



SIGNIFICANT RISK FACTORS AND THREATS

The Group is exposed to various risks which may have an impact on its operations, financial standing and results or share performance.

Aside from the risks presented in this Report in section 5.11 – *Financial instruments – risk policy and instruments, objectives and methods for risk management*, and the risks described in section 6.2.1 *Significant external growth factors*, the Group identifies the following types of risk:

RISK RELATED TO AVAILABILITY OF NATURAL GAS



Natural gas represents the key component of production costs at the Group, with the Group's annual consumption at 2.2bn cubic metres. PGNiG S.A. was the Group's key gas supplier (61.4%). Other sources were used for the remaining 38.6%. PGNiG S.A. supplied both high-methane gas and gas from local sources under long-term contracts. Supplies from other trading partners were executed under short-term contracts.

In its search for alternative and competitive sources of gas, the Group companies seek to diversify both the geographical regions and the suppliers of their gas imports, and report on these efforts in their press releases and reports. Negotiations with alternative gas suppliers are conducted at the Group level, which allows the Group to leverage its stronger bargaining position. The Group's gas requirements are also partially satisfied from local sources. The Group takes steps to satisfy its overall gas demand through a combination of a long-term contract

with its strategic supplier (PGNiG), annual or quarterly contracts, and transactions on the energy exchange to meet its short-term demand. The steps taken to manage, in a comprehensive manner, all gas sources and balance supplies between the individual Group companies will bring additional cost savings. The Group companies also focus on lowering their gas consumption costs by implementing investment projects designed to reduce gas consumption rates. The gas interconnector and gas storage facility extension projects, currently being implemented in Poland, and the planned launch of the LNG terminal will minimise the risk related to availability of natural gas. Currently, half of the gas purchased by the Group is priced based on the gas prices quoted on Western European exchanges. Following the planned withdrawal of tariffs for industrial customers, all gas purchases will be made at prices paid by our competitors in the European Union.

RISKS ASSOCIATED WITH THE PLANNING AND EXECUTION OF STRATEGIC PROJECTS



The Grupa companies are working on investment projects begun in previous years, while embarking on new projects provided for in the Grupa Azoty Group Strategy for 2014–2020 that are important from the point of view of the Group's interests. Delivery of the Strategy depends on a range of factors, including those outside of the Group's control. In the 'Operationalisation of the Strategy' of June 2014, the Management Board and the Supervisory Board defined three pillars underlying the Group's growth, which included Organic Growth (implemented through investments in property, plant and equipment) and Mergers and Acquisitions.

The risks related to the implementation of the Strategy are external factors in the Group's environment, such as macroeconomic factors, market conditions, business environment and activities of the main competitors. Their negative impact could hinder the Group from developing as planned and from achieving their strategic objectives.

The risk inherent in the execution of strategic projects lies in the possibility that major growth-oriented initiatives and projects will not be completed according to plan or will not deliver the expected results, and that the goals they are intended to achieve will not be adequately translated into the project planning, monitoring or execution processes.

In order to minimise the risks related to the execution of strategic projects at the Grupa Azoty Group, internal procedures have been put in place to define and govern the preparation and execution of investment projects. Oversight has been introduced over strategic projects and their reviewed assumptions (business effects, budgets, KPIs, schedules, division of responsibilities), and regular updates are provided on projects status. Strategic projects are monitored by dedicated Strategic Project Managers appointed by the Company's Management Board. The monitoring of each project covers:

- › basic information on the project,
- › the schedule of milestones with description of expected effects, deadline and the responsible person,
- › the schedule of financial effects (mainly CAPEX and EBIT) to be achieved over time,
- › each project is assigned its owner who will be responsible for the economic result of the project's implementation.

Capital expenditure is defined in the Investing Activity Plan, for each of the four key companies and at the Group level. When planning capital expenditure, an acceptable deviation margin (expressed as a percentage) from the assumed targets is allowed.

In order to mitigate the risk inherent in the investment decision-making process, each Group company has applied internal policies which clearly define and govern the preparation and implementation stages of investment projects.

