Directors' Report
on the Operations of Grupa Azoty S.A.
and the Grupa Azoty Group
for the 12 months ended
December 31st 2018
This Directors’ Report presents the key events which occurred in the 12 months ended December 31st 2018 at the Grupa Azoty Group and Grupa Azoty S.A., the Group’s Parent. This Report includes all information which is essential for the assessment of the Group’s and the Parent’s financial condition and assets, including the results of their operations, as well as a description of relevant risks and threats. It also presents financial and non-financial indicators, if material for the assessment of the Group’s and the Parent’s condition, as well as additional explanations on the amounts presented in the consolidated and separate financial statements.
Contents

1. General information on the Grupa Azoty Group and its Parent ........................................... 5
   1.1. Organisation and structure ......................................................................................... 5
   1.2. Subsidiaries’ organisational or equity ties ................................................................. 9
   1.3. Changes in the organisational structure .................................................................. 14

2. Management policy ........................................................................................................... 20
   2.1. Parent’s organisational chart .................................................................................... 20
   2.2. Changes in key management policies ........................................................................ 21
   2.3. Workforce .................................................................................................................. 21

3. Business overview ........................................................................................................... 24
   3.1. Business segments .................................................................................................... 24
   3.2. Overview of key products ........................................................................................ 27
   3.3. Sales markets and procurement of raw materials, merchandise and services .......... 31
   3.4. Seasonality of operations ......................................................................................... 33
   3.5. Agreements, including credit facility and loan agreements, guarantees and sureties ......................................................................................... 33
   3.5.1. Significant agreements .......................................................................................... 34
   3.5.2. Credit facility and loan agreements ....................................................................... 34
   3.5.3. Annexes to agreements ........................................................................................ 36
   3.5.4. Commercial contracts ........................................................................................... 37
   3.5.5. Insurance agreements .......................................................................................... 38
   3.5.6. Project co-financing agreements ......................................................................... 39
   3.5.7. Other agreements .................................................................................................. 39
   3.5.8. Agreements between the Grupa Azoty Group companies ...................................... 39
   3.5.9. Sureties and guarantees ......................................................................................... 40
   3.5.10. Agreements concluded after the reporting date .................................................... 43
   3.6. Significant events ...................................................................................................... 43

4. Growth strategy and policy .............................................................................................. 46
   4.1. Strategy and growth directions .................................................................................. 46
   4.2. Growth prospects and market strategy ..................................................................... 47
   4.3. Key investments in Poland and abroad ..................................................................... 50
   4.4. Equity investments .................................................................................................... 53
   4.5. Feasibility of investment plans .................................................................................. 53
   4.6. Significant R&D achievements ................................................................................ 54

5. Financial condition of the Group ..................................................................................... 55
   5.1. Assessment of factors and one-off events having a material impact on the Group’s operations and financial performance .......................................................... 55
   5.2. Market overview ...................................................................................................... 57
   5.3. Key financial and economic data .............................................................................. 70
   5.3.1. Consolidated financial information ...................................................................... 70
   5.3.2. Segments’ consolidated financial information ....................................................... 71
   5.3.3. Structure of consolidated operating expenses ....................................................... 73
   5.3.4. Structure of consolidated assets, equity and liabilities ......................................... 74
   5.3.5. Consolidated financial ratios ................................................................................ 75
   5.3.6. Separate financial data ........................................................................................ 77
   5.3.7. Separate financial data by segment ..................................................................... 78
   5.3.8. Structure of separate operating expenses ............................................................. 80
   5.3.9. Structure of separate assets, equity and liabilities ............................................... 80
   5.3.10. Separate financial ratios ...................................................................................... 82
   5.4. Management of capital and assets ............................................................................ 83
   5.5. Bank deposits ........................................................................................................... 84
   5.6. Material off-balance-sheet items ............................................................................... 85
   5.7. Financial instruments - risk management policy and risk management instruments, objectives and methods .......................................................... 85
   5.8. Expected financial condition .................................................................................... 87

6. Risk, threats and growth prospects .................................................................................. 88
   6.1. Significant risk factors and threats .......................................................................... 88

Grupa Azoty
6.2. Significant external and internal growth factors ................................................................. 92

7. Shares and shareholding structure .......................................................................................... 95
7.1. Total number and par value of Grupa Azoty shares, holdings of the shares by supervisory and management personnel, and interests of such persons in the Parent’s related entities .......... 95
7.2. Treasury shares held by the Parent, the Group companies and persons acting on their behalf 95
7.3. Grupa Azoty shares ............................................................................................................... 95

8. Statement of compliance with corporate governance standards ................................................ 101
8.1. Corporate governance code applicable to the Parent and the place where the text of the code is available to the public .............................................................................................. 101
8.2. Information on the Parent’s non-compliance, if any, with the corporate governance standards and reasons for such non-compliance .......................................................... 102
8.3. Internal control and risk management systems ..................................................................... 106
8.4. Management standards and systems .................................................................................... 108
8.5. Shareholding structure .......................................................................................................... 109
8.6. Special control powers of securities holders .......................................................................... 111
8.7. Rules governing amendments to the Parent’s Articles of Association ............................... 111
8.8. Restrictions on voting rights ................................................................................................. 111
8.9. Restrictions on the transferability of securities .................................................................... 111
8.10. Rules governing appointment and removal of the management staff; powers of the management staff, including in particular the authority to resolve to issue or buy back shares 112
8.11. Operation of the General Meeting ..................................................................................... 113
8.12. Composition and operation of the Company’s management and supervisory bodies ........ 116
8.13. Diversity policy .................................................................................................................... 128
8.14. Remuneration policy ............................................................................................................ 129
8.15. Sponsorship, charitable or similar activities ....................................................................... 131
8.16. Report on entertainment expenses, legal costs, marketing costs, public relations and social communication expenses, and management consultancy fees .............................................. 134
8.16.1. Introduction ....................................................................................................................... 134
8.16.2. Expenses ......................................................................................................................... 134

9. Other material information and events ...................................................................................... 135
9.1. Qualified auditor .................................................................................................................... 135
9.2. Environmental performance .................................................................................................. 136

10. Non-financial statement ........................................................................................................... 144

11. Supplementary information ...................................................................................................... 144
1. General information on the Grupa Azoty Group and its Parent

1.1. Organisation and structure

Parent of the Grupa Azoty Group
Grupa Azoty S.A. is the Parent of the Grupa Azoty Group (“Grupa Azoty”, the “Group”, the “Grupa Azoty Group”). Its principal business activities include manufacturing, trading in and service activities related to nitrogen fertilizers, engineering plastics and intermediates. The Company operates its own research facilities. It concentrates both on research into new products and technologies, and on advancing existing products.

The Parent, Grupa Azoty S.A., has been listed on the Warsaw Stock Exchange since June 30th 2008. It is included in the WIG, WIG30, mWIG 40, WIG-Poland, WIG-CHEMIA and WIG.MS-PET indices, as well as the Respect Index. Its shares are also a constituent of foreign indices: MSCI Emerging Markets, FTSE Emerging Markets, and FTSE4Good Emerging Index. The Company’s registered office is located at ul. Eugeniusza Kwiatkowskiego 8, Tarnów, Poland.

Grupa Azoty S.A. is an integrated manufacturer of polyamide 6, marketed as Tarnamid®; it also specialises in the manufacturing of nitrogen fertilizers (nitrogen-sulfur and nitrate).

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

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

As at December 31st 2018, the Grupa Azoty Group comprised: Grupa Azoty S.A. (the Parent) and the following subsidiaries:
- Grupa Azoty Zakłady Azotowe Puławy S.A. (Grupa Azoty PULAWY),
- Grupa Azoty Zakłady Chemiczne Police S.A. (Grupa Azoty POLICE),
- Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. (Grupa Azoty KĘDZIERZYN),
- Goat TopCo GmbH,
- Grupa Azoty ATT Polymers GmbH,
- Grupa Azoty Polskie Konsorcjum Chemiczne Sp. z o.o. (Grupa Azoty PKCh Sp. z o.o.),
- Grupa Azoty Koltar Sp. z o.o. (Grupa Azoty KOLTAR Sp. z o.o.),
- Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol S.A. (Grupa Azoty SIARKOPOL),
- Grupa Azoty Compounding Sp. z o.o.,
- Grupa Azoty Folie Sp. z o.o.

The Parent and the Group companies were incorporated for unlimited period.

Parent’s subsidiaries

Grupa Azoty Zakłady Azotowe Puławy S.A.
The company’s registered office is located in Puławy. Since April 4th 2013, it has been trading under the name Grupa Azoty Zakłady Azotowe Puławy Spółka Akcyjna (abbreviated to Grupa Azoty PULAWY). Grupa Azoty PULAWY specialises in the manufacturing of nitrogen fertilizers and is one of the largest melamine manufacturers in the world.

Grupa Azoty Zakłady Chemiczne Police Spółka Akcyjna
The company’s registered office is located in Police. Since June 3rd 2013, it has been trading under the name Grupa Azoty Zakłady Chemiczne Police Spółka Akcyjna (abbreviated to Grupa Azoty Police). Grupa Azoty Police is a major manufacturer of compound and nitrogen fertilizers, as well as titanium white.
Grupa Azoty Zakłady Azotowe Kędzierzyn Spółka Akcyjna
The company’s registered office is located in Kędzierzyn-Koźle. Since January 11th 2013, it has been trading under the name Grupa Azoty Zakłady Azotowe Kędzierzyn Spółka Akcyjna (abbreviated to Grupa Azoty Kędzierzyn).
The company’s two business pillars are nitrogen fertilizers and OXO products (OXO alcohols and plasticizers).

Goat TopCo GmbH
The company’s registered office is located in Münster, Germany.
The Company is a holding company for 22 other companies, including the main operating company COMPO EXPERT GmbH, one of the world’s largest manufacturers of high value-added specialist fertilizers for professional customers.

Grupa Azoty ATT Polymers GmbH
The company’s registered office is located in Guben, Germany. Since July 10th 2013, it has been trading under the name Grupa Azoty ATT Polymers GmbH.
It manufactures polyamide 6 (PA6).

Grupa Azoty Polskie Konsorcjum Chemiczne Spółka z ograniczoną odpowiedzialnością
The company’s registered office is located in Tarnów. Since February 28th 2013, it has been trading under the name Grupa Azoty Polskie Konsorcjum Chemiczne Spółka z ograniczoną odpowiedzialnością (abbreviated to Grupa Azoty PKCh Sp. z o.o. or Grupa Azoty PKCh Sp. z o.o.).
Grupa Azoty PKCh’s services encompass comprehensive design support for investment projects in the chemical industry – from study and concept work to engineering design, building permit design and working plans, to services provided during the construction, commissioning and operation of process units.

Grupa Azoty Koltar Spółka z ograniczoną odpowiedzialnością
The company’s registered office is located in Tarnów. Since March 6th 2013, it has been trading under the name Grupa Azoty Koltar Spółka z ograniczoną odpowiedzialnością (abbreviated to Grupa Azoty Koltar Sp. z o.o.).
Grupa Azoty KOLTAR provides countrywide railway transport services. It is one of the few organisations in Poland to hold licences required to perform comprehensive repairs of rail car chassis and tank cars used in the transport of dangerous materials (according to RID).

Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol Spółka Akcyjna
The company’s registered office is located in Grzybów. Since February 11th 2014, it has been trading under the name Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol Spółka Akcyjna (abbreviated to Grupa Azoty Kopalnie i Zakłady Chemiczne Siarki Siarkopol S.A. or Grupa Azoty SIARKOPOL).
Grupa Azoty SIARKOPOL is Poland’s largest producer of liquid sulfur.

Grupa Azoty Compounding Spółka z ograniczoną odpowiedzialnością
The company’s registered office is located in Tarnów. Its business model is based on a portfolio of specialised engineering plastics manufactured through the compounding of plastics, with the use of innovative technological solutions.

Grupa Azoty Folie Spółka z ograniczoną odpowiedzialnością
The company’s registered office is located in Tarnów.
Its principal business is research and development in technical science.
Parent’s equity interests in subsidiaries as at December 31st 2018

<table>
<thead>
<tr>
<th>Company</th>
<th>Registered office/address</th>
<th>Share capital</th>
<th>% of shares held directly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goat TopCo GmbH</td>
<td>Krögerweg 10, 48155, Münster, Germany</td>
<td>25,000 EUR</td>
<td>100.00</td>
</tr>
<tr>
<td>Grupa Azoty ATT Polymers GmbH</td>
<td>Forster Straße 72, 03172 Guben, Germany</td>
<td>9,000,000 EUR</td>
<td>100.00</td>
</tr>
<tr>
<td>Grupa Azoty Compounding Sp. z o.o.</td>
<td>ul. Chemiczna 118, 33-101 Tarnów, Poland</td>
<td>36,000,000 PLN</td>
<td>100.00</td>
</tr>
<tr>
<td>Grupa Azoty Folie Sp. z o.o.</td>
<td>ul. Chemiczna 118, 33-101 Tarnów</td>
<td>5,500,000 PLN</td>
<td>100.00</td>
</tr>
<tr>
<td>Grupa Azoty PULAWY</td>
<td>ul. Mostowa 30 A, skr. poczt. 163 47-220 Kędzierzyn-Koźle</td>
<td>191,150,000 PLN</td>
<td>95.98</td>
</tr>
<tr>
<td>Grupa Azoty KĘDZIERZYN</td>
<td>ul. Kwiatkowskiego 8, 33-101 Tarnów, Poland</td>
<td>285,064,300 PLN</td>
<td>93.48</td>
</tr>
<tr>
<td>Grupa Azoty KOLTAR Sp. z o.o.</td>
<td>ul. Kwiatkowskiego 7, 33-101 Tarnów, Poland</td>
<td>43,156,700 PLN</td>
<td>75.91</td>
</tr>
<tr>
<td>Grupa Azoty POLICE</td>
<td>ul. Kuźnicka 1, 72-010 Police</td>
<td>750,000,000 PLN</td>
<td>66.00</td>
</tr>
<tr>
<td>Grupa Azoty PKCh Sp. z o.o.</td>
<td>ul. Kwiatkowskiego 7, 33-101 Tarnów</td>
<td>85,630,550 PLN</td>
<td>63.27</td>
</tr>
</tbody>
</table>
The Parent and its subsidiaries as at December 31st 2018

Parent
- Grupa Azoty „Compounding” Sp. z o.o. 100%
- Grupa Azoty „Folie” Sp. z o.o. 100%
- Grupa Azoty KOLTAR Sp. z o.o. 75.91%
- Grupa Azoty PKCh Sp. z o.o. 63.27%

1

2 - Grupa Azoty PULAWY 95.98%
3 - Grupa Azoty POLICE 66%
4 - Grupa Azoty KĘDZIERZYN 93.48%
5 - Grupa Azoty SIARKOPOL 99.37%
6 - Grupa Azoty AT Polymer GmbH 100%
7 - Goat TopCo GmbH 100%

Source: Company data.
1.2. Subsidiaries’ organisational or equity ties

Equity interests held by the subsidiaries in other entities of the Group as at December 31st 2018

**Grupa Azoty PULAWY**

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elektrownia Puławy Sp. z o.o.</td>
<td>100.00</td>
<td>92,148</td>
</tr>
<tr>
<td>Agrochem Puławy Sp. z o.o.</td>
<td>100.00</td>
<td>68,639</td>
</tr>
<tr>
<td>SCF Natural Sp. z o.o.</td>
<td>99.99</td>
<td>15,001</td>
</tr>
<tr>
<td>Gdański Zakłady Nawozów Fosforowych Fosfory Sp. z o.o.</td>
<td>99.19</td>
<td>59,003</td>
</tr>
<tr>
<td>Zakłady Azotowe Chorzów S.A.</td>
<td>96.48</td>
<td>94,700</td>
</tr>
<tr>
<td>STO-ZAP Sp. z o.o.</td>
<td>96.15</td>
<td>1,117</td>
</tr>
<tr>
<td>Remzap Sp. z o.o.</td>
<td>94.61</td>
<td>1,812</td>
</tr>
<tr>
<td>Prozap Sp. z o.o.</td>
<td>84.69</td>
<td>826</td>
</tr>
<tr>
<td>Bałtycka Baza Masowa Sp. z o.o.</td>
<td>50.00</td>
<td>19,500</td>
</tr>
<tr>
<td>Grupa Azoty KOLTAR Sp. z o.o.</td>
<td>14.72</td>
<td>RUB 800</td>
</tr>
</tbody>
</table>

**Grupa Azoty POLICE**

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supra Agrochemia Sp. z o.o.</td>
<td>100.00</td>
<td>19,721</td>
</tr>
<tr>
<td>Transtech Usługi Sprzętowe i Transportowe Sp. z o.o.</td>
<td>100.00</td>
<td>9,783</td>
</tr>
<tr>
<td>Grupa Azoty Police Serwis Sp. z o.o.</td>
<td>100.00</td>
<td>9,618</td>
</tr>
<tr>
<td>Koncept Sp. z o.o.</td>
<td>100.00</td>
<td>512</td>
</tr>
</tbody>
</table>

**Grupa Azoty Africa S.A. w likwidacji (in liquidation)**

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zarząd Morskiego Portu Police Sp. z o.o.</td>
<td>99.99</td>
<td>132,000 (XOF thousand)</td>
</tr>
<tr>
<td>PDH Polska S.A.</td>
<td>99.91</td>
<td>32,642</td>
</tr>
<tr>
<td>Infrapark Police S.A. w likwidacji (in liquidation)</td>
<td>59.93</td>
<td>304,000</td>
</tr>
<tr>
<td>Budchem Sp. z o.o. w upadłości likwidacyjnej (in liquidation bankruptcy)</td>
<td>54.43</td>
<td>14,986</td>
</tr>
<tr>
<td>Kemipol Sp. z o.o.</td>
<td>48.96</td>
<td>1,201</td>
</tr>
</tbody>
</table>

**Grupa Azoty KĘDZIERZYN**

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZAKSA S.A.</td>
<td>91.67</td>
<td>6,000</td>
</tr>
<tr>
<td>Grupa Azoty KOLTAR Sp. z o.o.</td>
<td>9.37</td>
<td>43,157</td>
</tr>
<tr>
<td>Grupa Azoty Polskie Konsorcjum Chemiczne Sp. z o.o.</td>
<td>36.73</td>
<td>85,631</td>
</tr>
</tbody>
</table>

The Parent holds 40.07% of shares in PDH Polska S.A.

Grupa Azoty KOLTAR Sp. z o.o holds 0.783% of shares in ZAKSA S.A.
Grupa Azoty PKCh Sp. z o.o.

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grupa Azoty Jednostka Ratownictwa Chemicznego Sp. z o.o.</td>
<td>100.00</td>
<td>21,749</td>
</tr>
<tr>
<td>Grupa Azoty Prorem Sp. z o.o.</td>
<td>100.00</td>
<td>11,567</td>
</tr>
<tr>
<td>Grupa Azoty Automatyka Sp. z o.o.</td>
<td>77.86</td>
<td>4,654</td>
</tr>
</tbody>
</table>

Goat TopCo GmbH Group

Goat TopCo GmbH holds 100% of shares in Goat HoldCo GmbH (with a share capital of EUR 25,000), which in turn holds 100% of shares in Goat BidCo GmbH (with a share capital EUR 25,000). Goat BidCo GmbH holds shares in:

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership interest (%)</th>
<th>Share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPO EXPERT GmbH</td>
<td>100.00</td>
<td>EUR 25.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Italia S.r.l.</td>
<td>100.00</td>
<td>EUR 10.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Spain S.L.</td>
<td>100.00</td>
<td>EUR 3.10 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Benelux N.V.*</td>
<td>99.99</td>
<td>EUR 7,965.01 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Chile Fertilizantes Ltda.**</td>
<td>99.99</td>
<td>CLP 1,528,560.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Hellas S.A.</td>
<td>100.00</td>
<td>EUR 60.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Argentina SRL***</td>
<td>90.00</td>
<td>ARS 41,199.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Brasil Fertilizantes Ltda.****</td>
<td>99.99</td>
<td>BRL 26,199.42 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Techn. (Shenzhen) Co. Ltd.</td>
<td>100.00</td>
<td>RMB 2,810.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT France SAS</td>
<td>100.00</td>
<td>EUR 523.67 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT India Private Limited</td>
<td>99.99</td>
<td>INR 250.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Asia Pacific Sdn. Bhd.</td>
<td>100.00</td>
<td>MYR 500.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Mexico S.A. de C.V.*****</td>
<td>99.99</td>
<td>MXN 100.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Polska Sp. z o.o.</td>
<td>100.00</td>
<td>PLN 6.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Portugal, Unipessoal Ltd.</td>
<td>100.00</td>
<td>EUR 2.00 thousand</td>
</tr>
<tr>
<td>COMPO EXPERT Turkey Tarim Sanai ve Ticaret Ltd. Şirketi*****</td>
<td>96.17</td>
<td>TRY 264,375.00</td>
</tr>
<tr>
<td>COMPO EXPERT UK Ltd.</td>
<td>100.00</td>
<td>1.00 GBP</td>
</tr>
<tr>
<td>COMPO EXPERT USA&amp;CANADA Inc.</td>
<td>100.00</td>
<td>1.00 USD</td>
</tr>
</tbody>
</table>

* 0.0103% of the share capital is held by COMPO EXPERT GmbH.
** 0.01% of the share capital is held by COMPO EXPERT GmbH.
*** 0.0000024% of the share capital is held by COMPO EXPERT GmbH.
**** 0.000003% of the share capital is held by COMPO EXPERT GmbH.
***** 0.000311% of the share capital is held by COMPO EXPERT GmbH.
****** 3.83% of the share capital is held by COMPO EXPERT GmbH.

COMPO EXPERT GmbH holds shares in:
## Company Ownership Interest and Share Capital

<table>
<thead>
<tr>
<th>Company</th>
<th>Ownership Interest (%)</th>
<th>Share Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPO EXPERT South Africa (Pty) Ltd.</td>
<td>100.00</td>
<td>ZAR 0</td>
</tr>
<tr>
<td>COMPO EXPERT Austria GmbH</td>
<td>100.00</td>
<td>EUR 35.00 thousand</td>
</tr>
</tbody>
</table>
Goat TopCo GmbH Group and its subsidiaries as at December 31st 2018 - Europe

1. Goat BidCo GmbH
   Germany
2. COMPO EXPERT Spain S.L.
   Spain
3. COMPO EXPERT Benelux N.V.
   Belgium
4. COMPO EXPERT Hellas S.A.
   Greece
5. COMPO EXPERT France SAS
   France
6. COMPO EXPERT Italia S.r.l.
   Italy
7. COMPO EXPERT Polska Sp. z o.o.
   Poland
8. COMPO EXPERT Portugal, Unipessoal Lda.
   Portugal
   Turkey
10. COMPO EXPERT UK Ltd.
    United Kingdom
11. COMPO EXPERT Austria GmbH
    Austria

Source: Company data
1.3. Changes in the organisational structure

Changes in the Group’s structure, including changes resulting from business combinations, acquisitions or disposals of Group entities, as well as long-term investments, demergers, restructuring or discontinuation of operations in the reporting period.

Merger of Grupa Azoty KOLTAR Sp. z o.o., CTL CHEMKOL Sp. z o.o., and CTL KOLZAP Sp. z o.o.

Under an agreement signed on December 6th 2017 with CTL Logistics Sp. z o.o., on January 1st 2018 Grupa Azoty KOLTAR Sp. z o.o expanded its business to include a new location in Police, where it provides forwarding, shunting, and repair services.

Moreover, pursuant to resolutions of their respective General Meetings of December 6th 2017, on January 1st 2018 CTL KOLZAP Sp. z o.o. and CTL CHEMKOL Sp. z o.o. made a representation to the effect that all the shares in those companies held by CTL Logistics Sp. z o.o. had been repurchased by them and cancelled.

On March 29th 2018, a Merger Plan for those companies was published on their websites. In accordance with the Plan, the merger was effected under Art. 492.1.1 of the Commercial Companies Code (merger through acquisition) by transferring all assets of the acquirees (CHEMKOL Sp. z o.o. and KOLZAP Sp. z o.o.) to the acquirer (Grupa Azoty KOLTAR Sp. z o.o.). The merger was accompanied by an increase in the share capital of Grupa Azoty KOLTAR Sp. z o.o. through the issue of new shares that were allotted to the shareholders of the acquirees, based on the share exchange ratio specified in the Merger Plan.

On March 29th 2018, the change of the company name from CTL Chemkol Sp. z o.o. to Grupa Azoty Chemkol Sp. z o.o. was entered in the National Court Register.

On May 15th 2018, the change of the company name from CTL KOLZAP Sp. z o.o. to Grupa Azoty KOLZAP Sp. z o.o. was entered in the National Court Register.

After the General Meeting had adopted the required resolutions concerning the merger and share capital increase, on August 1st 2018 the merger was entered into the National Court Register. This marked the closing of the project to consolidate Grupa Azoty Group’s railway assets.

Grupa Azoty KOLTAR Sp. z o.o. has branches (which operate as separate employers) in Puławy and Kędzierzyn-Koźle and, as of October 1st 2018, also in Police.

In December 2018, Grupa Azoty KOLTAR Sp. z o.o. received funds as payment for shares taken up in its increased share capital. Grupa Azoty KĘDZIERZYN and Grupa Azoty PUŁAWY took up 68,750 and 45,683 shares, respectively, in exchange for cash contributions.

The share capital increase was registered on January 8th 2019. Consequently, the Parent now holds a 60% equity interest in the company, while Grupa Azoty PUŁAWY and Grupa Azoty KĘDZIERZYN hold a 20% interest each.

As a result of the merger, Grupa Azoty KOLTAR Sp. z o.o. held shares in JAMAUTO Sp. z o.o. in liquidation. On November 27th 2018, JAMAUTO Sp. z o.o. in liquidation was deleted from the National Court Register.

Upon the merger, Grupa Azoty KOLTAR Sp. z o.o. became a minority shareholder in ZAKSA Sportowa Spółka Akcyjna.

Share capital increase at Zakłady Azotowe Chorzów S.A.

On January 3rd 2018, an increase in the share capital of Zakłady Azotowe Chorzów S.A. from PLN 58,700 thousand to PLN 94,700 thousand through an issue of 3,600,000 Series C registered shares, by way of a private placement with Grupa Azoty PULAWY, was registered with the National Court Register.

All new shares were acquired by Grupa Azoty PULAWY for cash.

As a result, Grupa Azoty PULAWY’s equity interest in Zakłady Azotowe Chorzów S.A. increased from 94.32% to 96.48%.
Share capital increase at Grupa Azoty Compounding Sp. z o.o.
On January 11th 2018, a change in the capital of Grupa Azoty Compounding Sp. z o.o. was registered in the National Court Register. The share capital was increased from PLN 1,105 thousand, by PLN 4,895 thousand.
On July 27th 2018, the Extraordinary General Meeting of Grupa Azoty Compounding Sp. z o.o. resolved to increase the company’s share capital by PLN 30,000 thousand, from PLN 6,000 thousand. The increase was effected by way of an issue of 300,000 new, equal and indivisible shares with a par value of PLN 100 per share.
All the new shares in the increased share capital were acquired by the existing shareholder, Grupa Azoty S.A., in exchange for a cash contribution of PLN 30,000 thousand. The increase was registered on September 17th 2018.

Merger of Agrochem Puławy Sp. z o.o. and Agrochem Sp. z o.o.
On February 28th 2018, the Extraordinary General Meetings of Agrochem Puławy Sp. z o.o. and Agrochem Sp. z o.o. passed resolutions to merge the companies.
The merger was effected in accordance with Art. 491 of the Commercial Companies Code, through the acquisition of Agrochem Sp. z o.o. by Agrochem Puławy Sp. z o.o. pursuant to Art. 492.1.1 of the Commercial Companies Code, i.e. by transferring all assets of the acquiree to the acquirer, with a simultaneous increase in the acquirer’s share capital through the issue of new shares. The new shares are to be allotted to shareholders of the acquiree in the merger process.
On April 18th 2018, the merger and the share capital increase were entered in the National Court Register.
The share capital of Agrochem Puławy Sp. z o.o. was increased from PLN 50,000 thousand to PLN 68,639 thousand and is divided into 686,391 equal and indivisible shares with a par value of PLN 100 per share.

Agreement concerning African Investment Group S.A.
On December 20th 2017, Grupa Azoty POLICE and DGG ECO Sp. z o.o. entered into a conditional agreement (confirmed by court settlement). The agreement is to be consummated by way of mutual confirmation of the termination and reversal of the effects of an agreement of August 28th 2013 under which Grupa Azoty POLICE had acquired a majority interest in African Investment Group S.A. of Dakar, Senegal (“AFRIG S.A.”), having paid a total of USD 28,850,000 towards the purchase price. Reversal of the effects of the above-mentioned agreement was to include reimbursement to Grupa Azoty POLICE of all amounts paid by it for the shares in AFRIG S.A. against re-transfer of the shares to DGG ECO Sp. z o.o.
As at February 28th 2018, DGG ECO Sp. z o.o. had not reimbursed the first tranche of the purchase price for the shares in African Investment Group S.A. and no bank guarantee securing reimbursement of the balance had been provided. Therefore, the conditional agreement between Grupa Azoty POLICE and DGG Eco Sp. z o.o. had not been consummated by the envisaged date. However, Grupa Azoty POLICE announced that it was holding talks with DGG Eco Sp. z o.o., which was involved in continued efforts to satisfy the conditions for consummation of the agreement, and specified March 16th 2018 as the deadline.
On March 17th 2018, the company announced that due to non-payment by DGG Eco Sp. z o.o. of the first tranche of reimbursement of the purchase price for shares in African Investment Group S.A. and failure to provide a bank guarantee securing reimbursement of the balance, the conditional agreement concluded between Grupa Azoty Police and DGG Eco Sp. z o.o. had not been consummated by the declared additional deadline.
On May 24th 2018, Grupa Azoty POLICE announced that considering:

- DGG Eco sp. z o.o.’s failure to comply with the original terms of consummating the Termination Agreement made on December 20th 2017, and
- the submission of a declaration of insolvency by African Investment Group S.A. in connection with not having sufficient funds to meet its liabilities,

on May 24th 2018, Grupa Azoty POLICE signed an annex to the Termination Agreement, amending the terms of consummation as follows:

- DGG Eco Sp. z o.o. undertakes to reimburse the purchase price of the shares in African Investment Group S.A., in the amount of USD 28,850 thousand, in instalments payable over five years, with the first instalment payable by December 31st 2018 and the last one by December 31st 2023;
- African Investment Group S.A. shares will be transferred back to DGG Eco sp. z o.o. after the latter submits a representation on submission to enforcement within the meaning of Art. 777 of the
Polish Code of Civil Procedure with respect to the aforementioned undertaking to reimburse the purchase price of AFRIG S.A. shares;

- the Company’s trade receivables from African Investment Group S.A. will be cancelled as of the day of transferring the shares to DGG Eco Sp. z o.o.;
- DGG Eco sp. z o.o.’s obligation to provide a bank guarantee securing that company’s liabilities will be waived, while the security transfer of title to the documentation of appraisal of phosphate rock deposits and claims against AVES FZE onto Grupa Azoty Police will remain in force.

On May 30th 2018, the shares in African Investment Group S.A. held by Grupa Azoty POLICE and Grupa Azoty Police Serwis Sp. z o.o. were transferred back to DGG Eco Sp. z o.o. As of that date, the two companies are not shareholders in African Investment Group S.A. or, indirectly, in Afrig Trade SARL.

On August 14th 2018, Grupa Azoty POLICE received USD 3m from DGG Eco Sp. z o.o. as partial repayment of the amount due to Grupa Azoty POLICE for the returned shares in AFRIG S.A. in accordance with the terms of an annex to the Termination Agreement of December 20th 2017 on termination of the Share Purchase Agreement of August 28th 2013.

Petition to open bankruptcy proceedings with respect to African Investment Group S.A.

Having declared insolvency on March 29th 2018, African Investment Group S.A., a Grupa Azoty POLICE subsidiary with a share capital of CFA 340m (PLN 2,169 thousand, translated at the mid exchange rate for March 28th 2018), filed a petition for bankruptcy with the Commercial Court of Dakar on March 29th 2018.

Share capital increase at PDH Polska S.A.

On April 9th 2018, a share capital increase at PDH Polska S.A. was entered in the National Court Register.

On October 18th 2017, the management boards of the Parent and Grupa Azoty POLICE resolved to acquire new registered shares in PDH Polska S.A. Pursuant to the adopted resolutions, the Parent decided to acquire 9,400,000 shares for PLN 94,400 thousand, and Grupa Azoty POLICE decided to acquire 3,000,000 shares for PLN 30,000 thousand, in each case by way of subscription for shares in PDH Polska S.A.’s increased share capital.

It was agreed that payments for the new shares will be made as follows:

- the Parent and Grupa Azoty POLICE would pay, respectively, PLN 23,500,000 and PLN 7,500,000 by March 1st 2018 (the payments have been made),
- the Parent and Grupa Azoty POLICE would pay, respectively, PLN 70,500 thousand and PLN 22,500 thousand by September 1st 2018.

Following payment of the second instalment towards the share capital increase at PDH Polska S.A., made on August 31st 2018, the Parent holds 12,182,125 shares in the company, representing 40.07% of its share capital (the remaining 59.93% of the shares are held by Grupa Azoty POLICE). Currently, the total number of shares of all issues is 30,400,000, with a par value of PLN 10 per share. Following the registration, the share capital of PDH Polska S.A. amounts to PLN 304,000 thousand.

Share capital increase at Grupa Azoty SIARKOPOL

On June 6th 2018, the Annual General Meeting of Grupa Azoty SIARKOPOL adopted a resolution to increase the share capital by not less than PLN 3,828,560 and not more than PLN 3,854,350, through the issue of new Series B registered shares with a par value of PLN 10 per share. The record date for the pre-emptive rights to the New Shares is June 6th 2018.

On July 12th 2018, the Management Board of the Parent approved the exercise of its pre-emptive rights to Series B ordinary registered shares in Grupa Azoty SIARKOPOL on the following terms:

- number of shares subscribed for - 382,856,
- price per share - PLN 53.38,
- total price payable - PLN 20,436,853.28.

The Parent exercised its pre-emptive rights, submitted the subscription form and paid for the acquired Series B shares in Grupa Azoty SIARKOPOL by the prescribed deadline, i.e. July 17th 2018.

On August 23rd 2018, the Management Board of Grupa Azoty SIARKOPOL allotted 382,856 Series B ordinary registered shares with a par value of PLN 10 per share, offered in a private placement. The relevant entry in the National Court Register was made on October 31st 2018. Grupa Azoty S.A. holds a total of 99.37% of shares in Grupa Azoty SIARKOPOL.

Merger of Grupa Azoty PULAWY and Elektrownia Puławy Sp. z o.o.
On August 7th 2018, a decision was made to commence preparations for the merger of Grupa Azoty PUŁAWY and its subsidiary Elektrownia Puławy Sp. z o.o.

Grupa Azoty PUŁAWY is the sole owner of Elektrownia Puławy Sp. z o.o.

On November 6th 2018, the Extraordinary General Meeting of Grupa Azoty PUŁAWY and the Extraordinary General Meeting of Elektrownia Puławy Sp. z o.o. passed resolutions to merge the two companies and to approve their Merger Plan.

The merger procedure and terms are defined in detail in the Merger Plan, agreed on and signed by both Companies on September 26th 2018. Since that date, the Merger Plan has been disclosed to the public free of charge on the merging companies’ websites.

The merger became effective on January 2nd 2019, which was the date of the merger’s entry in the National Court Register maintained for Grupa Azoty PUŁAWY (the acquirer) and deletion of Elektrownia Puławy Sp. z o.o. from the National Court Register.

The merger was effected pursuant to Art. 492.1.1 of the Commercial Companies Code, i.e. without increasing the share capital of Grupa Azoty PUŁAWY, by transferring all assets of Elektrownia Puławy to Grupa Azoty PUŁAWY in line with the simplified procedure (merger through acquisition).

Agreement for acquisition of shares in Goat TopCo GmbH

On September 6th 2018, the Parent and Goat Netherlands B.V. of Amsterdam, a member of the XIO Group, entered into a conditional share purchase agreement for 25,000 shares in Goat TopCo GmbH (Goat TopCo) of Münster, Germany, representing 100% of the company's share capital, for a consideration of no more than EUR 235m.

The transaction is to consist in the acquisition of 100% of shares in Goat TopCo (a special purpose vehicle), which is a holding company for 22 other entities, including the main operating company COMPO EXPERT GmbH of Münster, Germany, one of the largest global manufacturers of speciality fertilizers (the COMPO EXPERT Group).

The agreement defines in detail the financial mechanisms of the transaction, including price determination, rules governing the seller’s warranty and liability, transaction closing conditions, such as obtaining approval from the Parent’s General Meeting and antitrust clearance, commitments between the agreement date and the transaction closing date, as well as rules governing mutual reimbursement of costs if the transaction is unsuccessful.

On October 2nd and October 8th 2018, the Parent announced partial satisfaction of conditions for closing the transaction (i.e. the conditions related to antitrust clearance), having obtained relevant clearance from the antitrust authorities in Germany and Austria. On October 12th 2018, the Parent was notified of clearance given on October 11th 2018 for the acquisition of shares in Goat TopCo GmbH by the Turkish Competition Authority.

On October 12th 2018, the Parent’s Extraordinary General Meeting passed a resolution to grant consent to Grupa Azoty’s acquisition of shares representing 100% of the share capital of Goat TopCo GmbH under the conditional share purchase agreement, subject to clearance by the relevant antitrust authorities, on the financial terms stipulated in the conditional agreement, for a price not higher than EUR 235m. The Extraordinary General Meeting’s resolution took effect as of its date.

As a result, since clearance from all antitrust authorities specified in the agreement and approval from the Extraordinary General Meeting were obtained, the necessary conditions stipulated in the agreement have been satisfied.

The transaction is consistent with the Parent’s strategy to reinforce the Grupa Azoty Group’s position among the leading providers of agricultural solutions as well as to expand and enhance the fertilizer products offering. It will open new opportunities for Grupa Azoty to diversify its business while acquiring highly innovative technologies, know-how, and an extended distribution network. The COMPO EXPERT Group’s products will complement Grupa Azoty’s portfolio, bringing advanced solutions in speciality fertilizers.
Expansion of the fertilizer portfolio following the acquisition of shares in Goat TopCo GmbH

Fertilizer value pyramid

- **Specialty fertilizers**: Technologically advanced agrochemical products with a higher added value than commodity fertilizers. Designed mainly for high-value crops (fruit, vegetables, ornamental plants). Specialty fertilizers are priced higher, but offer many benefits, including slow-release of nutrients. Some specialty products can be used for coverage or greening/cultivation, as well as for lawns and turf grass. They are available in solid form (granules) and as liquids (for soil and foliar application). The most advanced products positively influence certain characteristics of the plants, such as size, colour or - in the case of fruit and vegetables - taste.

- **Commodity fertilizers**: Standard fertilizers widely applied all around the world. Typically contains one or two nutrients. In the case of NPK fertilizers, they are based on potassium chloride. Priced lower than specialty fertilizers.

Source: Company data.

Winding up of the operations of INFRAPARK Police S.A. w likwidacji (in liquidation)
On November 1st 2018, INFRAPARK Police S.A. w likwidacji (in liquidation) terminated its operations. On January 8th 2019, the Annual General Meeting of INFRAPARK Police S.A. w likwidacji (in liquidation) approved the documents closing the Company’s liquidation.

Events after the reporting period

Planned increase of Grupa Azoty POLICE’s share capital
On March 4th 2019, the Management Board of Grupa Azoty POLICE resolved to increase the company’s share capital through an issue of new shares with pre-emptive rights and to amend the Articles of Association.

The proposed share capital increase will be effected through a secondary public offering (“SPO”) for an amount not higher than PLN 1,100,000, addressed to existing shareholders (pre-emptive rights). The proposed share capital increase should be effected by the end of July 2019.

Proceeds from the share issue will be used to support the implementation of the Grupa Azoty Group’s strategy for the coming years, in particular to diversify revenue streams and increase profitability, and to step up the efforts to expand the non-fertilizer business lines. The key task undertaken in the pursuit of these strategic goals is the Polimery Police project implemented by PDH Polska S.A.

Acquisition of shares in PDH Polska S.A.
On March 27th 2019, the Parent’s Management Board passed a resolution to acquire 9,782,808 new shares in PDH Polska S.A. at the issue price of PLN 10.00, i.e. for a total amount of PLN 97,828,080.00. The acquisition will be effected by taking up the new shares in the increased share capital of PDH Polska S.A. The planned share capital increase is to be carried out by way of a private placement, with the existing shareholders’ pre-emptive rights waived in full.

Letters of intent concerning the financing of the Polimery Police project
On April 12th 2019, PDH Polska S.A. received letters of intent from Korea Overseas Infrastructure & Urban Development Corporation and from Hyundai Engineering Co., Ltd. regarding their potential participation in the financing of the Polimery Police investment project through a contribution to the share capital of PDH Polska S.A. of up to USD 50m by Korea Overseas Infrastructure & Urban Development Corporation and up to USD 80m by Hyundai Engineering Co., Ltd.

On April 18th 2019 the Management Board of PDH Polska S.A. passed a resolution on final selection of the bidder Hyundai Engineering Co., Ltd. as the general contractor in a tender to award a contract.
for turn-key delivery of the Polimery Police project for a VAT-exclusive lump sum of EUR 992,811 thousand (basic scope).
Additionally, in connection with the implementation of the Project Grupa Azoty POLICE will be required to make capital expenditure to, *inter alia*, adapt the energy infrastructure, improve fire safety measures, and reduce the adverse environmental impact of the existing and planned units. The Grupa Azoty POLICE Management Board currently estimates that the expenditure will not exceed PLN 100m.
On April 18th 2019, the Supervisory Board of PDH Polska S.A. approved the conclusion of a contract with the selected general contractor.
In accordance with the agreed timetable, the contract with the selected bidder will be signed in the second quarter of 2019, while the execution of the Project under the general contractor agreement is to be completed in the fourth quarter of 2022.

