to innovation
C. Business model	Value creation model
D. Risks and opportunities	Risk management; Climate risk management; Map of ESG risks and opportunities
E. Strategy and resource allocation	2021–2030 Strategy
F. Presentation of results	Value creation model;; Key projects in 2021; Financial performance; Stakeholder dialogue; Support to local communities
G. Prospects for the future	Our future
H. Basis of preparation and presentation	Our report