The execution of investment projects includes change management, where special attention is given to changes in foreign exchange rates, prices of steel and other commodities, as well as the requirements to be met by newly constructed units. As a result, execution timetables and expenditure budgets can be updated on an ongoing basis. In addition, controlling officers monitor the execution of projects to identify potential threats. These policies also take into account the requirements related to the obligations imposed on beneficiaries of EU subsidies granted for the execution of projects co-financed with aid funds.

RISKS ASSOCIATED WITH NEW LEGAL REQUIREMENTS RELATING TO PRODUCTION PROCESSES, INCLUDING ENVIRONMENTAL REGULATIONS (DESCRIPTION OF THE RISKS PRESENTED IN THREE SUB-GROUPS)



1. Risk associated with the implementation of the Industrial Emissions Directive (IED)

Following the implementation of the Industrial Emissions Directive (IED) in January 2014, the Grupa Azoty Group will be required to bring its production facilities to compliance with the new regulations. The companies will have to undertake specific adaptation work, and bear its costs, with respect to:

- › bringing the CHP plants operated by the Group companies in line with the new, more restrictive, standards of NOx, SO2 and dust emissions. The plants in Tarnów, Police, and Puławy will be brought in line with the requirements of the IED Directive, and a new energy source will be built at the Kędzierzyn plant,
- › modernisation of the urea production plant at ZAK S.A. – bringing the existing production plant in line with new legal requirements, including environmental regulations, with respect to urea and ammonia dust emissions,
- › modernisation of the titanium white production plant in Police – continuous monitoring was implemented in January 2015, compliant with the new Regulation. Investments and overhauls of dust removal and desulphurisation units are nearing completion, and will ensure the units' compliance with the new emissions standards.

To ensure that there is sufficient time for taking appropriate steps to adapt the Group's facilities to the changing regulations, the Group continuously monitors all planned and implemented changes in the legal environment which could affect its operations. Investments necessary in the light of new regulations are included in Group companies' investment plans.

2. Risk associated with greenhouse gas emissions

In the course of their production processes, the Group companies emit pollutants and greenhouse gases into the air. Changes in the legal requirements concerning greenhouse gas emissions generate the risk of the Group having to take adaptive steps and incur additional cost.

The regulations are related to the European Union's emissions trading scheme (EU ETS). Directive 2009/29/EC expanded the scope of the EU ETS to cover other areas, including the chemical industry, in the third trading period from 2013 to 2020. In the case of the Group, apart from the CHP plant, this mainly applies to the production units manufacturing nitric acid, ammonia and bulk organic chemicals by way of cracking, reforming, partial or complete oxygenation and similar processes with a daily production capacity in excess of 100 Mg. The ETS III system is based on the allocation of free greenhouse gas emission allowances for emitting installations and, if free allowances are not sufficient, on the purchase thereof in an auction-based system. Each year, the number of the allowances allotted decreases by several percent. If the actual CO2 emissions are not covered by the free allowances, the Grupa Azoty Group may need to incur additional capital expenditure on projects designed

to reduce the emissions of nitrous oxide and carbon dioxide. The volume of carbon dioxide emissions is related to the energy intensity of production processes.

In order to mitigate this risk, the Group companies have been taking steps designed to reduce the energy intensity of production processes, and thus reduce greenhouse gas emissions; for the Group company based in Kędzierzyn, it meant reducing nitrous oxide emissions from its nitric acid unit.

3. Risk associated with BAT conclusions

Following the scheduled review of the regulations on the Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals - Ammonia, Acids & Fertilisers, there is a risk of implementing stricter and broader requirements relating to the air pollution emissions standards. Similarly, there is a risk that new BATs will be defined for the installations for which so far no BATs have been specified. The period for adapting production installations to the emission requirements specified in the BAT conclusions is four years.

In order to meet the BAT requirements, companies should monitor on an on-going basis any drafts of new laws and regulations and actively present their opinions on the proposed legislation. The measures taken by the Group companies in this respect include:

- › analysing the effectiveness of the technologies used in the context of development trends prevailing in the competitive environment,
- › planning and implementing projects designed to bring the production installations in line with the BAT/BREF standards,
- › searching for new solutions used in the processes, in particular to improve efficiency and reduce energy intensity in the context of regulations currently in place and the current level of technology,
- › developing and extending the product range by adding new fertilizers based on components produced in the existing installations.