**Planned increase of Grupa Azoty SIARKOPOL’s share capital**
On April 15th 2018, the Extraordinary General Meeting of Grupa Azoty SIARKOPOL passed a resolution to increase the company’s share capital and amend the Articles of Association to reflect the increase. The company’s share capital will be increased by an amount not lower than PLN 1,791,530 and not higher than PLN 1,802,810, to an amount not lower than PLN 60,620,090 and not higher than PLN 60,631,370, through the issue of not fewer than 179,153 and not more than 180,281 new series C registered shares with a nominal value of PLN 10 per share. The shares will be taken up in exchange for cash contributions paid before the registration of the share capital increase.
2. Management policy

2.1. Parent’s organisational chart
2.2. Changes in key management policies

Amendments were made to the Articles of Association of the Grupa Azoty Group companies, following from the Act Amending the Act on State Property Management and the Act on Commercialisation and Certain Employee Rights, dated March 1st 2018 (Dz.U. of 2018, item 702) and the Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017 (Dz.U. of 2017, item 1089), which came into force on June 21st 2017, and in particular:

- expanding the right of the Company employees to elect and remove employee representatives on the supervisory board to include the employees of all of the Company’s subsidiaries,
- streamlining of matters related to the appointment of the Audit Committee and the powers and responsibilities of Supervisory Board members - for public companies.

The Rules of Procedure for General Meetings were also changed to reflect the amendments to the Articles of Association.

In accordance with their respective Articles of Association and the Act on State Property Management of December 16th 2016 (Dz.U. of 2016, item 2259), the Grupa Azoty Group companies (both the Parent and the subsidiaries) adopted, by way of General Meeting resolutions, uniform Rules for disposal of non-current assets and Rules for selection and recruitment of Management Board members.

On June 28th 2018, the Management Board of Grupa Azoty S.A. amended the rules contained in the document ‘Exercise of ownership – corporate governance policy’ at the Grupa Azoty Group. Compared with the previous document, the amended Rules:

- include physical security at the Grupa Azoty Group in the corporate standards,
- introduce new regulations and procedures for the preparation, implementation and supervision of the Grupa Azoty Group’s corporate standards.

2.3. Workforce

Number of employees at the Group

<table>
<thead>
<tr>
<th>Employee group</th>
<th>as at Dec 31 2018</th>
<th>as at Dec 31 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>1,315</td>
<td>8,572</td>
</tr>
<tr>
<td>white collar employees</td>
<td>2,282</td>
<td>3,361</td>
</tr>
<tr>
<td>Total</td>
<td>3,597</td>
<td>11,933</td>
</tr>
<tr>
<td>Total – the Group</td>
<td>15,530</td>
<td>14,434</td>
</tr>
</tbody>
</table>

The workforce level increased following the acquisition of shares in Goat TopCo GmbH, which has production plants in Germany and Spain as well as subsidiaries in many countries, and the merger of Grupa Azoty KOLTAR Sp. z o.o., CTL CHEMKOL Sp. z o.o. and CTL KOLZAP Sp. z o.o., and also as a result of the need to hire additional staff for new production units placed in service.

Number of employees at the Parent

<table>
<thead>
<tr>
<th>Employee group</th>
<th>as at Dec 31 2018</th>
<th>as at Dec 31 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>292</td>
<td>1,065</td>
</tr>
<tr>
<td>white collar employees</td>
<td>355</td>
<td>488</td>
</tr>
<tr>
<td>Total</td>
<td>647</td>
<td>1,553</td>
</tr>
<tr>
<td>Total – the Parent</td>
<td>2,200</td>
<td>2,148</td>
</tr>
</tbody>
</table>
Number of employees at consolidated subsidiaries

<table>
<thead>
<tr>
<th>Employee group</th>
<th>as at Dec 31 2018</th>
<th></th>
<th>as at Dec 31 2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>1,023</td>
<td>7,515</td>
<td>1,001</td>
<td>7,002</td>
</tr>
<tr>
<td>white collar employees</td>
<td>1,927</td>
<td>2,865</td>
<td>1,731</td>
<td>2,552</td>
</tr>
<tr>
<td>Total</td>
<td>2,950</td>
<td>10,380</td>
<td>2,732</td>
<td>9,554</td>
</tr>
<tr>
<td>Total – subsidiaries</td>
<td>13,330</td>
<td>12,286</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of employees at the Goat TopCo GmbH Group

<table>
<thead>
<tr>
<th>Employee group</th>
<th>as at Dec 31 2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>3</td>
<td>223</td>
</tr>
<tr>
<td>white collar employees</td>
<td>138</td>
<td>279</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>502</td>
</tr>
<tr>
<td>Total - Goat TopCo GmbH</td>
<td>643</td>
<td></td>
</tr>
</tbody>
</table>

Number of employees at the Group: average for the year and as at the end of 2018

<table>
<thead>
<tr>
<th>Employee group</th>
<th>average annual</th>
<th>as at Dec 31 2018</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>1,320.5</td>
<td>8,521.2</td>
<td>1,315</td>
<td>8,572</td>
</tr>
<tr>
<td>white collar employees</td>
<td>2,251.7</td>
<td>3,376.1</td>
<td>2,282</td>
<td>3,361</td>
</tr>
<tr>
<td>Total</td>
<td>3,572.2</td>
<td>11,897.3</td>
<td>3,597</td>
<td>11,933</td>
</tr>
</tbody>
</table>

Number of employees at the Parent: average for the year and as at the end of 2018

<table>
<thead>
<tr>
<th>Employee group</th>
<th>average annual</th>
<th>as at Dec 31 2018</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>297.2</td>
<td>1,064.6</td>
<td>292</td>
<td>1,065</td>
</tr>
<tr>
<td>white collar employees</td>
<td>354.3</td>
<td>485.6</td>
<td>355</td>
<td>488</td>
</tr>
<tr>
<td>Total</td>
<td>651.5</td>
<td>1,550.2</td>
<td>647</td>
<td>1,553</td>
</tr>
</tbody>
</table>

Number of employees at consolidated subsidiaries: average for the year and as at the end of 2018

<table>
<thead>
<tr>
<th>Employee group</th>
<th>average annual</th>
<th>as at Dec 31 2018</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>blue collar employees</td>
<td>1,023.3</td>
<td>7,466.3</td>
<td>1,023</td>
<td>7,515</td>
</tr>
<tr>
<td>white collar employees</td>
<td>1,897.4</td>
<td>2,880.8</td>
<td>1,927</td>
<td>2,865</td>
</tr>
<tr>
<td>Total</td>
<td>2,920.7</td>
<td>10,347.1</td>
<td>2,950</td>
<td>10,380</td>
</tr>
</tbody>
</table>
Employee turnover at the Grupa Azoty Group

<table>
<thead>
<tr>
<th></th>
<th>2018 (Women)</th>
<th>2018 (Men)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New hires</td>
<td>347</td>
<td>891</td>
</tr>
<tr>
<td>Terminations</td>
<td>568</td>
<td>787</td>
</tr>
</tbody>
</table>

Employee turnover at the Parent

<table>
<thead>
<tr>
<th></th>
<th>2018 (Women)</th>
<th>2018 (Men)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New hires</td>
<td>40</td>
<td>98</td>
</tr>
<tr>
<td>Terminations</td>
<td>28</td>
<td>62</td>
</tr>
</tbody>
</table>

Workforce structure at the Group by education*

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>Total workforce</th>
<th>University or equivalent</th>
<th>Secondary</th>
<th>Vocational</th>
<th>Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>2018</td>
<td>14,887</td>
<td>4,542</td>
<td>6,300</td>
<td>3,337</td>
<td>708</td>
</tr>
<tr>
<td>Number of employees</td>
<td>2017</td>
<td>14,434</td>
<td>4,319</td>
<td>6,070</td>
<td>3,313</td>
<td>732</td>
</tr>
</tbody>
</table>

*Excluding the Goat TopCo GmbH Group.

Workforce structure at the Parent by education

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>Total workforce</th>
<th>University or equivalent</th>
<th>Secondary</th>
<th>Vocational</th>
<th>Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>2018</td>
<td>2,200</td>
<td>670</td>
<td>903</td>
<td>537</td>
<td>97</td>
</tr>
<tr>
<td>Number of employees</td>
<td>2017</td>
<td>2,148</td>
<td>628</td>
<td>876</td>
<td>547</td>
<td>97</td>
</tr>
</tbody>
</table>

Workforce structure at the Group by length of service*

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>up to 5 years</th>
<th>6–10 years</th>
<th>11–20 years</th>
<th>Above 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>2018</td>
<td>2,892</td>
<td>1,612</td>
<td>2,941</td>
<td>7,442</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>2,493</td>
<td>1,705</td>
<td>2,787</td>
<td>7,449</td>
</tr>
</tbody>
</table>

*Excluding the Goat TopCo GmbH Group.

Workforce structure at the Parent by length of service

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>up to 5 years</th>
<th>6–10 years</th>
<th>11–20 years</th>
<th>Above 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>2018</td>
<td>454</td>
<td>160</td>
<td>143</td>
<td>1,443</td>
</tr>
<tr>
<td></td>
<td>2017</td>
<td>408</td>
<td>130</td>
<td>212</td>
<td>1,398</td>
</tr>
</tbody>
</table>

Grupa Azoty
3. Business overview

3.1. Business segments

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

Core business of the Group

The Group’s business is divided into the following segments:
- Agro Fertilizers,
- Plastics,
- Chemicals,
- Energy,
- Other Activities.

Agro Fertilizers

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

The segment’s manufacturing activities are conducted by the companies in Tarnów (Parent), Puławy, Kędzierzyn, Police, Gdańsk, and Chorzów. The Group is Poland’s largest and European Union’s second largest manufacturer of mineral fertilizers.
Plastics
The segment’s key products are engineering plastics (polyamide 6 (PA6) and modified plastics) and auxiliary products, such as caprolactam and other chemicals. They are manufactured by three companies – in Tarnów, Puławy, and Guben (Germany). The Group is the leading manufacturer of PA6 in Poland and the third largest producer of this polyamide in the European Union.

Chemicals
The Chemicals segment is an important part of the Group’s business, comprising OXO alcohols, plasticizers, melamine, technical grade urea, titanium white, sulfur, AdBlue®, and other products. They are manufactured in Kędzierzyn, Puławy, Police, and Grzybów. The Group is a major manufacturer of melamine globally and the third largest in the European Union. As regards OXO products, the Group is the only manufacturer of OXO alcohols in Poland, ranking fifth in the European Union. The Group is Poland’s only producer of titanium white.
Grupa Azoty Group’s production capacities vs competition (Plasticizers*)

<table>
<thead>
<tr>
<th>Company</th>
<th>Capacity [tt]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExxonMobil</td>
<td></td>
</tr>
<tr>
<td>BASF</td>
<td></td>
</tr>
<tr>
<td>Evonik</td>
<td></td>
</tr>
<tr>
<td>Polyt</td>
<td></td>
</tr>
<tr>
<td>Grupa Azoty</td>
<td></td>
</tr>
<tr>
<td>OXEA GROUP</td>
<td></td>
</tr>
<tr>
<td>DEZA</td>
<td></td>
</tr>
<tr>
<td>Perstorp OXO AB</td>
<td></td>
</tr>
</tbody>
</table>

*) Production capacities for phthalate plasticizers and terephthalate plasticizers.

Source: Plasticizers Alcohols 2013 and Plasticizers (UE) 2013.

Grupa Azoty Group’s production capacities vs competition (OXO**)

<table>
<thead>
<tr>
<th>Company</th>
<th>Capacity [tt]</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASF</td>
<td></td>
</tr>
<tr>
<td>Oxea Group</td>
<td></td>
</tr>
<tr>
<td>Ineos</td>
<td></td>
</tr>
<tr>
<td>Perstorp OXO AB</td>
<td></td>
</tr>
<tr>
<td>Grupa Azoty</td>
<td></td>
</tr>
<tr>
<td>Oltchim SA</td>
<td></td>
</tr>
</tbody>
</table>

**) Production capacities for 2-EH, N-butanol, isobutanol.

Source: Plasticizers Alcohols 2013 and Plasticizers (UE) 2013.

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

<table>
<thead>
<tr>
<th>Company</th>
<th>Capacity [tt]</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCI Melamine</td>
<td></td>
</tr>
<tr>
<td>Grupa Borealis</td>
<td></td>
</tr>
<tr>
<td>Grupa Azoty</td>
<td></td>
</tr>
<tr>
<td>BASF SE</td>
<td></td>
</tr>
<tr>
<td>Azomures S.A.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Plasticizers Alcohols 2013 and Plasticizers (UE) 2013.

Energy

Electricity and heat produced by the Energy segment are sold locally, to customers in the immediate vicinity of the Group’s plants.
The segment’s key customers are companies of the Group. Outside the Group, the segment’s products are sold on the electricity and hot water markets to local customers. The Group companies operate their own electricity and energy carrier distribution networks.

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

3.2. Overview of key products

AGRO FERTILIZERS

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

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

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

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

Nitrogen-sulfur fertilizers
These fertilizers improve sulfur content in the soil, enhance arable crops’ ability to absorb nitrogen, and thus increase the quality and volume of crops.
- PULGRAN®S - urea-ammonium sulfate, is a nitrogen fertilizer with sulfur in the form of white hemispherical pastilles, obtained by blending urea and ammonium sulfate. It is manufactured in two varieties with various contents: 37% nitrogen/21% sulfur and 33% nitrogen/31% sulfur.
- Saletrosan®, or ammonium sulfate nitrate, is a nitrogen fertilizer with sulfur, obtained by blending ammonium nitrate and ammonium sulfate. Saletrosan® 26 contains 26% nitrogen and 13% sulfur. The fertilizer is also marketed under the trade name Saletrosan® 30, with different proportions of nitrogen and sulfur (30% and 6%).
• Polifoska® 21 is a nitrogen fertilizer with sulfur; it is an ammonium sulfate-urea mix, containing 21% nitrogen and 33% sulfur.
• AS 21 (ammonium sulfate) is a simple nitrogen fertilizer with sulfur, containing 21% nitrogen and 24% sulfur. It is a by-product in the manufacture of caprolactam and in flue gas desulfurisation processes. The Group manufactures a wide range of ammonium sulfate in various granule forms and sizes: selection, macro, standard, and crystalline.
• PULASKA® is a liquid nitrogen fertilizer with sulfur, obtained by blending urea and ammonium sulfate, and has a 20% nitrogen and a 6% sulfur content.

**Compound fertilizers (NPK, NP)**
NPK and NP compound fertilizers are universal fertilizers which, depending on composition, can be applied to various types of crops and soil. Aside from the primary components – nitrogen (N), phosphorous (P) and potassium (K), these fertilizers contain secondary nutrients such as magnesium, sulfur or calcium, and may contain microelements such as boron or zinc. Compound fertilizers may be used to provide nutrients to all types of arable crops. The Group's current offering includes more than 40 grades of compound fertilizers, which are marketed under the following trade names: Polifoska®, Polidap®, Polimag® Superfosfat, Amofoska®, etc. The Group also offers dedicated fertilizers, custom-made to satisfy customers' specific requirements.

**Phosphorites (phosphate rock)** – feedstock for the manufacturing of compound fertilizers, naturally occurring in various parts of the globe. Phosphate rock is a sedimentary rock containing phosphate-bearing minerals which, after being extracted and beneficiated, are used mainly to produce phosphoric acid. For the Group, it is an intermediate product used to manufacture compound fertilizers (NP and NPK).

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

**PLASTICS**

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

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

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

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

O XO products
O XO alcohols
The Group makes the following O XO alcohols: 2-ethylhexanol (2-EH) and butanols (n-butanol, isobutanol). The key product in this group is 2-EH.
2-ethylhexanol (2-EH) is used in the manufacture of plasticizers, paints and varnishes as well as in the textile industry and oil refining processes. It can also be applied as a solvent for vegetable oils, animal fats, resins, waxes and petrochemicals.

Plasticizers
The Group manufactures the DEHT/DOTP plasticizer. It is used in the chemical industry to increase the plasticity of materials, mainly PVC, and as an additive to paints and varnishes. The Group’s DEHT/DOTP is marketed under the Oxoviflex® brand. It is used in plastics processing as a non-phthalic plasticizer as well as in the manufacture of paints and varnishes. It is also widely applied for the production of floor tiles and wall cladding as well as toys for children.

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

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

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

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

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

Electricity
The Group purchases electricity from major Polish suppliers trading with large accounts. Following a number of tenders for 2018, the Group companies signed electricity supply contracts under their existing framework agreements. Thanks to the joint procurement strategy for electricity supplies, they secured competitive prices and favourable terms of the contracts. Given the volatility of the electricity market and its changing legal framework, the Group’s policy was to purchase electricity under forward contracts concluded for various periods and on the SPOT market, including on the Polish Power Exchange.

Phenol
The procurement strategy is based primarily on supplies from the domestic and the EU markets, with deliveries from outside Europe covering deficit. The Group secures phenol supplies for its own needs under long-term contracts concluded directly with Europe's largest producers.

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

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

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

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

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

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

On the domestic market, prices of pulverised coal used in power generation are not directly linked to ARA rates, which only serve as pricing benchmarks for Polish coal producers. Since 2018, the Group companies follow a strategy of purchasing coal under multi-year contracts with a guaranteed price change range. Such long-term contracts cover over 80% of the Group’s needs for coal supplies.
3.3. Sales markets and procurement of raw materials, merchandise and services

The Group's products are sold all over the world, mainly in the European Union, and on the domestic market.

The Group’s sales by geographies (by revenue)

* Excluding Poland.

Source: Company data.

The Parent’s sales by geographies (by revenue)

Source: Company data.

In 2018, the Parent had one customer which accounted for more than 10% of total revenue. It was Grupa Azoty ATT Polymers GmbH, a subsidiary of the Parent.
Sources of strategic raw materials
For the most part, the Group procures its raw materials, merchandise and services on the domestic and EU markets. Certain raw materials (phosphate rock, slag, potassium chloride) are purchased from non-EU suppliers. Raw materials supplied by the Group companies, i.e. ammonia and to some extent sulfur, account for a significant share of the total raw materials procured by the Group.
In 2017, the Group had one supplier whose share in the total cost of raw materials exceeded 10%; it was Polskie Górnictwo Naftowe i Gazownictwo (PGNiG S.A.).

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

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

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Coal
The Group purchases coal mainly on the domestic market. Purchasing large volumes of coal of the required quality from geographically remote markets is not economically viable given the high transport costs and price formulae (ARA).
On the domestic market, prices of pulverised coal used in power generation are not directly linked to ARA rates, which only serve as pricing benchmarks for Polish coal producers.
Since 2018, the Group companies follow a strategy of purchasing coal under multi-year contracts with a guaranteed price change range. Such long-term contracts cover over 80% of the Group’s needs for coal supplies.

3.4. Seasonality of operations
Seasonality of operations is seen mainly in the markets for mineral fertilizers.

Mineral fertilizers
The first half of each year is a period of increased field work activity in the agricultural sector, preceded by increased demand for means of agricultural production (including mineral fertilizers). The Group follows a policy of mitigating seasonality through optimum volume allocation:
• As part of all-year supplies to the distribution network, and
• By partial sales of products on geographical markets with different seasonality patterns.

Titanium white market
Because of its chief application (as a component of paints and varnishes), titanium white is a seasonal product used in structural construction. The demand for titanium white depends on the situation on the application markets, especially the construction market. It usually starts to rise at the end of the first quarter and falls as the construction season ends in autumn.
In the case of other Grupa Azoty Group’s products, seasonality does not have a material effect on the Group’s performance as they represent a small proportion of total output.

3.5. Agreements, including credit facility and loan agreements, guarantees and sureties
The agreements are presented in chronological order.
In 2018 and as at the date of this Report for 2018, none of the Group companies defaulted on credit facilities or loans or breached any material covenants under credit facility or loan agreements.
3.5.1. Significant agreements

Annex to the long-term thermal coal supply agreement
On February 26th 2018, Grupa Azoty PUŁAWY signed an annex to the long-term agreement for thermal coal supply, executed by Grupa Azoty PUŁAWY and Lubelski Węgiel Bogdanka S.A. on January 8th 2009. Following the signing of the annex, the estimated value of the agreement from its execution date to December 31st 2022 (net of possible increases, deviations and tolerance) totals PLN 1,340m (VAT exclusive), including approximately PLN 557m (VAT exclusive) planned for the period 2018-2022.

On November 19th 2018, another annex was signed to the long-term thermal coal supply agreement of January 8th 2009. Following the signing of the annex, the estimated value of the agreement from its execution date to December 31st 2023 (net of possible increases, deviations and tolerance) totals PLN 1,534m (VAT exclusive), including approximately PLN 666m (VAT exclusive) planned for the period 2019-2023.

Coal supplied under the annexes is intended for Grupa Azoty PUŁAWY’s CHP plant. The supplies do not cover the coal demand related to the plans to construct a new coal-fired unit.

3.5.2. Credit facility and loan agreements

Parent’s credit facility agreements with the European Investment Bank
On January 25th 2018, the Parent and the European Investment Bank signed a EUR 145,000,000 term loan agreement for a period of ten years from the disbursement date to finance certain projects under the Group’s investment and R&D programmes. Interest is determined individually for each tranche. The Parent and EIB also signed an annex to the PLN 550,000,000 loan agreement of May 28th 2015 in order to harmonise the material terms and conditions of the two agreements, which are subject to harmonisation under the Group’s other corporate financing agreements.

Overdraft Facility Agreement signed by Agrochem Sp. z o.o.
Having obtained, on January 30th 2018, a PLN 10m limit under physical cash pooling, AGROCHEM Sp. z o.o. of Dobre Miasto decided not to extend for another period its overdraft facility agreement with Pekao S.A. valid until January 31st 2018 and repaid the debt outstanding as at January 31st 2018.

Agreement Amending and Restating the Revolving Credit Facility Agreement
On June 29th 2018, the Parent and PKO BP S.A., Bank Gospodarstwa Krajowego, Bank Zachodni WBK S.A., and ING Bank Śląski S.A. (the “Lenders”) signed an Agreement Amending and Restating the Revolving Credit Facility Agreement of April 23rd 2015 in order to increase the total amount available under the facility from PLN 1.5bn to PLN 3bn, including the refinancing of the existing Tranche A - revolving credit facility of PLN 1.5bn, and the granting of Tranche B - term facility of PLN 1.5bn, with the repayment period set as up to seven (7) years from the date of the amending agreement for both tranches of the facility.

The Lenders’ claims under the Agreement are secured by the following security instruments, replacing the analogous instruments under the Agreement of April 23rd 2015:

- Sureties provided by each of the Key Subsidiaries (Grupa Azoty KĘDZIERZYN, Grupa Azoty POLICE and Grupa Azoty PUŁAWY) under the surety agreement concluded on June 29th 2018 between the Lenders and the Borrower and the Key Subsidiaries, up to an amount equal to 1/3 (one-third) of 120% of the increased amount of the Facility (i.e. up to PLN 1.2bn), in respect of the Borrower’s liabilities arising under the Agreement and covered by the surety agreement;
- The Borrower’s declarations of voluntary submission to enforcement under the Agreement, up to an amount equal to 120% of each Lender’s commitment;
- A declaration of voluntary submission to enforcement made by each of the Key Subsidiaries under the sureties provided by them, up to an amount equal to 100% of each surety amount;
- Powers of attorney over the Borrower’s bank accounts granted to the Security Agent, authorising the Security Agent to withdraw funds from those accounts to repay the Borrower’s liabilities under the Agreement when they fall due.

The Agreement is part of a long-term financing package for the Group’s general corporate needs, including the strategy and the investment programme. The facility bears interest at a variable rate based on 1M WIBOR plus bank margin. All material terms and conditions of these long-term financing agreements have been harmonised.
Package of long-term financing agreements
On July 26th 2018, the Parent and the European Bank for Reconstruction and Development signed a new long-term credit facility agreement and an annex to the long-term credit facility agreement of May 28th 2015 (the “First EBRD Agreement”).
The Parent concluded with the EBRD a new financing agreement for up to PLN 500m (the “Second EBRD Agreement”), and together with its Key Subsidiaries the Parent entered into a new guarantee agreement with the EBRD under which the Key Subsidiaries, acting as Guarantors, provided guarantees for the Parent’s liabilities under the Second EBRD Agreement, with each guarantee covering up to one-third (1/3) of 120% of the amount provided under the Second EBRD Agreement, i.e. up to PLN 200m.
The Second EBRD Agreement for up to PLN 500m was concluded for a period of up to ten years, with the loan to be repaid in instalments, starting within three years from the Second EBRD Agreement date.
Furthermore, the Company and the EBRD executed an annex to the First EBRD Agreement of May 28th 2015 for up to PLN 150m in order to harmonise the material terms and conditions of the First EBRD Agreement and the Second EBRD Agreement, thus marking the end of harmonisation of the agreements for corporate financing of the Group.
In the agreements with the EBRD, the Parent agreed to incur capital expenditure on selected projects under its investment programme that are in line with the EBRD’s policy. The agreements also contain an obligation to submit periodic reports and a final report on project costs and other matters.
The agreements with the EBRD impose certain restrictions on the Parent and the Key Subsidiaries including restrictions on disposal and encumbering of material assets, provision of loans and guarantees, payment of dividends and incurring financial liabilities above the agreed thresholds of the consolidated net debt to EBITDA ratio, which have been or are to be harmonised with the other long-term financing agreements.
The agreements provide for variable interest rates based on 1M WIBOR plus bank margin.
The agreements with the EBRD are an integral part of the long-term financing package intended for the financing of Grupa Azoty’s general corporate needs, including its strategy and investment programme.

Execution of credit facility agreement and physical cash pooling agreement with PKO Bank Polski S.A.
On November 2nd 2018, the Parent executed a EUR 75m overdraft facility agreement with PKO BP S.A. (the “EUR OFA”), valid until September 30th 2022.
The EUR OFA is related to the euro physical cash pooling agreement (the “EUR PCP Agreement”), which was simultaneously executed by the Parent and companies of its Group on November 2nd 2018.
The EUR physical cash pooling is designed to optimise interest income and expenses and to enable the Group companies to use the Group’s global liquidity limit by pooling the positive and negative balances in their current accounts.
The Bank’s claims under the EUR OFA are secured by: the Borrower’s notarised declaration of voluntary submission to enforcement up to 120% of the value of the EUR OFA and a power of attorney over the Borrower’s current account granted to the Bank.
The Parent is liable for the repayment of all amounts due under the EUR OFA.
The facility bears interest at an annual rate equal to the reference rate 1M WIBOR plus the Bank’s margin. The terms of the EUR Overdraft Facility Agreement do not differ from standard terms used in agreements of such type.
The EUR OFA also imposes certain restrictions on the Parent, including restrictions on disposal or encumbering of its material assets, granting loans and guarantees, paying dividends and incurring financial liabilities, above the consolidated net debt to EBITDA ratios agreed with the lenders, which have been harmonised with the revolving credit facility agreement of April 23rd 2015, amended under the Amending Agreement of June 29th 2018 (see Current Report No. 25/2015 of April 23rd 2015 and Current Report No. 33/2018 of June 29th 2018).
On November 27th 2018, the Parent and the Group companies executed Annex 1 to the EUR PCP Agreement with PKO BP S.A., whereby selected companies from the Compo Group were included in the agreement. Subsequently, the Parent granted Goat BidCo GmbH and Compo Expert GmbH internal debt limits within the EUR PCP structure, which were used to settle the Compo Group’s pre-acquisition financial debt of EUR 127m, which was refinanced as of the acquisition date by the Parent.
Subsequent to the reporting date, on January 31st 2019, the Parent and the Group companies executed Annex 2 to the EUR PCP Agreement with PKO BP S.A., to include further companies of the Grupa Azoty Group in the agreement.
Payments Servicing Agreement with Banco Santander S.A.
On December 14th 2018, the Parent and the Key Subsidiaries executed the Payments Servicing Agreement with Banco Santander S.A., providing for a maximum limit of PLN 250m, to secure financing of trade transactions with the Company’s and Group companies’ suppliers. The agreement was made for an indefinite term. As security, the Parent issued a notarised declaration of voluntary submission to enforcement with respect to its debt under the Payments Servicing Agreement, for up to 120% of the financing limit provided for in the agreement, i.e. up to PLN 300m. The interest on deferred payments is based on the 1M to 3M WIBOR/EURIBOR rate (as applicable depending on the financing period and the currency) plus the bank’s margin.

Working Capital Facility with Bank Gospodarstwa Krajowego
On December 21st 2018, Grupa Azoty POLICE contracted a non-revolving working capital facility of up to EUR 20,000 thousand with Bank Gospodarstwa Krajowego. The agreement is effective until December 31st 2023. The credit facility was used by the company to refinance its existing debt under the multi-purpose credit facility with BGŻ BNP Paribas S.A. The borrowing, used exclusively by AFRIG S.A., was taken over by the company as a co-borrower. The company retained a recourse claim against African Investment Group S.A. concerning its obligation to repay the amount drawn under the facility (EUR 20,079 thousand) together with the costs of debt servicing. The terms of servicing and repayment of the facility have been set out in a trilateral agreement between the Company, African Investment Group S.A. and DGG ECO Sp. z o.o.

3.5.3. Annexes to agreements

Annex to the Intragroup Financing Agreement
On January 25th 2018, the Parent signed Annex 1 to the Intragroup Financing Agreement of April 23rd 2015 with Grupa Azoty POLICE, Grupa Azoty KĘDZIERZYN and Grupa Azoty PUŁAWY. Pursuant to the Annex, the loan facility agreement concluded on January 25th 2018 between the Parent and the European Investment Bank, together with the guarantee agreement of January 25th 2018, is to be governed by the framework for the Key Companies’ provision of guarantees for corporate credit facility agreements, Grupa Azoty S.A.’s financing for the Key Companies and mutual settlements on this account between the companies.
On June 29th 2018, the parties signed Annex 2 to the Intragroup Financing Agreement of April 23rd 2015, under which the amount of financing was increased from PLN 0.5bn to PLN 1bn for each of the above-mentioned Key Companies.

Annexes to the Physical Cash Pooling Agreement
On February 12th 2018, the Parent, acting together with other Group companies, and PKO BP S.A. signed Annex 2 to the Physical Cash Pooling Agreement of September 20th 2016, as amended. The Annex included new Group companies in the Agreement.
On May 9th 2018, the Parent, acting together with other Group companies, and PKO BP S.A. signed Annex 3 to the Physical Cash Pooling Agreement of September 20th 2016, as amended, and Annex 14 to the Overdraft Facility Agreement of October 1st 2010. The Annexes update the provisions of the aforementioned agreements in connection with the acquisition of Agrochem Sp. z o.o. by Agrochem Pulawy Sp. z o.o. and in connection with the change of the name of CTL CHEMKOL Sp. z o.o. to Grupa Azoty CHEMKOL Sp. z o.o.
On November 2nd 2018, the Parent and the Group companies executed Annex 4 to the PLN Physical Cash Pooling Agreement signed with PKO BP S.A. on September 20th 2016, as amended, extending the agreement term until September 30th 2022.

Annex to the Overdraft Facility Agreement signed by Grupa Azoty KOLZAP Sp. z o.o.
On March 30th 2018, Grupa Azoty KOLZAP Sp. z o.o. and the Cooperative Bank of Nałęczów signed an Annex to the Overdraft Facility Agreement, for PLN 1.2m, with a one-year repayment term.

Annex to Overdraft Facility Agreement
On June 29th 2018, the Parent and other companies of the Group executed with PKO BP S.A an annex to the PLN 310m Overdraft Facility Agreement of October 1st 2010. Under the annex, the overdraft availability date was extended from September 30th 2019 to September 30th 2022. The Overdraft Facility Agreement is connected with the physical cash pooling agreement signed with PKO BP on September 30th 2016.
Directors’ Report on the operations of Grupa Azoty S.A. and the Group 
for the 12 months ended December 31st 2018 
(all amounts in PLN ‘000 unless indicated otherwise)

As at the date of the annex to the Overdraft Facility Agreement, the sub-limits were as follows: up to PLN 96.2m for the Parent, up to PLN 110.5m for Grupa Azoty POLICE, up to PLN 21.7m for Grupa Azoty KĘDZIERZYN, and a total of PLN 81.6m for the other companies.

PKO BP S.A. ’s claims under the Agreement are secured with sureties with an aggregate amount of PLN 372m, granted under a surety agreement made on June 29th 2018 between PKO BP S.A. and the Parent along with its subsidiaries (Grupa Azoty PULAWY, Grupa Azoty POLICE, and Grupa Azoty KĘDZIERZYN) as surety providers. The share of each surety provider in the aggregate surety amount is one-third (1/3) of 120% of the facility amount, i.e. no more than PLN 124m. The surety agreement superseded the previous surety agreement securing the Bank’s claims under the Overdraft Agreement of September 20th 2016.

Annex to Multi-Purpose Credit Facility Agreement
On June 29th 2018, the Parent and the Group companies signed an Annex to the PLN 240m Multi-Purpose Credit Facility Agreement with PKO BP S.A. Under the annex, the availability date of the facility was extended from September 30th 2019 to September 30th 2022.

As at the Annex date, the sub-limits under the Agreement were as follows: up to PLN 30m for the Parent; up to PLN 62m for Grupa Azoty POLICE, up to PLN 79m for Grupa Azoty PULAWY, up to PLN 50m for Grupa Azoty KĘDZIERZYN, and up to PLN 19m for Grupa Azoty ATT Polymers.

PKO BP S.A. ’s claims under the Agreement are secured with sureties with an aggregate amount of PLN 288m, granted under a surety agreement made on June 29th 2018 between PKO BP S.A. and the Parent along with its subsidiaries (Grupa Azoty PULAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN), acting as surety providers. The share of each surety provider in the aggregate surety amount is one-third (1/3) of 120% of the facility amount, i.e. up to a maximum of PLN 96m. The surety agreement superseded the previous surety agreement of September 20th 2016.

The Annexes to the agreements are part of a long-term financing package designed to finance general corporate needs and secure financing for the Group companies through the umbrella structure of limit allocation and actual intra-Group redistribution.

Annex to Overdraft Facility Agreement
On November 29th 2018, Grupa Azoty PULAWY and Bank Pekao S.A. signed Annex 10 to the PLN 2m intraday overdraft facility agreement. The annex extends the term of the facility until November 30th 2019.

3.5.4. Commercial contracts

Execution of bilateral coal supply contracts
On March 1st 2018, the Parent and its subsidiaries: Grupa Azoty PULAWY, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN (hereinafter jointly referred to as the Customers), signed bilateral coal supply contracts with Polska Grupa Górnicza S.A. (hereinafter referred to as the Seller).

The subject matter of the contracts is the sale of thermal coal produced at the Seller’s mines and intended for consumption at the Customers in quantities specified in the respective contracts, based on uniform business terms for the Customers. The total estimated value of all the contracts is approximately PLN 212.5m (VAT exclusive) per annum.

The contracts were concluded for an indefinite term with effect as of January 1st 2018, and provide for annual delivery periods.

The contracts are considered material to the Parent given that Polska Grupa Górnicza S.A. is a strategic supplier of thermal coal to Grupa Azoty, and the contracts will satisfy a material portion of demand for such coal; in particular, they will cover total demand from Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN, as well as up to 70% of demand from Grupa Azoty S.A. They will also supplement up to about 15% of Grupa Azoty PULAWY’s demand not covered by other contracts.

Execution of contract for purchase of phosphate rock
On April 9th 2018, Grupa Azoty POLICE entered into a contract for the purchase of Moroccan phosphate rock with Office Chérifien des Phosphates (OCP) of Casablanca, Morocco (the seller).

The Contract was executed for a definite period from January 1st 2018 to December 31st 2020 and defines a specific schedule and other commercial terms of the deliveries. The value of the deliveries to be made under the Contract is estimated at approximately PLN 350m.

The other terms and conditions do not differ from standard terms used in contracts of this type. Information on execution of the Contract was classified as inside information by Grupa Azoty POLICE, because it refers to securing supplies of phosphate rock, the key raw material for production of compound fertilizers, in quantities sufficient to satisfy demand for that material for the next three
years. OCP, being the world’s largest exporter of phosphorites, guarantees timely delivery of phosphate rock of high and consistent quality.

### 3.5.5. Insurance agreements

**Consolidated Group Insurance Programme with TUW PZUW**

In February 2018, Towarzystwo Ubezpieczeń Wzajemnych PZUW issued policies for the period from March 1st 2018 to February 28th 2019, for the following types of insurance:

- all-risk property damage insurance (AR/PD),
- business interruption insurance with respect to AR/PD (BI),
- machinery breakdown insurance (MB),
- all-risk electronic equipment insurance (EEI).

The policies were issued under the Master Agreement for the Consolidated Property Insurance Programme, concluded for the period from March 1st 2017 to February 28th 2019 by the six Group companies comprising the Mutual Insurance Union (Grupa Azoty Group Mutual Insurance Union), i.e. Grupa Azoty S.A., Grupa Azoty KĘDZIERZYN, Grupa Azoty POLICE, Grupa Azoty PUŁAWY, GZNFO Sp. z o.o. and Grupa Azoty Siarkopol.

Subsequent the reporting date, the above Group companies negotiated and signed a new Master Agreement for the Consolidated Property Insurance Programme with TUW PZUW for the three years from March 1st 2019 to February 28th 2022, covering the following types of insurance:

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

On June 27th 2018, TUW PZUW issued policies for the period from July 1st 2018 to June 30th 2019, for the following types of insurance:

- Business and property owner’s liability insurance (OC),
- Property in national and international transit insurance (CARGO).

The policies were issued for the aforementioned companies comprising the Group’s Mutual Insurance Union under Master Agreements made for a period of two years, from July 1st 2017 to June 30th 2019.

**Trade credit insurance at Grupa Azoty PUŁAWY**

On February 15th 2018, trade credit insurance policies were signed with Towarzystwo Ubezpieczeń Euler Hermes S.A. for the period from February 1st 2018 to January 31st 2019. The policies cover:

- receivables from domestic and export sales of caprolactam, melamine and other products due from customers buying caprolactam, melamine, PUC-C and alcohol foreshots, up to the amount of credit limits granted by TUEH (excluding transactions secured by bank guarantees and letters of credit). Expected turnover covered by the insurance is PLN 848m;
- Grupa Azoty PUŁAWY’s receivables from exports of fertilizers (ammonium nitrate PULAN, UAN, UAN+S, ammonium sulfate Pulsar, Pulaska®, Pulrea®, ammonium sulfate IOS, Pulgran® and Pulgran® S); sales of LIKAM and PULNOX® to CHP plants, power plants, cement plants, waste incineration plants, and wastewater treatment plants; NOx sales and domestic sales of technical grade urea, sales of ammonia, hydrogen peroxide, carbon dioxide, hydrogen, nitric acid and Coolant/dry ice up to the amount of credit limits granted by TUEH (excluding transactions secured by bank guarantees and letters of credit). Expected turnover covered by the insurance is PLN 618m.

The aggregate maximum compensation under these policies in a given insurance year (maximum sum insured) calculated on a minimum premium basis is PLN 35.2m.

**Insurance of environmental risks**

On July 31st 2018, the Parent, Grupa Azoty KĘDZIERZYN, Grupa Azoty POLICE and Grupa Azoty PUŁAWY concluded an environmental liability insurance agreement with the Polish Branch of Colonnade Insurance Societe Anonyme.

**D&O insurance**
On September 24th 2018, the Parent entered into a directors and officers (D&O) liability insurance agreement with PZU S.A. The insurance provides cover for the Group companies from September 17th 2018 to September 16th 2019. The total sum insured is PLN 200m.

Automobile Insurance
On December 20th 2018, companies forming the Grupa Azoty mutual insurance union signed with TUW PZUW an Annex to the Motor Insurance Master Agreement, extending the agreement for another year, i.e. for the period from January 1st 2019 to January 31st 2019.

3.5.6. Project co-financing agreements

- On August 3rd 2018, Grupa Azoty PULAWY, acting as a member of a consortium, signed an agreement with the National Centre for Research and Development for co-financing of the ‘Green technology for production of succinic acid from renewable and waste materials’ project under the Smart Growth Operational Programme. The total co-financing granted to the consortium amounts to PLN 2.1m, including PLN 1.4m for Grupa Azoty PULAWY.
- On September 12th 2018, Grupa Azoty PULAWY signed an agreement with the National Fund for Environmental Protection and Water Management for co-financing the upgrade of steam generator OP-215 No. 2 to reduce NOx emissions. The project cost is PLN 84.1m, while the loan amounts to PLN 52.5m. The loan will be available from January 2nd 2019 to March 31st 2028. The grace period granted in respect of the loan ends on June 29th 2021. The loan is secured by a blank promissory note.
- On November 20th 2018, as part of Measure 1.3. Research and Development Infrastructure at Companies under the Lublin Province Regional Operational Programme for 2014-2020, an agreement was concluded with the Lublin Agency for the Support of Entrepreneurship concerning co-financing of the ‘Development of the Grupa Azoty Puławy Research Laboratory’ project. The amount of co-financing to be provided by the agency is PLN 2.9m.
- In 2018, the Parent received co-financing tranches for a total amount of PLN 11,927 thousand under an agreement signed on September 2nd 2016 with the Minister of Development, acting as the Managing Authority, to finance the ‘Construction of Grupa Azoty’s R&D Centre in Tarnów’ project, co-financed from the European Regional Development Fund. The project is being implemented under the Smart Growth Operational Programme 2014-2020.
- In the reporting period, Grupa Azoty Jednostka Ratownictwa Chemicznego Sp. z o.o. received funding from the National Centre for Research and Development for a project to produce innovative, environment-friendly furfuryl resins. The total project cost is PLN 6,493 thousand, while the funding amounts to PLN 3,485 thousand.

3.5.7. Other agreements

On September 3rd 2018, Grupa Azoty PULAWY entered into an agreement with the New Chemical Syntheses Institute for the purchase of licences and technologies for the upgrade of its existing nitric acid lines with a daily capacity of 700 tonnes in 100% concentration equivalent, including the acquisition of a process design, delivery of key equipment together with author’s supervision, staff training, participation in unit start-up and trial run. The value of the agreement is PLN 137.6m.

3.5.8. Agreements between the Grupa Azoty Group companies

Loan agreements

Loan agreement between Grupa Azoty KĘDZIERZYN and CTL Chemkol Sp. z o.o.
On January 17th 2018, Grupa Azoty KĘDZIERZYN entered into a loan agreement with CTL CHEMKOL Sp. z o.o. (currently Grupa Azoty KOLTAR Sp. z o.o.), under which on January 22nd 2018 it advanced a loan of PLN 2,000 thousand to its subsidiary. The interest on the loan, due by April 30th 2018, accrued at a variable rate based on 1M WIBOR plus margin. The loan was repaid.

Loan agreement between Grupa Azoty POLICE and Supra Agrochemia Sp. z o.o.
On June 28th 2018, Grupa Azoty POLICE granted a PLN 1,000 thousand loan to its subsidiary Supra Agrochemia Sp. z o.o., to secure funds until completion of disposal of the company shares. The loan bears interest at a variable rate based on 1M WIBOR plus margin. In 2018, Grupa Azoty POLICE disbursed four tranches of the loan, totalling PLN 480 thousand. As at December 31st 2018, the amount
outstanding under the loan agreement was PLN 480 thousand. The loan is to be repaid by June 30th 2019.

**Intragroup financing agreement**

Pursuant to the intragroup financing agreement of April 23rd 2015, as amended:

- On January 31st 2018, the Parent disbursed to Grupa Azoty KĘDZIERZYN a loan to finance the ‘Upgrade of the Biological Wastewater Treatment Plant at the Wastewater Treatment and Sewage System Division of the Infrastructure Unit’ project in an amount of PLN 4,447 thousand;
- On May 30th 2018, the Parent paid to Grupa Azoty POLICE PLN 40,000 thousand as the last tranche of the loan to cover the share capital of the subsidiary PDH Polska S.A. (the total amount of the loan is PLN 60,000 thousand);
- On July 30th 2018, the Parent granted Grupa Azoty KĘDZIERZYN a loan of PLN 14,500 thousand to finance the upgrade of the synthesis gas compression unit supplying the Ammonia Plant. The repayment date of the loan is March 31st 2025;
- On July 30th 2018, the Parent paid Grupa Azoty KĘDZIERZYN PLN 3,729 thousand as a tranche of a loan to refinance and finance the ‘Raw Gas Compressor (GGH)’ project, on the basis of Annex 1 signed on July 16th 2018 to the request for a loan dated June 12th 2017, approved on June 22nd 2017. The annex increases the loan amount from PLN 7,732 thousand to PLN 11,461 thousand and changes the loan repayment schedule so that it begins on September 30th 2019 and ends on March 31st 2025.
- On September 28th 2018, the Parent disbursed to Grupa Azoty KĘDZIERZYN a loan of PLN 9,700 thousand to finance the investment project ‘Upgrade of the synthesis gas compression unit supplying the Ammonia Plant’ under Annex 1 of September 7th 2018 to the Loan Request of July 30th 2018, approved on September 26th 2018. The Annex increased the loan amount from PLN 14,500 thousand to PLN 24,200 thousand and changed the loan repayment schedule in the period from June 30th 2020 to March 31st 2025.
- On September 28th 2018, the Parent granted Grupa Azoty KĘDZIERZYN a loan of PLN 7,000 thousand to finance the investment project ‘Upgrade of the partial combustion unit at the Ammonia Department of the Grupa Azoty ZAK S.A. Ammonia Plant scheduled for completion in December 2020’. The loan is scheduled for repayment by March 31st 2025.
- On October 15th 2018, the Parent granted Grupa Azoty KĘDZIERZYN a PLN 4,600 thousand loan to finance the purchase of 200 storage line tanks, to be repaid by December 29th 2023.
- On February 25th 2019, the Parent disbursed PLN 8,430 thousand to Grupa Azoty KĘDZIERZYN as a tranche of the loan to refinance and finance the ‘Raw Gas Compressor (GGH)’ project, under Annex 2 of February 25th 2019 to the Loan Request of June 12th 2017, as amended by Annex 1 of July 16th 2018. Annex 2 increases the loan amount from PLN 11,461 thousand to PLN 19,891 thousand and changes the loan repayment schedule in the period from March 31st 2020 to September 29th 2023.

The loans bear interest at a variable rate based on 1M WIBOR plus margin.

**Other agreements**

**Execution of framework agreement for ammonia supply**

On February 6th 2018, the Parent signed a framework contract with Grupa Azoty POLICE for the supply of liquid ammonia. Its conclusion is part of the companies’ production programmes for fertilizer lines and secures the supply of ammonia for the fertilizer production processes at Grupa Azoty S.A. The contract was executed for an indefinite period starting on January 1st 2018 and defines a specific schedule and other commercial terms of the deliveries. The annual value of the contract is estimated at approximately PLN 113m (VAT exclusive). The terms and conditions of the contract do not provide for additional contractual penalties. The other terms and conditions do not differ from standard terms used in agreements of this type.

3.5.9. **Sureties and guarantees**

**Sureties granted**

**Sureties to the Agreement Amending and Restating the Revolving Credit Facility Agreement**

On June 29th 2018, the Parent and PKO BP S.A., Bank Gospodarstwa Krajowego, Bank Zachodni WBK S.A., and ING Bank Śląski S.A. signed an agreement amending and restating the revolving credit facility
agreement of April 23rd 2015 in order to increase the total amount available under the facility from PLN 1.5bn to PLN 3bn.
The amount of surety granted by each of the guarantors was set at no more than PLN 1.2bn, i.e. up to PLN 3.6bn in aggregate. The surety expires upon expiry of the security term, which ends upon repayment of debt under the credit facility agreement concluded for seven years from the date of signing the amending agreement.

Sureties under the Annex to the Overdraft Facility Agreement
On June 29th 2018, the Parent and the Group companies signed with PKO BP S.A. an annex to the PLN 310m Overdraft Facility Agreement of October 1st 2010.
The amount of surety granted by each of the guarantors was set at no more than PLN 124m, i.e. up to PLN 372m in aggregate. As of its date, the surety agreement superseded the previous surety agreement to the Overdraft Facility Agreement of September 20th 2016. The surety expires upon expiry of the security term, which ends upon repayment of debt under the Overdraft Facility Agreement.

Sureties to Multi-Purpose Credit Facility Agreement
On June 29th 2018, the Parent and its Group companies signed an annex to the PLN 240m Multi-Purpose Credit Facility Agreement with PKO BP S.A.
The amount of surety granted by each of the guarantors was set at no more than PLN 96m, i.e. up to PLN 288m in aggregate. As of its date, the surety agreement superseded the previous surety agreement to the Multi-Purpose Credit Facility Agreement of September 20th 2018. The surety expires upon expiry of the security term, which ends upon repayment of debt under the Multi-Purpose Credit Facility Agreement.

Guarantees

Guarantees for credit facilities
Following the execution, on January 25th 2018, of a EUR 145,000 thousand long-term loan agreement between the Parent and the European Investment Bank, on the same date the Group’s key subsidiaries, including Grupa Azoty PULawy, Grupa Azoty POLICE and Grupa Azoty KĘDZIERZYN, entered into an agreement with EIB for the provision of a guarantee securing repayment of debt under the loan agreement.
Under the guarantee agreement, the key subsidiaries, acting as guarantors, provided guarantees covering the Parent’s liabilities under the loan agreement, with each guarantee covering up to one-third (1/3) of 120% of the amount provided under loan agreement with EIB, i.e. up to EUR 58,000,000.

Following the execution, on July 26th 2018, of a new long-term credit facility agreement and an annex to the long-term credit facility agreement of May 28th 2015 (the “First EBRD Agreement”) between the Parent and the European Bank for Reconstruction and Development, the Parent and its Key Subsidiaries signed a new guarantee agreement with the EBRD. Under the agreement, the Key Subsidiaries provided guarantees for the Parent’s liabilities under the Second EBRD Agreement, with each guarantee covering up to one-third (1/3) of 120% of the loan amount provided under the Second EBRD Agreement, i.e. up to PLN 200m.

Guarantees issued
In 2018, the Parent did not issue any guarantees with a significant aggregate value.

Material guarantees issued

<table>
<thead>
<tr>
<th>Guarantee recipient</th>
<th>Total guarantee amount (PLN '000)</th>
<th>Guarantee date</th>
<th>Period for which the guarantee was issued</th>
<th>Financial terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELERING AS - ESTONIA</td>
<td>20,264</td>
<td>Oct 17 2018</td>
<td>Jul 14 2020</td>
<td>Freeze on funds equal to 20% of guarantee amount</td>
</tr>
<tr>
<td>ELERING AS - ESTONIA</td>
<td>20,264</td>
<td>Nov 27 2018</td>
<td>Sep 30 2019</td>
<td>Freeze on funds equal to 20% of guarantee amount</td>
</tr>
<tr>
<td>ELERING AS - ESTONIA</td>
<td>6,734</td>
<td>Aug 29 2018</td>
<td>Jun 14 2020</td>
<td>Freeze on funds equal to 20% of guarantee amount</td>
</tr>
<tr>
<td>Grace Technologies</td>
<td>19,250</td>
<td>Dec 6 2018</td>
<td>Jun 5 2023</td>
<td>Bank margin</td>
</tr>
</tbody>
</table>
Guarantees received
The total amount of all guarantees received by the Grupa Azoty Group companies in the reporting year amounted to PLN 171,168 thousand, including
- with a value of up to PLN 500 thousand - PLN 44,578 thousand,
- with a value above PLN 500 thousand - PLN 126,590 thousand.

Material guarantees received

<table>
<thead>
<tr>
<th>Entity requesting the guarantee</th>
<th>Total guarantee amount (PLN ‘000)</th>
<th>Guarantee date</th>
<th>Period for which the guarantee was issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man Diesel &amp; Turbo Schweiz AG</td>
<td>6,488 (CHF 1,700 thousand)</td>
<td>Nov 13 2018</td>
<td>May 6 2020</td>
</tr>
<tr>
<td>Anna-Bud Sp. z o.o. (construction company)</td>
<td>6,253</td>
<td>Apr 4 2018</td>
<td>Jul 16 2018</td>
</tr>
<tr>
<td>Siemens Sp. z o.o. Warsaw</td>
<td>6,302 (EUR 1,465 thousand)</td>
<td>Aug 13 2018</td>
<td>Jul 1 2019</td>
</tr>
<tr>
<td>Haldor Topsoe Denmark</td>
<td>5,808 (EUR 1,351 thousand)</td>
<td>Sep 13 2018</td>
<td>Jul 6 2020</td>
</tr>
<tr>
<td>Siemens Sp. z o.o. Warsaw</td>
<td>5,729 (EUR 1,332 thousand)</td>
<td>Mar 20 2018</td>
<td>Jul 1 2019</td>
</tr>
<tr>
<td>Siemens Sp. z o.o. Warsaw</td>
<td>5,729 (EUR 1,332 thousand)</td>
<td>May 16 2018</td>
<td>Jul 1 2019</td>
</tr>
<tr>
<td>EBRUD S.A. Warsaw</td>
<td>5,131</td>
<td>Jul 11 2018</td>
<td>Dec 23 2019</td>
</tr>
</tbody>
</table>

Sources: Company data.

Letters of credit issued
In 2018, the following import letters of credit were issued upon Grupa Azoty PULAWY’s instruction by PKO BP S.A. under a multi-purpose credit facility agreement:
- On February 6th 2018, EUR 1.87m was paid under the EUR 2.04m letter of credit. The beneficiary of the letter of credit is the vendor of a CO₂ condensation and purification unit. On July 2nd 2018, the expiry date of the import letter of credit was changed from June 30th 2018 to October 31st 2018. In November 2018, the validity of the letter of credit was extended to April 5th 2019. As at December 31st 2018, the credit balance under the letter of credit was EUR 170 thousand.
- On February 27th 2018, EUR 19,688 was paid. The beneficiary was the vendor of a coalescing filter cartridge for the oil separator at the urea unit. As at December 31st 2018, the outstanding credit balance under the letter of credit was EUR 0.
- On April 4th 2018, EUR 481.6 thousand was paid under a letter of credit opened for this amount for Grupa Azoty Zakłady Azotowe Pulaawy S.A. by PKO BP S.A., valid until March 31st 2018. The beneficiary was the supplier of a dolomite powder pneumatic conveying system. As at December 31st 2018, the outstanding credit balance under the letter of credit was EUR 0.
- On May 18th 2018, the letter of credit issued for the benefit of the supplier of equipment for the nitric acid unit was amended. The amount under the letter of credit was increased by EUR 27 thousand to EUR 1,414.5 thousand and the amounts of individual payments to be made under the letter of credit were changed. The following payments were made under the above letter of credit: EUR 471.5 thousand was paid on June 1st 2018 and EUR 848.7 thousand was paid on November 22nd 2018. As at December 31st 2018, the credit balance under the letter of credit was EUR 94,3 thousand.
• On July 24th 2018, the EUR 1,496.5 thousand import letter of credit issued for the supplier of drum equipment for the mechanical granulation unit expired and Bank PKO BP S.A. returned this amount to the account of Grupa Azoty PUŁAWY.

• On November 11th 2018, a EUR 1.05 thousand import letter of credit, expiring on November 21st 2018, was issued for the benefit of the supplier of drum equipment for the mechanical granulation unit. In November 2018, the validity of the letter of credit was extended to March 1st 2019. As at December 31st 2018, the credit balance under the letter of credit was EUR 1,05 thousand.

• On October 23rd 2018, EUR 2,535 thousand was paid under a letter of credit of EUR 19m. EUR 5m was paid on December 20th 2018. The beneficiary of the letter of credit is the supplier of a nitric acid unit. As at December 31st 2018, the credit balance under the letter of credit was EUR 5m.

Agreements concluded after the reporting date

Commercial contracts

Execution of contract for purchase of phosphate rock
On February 5th 2019, Grupa Azoty POLICE entered into a trilateral contract with Ameropa AG of Binningen, Switzerland (as the seller) and Somiva SA of Dakar-Yoff, Senegal (as the producer) for the purchase of low-cadmium phosphate rock sourced from Senegal. The contract was executed for a definite period from February 1st 2019 to February 28th 2021 and defines a specific schedule and other commercial terms of the deliveries. The value of the deliveries to be made under the contract is estimated at approximately PLN 240,000 thousand. The other terms and conditions of the contract do not differ from standard terms typically applied in such contracts.

3.6. Significant events

Execution of an agreement with a licence provider
On January 11th 2018, PDH Polska S.A. and WR. Grace & Co, executed an agreement on purchase of a polypropylene process technology licence and supply of polypropylene catalysts for the Polimery Police project. The agreement marks another important milestone in the implementation of Grupa Azoty’s largest investment project to date. Polimery Police is a manufacturing complex developed in the town of Police which is to comprise propylene and polypropylene units, a port with feedstock storage facilities, auxiliary facilities and logistics infrastructure. The company already holds technology licences key to the project: one for the Oleflex-UOP catalytic dehydrogenation technology and one for the Unipol-GRACE polypropylene process technology. In a parallel effort, PDH Polska S.A. is in the process of selecting a future general contractor under a lump-sum turn-key contract and of arranging financing for the project.

Execution of an agreement on cooperation in fertilizers trading
On February 12th 2018, the four key companies of the Group: the Parent, Grupa Azoty POLICE, Grupa Azoty PUŁAWY and Grupa Azoty KĘDZIERZYN, signed a cooperation agreement under which the Companies tighten their cooperation in, among others, fertilizer trading. Key objectives of the agreement are to deepen the working ties within the Group, allowing the companies to trade as a single business entity. This in turn will help them strengthen their relationships with clients. As a result of the agreement, the Group will follow a uniform trading strategy and policy, consolidating and coordinating its marketing activities under a common brand. Headquartered in Pulawy, the Corporate Agro Trade Department forms part of the organisational structure of each company.

Opening of the Logistics Centre
On July 23rd 2018, the new Guben Logistics Centre was opened at Grupa Azoty ATT Polymers GmbH, another project that will significantly contribute to further expansion of the Grupa Azoty Group’s plastics business. The Guben Logistics Centre comprises a warehouse, a storage silo complex and the necessary infrastructure. The project’s CAPEX was EUR 7.47m, of which EUR 1.5m was provided as public aid by the government of Brandenburg.

Phthalic plasticizers removed from the offering
On September 3rd, Grupa Azoty KĘDZIERZYN dispatched its last delivery of DEHP (bis(2-ethylhexyl) phthalate), which had been continuously manufactured and offered since 1963. As a result, the
Oxoplast O® and Oxoplast Medica® phthalic plasticizers have been withdrawn from the Grupa Azoty Group’s offering. They will be replaced by safer non-phthalic plasticizers, among which Oxoviflex® currently plays the key role on the market.

Grupa Azoty KĘDZIERZYN discontinued the production of phthalic plasticizers. Instead, the company has based its long-term policy on the development of non-phthalic plasticizer DEHT/DOTP (Oxoviflex®), of which it is the largest producer in Europe, as well as a range of speciality esters. In October 2018, the company commenced the start-up of Speciality Esters I unit, where it will manufacture new products based on a proprietary technology. This will enable the company to adapt its offering to the changing plasticizers market and maintain its market position as a plasticizer supplier.

The future of the OXO segment is in non-phthalic plasticizers and speciality esters. The increase in the Oxoviflex® (DEHT/DOTP) capacity is a consequence of the product policy designed to best meet the expectations of the market and customers, while the focus on speciality esters supports the company’s plan to extend the OXO alcohol processing chain.

There has been a noticeable increase in demand for new non-phthalic plasticizers, whose share in the European market has been growing rapidly. The range of new plasticizers will find a variety of applications, not only in PVC processing, as some of them will also provide innovative solutions for other applications.

Launch of the Research and Development Centre in Tarnów
On October 29th 2018, Grupa Azoty opened a new Research and Development Centre in Tarnów. The Centre will accommodate research facilities, supporting the delivery of innovative solutions. Its effective use by Grupa Azoty will allow it to build competitive advantages and boost the flow of innovation into its business.

The Research and Development Centre has 46 laboratory rooms, including the Inorganic Products laboratory, the Organic Products laboratory, and a pilot-plant hall, which consists of a single-storey section where research facilities may be installed, as well as a two-storey technical and storage section.

A unique feature of the R&D Centre is its pilot-plant hall, where the technologies developed in laboratories may be tested in real-life conditions. The technologies and processes implemented in the pilot-plant space are expected to help Grupa Azoty diversify its offering towards high-margin, fine speciality products in the near future. In accordance with the research agenda, in 2016-2023 the new R&D infrastructure will support research work into advanced materials, modern fertilizer products and pro-environmental solutions.

Grupa Azoty enhances its offering of innovative services for agriculture
Grupa Azoty has decided to extend its cooperation with SatAgro, a Polish start-up offering automated processing of satellite data for the needs of individual farmers. The decision to continue the programme was prompted by positive results achieved last year in the pilot phase of this innovative service, which provides valuable information about changes in the condition of crops.

SatAgro is a web application that enables automatic processing of satellite data for monitoring of individual farm fields and creation of electronic directions for the application of fertilizers (mainly nitrogen fertilizers), compatible with precision fertilizer spreaders and sprayers of most manufacturers.

Grupa Azoty named Ambassador of Polska Chemia brand
Grupa Azoty was granted the prestigious title of the Ambassador of the Polish Chemical Industry, which is awarded to individuals, institutions, businesses and organisations in recognition of their efforts to promote and support the Polish chemical industry. The title is awarded by the Polish Chamber of Chemical Industry in partnership with the Jury of the Polish Chemical Industry campaign.

The fifth Polish Chemical Industry Congress was held on June 13th and 14th 2018 in Wieliczka. The Congress is the most important industry event in Poland, providing a forum for sharing experiences, presenting innovative ideas and building strategies for the chemical sector as a vital branch of industry.

Grupa Azoty proclaimed CSR leader in the industry
Grupa Azoty came first in the 12th edition of the Responsible Company Ranking, in the industrial production category. The Ranking lists Poland’s largest companies by the quality of their Corporate Social Responsibility management.

In the general category, Grupa Azoty ranked 5th, having moved up from the 23rd place.
Grupa Azoty at the United Nations Forum in New York
Grupa Azoty was Poland’s only company to accompany the Polish government delegation to the UN High Level Political Forum (HLPF) in New York. During the ministerial session, the Polish delegation presented a report on the implementation in Poland of the United Nations 2030 Agenda for Sustainable Development. Grupa Azoty, which discussed examples of its own best practices contributing to the implementation of the Agenda, played a major role in the presentation of the report. The described initiatives included the Product Stewardship programme, Idea4Azoty (a proprietary acceleration programme), as well as cooperation with SatAgro (a startup).

Grupa Azoty among the most attractive employers
Grupa Azoty was included in the Top 10 of the Most Attractive Employers Poland 2018 ranking according to students in the Natural Sciences category. The ranking is prepared by Universum, an international consultancy. Universum’s Most Attractive Employers Poland 2018 ranking presents the results of surveys conducted among business/commerce, engineering, IT, health/medicine, natural sciences, humanities/liberal arts/education and law students. The Universum Talent Survey is the largest such project around the world, with more than 1.5 million students and young professionals from over 60 countries participating in the surveys. In Poland, more than 17.5 thousand students representing 71 Polish universities and 112 fields of study participated in the 2018 edition of the survey.

Grupa Azoty as Innovative Company of the 100 Years of Independent Poland
Grupa Azoty received a distinction in the ‘Innovative Company of the 100 Years of Independent Poland’ category. The ‘Economic Foundations of Independence’ campaign and the ‘Company of the 100 Years of Independent Poland’ ranking were organised to remind that Poland’s companies of today have traditions to draw from and can look at thousands of large, smaller and micro enterprises which operated in the first 20 years of Poland’s independence (1918-1939) as their predecessors.

Grupa Azoty awarded at COP24
At the COP24 Climate Summit held in Katowice, Grupa Azoty was recognised for its pursuit of the UN Sustainable Development Goals and the Ten Principles of the United Nations Global Compact. The UN’s 17 Sustainable Development Goals are a certain universal action plan for the Grupa Azoty Group. The recently presented updated business strategy of Grupa Azoty until 2020 focuses on innovation in the chemical industry and investments in start-ups. In line with the updated strategy, by 2020 the expenditure on research, development and innovation will reach 1% of Grupa Azoty’s revenue.

Events after the reporting period
Approval of pre-selected bidder in tender for implementation of Polimery Police project
On March 19th 2019, the Management Board of PDH Polska S.A. passed a resolution to approve Hyundai Engineering Co., Ltd. as a pre-selected bidder in the tender to award a lump-sum turn-key contract for the execution of the Polimery Police project. Amongst all the bidders, Hyundai Engineering Co. best met the requirements set out in the tender documentation. Talks with the pre-selected bidder will be continued to agree on all the details of the Polimery Police project, in particular with regard to the financing of the Project and insurance structure. Based on a review of the bids, the amount of remuneration under the general contractor agreement for the Polimery Police project (basic scope) will not exceed EUR 1bn. Accordingly, based on estimates as at March 19th 2019, the total amount of capital expenditure on the project should not exceed EUR 1.18bn. In addition to the general contractor’s remuneration, the amount includes the capital expenditure incurred to date, the costs of site preparation, payment for technology licences and purchase of catalysts. The project’s total budget, including the cost of its financing the during the construction phase and reserve funds required under the project finance model, should not exceed EUR 1.52bn. Moreover, it is currently assumed that PDH Polska S.A. will require additional working capital financing of EUR 176m during the operation phase. Polimery Police’s financial model indicates strong economic viability despite the increased budget. In accordance with the agreed timetable, the contract with the selected bidder will be signed in the second quarter of 2019, while the execution of the Polimery Police project under the general contractor agreement is to be completed in the fourth quarter of 2022.
4. Growth strategy and policy

4.1. Strategy and growth directions

On May 10th 2017, the Management Board of the Parent passed a resolution to update the Grupa Azoty Group Strategy for 2013−2020. On the same day, the Supervisory Board of the Parent passed a resolution to approve and adopt the updated Strategy. The updated Strategy outlines the Group’s key strategic objectives in the main product areas with respect to innovations, operations, sales and financial policy. It also defines the corporate management objectives and methodology applied across the Group.

Grupa Azoty will deploy state-of-the-art, comprehensive chemical industry solutions that meet stakeholder expectations. The Group’s activities will serve as a catalyst for growth of Poland’s chemical sector and related industries and a springboard for expansion of the product chain in the domestic chemical sector (in particular by building a feedstock base for propylene, polypropylene and their processing products), and will position the Grupa Azoty Group as the leader of R&D and innovation in Poland’s chemical sector and associated industries. By harnessing innovative mechanisms, the Group will revamp its revenue structure by moving towards high-margin and low-tonnage chemicals.

Mission: Create value for Grupa Azoty and the national economy by delivering safe, useful and innovation-driven chemical products

Vision: Deploy state-of-the-art and comprehensive chemical industry solutions that meet stakeholder expectations.

Grupa Azoty’s Mission and Vision

| The Group mission |
| Create value for Grupa Azoty and the national economy by delivering safe, useful and innovation-driven chemical products |

| Grupa Azoty’s vision |
| Deploy state-of-the-art, comprehensive chemical industry solutions that meet stakeholder expectations |

Source: Company data.

Strategic growth directions
Changes in economic conditions and in Grupa Azoty’s immediate environment have necessitated a revision to its previous strategic objectives to better align them with the current market landscape. In the years to 2020 Grupa Azoty will pursue growth in four areas representing major challenges for Poland’s top chemical producer:

- Complete the Group consolidation process
- Reinforce leadership in agricultural solutions in Europe
- Strengthen the second operating pillar by expanding non-fertilizer business
- Develop and implement innovations to drive growth of the chemical industry
Strategic growth directions

1. Complete the Group consolidation process
2. Reinforce leadership in agricultural solutions in Europe
3. Strengthen the second operating pillar by expanding non-fertilizer business
4. Develop and implement innovations to drive growth of the chemical industry

Source: Company data.

Complete the Group consolidation process
Launched in 2013, the Grupa Azoty Group consolidation process can still offer potential further gains. In order to more effectively manage the Group, a system of management by business segments will be implemented. Grupa Azoty will continue to integrate its processes and consolidate its sales/marketing, procurement, logistics, finance, IT and other functions until 2020.

Reinforce leadership in agricultural solutions in Europe
To preserve its strong position on the fertilizer markets at home and regionally, Grupa Azoty will seek to increase control over retail channels, looking for opportunities to grow and improve the efficiency of its production processes. In response to changing expectations of its key customers, Grupa Azoty will modify its product range to better meet the needs of modern farming, also by offering auxiliary services to farmers.

Strengthen the second operating pillar by expanding non-fertilizer business
In order to diversify its revenue sources and become less dependent on business cycles in agriculture, Grupa Azoty will step up its efforts to expand non-fertilizer business lines, with petrochemicals and plastics as the key areas for growth.

Develop and implement innovations to drive the industry’s growth
With its own unique expertise in agro-products, Grupa Azoty will become an active participant in research, development and innovation projects in Poland, particularly those focused on developing and marketing advanced, profitable, speciality fine chemicals.

4.2. Growth prospects and market strategy

Agro Fertilizers
Grupa Azoty's growth strategy for Agro Fertilizers will focus on extending the value chain to include more speciality products for specific crops and customers, and on enhancing the efficiency of its production processes. The efforts will mainly focus on tailoring our product portfolio to the needs of large-scale farms, while maintaining a strong position among small farmers. Grupa Azoty will also expand its range of precision farming services.
In order to secure a market outlet for its fertilizer products, Grupa Azoty will take steps to increase control over both domestic and foreign distribution channels for agro-products. Fertilizer sale processes will be further consolidated in order to simplify and streamline Grupa Azoty’s relationships with key customers. We will seek to increasingly use channels allowing us to deal directly with end consumers and grow sales of products complementary to fertilizers.
By consolidating its production assets, Grupa Azoty will act on market opportunities to reinforce its position on the European fertilizer market.
Plastics
In Plastics, our strategy will focus on extending the value chain to include more speciality products, expanding into new business fields, and improving operational efficiency.
Once brought on stream, a new polyamide unit in Tarnów will allow us to fully balance caprolactam supply with demand for Grupa Azoty’s polyamide production and to focus on polyamides and their derivatives that are further down the value chain and offer stronger market potential. The new plant will produce polyamides in a full viscosity range, suitable for a broader spectrum of applications.
In line with its strategy, Grupa Azoty will avoid direct competition with its customers down the polyamide product chain. In addition, the Group will seek out opportunities to expand into advanced polyamide-based polymers, polymer additives, and engineering plastics.

OXO ALCOHOLS
The Group’s strategy for the OXO business will focus on optimising the supplies of raw materials, including the use of the Group’s own sources of raw materials, extending the value chain to include more speciality products, and improving operational efficiency.
In order to meet its own propylene demand and create opportunities for growth in a new value chain, Grupa Azoty will invest in a project to build a propylene production unit (PDH) in Police, which will additionally offer an option to expand into derivative products.
To better align its offering with market expectations and regulatory requirements, non-phthalate, organic and speciality plasticizers will be added to the product portfolio. In addition, Grupa Azoty sees growth opportunities in extending its product chain and processing of aldehydes into speciality products.

Titanium white and melamine
Our strategy for Titanium White and Melamine is to improve the efficiency of existing production units by implementing upgrades and removing bottlenecks, while extending the value chain to include polymer additives.

Innovation strategy
Grupa Azoty keeps track of and follows current trends, including in the area of research, development and innovation (R&D&I). We do not want to be a mere beneficiary but an active participant of the initiatives being implemented in Poland. Our ultimate goal is to lead the way and break new ground in innovation.
In order to maximise potential benefits, Grupa Azoty’s R&D&I will be operationalised to establish proper structures, procedures, principles and good practices, which will be coordinated at the Group level. This initiative will be supported through further development of the existing Research and Development Centres and establishment of new units and product specialities.
Our Strategy will focus on driving innovation to extend the value chain with high-margin, speciality fine products, adapting new technologies to our own needs, and refining existing processes. Grupa Azoty will actively participate in open innovation initiatives, also by working with promising start-ups (commercial contracts and/or equity participation), implementing CSR projects, and engaging with local communities. In line with the Strategy, R&D&I spending will reach 1% of the Group’s revenue by 2020.

Operational excellence strategy
Operational excellence, which complements the organic growth strategy, is about implementing mechanisms for continuous efficiency improvement, which is achieved by streamlining business processes, cutting costs, and minimising the impacts or reducing the risk of a crisis.
With the Azoty Pro initiatives at an advanced stage and with some of the optimisation measures having become outdated, Grupa Azoty is set to thoroughly review its operational excellence programme.
Financial strategy
The updated strategic objectives necessitated a review of the Group's corporate performance indicators. The indicators provide a benchmark against which progress in the implementation and delivery of our Strategy will be measured.

Strategic financial targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT margin</td>
<td>8%</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>14%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>up to 60%</td>
</tr>
<tr>
<td>ROCE</td>
<td>10%</td>
</tr>
<tr>
<td>ROE</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Company data.

Functional integration
One of Grupa Azoty’s strategic objectives is to integrate its finance function. Procedures and structures of finance departments will be harmonised across the Group.

Process support
By integrating IT systems and implementing a tool to operationalise the Strategy and monitor its progress.

Security
The overriding goal is to ensure long-term financial security and internal coherence among all funding sources.

Risk
Given the extensive capital investment programme in place and the risk of an economic downturn, no floor has been set for the dividend payout ratio. Accordingly, if justified, the Management Board will not recommend a dividend payment.

Corporate management strategy
A new organisational model for the Group will be developed by 2020, to maximise synergies through integration of selected support functions and implementation of a management system based on key business segments.

Management structure

Source: Company data.

Grupa Azoty plans to implement a divisional management structure designed around its key business segments, supported by the Corporate Centre and the Shared Services Centre, to be gradually streamlined through divestments of non-core companies.
Sales consolidation
Successful optimisation of the Group’s organisational structure will enable Grupa Azoty to continue the process of consolidating sales functions across the Group. One of the major strategic goals set by the Grupa Azoty Group is to achieve full consolidation of Group-wide fertilizer sales.
In line with the Grupa Azoty Group’s strategy of completing the consolidation process, in 2018 the Corporate Agro Trade Department was established, which will manage marketing and sales of fertilizers and selected chemical products for all Group companies. The Department is officially based in Pulawy, where the Group’s largest manufacturing plant is located, in keeping with the expectations of the Pulawy plant employees.

Procurement consolidation
The centralised procurement of strategic raw materials has brought tangible benefits. Over the period covered by the Strategy, Grupa Azoty will continue to streamline and harmonise its procurement structures, while refining its procurement procedures and standards as well as joint purchasing mechanisms. The range of product categories procured through joint tender procedures will be extended, with execution of the procedures supported by an IT platform and other tools.

Corporate social responsibility
Grupa Azoty will develop in a sustainable way, taking account of the need to:
- Improve operational safety of its chemical units and reduce environmental footprint,
- Maintain dialogue with key stakeholders and support local communities,
- Create favourable working conditions by raising employee satisfaction, health and safety standards, and staff qualifications.

4.3. Key investments in Poland and abroad
The Group's capital expenditure is presented below, including amounts spent on components, major overhaul work and improvements.

Structure of the Group’s capital expenditure in 2018:

- Growth capex PLN 630,591 thousand
- Maintenance capex PLN 180,931 thousand
- Mandatory investments PLN 42,095 thousand
- Purchase of finished goods PLN 52,108 thousand
- Other (components, major overhaul work, other) PLN 201,140 thousand
Directors’ Report on the operations of Grupa Azoty S.A. and the Group for the 12 months ended December 31st 2018 (all amounts in PLN '000 unless indicated otherwise)

Structure of capital expenditure

![Pie chart showing the breakdown of capital expenditure]

- **Growth capex**: 18.2%
- **Maintenance capex**: 4.7%
- **Mandatory investments**: 3.8%
- **Purchase of finished goods**: 16.3%
- **Other**: 57.0%

Source: Company data.

Capital expenditure at the Group in 2018:

- Parent: PLN 206,709 thousand
- Grupa Azoty PŁAWY Group: PLN 516,197 thousand
- Grupa Azoty POLICE Group: PLN 165,111 thousand
- Grupa Azoty KĘDZIERZY Group: PLN 118,803 thousand
- PDH Polska S.A.: PLN 50,188 thousand
- Grupa Azoty SIARKOPOL: PLN 12,219 thousand
- Grupa Azoty Compounding Sp. z o.o.: PLN 10,256 thousand
- Grupa Azoty ATT Polymers GmbH: PLN 9,890 thousand
- Grupa Azoty KOLTAR Sp. z o.o.: PLN 7,746 thousand
- Grupa Azoty PKCh Sp. z o.o.: PLN 5,747 thousand
- Top Goat Co GmbH: PLN 3,999 thousand

*) Translated at the EUR/PLN exchange rate quoted by the National Bank of Poland for December 31st 2018: EUR 1 = PLN 4.3000 (table No. 252/A/NBP/2018).

The Parent’s capital expenditure is presented below, including amounts spent on components, major overhaul work and improvements.

Structure of the Parent’s capital expenditure in 2018:

- **Growth capex**: PLN 134,763 thousand
- **Maintenance capex**: PLN 30,821 thousand
- **Mandatory investments**: PLN 7,359 thousand
- **Purchase of finished goods**: PLN 12,981 thousand
- **Other (components, major overhaul work, other)**: PLN 20,785 thousand
**Structure of the Parent’s capital expenditure:**

![Capital expenditure chart]

Source: Company data.

**Key investment projects implemented by the Group as at December 31st 2018:**

<table>
<thead>
<tr>
<th>Project name</th>
<th>Project budget</th>
<th>Expenditure incurred</th>
<th>Expenditure incurred in 2018</th>
<th>Project purpose</th>
<th>Scheduled completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Technology and Development Centre</td>
<td>74,100</td>
<td>51,725</td>
<td>45,898</td>
<td>Construction of R&amp;D centre for Grupa Azoty S.A.</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Grupa Azoty PULAWY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade of the existing and construction of new nitric acid units, and facilities for neutralisation and production of new fertilizers based on nitric acid</td>
<td>695,000</td>
<td>85,634</td>
<td>78,737</td>
<td>To raise the efficiency of nitric acid production and improve the economics of production of nitric acid-based fertilizers</td>
<td>2024</td>
</tr>
<tr>
<td>Facility for production of granulated fertilizers based on ammonium nitrate</td>
<td>385,000</td>
<td>292,412</td>
<td>155,083</td>
<td>To improve the quality of fertilizers by applying modern mechanical granulation</td>
<td>2020</td>
</tr>
<tr>
<td>Replacement of the TG-2 turbine generator set</td>
<td>99,000</td>
<td>73,618</td>
<td>13,482</td>
<td>To increase the efficiency of electricity and heat cogeneration by replacing the TG-2 30 MWe pass-out and condensing turbine with a new 37 MWe turbine as part of the power system upgrade</td>
<td>Completed</td>
</tr>
<tr>
<td>Upgrade of steam generator OP-215 No. 2 to reduce NOx emissions</td>
<td>93,000</td>
<td>4,804</td>
<td>4,226</td>
<td>To bring the steam generator into compliance with new NOx emission standards and restore it to proper working condition</td>
<td>2020</td>
</tr>
</tbody>
</table>
### Project name | Project budget | Expenditure incurred | Expenditure incurred in 2018 | Project purpose | Scheduled completion date
---|---|---|---|---|---
**Grupa Azoty POLICE**
Exhaust gas treatment unit and upgrade of the EC II CHP plant | 290,885 | 252,005 | 377 | To bring the operation of the CHP plant’s units in line with the requirements of Directive 2010/75/EU | Project completed
Change of phosphoric acid production method (DA-HF technology) | 83,350 | 81,531 | 41,066 | To raise the efficiency of phosphoric acid production and improve the acid quality | 2019
**Grupa Azoty KĘDZIERZYN**
Upgrade of the synthesis gas compression unit supplying the Ammonia Plant | 180,000 | 31,369 | 31,102 | To rebuild the capacity of synthesis gas compression for the Ammonia Plant through the installation of a new compressor | 2020
**PDH Polska S.A.**
Propane Dehydrogenation (PDH) unit with related infrastructure, and polypropylene (PP) production unit | 5,276,829\(^*\) | 159,872 | 49,048 | Construction of a propylene dehydrogenation plant (PDH) and a polypropylene production plant with associated infrastructure, including the expansion of the Police Sea Port to include a propane and ethylene handling and storage terminal. | 2023
**Grupa Azoty Compounding Sp. z o.o.**
Modified Plastics Plant | 120,000 | 10,256 | 10,256 | Construction of plastics modification unit | 2019

*As of March 19th 2019, the total budget related to the implementation of the Project, including financing costs during the construction period together with provisions required under the project finance formula should not exceed EUR 1.52 billion (approximately PLN 6.5 billion), as disclosed by the Parent in Current Report No. 13/2019 of March 19th 2019.

### 4.4. Equity investments

Save for equity investments at the Grupa Azoty Group described in Section 1.3 *Changes in the organisational structure*, no other significant equity investments were made, in particular no investments outside the group of related entities.

### 4.5. Feasibility of investment plans

In 2018, the Parent incurred capital expenditure of PLN 206.7m (exclusive of the acquisition of shares in Goat TopCo GmbH), financed with internally generated funds, proceeds from a corporate set of long-term credit facilities and, to a lesser extent, with lease contracts and grants. Grupa Azoty's total 2018 capital expenditure reached PLN 1,107m (exclusive of the acquisition of shares in Goat TopCo GmbH) and was financed with internally generated funds, the corporate set of credit facilities (redistributable among the Group companies), and additionally with environmental protection loans, lease contracts and grants.

Under its centralised Financing Model, in 2018 Grupa Azoty continued to use the set of long-term credit facilities for a total amount of PLN 4,823m and available credit limits of up to PLN 2,353m to finance the Group’s capital expenditure and other objectives outlined in the long-term Group Strategy. The facilities included:
- a PLN 3,000m syndicated revolving and term credit facility; as at December 31st 2018, funds available under the facility were PLN 1,545m,
- term credit facilities granted by the EIB (PLN 550m and EUR 145m) and the EBRD (PLN 150m and PLN 500m); as at December 31st 2018, funds available under these facilities were PLN 808m.
The Group is able to finance its investment plans using either current or expected free operating cash flows (EBITDA), as well as the corporate credit facilities specified above. Given the acceptable levels of financial ratios agreed with the strategic lenders, the Parent and the Group can further increase their external funding without the risk of breaching covenants under the set of credit facilities, or secure separate financing for projects implemented by SPVs on a project finance basis.

4.6. Significant R&D achievements

In keeping with the updated Grupa Azoty Group Strategy until 2020 and its operationalisation, R&D projects implemented in 2018 focused specifically on:
- development and launch of new fertilizer products,
- development of new modified plastics formulae,
- optimisation of operation of selected production lines and improvement of product quality,
- development of innovative product technologies,
- preliminary market analyses for new prospective products.

With regard to product and technology development, the Company successfully combines its own specialist research facilities with close partnership with external research units and industrial equipment suppliers. Most research and development work is carried out as long-term programmes, which is why the work carried out in 2018 was mainly a continuation or extension of ongoing projects. As a result of the projects carried out in 2018 and in previous years, the following fertilizers were added to the Group’s product mix: Modified Saletrosan® 26 plus, Saletrosan® 26 with boron, Saletromag and Saletrzak 27 macro/standard plus. Other projects are being carried out to further expand the range of products offered in the AGRO segment.

To optimise fertilizer production and enhance product quality, a number of extensive analyses were carried out to identify factors that could stabilise the physical parameters over time, and to select effective measures to reduce dusting, caking and moisture absorption, especially during fertilizer storage and transport.

The R&D work carried out in the plastics segment focused on modifications of plastics produced by the Company, in particular new varieties of polyamide 6 for 3D printing and for electrochemical applications, and polyamide for extrusion into semi-finished products for machining.

In the area of catalysts, work was carried out to enhance the performance of existing catalysts used mainly in ammonia lines, and to develop new catalysts to be applied in new fast-growing industries. Conceptual work to verify preliminarily selected diversification directions for the Company were also an important part of the efforts.