RISK OF DETERIORATED SALES PERFORMANCE CAUSED BY AN IMBALANCE BETWEEN SUPPLY AND DEMAND >

Fertilizer Segment (material changes)

Growth of harmful fertilizer imports from countries with cheap feedstocks resulting from disruptive protectionist measures, such as dual pricing, especially of gas, potassium chloride or phosphates, imported mainly from Eastern Europe, Western Asia and the MENA countries.

New fertilizer production capacities coming on-stream, especially in EU neighbouring regions.

Announcement of low and fixed export duties on fertilizers in China for 2015 (abandoning the "customs duty window"), which with a demand slowdown in China will cause large-scale fertilizer exports. In a situation when the Indian government withdraws its subsidies and at the same time the Indonesian government reduces its purchases, with both countries being buffer markets for Chinese exports, the flow of Chinese products may be re-directed to other markets, including Europe.

Ukrainian fertilizer production capacities put back on-stream, which, considering the liberalisation of trade relations between the European Union and Ukraine and the lowering of custom duties, may cause inflows of fertilizers to the EU, and especially to Poland.

Grupa Azoty monitors the market on an ongoing basis through its market research and responds promptly to any observed changes. The sales strategy is based on strong relations with the best distributors, complementary services (comprehensive and gradually expanded offering of fertilizers renowned for their quality), a broad marketing programme (agricultural website for farmers, on-line application facilitating business relations with customers), addressing the offering directly to the largest end customers, and ensuring that the target groups on foreign markets are better reached. Securing safe supplies of raw materials through the acquisition of own sources of sulfur and phosphate. Gas purchase policy providing for a 50% shares of gas purchased on the free market.

Grupa Azoty is very active in the regulatory field where it, on its own or through industry organisations, monitors changes and reaches decision-making or opinion-forming bodies to:

- › introduce anti-dumping duties on products affected by harmful imports,
- › prevent threats posed by negotiations of international trade agreements by the EU (currently with the US), as well as by

countries joining the WTO (Russia),

- › prevent trends weakening market protection instruments,
- › inform Members of the European Parliament of the adverse consequences of the ETS and other regulations on the competitiveness of the European industry and its transfer outside the EU.

Plastics Segment (material changes)

- › expansion of Chinese polyamide production capacities ensuring Chinese self-sufficiency (ca. 700 thousand tonnes annually), leading to contracting export markets for EU producers and oversupply in the region;
- › planned expansion of polyamide production capacities on the already saturated EU market (up 20 thousand tonnes per year);
- › expansion of Chinese caprolactam production capacities by ca. 600 thousand tonnes;

The Group mitigates the risk by customising the product mix for processing companies (proprietary application lab), maintaining strong relationships with customers via its Hamburg trade office and developing plans to launch an expanded polyamide range for a wide variety of applications. Thanks to these efforts, Group customers may rely on deliveries of products tailored to their needs in a long time horizon, which ensures stability of supplies. On-line application facilitating business relations with customers. New geographical markets.

OXO Segment (material changes)

- › higher supply of OXO alcohols on a balanced European market, driven by heavy inflow of cheaper alcohols, especially from the Russian market;
- › import of plasticisers to the balanced and highly competitive EU market, on which a wide range of plasticisers are available – the risk related to imports of non-phthalate plasticizers from the Korean and Turkish markets is particularly significant.

The Group mitigates the risk by:

- › adjusting its product mix to market requirements and needs, for instance by introducing non-phthalate plasticisers, ensuring high purity of OXO alcohols and identifying market niches – e.g. improving the DEHP plasticizer for medical applications or arranging deliveries tailored to the needs of end users (flexitanks for deep-sea freight of small volumes of products);
- › initiatives designed to minimise production costs of individual products.

CURRENCY RISK



The Group has a positive exposure to the euro and the US dollar which is hedged based on on-going monitoring of movements in the euro and US dollar exchange rates. The Group companies hedge their currency exposures using currency forwards and natural hedging.

The Group has also applied the Policy of Financial Risk Management (currency risk and interest rate risk) which provides for:

- › centralised supervision over the financial risk management process,
- › monitoring of the Group's consolidated currency exposure,
- › determination of the optimal hedging strategy at the Group level,
- › Group-wide uniform currency risk management rules,
- › uniform catalogue of acceptable and applied hedging instruments,
- › consistent hedge limits and time horizons, determined based on an analysis of the planned currency exposures of the Group and its companies and an analysis of the value at risk (VaR).