Moreover, in 2018 the Group pursued the project ‘Injection system of precision irrigation and fertilization, satisfying individual plant needs’, which received a funding recommendation from the National Centre for Research and Development in 2017 under the third edition of the Strategic Research and Development Programme ‘Environment, Agriculture and Forestry’ – BIOSTRATEGIST. The project was carried out under an agreement signed with the National Centre for Research and Development and a consortium agreement with other project participants.
5. Financial condition of the Group

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

One-off items affecting the assets, equity and liabilities, capital, net profit/loss or cash flows are presented below.

Loss of control of African Investment Group S.A., a subsidiary of Grupa Azoty POLICE
Following the execution of a termination agreement with DGG Eco Sp. z o.o. along with annexes, shares in African Investment Group S.A., acquired under an agreement between DGG ECO Sp. z o.o. and Grupa Azoty POLICE, were returned on May 30th 2018. Thus, on May 30th 2018, Grupa Azoty POLICE lost control of its subsidiary African Investment Group S.A. and, indirectly, of AFRIG Trade SARL.
For a full description of the events and the consequences of losing control over the subsidiary, as well as their impact on the consolidated net result, see Section 1.2.2 of the full-year consolidated financial statements of Grupa Azoty for the 12 months ended December 31st 2018.

Impairment loss recognised by Zakłady Azotowe Chorzów S.A., subsidiary of Grupa Azoty PULAWY
On August 8th 2018, the Management Board of Zakłady Azotowe Chorzów S.A. passed a resolution to recognise a PLN 6.77m impairment loss on the company’s fat processing unit. In accordance with IAS 36, the Management Board identified indications that the recoverable amount of this unit may have decreased below its carrying amount as at June 30th 2018. The fat processing unit continues to operate below its full processing capacity. The limitation of the company’s ability to generate cash inflows from the sale of stearine and other oleochemicals results from lower than planned prices and sales volumes in the first half of 2018 and lower forecasts for the coming years.
On March 4th 2019, the management board of Zakłady Azotowe Chorzów S.A. passed a resolution to recognise another impairment loss (PLN 6.39m) on the assets of the fat processing unit.
The effect of the above events on EBIT and the consolidated net result of Grupa Azoty for 2018 is PLN (13.1) million.
The impairment losses are included in the Grupa Azoty full-year financial statements prepared as at December 31st 2018.

Volatility of exchange rates
The factors and events with a bearing on Grupa Azoty’s financial performance in 2018 include, in the first place, the continued weakening of the US dollar against the euro, and then the transition to the Eurodollar consolidation phase in the second half of the year. The changes in this pair of base currencies had a significant impact on the PLN exchange rate, which first gradually strengthened to the USD and EUR until April 2018, then weakened significantly, and in the second half of the year the EUR/PLN exchange rate consolidated in a narrow range of 4.26 - 4.34.
In 2018, the Polish economy continued to grow, with strong GDP growth, low unemployment, higher household incomes and good condition of public finances. However, the raising of Poland’s debt rating had a limited impact on the PLN exchange rate, which first gradually strengthened to the USD and EUR until April 2018, then weakened significantly, and in the second half of the year the EUR/PLN exchange rate consolidated in a narrow range of 4.26 - 4.34.
As at December 31st 2018, the złoty lost approximately 3.1% against the euro and about 8% against the US dollar compared with the end of 2017. On the other hand, the average PLN exchange rate fell only slightly: by about 0.5% relative to the euro and about 0.7% relative to the US dollar. All in all, on an annual average basis, the limited weakening of PLN to EUR and USD did not have a significant impact on Grupa Azoty’s performance in the reporting period.
Considering the projected continuation of positive fundamentals in the Polish economy in 2019, it is expected that the EUR/PLN side trend will continue throughout the first half of 2019, with a possible periodic strengthening of PLN to EUR and USD. However, the Polish currency may weaken primarily in the event of a major crisis in the global economy or renewed rise in uncertainty resulting from such factors as failure to carry out an orderly Brexit and escalation of trade disputes or adverse climatic changes.
Potential changes in the PLN/USD and PLN/EUR exchange rates should not affect the results achieved in relation to the Group’s currency exposure, considering that the exchange rate of the zloty to both these currencies remains relatively permanently close to medium-term equilibrium levels.

The Group monitors its current and planned net currency exposures and manages the resulting currency risk by applying selected hedging instruments. In the reporting period, the main hedging tools used by the Group included natural hedging; factoring and discounting of receivables denominated in foreign currencies; and currency forwards entered into on a rolling basis to cover up to 80% of the remaining currency exposure with time horizons of less than 6 months, and up to 50% of the remaining currency exposure with time horizons between 6 and 12 months.

Moreover, in November 2018, the Parent and its subsidiaries concluded with PKO BP an overdraft facility agreement (EUR OFA) related to the agreement for the provision of physical cash pooling services in EUR. Physical cash pooling in EUR allows the Group companies to use the Group’s global liquidity limit in that currency, which further reduces their exposure to currency risk in EUR by correcting potential mismatches in income and expenditure over time.

In 2018, the Grupa Azoty Group’s hedging tools were EUR and USD forward swaps, executed in the periods of depreciation of the Polish zloty to supplement forward hedges for the sale of EUR and USD, reflecting its planned net exposure in both currencies.

The Group’s result on hedging transactions executed in 2018 was PLN 43 thousand. The result on revaluation of hedging instruments was negative at PLN (455.5) thousand.

In 2018, the Group’s total result on hedging transactions and revaluation of hedging instruments was negative at PLN (413) thousand.

On the unhedged net currency exposure, the Group reported a net gain on realised and unrealised foreign-exchange differences of PLN 35,729 thousand.

In 2018, the Group’s total result on foreign exchange differences and currency derivative transactions (including revaluation as at the end of the reporting period) was PLN 35,822 thousand.

In 2018, the Parent’s hedging tools were EUR swap forwards, reflecting its planned net exposure.

The Parent’s result on hedging transactions executed in 2018 was PLN 293 thousand. The result on revaluation of hedging instruments was negative at PLN (350) thousand.

On the remaining part of the unhedged net currency exposure, the Parent reported a gain of PLN 1,216 thousand on realised foreign exchange differences and a net gain on unrealised foreign-exchange differences of PLN 4,507 thousand.

In 2018, the Parent’s total result on foreign exchange differences and currency derivative transactions (including revaluation as at the end of the reporting period) was PLN 5,666 thousand, including PLN (58) thousand on realised foreign exchange differences and currency hedging transactions and PLN 5,723 thousand on valuation of unrealised positions and hedging.

Since September 28th 2015, the Group has applied cash flow hedge accounting. The hedged items are highly probable future proceeds from sale transactions in the euro, which will be recognised in profit or loss in the period from January 2019 to September 2028. The hedging covers currency risk. The hedging item consists of two EUR-denominated foreign currency loans taken out with the EIB, one in the amount of EUR 118,053 thousand and the other in the amount of EUR 50,000 thousand as at December 31st 2018 (for details, see the Note “Financial Instruments” in the financial statements).

In 2018, the Group did not reclassify any hedge accounting amounts from other comprehensive income to the statement of profit or loss.

Prices of CO₂ emission allowances

In 2018, there was a strong increase in the price of CO₂ emission rights, after a period of low prices of EUAs in the previous two years. The price increase was a result of increased production in the European emissions-generating industry and was also related to the completion of the reform of the ETS Directive for 2021-2030 (EU ETS Phase IV), as a result of which part of the surplus allowances on the market will be withdrawn and part of the allowances will be permanently cancelled.

Pursuing its policy of reducing the deficit in CO₂ emission allowances through spot and forward transactions with a three-year time horizon, the Group made only limited purchases of allowances during the period of increased prices, which may have been partly of speculative nature.

However, in the period of correction of the above trend, which occurred in the fourth quarter of 2018, the Group purchased the missing emission allowances required to cover the emissions for 2018, limiting the negative financial effects of the increase in EUA prices.

The fact that the European Commission now regulates the carbon market through administrative measures, including introduction of the Market Stability Reserve (MSR) as of 2019 (back-loading and redemption of surplus allowances), has made the market all the more unpredictable. Sharp price increases coupled with significant market volatility hamper optimal management of the risk related to prices of carbon dioxide emission allowances.
In 2019, the Group intends to continue the adaptation efforts aimed at mitigating the adverse financial impact of the increase in EUA prices by gradually purchasing emission allowances during periods of downward price adjustments, in forward transactions, with maturities falling before the periods of settlement of the deficit hedged in the three-year horizon.

5.2. Market overview

AGRO FERTILIZERS

Economic conditions in agriculture

In 2018, grain prices in Poland were higher than in 2017, mainly on the back of unfavourable weather conditions (drought), which affected harvest figures. Based on the data published by Statistics Poland, the country’s grain production (as at December 2018) was estimated at 26.8m tonnes, down approximately 16% year on year. Higher prices of agricultural products in the period did not fully offset the losses incurred by the agricultural sector due to drought, affecting the sector’s financial condition and weakening its purchasing power. Neither the advance direct payments made in the fourth quarter of 2018 in the amount of 70% of the grant, nor the drought compensation paid by the Agency for Restructuring and Modernisation of Agriculture (ARiMR), improved the situation to any considerable extent.

Prices of wheat, maize and rapeseed

Source: Ministry of Agriculture and Rural Development.
The table below presents the average prices of wheat, maize and rapeseed in 2018 relative to 2017:

<table>
<thead>
<tr>
<th></th>
<th>Average 2017 PLN/t</th>
<th>Average 2018 PLN/t</th>
<th>y/y %</th>
<th>12-2018 PLN/t</th>
<th>MIN 2018 PLN/t</th>
<th>MAX 2018 PLN/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumable wheat</td>
<td>686</td>
<td>738</td>
<td>7.6</td>
<td>832</td>
<td>674</td>
<td>833</td>
</tr>
<tr>
<td>Maize</td>
<td>671</td>
<td>685</td>
<td>2.1</td>
<td>717</td>
<td>617</td>
<td>743</td>
</tr>
<tr>
<td>Rapeseed</td>
<td>1,714</td>
<td>1,578</td>
<td>7.9↓</td>
<td>1,659</td>
<td>1,503</td>
<td>1,659</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture and Rural Development.

Nitrogen fertilizers

The distribution of demand for nitrogen fertilizers in 2018 was as usual, peaking in the spring season due to easy product availability and falling prices. The key drivers of demand in autumn included the weather and the sales policies of fertilizer suppliers.

The prices of nitrate fertilizers were higher year on year. The key development in this area was the significant rise in prices at the end of the third and the beginning of the fourth quarter of 2018, driven by the market players’ trading policy on the one hand, and by a steady increase in production costs (prices of natural gas) on the other. The situation on the global urea market was another important factor.

Given the prevailing market and economic conditions, no significant stock build-up by farmers was observed during the year. Rather, stocks were used to cover current demand.

The first half of 2018 saw fluctuations in the prices of ammonia. In the first quarter of the year production surplus on the market, which was expected to occur later in the year, resulted in a price slump, in the second and third quarter prices were on the rise. This was mainly due to the undermined supply-demand balance on the ammonia market. A slowdown leading to lower prices was seen only in the last quarter of the year. In 2018, prices of ammonia went up by approximately 8% on 2017.

The prices of urea remained under pressure from global oversupply in 2018. Still, their level was approximately 15% higher than in 2017 (FOB Baltic). China’s passivity regarding urea exports and higher demand for urea from India and Brazil were the positive price drivers in the period. In 2018, imports of urea from China are estimated at only 2 to 2.5 million tonnes, compared to around 8 to 13 million tonnes in previous years. Another major development affecting the prices in the fourth quarter of 2018 was Iran’s exit from the market in the aftermath of the US sanctions imposed on the country. In 2018, two large plants were brought on stream: Freeport in the US (750 thousand tonnes) and Panca Amara Utama (PAU) in Indonesia (660 thousand tonnes). They are expected to reach full production capacity in 2019. Demand on non-traditional markets increased in 2018, and weaker US imports were offset by rising purchase figures in Morocco and China. The average price of ammonia in 2018 was USD 284/t (FOB Yuzhny), up nearly 9% on 2017. At the low end, the price was USD 220 per tonne, while the maximum price was USD 339/tonne.
Prices of nitrogen fertilizers (urea, CAN, AN, AS,) and ammonia

<table>
<thead>
<tr>
<th></th>
<th>Average 2017</th>
<th>Average 2018</th>
<th>y/y %</th>
<th>12-2018</th>
<th>MIN 2018</th>
<th>MAX 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium ammonium nitrate (CAN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27% Germany, CIF inland (bulk)</td>
<td>185 EUR/t</td>
<td>197 EUR/t</td>
<td>6.5</td>
<td>224 EUR/t</td>
<td>161 EUR/t</td>
<td>224 EUR/t</td>
</tr>
<tr>
<td>Ammonium nitrate AN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.5% France, delivered (bulk)</td>
<td>263 EUR/t</td>
<td>281 EUR/t</td>
<td>7.2</td>
<td>311 EUR/t</td>
<td>247 EUR/t</td>
<td>313 EUR/t</td>
</tr>
<tr>
<td>Ammonium sulfate Black Sea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOB (white)</td>
<td>126 USD/t</td>
<td>132 USD/t</td>
<td>6.0</td>
<td>145 USD/t</td>
<td>115 USD/t</td>
<td>145 USD/t</td>
</tr>
<tr>
<td>Ammonia FOB Yuzhny</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOB Yuzhny</td>
<td>262 USD/t</td>
<td>284 USD/t</td>
<td>8.5</td>
<td>298 USD/t</td>
<td>220 USD/t</td>
<td>339 USD/t</td>
</tr>
<tr>
<td>Urea (FOB Baltic)</td>
<td>218 USD/t</td>
<td>251 USD/t</td>
<td>15.2</td>
<td>272 USD/t</td>
<td>215 USD/t</td>
<td>308 USD/t</td>
</tr>
<tr>
<td>Ammonium sulfate Black Sea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOB white</td>
<td>125 USD/t</td>
<td>132 USD/t</td>
<td>6.0</td>
<td>145 USD/t</td>
<td>115 USD/t</td>
<td>145 USD/t</td>
</tr>
</tbody>
</table>

Source: ICIS, Argus FMB, Profercy.

In 2018, the average price of urea was 251/t (FOB Baltic), up 15% on 2017.
The first quarter of 2018 saw a market slowdown, not only on European markets, but also in Brazil. Prices were affected by the lack of interest from farmers due to adverse weather conditions and higher freight prices, also driven by bad weather. In February, some manufacturers decided to withdraw their products from the market on that account. March saw continued constraints on the urea market, including falling prices, additionally aggravated by favourable ammonium nitrate offers on the UK market, which were welcome by farmers as an attractive alternative. A rebound in prices was observed only at the end of May. At the same time, the demand in Western Europe remained low throughout the period.

An upward trend in urea prices was seen since the beginning of the third quarter. The demand came primarily from Latin America, especially Argentina, Chile and Mexico, as well as Brazil (starting in August). Due to the third-quarter maintenance shutdowns, supply was limited in certain areas (the Baltic Sea and Yuzhny regions). Urea prices began to fall towards the end of 2018, starting after mid-September. In Western Europe, the demand for prilled urea stayed low until the end of December, as buyers expected further price falls.

Market of compound fertilizers
The average NPK 16-16-16 price in 2018 was USD 265/t (FOB Baltic), up nearly 9% year on year. The minimum price was USD 253/tonne and the maximum price was USD 275/tonne (the maximum price prevailed in the last quarter).

The first half of 2018 saw continued weak demand and the prices of basic NPK fertilizers remained relatively unchanged, with a slight increase in March and late June. In August, demand for NPK fertilizers in Poland increased to high levels, mainly in the case of rapeseed fertilizers. The strong demand continued in September, but the availability of products on the market was limited. In the last quarter, interest in NPK fertilizers was minimum. Russian manufacturers placed their output mainly on the home market, and also sold their products to South American and Indian customers. A market upturn was seen only in April, mainly in Western Europe. The formulas invariably in high demand for several seasons included NPK 15-15-15, NPK 16-16-16, NPK 8-20-30/8-19-29, and NPK 10-26-26. In July, demand for NPK fertilizers was slowly rising in Western markets, mainly among German customers. A market revival was also seen in September in Western Europe (mainly France and Ireland). In July and August, Russian farmers bought fertilizers with a high content of phosphorus and potassium, including two most popular formulas: NPK 10-26-26 and NPK 8-20-30/NPK 8-19-29. In Ukraine, small and medium farms showed interest in nitrogen-rich NPK fertilizers, mainly NPK 10-26-26 and 8-19-29, as well as 16-16-16. Rising demand triggered slight price increases. The demand for NPK fertilizers in Russia declined in mid-September, with Russian producers announcing price cuts. In the last quarter, interest in NPK fertilizers was minimum, and producers focused on markets such as India and South America.

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

![Graph showing prices of compound fertilizers](image)

Source: WFM, FERTECON, Profercy.

In 2018, on international markets, the average prices of compound fertilizers and raw materials used in their production increased relative to 2017, as shown in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Average 2017</th>
<th>Average 2018</th>
<th>y/y %</th>
<th>12-2018 2018</th>
<th>MIN 2018</th>
<th>MAX 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAP (FOB Baltic)</td>
<td>338 USD/t</td>
<td>407 USD/t</td>
<td>20.4</td>
<td>404 USD/t</td>
<td>373 USD/t</td>
<td>435 USD/t</td>
</tr>
<tr>
<td>NPK 3x16 (FOB Baltic)</td>
<td>243 USD/t</td>
<td>265 USD/t</td>
<td>8.9</td>
<td>275 USD/t</td>
<td>253 USD/t</td>
<td>275 USD/t</td>
</tr>
<tr>
<td>Potassium chloride (FOB</td>
<td>230 USD/t</td>
<td>256 USD/t</td>
<td>11</td>
<td>287 USD/t</td>
<td>241 USD/t</td>
<td>287 USD/t</td>
</tr>
<tr>
<td>Baltic spot)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphate rock (FOB</td>
<td>91 USD/t</td>
<td>100 USD/t</td>
<td>10.8</td>
<td>106 USD/t</td>
<td>96 USD/t</td>
<td>106 USD/t</td>
</tr>
<tr>
<td>North Africa)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: WFM, FERTECON, Profercy.

DAP prices were up approximately 20% year on year in 2018. The average DAP (FOB Baltic) price was USD 407/t, the minimum price stood at USD 373/t, and the maximum price at USD 435/t (recorded in September and early October 2018).

DAP prices were on the rise in January and February, to go down at the end of March and rebound slightly in May. At the end of H1 2018, DAP prices were almost 12% higher than at the beginning of
January. In the same period of 2017, the increase was 10%. The situation was, on the one hand, an outcome of periodic hikes in demand for DAP and of reduced output and delayed deliveries by certain manufacturers, on the other. Demand for DAP was the highest in South America and Asia, where the number of transactions was the largest. In Europe, demand for DAP came mainly from Romania, Slovakia, Bulgaria and Serbia. In the second half of the year, DAP prices rose until October, when the trend reversed. Strong demand in the home market prompted Russian producers to reduce their MAP exports at the beginning of the third quarter. In Russia, the season for DAP ended in September, but interest in the product continued until mid-October. MAP from Kazakhstan also sold well. Low demand on China’s home market observed from the beginning of September made Chinese producers export part of their output, mainly to India, Pakistan and South America (mainly Brazil). In Central Europe, demand for DAP came mainly from Romania, Bulgaria and Slovakia. In Western Europe, demand for DAP was seen as late as in September, from France, Germany, Italy and Spain. Distributors and farmers purchased Russian and Moroccan product. From mid-November, demand for MAP and DAP was negligible.

In H1 2018, the phosphate rock market saw two global price increases. The first one, in January, was due to higher prices of phosphate fertilizers (mainly DAP) and amounted to approximately USD 9/t (FOB Morocco) on average. The second global increase took place at the end of April, with average prices of phosphate rock having risen by approximately USD 4/t (FOB Morocco). In 2018, the average increase in phosphate rock prices was approximately 10% year on year. In 2018, the phosphoric acid market saw an even stronger price growth, of about 27%. In India, in the wake of price rises for phosphorus-bearing materials, the production of phosphate fertilizers fell significantly, while the imports of finished products increased. Moreover, one of India’s major sulfuric and phosphoric acids manufacturers stopped production owing to environmental issues, which contributed to the undersupply on the Indian market. In China, local environmental audits were continued in 2018, due to which several mines in the Sichuan region were permanently closed down. Towards the end of 2018, the global phosphate fertilizers market slowed down, bringing about a decline in phosphate fertilizer prices virtually across all markets. The prices of phosphate rock and phosphoric acid remained stable in the last quarter of 2018, but given the slowdown in the fertilizers market, the customers, mainly in India and Western Europe, started negotiating lower prices, especially of phosphoric acid.

Since the beginning of 2018, potassium chloride prices grew on most markets. At the beginning of the year, most major producers of potassium chloride announced that they had in place sale contracts covering production until March/April which, combined with production capacity reduction by some suppliers in December 2017 and January 2018, brought about a steady increase in potassium chloride prices on target markets. At the end of Q3 2018, contractual terms of potassium chloride supplies to China and India were agreed for the 2018/2019 financial year. Compared with contracts for the 2017/2018 year, the prices grew by 26% and 21%, respectively, for the supplies to China and India. Compared with 2017, the average increase in maximum prices of potassium chloride was approximately 11% in 2018. Despite earlier forecasts of a possible slowdown in the Brazilian market (one of the key markets for potassium chloride), the volume of potassium chloride purchases rose by 8.8% year on year in Brazil in 2018. In view of the contracts agreed between China and India and suppliers from Belarus, Israel, Canada and Germany, the beginning of Q4 2018 saw quarter-on-quarter increases in prices on other markets, including the United States and Europe (up by approximately 10%), and in Brazil (up by approximately 15%).

PLASTICS

Polyamide 6 chain
In the reporting period, the market situation in the plastics segment was mainly driven by the forces of supply and demand and a weaker effect of crude oil prices on prices of petrochemical feedstock. Despite slight year-on-year changes in the average prices, the entire polyamide chain continued to be accompanied by sharp and temporary or periodic price rises, driven by volatile market conditions (especially on the demand side). The most evident example was benzene, for which the difference between the maximum and minimum price represented as much as 35% of the average price for the period under review.

The 32% year-on-year rise in crude oil prices in 2018 only partially translated into changes in prices of benzene and caprolactam, which in previous periods had a significant effect on polyamide (PA6) prices. Despite the clear increase in crude oil prices, the average annual prices of benzene and phenol did not go up. On the contrary, they fell slightly, by 1.7% in the case of phenol and 5.7% in the case of benzene. This situation is in the first place an outcome of seasonal changes in prices and strong
fluctuations in demand throughout the economic cycle, driven also by legal environment and the legislation governing the automotive market.

The average annual price of caprolactam on Asian markets (EUR 2,131/t, CFR, NE Asia) in 2018 was nearly 15% higher year on year, while the prices of caprolactam on the European market grew by only 1% in the period, to EUR 2,130/t.

In 2018, the average price of polyamide 6 (PA6, Engineering Resin Virgin, DDP, WE) was EUR 2,190/t, having increased slightly (by 1.8%) year on year.

The forecast changes in the overall structure of demand for PA6 were for a time disturbed by the last-year introduction of new emissions tests for motor vehicles (WLTP and RDE), which materially affected the automotive market. However, despite the growing significance of engineering plastics and the higher demand for foil and flexible packaging, in the next decade the key customer for polyamide-based engineering plastics should be the automotive industry.

It should be seen as rational necessity to optimise the European caprolactam market and restructure its assets with a view to significantly reducing production capacities. The extent of the European CPL market’s rightsizing will depend solely on the consumption levels along the entire product chain in Europe. The PA6 production capacity increase on the European market should also be noted as it may materially change the market situation as well as the supply and demand balance in the region.

**Prices of PA6, caprolactam, benzene and phenol**

![Graph of Prices of PA6, caprolactam, benzene and phenol]

Source: TECNON, ICIS.
The table below presents the annual average prices of polyamide 6, caprolactam and raw materials used in their production relative to 2017.

<table>
<thead>
<tr>
<th></th>
<th>Average 2017 EUR/t</th>
<th>Average 2018 EUR/t</th>
<th>y/y %</th>
<th>12-2018 EUR/t</th>
<th>MIN 2018 EUR/t</th>
<th>MAX 2018 EUR/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene (FOB NWE)</td>
<td>762</td>
<td>718</td>
<td>5.7</td>
<td>542</td>
<td>542</td>
<td>794</td>
</tr>
<tr>
<td>Phenol (FD NWE)</td>
<td>1,367</td>
<td>1,344</td>
<td>1.7</td>
<td>1,194</td>
<td>1,194</td>
<td>1,416</td>
</tr>
<tr>
<td>Caprolactam (Liq., DDP WE)</td>
<td>2,109</td>
<td>2,130</td>
<td>1.0</td>
<td>2,009</td>
<td>2,009</td>
<td>2,166</td>
</tr>
<tr>
<td>Polyamide 6 (PA 6) (DDP WE)</td>
<td>2,152</td>
<td>2,190</td>
<td>1.8</td>
<td>2,090</td>
<td>2,090</td>
<td>2,205</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>USD/t</th>
<th>USD/t</th>
<th>%</th>
<th>USD/t</th>
<th>USD/t</th>
<th>USD/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caprolactam (CFR, NE Asia)</td>
<td>1,855</td>
<td>2,131</td>
<td>14.9</td>
<td>2,150</td>
<td>2,041</td>
<td>2,198</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>USD/bbl</th>
<th>USD/bbl</th>
<th>%</th>
<th>USD/bbl</th>
<th>USD/bbl</th>
<th>USD/bbl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude oil (BRENT)</td>
<td>54.32</td>
<td>71.68</td>
<td>32.0</td>
<td>59.25</td>
<td>59.25</td>
<td>81.16</td>
</tr>
</tbody>
</table>

Source: ICIS, Tecnon, Rzeczpospolita.

Like in previous periods, long-term forecasts do not suggest any threat from the Asian market to European manufacturers but only indicate that the Chinese production capacities are sufficient to meet the country's demand for PA6. Thus, the Asian markets' impact on Europe should only lead to reorientation of caprolactam exports, while the polyamide market will not be affected to any significant degree.

In the near future, the prices of products and raw materials used by the segment will still be largely affected by two factors: possible commodity pressures (depending on the oil and benzene price scenario) and the balance of supply and demand in the plastics processing industry (shaped by the GDP growth rate, expected by analysts at around 4.0%).

Stabilisation of prices along the entire chain and strong demand would create a favourable environment for reaching and maintaining market equilibrium in the sector, thus supporting an anticipated further increase in demand for plastics, not hampered by other factors.

CHEMICALS

OXO product chain

The average spot prices of OXO alcohols followed various trends in 2018: prices of 2-EH were higher, and of n-butanol were lower year on year. Also the average spot prices of DOTP went down year on year. Market conditions were the key drivers of price developments, including the strong supply of n-butanol, making it more difficult to obtain higher spot prices than the year before. The market was more favourable for 2-EH, because in some trading periods the market was less balanced that in the case of other OXO products due to scheduled and unscheduled production stoppages.

The availability of various types of plasticizers on the European market for three quarters was very good. After a year-long downtime due to force majeure, BASF re-entered the market in 2018. Additionally, various products were imported to Europe, mainly DOTP from Korea and the US. The situation reversed in Q4 2018, which ended with logistics and production issues related to low water levels on the Rhine river. A lower supply of plasticizers (in particular DINP and DPHP) translated into higher demand for DOTP and its lower availability on the spot market. A similar situation occurred in the n-butanol market. Limited availability and maximum contracted volumes affected the spot market.

The increase in crude oil prices on global markets in 2018 also translated into higher propylene prices, with the average spot price of propylene 18% higher than in 2017. An additional factor driving up propylene prices, in particular in the second and third quarters of 2018, was the lower availability of propylene caused by scheduled and unscheduled downtime at some manufacturers, as well as the hot summer weather adversely affecting the production and logistics of this raw material. At the beginning of November, propylene prices started to gradually decline, due to falling prices of raw materials used in its production and improved availability of propylene on the European market. The spot price of propylene was EUR 960/t at the end of the year. Grupa Azoty's purchases of propylene were made in contracted volumes, supplemented on the spot market with imports from countries east of Poland to reduce the average price of this key raw material.
Prices of 2-EH, DOTP and propylene

* January 18th 2017 - The changes in DOTP prices were caused by alteration of the price gathering methodology applied by ICIS (which was revised to better present the actual market prices) and should not be viewed as an indication of an actual change in the plasticizer prices.

Source: ICIS.

<table>
<thead>
<tr>
<th></th>
<th>Average 2017 EUR/t</th>
<th>Average 2018 EUR/t</th>
<th>y/y %</th>
<th>12-2018 EUR/t</th>
<th>MIN 2018 EUR/t</th>
<th>MAX 2018 EUR/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-EH (FD NWE spot)</td>
<td>1,089</td>
<td>1,160</td>
<td>6.5</td>
<td>1,198</td>
<td>1,050</td>
<td>1,239</td>
</tr>
<tr>
<td>DOTP (FD NWE spot)</td>
<td>1,340</td>
<td>1,288</td>
<td>3.8(\uparrow)</td>
<td>1,310</td>
<td>1,258</td>
<td>1,313</td>
</tr>
<tr>
<td>Propylene (FD NWE spot)</td>
<td>846</td>
<td>992</td>
<td>17.3</td>
<td>870</td>
<td>870</td>
<td>1,107</td>
</tr>
</tbody>
</table>

Source: ICIS.

**Sulfur**

In 2018, the market saw both significant increases and declines in the prices of prilled sulfur. Initially, the demand was strongly driven by the phosphate fertilizers sector, but following a decline in demand on the phosphate fertilizers market in Q4 2018, the prices of prilled sulfur plunged too. An additional factor constraining supply were the US sanctions imposed on Iran, which caused some countries to cease to import commodities, including sulfur, from that source. No such movements were seen in the prices of molten sulfur, which went up at the beginning of each quarter throughout 2018. Year on year, the average price of molten sulfur rose by almost 30% (Benelux delivered). In 2018, the situation in the European molten sulfur market, where supply practically matches demand, was further complicated due to force majeure events, such as the industrial accident at a major German gas plant manufacturing molten sulfur, and the long and hot summer, which made transporting molten sulfur by water more difficult.
Directors’ Report on the operations of Grupa Azoty S.A. and the Group for the 12 months ended December 31st 2018 (all amounts in PLN ’000 unless indicated otherwise)

Prices of sulfur

![Graph showing prices of sulfur](image)

Source: FERTECON.

<table>
<thead>
<tr>
<th></th>
<th>Average 2017</th>
<th>Average 2018</th>
<th>y/y</th>
<th>12-2018</th>
<th>MIN 2018</th>
<th>MAX 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur (Delivered Benelux refinery)</td>
<td>95 USD/t</td>
<td>122 USD/t</td>
<td>28.3%</td>
<td>137 USD/t</td>
<td>112 USD/t</td>
<td>137 USD/t</td>
</tr>
<tr>
<td>Sulfur (Vancouver spot FOB)</td>
<td>106 USD/t</td>
<td>136 USD/t</td>
<td>28.6%</td>
<td>133 USD/t</td>
<td>120 USD/t</td>
<td>162 USD/t</td>
</tr>
</tbody>
</table>

Source: FERTECON.

**Pigment chain**

After steady rises in the prices of titanium white, continuing until mid-2018, the third quarter of the year saw contract price rolling. The fourth quarter saw the first triple-digit drops in the prices of the product. In 2018, the average price of titanium white in Europe was EUR 2,914/tonne, up by 15.2% year on year.

In the second half of 2018, the supply-demand balance began to tilt towards oversupply. The global undersupply was offset mainly by imports of Chinese titanium white, which is competitive both in terms of price and quality in the segment of standard grades of titanium white.

In Q4 2018, for the first time in two years the European titanium white market experienced seasonality, especially in the paints and coatings sector. Customers did not purchase more than necessary as they had high stocks of titanium white and expected further price declines. Market analyses showed that global economies, including Germany, began to slow down. Germany is Poland’s largest exports market. The deteriorating economic and political situation on global markets may reduce demand for the product in the future.

The challenging conditions on the titanium white market are expected to persist in H1 2019, with potential further price declines and temporary stabilisation in the high season.
Prices of titanium white and ilmenite

The prices of titanium white grew in parallel with purchase prices of titanium-bearing materials. Ilmenite prices usually start to follow the market price of titanium white after about six months. Accordingly, the purchase price of ilmenite peaked in the first half of 2018, stabilised in the third quarter, and went on a downward trend from Q4 2018 as a result of deteriorating conditions on the titanium white market. On the representative Chinese market, the average price of ilmenite reached USD 205/t in the first half of 2018 and fell to USD 189/t in the second half of the year. Titanium slag is produced by smelting ilmenite with coke in a furnace. As no investments are made in new furnaces, the titanium slag market is undersupplied, especially with respect to 74%-76% titanium slag used in the sulfate-based production of titanium white. Some of the manufacturers discontinued the production of titanium slag with a lower titanium content and switched to producing slags with 90% or higher TiO₂ content, due to higher sales margins achieved in chlorine-based production of titanium white. Thus, despite falling prices of titanium white, in 2018 the price of 74%-76% titanium slag rose 36% year on year. Considering the undersupply described above, the prices of titanium slag are expected to remain high.

Melamine
Melamine demand in Europe remained strong throughout 2018, with supply stable yet affected by maintenance shutdowns. Maintenance work was carried out by melamine manufacturers from Poland, Austria, the US, China and Japan.

In 2018, contract prices of melamine in Europe increased by 8.7% compared with 2017, which was attributable to a drop in supply from China due to lower availability of natural gas for industrial users, maintenance shutdowns of Chinese plants and environmental restrictions.

In 2019, buyers expect considerable reductions in melamine prices due to improved supply and balanced demand. Greater availability of cheaper melamine, mainly from China, Qatar, Russia and Japan, will have a significant impact on prices.
During the reporting period, the melamine market faced some supply constraints due to plant overhauls and repairs.

<table>
<thead>
<tr>
<th></th>
<th>Average 2017 EUR/t</th>
<th>Average 2018 EUR/t</th>
<th>y/y %</th>
<th>12-2018 EUR/t</th>
<th>MIN 2018 EUR/t</th>
<th>MAX 2018 EUR/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melamine</td>
<td>1,509</td>
<td>1,640</td>
<td>8.7</td>
<td>1,625</td>
<td>1,600</td>
<td>1,655</td>
</tr>
</tbody>
</table>

Source: ICIS, Global Bleaching Chemicals.

**ENERGY**

**Natural gas**

2018 saw an increase in gas prices on the European markets. The average annual gas prices at Western European hubs increased by more than 30% on 2017. At the beginning of the year, the prices fell to EUR 17.5/MWh in mid-February and were below last year’s levels. Two waves of frosty weather that swept over Europe at the end of February and in mid March led to record prices of gas on commodity exchanges (EUR 60-EUR 70/MWh) and depletion of gas stocks. After a temporary drop in prices from approximately EUR 18.5/MWh in late March, gas prices grew steadily in the second quarter of the year. The fundamental drivers of these increases were low gas stocks and rising prices of other energy commodities. Oil prices were on the rise, spurred by supply concerns. Initially, the causes of concerns were production cuts by OPEC members, the tension around Syria, and later - the US decision to withdraw from the nuclear agreement with Iran and re-impose sanctions on that country. At the same time, the exceptionally cold end of winter and the hot start of spring in Asia boosted the demand for coal. The coal market was characterised by limited supply, with prices having grown by a quarter in the period, to USD 100 per tonne. As a result, gas prices also went up and ranged between EUR 22 and EUR 23/MWh in the summer. The prolonged period of high air temperatures in Europe and the lack of precipitation leading to low water levels in rivers resulted in reduced output from nuclear power plants due to cooling problems. With lower-than-usual wind and hydro generation, demand driven by the increased use of air conditioning units made European countries increase their output of electricity generated from gas and coal. Due to the EU ETS reform, stronger demand and speculative activities, the prices of CO₂ emission allowances began to climb, which encouraged the power sector to use gas as a cleaner substitute fuel. Maintenance work on production and transmission infrastructure, first in Russia and later in Norway, as well as higher gas prices in Asia, where LNG was supplied under spot contracts, prevented a full balancing of the market. As a result, in September gas prices rose to almost EUR 30/MWh, which reduced its consumption in the power sector and made it possible to replenish stocks ahead of the winter season. The exceptionally warm last quarter of the year and the growing volumes of LNG supplies to the EU, driven by increased global natural gas liquefaction capacities, with high freight costs (favouring Europe as the supply direction), improved gas balance in the European system. In Europe, the year end was marked by a decline in gas prices, to EUR 22/MWh, and gas stocks above last year’s levels.
Prices of natural gas

According to the most recent IHS forecasts, the average price of gas in Europe in 2019 will be approximately 10% lower compared with the previous year’s figure. Gas prices are expected to fluctuate within a range determined at the bottom by the cost of LNG supplies to Europe, and at the top - by the opportunity cost of using gas instead of coal in power generation. The price erosion will be further driven by a faster increase of global LNG liquefaction capacities compared with regasification capacities, and the expected oversupply on the LNG market, which can only be absorbed in Europe given its high surplus of available regasification capacities. The second key driver of gas prices will be Russia’s export strategy - namely whether it will be focused on maintaining Russia’s share in the gas market or on maintaining gas prices. Another driver will be geopolitical factors, especially the impact of the trade war between the United States and China on global economic growth, and thus on demand for energy commodities.

Electricity
The average electricity prices went up by 48% year on year. In the fourth quarter, the upward price trend, initiated at the beginning of the year, was adjusted by more than 8% quarter on quarter. As a result, electricity prices in the comparative period rose by almost 45% year on year.

Prices of electricity

*Excluding transmission.
Source: PGNiG tariff, ICIS.
Electricity prices will be driven by the following factors:

- Continuing high prices of CO₂ emission units;
- Continuing high prices of gas;
- Increasingly widespread use of energy efficient solutions leading to reduced electricity consumption;
- Fluctuations in high prices of coal on global and domestic markets;
- Changes to the RES support system;
- Legal regulations to reduce electricity prices (excise duty, compensation for higher prices of CO₂ emission units, reduction of transition charge).

Coal

In 2018, coal prices continued on an upward trend and remained strong. The average coal prices rose by over 9% year on year. In Q4 2018, coal prices declined for the first time in the second half of the year, having averaged below USD 93/t in the period.

Current situation on the global coal market is described as highly volatile, with prices likely to continue at levels reached in December throughout the winter, after which they will come under a downward pressure, driven by stock levels in Europe, a relatively warm winter, as well as volumes purchased in Asia.

Analysts expect coal prices to drop to below USD 80/t this year.

### Prices of hard coal

<table>
<thead>
<tr>
<th></th>
<th>Average 2017</th>
<th>Average 2018</th>
<th>y/y</th>
<th>12-2018</th>
<th>MIN 2018</th>
<th>MAX 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>84.3</td>
<td>92.2</td>
<td>9.5</td>
<td>87.2</td>
<td>79.07</td>
<td>103.2</td>
</tr>
</tbody>
</table>
5.3. Key financial and economic data

5.3.1. Consolidated financial information

In 2018, the Group earned a positive EBITDA of PLN 764,442 thousand and net profit of PLN 7,650 thousand. Year on year, EBITDA and net profit fell by PLN 422,444 thousand and PLN 481,176 thousand, respectively.

Consolidated data

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>9,998,967</td>
<td>9,617,495</td>
<td>381,472</td>
<td>4.0</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(8,406,424)</td>
<td>(7,457,734)</td>
<td>948,690</td>
<td>12.7</td>
</tr>
<tr>
<td>Gross profit</td>
<td>1,592,543</td>
<td>2,159,761</td>
<td>(567,218)</td>
<td>(26.3)</td>
</tr>
<tr>
<td>Selling and distribution expenses</td>
<td>(658,602)</td>
<td>(673,555)</td>
<td>14,953</td>
<td>(2.2)</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>(812,368)</td>
<td>(757,767)</td>
<td>54,601</td>
<td>7.2</td>
</tr>
<tr>
<td>Gross profit</td>
<td>121,573</td>
<td>728,439</td>
<td>(606,866)</td>
<td>(83.3)</td>
</tr>
<tr>
<td>Net other expenses</td>
<td>(40,582)</td>
<td>(131,225)</td>
<td>90,643</td>
<td>(69.1)</td>
</tr>
<tr>
<td>Operating profit</td>
<td>80,991</td>
<td>597,214</td>
<td>(516,223)</td>
<td>(86.4)</td>
</tr>
<tr>
<td>Net finance income/(costs)</td>
<td>(53,683)</td>
<td>(36,824)</td>
<td>16,859</td>
<td>45.8</td>
</tr>
<tr>
<td>Share of profit of equity-accounted</td>
<td>13,092</td>
<td>16,015</td>
<td>(2,923)</td>
<td>(18.3)</td>
</tr>
<tr>
<td>investees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit before tax</td>
<td>40,400</td>
<td>576,405</td>
<td>(536,005)</td>
<td>(93.0)</td>
</tr>
<tr>
<td>Income tax</td>
<td>(32,750)</td>
<td>(87,579)</td>
<td>54,829</td>
<td>(62.6)</td>
</tr>
<tr>
<td>Net profit</td>
<td>7,650</td>
<td>488,826</td>
<td>(481,176)</td>
<td>(98.4)</td>
</tr>
<tr>
<td>EBIT</td>
<td>80,991</td>
<td>597,214</td>
<td>(516,223)</td>
<td>(86.4)</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>683,451</td>
<td>589,672</td>
<td>93,779</td>
<td>15.9</td>
</tr>
<tr>
<td>EBITDA</td>
<td>764,442</td>
<td>1,186,886</td>
<td>(422,444)</td>
<td>(35.6)</td>
</tr>
</tbody>
</table>

Source: Company data.

With revenue up 4.0% year on year and cost of sales growing relatively faster (up 12.7%), the Group reported a gross profit. Gross profit was PLN 567,218 thousand lower than in 2017.

Gross profit net of distribution costs and administrative expenses was PLN 121,573 thousand, that is PLN 606,866 thousand less than in 2017. In 2018, the balance of other income and other expenses was negative, at PLN (40,582) thousand, reducing EBIT, which amounted to PLN 80,991 thousand.
5.3.2.  Segments’ consolidated financial information

**EBIT by segment**

<table>
<thead>
<tr>
<th></th>
<th>Agro Fertilizers</th>
<th>Plastics</th>
<th>Chemicals</th>
<th>Energy</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>External revenue</td>
<td>4,904,051</td>
<td>1,561,648</td>
<td>3,113,955</td>
<td>252,977</td>
<td>166,336</td>
</tr>
<tr>
<td>Profit/(loss) on sales</td>
<td>(121,750)</td>
<td>133,825</td>
<td>182,644</td>
<td>(21,874)</td>
<td>(51,272)</td>
</tr>
<tr>
<td>EBIT</td>
<td>(133,790)</td>
<td>133,892</td>
<td>168,462</td>
<td>(18,912)</td>
<td>(68,661)</td>
</tr>
</tbody>
</table>

Source: Company data.

The Group’s profit on sales of products in 2018 was driven primarily by the market situation in the Agro Fertilizers, Plastics and Chemicals segments. In the Agro Fertilizers segment, revenue was down 2.5% year on year, and went up by 10.0% in Plastics, 11.7% in Chemicals, 9.9% in Energy, and 9.7% in Other Activities.

**Revenue by segment**

Source: Company data.
Revenue by segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro Fertilizers</td>
<td>31.1%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Plastics</td>
<td>49.1%</td>
<td>52.3%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>15.6%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Energy</td>
<td>1.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Other Activities</td>
<td>2.5%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Source: Company data.

The shares of individual segments in total revenue changed slightly compared with 2017, with increased contributions from Plastics (0.9pp), Chemicals (2.1pp), Energy (0.1pp) and Other Activities (0.1pp), and a lower contribution from Agro Fertilizers (down 3.2pp).

**Agro Fertilizers**
In 2018, revenue in the Agro Fertilizers segment came in at PLN 4,904,051 thousand and accounted for 49.1% of the Group's total revenue. Relative to 2017, the segment's revenue fell by 2.5%. EBIT reported by the Group in the Agro Fertilizers segment was negative. Sales on the domestic market accounted for approximately 74.9% of the segment’s revenue.

**Plastics**
Revenue in the Plastics segment was PLN 1,561,648 thousand and accounted for 15.6% of the Group's total revenue. The segment’s revenue was up 10.0% year on year. EBIT reported by the Plastics segment was positive. More than 89.9% of the segment’s revenue was derived from sales on foreign markets.

**Chemicals**
In 2018, revenue in the Chemicals segment amounted to PLN 3,113,955 thousand, having increased 11.7% year on year. The segment's revenue accounted for 31.1% of the Group's total revenue. EBIT reported by the Energy segment was positive. Sales on foreign markets accounted for approximately 61.8% of the Chemicals segment’s revenue.

**Energy**
In 2018, revenue in the Energy segment was PLN 252,977 thousand and accounted for approximately 2.5% of the Parent’s total revenue. The segment’s revenue increased 9.9% year on year. EBIT reported by the Energy segment was negative.

Other Activities
In 2018, revenue of the Other Activities segment was PLN 166,336 thousand and accounted for 1.7% of the Group’s total revenue, having increased by 9.7% relative to 2017. The segment’s EBIT was negative in 2018.

5.3.3. Structure of consolidated operating expenses
In 2018, operating expenses reached PLN 9,866,725 thousand, having increased by PLN 900,773 thousand year on year. There was a rise in raw materials and consumables used, salaries and wages, including overheads and other benefits, depreciation and amortisation, taxes and charges as well as cost of services. On the other hand, there was a decrease in other expenses.

Operating expenses by nature of expense

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and amortisation</td>
<td>681,149</td>
<td>586,660</td>
<td>94,489</td>
<td>16.5</td>
</tr>
<tr>
<td>Raw materials and consumables used</td>
<td>6,122,652</td>
<td>5,486,585</td>
<td>636,067</td>
<td>11.6</td>
</tr>
<tr>
<td>Services</td>
<td>1,032,262</td>
<td>990,067</td>
<td>42,195</td>
<td>4.3</td>
</tr>
<tr>
<td>Salaries and wages, including overheads, and other benefits</td>
<td>1,475,653</td>
<td>1,399,447</td>
<td>76,206</td>
<td>5.4</td>
</tr>
<tr>
<td>Taxes and charges</td>
<td>422,560</td>
<td>337,771</td>
<td>84,789</td>
<td>25.1</td>
</tr>
<tr>
<td>Other expenses</td>
<td>132,449</td>
<td>165,422</td>
<td>(32,973)</td>
<td>(19.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,866,725</strong></td>
<td><strong>8,965,952</strong></td>
<td><strong>900,773</strong></td>
<td><strong>10.1</strong></td>
</tr>
</tbody>
</table>

Source: Company data.

Other operating expenses
In 2018, other expenses, excluding raw materials and consumables used, accounted for 38.0% of total operating expenses, down from 38.8% in the corresponding period of 2017. The structure of other expenses changed only slightly relative to the comparative period.

Structure of other operating expenses [%]

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and amortisation</td>
<td>6.9</td>
<td>6.5</td>
</tr>
<tr>
<td>Services</td>
<td>10.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Salaries and wages, including overheads, and other benefits</td>
<td>15.0</td>
<td>15.6</td>
</tr>
<tr>
<td>Taxes and charges</td>
<td>4.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Other expenses</td>
<td>1.3</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37.9</strong></td>
<td><strong>38.8</strong></td>
</tr>
</tbody>
</table>

Source: Company data.
5.3.4. Structure of consolidated assets, equity and liabilities

In 2018, the Group’s assets rose to PLN 14,160,469 thousand, by PLN 2,422,425 thousand relative to the end of 2017. As at December 31st 2018, non-current assets were PLN 9,886,441 thousand, and current assets were PLN 4,274,028 thousand.

Year on year, the most significant changes in assets in the reporting period included:
- PLN 885,891 thousand increase in property, plant and equipment,
- PLN 367,309 thousand increase in intangible assets,
- PLN 500,683 thousand increase in inventories,
- PLN 465,485 thousand increase in trade and other receivables.

Structure of assets

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-current assets, including:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>7,665,639</td>
<td>6,779,748</td>
<td>885,891</td>
<td>13.1</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>763,064</td>
<td>395,755</td>
<td>367,309</td>
<td>92.8</td>
</tr>
<tr>
<td>Goodwill</td>
<td>581,436</td>
<td>32,468</td>
<td>548,968</td>
<td>1,690.8</td>
</tr>
<tr>
<td>Perpetual usufruct of land</td>
<td>470,178</td>
<td>476,616</td>
<td>(6,438)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>Other receivables</td>
<td>185,397</td>
<td>137,850</td>
<td>47,547</td>
<td>34.5</td>
</tr>
<tr>
<td>Equity-accounted investees</td>
<td>89,496</td>
<td>111,059</td>
<td>(21,563)</td>
<td>(19.4)</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>75,579</td>
<td>69,583</td>
<td>5,996</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Current assets, including:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>1,553,909</td>
<td>1,088,424</td>
<td>465,485</td>
<td>42.8</td>
</tr>
<tr>
<td>Inventories</td>
<td>1,503,897</td>
<td>1,003,214</td>
<td>500,683</td>
<td>49.9</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>846,532</td>
<td>1,085,885</td>
<td>(239,353)</td>
<td>(22.0)</td>
</tr>
<tr>
<td>Property rights</td>
<td>261,767</td>
<td>188,887</td>
<td>72,880</td>
<td>38.6</td>
</tr>
<tr>
<td>Current tax assets</td>
<td>67,217</td>
<td>24,248</td>
<td>42,969</td>
<td>177.2</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>14,160,469</td>
<td>11,738,044</td>
<td>2,422,425</td>
<td>20.6</td>
</tr>
</tbody>
</table>

Source: Company data.

Year on year, the most significant changes in equity and liabilities in the reporting period included:
- PLN 120,821 thousand decrease in equity,
- PLN 1,215,885 thousand increase in non-current and current liabilities under borrowings,
- PLN 829,090 thousand increase in trade and other payables.
### Structure of equity and liabilities

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>7,328,226</td>
<td>7,443,407</td>
<td>(115,181)</td>
<td>(1.5)</td>
</tr>
<tr>
<td>Non-current liabilities, including:</td>
<td>3,556,776</td>
<td>2,336,621</td>
<td>1,220,155</td>
<td>52.2</td>
</tr>
<tr>
<td>Borrowings</td>
<td>2,488,353</td>
<td>1,564,879</td>
<td>923,474</td>
<td>59.0</td>
</tr>
<tr>
<td>Employee benefit obligations</td>
<td>394,677</td>
<td>336,781</td>
<td>57,896</td>
<td>17.2</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>342,790</td>
<td>177,588</td>
<td>165,202</td>
<td>93.0</td>
</tr>
<tr>
<td>Provisions</td>
<td>143,772</td>
<td>122,740</td>
<td>21,032</td>
<td>17.1</td>
</tr>
<tr>
<td>Government grants received</td>
<td>136,002</td>
<td>90,585</td>
<td>45,417</td>
<td>50.1</td>
</tr>
<tr>
<td>Current liabilities, including:</td>
<td>3,275,467</td>
<td>1,958,016</td>
<td>1,317,451</td>
<td>67.3</td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>2,598,289</td>
<td>1,769,199</td>
<td>829,090</td>
<td>46.9</td>
</tr>
<tr>
<td>Borrowings</td>
<td>362,620</td>
<td>70,209</td>
<td>292,411</td>
<td>416.5</td>
</tr>
<tr>
<td>Other financial liabilities</td>
<td>198,138</td>
<td>31,484</td>
<td>166,654</td>
<td>529.3</td>
</tr>
<tr>
<td>Employee benefit obligations</td>
<td>45,630</td>
<td>42,316</td>
<td>3,314</td>
<td>7.8</td>
</tr>
<tr>
<td>Provisions</td>
<td>44,425</td>
<td>29,805</td>
<td>14,620</td>
<td>49.1</td>
</tr>
<tr>
<td>Current tax liabilities</td>
<td>18,178</td>
<td>8,916</td>
<td>9,262</td>
<td>103.9</td>
</tr>
<tr>
<td>Government grants received</td>
<td>7,999</td>
<td>6,087</td>
<td>1,912</td>
<td>31.4</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>14,160,469</td>
<td>11,738,044</td>
<td>2,422,425</td>
<td>20.6</td>
</tr>
</tbody>
</table>

Source: Company data.

#### 5.3.5. Consolidated financial ratios

##### Profitability ratios [%]

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit margin</td>
<td>15.9</td>
<td>22.5</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>0.8</td>
<td>6.2</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>7.6</td>
<td>12.3</td>
</tr>
<tr>
<td>Net profit margin</td>
<td>0.1</td>
<td>5.1</td>
</tr>
<tr>
<td>ROA</td>
<td>0.1</td>
<td>4.2</td>
</tr>
<tr>
<td>ROCE</td>
<td>0.7</td>
<td>6.1</td>
</tr>
<tr>
<td>ROE</td>
<td>0.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Return on non-current assets</td>
<td>0.1</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: Company data.

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

##### Liquidity ratios

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>1.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>0.8</td>
<td>1.4</td>
</tr>
</tbody>
</table>
Directors’ Report on the operations of Grupa Azoty S.A. and the Group for the 12 months ended December 31st 2018 (all amounts in PLN ‘000 unless indicated otherwise)

Cash ratio
Source: Company data.

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

Changes in working capital
Source: Company data.

Operational efficiency ratios
Source: Company data.

Ratio formulas:
Inventory turnover = inventories * 360 / cost of sales
Average collection period = trade and other receivables * 360 / revenue
Average payment period = trade and other payables * 360 / cost of sales
Cash conversion cycle = inventory turnover + average collection period - average payment period
Debt ratios [%]

<table>
<thead>
<tr>
<th>Ratio</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt ratio</td>
<td>48.2</td>
<td>36.6</td>
</tr>
<tr>
<td>Long-term debt ratio</td>
<td>25.1</td>
<td>19.9</td>
</tr>
<tr>
<td>Short-term debt ratio</td>
<td>23.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Equity-to-debt ratio</td>
<td>107.3</td>
<td>173.3</td>
</tr>
<tr>
<td>Interest cover ratio</td>
<td>182.0</td>
<td>1,549.6</td>
</tr>
</tbody>
</table>

Source: Company data.

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

5.3.6. Separate financial data

In 2018, the Group earned a positive EBITDA of PLN 159,971 thousand and net profit of PLN 171,064 thousand.

Year on year, EBITDA was lower by PLN 85,038 thousand and the net profit fell by PLN 183,729 thousand.

Separate financial data of Grupa Azoty

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,825,771</td>
<td>1,681,525</td>
<td>144,246</td>
<td>8.6</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(1,499,486)</td>
<td>(1,265,543)</td>
<td>(233,943)</td>
<td>18.5</td>
</tr>
<tr>
<td>Gross profit</td>
<td>326,285</td>
<td>415,982</td>
<td>(89,707)</td>
<td>21.6</td>
</tr>
<tr>
<td>Selling and distribution expenses</td>
<td>(96,713)</td>
<td>(101,181)</td>
<td>4,468</td>
<td>(4.4)</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>(169,523)</td>
<td>(161,048)</td>
<td>(8,475)</td>
<td>5.3</td>
</tr>
<tr>
<td>Gross profit</td>
<td>60,049</td>
<td>153,753</td>
<td>(93,704)</td>
<td>(60.9)</td>
</tr>
<tr>
<td>Net other expenses</td>
<td>(12,288)</td>
<td>(9,412)</td>
<td>(2,876)</td>
<td>30.6</td>
</tr>
<tr>
<td>Operating profit</td>
<td>47,761</td>
<td>144,341</td>
<td>(96,580)</td>
<td>(66.9)</td>
</tr>
<tr>
<td>Net finance income</td>
<td>135,544</td>
<td>193,505</td>
<td>(57,961)</td>
<td>(30.0)</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>183,305</td>
<td>337,846</td>
<td>(154,541)</td>
<td>(45.7)</td>
</tr>
<tr>
<td>Income tax</td>
<td>(12,241)</td>
<td>16,947</td>
<td>(29,188)</td>
<td>(172.2)</td>
</tr>
<tr>
<td>Net profit</td>
<td>171,064</td>
<td>354,793</td>
<td>(183,729)</td>
<td>(51.8)</td>
</tr>
<tr>
<td>EBIT</td>
<td>47,761</td>
<td>144,341</td>
<td>(96,580)</td>
<td>(66.9)</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>112,210</td>
<td>100,668</td>
<td>11,542</td>
<td>11.5</td>
</tr>
<tr>
<td>EBITDA</td>
<td>159,971</td>
<td>245,009</td>
<td>(85,038)</td>
<td>(34.7)</td>
</tr>
</tbody>
</table>

Source: Company data.

With revenue up 8.6% year on year and cost of sales up 18.5%, Grupa Azoty reported a gross profit of PLN 326,285 thousand, down by PLN 89,697 thousand on 2017.

Despite higher administrative expenses and net other expenses, Grupa Azoty reported an operating profit of PLN 47,761 thousand. Profit before tax was ultimately driven by finance income, which comprised mainly dividends received.
5.3.7. Separate financial data by segment

**EBIT by segment**

<table>
<thead>
<tr>
<th></th>
<th>Agro Fertilizers</th>
<th>Plastics</th>
<th>Energy</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>External revenue</td>
<td>653,601</td>
<td>1,105,806</td>
<td>35,068</td>
<td>31,296</td>
</tr>
<tr>
<td>Profit/(loss) on sales</td>
<td>(76,028)</td>
<td>126,392</td>
<td>840</td>
<td>8,845</td>
</tr>
<tr>
<td>EBIT</td>
<td>(78,536)</td>
<td>119,759</td>
<td>179</td>
<td>6,359</td>
</tr>
</tbody>
</table>

Source: Company data.

The Group’s profit on sales of products in 2018 was determined primarily by the market situation in the Agro Fertilizers and Plastics segments. In relation to the previous year, revenue rose in the Plastics (by 23.2%), Energy (by 19%) and Other Activities (by 12.7%) segments. In the Fertilizers-Agro segment, revenue fell by 10.0%.

**Revenue by segment**

Source: Company data.
Revenue by segment

2018

35.8% 60.6% 1.9% 1.7%

2017

43.2% 53.4% 1.8% 1.6%

Source: Company data.

There were year-on-year movements in the segments’ shares in total revenue, with increased contributions from Plastics (7.2pp), Energy (0.1pp), and Other Activities (0.1pp), and a lower contribution from Agro Fertilizers (down 7.4pp).

**Agro Fertilizers**

In 2018, revenue in the Agro Fertilizers segment was PLN 653,601 thousand and accounted for 35.8% of the Parent’s total revenue. Year on year, the segment’s revenue fell 10.0%, with its share in the Parent’s revenue having declined by 7.4pp. EBIT reported by the Group in the Agro Fertilizers segment was negative. Sales on the domestic market accounted for approximately 66.5% of the segment’s revenue.

**Plastics**

In 2018, revenue in the Plastics segment was PLN 1,105,806 thousand and accounted for 60.6% of the Parent’s total revenue. Year on year, the segment’s revenue went up by 23.2%. The Plastics segment recorded a positive EBIT. More than 85.0% of the segment’s revenue was derived from sales on foreign markets.
Energy
In 2018, revenue in the Energy segment was PLN 35,068 thousand and accounted for approximately 1.9% of the Parent’s total revenue. The segment’s revenue increased 19.0% year on year. EBIT reported by the Energy segment was positive.

Other Activities
In 2018, revenue in the Other Activities segment was PLN 31,296 thousand and accounted for 1.7% of total revenue, having increased by 12.7% relative to 2017. The segment’s EBIT was negative in 2018.

5.3.8. Structure of separate operating expenses

In 2018, operating expenses reached PLN 1,775,752 thousand, having increased by PLN 212,103 thousand year on year. The largest increase was recorded in raw materials and consumables used, services, and other.

Operating expenses by nature of expense

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and amortisation</td>
<td>111,008</td>
<td>99,502</td>
<td>11,506</td>
<td>11.6</td>
</tr>
<tr>
<td>Raw materials and consumables used</td>
<td>1,107,046</td>
<td>948,065</td>
<td>158,981</td>
<td>16.8</td>
</tr>
<tr>
<td>Services</td>
<td>253,246</td>
<td>238,419</td>
<td>14,827</td>
<td>6.2</td>
</tr>
<tr>
<td>Salaries and wages, including overheads, and other benefits</td>
<td>213,634</td>
<td>209,453</td>
<td>4,181</td>
<td>2.0</td>
</tr>
<tr>
<td>Taxes and charges</td>
<td>52,701</td>
<td>43,943</td>
<td>8,758</td>
<td>19.9</td>
</tr>
<tr>
<td>Other expenses</td>
<td>38,117</td>
<td>24,267</td>
<td>13,850</td>
<td>57.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,775,752</strong></td>
<td><strong>1,563,649</strong></td>
<td><strong>212,103</strong></td>
<td><strong>13.6</strong></td>
</tr>
</tbody>
</table>

Source: Company data.

Other operating expenses
In 2018, other expenses, excluding raw materials and consumables used, accounted for 37.7% of total operating expenses, down from 39.4% in the corresponding period of 2017. Relative to the comparative period, the share of services and the share of salaries and wages, including overheads and other benefits, decreased, and the share of other expenses changed slightly.

Structure of other operating expenses [%]

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation and amortisation</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Services</td>
<td>14.3</td>
<td>15.2</td>
</tr>
<tr>
<td>Salaries and wages, including overheads, and other benefits</td>
<td>12.0</td>
<td>13.4</td>
</tr>
<tr>
<td>Taxes and charges</td>
<td>3.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Other expenses</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37.7</strong></td>
<td><strong>39.4</strong></td>
</tr>
</tbody>
</table>

Source: Company data.

5.3.9. Structure of separate assets, equity and liabilities
In 2018, the Parent’s assets increased to PLN 8,603,645 thousand, i.e. by PLN 1,732,512 thousand relative to the end of 2017. As at December 31st 2018, non-current assets were PLN 7,034,158 thousand, and current assets were PLN 1,569,487 thousand.
Year on year, the most significant changes in assets included:
- a 29.6% increase in shares,
- a 74.8% increase in cash and cash equivalents,
• a 6.1% increase in property, plant and equipment.

Structure of assets

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets, including:</td>
<td>7,034,158</td>
<td>5,770,410</td>
<td>1,263,748</td>
<td>21.9</td>
</tr>
<tr>
<td>Shares</td>
<td>5,012,908</td>
<td>3,867,145</td>
<td>1,145,763</td>
<td>29.6</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>1,650,232</td>
<td>1,554,673</td>
<td>95,559</td>
<td>6.1</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>285,626</td>
<td>249,978</td>
<td>35,648</td>
<td>14.3</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>49,108</td>
<td>46,957</td>
<td>2,151</td>
<td>4.6</td>
</tr>
<tr>
<td>Current assets, including:</td>
<td>1,569,487</td>
<td>1,100,723</td>
<td>468,764</td>
<td>42.6</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1,000,980</td>
<td>572,711</td>
<td>428,269</td>
<td>74.8</td>
</tr>
<tr>
<td>Inventories</td>
<td>246,106</td>
<td>212,109</td>
<td>33,997</td>
<td>16.0</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>238,558</td>
<td>214,524</td>
<td>24,034</td>
<td>11.2</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>47,340</td>
<td>70,361</td>
<td>(23,021)</td>
<td>(32.7)</td>
</tr>
<tr>
<td>Total assets</td>
<td>8,603,645</td>
<td>6,871,133</td>
<td>1,732,512</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Company data.

Year on year, the most significant changes in equity and liabilities in the reporting period included:
• a 92.1% increase in current and non-current liabilities under borrowings.
• a 25.7% increase in trade and other payables,
• a 54.1% increase in government grants received.

Structure of equity and liabilities

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
<th>change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>4,788,188</td>
<td>4,762,256</td>
<td>25,932</td>
<td>0.5</td>
</tr>
<tr>
<td>Non-current liabilities, including:</td>
<td>2,457,929</td>
<td>1,484,324</td>
<td>973,605</td>
<td>65.6</td>
</tr>
<tr>
<td>Borrowings</td>
<td>2,311,248</td>
<td>1,357,234</td>
<td>954,014</td>
<td>70.3</td>
</tr>
<tr>
<td>Employee benefit obligations</td>
<td>51,289</td>
<td>47,459</td>
<td>3,830</td>
<td>8.1</td>
</tr>
<tr>
<td>Government grants received</td>
<td>40,666</td>
<td>26,394</td>
<td>14,272</td>
<td>54.1</td>
</tr>
<tr>
<td>Provisions</td>
<td>31,069</td>
<td>27,345</td>
<td>3,724</td>
<td>13.6</td>
</tr>
<tr>
<td>Other financial liabilities</td>
<td>23,625</td>
<td>25,860</td>
<td>(2,235)</td>
<td>(8.6)</td>
</tr>
<tr>
<td>Current liabilities, including:</td>
<td>1,357,528</td>
<td>624,553</td>
<td>732,975</td>
<td>117.4</td>
</tr>
<tr>
<td>Borrowings</td>
<td>893,947</td>
<td>310,892</td>
<td>583,055</td>
<td>187.5</td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>352,908</td>
<td>280,843</td>
<td>72,065</td>
<td>25.7</td>
</tr>
<tr>
<td>Other financial liabilities</td>
<td>103,836</td>
<td>24,315</td>
<td>79,521</td>
<td>327.0</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>8,603,645</td>
<td>6,871,133</td>
<td>1,732,512</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Company data.
5.3.10. Separate financial ratios

### Profitability ratios [%]

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit margin</td>
<td>17.9</td>
<td>24.7</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>2.6</td>
<td>8.6</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>8.8</td>
<td>14.6</td>
</tr>
<tr>
<td>Net profit margin</td>
<td>9.4</td>
<td>21.1</td>
</tr>
<tr>
<td>ROA</td>
<td>2.0</td>
<td>5.2</td>
</tr>
<tr>
<td>ROCE</td>
<td>0.7</td>
<td>2.3</td>
</tr>
<tr>
<td>ROE</td>
<td>3.6</td>
<td>7.5</td>
</tr>
<tr>
<td>Return on non-current assets</td>
<td>2.4</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: Company data.

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

### Liquidity ratios

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>1.0</td>
<td>1.4</td>
</tr>
<tr>
<td>Cash ratio</td>
<td>0.8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Company data.

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

![Graph showing changes in working capital from 2016-12-31 to 2018-12-31.](image)

Source: Company data.

**Operational efficiency ratios**

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory turnover</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>Average collection period</td>
<td>47</td>
<td>46</td>
</tr>
<tr>
<td>Average payment period</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>Cash conversion cycle</td>
<td>21</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Company data.

*Ratio formulas:*

- Inventory turnover = inventories * 360 / cost of sales
- Average collection period = trade and other receivables * 360 / revenue
- Average payment period = trade and other payables * 360 / cost of sales
- Cash conversion cycle = inventory turnover + average collection period - average payment period

**Debt ratios [%]**

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt ratio</td>
<td>44.3</td>
<td>30.7</td>
</tr>
<tr>
<td>Long-term debt ratio</td>
<td>28.6</td>
<td>21.6</td>
</tr>
<tr>
<td>Short-term debt ratio</td>
<td>15.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Equity-to-debt ratio</td>
<td>125.5</td>
<td>225.8</td>
</tr>
<tr>
<td>Interest cover ratio</td>
<td>520.3</td>
<td>1,211.8</td>
</tr>
</tbody>
</table>

Source: Company data.

*Ratio formulas:*

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

5.4. Management of capital and assets
In 2018, the Group paid all of its borrowing-related liabilities when due, and there is no threat to its ability to continue servicing its debt. Grupa Azoty has available credit limits of approximately PLN 2,353m (as at December 31st 2018) under corporate loans extended on the basis of long-term credit facility agreements concluded with a bank syndicate, the EIB and the EBRD. The Group’s financing is based on variable and fixed interest rates. Depending on the currency, the variable rates are based on WIBOR or EURIBOR. Grupa Azoty has unused umbrella overdraft limits under overdraft credit facilities in PLN and EUR linked to physical cash pooling facilities in both currencies and under the multi-purpose credit facility, which may be used by the Parent at times of increased demand for funding by the Group companies. Complementarily, the Group has unused available limits resulting from bilateral and multi-purpose overdrafts held by the Group's entities.

The amount of limits under overdraft and multi-purpose credit facilities available to the Group as at December 31st 2018 was PLN 677m. In addition, as at the reporting date, the Group had unused limits under corporate credit facilities of approximately PLN 2,353m and approximately PLN 52m in funds available under special purpose loans.

In total, as at December 31st 2018 the Group had access to credit limits under the agreements specified above of approximately PLN 3,082m (December 31st 2017: PLN 1,188m).

In Q4 2018, the Group increased the amount of available credit limits by an equivalent of approximately PLN 320m following the execution of a new overdraft facility agreement for up to EUR 75m, related to a EUR physical cash pooling agreement; both agreements were concluded with PKO BP on November 2nd 2018.

In addition, in Q4 2018 the Group used an equivalent of approximately PLN 730m under available credit limits in the euro to finance the acquisition of Goat TopCo GmbH and an equivalent of approximately PLN 277m to refinance the existing debt of Goat TopCo GmbH, based on the EUR physical cash pooling arrangement related to the EUR overdraft facility.

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

The Parent and key Group companies are fully solvent, with good credit standing. The Group is able to pay its liabilities as they fall due and to hold and generate free operating cash flows to further support payment of such liabilities in a timely manner.

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

5.5. Bank deposits

In 2018, the Group’s short-term funds were primarily held in current accounts in PLN and EUR with PKO BP S.A., linked under physical cash pooling with the individual companies’ sublimits in those currencies. The arrangement enabled the Group to optimise its interest income and expenses, while effectively managing the global liquidity limit and its optimal allocation within the Group. The Group companies also held free cash in short-term deposits placed with reputable banking institutions offering the highest interest rates (amounts not included the cash pooling arrangement).

As at December 31st 2018, the Group held a total of PLN 858,529 thousand in bank accounts and short-term deposits, of which PLN 543,166 thousand was held by the Group companies in the Parent’s consolidated current accounts (in PLN and EUR) with PKO BP S.A., linked to the physical cash pooling instruments in those two currencies. As at December 31st 2018, these funds were presented in the Group’s financial statements under the following items:

- Cash and cash equivalents - in an amount of PLN 846,532 thousand (with maturities of up to 3 months),
- Other current financial assets - in an amount of PLN 11,997 thousand (with maturities of over 3 months to 1 year).

Interest income earned by the Group on fixed-term deposits and under the cash pooling arrangement totalled PLN 10,639 thousand.
5.6. Material off-balance-sheet items

The Group companies reported blank promissory notes and guarantees issued upon their instruction. Blank promissory notes issued by the Group companies and guarantees issued by banks or insurance companies upon the Group companies’ instruction as security for liabilities recognised in the statement of financial position, or liabilities with respect to which the likelihood of cash outflows to settle the liability is negligible, are not presented as contingent liabilities.

5.7. Financial instruments - risk management policy and risk management instruments, objectives and methods

As part of its financial risk management policy, the Group identifies the following risks and has adopted the following risk management objectives and methods:

Currency risk management
In 2018, the Grupa Azoty Group applied the ‘Financial (Currency and Interest Rate) Risk Management Policy’, as an element of the Group’s centralised Financing Model. The policy is also applied by those Group companies which are exposed to material levels of currency and interest rate risk.

• Identification of currency risk
The Group is exposed to currency risk resulting from its net exposure to the euro and the US dollar related to the foreign currency balance of its sale and procurement transactions, trade receivables and payables, as well as receivables and liabilities from financing and investing activities. The Group is also exposed to the risk related to periodic episodes of strong exchange rate volatility, including the effect of EUR/USD exchange rate development on EUR/PLN and USD/PLN exchange rates.

• Purpose of currency risk management
The purpose of currency risk management is mitigation of volatility of the Group’s cash flows in the euro and US dollar and hedging against adverse exchange rate movements by using instruments designed to reduce currency risk exposure and its effect on the Group’s financial performance.
In accordance with the policy, the objective of currency risk management at the Group is to reduce the impact of adverse exchange rate movements on the Group’s cash flows to a level acceptable by the Group, determined according to the VaR methodology.

• Level of currency hedging
The hedging level is considered optimum if up to 80% of the planned net currency exposure is hedged for a period of up to 6 months from the transaction date, up to 50% of the planned currency exposure is hedged for a period from 6 to 12 months from the transaction date, and up to 30% of the planned currency exposure is hedged for a period from 12 to 24 months from the transaction date.
Using a higher currency hedging level requires approval from the Management Board following a recommendation received from the Risk Committee.

• Rules of executing currency hedges
Currency hedges are executed to reduce the Group’s planned currency exposure and they are classified as cash flow hedges under hedge accounting. The amount of currency in a given transaction may not be higher than the hedged item in that currency.
To hedge exposure in the euro and US dollar the Group primarily uses natural hedging, which involves increasing future liabilities in the euro and US dollar through the execution of procurement, investing and financing contracts and agreements in those currencies.
The remaining currency exposure is mitigated by executing transactions of the following types:
- Currency forwards,
- Currency swaps, involving temporary swaps of currencies with a bank to optimise short-term currency mismatch,
- It is also possible to execute symmetric currency collars or other symmetric combinations of longing put options and shorting call options.

Currency hedges are generally settled by physical delivery of the currency on the expiry date.
Pursuant to the ‘Policy of Financial Risk Management (Currency Risk and Interest Rate Risk)’, the Grupa Azoty Group may enter into hedging transactions with horizons of up to 24 months, provided such transactions reduce the adverse effect of fluctuations in exchange rates on the cash flows (and the Group complies with the adopted hedging limits and hedge ratios and acts consistently with the applied VaR methodology).

The Group enters into currency hedges only with the banks with which it has executed framework agreements that provide for comprehensive rules of execution and settlement of such transactions. Execution of currency hedging transactions where the hedge horizon is more than 24 months or the transaction does not conform to the Financial Risk Management Policy requires approval by the Management Board based on the recommendation of the Finance Committee.

**Interest rate risk management**

The Group is exposed to interest rate risk related to its financial liabilities (chiefly borrowings) denominated in the złoty and the euro, which are based on variable market interest rates, and financial assets (mainly cash at banks and bank deposits) denominated in the złoty, which earn interest at variable and fixed market interest rates.

The objective of interest rate risk management is to optimise interest rates with a view to:

- Reducing the adverse effect of fluctuations in interest rates on cash flows,
- Minimising the cost of interest on debt,
- Ensuring the highest available profitability of financial assets and their safe allocation.

To achieve that objective it is necessary to ensure an optimum structure and cost of project financing using proceeds from issues of securities and debt, and to provide for an optimum level of working capital.

The Group primarily uses natural hedging involving the use of the same reference rate for borrowings and financial assets denominated in the złoty, and maintaining its available long-term credit facilities based on a fixed interest rate in the euro.

The remaining exposure to interest rate risk may be hedged using only the following transactions:

- Forward rate agreements (FRA),
- Interest rate swaps (IRS),
- Cross-currency interest rate swaps (CIRS).

The Group may enter into a transaction to hedge interest rate risk if it is ensured that the expected cost of the underlying instrument is limited. Execution of such a transaction is subject to the Risk Committee's approval.

Execution of an interest rate hedging transaction must be approved by the Management Board if its hedge horizon is more than 12 months or if the transaction does not conform to the Financial Risk Management Policy.

**Credit risk management**

The Group has a uniform credit risk management policy and procedure in place, which has been adopted by all key companies of the Group which are exposed to such risk.

- **Identified credit risks**
  - The Group's credit risk is related to:
    - Placements of cash and cash equivalents with banks;
    - Granting trade credit to trading partners in connection with the sale of products and services.

- **Purpose of credit risk management:**
  - Mitigation of the risk of loss of financial assets, including loans, receivables, cash and cash equivalents.

- **Identification of cash investment instruments**
  - The Group is allowed to use the following instruments to invest cash:
    - Bank deposits with banks of good financial standing,
    - Polish treasury bills and bonds,
    - Other instruments of a similar nature.

- **Trade credit limits:**
  - The total amount of trade credit granted to trading partners by a Group company should not exceed:
The amount of insured trade credit,  
The market value of security provided by the customer,  
The trade credit limit determined by the Group company based on the assessment of the trading partner's financial condition.

- **Rules of credit risk management**
  - **a) Execution of transactions involving placement of cash and cash equivalents**
    - Group companies make cash placements following selection of the highest interest rate quotations received from at least three banks, taking into account allocation limits, except for overnight deposits, which may be placed with the bank at which the account balance shows a financial surplus,
    - Exceeding the allocation limit and/or placement of a deposit with a term of more than one year requires approval by the Management Board member in charge of finance or the President of the Grupa Azoty Management Board.

  - **b) Provision of trade credit**
    - The Group determines trade credit limits based on requests received from teams responsible for execution of a sale transaction,
    - A trade credit limit does not require a separate approval if it is insured or relevant security is provided by a bank or other institution with high creditworthiness,
    - In other cases, a trade credit limit decision requires approval by the Corporate Finance Department (for limits of up to PLN 2m), by the Credit Risk Committee (up to PLN 5m), or by the Management Board member in charge of finance or President of the Grupa Azoty Management Board.

In the case of actual or threatened insolvency, as a result of which an impairment loss is recognised, a Group company should immediately initiate an amicable recovery procedure, or collection or enforcement proceedings to recover the threatened financial asset or relevant security.

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**Receivables insurance agreements at the Group**

As part of trade credit risk management, the Group cooperates with leading insurance companies, taking advantage of diversification and competition between insurers, by accessing specialist knowledge on the financial standing of the insured trading partners and having the ability to adjust the amounts of trade credits to the limits granted by individual insurers to their clients which are also customers of the Group.

Given the above, the Parent (with certain subsidiaries as co-insured) and Grupa Azoty KĘDZIERZYN hold uniform global receivables insurance policies with KUKE, expiring in July 2019. Grupa Azoty PUŁAWY signed a receivables insurance agreement on the same terms with EULER HERMES, expiring in January 2019. Grupa Azoty POLICE executed a global insurance agreement with ATRADIUS, based on the uniform terms of insurance, valid until November 2019.

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**5.8. Expected financial condition**

The Parent and key companies of the Grupa Azoty Group are fully solvent, with good credit standing. The Group is able to pay its liabilities as they fall due and to hold and generate free operating cash flows to further support servicing of such liabilities in a timely manner.

In 2018, the Group paid all of its borrowing-related liabilities when due, and there is no threat to its ability to continue servicing its debt.

In 2018, the Parent paid dividend of PLN 123,994 thousand from the 2017 profit, with the balance of the profit allocated to statutory reserve funds and as coverage of retained losses. The other Group companies also paid out dividend from their 2017 profit, in accordance with relevant dividend resolutions passed by their respective general meetings.

The Group has access to overdraft limits in PLN and EUR under physical cash pooling in the two currencies, which the Parent may use at times of increased demand for funding at the Group companies, and to additional multi-purpose and working capital credit lines available to its subsidiaries. The Group complies with the uniform covenants of its facility agreements which enable it to significantly increase financial debt when and as needed.

The Group’s strategic lenders view its financial condition as sound, and there are no material threats or risks of its deterioration in the future.
The Group's Budget for 2019 takes into account all market information (forecasts) available to the Group and detailed budgets of its individual business units. The Budget accounts for the main assumptions and optimises economic parameters derived from trends identified in the macroeconomic environment and internally, within the organisation.

The Group intends to consistently implement the financial and investment objectives assumed in the strategy, designed to ensure that the return on investment expected by investors is achieved, while further diversifying its market risk exposure.

To mitigate the impact of adverse external factors, the Group continues the cooperation with PGNiG with respect to supplies of natural gas (a key feedstock) based on market prices, actively manages its currency risk, interest rate risk and the risk related to increasing prices of CO₂ emission allowances. External factors with an impact on earnings in fertilizers, plastics and chemicals will be the prices of key feedstocks, including natural gas, coal, electricity and benzene, as well as competition from rivals in the Group's sales markets. Future financial performance will also be influenced by exchange rates (USD, EUR), the economic situation in agriculture and in the industries which are final customers, and also by the prices of fertilizers and plastics.

The Group successfully sells all of its fertilizer production on the domestic and international markets despite an increased supply from countries lying east of Poland by offering a complete range of products and services for end customers, reliable deliveries and premium product quality. The acquisition of Goat TopCo GmbH is also expected to strengthen Grupa Azoty's position as one of the leaders in agricultural solutions. It will open new opportunities for Grupa Azoty to diversify its business while acquiring highly innovative technologies, know-how, and an extended distribution network. In the Plastics segment, the Group ensured sales guaranteeing high utilisation of the available production capacity, thanks to the consistently pursued product, application and geographical diversification strategy. The launch of the new modified plastics plant, expected to take place at the end of the year, will further increase the security of operations.

However, there are certain long-term challenges facing the plastics industry – in the automotive sector, these include problems of diesel engines manufacturers and the necessity to meet the environmental requirements, and in the packaging segment - plastic foil recycling.

In chemicals, the Group expects the melamine and urea solutions markets to remain stable in 2019, supporting the segment’s financial performance. The volumes of caprolactam consumed by the Group for polyamide production started to increase gradually in 2018, an effect of the launch of the new polyamide plant at the Parent in 2017.

6. Risk, threats and growth prospects

6.1. Significant risk factors and threats

Risk related to price and availability of natural gas
Grupa Azoty Group - medium risk / Parent - medium risk

Risk related to prices and operational disruptions caused by a lower-than-expected or restricted supply of adequate volumes of natural gas of the right grade and quality required for production. In its search for competitive sources of gas, the Group seeks to diversify both the geographical regions and suppliers of gas, providing details of its efforts in press releases and reports. Negotiations with alternative gas suppliers are conducted at the Group level, which allows the Group to leverage its stronger bargaining position. 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 shorter contracts with a number of other suppliers, and transactions on energy exchanges and the OTC market to meet its short-term demand.

The abolishment of tariffs on the Polish gas market and conclusion of a long-term contract with pricing formulas based on the German market (the largest gas market in Europe) limited the risk of having to pay significantly higher prices than our EU competitors. Since 2016, the difference has not exceeded 2.5%.

The SOS Regulation (Regulation (EU) 2017/1938 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply), as well as the opening of the gas terminal in Słinoujście and the ongoing expansion of storage capacities, minimised the risk of restrictions due to disruptions in gas supply to Poland (which last occurred in 2009). For these reasons, the possibility that any of these risks will materialise is currently considered low.

A long-term contract with a large and reliable strategic partner has been concluded. It expires in 2022, but may be shortened by two years. The contract secures 80%-100% of the Group’s needs,
making it possible to partially diversify supplies. The contract provides for a price formula based on market quotations and allows the Group to hedge prices based on forward products. Moreover, the gas availability and price risk is mitigated by the supplies of substitute and cheaper gas from local sources. They ensure that in the event of limited supply of grid gas production may be continued at satisfactory levels, and if supplies from local sources are lower than needed, grid gas is purchased on the Polish Power Exchange and supplied as part of within-day interruptible capacity.

Risk of rising prices of carbon emission allowances
Grupa Azoty Group - medium risk / Parent - medium risk
The negative impact of prices on the CO₂ emission allowances trading market in the EU ETS system follows from the limited number of allowances needed to account for the emissions. Potential threats related to the risk include higher market prices of CO₂ emission allowances or insufficient volumes of CO₂ emission allowances purchased.

In order to mitigate the risk of a negative impact of CO₂ emissions trading prices on its results, the Company monitors the emission allowances market on an ongoing basis and purchases emission allowances on the SPOT market when prices are favourable. In addition, a part of future emission allowances are secured by using futures contracts - emission allowances are purchased in the form of derivative financial instruments that give rise to an obligation to deliver allowances in future periods when they should be redeemed, which is done in accordance with the purchase strategy in force. The policies and procedures in place are designed to ensure smooth trading in CO₂ emission allowances, ensure its efficiency, optimise the cost of operation of the EU Emissions Trading Scheme, and minimise the risks associated with participation in the scheme. Following a strong upward trend in prices of emission allowances on the exchange market, the prices exceeded the levels provided for in the budget.