In connection with the process of implementing the new centralised financing model, Grupa Azoty intends to extend its hedge time horizon by using long-term currency hedging in the form of a euro-denominated facility for a part of its long-term financing.

The Risk Committee operates at the Group. The Committee analyses and determines the consolidated currency exposure of the Group and its companies and recommends target levels and horizons of hedges, type of currency instruments and exchange rates for hedge transactions. Hedging transactions are executed by those Group companies in which the exposure actually occurs.

The applied methods enable the Group to limit the existing risk by using selected hedging instruments and strategies, based on long-term and one-year currency exposure plans and their updates to account for quarterly operational plans and short-term

projection of currency flows and currency expenditures, and based on the transactions already registered in the financial and accounting system; however, these methods do not eliminate that risk completely. In addition, currency risk may affect the domestic nitrate fertilizer market in the context of bilateral trade with other EU countries. Strong fluctuations in exchange rates may affect the Group's business, financial standing or performance.

RISK OF A NEGATIVE EFFECT OF CO₂ TRADING PRICES ON FINANCIAL PERFORMANCE



The Group and its individual companies implement the necessary organisational and technical measures that enable it to fulfil the requirements on monitoring and verification of emission parameters for control/inspection purposes, effectively manage the allocated allowances, and implement relevant procedures for allowance purchases. The Group has in place a monitoring system for emissions covered by the EU ETS. It also performs ongoing balancing of greenhouse gas emissions. The Group monitors on an ongoing basis its actual emissions and the market prices of emission allowances and takes appropriate steps in response to their fluctuations. The Company may be forced to incur higher-than-expected costs if it reports a deficit in emission allowances as at the end of the year and faces an increased demand for EUAs on the market.

The Group mitigates the risk of an adverse effect of CO₂ trading prices through rolling purchases of emission allowances on the SPOT market and through purchases of emission allowances in the form of financial derivatives with delivery in a future period when they should be redeemed in accordance with the then-current Purchase Strategy.

The CO₂ certificates under Phase III of the EU ETS have been allocated to all Group companies, and the timely allocation of further certificates is expected in line with the allocation plan for the next trading periods. In addition, the companies file audit reports in a timely manner and redeem allowances used for a given year (i.e. by April 30th of the following year).

The Group effectively implements its strategy of rolling purchases of emission allowances, which is designed to ensure full coverage of any deficit of emission allowances that should be allocated for a given year and subsequently redeemed, with exercise prices not higher than the prices projected in the Group's Long-Term Plan.

The Emissions Trading System (ETS) Committee has also been formed and includes representatives of all leading companies, whose main objective is to recommend to the Management Board, and subsequently implement, the Emissions Trading Strategy binding for all Group companies.

The tasks of the ETS Committee include:

- › monitoring of the current and planned greenhouse gas emissions at the Grupa Azoty Group,
- › analysis of the current situation on the Emissions Trading market,
- › analysis of macroeconomic conditions and preparation of market forecasts,
- › determination and coordination of budgets, price limits and instruments for the purchase emission to cover the deficit, to be used to
- › implement the Group's Emissions Trading Strategy,
- › assessment of the Strategy implementation and recommendation of corrective measures, if any.

RISK OF MAJOR INDUSTRIAL ACCIDENTS OR TECHNICAL FAILURES DISRUPTING THE CONTINUITY OF PROCESSES AND OPERATION OF KEY PRODUCTION UNITS



The Group has reliable safety systems and preventive measures in place at all organisational and technological levels, including occupational health and safety as well as protection against industrial accidents, however there is no assurance that these will completely eliminate the risk of such accidents and ensure the continuity of production processes. Their relevance is assessed by external and internal inspection authorities, as well as accreditation/certification bodies.