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

Risk of higher fertilizer imports
Grupa Azoty Group - increased risk / Parent - high risk
The risk of periodically increasing volumes of fertilizers imported into Poland from other European Union countries and worsened economics as a result of squeezed product margins caused by the
emergence of new market players and a significant volume of imported fertilizers, giving rise to the risk of failure to achieve target revenue from sales of fertilizers.

The key component of fertilizers production costs is the cost of natural gas, which translates directly into the price competitiveness of products offered by Group. Moreover, fertilizers production costs in the European Union are affected by an added regulatory burden, concerning in particular CO\textsubscript{2} emissions. Increasing supply of fertilizers produced with the use of cheap gas and the sector’s growing manufacturing capacities lead to intensified competition from markets east of Poland.

In recent years, imports of compound fertilizers (NP and NPK) from non-EU countries have been on the rise, because the countries have access to cheap feedstock (gas) and are subject to less tight regulatory restrictions (environmental protection standards).

The Group’s efforts focus on mitigating the risks and on strengthening and consolidating the leading position in the segment of fertilizer production and sale. The Group monitors fertilizer imports volumes based on data provided by the Customs Chamber and reports from the field sales representatives. In order to best respond to market developments, the Group makes changes to its marketing/pricing policy, bringing its prices in line with those of competitors, thus ensuring placement of the planned volumes on the market. The Group also takes steps to optimise production costs and broaden the portfolio of products and services offered to customers.

**Measures taken by the Group to strengthen its competitive edge** include pursuit of the objectives laid down in its updated strategy with respect to distribution and capex projects designed to improve production efficiency. The Group is actively involved in the work of Fertilizers Europe (the European Fertilizer Manufacturers Association). It also works with universities and research institutes and assists agricultural producers to ensure they have access to state-of-the-art production and fertilizer solutions.

**Risk of implementation/tightening of EU or local regulations which would restrict the use or application of the Company’s products**

**Grupa Azoty Group - medium risk / Parent - medium risk**

The Group monitors and implements new requirements on an ongoing basis. The Group takes an active part in the work of registration consortia and European associations, and cooperates with Polish institutions to receive advance information on upcoming changes in the legislation.

In each case the Group reviews the impact of new regulations on its operations and marketed products. Possible amendments tightening EU directives or regulations applicable to the Group’s key manufacturing and trading activities give rise to a potential risk that the use or application of the Group’s products by customers in the EU countries may be restricted.

**Risk associated with new legal requirements relating to production processes, including environmental regulations**

**Grupa Azoty Group - medium risk / Parent - medium risk**

Risk associated with new legal requirements relating to production processes, including environmental regulations on GHG emissions or other forms of adverse environmental impact.

Grupa Azoty 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 the Group’s investment plans.

In 2017 and 2018, a number of bills, subsequently enacted into law, which had a material effect on the operations of the Company and the Group were issued. These included The Water Law of July 20th 2017 (Dz. U. of 2017, item 1566), the Act amending the Environmental Protection Law and the Waste Act, dated July 20th 2018, and the Amended Waste Act (Dz. U. of 2018, item 1592). Based on the available information, the Group will be required to comply with BAT LCP, BAT WGC and a set of legal acts on waste in the coming years.

On behalf of all the Group companies, the Environmental Protection Department at Grupa Azoty S.A. prepares - on a case-to-case basis - comments on draft amendments and takes steps to rationalise the additional cost of implementing changes in legislation. Grupa Azoty S.A. seeks to ensure uniform legal interpretation of new regulations. As part of these efforts, it analyses the risks and opportunities that each new regulation involves for the key production processes and for business interests of the individual Group companies.

**Currency risk**

**Grupa Azoty Group - medium risk / Parent - medium risk**

Risk of excessive finance costs, failure to achieve profit guidance or targets as a result of adverse exchange rate changes (taking into account the hedging programme).
The Group has positive exposure to the euro and the US dollar, which is hedged based on ongoing monitoring of movements in the euro and US dollar exchange rates. The Group Companies hedge their currency exposures using currency forwards and natural hedging. Since 2014, the Group has applied the Financial (Currency and Interest Rate) Risk Management Policy. Since 2015, a centralised financing model has also been in place, supporting a long-term hedge horizon by contracting a portion of long-term financing in the form of a euro-denominated facility. Starting from 2017, the Group has also reduced its euro-denominated net currency exposure as a result of increasing the extent of natural hedging.

The Group's Risk Committee analyses and sets consolidated targets for currency exposure of the Group and its leading companies, and recommends target levels and horizons of hedges, types of currency instruments, and exchange rates for hedge transactions. Hedging transactions are executed by those Group companies where the exposure actually occurs. The applied risk management methods enable the Group to limit the existing risk exposure 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 condition or performance. In addition, the Group applies hedge accounting by matching specific foreign currency positions to be hedged with hedging instruments with a time horizon of more than one year.

**Interest rate risk**

**Grupa Azoty Group - low risk/ Parent - low risk**

Grupa Azoty S.A. 's net exposure to the interest rate risk is partly limited as the Company has credit facilities bearing interest at 1M WIBOR plus the banks’ margins. At the same time, the Company advances to the Group companies loans bearing interest at the same variable rate and invests cash surpluses in short-term deposits (bearing interest at the current market rates WIBOR and WIBID). The Group also uses surplus cash in PLN and EUR to balance debt owed by the Group companies in PLN and EUR under overdraft agreements connected with physical cash pooling agreements (from 2016 in PLN and from 2018 in EUR). This limits the Group’s net exposure to interest rate risk. In addition, by 2017 the Company had utilised the long-term fixed-rate loan facility from the EIB, which was disbursed for 10 years in tranches up to an agreed aggregate amount in the euro.

The Group also has access to transaction limits with banks, which enable it to enter into fixed-rate hedging transactions (e.g. FRA) if the risk of a significant increase in financing costs due to higher variable market interest rates grows. Furthermore, the Group has implemented the Financial (Currency and Interest Rate) Risk Management Policy, which comprises:

- centralised supervision of the financial risk management process,
- monitoring of the Group’s and its individual companies’ consolidated interest rate risk exposure,
- defining the optimum hedging strategy at the Group level,
- uniform rules of interest rate risk management at the Group,
- uniform catalogue of acceptable and applied hedging instruments,
- consistent hedging limits and time horizons, determined based on an analysis of the Group’s and its companies’ planned currency exposure and VaR analysis.

The Group has a Risk Committee which analyses and defines the Group’s and its material companies’ consolidated exposure to interest rate risk and may recommend to the Group’s Management Board the strategies for interest rate risk hedging.

In 2016, the Risk Committee determined that in the event of low market interest rates (actual or planned), risk indicators will be calculated and risk assessment will be performed based on a scenario analysis with respect to the Group’s and its companies’ actual exposure to that risk. If the risk exposure and/or market interest rates significantly increase, the Risk Committee will consider whether the value exposed to interest rate risk should be calculated in accordance with the VaR methodology.

Agreements hedging against the interest rate risk should be concluded by the Parent, which is a borrower under the New Financing agreements and the Agent under the overdraft facility agreements and multi-purpose credit facility agreements, because hedging transactions should be made where the exposure actually takes place. Under the loan agreement with the EIB, the Group is obliged to keep its consolidated EBITDA to net interest expense ratio at no less than 6x.
6.2. Significant external and internal growth factors

The World Bank estimates that in 2018 the global GDP grew by 3%. According to the World Bank, in 2019 the global economy will expand at a lower pace of 2.9%, on the back of, among others, economic and financial problems in emerging and developing economies. According to the European Commission, Poland’s GDP in 2018 grew at a record-high rate of 5.1%, driven primarily by domestic demand, particularly strong private consumption and public investment. The European Commission expects Poland’s GDP to slow down to 3.5% and 3.2% in 2019 and 2020, respectively.

Interest rates in Poland

Domestic interest rates remained stable throughout 2018 and, in line with the Governor of the National Bank of Poland’s announcements, should remain unchanged in 2019. Thus, the main reference rate applicable to the Grupa Azoty Group’s credit facilities (1M WIBOR) should stay flat at about 1.7%. This will help stabilise the Group’s borrowing costs at a relatively low level and reinforce its debt service capacity, also if the Group decides to increase debt to finance its investing activities, as planned.

Given that the eurozone has already seen the peak of its economic growth and that the rise in inflation is limited, the European Central Bank continues its quantitative easing programme and a policy of negative interest rates, which should remain at current levels at least until the end of 2019, considering that core inflation remains low following a long period of deflation. On the other hand, in 2018 the FED continued to gradually taper its accommodative monetary policy, in connection with the continued economic recovery in the US and concerns regarding increased inflationary pressures. However, there are signals of a slowdown in the US economy, which means that the probability of further increases in interest rates for USD-denominated debt in 2019 is significantly lower.

Therefore, any adverse changes to the current low interest rates on debt in the currencies used by the Group to finance its activities (PLN and EUR) are relatively unlikely. Thus the risk of the Group’s financial condition or results of operations deteriorating on higher borrowing costs should be considered low.

Relative to market rates, the relatively narrow spread between credit and deposit rates available to the Group is expected to continue. Interest income earned on free cash under cash pooling and fixed-term deposits will partially offset the borrowing costs.

Regulatory area

- In 2018, work continued on a new fertilizers regulation - the Trilogue (tripartite talks between the European Parliament, Council of the European Union and European Commission). At the end of the year, the European Parliament’s IMCO Committee adopted the procedure negotiated at the European Council for solving disputes. On January 1st 2019, Romania took over EU presidency from Austria. The work is expected to be completed in the first quarter of 2019, provided the European Parliament votes in favour.

- In January 2018, the European Commission issued a communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, concerning the European Strategy for Plastics in a Circular Economy. The Strategy is to transform the way plastic products are designed, used, produced and recycled in the EU. In May 2018, the ENVI Committee published a proposal for a directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment. The directive proposes a variety of measures in respect of specific single use plastic products, taking into account consumers’ needs and behaviour as well as business opportunities. The directive is expected to come into force in the first half of 2019.

- Following the publication of amendments to the EU ETS Directive, in March 2018 the European Commission commenced work on the implementing acts for phase 4 of the system (2021-2030). A new list of sectors which will receive allowances free of charge and sectors at risk of carbon leakage was published. The list includes the Grupa Azoty Group’s products, which ensures 100% allocation of free allowances up to the benchmark values. Work is nearing completion on the following projects: Commission Delegated Regulation establishing the Innovation Fund, the regulation determining transitional Union-wide rules for harmonised free allocation of emission allowances, and implementing act on activity level changes (dynamic allocation). Government administration in Poland started to identify investment areas to be financed with the funds from the modernisation fund, derogation under Article 10c of the EU ETS Directive, and the Solidarity Provision. The European Commission is preparing to update the benchmark levels and review the

- Aid to undertakings in sectors deemed to be exposed to a significant risk of carbon leakage due to EU ETS allowance costs passed on in electricity prices (aid for indirect emission costs). The list of legislative acts being prepared by the Council of Ministers includes a draft act concerning compensation for indirect emission costs. The purpose of the draft act is to provide annual compensation for the cost of emission allowances, passed on in the price of electricity used for manufacturing products in energy-intensive sectors and subsectors referred to in the annex to the Guidelines on certain State aid measures in the context of the greenhouse gas emission allowance trading scheme. The funds allocated to the payment of compensation for a given calendar year may not exceed 25% of revenue from sale of emission allowances by way of an auction, achieved in the year preceding the year for which compensation is granted.

- Solutions reducing the cost of electricity for energy-intensive sectors. Reduced capacity charges for industrial users, provided for in the Act on Capacity Market of December 8th 2017, and reduced cogeneration charges, introduced by the Act to support programmes for electricity from high-efficiency co-generation of December 14th 2018, need to be notified to and approved by the European Commission.

- In the short and long terms, Germany will further tighten its fertilization plans as part of the continued implementation of the Nitrates Directive in the current fertilizer season. In the market’s opinion, this may translate into a fall in Germany’s consumption of nitrogen fertilizers, especially urea, partly offset by higher consumption of nitrate fertilizers or smart/speciality fertilizers.

- Poland and other EU members are in the process of implementation of the NEC Directive. For the year 2020-2030, the Directive sets new national emission reduction commitments for the six main pollutants: sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia, particulate matter (soot) and methane. Reducing ammonia emissions will play a key role with regard to both mineral and organic fertilizers. Compared with emission levels from 2005, the target for Poland is to reduce ammonia emissions by 1% in 2020-2029, and 17% from 2030 onwards. The Polish government must submit its air pollution control programme, monitoring data, and air pollutant emission inventory and projections to the European Commission. Currently, at the ministerial and advisory level, work is under way to prepare draft laws and regulations implementing the Directive in Poland. The probable time for public consultations is the first half of 2019.

- In Poland, the Polish Council of Ministers’ Regulation on the adoption of the ‘Programme to reduce the pollution of water with nitrates from agriculture and to prevent further pollution’ came into force in July 2018. The programme was launched as part of the implementation of the Nitrates Directive and the Water Law. In the short- and long-term, the programme will impose increased obligations, principally on breeders and large agricultural producers. The key objective of the programme is to introduce measures aimed at limiting nitrogen outflow to waters (e.g. by improving the effectiveness of fertilizer application). The programme will also increase analytical and reporting obligations on the part of agricultural producers.

- Work is also under way to amend the Polish Fertilizers and Fertilization Act in order to achieve the objectives set out in the national document concerning the directions for the construction of agricultural biogas plants for 2010-2020 and the provisions of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

- 2018 saw continued implementation of China’s pro-environmental policy translating into long-term restrictions on the utilisation of the chemical sector’s production capacities, including fertilizer and caprolactam production capacities and, consequently, into an improved global balance of products of key importance for the Group. Another step was the introduction, as of January 1st 2018, of the environmental tax under the Polish Environmental Protection Tax Act.

**Trade policy**

- The five-year anti-dumping duty on caprolactam imports to China from the EU and the US, imposed on October 22nd 2011, expired. No new decision in this regard has yet been made. The Chinese authorities are reviewing the situation to decide whether to extend or abolish the caprolactam duties. Among the companies subject to the duty are Grupa Azoty PULAWY and Grupa Azoty S.A., for which the rates were set at 4.4% and 4.9%, respectively.

- China applies anti-dumping duties on imports of polyamide 6 originating in the European Union, the United States, Russia and Taiwan. The most recent decision to uphold the anti-dumping duties for another five years was made in April 2016. The customs duty rates for Grupa Azoty S.A. and Grupa Azoty ATT Polymers GmbH were set at 9.7% and 23.9%, respectively.
• On August 8th 2018, the United States announced a new round of anti-dumping duties on materials imported from China. Materials covered by the new round include polymers, among them PA 6. The current anti-dumping duty rate is 25%, effective as of August 23rd 2018.

• Following an anti-dumping investigation, on July 2nd 2018 the European Commission imposed, by means of Implementing Regulation (EU) No 2017/1171, a definitive anti-dumping duty on imports of melamine originating in China. The measures took the form of a fixed duty of EUR 415 per tonne on all imports from China with the exception of three cooperating Chinese exporting producers, which were granted a minimum import price of EUR 1,153 per tonne. The measures were imposed for a period of five years, i.e. until July 2nd 2022.

• The Chinese Ministry of Finance imposed, as of September 24th 2018, a 5% and 10% duty on products originating in the US, with a market value of USD 60bn. This was a response to the US administration’s decision limiting, among other things, the imports of fertilizers from China.

• In November 2018, the European Commission completed two anti-dumping reviews regarding ammonium nitrate imports from Russia. The Russian manufacturers’ request was rejected and the EU agricultural associations’ request was granted - the anti-dumping duty was reduced from approximately EUR 47 per tonne to approximately EUR 32 per tonne. The European Commission’s decision was announced in the Official Journal of the European Union on November 16th 2018.

• On August 13th 2018, in the Official Journal of the European Union, the European Commission announced the launch of an anti-dumping (AD) procedure concerning mixtures of urea and ammonium nitrate - UAN (CN Code 3102 80 00) imported from Russia, Trinidad and Tobago, and the US. The European Commission’s decision is expected to come into force in September 2019.

• Negotiations within the UK government and with the European Commission regarding the UK leaving the European Union (Brexit) at an impasse. The ‘no-deal Brexit’ is becoming increasingly likely (the European Commission has launched an information campaign for companies in case of the UK leaving the EU without a deal).

• Negotiations of the European Union’s trade agreements with the following third countries are currently being finalised: Vietnam (entry into force in 2019), Singapore (awaiting adoption by the Council), Southern Common Market (Argentina, Brazil, Paraguay, Uruguay - negotiation phase), Mexico, Chile (negotiation phase), Australia and New Zealand (negotiation phase).

• On July 6th 2018, the Council of the European Union decided to sign an economic partnership agreement with Japan and to request the European Parliament to grant approval for the conclusion of this agreement. The negotiation guidelines were adopted in 2012, and the agreement was ratified in late 2018. Upon the entry into force of the economic partnership, duties on more than 90% of products, including fertilizers, will be lifted. Full implementation of the agreement will result in the lifting of duties for 97% of goods.

• Ukraine applies anti-dumping duties of about 32% on nitrogen fertilizers from Russia. In March 2018, Ukraine’s anti-dumping duties on ammonium nitrate imported from Russia were increased. The anti-dumping duty on ammonium nitrate was set at 29.25% for Dorogobuzh and at 42.96% for other Russian exporters. The previous anti-dumping duty was 31.84%. Anti-dumping duties on imports of nitrogen fertilisers, including ammonium nitrate from Russia, were imposed in 2014 and are to expire in 2019. The situation may be changed by a WTO ruling as Russia has lodged a complaint with the organization.
7. Shares and shareholding structure

7.1. Total number and par value of Grupa Azoty shares, holdings of the shares by supervisory and management personnel, and interests of such persons in the Parent’s related entities

Number and par value of shares as at the date of issue of this Report:
- 24,000,000 Series AA shares with a par value of PLN 5 per share,
- 15,116,421 Series B shares with a par value of PLN 5 per share,
- 24,999,023 Series C shares with a par value of PLN 5 per share,
- 35,080,040 Series D shares with a par value of PLN 5 per share.

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

As at December 31st 2018 and as at the date of this Report, none of the members of the Parent’s Management or Supervisory Boards held any shares in the Parent’s share capital.

As at the date of this Report, none of the Parent’s supervisory or management personnel held any shares in the Parent’s related parties.

7.2. Treasury shares held by the Parent, the Group companies and persons acting on their behalf

The Parent holds no treasury shares. The Group companies hold no shares in the Parent.

7.3. Grupa Azoty shares

The Parent stock has been listed on the Warsaw Stock Exchange since June 30th 2008. The Parent’s share capital amounts to PLN 495,977,420 and is divided into 99,195,484 shares with a par value of PLN 5 per share. The Parent’s shares (ticker: ATT) are listed on the WSE main market in the continuous trading system and are included in the following domestic indices:
- WIG – comprising all stocks traded on the WSE Main Market which satisfy the basic eligibility criteria. Grupa Azoty S.A.’s share in the WIG index: 0.59%.
- WIG30 – based on the value of the 30 largest and most liquid stocks traded on the WSE Main Market;
- mWIG40 – comprising 40 medium-sized companies listed on the WSE Main Market;
- WIG-Chemia – a sector index comprising those companies included in the WIG index which are also classified in the Chemicals sector;
- WIG.Poland – an index comprising exclusively shares of Polish companies listed on the Main Market of the WSE and meeting the basic eligibility criteria.

The Parent is also included in the following foreign indices:
- MSCI indices - in the semi-annual revision of the MSCI indices of November 13th 2018, Grupa Azoty was transferred from the MSCI GLOBAL STANDARD INDEXES – MSCI POLAND INDEX to MSCI GLOBAL SMALL CAP INDEXES – MSCI POLAND INDEX;
- FTSE indices – following FTSE Russell’s reclassification of the Polish market from developing markets to developed ones, since September 24th 2018 Grupa Azoty has been included in the FTSE DEVELOPED MARKETS index;
- Since June 15th 2018, Parent shares have been traded on the Berlin Open Market (Boerse Berlin).

The Parent is included in CSR indices:
- Since November 19th 2009, the Parent has been a constituent of the RESPECT index of the Warsaw Stock Exchange,
- FTSE4Good Emerging – an index launched in December 2016, including companies reporting environmental events, corporate governance and social responsibility issues.
All other key information on Parent shares, including information on voting restrictions, is presented in the sections concerning the *Statement of compliance with corporate governance rules*.

**Shareholding structure**

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

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

**Shareholding structure as at December 31st 2018**

<table>
<thead>
<tr>
<th>Shareholder</th>
<th>Number of shares</th>
<th>Ownership interest (%)</th>
<th>Number of votes</th>
<th>% of voting rights</th>
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<td><strong>Total</strong></td>
<td><strong>99,195,484</strong></td>
<td><strong>100.00</strong></td>
<td><strong>99,195,484</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

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

In the period from December 31st 2018 to the issue date of this Report, the Parent was not notified of any changes in major holdings of its shares.

**Dividend policy**

In accordance with the Parent’s dividend policy, applied in line with its updated Strategy for 2013−2020, it decided not to set a lower limit for the dividend payout ratio, and to maintain the upper limit at 60%.

The main goal underpinning Grupa Azoty’s financing structure is to ensure long-term financial security and internal coherence between all funding sources. Given the extensive capital investment programme in place and the risk of an economic downturn, no floor has been set for the dividend payout ratio. Accordingly, if justified, the Parent’s Management Board will not recommend a dividend payment.

The final decision on profit distribution for a given financial year is made each time by shareholders at the Annual General Meeting.

In the reporting period, the Parent distributed profit for 2018. The amount of profit allocated for distribution was PLN 123,994,355,00 thousand (i.e. PLN 1.25 per share). The dividend record date and the dividend payment date were set for July 25th 2018 and August 8th 2018, respectively.
Dividend paid out in 2008–2018

<table>
<thead>
<tr>
<th>Year for which dividend was paid</th>
<th>Dividend record date</th>
<th>Dividend payment date</th>
<th>Profit earned</th>
<th>Total dividend</th>
<th>Dividend per share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Jun 26 2009</td>
<td>Instalment 1: Aug 31 2009</td>
<td>PLN 61,935 thousand</td>
<td>PLN 39,898,749.42</td>
<td>PLN 1.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instalment 2: Nov 6 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Apr 22 2013</td>
<td>May 24 2013</td>
<td>PLN 250,692 thousand</td>
<td>PLN 148,793,226.00</td>
<td>PLN 1.50</td>
</tr>
<tr>
<td>2013</td>
<td>Jun 18 2014</td>
<td>Jul 9 2014</td>
<td>PLN 44,117 thousand</td>
<td>PLN 198,839,096.80</td>
<td>PLN 0.20</td>
</tr>
<tr>
<td>2015</td>
<td>Jun 20 2016</td>
<td>Jul 11 2016</td>
<td>PLN 209,055 thousand</td>
<td>PLN 83,324,206.56</td>
<td>PLN 0.84</td>
</tr>
<tr>
<td>2016</td>
<td>Aug 4 2017</td>
<td>Aug 23 2017</td>
<td>PLN 224,775 thousand</td>
<td>PLN 78,364,432.36</td>
<td>PLN 0.79</td>
</tr>
<tr>
<td>2017</td>
<td>Jul 25 2018</td>
<td>Aug 8 2018</td>
<td>PLN 354,793 thousand</td>
<td>PLN 123,994,355.00</td>
<td>PLN 1.25</td>
</tr>
</tbody>
</table>

Source: Company data.

Performance of Grupa Azoty shares

At the close of the last trading session in 2017, Grupa Azoty shares traded at PLN 69.60. Until mid-January 2018, the price went up sharply to PLN 76 and subsequently went down to around PLN 65 in the first ten days of February, marking a clear downward trend. The downward trend in the share price was not only maintained, but also dramatically accelerated in the following months of 2018 with sporadic attempts at trend reversal. At the beginning of the second half of 2018, the stock price stabilised in the range PLN 42–44, to slump to PLN 36–38 in August and September 2018. The beginning of the fourth quarter of 2018 saw the price plummet to PLN 22 per share, the level last seen in 2011. The price decrease was largely attributable to higher prices of energy carriers (gas and electricity), and CO₂ emission allowances, as well as to fertilizers oversupply. Another important factor was the sell-out of the shares by emerging markets funds as part of portfolio restructuring following FTSE’s reclassification of Poland to developed markets. The relatively low free float added to the adverse price fluctuations. After the local minimum, the rebound pushed the price back to around PLN 30, and temporarily to almost PLN 35. This short-lived peak was connected with the record trading volume following the reclassification of Grupa Azoty S.A. to the MSCI GLOBAL SMALL CAP INDEXES index - MSCI POLAND INDEX as of November 30th 2018. At the end of 2018, the Company stock traded at PLN 31.18 and rose to PLN 35 at the beginning of 2019.

Performance of Grupa Azoty shares

<table>
<thead>
<tr>
<th>Metric</th>
<th>Unit of measurement</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shares</td>
<td>shares</td>
<td>99,195,484</td>
</tr>
<tr>
<td>Capitalisation at year-end</td>
<td>PLNm</td>
<td>3,093</td>
</tr>
<tr>
<td>Average trading volume per session</td>
<td>shares</td>
<td>116,076</td>
</tr>
<tr>
<td>Trading value</td>
<td>PLNm</td>
<td>1,026</td>
</tr>
<tr>
<td>Lowest closing price</td>
<td>PLN</td>
<td>22.82</td>
</tr>
<tr>
<td>Highest closing price</td>
<td>PLN</td>
<td>75.95</td>
</tr>
</tbody>
</table>

Source: In-house analysis based on the WSE Statistics Bulletin.
Grupa Azoty share price from January 1st 2018 to December 31st 2018

Source: In-house analysis based on the WSE data.

Parent’s share price from the IPO (June 30th 2008) to December 31st 2018

Source: In-house analysis based on the WSE data.
Performance of Grupa Azoty shares against the Chemicals index

Source: In-house analysis based on the WSE data.

Recommendations
In 2018, seven brokerage houses covering the Parent issued 26 price target recommendations for its stock.

Recommendations for Company stock issued from January 2st 2018 to December 31st 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Recommendation</th>
<th>Price target</th>
<th>Price at recommendation</th>
<th>Broker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 7 2018</td>
<td>Hold</td>
<td>PLN 32.70</td>
<td>PLN 31.48</td>
<td>TRIGON DM</td>
</tr>
<tr>
<td>Nov 23 2018</td>
<td>Hold</td>
<td>PLN 33.00</td>
<td>PLN 32.36</td>
<td>DM mBank</td>
</tr>
<tr>
<td>Nov 5 2018</td>
<td>Buy</td>
<td>PLN 31.47</td>
<td>PLN 24.94</td>
<td>DM mBank</td>
</tr>
<tr>
<td>Oct 22 2018</td>
<td>Hold</td>
<td>PLN 27.30</td>
<td>PLN 25.10</td>
<td>TRIGON DM</td>
</tr>
<tr>
<td>Oct 7 2018</td>
<td>Sell</td>
<td>PLN 24.20</td>
<td>PLN 28.20</td>
<td>DM BOŚ</td>
</tr>
<tr>
<td>Sep 24 2018</td>
<td>Hold</td>
<td>PLN 31.80</td>
<td>PLN 32.70</td>
<td>DM BDM</td>
</tr>
<tr>
<td>Sep 3 2018</td>
<td>Hold</td>
<td>PLN 41.13</td>
<td>PLN 38.00</td>
<td>DM mBank</td>
</tr>
<tr>
<td>Aug 13 2018</td>
<td>Hold</td>
<td>PLN 43.75</td>
<td>PLN 36.14</td>
<td>DM BOŚ</td>
</tr>
<tr>
<td>Aug 2 2018</td>
<td>Hold</td>
<td>PLN 42.13</td>
<td>PLN 41.90</td>
<td>DM mBank</td>
</tr>
<tr>
<td>Jul 19 2018</td>
<td>Buy</td>
<td>PLN 53.00</td>
<td>PLN 43.22</td>
<td>TRIGON DM recommendation suspended as of September 10th 2018</td>
</tr>
<tr>
<td>Jul 18 2018</td>
<td>Hold</td>
<td>PLN 46.40</td>
<td>PLN 43.42</td>
<td>PKO BP</td>
</tr>
<tr>
<td>Jul 9 2018</td>
<td>Hold</td>
<td>PLN 45.00</td>
<td>PLN 44.08</td>
<td>DM BOŚ</td>
</tr>
</tbody>
</table>
Investor relations

Acting in accordance with the highest standards of capital market communications and corporate governance, the Parent provides all market participants, in particular current and prospective shareholders, with exhaustive and reliable information on events taking place at the Parent and the Group. In its communication with investors, the Parent goes above and beyond the statutory disclosure requirements, pursuing an open information policy in compliance with the principle of equal access to information. As part of the consolidation process, communication with the capital market is conducted jointly for all issuers from the Group to present a coherent picture of the Group to investors.

Following the issue of periodic reports, the Group holds earnings conferences at which representatives of the Management Boards of the issuers from the Group present and discuss their financial performance. Because of the shareholding structure and significant interest they attract, earnings conferences for capital market analysts are broadcast online in real time, in Polish and in English. Conference recordings together with the presentations are available on the Parent’s website and on social networking sites.

Grupa Azoty representatives also meet with capital market participants during numerous one-on-one meetings and roadshows, and at investor conferences held both in Poland and abroad. Investors and analysts may attend site visits, organised on a regular basis by Grupa Azoty, at which they can visit production sites and meet with key managers responsible for operations of the Group’s segments. Keen to communicate with its retail investors, following the issue of each financial report the Group also holds open webchat sessions with Vice President of the Grupa Azoty Management Board in charge of finance and investor relations, where the shareholders are able to communicate directly and ask questions concerning the Group’s performance and current condition.

Since its IPO, Grupa Azoty has held annual meetings with retail investors during the Wall Street conference and the affiliated ‘Moje inwestycje’ fair, both organised by the Polish Association of Retail Investors (“SII”). In 2018, Grupa Azoty was a partner of the conference.

In response to the shareholders’ expectations, the Parent makes every effort to ensure that the published information is disseminated among as many recipients as possible.

A key tool for communicating with the capital market is the Parent’s corporate website http://grupaazoty.com/, featuring:

- Current and periodic reports,
- Presentations of periodic financial results and investor presentations,
• Multimedia files with recordings of earnings conferences and comments on financial performance in individual periods,
• Chat logs,
• Analyst recommendations,
• FAQ section, containing answers to the most frequently asked questions,
• Interactive calendar of corporate events,
• Strategy of the Grupa Azoty Group,
• Information on the corporate bodies.

Current information about the Group is also published in social media, such as Twitter, Youtube, and Facebook.

The content and presentation quality of Grupa Azoty’s IR section, as well as the use of the Internet to communicate with investors, were recognised multiple times by the jury of the Golden Website Award for Listed Companies, organised by the Polish Association of Listed Companies, achieving a high rank in the competition. The website already received the Golden Website Award in the past, during its 7th and 8th edition.

Grupa Azoty’s IR efforts were also recognised by financial market institutions, as confirmed by the awards received in 2018:
• Two companies of the Grupa Azoty Group, Grupa Azoty S.A. and Grupa Azoty Police, have earned the prestigious title of ‘Transparent Company 2017’ in the second edition of a ranking run by the Parkiet daily and the Institute of Accountancy and Taxes, with the support of the Warsaw Stock Exchange.
  The aim of the ranking is to promote the most transparent and best communicating companies included in the three main WSE indices: WIG20, WIG40 and WIG80. Grupa Azoty S.A. was awarded in the mWIG40 category and Grupa Azoty Police – in sWIG80. The ‘Transparent Company 2017’ ranking was based on a survey covering the most important areas of market communication: financial reporting, investor relations and corporate governance.
• Grupa Azoty S.A. was distinguished for the “highest quality of retail investor relations” at the cyclical Wall Street conference held in Karpacz by the Polish Association of Retail Investors.

In addition, Grupa Azoty S.A. has been a constituent of the RESPECT Index since its inception in 2009. Inclusion in the RESPECT Index depends, first and foremost, on demonstrating excellence in communication with the market through current and periodic reports and through websites, as well as socially responsible conduct vis-à-vis the environment, communities and employees.

8. Statement of compliance with corporate governance standards

8.1. Corporate governance code applicable to the Parent and the place where the text of the code is available to the public

8.2. Information on the Parent's non-compliance, if any, with the corporate governance standards and reasons for such non-compliance

Since the flotation of its shares on the WSE in 2008, the Parent's aim has been to observe the best corporate governance practices, which was expressed in the declaration of the Parent's Management Board contained in the issue prospectuses and confirmed in the Management Board's resolutions on the adoption of the recommendations and principles imposed by subsequent versions of the 'Best Practice for WSE Listed Companies'.

As the new ‘Best Practice for WSE Listed Companies’ applies now, the Company's Management Board declares that as of January 1st 2016 all the recommendations and detailed principles imposed thereby are followed, with the exception of:

- recommendation IV.R.2.
  "If justified by the structure of shareholders or expectations of shareholders notified to the company, and if the company is in a position to provide the technical infrastructure necessary for a general meeting to proceed efficiently using electronic communication means, the company should enable its shareholders to participate in a general meeting using such means, in particular through:
  1) real-time broadcast of a general meeting,
  2) real-time bilateral communication where shareholders may take the floor during a general meeting from a location other than the venue of the general meeting,
  3) exercise of the right to vote during a general meeting either in person or through a proxy."

Explanation: The Company's Articles of Association and the Rules of Procedure for the Company's General Meeting do not provide for real-time broadcasting of General Meetings. Also, the Company believes that the way General Meetings have been documented and carried out to date ensures transparency and safeguards the rights of all shareholders. Further, information on passed resolutions is published by the Company in the form of current reports, also on its website. Therefore, investors are able to review the matters discussed at General Meetings. However, the Company may apply this principle in the future.

In the opinion of the Company's Management Board, the decision not to apply the abovementioned principle will not affect the reliability of the Company's information policy, nor will it hinder shareholders' participation in General Meetings.

- and the following principles:
  I.Z.1.20 "A company should operate a corporate website and publish on it, in a legible form and in a separate section, in addition to information required under the legislation, an audio or video recording of a general meeting."

Explanation: The Company believes that the way General Meetings have been documented and carried out to date ensures transparency and safeguards the rights of all shareholders. Further, information on passed resolutions is published by the Company in the form of current reports, also on its website. Therefore, investors are able to review the matters discussed at General Meetings. However, the Company may apply this principle in the future.

In the opinion of the Company's Management Board, the decision not to apply the abovementioned principle will not affect the reliability of the Company's information policy, nor will it hinder shareholders’ participation in General Meetings.

IV.Z.2. "If justified by the shareholding structure, a company should ensure publicly available real-time broadcasts of general meetings."

Explanation: The Company's Articles of Association and the Rules of Procedure for the Company's General Meeting do not provide for real-time broadcasting of General Meetings. Also, the Company believes that the way General Meetings have been documented and carried out to date ensures transparency and safeguards the rights of all shareholders. Further, information on passed resolutions is published by the Company in the form of current reports, also on its website. Therefore, investors are able to review the matters discussed at General Meetings. However, the Company may apply this principle in the future.

In the opinion of the Company's Management Board, the decision not to apply the abovementioned principle will not affect the reliability of the Company's information policy, nor will it hinder shareholders’ participation in General Meetings.
Parent's report on compliance with recommendations of Best Practices in the reporting period

I. Disclosure Policy, Investor Communications

I.R.1. Where a company becomes aware that untrue information is disseminated in the media, which significantly affects its evaluation, it should immediately publish on its website a communiqué containing its position on such information, unless in the opinion of the company the nature of such information and the circumstances of its publication give reasons to follow a more adequate solution.

The Company declares to make every effort to prevent any damage that may be caused by disseminating untrue information about it. The Company seeks to ensure transparency by responding effectively to untrue information and limiting the negative effects of its dissemination. The Company takes care to provide its shareholders and the market with a true and accurate picture of the Group. Considering the above, the Group monitors the media, including newspapers, electronic media, and online resources.

I.R.2. Where a company pursues sponsorship, charity or other similar activities, it should publish information about the relevant policy in its annual activity report.

The Company pursues transparent sponsorship, charity and other similar activities. For details, see section 8.15 of this report.

I.R.3. Companies should allow investors and analysts to ask questions and receive explanations – subject to prohibitions defined in the applicable legislation – on topics of their interest. This recommendation may be implemented through open meetings with investors and analysts or in other formats allowed by a company.

The Company, pursuing an open information policy, provides all market participants, in particular current and prospective shareholders, with exhaustive and reliable information on events taking place at the Company and the Group. For details, see section … of this Report.

I.R.4. Companies should use best efforts, including taking all steps well in advance as necessary to prepare a periodic report, to allow investors to review their financial results as soon as possible after the end of a reporting period.

The Company takes all necessary steps to prepare periodic reports well in advance. When planning the issue dates for periodic reports, the Company seeks to ensure that investors are able to review the Company's financial results as soon as possible.

II. Management Board, Supervisory Board

II.R.1. To ensure the highest standards of the management board and the supervisory board of a company in efficient fulfilment of their obligations, the management board and the supervisory board should have members who represent high qualifications and experience.

In 2018, the Management Board and Supervisory Board were composed of persons holding university degrees in law, economics, chemical engineering and technology, as well as environmental engineering.

Moreover, most of the Board members completed post-graduate programmes in corporate management, polymer chemistry and technology, management control, MBA, as well as specialist courses or trainings, including in power engineering, transport of hazardous materials, management, project management, disclosure requirements applicable to WSE-listed companies, brokerage courses, training in asset management strategy, risk management and corporate governance.

For information on members of the Management and Supervisory Boards and their CVs, see section 8.12 of this report.

II.R.2. Decisions to elect members of the management board or the supervisory board of a company should ensure that the composition of these bodies is comprehensive and diverse among others in terms of gender, education, age and professional experience.

Pursuant to Art. 23.3 of the Company’s Articles of Association, a member of the Management Board should have a university degree and at least five years of professional experience in a managerial
position, except for a candidate for the position of the Management Board member elected by the Company’s employees.

Given their vast competences and professional experience, including experience in serving on supervisory bodies of chemical or financial companies, members of the Management Board and Supervisory Board manage and supervise the Company’s operations properly and to a sufficient degree. For information on members of the Management and Supervisory Boards, their gender, education, and professional experience, see section 8.12 of this report.

II.R.3.
Serving on the management board of a company should be the main area of the professional activity of management board members. Additional professional activities of management board members must not require such amounts of time and effort as would adversely affect the proper performance of the members’ duties and responsibilities at the company. In particular, management board members should not serve in governing bodies of other entities if the time devoted to such service were to prevent the proper performance of their duties and responsibilities at the company.

Some of the Company’s Management Board members also hold positions in governing bodies of the subsidiaries, which facilitates successful and effective enforcement of decisions made by the Parent’s Management Board at all Group companies with a view to maximising efficiency of the Group’s operations.

In addition, holding positions in governing bodies of the subsidiaries by the Management Board members strengthens the Management Board’s supervision of synergies and improves efficiency of the Group’s processes.

II.R.4.
Supervisory board members must be able to devote the time necessary to perform their duties.

The Supervisory Board exercises ongoing supervision of the Company’s operations in each area of its activity. Pursuant to Art. 37 of the Company’s Articles of Association, the Supervisory Board meetings are held at least once every two months.

In the financial year 2018, the Supervisory Board held 11 meetings and 14 voting procedures using means of remote communication.

II.R.5.
If a supervisory board member resigns or is unable to perform his or her duties, the company should immediately take steps necessary to ensure substitution or replacement on the supervisory board.

If there is a threat that resignation or inability to perform his or her duties by a member of the Supervisory Board may result in a vacancy on the Board, the Company declares to take necessary steps to fill such vacancy. In the event of any temporary vacancy on the Supervisory Board, the Company will report such circumstance as a breach of the principle.

In the composition of the Supervisory Board there are members appointed by the Company employees, pursuant to Art. 14 of the Act on Commercialisation and Privatisation.

II.R.6.
Being aware of the pending expiration of the term of office of management board members and their plans of further performance of duties on the management board, the supervisory board should take steps in advance to ensure efficient operation of the company’s management board.

The Company declares to apply this recommendation by ensuring continued operation of the Management Board, and by taking steps, sufficiently in advance, to ensure appropriate operation of the Company.

II.R.7.
A company should allow its supervisory board to use professional and independent advisory services necessary for the supervisory board to exercise effective supervision in the company. In its selection of the advisory service provider, the supervisory board should take into account the financial condition of the company.

Should the need arise, the Company declares to allow its Supervisory Board to use professional and independent advisory services necessary for the Board to exercise effective supervision. In its selection of the advisory service provider, the Supervisory Board should take into account the Company’s financial condition and internal procedures.
III. Internal systems and functions

III.R.1.
The company’s structure should include separate units responsible for the performance of tasks within its systems or functions, unless the separation of such units is not justified by the size or type of the company’s activity.

The Company’s structure includes separate units responsible for the performance of tasks within its systems or functions.
The Company’s Management Board is responsible for the implementation, maintenance, and efficiency of internal control, risk management, and compliance systems, as well as internal audit function as recommended by good practices. Persons responsible for the operation of organisational units which perform tasks related to the above systems and functions report directly to the President of the Management Board or to a designated Member of the Management Board. The Company has in place an audit committee.
The Company organisational chart is presented in section 2.1. of this report.

IV. General Meeting, Shareholder Relations

IV.R.1.
Companies should strive to hold an ordinary general meeting as soon as possible after the publication of an annual report and set the date in keeping with the applicable legislation.

The Company convenes a General Meeting and sets its date not only in keeping with the applicable legislation, but also strives to hold it as soon as possible after issuing an annual report and closing of General Meetings of the subsidiaries. In 2018, the Company convened the Annual General Meeting for June 28th 2018.