Prevention of industrial accidents at the Group companies is achieved through a range of activities, including:

- › identification of hazards inherent in technological processes, storage and transport, and implementation of technical solutions and organisational measures to minimize the risk of an accident,
- › ongoing monitoring of operations of machinery and equipment and evaluation of their technical condition,
- › fitting of plants and units with safety and protection systems to minimise the risk of a major accident and environmental contamination, as well as risks to life and limb,
- › implementation of new projects and upgrades based on technical and organisational solutions designed to ensure occupational health and safety (the Group's facilities are compliant with the Best Available Techniques (BAT) reference

- documents, which are the source of the world's strictest safety requirements, including environmental regulations),
- › effecting planned technical stopovers and maintenance shutdowns to ensure that the units and installations are kept in a proper working order,
- › continuous improvement of the employees' qualifications through trainings, courses, etc.
- › introduction of corporate rules within the Group on how to report industrial accidents and failures, as well as how to investigate them and take preventive measures to mitigate the risk of their recurrence in the future,
- › analysis of technical and technological risks at the Grupa Azoty Group,
- › implementation of an operational excellence programme,
- › implementation of the Product Stewardship standard, covering all stages of the fertilizer lifecycle, which has been confirmed by the issuing of a certificate.

RISK OF FERTILIZER OVERSUPPLY, INCLUDING DUE TO IMPORTS OF PRODUCTS MANUFACTURED FROM CHEAPER RAW MATERIALS >

The increasing supply of fertilizers produced with cheap gas and the growing manufacturing capacities in the sector have led to intensified competition in the nitrogen fertilizer markets. In order to strengthen and consolidate its leadership in the segment, the Group has been taking steps to optimise the production costs, broaden the portfolio of products and services offered, and improve customer service. Measures taken by the Group to strengthen its competitive advantages include:

- › implementation of the Group's updated distribution strategy,
- › implementation of projects designed to improve the efficiency of production processes,
- › search for alternative sources of natural gas supplies,
- › strengthening the Group's market position through acquisitions and placement of new products in the market,
- › taking active part in the process of consolidation of the chemical industry,
- › initiation of anti-dumping proceedings,
- › active participation in the work of Fertilizers Europe,
- › cooperation with universities and research institutes,
- › supporting agricultural producers by providing them with access to state-of-the-art fertilizing and production solutions.

RISK RELATED TO THE STRUCTURAL CHANGE ON THE GLOBAL CAPROLACTAM MARKET >

A rapid growth of caprolactam production capacities in China results in gradual reduction of caprolactam imports by China, which in turn has a significant effect on the global supply and demand balance in the caprolactam-polyamide and ammonium sulfate product chains.

To minimise the effect of projected market trends, the Group has undertaken a number of initiatives to strengthen its competitive position:

- › Construction of a new PA6 unit with annual production capacity of 80 kt in Tarnów will help achieve balance in terms of caprolactam production at the Parent (addition of 10 kt per year) and at Grupa Azoty PUŁAWY (addition of 70 kt per year). Extension of the PA6 product chain will be an additional benefit.
- › The Parent is in the final stages of obtaining all required permits and approvals for construction of a new Modified Plastics Facility in Tarnów, within the Kraków Special Economic Zone, that will help further expand the PA6 product chain.
- › Steps have been taken with a view to reducing China's share in Grupa Azoty PUŁAWY's sales through a continuation of the policy to diversify sales of caprolactam on the Asian market, strengthen the position of Grupa Azoty PUŁAWY in the European market and balance caprolactam volumes within the Grupa Azoty Group – regular supplies to ATT Polymers GmbH.
- › The situation in the caprolactam and PA6 markets, particularly in Asia and in Europe, is monitored on an ongoing basis.
- › As far as cost-cutting measures are concerned, a long-term caprolactam manufacturing cost reduction programme was prepared. The programme envisages modernisation projects leading to permanent reduction of manufacturing costs.
- › Steps have been taken to fully leverage the synergies between Tarnów's and Puławy's installations achieved through the integration of the companies' production and sales potential.
- › The Parent is focused on meeting customer expectations by offering new products tailored to specific customer needs.
- › It seeks to optimise the portfolio of its raw material suppliers, with particular emphasis on direct partnerships with producers under long-term strategic contracts, and to develop an optimum procurement logistics model.
- › The Group is active internationally as a member of European industry organisations, such as CEFIC, Plastics Europe, and monitors the situation for any possible threats to be able to take necessary steps and mitigate adverse effects of such negative developments.