IV.R.2.
If justified by the structure of shareholders or expectations of shareholders notified to the company, and if the company is in a position to provide the technical infrastructure necessary for a general meeting to proceed efficiently using electronic communication means, the company should enable its shareholders to participate in a general meeting using such means, in particular through: 1) real-time broadcast of a general meeting, 2) real-time bilateral communication where shareholders may take the floor during a general meeting from a location other than the venue of the general meeting, 3) exercise of the right to vote during a general meeting either in person or through a proxy.

The Company does not apply the above recommendation. The Company’s Articles of Association and the Rules of Procedure for the Company’s General Meeting do not provide for real-time broadcasting of General Meetings. The Company believes that the way General Meetings have been documented and carried out to date ensures transparency and safeguards the rights of all shareholders. Further, information on passed resolutions is published by the Company in the form of current reports, also on its website. Therefore, investors are able to review the matters discussed at General Meetings. However, the Company may apply this principle in the future. In the opinion of the Company’s Management Board, the decision not to apply the abovementioned principle will not affect the reliability of the Company’s information policy, nor will it hinder shareholders’ participation in General Meetings.

IV.R.3.
Where securities issued by a company are traded in different countries (or in different markets) and in different legal systems, the company should strive to ensure that corporate events related to the acquisition of rights by shareholders take place on the same dates in all the countries where such securities are traded.

This recommendation does not apply to the Company. The Company shares are listed only on the main market of the Warsaw Stock Exchange.

V. Conflict of Interest, Related Party Transactions

V.R.1.
Members of the management board and the supervisory board should refrain from professional or other activities which might cause a conflict of interest or adversely affect their reputation as members of the governing bodies of the company, and where a conflict of interest arises, immediately disclose it.

Members of the Management Board and the Supervisory Board declare that they refrain from professional or other activities which might cause a conflict of interest. Members of the Management
Board and the Supervisory Board must notify the Management Board or the Supervisory Board, respectively, of any conflict of interest which has arisen or may arise, and should refrain from voting on a resolution on a matter which may give rise to such a conflict of interest. Any conflicts of interest are immediately and thoroughly investigated.

VI. Remuneration

VI.R.1. The remuneration of members of the company’s governing bodies and key managers should follow the approved remuneration policy.

The remuneration of members of the Company’s governing bodies and key managers follows the Company’s remuneration policy.

For details on the Company’s remuneration policy, see section 8.14 of this report.

VI.R.2. The remuneration policy should be closely tied to the company’s strategy, its short- and long-term goals, long-term interests and results, taking into account solutions necessary to avoid discrimination on whatever grounds.

The Company’s remuneration policy is closely tied to the Company’s strategy, its goals, interests, and results.

For details on the Company’s remuneration policy, see section 8.14 of this report.

VI.R.3. If the supervisory board has a remuneration committee, principle II.Z.7 applies to its operations.

On December 21st 2017, a Nomination and Remuneration Committee was appointed as a collective advisory body within the Supervisory Board.

Composition of the Nomination and Remuneration Committee is as follows:

- Bartłomiej Litwińczuk - Chair,
- Monika Fill - Member,
- Roman Romaniszyn - Member.

On June 20th 2018, Piotr Czajkowski was appointed as member of the Nomination and Remuneration Committee.

VI.R.4. The remuneration of members of the management board and the supervisory board and key managers should be sufficient to attract, retain and motivate persons with skills necessary for proper management and supervision of the company. Remuneration should be adequate to the scope of tasks delegated to individuals, taking into account additional duties, for instance on supervisory board committees.

The remuneration of members of the Management Board, Supervisory Board and key managers is compliant with the remuneration rules adopted by the corporate bodies. At the same time, the remuneration is sufficient to attract, retain and motivate persons with skills necessary for proper management and supervision of the Company, and is adequate to the scope of tasks delegated to those individuals.

For details on the rules of remuneration of the Management Board and Supervisory Board members, see section 8.14 of this report.

8.3. Internal control and risk management systems

Organisational solutions have been put in place at the Parent to ensure that risks involved in the preparation of financial statements are effectively and efficiently identified, managed, and eliminated. The solutions are based on internal regulations, organisational rules, workflow procedures, as well as the scopes of powers and responsibilities of the finance and accounting staff. The Company applies documented accounting policies, which relate in particular to the chart of accounts, measurement of assets and liabilities, calculation of net profit or loss, maintenance of the accounting books, rules to be followed in inventory taking, as well as data and database protection systems.
Accounting books are maintained using SAP, an integrated IT system interoperating with other complementary systems. All systems in place are protected against unauthorised access with periodically changed passwords and function-based access control. Source documents underlying accounting records are inspected by organisational units responsible for their review based on the division of duties and authority. Before any accounting entries are made, documents are subject to a final review performed by the accounting and tax personnel.

The Grupa Azoty Group takes care to ensure that its financial statements are prepared properly, that is in compliance with applicable regulations setting forth the reporting rules and procedures, and in accordance with the principles of fairness and completeness. Data sourced from the accounting records is based on entries made on the basis of appropriate source documents, which are verified through an inventory-taking of assets and review of transactions and balances in individual accounts by dedicated inventory-taking and review teams.

Preparation of the financial statements is overseen by Head of the Corporate Finance Department, who supervises the financial and accounting functions responsible for reviewing and recording economic events in the Company’s accounting books and generating the data necessary to prepare the financial statements.

The accounting policies meet the requirements set forth in the International Financial Reporting Standards/International Accounting Standards and the Polish Accounting Act. The Parent constantly monitors changes to the applicable financial reporting laws and regulations, and makes preparations sufficiently in advance to incorporate them into its rules and policies. Changes to accounting policies necessitated by amendments to accounting laws are made on an ongoing basis by the Company’s Management Board.

Once prepared, the financial statements are presented by Head of the Corporate Finance Department to the Company's Management Board. In order to confirm that the data in the financial statements is correct and consistent with the records in the Company’s accounting books, the financial statements are audited by an independent auditor, who issues an opinion on the financial statements. The auditor is selected by the Supervisory Board based on a recommendation issued by the Audit Committee (a standing committee of the Supervisory Board). As part of its activities, the Audit Committee monitors the financial reporting process, the effectiveness of internal control and risk management systems in place at the Company, the full-year separate and consolidated financial statements, as well as the work performed and reports prepared by a qualified auditor.

Financial statements adopted by the Management Board are subject to assessment by the Supervisory Board, which submits a written evaluation report to the General Meeting of Grupa Azoty.

The adopted procedures for the preparation of financial statements are intended to ensure accuracy of disclosures and their compliance with the law, and to guarantee that potential risks are identified and eliminated sufficiently in advance in order to obtain a reasonable assurance concerning the accuracy and fairness of the financial statements.

The Parent and the main subsidiaries of the Grupa Azoty Group have implemented the Enterprise Risk Management System based on the ISO 31000:2018 “Risk management principles and guidelines” standard and on good practices recommended in other recognised Enterprise Risk Management (ERM) standards.

The Parent has established the “Enterprise Risk Management Policy for the Grupa Azoty Group” and implemented procedural solutions describing the stages of the risk management process and detailed procedures for identification and assessment of enterprise risk at the Grupa Azoty Group companies. In accordance with the rules applicable at the Group, enterprise risk management at the Group companies consists of the following stages:

- risk identification taking into account opportunities and threats,
- assessment of risks and control mechanisms in place,
- establishing mitigation plans for specific risks,
- monitoring and reporting of enterprise risk levels.

Enterprise risk management is a process carried out at the operating level - at the Subsidiaries, and at the corporate level - at the Parent’s Corporate Risk Management Office. A Risk Management Committee and a Corporate Integration Team for Risk Management Process have been established to support the process of risk management.

The Group Companies conduct ongoing identification of risks, taking into account market analyses and amendments to key regulations. Based on the identified new risks, a periodic qualitative and quantitative analysis is carried out, for which the respective risk owners are responsible. Results of the periodical reviews are recorded in Risk Information Sheets and Risk Register and the collected...
data is used in periodic reports prepared for the Management and Supervisory Boards of Grupa Azoty S.A.

Risks are managed by the respective risk owners, who adopt risk management strategies, carry out day-to-day activities to analyse particular risk factors and monitor risk levels. The Parent monitors all key risks and areas of its exposure to market threats on an ongoing basis. The Group has in place optimisation measures to improve risk management efficiency.

8.4. Management standards and systems

Management standards
The Group operates an Enterprise Management Policy. The Policy, which defines the general plans and directions for the Grupa Azoty Group, was updated in September 2018. The Enterprise Management Policy sets out the mission, vision and strategic objectives of the Group companies. The objectives are implemented based on management systems compliant with the highest international standards.

The Enterprise Management Policy defines the Grupa Azoty Group as:
- stimulant for growth of the Polish chemical and related industries
- base for extending the product chain in Poland’s chemical industry
- opportunity to reduce Poland’s trade deficit in chemicals
- leader in research, development and innovation for the chemical and related industries in Poland
- platform for cooperation with state-controlled companies

To accomplish this mission, the following strategic objectives have been set:
- complete the Group consolidation process
- reinforce leadership in agricultural solutions in Europe
- strengthen the second operating pillar by expanding non-fertilizer business
- develop and implement innovations that drive the growth of the chemical industry

The Group companies pursue strategic objectives based on management systems conforming to the highest international standards. Operating priorities, such as high quality, care for technical safety and the environment, health safety of food, process safety, reducing environmental losses, energy efficiency improvement, giving priority to customers, are all efficiently monitored and ensure effective management.

In its operations, the Group complies with all applicable laws and regulations and strives to constantly improve the results of its operations, while minimising the associated risks.

Management systems
The Group pursues a Management Policy which guarantees that strategic goals are achieved in reliance on an integrated management system consistent with international standards. The Integrated Management System is structured around the following principles assuming giving priority to customers, reducing environmental losses and mitigating the risk of hazards, and continuous improvement.

The Parent has implemented:
- Quality Management System compliant with the ISO 9001:2015 standard,
- Environmental Management System compliant with the ISO 14001:2015 standard,
- Occupational Health and Safety Management System compliant with the PN-N-18001:2004 and BS OHSAS 18001:2007 standards (currently be adapted to the ISO 45001:2018 standard),
- Food Safety Management System compliant with the ISO 22000:2005 standard,
- PN-EN ISO/IEC 17025:2005 Management System (general requirements for the competence of testing and calibration laboratories),
- Management Standard compliant with the Fertilizers Europe Product Stewardship Standard,
- Enterprise Risk Management System based on ISO 31000 standard “Risk management principles and guidelines”,

In the reporting period, the management systems implemented at the Grupa Azoty Group were maintained and improved. The operating priorities: high quality and care for technical safety and the environment, are all efficiently monitored and facilitate effective management. The validity of
certificates confirming the systems’ compliance with relevant standards and requirements was maintained. Improvements were also made based on findings of external and internal audits of the certified management systems, and conclusions of the Management Review. The Grupa Azoty Group integrated its management systems on an ongoing basis and continuously monitored changes in laws, regulations, and standards, and took adaptive measures to ensure that the Group’s management systems are compliant with the amended ISO 9001:2015 and ISO 14001:2015 standards.

In the reporting period, Grupa Azoty’s quality management and environmental management systems were upgraded to comply with, respectively, the ISO 9001:2015 and the ISO 14001:2015 standards. Moreover, an energy management system compliant with the ISO 50001:2011 standard was implemented. Compliance of the management systems with the standards has been certified by independent certification bodies.

### 8.5. Shareholding structure

A shareholder is any person, including a parent and a subsidiary of such person, who is directly or indirectly entitled to exercise voting rights at the General Meeting under any legal title; this includes persons who do not hold shares in the Company, in particular usufructuaries, pledgees, as well as persons entitled to participate in the General Meeting despite having disposed of their shareholdings after the record date (Art. 46.5 of the Articles of Association). Detailed rights of the State Treasury (a shareholder) are defined in Art. 46.3 of the Articles of Association. It should be noted that the Articles of Association do not provide for any preference shares.

#### Shareholding structure as at January 1st 2018 (in accordance with the information provided in the full-year report for 2017)

<table>
<thead>
<tr>
<th>Shareholder</th>
<th>Number of shares</th>
<th>Ownership interest (%)</th>
<th>Number of votes</th>
<th>% of voting rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Treasury</td>
<td>32,734,509</td>
<td>33.00</td>
<td>32,734,509</td>
<td>33.00</td>
</tr>
<tr>
<td>ING OFE</td>
<td>9,883,323</td>
<td>9.96</td>
<td>9,883,323</td>
<td>9.96</td>
</tr>
<tr>
<td>Norica Holding S.à r.l.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(indirectly: 19,321,700 shares or 19.47%)</td>
<td>71,348</td>
<td>0.07</td>
<td>71,348</td>
<td>0.07</td>
</tr>
<tr>
<td>Rainbee Holdings Limited¹</td>
<td>9,820,352</td>
<td>9.90</td>
<td>9,820,352</td>
<td>9.90</td>
</tr>
<tr>
<td>Opansa Enterprises Limited¹</td>
<td>9,430,000</td>
<td>9.50</td>
<td>9,430,000</td>
<td>9.50</td>
</tr>
<tr>
<td>TFI PZU S.A.</td>
<td>8,530,189</td>
<td>8.60</td>
<td>8,530,189</td>
<td>8.60</td>
</tr>
<tr>
<td>Other</td>
<td>28,725,763</td>
<td>28.97</td>
<td>28,725,763</td>
<td>28.97</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99,195,484</strong></td>
<td><strong>100.00</strong></td>
<td><strong>99,195,484</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

¹) Direct subsidiary of Norica Holding S.à r.l.

On December 13th 2018, the Parent received a notification from attorney-in-fact Oscar Valters, given under Art. 69.1.2 in conjunction with Art. 87.1.7 of the Act of July 29th 2005 on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies (the “Public Offering Act”).

According to the notification, on December 7th 2018 Mr Valters was informed that his power of attorney on the securities accounts of Opansa Enterprises Limited and Rainbee Holdings Limited (companies established under the laws of Cyprus) and to the securities account of Norica Holding S.a.r.l., a Luxembourg law company, had been revoked. Prior to the revocation, Mr Valters held a power of attorney on securities accounts in which 19,657,350 Parent shares were registered, representing approximately 19.82% of all shares in the Parent and conferring 19,657,350 voting rights, or approximately 19.82% of total voting rights, at the Parent’s General Meeting.

Following the revocation, Mr Valters holds no power of attorney on any accounts that would have Company shares registered in them, nor does he hold any Parent shares. The notification also states that:

- Mr Valters is not the parent, within the meaning of the Public Offering Act, of any subsidiaries that would hold any Company shares,
- there are no persons referred to in Art. 87.1.3(c) of the Public Offering Act,
• Mr Valters does not hold any additional voting rights attached to shares that would be calculated in accordance with Art. 69b.2 and Art. 69b.3 of the Public Offering Act as he does not hold any financial instruments referred to in Art. 69b.1.1 and Art. 69b.1.2 of the Public Offering Act.

Shareholding structure as at December 13th 2018

<table>
<thead>
<tr>
<th>Shareholder</th>
<th>Number of shares</th>
<th>Ownership interest (%)</th>
<th>Number of votes</th>
<th>% of voting rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Treasury</td>
<td>32,734,509</td>
<td>33.00</td>
<td>32,734,509</td>
<td>33.00</td>
</tr>
<tr>
<td>ING OFE</td>
<td>9,883,323</td>
<td>9.96</td>
<td>9,883,323</td>
<td>9.96</td>
</tr>
<tr>
<td>Norica Holding S.à r.l. (indirectly: 19,657,350 shares or 19.82%)</td>
<td>406,998</td>
<td>0.41</td>
<td>406,998</td>
<td>0.41</td>
</tr>
<tr>
<td>Rainbee Holdings Limited¹</td>
<td>9,820,352</td>
<td>9.90</td>
<td>9,820,352</td>
<td>9.90</td>
</tr>
<tr>
<td>Opanza Enterprises Limited¹</td>
<td>9,430,000</td>
<td>9.51</td>
<td>9,430,000</td>
<td>9.51</td>
</tr>
<tr>
<td>TFI PZU S.A.</td>
<td>8,530,189</td>
<td>8.60</td>
<td>8,530,189</td>
<td>8.60</td>
</tr>
<tr>
<td>Other</td>
<td>28,390,113</td>
<td>28.62</td>
<td>28,390,113</td>
<td>28.62</td>
</tr>
<tr>
<td>Total</td>
<td>99,195,484</td>
<td>100.00</td>
<td>99,195,484</td>
<td>100.00</td>
</tr>
</tbody>
</table>

¹) Direct subsidiary of Norica Holding S.à r.l.

In the period from December 13th 2018 to the issue date of this Report, the Parent was not notified of any changes in major holdings of its shares.

Major shareholders in the Company

• The State Treasury - the Government of the Republic of Poland represented by the Chancellery of the Prime Minister,
• TFI PZU S.A. - Towarzystwo Funduszy Inwestycyjnych PZU S.A. - financial investor; one of Poland’s largest investment fund companies, member of the PZU Group,
• ING OFE (currently NN OFE) - Nationale-Nederlanden Otwarty Fundusz Emerytalny, managed by Nationale-Nederlanden Powszechne Towarzystwo Emerytalne S.A. - financial investor, member of NN Group N.V.,
• Norica Holding S.à r.l. - a subsidiary of Acron and Mr. Viatcheslav Kantor, Norica Holding S.à r.l. and its subsidiaries Opanza Enterprises Limited and Rainbee Holdings Limited hold 19.82% of shares in the Company.
8.6. Special control powers of securities holders

Pursuant to Art. 16.2 of the Parent’s Articles of Association, the State Treasury of Poland, as a shareholder, has an individual right to appoint and remove one member of the Supervisory Board. Furthermore, in accordance with Art. 43.1.3 and 43.1.4 of the Parent’s Articles of Association, the General Meeting is convened by the Management Board:

- At the request of a shareholder or shareholders representing at least one-twentieth of the share capital, submitted in writing or in electronic form at least one month before the proposed date of the General Meeting,
- At the request of the State Treasury as a shareholder, irrespective of its stake in the Company’s share capital, submitted in writing at least one month before the proposed date of the General Meeting.

Pursuant to Art. 44.4 of the Parent’s Articles of Association governing the placing of matters on the agenda of the next General Meeting by the shareholders, a shareholder or shareholders representing at least one-twentieth of the Company’s share capital may request that certain matters be placed on the agenda of the next General Meeting. The same right is held by the State Treasury as the Company’s shareholder, irrespective of its stake in the share capital.

Pursuant to Art. 44.8 of the Parent’s Articles of Association, prior to the date of the General Meeting, a shareholder or shareholders representing at least one-twentieth of the Company’s share capital may submit to the Company draft resolutions on the matters included or to be included in the agenda of the General Meeting, in writing or with the use of electronic means of communication. The Company promptly publishes such draft resolutions on its website.

8.7. Rules governing amendments to the Parent’s Articles of Association

Amendments to the Articles of Association are made in accordance with the Articles of Association and the Commercial Companies Code.

Pursuant to Art. 50.19 of the Articles of Association, powers of the General Meeting include making amendments to the Articles of Association of Grupa Azoty S.A. Requests to amend the Articles of Association should be presented together with a statement of reasons and a written opinion of the Supervisory Board (Art. 51 of the Articles of Association). Any amendments to the Articles of Association must be approved by resolution by the General Meeting and be entered in the register (Art. 430.1 of the Commercial Companies Code). Such entry is of a constitutive nature. Therefore, any amendments to the Articles of Association must be submitted to the Management Board to the registry court. Such submission must be made within three months from the date on which the General Meeting adopted the resolution introducing the amendment (Art. 430.2 of the Commercial Companies Code). Pursuant to Art. 32.1.15 of the Articles of Association, the Company’s Supervisory Board adopts the consolidated text of the Company’s Articles of Association, prepared by the Management Board.

8.8. Restrictions on voting rights

In accordance with Art. 46.2 of the Parent’s Articles of Association, one share carries one vote at the General Meeting, subject to Art. 46.3-7.

“Art. 46.3.: As long as the State Treasury of Poland or its subsidiaries hold shares in the Company representing at least one-fifth of total voting rights, the other shareholders’ voting rights shall be limited in such a manner that no shareholder may exercise more than one-fifth of total voting rights at the General Meeting existing on the day of the General Meeting. The limitation on the voting rights referred to in the preceding sentence shall not apply to the State Treasury or any of its subsidiaries. For the purposes of this Article 46.3, the exercise of voting rights by a subsidiary shall be deemed the exercise of voting rights by its parent as defined in the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies of July 29th 2005 (the "Public Offering Act"), and the terms “parent” and “subsidiary” shall include any entity whose voting rights attached to shares held, directly or indirectly, in the Company are aggregated with the voting rights of another entity or entities, in accordance with the Public Offering Act, in connection with the holding, disposal or acquisition of major holdings in the Company. A shareholder whose voting rights are subject to the limitation shall in any case retain the right to cast at least one vote.”

8.9. Restrictions on the transferability of securities
There are no restrictions on the transferability of the Parent securities.

8.10. Rules governing appointment and removal of the management staff; powers of the management staff, including in particular the authority to resolve to issue or buy back shares

Rules governing appointment and removal of the management staff

Management Board

Members of the Management Board are appointed by the Supervisory Board following a recruitment process held to verify and evaluate qualifications of candidates and to select the best candidate. The rules and procedures for the recruitment process are defined by the General Meeting in a resolution. The currently applicable rules and procedures for the recruitment process are set out in the Rules for recruitment and selection of members of the Management Board of Grupa Azoty S.A., adopted by resolution of the Extraordinary General Meeting. Any member of the Management Board may be removed or suspended from duties by the Supervisory Board or the General Meeting. Considering that Grupa Azoty S.A. is a state-owned company, the appointment and removal of Management Board members are governed by the Commercial Companies Code, the Act on State Property Management of December 16th 2016, the Company’s Articles of Association and the Rules for recruitment and selection of members of the Management Board of Grupa Azoty S.A., adopted by resolution of the Company’s Extraordinary General Meeting.

The Company’s Management Board consists of no more than seven persons, including the President, Vice Presidents and other Members. The number of Management Board members is defined by the governing body that appoints the Management Board. Members of the Management Board are appointed for a joint three-year term of office. The Management Board of the 11th term of office is composed of six Members, including the President, four Vice Presidents and one Member of the Management Board.

The Management Board manages the Company’s affairs and represents the Company in all court and non-judicial activities. Any matters related to managing the Company’s affairs, not reserved for the General Meeting or the Supervisory Board pursuant to the law or the Articles of Association, fall within the powers of the Management Board.

As long as the Parent employs an annual average of above 500 employees, the Supervisory Board appoints one person elected by Parent employees to the Management Board, for the Management Board’s term of office (Art. 25.1 of the Parent’s Articles of Association).

Powers of the Supervisory Board also include suspension of individual or all Management Board members from duties for important reasons and delegation of Supervisory Board members to temporarily perform the duties of members of the Management Board who are unable to perform their duties (Art. 32 of the Parent’s Articles of Association).

The Supervisory Board

Pursuant to Art. 34.1 of the Parent’s Articles of Association, the Supervisory Board is composed of five to nine members, appointed by the General Meeting, subject to the provisions of Art. 16.2 (“The State Treasury has an individual right to appoint and remove one member of the Supervisory Board.”) and Art. 35 of the Articles of Association (“In the composition of the Supervisory Board there are members appointed by the Company employees, pursuant to Art. 14 of the Act on Commercialisation and Certain Employee Rights”).

Members of the Supervisory Board are appointed for a joint three-year term of office. A member of the Supervisory Board appointed by the General Meeting may be removed by the General Meeting at any time.

At least two members of the Supervisory Board are independent members that meet all of the independence criteria set out in Annex II to the Commission Recommendation on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board (Art. 34.4 of the Parent’s Articles of Association).

The General Meeting appoints the Chairperson of the Supervisory Board. The Deputy Chairperson and the Secretary are elected by the Supervisory Board, at its first meeting, from among its members.
Power to make decisions to issue or buy back shares

Pursuant to Art. 10.1 of the Parent’s Articles of Association and subject to Art. 10.3-5 thereof, the Parent’s share capital may be increased by way of a resolution of the General Meeting by issuing new registered or bearer shares or by increasing the value of the existing shares. Pursuant to Art. 10.3-7 of the Articles of Association:

3. The Management Board is authorised to increase the Company’s share capital by issuing new shares with a total par value of up to PLN 240,432,915, by way of an increase in the share capital within the limits defined above (“Authorised Share Capital”). An increase in the share capital within the limits of the Authorised Share Capital may be effected only for the purpose and on the terms and conditions stipulated in Art 10.4 below. The Management Board’s authorisation to increase the share capital and to issue new shares within the limits of the Authorised Share Capital expires within six months from the date of registration of the amendments to the Articles of Association providing for the Authorised Share Capital.

4. Within the limits of the Authorised Share Capital, the Management Board shall be authorised to offer Company shares, with the existing shareholders’ pre-emptive rights waived, only to the shareholders of Zakłady Azotowe Puławy S.A. of Puławy, entered in the Business Register of the National Court Register under entry No. KRS 0000011737 (“ZA Puławy”), in exchange for a non-cash contribution in the form of shares in ZA Puławy, so that one share in ZA Puławy shall be deemed a non-cash contribution to cover 2.5 Company shares issued within the limits of Authorised Share Capital. A Management Board resolution to issue shares in exchange for a non-cash contribution in the form of shares in ZA PULAWY shall not require approval by the Supervisory Board.

5. In the Company’s interest the Management Board is authorised to waive, in whole or in part, the existing shareholders’ pre-emptive rights to acquire shares issued within the limits of the Authorised Share Capital only to offer such shares to the shareholders of ZA PULAWY in accordance with the rules described in Art. 10.4 above.

6. Unless stipulated otherwise in Art. 10.7 or in the Commercial Companies Code, the Management Board shall decide on all matters connected with a share capital increase within the limits of the authorised share capital; in particular the Management Board is authorised to:

1) enter into agreements providing for the arrangement and the carrying out of a share issue,

2) adopt resolutions and take other actions regarding conversion of the shares and allotment certificates into book-entry form as well as to enter into agreements with the CSDP on the registration of the shares and allotment certificates,

3) adopt resolutions and take other actions regarding the issue of shares by way of a public offering or seeking admission of the shares and allotment certificates to trading on the regulated market, as the case may be.

7. A Management Board resolution on:

1) share capital increase within the limits of the Authorised Share Capital,

2) determination of the issue price for shares issued within the limits of the Authorised Share Capital, and

3) disapplication of pre-emptive rights, shall require approval by the Supervisory Board.

8.11. Operation of the General Meeting

The General Meeting is convened in accordance with the Commercial Companies Code, the Parent’s Articles of Association and the Rules of Procedure for the General Meeting. The current Rules of Procedure for the General Meeting of Grupa Azoty S.A. of Tarnów were adopted by resolution of the Extraordinary General Meeting of June 7th 2018.

Pursuant to Art. 42.1 of the Articles of Association, the General Meeting is convened by the Company’s Management Board:

- on its own initiative,
- at the request of the Supervisory Board, expressed in a Supervisory Board resolution,
- at the request of a shareholder or shareholders representing at least one-twentieth of the share capital, submitted in writing or in electronic form at least one month before the proposed date of the General Meeting,
- at the request of the State Treasury as a shareholder, irrespective of its interest in the Company’s share capital, submitted in writing at least one month before the proposed date of the General Meeting.
It should be noted that the General Meeting should be convened within two weeks of the date of the request referred to in Art. 42.1.2-4 (Art. 42.2 of the Articles of Association). If the General Meeting is not convened within the above time limit:

- if a request to convene the meeting has been made by the Supervisory Board - it becomes entitled to convene the General Meeting,
- if a request to convene the meeting has been made by the shareholders specified in Articles 42.1.3 or 42.1.4 above, the Registry Court may authorise the requesting shareholders to convene an Extraordinary General Meeting. The Registry Court designates the Chairperson of the Meeting. The notice convening the Extraordinary General Meeting should refer to the decision of the Registry Court.

Art. 42.4 of the Articles of Association further states that the right to convene an Extraordinary General Meeting is also vested in:

- the Supervisory Board, whenever it deems it advisable, by way of a resolution;
- a shareholder or shareholders representing at least half of the share capital. Such shareholder or shareholders designate the Chairperson of the Meeting.

A General Meeting of a public company (such as Grupa Azoty S.A.) is convened by posting a notice on the company’s website and in the manner prescribed for publication of current reports, in accordance with the provisions of the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading and Public Companies. The notice should be published at least twenty-six days before the date of the General Meeting (Art. 44.1 of the Articles of Association; Art. 402.1 of the Commercial Companies Code). Art. 402.2 of the Commercial Companies Code stipulates formal requirements to be met by the notice, while Art. 402.3 of the Code specifies the data to be published on the company's website.

Pursuant to Art. 43 of the Articles of Association, General Meetings are held at the Company's registered office (in Tarnów) or in Warsaw. The Annual General Meeting should be held within six months from the end of each financial year (Art. 49 of the Articles of Association). As a rule, technical and organisational support of each general meeting is provided by the Company's Management Board (Section 4.1 of the Rules of Procedure for the General Meeting). The Management Board may, however, engage third parties to perform the obligation specified above, including professional organisers of general meetings (Section 4.2 of the Rules of Procedure).

The General Meeting may be attended by: 1) persons who are the Company’s shareholders sixteen days prior to the date of the General Meeting, 2) proxies or statutory representatives of the shareholders referred to in the preceding item, 3) members of the Management Board and Supervisory Board, and the Annual General Meeting also by persons who were members of the Company's governing bodies in the last financial year, 4) experts and persons invited by the body or entity convening the General Meeting, 5) third parties responsible for the provision of support of the General Meeting, and support staff designated by the Company's Management Board, 6) a person designated by the Management Board (Art. 5.1 of the Articles of Association).

The proceedings at the General Meetings are in principle governed by the Rules of Procedure for the General Meeting.

The General Meeting is opened by the Chairperson or Deputy Chairperson of the Supervisory Board and if these persons are absent - by the President of the Management Board or a person appointed by the Management Board. Then, subject to Art. 42.3.2 and Art. 42.4.2 of the Articles of Association, the Chairperson of the General Meeting is elected from among those entitled to participate in the Meeting. The General Meeting has the capacity to adopt resolutions irrespective of the number of shares represented at the Meeting, unless the Commercial Companies Code or the Articles of Association provide otherwise (cf. Art. 46.1 of the Articles of Association).

As a rule, one share confers the right to one vote at the General Meeting (Art. 46.2 of the Articles of Association).

A General Meeting may only adopt resolutions concerning matters included in its agenda, subject to Article 404 of the Commercial Companies Code (Art. 44.2 of the Articles of Association). The agenda of a General Meeting is prepared by the Management Board or another entity convening the Meeting. By way of a resolution, the General Meeting may change the order of items on the agenda (Art. 44.3 of the Articles of Association). A shareholder or shareholders representing at least one twentieth of the Company’s share capital may request that certain issues be placed on the agenda of the next General Meeting. The same right is held by the State Treasury as the Company’s shareholder, irrespective of its interest in the share capital (Art. 44.4 of the Articles of Association). The procedure and formal conditions for submitting the requests referred to above are set out in Art. 44.5-7 of the Articles of Association. Prior to the date of the General Meeting, a shareholder or shareholders...
representing at least one-twentieth of the Company’s share capital may also submit to the Company draft resolutions on the matters included or to be included in the agenda of the General Meeting, in writing or with the use of electronic means of communication. The Company promptly publishes such draft resolutions on its website (Art. 44.8 of the Articles of Association).

Key powers of the General Meeting
The powers of the General Meeting are stipulated in Art. 50 of the Articles of Association, and in particular include:

- examination and approval of the financial statements for the previous financial year and the directors’ report on the company’s operations,
- granting discharge to members of the Company’s governing bodies in respect of performance of their duties,
- distribution of profit or coverage of loss,
- setting the dividend record date and the dividend payment date, as well as a decision on payment of dividend in instalments,
- review and approval of the consolidated financial statements of the Group for the previous financial year and of the directors’ report on the Group’s operations if their preparation is required under the Accounting Act,
- appointment and removal of Supervisory Board members appointed by the General Meeting, including the Chairperson of the Supervisory Board, subject to the provisions of Art. 16.2,
- determination of the rules and amounts of remuneration for Supervisory Board members,
- granting consent to disposal or lease of the Company’s business or its organised part, and establishment of limited property rights in the Company’s business or its organised part,
- granting consent for the following legal transactions, if the market value of the subject matter of such legal transaction exceeds PLN 100,000,000 or 5% of the Company’s total assets:
  - acquisition or disposal of property, perpetual usufruct right to or interest in property,
  - acquisition or disposal of non-current assets, as well as granting to another entity the right to use such assets for a period longer than 180 days in a calendar year,
  - acquisition, purchase or sale of shares in another company,
- execution of loan, credit facility, surety or any other similar agreement by the Company with or for the benefit of a member of the Management Board, member of the Supervisory Board, proxy, or liquidator,
- increase or reduction of the Company’s share capital,
- issue of convertible bonds, bonds with pre-emptive rights and subscription warrants,
- acquisition of the Company’s own shares in the situation specified in Art. 362.1.2 of the Commercial Companies Code,
- squeeze-out carried out in compliance with Art. 418 of the Commercial Companies Code,
- creation, use and release of capital reserves,
- use of statutory reserve funds,
- decisions with respect to claims for redress of damage inflicted in the course of establishing the Company, its management or supervision,
- merger, transformation or demerger of the Company,
- amendments to the Articles of Association and change of the Company’s business profile,
- dissolution and liquidation of the Company,
- review of the Supervisory Board’s reports referred to in Art. 32.1.8, 32.1.19, 32.1.20, and 32.1.21,
- determination of rules for disposal of non-current assets whose value exceeds 0.1% of the Company’s total assets,
- determination of detailed recruitment rules and selection procedure for members of the Company’s Management Board,
- determination of the rules of remuneration for members of the Company’s Management Board.

Motions and requests concerning the matters specified in Article 50 should be submitted together with a statement of reasons and a written opinion of the Supervisory Board. Opinions of the Supervisory Board are not required for motions or requests concerning members of the Supervisory Board, in particular regarding the matters referred to in Art. 50.2, 50.6 and 50.7 of the Articles of Association.
8.12. Composition and operation of the Company’s management and supervisory bodies

Management Board
The Management Board is the Company’s executive and managing body conducting all of the Company’s affairs not reserved by law or by the Articles of Association for the General Meeting or the Supervisory Board, and representing the Company in relations with third parties.

Composition of the Management Board as at January 1st 2018 was as follows:
- Wojciech Wardacki - President of the Management Board,
- Witold Szczyński - Vice President of the Management Board,
- Tomasz Hinc - Vice President of the Management Board,
- Grzegorz Kądzielawski - Vice President of the Management Board,
- Paweł Łapiński – Vice President of the Management Board,
- Józef Rojek - Vice President of the Management Board,
- Artur Kopeć - Member of the Management Board.

Tomasz Hinc, Vice President of the Management Board, resigned from the Company’s Management Board, submitting a resignation letter to the Supervisory Board on March 4th 2018. Therefore, as at March 5th 2018, the Parent’s Management Board was composed of:
- Wojciech Wardacki - President of the Management Board,
- Witold Szczyński - Vice President of the Management Board,
- Grzegorz Kądzielawski - Vice President of the Management Board,
- Paweł Łapiński – Vice President of the Management Board,
- Józef Rojek - Vice President of the Management Board,
- Artur Kopeć - Member of the Management Board.

On May 17th 2018, the Supervisory Board adopted resolutions to appoint the Management Board of the Parent for a new, 11th term of office.

In addition, the Supervisory Board validated the election held between March 22nd and April 11th 2018 to elect an employee representative to the Company’s Management Board, and confirmed the election of Artur Kopeć as Member of the Management Board of the 11th term of office. The effective date of the relevant resolutions was May 17th 2018.

On June 28th 2018, i.e. the date of the Annual General Meeting, the mandate of Józef Rojek as Vice President of the Management Board of the 10th term of office expired. Therefore, as at December 31st 2018, the Management Board was composed of:
- Wojciech Wardacki - President of the Management Board,
- Witold Szczyński - Vice President of the Management Board,
- Mariusz Grab - Vice President of the Management Board
- Grzegorz Kądzielawski - Vice President of the Management Board,
- Paweł Łapiński – Vice President of the Management Board,
- Artur Kopeć - Member of the Management Board.

Curriculum vitae of Management Board members

Wojciech Wardacki - President of the Management Board
Appointed President of the Company’s Management Board on December 16th 2016.

Education:
Doctor of Economics.

Professional experience:
1983 - 1995 Assistant Lecturer and Assistant Professor at the Transport Economics Institute of Szczecin University (until August 31st 1985: Szczecin University of Technology)
1989 - 1990 Researcher, DAAD visiting fellow in the Transportation Institute of the University of Cologne, Germany
1991 - 1993 Member of the Lower Chamber of the Polish Parliament
1994 - 1996 Sole proprietorship, owner of Pracownia Analiz i Badań Marketingowych of Szczecin, a marketing research company
1995 - 1996  Lecturer at the School of Public Administration in Szczecin
1996 - Apr 30 2005  Head of Administration and Economic Affairs, Chief Financial Officer, and member of the management board of Goleniowskie Fabryki Mebli Kollektion WIM Sp. z o.o.
May 4 2005 - Oct 2 2005  Member of the management board for restructuring at Zakłady Chemiczne Zachem S.A.
Oct 3 2005 - Aug 1 2006  President of the management board and Chief Executive Officer of Zakłady Chemiczne Zachem S.A.
Aug 2 2006 - Oct 31 2008  Member of the management board of Ciech S.A.
2010 - 2014  Sole proprietorship, business consultancy and lobbying
Since April 2016:  President of the management board and Chief Executive Officer of Grupa Azoty Zakłady Chemiczne Police S.A.
Since December 2016:  President of the Management Board of Grupa Azoty S.A.

Other professional experience:
1997 - 1998  Secretary to the Team of Advisors to President of the management board of Polskie Koleje Państwowe S.A. responsible for the assessment of restructuring programmes
1998:  Chairman of the supervisory board of Polskie Koleje Państwowe S.A.
1999 - 2000  Member of the supervisory board of Polskie Koleje Państwowe S.A.
2005 - 2008  Chairman and member of the supervisory board of Transclean Sp. z o.o.
2006 - 2008  Chairman of the supervisory board of Janikosoda S.A.
2006 - 2008  Deputy Chairman of the supervisory board of Soda Mątwy S.A.
2006 - 2008  Member of the supervisory board of Gdańskie Zakłady Nawozów Fosforowych sp. z o.o.
2007 - 2008  Chairman of the supervisory board of Zakłady Chemiczne Zachem S.A.
Since February 15th 2016:  Chairman of the supervisory board of Bank Ochrony Środowiska S.A.
Mar 1 2016 - Mar 30 2016  Member of the supervisory board of Grupa Azoty Zakłady Chemiczne Police S.A.
Since February 3rd 2017:  Chairman of the Council of the Polish Chamber of Chemical Industry
Since April 2017:

Witold Szczyński - Vice President of the Management Board, Director General

Education:
Graduate of the Production Organisation Faculty of the Silesian University of Technology. Completed studies in industry organisation and management (specialisation: chemical industry), MSc (Eng) in industry organisation.

Training and courses:
Training and courses focused on managerial skills and functioning of companies under the Commercial Companies Code.
Specialist training courses in process safety, workplace safety, economic project analysis, energy efficiency analysis, legal aspects of the chemical industry, and organisation of research processes.
Main training courses:
- Training course for candidates to supervisory boards (Instytut Prawa Spółek i Inwestycji Zagranicznych Sp. z o.o.),
- Training course for management staff based on the course for candidates to supervisory boards (Rzeszów School of Management),
- 'BEST MANAGER' series of seminars preparing managers for ownership transformations (Staff Development Centre at the HR and Training Department of the Ministry of Industry).

Professional experience:
1979 - 1987  Foreman, Process Engineer and Senior Process Engineer at the Synthesis Plant of Zakłady Azotowe im. F. Dzierżyńskiego w Tarnowie (later renamed Zakłady Azotowe w Tarnowie-Mościcach S.A.)
1987 - 1990 Manager of Silicon Department at the Synthesis Plant of Zakłady Azotowe w Tarnowie-Mościcach S.A.
1991 - 1999 Manager of the Synthesis Plant of Zakłady Azotowe w Tarnowie-Mościcach S.A.
1999 - 2001 Director of Plastics Centre of Zakłady Azotowe w Tarnowie-Mościcach S.A.
2002 - 2007 Director responsible for Technology and Development at Zakłady Azotowe w Tarnowie-Mościcach S.A.
2007 - 2008 Member of the management board of Zakłady Azotowe w Tarnowie-Mościcach S.A.
2008 Acting President of the management board of Zakłady Azotowe w Tarnowie-Mościcach S.A.
Since 2008: Vice President of the management board of Zakłady Azotowe w Tarnowie-Mościcach S.A. (currently Grupa Azoty S.A.)


Additional information:
- Member of the Scientific Board of the Ignacy Mościcki Industrial Chemistry Research Institute (since 2017),
- Member of the University Council at the Tadeusz Kościuszko University of Technology of Kraków (since 2019)
- Member of the Chemical and Process Engineering Committee of the Polish Academy of Sciences (2011−2015),
- Member of the Steering Committee of the ‘Advanced power generation technologies’, a strategic scientific research and development programme of the National Centre for Research and Development (2012−1015),
- Member of the Scientific Board of the Blachownia Institute of Heavy Organic Synthesis of Kędzierzyn-Koźle (2011−2015),
- Chairman of the management board of SITPChem Branch of Tarnów (2007−2010),
- Author and co-author of nearly 40 implemented specialist improvement concepts (including six patent protected) for the manufacturing of ammonia, hydrogen, food-grade carbon dioxide, polyoxymethylene, polycrystalline silicon and catalysts; and for energy infrastructure.

Paweł Łapiński – Vice President of the Management Board
Appointed Vice President of the Company’s Management Board on May 20th 2016.

Education:
- Graduate of the Management and Marketing Department of the Faculty of Economic Sciences and Management of the Nicolaus Copernicus University in Toruń (major in manufacturing process management and industrial enterprise management).
- Completed a post-graduate course in commercial law at the Nicolaus Copernicus University in Toruń.
- Completed a post-graduate course in value based management at the Warsaw School of Economics.
- Completed a post-graduate course in business psychology and negotiation at the Warsaw School of Economics.

Training and courses:
Various courses in management, finance, taxes, cost analysis and subjects related to the power industry.

Professional experience:
1997 - 2007 Boryszew S.A. Elana Branch in Toruń (last position held: Deputy Managing Director, Economic Director)
2005 - 2007 Elana-Energetyka Sp. z o.o. (last position held: Vice President of the management board, Economic and Finance Director)
2007 - 2016 Struga S.A. (President of the management board)

In addition:
2006 - 2007 Chairman of the supervisory board of ELANA-PET Sp. z o.o.
Grzegorz Kądzielawski - Vice President of the Management Board
Appointed Vice President of the Company’s Management Board on June 20th 2017.

Education:
2011 - 2017 Andrzej Frycz Modrzewski Krakow University, doctoral student at the Faculty of Law, Administration and International Relations, majoring in law; title of degree: PhD in law (graduation with honours)
2011 - 2012 Diplomatic Academy of the Polish Institute of International Affairs, Foreign Policy Studies
2007 - 2010 Jagiellonian University, Faculty of Law and Administration, field of study: Administration (master’s programme)
2004 - 2007 State Higher Vocational School in Tarnów, Institute of Administration and Economics, major: Public Administration (bachelor’s programme)

Professional experience:
Since 2018 Member of the supervisory board of H. Cegielski Poznań S.A.
Since 2017 Vice President of the Management Board of Grupa Azoty S.A., responsible for R&D and Infrastructure
Since 2017 Expert of ECVET (European Credit System for Vocational Education and Training) at the Foundation for the Development of the Education System
Since 2016 Member, Chairman (from November 2016 to July 2017) and Deputy Chairman (from July 2017) of the supervisory board of Zakłady Górnico-Metalowe ZĘBIEC w Zębcu S.A.
2015 - 2017 Head of Office of the Deputy Prime Minister, Minister of Science and Higher Education
2015 - 2016 Workshop programme coordinator at the Faculty of Administration and Social Sciences, Warsaw University of Technology
2015 - 2017 Member of the Programme Board at Polskie Radio w Warszawie RDC S.A.
2014 - 2015 Head of Office of the Parliamentary Group Sprawiedliwa Polska/Zjednoczona Prawica at the lower chamber of the Polish parliament
2013 - 2018 Lecturer at Lazarski University, Faculty of Law and Administration, Department of Administrative Law
2013 Expert at the media production company Prasa i Film
2011 - 2014 Lecturer at the State Higher Vocational School in Tarnów, Institute of Administration and Economics
2007 - 2014 Head of an MP’s office

Training and courses:
Numerous completed training courses, including in the protection of classified information; PRINCE2® Foundation (Projects In Controlled Environments) project management course, with an examination successfully passed and a certificate issued; Effective management of the R&D department. Practical solutions and new technologies; Intellectual property law; Organisation of conferences and business visits.

Other experience:
- Member of Stowarzyszenie Inżynierów i Techników Przemysłu Chemicznego (Polish Association of Chemical Engineers)
- Member of the Tarnów Scientific Society
- Member of the Scientific Council of the scientific journal Tarnowskie Dialogi Naukowe (Tarnów Scientific Dialogues),
- Member of the Editorial Team of the Cement Wapno Beton international scientific journal, focusing on mineral binding materials and concrete. The bi-monthly publishes primarily scientific and research papers on chemistry and technology of binding construction materials and concrete. The journal is listed in the Thomson Reuters databases: Citation Science Index Expanded (also known as SciSearch®), Neuroscience Citation Index®, Journal Citation Reports/Science Edition, and in the prestigious Master Journal List of the Institute for Scientific Information.
- Member of the Jagiellonian University Business Board, appointed by the Rector of the Jagiellonian University of Kraków. The Board has been appointed to strengthen the integration of the
Jagiellonian University with its social and economic environment, and to support effective cooperation of science and education with business.

- Member of the Board of Patrons of the Tarnów Higher School.
- Author and co-author of dozen or so scientific articles, in particular in *Przemysł Chemiczny*, *Handel Zagraniczny* and *Cement Wapno Beton*.
- Co-author of the book *Buduję swoją pierwszą drukarkę 3D* (‘Building my first 3D printer’).

**Mariusz Grab - Vice President of the Management Board**

Appointed Vice President of the Company’s Management Board on May 17th 2018.

**Education:**
- 2006 - 2015 PhD programme at the Faculty of Computer Science of the West Pomeranian University of Technology
- 2003 - 2004 Postgraduate programme in pedagogy at the Szczecin University of Technology
- 1994 - 1999 MSc programme at the Faculty of Computer Science of the Szczecin University of Technology
- 1992 - 1994 School of Computer Science in Jelenia Góra

**Professional experience:**
- May 23 2016 - President of the management board of Grupa Azoty Police Serwis Sp. z o.o.
- Apr 1 2016 - May 22 2016 Independent commercial proxy at Żegluga Szczecińska sp. z o.o.
- May 8 2012 - May 22 2016 Deputy CEO at Żegluga Szczecińska sp. z o.o.
- Jul 9 2010 - Nov 30 2011 Member of the management board and CFO of Polskie Radio - Regionalna Rozgłośnia w Szczecinie S.A. (regional branch of the Polish state radio broadcaster)
- Apr 21 2010 - Jul 8 2010 President of the management board of Polskie Radio - Regionalna Rozgłośnia w Szczecinie S.A.
- Mar 30 2007 - Apr 20 2010 Vice President of the management board of Polskie Radio - Regionalna Rozgłośnia w Szczecinie S.A.
- Jul 7 2006 - Mar 29 2007 Member of the management board of Polskie Radio - Regionalna Rozgłośnia w Szczecinie S.A.
- 2001 - 2006 Owner of Art Media (sole trading activity)
- 1999 - 2008 Assistant at the Systems Research Unit, Artificial Intelligence and Mathematical Methods Institute, of the Faculty of Computer Science of the Szczecin University of Technology.

**Other experience:**
- 2004-2017 - Member of the Programming Board of the Szczecin Branch of Telewizja Polska.
- From 2003 - Member of the Community Council of the Szczecin Provincial Emergency Medical Service Station, responsible for evaluating the budget, financial statements as well as financial and investment plans of the Station, which reported to the Marshal's Office of the Province of Szczecin.
- 2001-2002 - Participation as a research team member in the PHARE PL 9704-01-13 (Component C) project ‘Concept of agricultural information system for the needs of the CAP’ - development of a system for sharing agricultural information between Poland and EU countries - co-creator of the system design presented to the Ministry of Agriculture.
- Author of more than ten scientific papers on modern financial instruments, information management in the European Union, modern valuation and risk mitigation technologies in economic markets, presented at conferences in Poland and abroad. Author of studies on mass property appraisal for the purposes of introducing cadastral tax in Poland.

**Artur Kopeć - Member of the Management Board**

Member of the Company’s Management Board since February 2012, elected by employees of Grupa Azoty S.A.

**Education:**
- Graduate of the Chemical Technology Faculty of Wrocław University of Technology (2002),
- Completed postgraduate course in entrepreneurship at Cracow University of Economics,
- Completed managerial course organised by Rudzka Agencja Rozwoju and Training Partners.
Training and courses:
Completed a number of training courses in management, health and safety, ISO and environmental protection.

Professional experience:
• 2003 – employment with the State Higher Vocational School in Tarnów,
• As of October 1st 2003 employed by Zakłady Azotowe w Tarnowie-Mościcach S.A. (now Grupa Azoty S.A.), in the following positions:
  - technician at the Department of Ammonia (2003–2005),
  - shift master at the Department of Catalysts (August–November 2005),
  - ammonia synthesis technician at the Fertilizers Centre (2006–2009),
  - fertilizer specialist technologist and engineer supervising construction of the Mechanical Fertilizer Granulation Unit (2006–2009),
  - testing and commissioning manager at the Mechanical Fertilizer Granulation Unit (2008–2009),
  - ammonia and hydrogen management specialist at the Ammonia Department (2010–2011),
  - since 2011 – head of the Ammonia Department and commissioning manager at the hydrogen production unit,
  - since February 2012 – Member of the Management Board of Grupa Azoty S.A.

Additional information:
• Since 2006, he has been a member of the Polish Association of Chemical Engineers.
• In 2013–2014 – deputy chairman of the supervisory board of ZSSA Unia Tarnów.
• Major professional accomplishments included successful launch of production of Saletrosan, a new fertilizer. Co-authored the “Process of preparation of ammonium nitrate-sulfate” invention filed in European and Polish patent applications, and a number of improvement concepts.
• Major accomplishments on the Management Board include:
  - contribution to work on consolidation of the Polish chemical industry,
  - negotiation of social packages at the Puławy and Grzybowo plants,
  - integration of occupational health and safety, environmental protection and fire protection functions,
  - establishment of the Fire Protection Team (ZOP),
  - establishment of the Grupa Azoty Rescue Education Centre (CERGA),
  - significant reduction of the accident rate at the Group,
  - implementation of DuPont’s STOP™ programme.

Powers and responsibilities of the Management Board members
On June 28th 2018, the Company’s Management Board passed a resolution establishing the following division of responsibilities between the Management Board members:
• Wojciech Wardacki – President of the Management Board, responsible for overall supervision and management of the Group, as well as for the strategy and corporate governance, including exercise of majority shareholder power, human resources management, communication and corporate image (which also covers public relations and CSR),
• Witold Szczypiński – Vice President of the Management Board, Director General of the Parent, responsible for integration of production processes, the Agro Segment, the Plastics Segment, and the Organic Synthesis Segment,
• Mariusz Grab – Vice President of the Management Board, responsible for formulation and implementation of the procurement strategy, logistics, and raw material and product integration,
• Grzegorz Kądzielawski – Vice President the Management Board, responsible for development of infrastructure and R&D programmes,
• Paweł Łapiński – Vice President of the Management Board, responsible for finance, controlling, IT, investor relations, M&A, growth strategy, and oversight of investment projects,
• Artur Kopeć – Member of the Management Board, responsible for production assets, plant safety, environmental protection, critical infrastructure, and social dialogue.
Directors’ Report on the operations of Grupa Azoty S.A. and the Group for the 12 months ended December 31st 2018
(all amounts in PLN ‘000 unless indicated otherwise)

Division of responsibilities between the Management Board members as at December 31st 2018

Source: Company data.

The Supervisory Board
As at January 1st 2018 and as at December 31st 2018, the Supervisory Board was composed of:
- Tomasz Karusewicz - Chairman of the Supervisory Board
- Michał Gabryel - Deputy Chairman of the Supervisory Board
- Zbigniew Paprocki - Secretary of the Supervisory Board
- Piotr Czajkowski - Member of the Supervisory Board
- Monika Fill - Member of the Supervisory Board
- Robert Kapka - Member of the Supervisory Board
- Bartłomiej Litwińczuk - Member of the Supervisory Board
- Ireneusz Purgacz - Member of the Supervisory Board
- Roman Romaniszyn - Member of the Supervisory Board.

Events after the reporting period
On February 26th 2019, Tomasz Karusewicz resigned as Chairman and Member of the Supervisory Board. No reasons for the resignation were given. On the same day, by way of a resolution of the Parent’s Extraordinary General Meeting, Ireneusz Purgacz was removed from the Supervisory Board. At the same time, by way of resolutions of the Parent’s Extraordinary General Meeting, the following persons were appointed to the Supervisory Board:
- Paweł Bielski,
- Marcin Pawlicki.

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

Graduated from the University of Wrocław, with M.Sc. in theoretical physics. He took a number of courses in management and control of local government units. In 1998, he completed the course for candidates to supervisory boards of state-owned companies. In 1976-1981 he worked for the Wrocław University of Technology, then in 1982-1992 he was director at Zakład Usług Wysokościowych Taternik, and in 1988-1993 he managed companies and a cooperative operating in the IT sector. From 1991, he was president of WAZA Spółka z o.o., where he developed proprietary software for public administration and healthcare sector. In 1998-2002, he was Chairman of the Audit Committee of the City of Wrocław. In 1998-1999 he was a member of the supervisory board of WZG S.A. and in 2016-2017 a member, deputy chairman, and then chairman of the supervisory board of PAIH S.A.

Zbigniew Paprocki - Secretary of the Supervisory Board

Mr Paprocki graduated from the Academy of Agriculture in Kraków with a master’s degree in environmental engineering. He completed a post-graduate MBA programme at the Faculty of Mechanical Engineering at the Institute of Business Studies, and a course for members of supervisory boards of state-owned companies. He has worked for Grupa Azoty S.A. (formerly Zakłady Azotowe w Tarnowie-Mościcach S.A.) for 25 years. First as Shift Foreman, then as Deputy Head of the Power Engineering Department, Deputy Chief Production Coordination Engineer, and from 2012 as Head of the Production Management and Coordination Office at the Corporate Production Coordination and Safety Department. Since 2010, he has chaired the Association of Chemical Industry Engineers and Technicians, Tarnów Branch, and sat on its Executive Board. On the Supervisory Board of Grupa Azoty S.A. Mr Paprocki served from November 2010 to April 2013, and then since June 2013 (elected by the employees). He was also deputy chairman of the supervisory board of ELZAT Sp. z o.o. and chairman of the supervisory board of PROREM Sp. z o.o.

Paweł Bielski – Member of the Supervisory Board

Graduate of the Faculty of Chemical and Process Engineering of the Warsaw University of Technology; completed doctoral studies at the Faculty of Chemical and Process Engineering, doctoral degree in engineering. He also completed post-graduate managerial studies in Management at the Warsaw School of Economics, and The Strategic Leadership Academy at the ICAN Institute. In 2000–2001, Mr Bielski worked for Endress + Hauser Poland Sp. z o.o., then with Mennica-Metale Szlachetne S.A. (first as Head of Quality Control Department and in 2005–2009 as Sales and Marketing Director). 2009–2013: Head of the Strategy and Development Division at Zakłady Azotowe Puławy S.A.; 2010–2012: Melamina III Sp. z o.o. (a special purpose vehicle established to build the Puławy Power Plant), In 2014–2016, Head of the Corporate Strategy and Development Department at Grupa Azoty S.A. Since 2016, Mr Bielski has served as Director of the Ignacy Mościcki Industrial Chemistry Research Institute. Member of the Chemical and Process Engineering Committee of the Polish Academy of Sciences, Scientific Board of the Institute of Organic Industry, and Scientific Board of the Institute of Electronic Materials Technology.

Piotr Czajkowski - Member of the Supervisory Board

Mr Czajkowski holds a master’s degree in management and marketing from the Faculty of Technology and Automation Engineering of the Warsaw University of Technology. He also completed a post-graduate course in organisation and management at the Military University of Technology, and a post-graduate course at the Faculty of Economics of the University of Warsaw in innovative economy and the role of economic policy. He has completed many training programmes in the operation and assessment of economic and financial condition of companies, preventive role of supervisory boards, management control and internal audit. He is qualified to sit on the supervisory boards of state-owned companies and has more than ten years of experience working on the supervisory bodies of corporations where he was chairman, deputy chairman and member, including (in the last ten years): Warszawskie Zakłady Mechaniczne PZL-WZM w Warszawie S.A., Huta Stalowa Wola S.A., Przedsiębiorstwo Komunikacji Samochodowej w Ostrowie Wielkopolski Sp. z o.o., Zakłady Przemysłu Precyzyjnego NIEWIADÓW S.A., Zakłady Mechaniczne PZL-Wola S.A., INTRACO S.A. and Zakłady Tekstylno-Konfekcyjne TEOFIŁÓW S.A. In 2000-2017, he worked for the Ministry of State Treasury, holding positions of a senior specialist, chief specialist, and head of unit, where he exercised owner supervision of state-owned companies, and was responsible for restructuring and consolidation of defence companies. At present, Mr
Czajkowski is head of unit at the State Treasury Department of the Chancellery of the Prime Minister, with responsibility for performance of tasks related to the exercise of owner supervision of state-owned companies and the Prime Minister’s coordination of the State Treasury’s exercise of rights attached to shares held by the State Treasury in companies of key importance to Polish economy and other state-owned companies.

Monika Fill - Member of the Supervisory Board
In 1996, Ms Fill graduated from the Institute of English Studies at the Jagiellonian University in Kraków. In 1996-1998, she studied in London, where she obtained a master’s degree in Modern European Studies at the University of North London. Having returned to Poland, she started working in finance. In 1999-2006, she worked with Prudential, a US company, PZU S.A., and Golden Egg Niezależni Doradcy Finansowi, holding managerial positions in marketing and sales, with a large portfolio of successful sales and advertising campaigns. In 2004, she completed sociology studies at the Institute of Applied Social Sciences of the University of Warsaw, and in 2008 - a post-graduate course in insurance at the Academy of Finance in Warsaw.

From 2006 to 2010 she was a member of the supervisory board and then vice president and president of the management board of Pocztowe Towarzystwo Ubezpieczeń Wzajemnych (a mutual insurance company). In 2015-2016, she held a managerial position at the Warsaw Stock Exchange, and was also president of the management board of the Warsaw Stock Exchange Foundation.

She is authorised by the Ministry of State Treasury to serve on supervisory boards of state-owned companies. Since 2012, Ms Fill has run her own consulting company.

Robert Kapka - Member of the Supervisory Board
On the Supervisory Board of Grupa Azoty S.A. since June 2013. Member of the Supervisory Board elected by the employees.

Graduate of the Cracow University of Technology, Faculty of Chemical Engineering and Technology, principal field of study: light chemical technology, master of science. He also completed a post-graduate course in Polymer Chemistry and Technology at the Rzeszów University of Technology. In 2013, he passed the exam for candidates to supervisory boards of state-owned companies.

Mr Kapka has been employed at Grupa Azoty S.A. (formerly Zakłady Azotowe w Tarnowie-Mościcach S.A.) since 1999, at the following positions: Process Engineer, Manager of comprehensive tests and commissioning of the Polyamide Plant, Head of Caprolactam Polymerisation Division, Head of Production at the Plastics Centre, and Head of Production at the Plastics Production Unit, Plastics Business Segment. From December 2014, Head of Plastics Production Unit in Tarnów, Plastics Business Segment. From July 2016 to March 17th 2017, Chairman of the Supervisory Board of Grupa Azoty ATT Polymers GmbH.

Bartłomiej Litwińczuk - Member of the Supervisory Board
Mr Litwińczuk is a graduate of the University of Warsaw, Faculty of Law and Administration (master’s degree, commercial public law). In 2009, he completed legal training as an attorney-at-law at the regional bar association in Warsaw, and passed the bar examination. In May 2010, he was entered in the register of attorneys-at-law. Mr Litwińczuk owned a law firm. In his legal practice, he specialised in the protection of personal rights, commercial companies law, criminal law, penal fiscal law, civil law, and administrative law. Provided legal services to businesses, also in the field of corporate governance. Since February 1st 2016, he has served as Member of the Supervisory Board of Grupa Azoty S.A.

Marcin Pawlicki - Member of the Supervisory Board
Graduate of Management and Marketing at the Warsaw School of Management and MBA studies at the Master of Business Administration Oxford Brookes University.

From 2010 to 2016, Mr Pawlicki was a member of the programming board of the Szczecin branch of the Polish Radio, and then sales network coordinator at Orange and TP SA (GTP) in Szczecin. In 2013-2016, he ran his own business (marketing, sales and services).

Between 2015 and 2016, he was Project and Implementation Manager at Tramwaje Szczecińskie Sp. z o.o., and from 2016 to 2018 - Deputy Mayor of the City of Szczecin.

Currently, he serves as Promotion and Information Adviser to the Management Board at Enea Operator Sp. z o.o. In addition, he is a councillor of the City of Szczecin and a member of the supervisory board of IMS Sp. z o.o. Mr Pawlicki has completed a number of courses and training programmes, including for Data Security Controller and Personal Data Controller, as well as on protection of classified information.
Roman Romaniszyn - Member of the Supervisory Board
Graduate of the Faculty of Electrical Engineering, Automatics and Electronics, majoring in power generation, at the AGH University of Science and Technology of Kraków. He completed also a postgraduate course in energy audit at the AGH University of Science and Technology of Kraków. In 2015, he passed the exam for candidates to supervisory boards of state-owned companies. Member of the Supervisory Board elected by the employees.
In 1996, he joined Grupa Azoty S.A., where he held the positions of process engineer at the Electrical Engineering Department, deputy manager, and from 2003 - manager, of the Power Supply and Security Division at the Power Centre. Member of the management board of the Association of Polish Electrical Engineers, Branch No. 3 in Tarnów, member of the Polish Association of Chemical Engineers, Tarnów Branch.

Tomasz Karusewicz - Member of the Supervisory Board in the reporting period
Economist, graduated in business management from Szczecin University. Mr Karusewicz is a qualified comptroller, certified by the Ministry of Finance. He is also qualified to serve on supervisory boards of the state-owned companies. Completed a number of internal audit and control courses and training programmes.
In 2003-2005, Mr Karusewicz worked at the Internal Control Department of the Szczecin City Hall, and also served as comptroller. Then he was an expert at Nafta Polska S.A. In 2006-2008, he was with the Ciech Group S.A., first as deputy director at the owner supervision office of Ciech S.A. and member of the supervisory boards of Zakłady Chemiczne Alwernia S.A. and Ciech Polfa Sp. z o.o. (both Ciech Group companies). Then he moved on to serve as member of the supervisory board of Ciech S.A. In 2007-2009, he worked as deputy director at the Business Development Office and the Foreign Investments Office of PZU S.A. Afterwards, he was connected with Telewizja Polska S.A., Poland’s public television broadcaster, from 2010 to 2012 as director of the Internal Audit and Control Office. Also served on supervisory boards of Enea S.A. of Poznań (2007-2008), IKS „Solino” S.A. of Inowrocław and Zakład Wodociągów i Kanalizacji Sp. z o.o. of Szczecin (2015).
In 2006, he served as Chairman of the Supervisory Board of Zakłady Azotowe w Tarnowie-Mościcach S.A. Currently, he is again with a PZU Group company, as member of the management board of PZU Życie S.A.

Ireneusz Purgacz - Member of the Supervisory Board in the reporting period
Mr Purgacz is a graduate of the Law and Administration Faculty at the University of Warsaw. He completed legal training for court judges in the Ciechanów Provincial Court, and legal training as an attorney-at-law at the Regional Bar Association in Płock.
He worked as an assistant judge in the Ciechanów Provincial Court, and then practiced law at Zespół Adwokacki Nr 1 in Ciechanów. Since January 1995 to date, Mr Purgacz has run his own law firm in Ciechanów. As part of his practice as attorney-at-law, he offers legal services to individuals and businesses, in civil, commercial, administrative and criminal law. From 2009 to 2011, he served on the supervisory board of Przedsiębiorstwo Wodociągów i Kanalizacji Sp. z o.o. in Wyszków.

Audit Committee
To streamline its work and improve control of the Parent and the Group, on July 4th 2013 the Supervisory Board passed a resolution to appoint an Audit Committee.
Composition of the Audit Committee as at January 1st 2018:
- Ireneusz Purgacz - Chair,
- Piotr Czajkowski,
- Michał Gabryel,
- Tomasz Karusewicz.

Piotr Czajkowski resigned as member of the Supervisory Board’s Audit Committee as of April 19th 2018.

As at December 31st 2018, the Audit Committee was composed of:
- Ireneusz Purgacz - Chair,
- Michał Gabryel - Member,
- Tomasz Karusewicz - Member.

Events after the reporting period
Following changes in the composition of the Supervisory Board made on February 26th 2019, on March 7th 2019 the Supervisory Board passed a resolution to fill the vacancy on the Audit Committee and appoint its Chair. The Supervisory Board appointed Marcin Pawlicki and Paweł Bielski to the Committee. It also appointed Michał Gabryel as Chair of the Audit Committee. As a result, as of March 7th 2019, the Audit Committee is composed of:

- Michał Gabryel – Chair,
- Marcin Pawlicki – Member,
- Paweł Bielski – Member.

Responsibilities of the Audit Committee

The Audit Committee operates pursuant to the Rules of Procedure for the Audit Committee, adopted by the Supervisory Board by way of a resolution of July 4th 2013. The main tasks of the Committee include:

- Monitoring of the financial reporting process,
- Monitoring of the effectiveness of the Company’s internal control, internal audit and risk management systems,
- Monitoring of financial audit,
- Monitoring of the independence of the auditor and the entity qualified to audit financial statements,
- Monitoring of the audit of full-year separate and consolidated financial statements,
- Monitoring of the work and reports of the independent auditor,
- Analysing selected economic events relevant to the Company’s operations.

Independence criteria

The independence criteria set out in Annex II to the Commission Recommendation of 15 February 2005 on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board (EU OJ L 52/51 of 2005) in the reporting period were met by Michał Gabryel, Piotr Czajkowski and Ireneusz Purgacz. The Ministry of Development has been split into two new ministries: the Ministry of Investment and Economic Development and the Ministry of Entrepreneurship and Technology. As a result, the Prime Minister’s former delegation of ownership rights conferred by shares held by the State Treasury in Grupa Azoty S.A. to the Minister of Development expired, and these rights are now exercised by the Prime Minister. As an employee of the State Treasury Department of the Chancellery of the Prime Minister, Piotr Czajkowski ceased to be an independent Member of the Supervisory Board and, consequently, tendered his resignation as Member of the Audit Committee of the Company’s Supervisory Board, with effect from April 19th 2018. As at the date of issue of this Report, the independence criteria were met by Michał Gabryel and Marcin Pawlicki.

Expertise and competence

For information on the Audit Committee members’ expertise and competence in accounting or auditing of financial statements as well as the knowledge of and skills required in the industry in which the Parent operates, including the manner of their acquisition, see the section presenting the biographical notes of the Supervisory Board members.

Consents for the provision of permitted services

In 2018, the Audit Committee granted consent for the provision of the following services:

- Conclusion by the Parent and the auditing firm selected to audit the financial statements of Grupa Azoty S.A., i.e. Ernst & Young Polska Spółka z ograniczoną odpowiedzialnością sp. k. of Warsaw (E&Y), of an agreement to certify the correctness of calculating the Group’s financial debt ratios for 2017, i.e. EBITDA to net interest and net debt to EBITDA,
- Review by Ernst & Young Audyt Polska Sp. z o.o. Sp.k. of the financial statements for the six months ended June 30th 2018 and of the consolidation packages for preparing Grupa Azoty Group’s consolidated financial statements for the six months ended June 30th 2018,
- Provision by Ernst & Young Audyt Polska Sp. z o.o. Sp.k. of the assurance service with respect to Grupa Azoty Group’s Integrated Report for 2016 and 2017,
• Audit by Ernst & Young Audyt Polska Sp. z o.o. Sp.k. of the consolidation packages prepared for the purposes of the Group’s consolidated financial statements for 2018 by the consolidated companies of the Group.

Key assumptions underlying the audit firm selection policy
The purpose of the policy for selecting the audit firm to perform the audit is to ensure compliance of the Company’s activities with the Polish Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017 and Regulation (EU) No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC, including the performance of the obligations laid down in Art. 130.1 of the Act on Statutory Auditors.

The key assumptions underlying the policy for selecting the audit firm to perform the audit:
1. The Audit Committee is responsible for developing and amending the Policy.
2. The Audit Committee adopts or amends the Policy by way of a resolution, and then submits it to the Company’s Supervisory Board for approval.
3. The Company’s Supervisory Board approves or amends the Policy by way of a resolution.
4. The Policy is subject to annual review to ensure that it reflects changes in the Company’s legal environment and guidelines issued by relevant Authorities.
5. The maximum continuous duration of a statutory audit engagement referred to in the second subparagraph of Article 17(1) of Regulation No 537/2014 of the same audit firm or an audit firm affiliated with that audit firm or any member of its network within the European Union to which those audit firms belong shall not exceed five years.
6. The lead auditor may not carry out a statutory audit in the same public-interest entity for a period of more than five years.
7. The lead auditor may again perform the statutory audit in the entity referred to in Par. 4.4 after the lapse of at least three years from the end of the last statutory audit.
8. The first contract with the audit firm for the audit of the financial statements should be concluded for not less than two years with an option to extend its term for subsequent periods of two years or more. However, the aggregate duration may not exceed the period specified in item 5.
9. When selecting the audit firm, Members of the Company’s Audit Committee and its Supervisory Board should be guided by the following criteria:
   • Both the audit firm and the lead auditor should meet the independence and impartiality criteria referred to in the Act on Statutory Auditors and the Regulation;
   • There should be no other threats to the independence of the audit firm and the lead auditor; in particular, the audit firm may not provide the Company or the Group with services prohibited under the Regulation and the Act on Statutory Auditors;
   • The audit firm should have competent staff, sufficient time and other resources required to duly perform the audit;
   • The audit firm should have the knowledge of the industry in which the Company and the Group operate;
   • The audit firm and the lead auditor should meet other criteria prescribed by law, including the rotation of the audit firm and the lead auditor.

The purpose of the policy for providing the Grupa Azoty Group with additional services by an audit firm is to ensure compliance of the Company’s activities with the Polish Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017, including compliance with Art. 130.1 of that Act, and with Regulation (EU) No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC.

The key assumptions underlying the policy for providing additional services by the audit firm:
1. The Audit Committee is responsible for developing and amending the Policy.
2. The Audit Committee adopts or amends the Policy, and then submits it to the Company’s Supervisory Board for approval.
3. The Company’s Supervisory Board approves or amends the Policy by way of a resolution.
4. The Policy is subject to annual review to ensure that it reflects changes in the Company’s legal environment and guidelines issued by relevant Authorities.
Prohibited services
Neither the auditor nor the audit firm may provide, directly or indirectly, the Company or the companies it controls with any services prohibited under Regulation 537/2014 or the Act on Statutory Auditors during the following periods:
- between the beginning of the period audited and the issuing of the audit report;
- in the financial year immediately preceding the period referred to in item 1) above with respect to designing and implementing internal control or risk management procedures related to the preparation and/or control of financial information or designing and implementing financial information technology systems.

Additional services
The auditor or audit firm may provide the Company or the companies it controls with additional services if doing so is approved by the Audit Committee following an appropriate assessment of threats to the audit firm’s independence as well as the safeguards applied to mitigate those threats.

Recommendation to select an audit firm
The auditor was selected on March 28th 2017, prior to the entry in force of the Polish Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017. For this reason, the audit firm was selected in accordance with the previous Act.
No selection of audit firm was made in 2018.

The Audit Committee held eight meetings in 2018.

Other Supervisory Board's committees
On February 1st 2018, the Supervisory Board resolved to establish a Strategy and Development Committee and a Nomination and Remuneration Committee.

As at December 31st 2018, the Strategy and Development Committee was composed of:
- Robert Kapka - Chair,
- Piotr Czajkowski - Member,
- Zbigniew Paprocki - Member.

As at the date of this Report, the Nomination and Remuneration Committee was composed of:
- Bartłomiej Litwińczuk - Chair,
- Piotr Czajkowski - Member,
- Monika Fill - Member,
- Roman Romaniszyn - Member.

Events after the reporting period
On March 29th 2019, the Supervisory Board appointed Paweł Bielski to the Strategy and Development Committee.
Following the appointment, the composition of the Audit Committee is as follows:
- Robert Kapka - Chair,
- Paweł Bielski - Member,
- Piotr Czajkowski - Member,
- Zbigniew Paprocki - Member.

8.13. Diversity policy
The Group has no formalised diversity policy. However, in its operations it follows clear rules of employment and promotion. It also seeks to achieve diversity in terms of gender, education, age and professional experience of its entire workforce, including in particular members of the governing bodies and key management personnel.
In accordance with the non-discrimination rule stipulated in Art. 11³ of the Polish Labour Code, Any form of workplace discrimination, whether direct or indirect, on grounds of gender, age, disability, race, religion, nationality, political views, trade union membership, ethnicity, religious denomination, sexual orientation, or whether an employee is employed under a fixed-term or indefinite term full-time or part-time contract is prohibited.
The Company's Articles of Association define rules for appointment of the Management Board and for election of Management Board members by employees. The Collective Labour Agreement set forth the employment and promotion criteria for managerial positions, based on a competence model and psychological tests verifying candidates' management abilities. Also the Work Rules of Grupa Azoty S.A. contain a section devoted to equal treatment in employment. Over the years, the Group has developed rules that support non-discrimination and diversity, and ensure equal opportunities for professional development of the workforce, and thus contribute to higher work efficiency and the Group's development.

8.14. Remuneration policy

Remuneration system at the Parent
The Parent's remuneration policy relies on a negotiation system. Remuneration is set by way of negotiation between the Management Board and the trade unions. As part of the process, the average remuneration growth rate in a given year and the remuneration components to which the growth rate will apply are determined. By the end of February every year, the Management Board and the trade unions sign a remuneration agreement defining the remuneration growth rate and the remuneration components to which the growth rate will apply, as well as the incentive policy for the year. The key principles governing the terms of employment and remuneration at the Parent are provided for in the Collective Bargaining Agreement and the Work Rules. Persons holding key managerial positions are hired under management contracts and are not covered by the remuneration policy. Their remuneration comprises a monthly base salary and an annual bonus, whose amount depends on the degree of achievement of individual targets set for the year.

Remuneration policy for members of the Management Board
Managerial contracts have been concluded with Management Board members for the period of their appointment as the President, Vice President, or member of the Company’s Management Board. The contracts have been effective as of June 29th 2018.
Each managerial contract provides that if such contract is terminated upon discontinuation of holding a position for reasons other than a breach by a Management Board member of their principal duties thereunder, the Management Board member will be entitled to receive a severance payment equal to three times his or her fixed monthly remuneration, provided that the member has held the position for at least 12 months prior to the termination. The period of holding the position includes the effective periods of the managerial contract(s) previously executed with the Company. No severance payment is due if:
- the Management Board member has resigned from his or her position,
- the contract is terminated or amended due to a change of the Management Board member’s position on the Management Board or their responsibilities,
- the contract is terminated or amended due to the Management Board member’s appointment for another term of office,
- the Management Board Member is appointed to the management board of a Group company.

For a period of six months after the termination of each managerial contract, none of the Management Board members may conduct any activity which, under the Contract, is in competition with to the business of the Company or any subsidiary of the Group. Management Board members are entitled to receive, for a period equal to the non-compete period, compensation for refraining from competition, equal to 100% of the fixed remuneration paid to them prior to the termination.
Remuneration of Management Board members comprises:
- a fixed component in the form of a monthly base pay,
- a variable component representing additional remuneration payable for the Parent’s financial year,

The variable component depends on the progress in the delivery of management objectives and may not exceed 100% of the fixed component of the remuneration in the previous financial year for which the variable remuneration is calculated. The Supervisory Board determines the amount of variable remuneration for a given financial year by way of a separate resolution.
The variable component is payable after:
- the Directors’ Report on the Company’s operations and the financial statements for the previous financial year have been approved,
• the General Meeting has granted a Management Board member discharge in respect of performance of their duties in a given financial year,
• a Management Board member has submitted a report on performance of the management objectives,
• the Supervisory Board has approved performance of the management objectives by the Management Board member in a given year,
• the Supervisory Board has passed a resolution on performance of the management objectives and the amount of variable remuneration due.

The Management Board members have been provided, to the extent necessary to perform their managerial duties, with Company-owned technical equipment and other resources, in particular a company car, a mobile phone and a portable computer, along with the necessary additional equipment.

The rules of using a company car for private purposes and the rules for providing the Management Board members with equipment are set forth in separate internal regulations applicable at the Parent. If a Management Board member’s place of residence is outside the location of the Parent's registered office, the member may request the Supervisory Board to approve the grant of the right to tied accommodation in the location of the Company's registered office, on the terms specified in a resolution of the General Meeting.

**Rules governing remuneration of key management personnel**

Persons holding key managerial positions at the Parent are hired under management contracts. Under management contracts, the managers are entitled to the following perquisites: parking space for a private car, a portable computer with Internet access, and a mobile phone with unlimited business calls.

**Evaluation of the remuneration policy**

The remuneration policy, established by way of negotiation with the social partners, is closely linked to the Parent’s financial results. In accordance with the Collective Bargaining Agreement, the Parent’s current and forecast economic condition is the basis for determining the remuneration growth for any given year. In addition, the amounts of certain remuneration components, such as the incentive bonus and the annual bonus, depend directly on the financial results of the Parent and the degree of achievement of the targets set for the individual managers.

**Remuneration of the Parent’s Management Board members**

<table>
<thead>
<tr>
<th>Remuneration paid</th>
<th>fixed remuneration components</th>
<th>variable remuneration components</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wojciech Wardacki, PhD</td>
<td>817</td>
<td>18</td>
<td>835</td>
</tr>
<tr>
<td>Witold Szczypiński</td>
<td>707</td>
<td>-</td>
<td>707</td>
</tr>
<tr>
<td>Mariusz Grab</td>
<td>346</td>
<td>12</td>
<td>358</td>
</tr>
<tr>
<td>Grzegorz Kędziewlaski, PhD</td>
<td>707</td>
<td>7</td>
<td>714</td>
</tr>
<tr>
<td>Paweł Łapiński</td>
<td>707</td>
<td>21</td>
<td>728</td>
</tr>
<tr>
<td>Artur Kopeć</td>
<td>489</td>
<td>-</td>
<td>489</td>
</tr>
<tr>
<td>Tomasz Hinc*</td>
<td>127</td>
<td>353</td>
<td>480</td>
</tr>
<tr>
<td>Józef Rojek**</td>
<td>361</td>
<td>546</td>
<td>907</td>
</tr>
</tbody>
</table>

* The variable remuneration of PLN 353 thousand comprises PLN 348 thousand under a non-compete agreement and PLN 5 thousand for residential rental expenses.

** The variable remuneration of PLN 546 thousand comprises: PLN 185 thousand as severance pay upon removal from office and PLN 361 thousand under a non-compete agreement.

In 2017, the remuneration of the Management Board Members included an annual bonus provision (benefits potentially due). By the date of this Report, the Supervisory Board did not decide to pay the bonus.
Remuneration of the Parent’s Supervisory Board members

<table>
<thead>
<tr>
<th>Name</th>
<th>Fixed Remuneration</th>
<th>Variable Remuneration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piotr Czajkowski</td>
<td>156</td>
<td>-</td>
<td>156</td>
</tr>
<tr>
<td>Monika Fill</td>
<td>157</td>
<td>-</td>
<td>157</td>
</tr>
<tr>
<td>Michał Gabryel</td>
<td>171</td>
<td>-</td>
<td>171</td>
</tr>
<tr>
<td>Robert Kapka*</td>
<td>457</td>
<td>1</td>
<td>458</td>
</tr>
<tr>
<td>Tomasz Karusewicz</td>
<td>172</td>
<td>-</td>
<td>172</td>
</tr>
<tr>
<td>Bartłomiej Litwińczuk</td>
<td>169</td>
<td>-</td>
<td>169</td>
</tr>
<tr>
<td>Zbigniew Paprocki**</td>
<td>332</td>
<td>1</td>
<td>333</td>
</tr>
<tr>
<td>Ireneusz Purgacz</td>
<td>171</td>
<td>1</td>
<td>172</td>
</tr>
<tr>
<td>Roman Romaniszyn***</td>
<td>259</td>
<td>1</td>
<td>260</td>
</tr>
</tbody>
</table>

* Including remuneration under employment contract with the Company - PLN 288 thousand.
** Including remuneration under employment contract with the Company - PLN 163 thousand.
*** Including remuneration under employment contract with the Company - PLN 103 thousand.

Remuneration of the Parent’s management and supervisory personnel for holding office at the Group’s subsidiaries

<table>
<thead>
<tr>
<th>Name</th>
<th>Remuneration paid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed Remuneration</td>
</tr>
<tr>
<td>Mariusz Grab</td>
<td>184</td>
</tr>
</tbody>
</table>

Further information on remuneration

In the reporting period, at the Parent, the base pay and the allowance for work in a continuous system increased on average by PLN 250 and PLN 50 per employee, respectively, starting from January 1st 2018.

There were no collective redundancies in the reporting period, nor was there any collective dispute with trade unions.

After the reporting date, on January 15th 2019, the Parent and the trade unions active at the Parent executed an Agreement concerning the remuneration policy for 2019. Under the Agreement, as of January 1st 2019, the base pay and the allowance for work in a continuous system increased on average by PLN 250 and PLN 50 per employee, respectively.

8.15. Sponsorship, charitable or similar activities

The Group treats its social responsibilities and cooperation with the communities in which operates as matters of strategic and long-term importance. Social, sponsorship, and charitable initiatives are key elements contributing to the implementation of the long-term development strategy of the Group. Through its engagement in such initiatives, the Group promotes its image of both financially strong and socially responsible business.

The multifaceted and advanced nature of these activities make the Group companies active participants of the local community life, providing support where it is most needed.

Sustainable development policy

The Grupa Azoty Group seeks to implement its sustainable development and corporate social responsibility strategy following the solution it has adopted, based on following three pillars:
• Sustainable production
The Group focuses on ensuring that its resources are properly used and handled and that its products are disposed of in a sustainable way or recycled. In addition, the Group uses energy-efficient technologies, and has implemented a number of pro-environmental projects connected with automation of water and wastewater management, environmental monitoring, and energy audits.

• Workplace
In the pursuit of its objectives, the Group relies in the first place on its employees. We guarantee them safety and comfort at the workplace, because we want them to feel safe. We also conduct regular, mandatory OHS training for the entire workforce.
We seek to promote the development of our staff and raise their qualifications. Our employees attend various specialist courses and industry meetings, and also receive foreign language training. We also take appropriate HR measures to prevent a generation gap. To ensure better healthcare to our employees, we co-finance their private health insurance plans.

• Dialogue and relationship building
Our cooperation with local communities involves supporting educational initiatives and institutions at various levels. We are also committed to helping high school students with vocational training by organising internships for students. We are well aware of the need to foster future generations.

Development of the region
In 2018, Grupa Azoty S.A. participated in numerous initiatives for the development of the region and its community, supporting the operations of such institutions as: PTTK (Polish Tourist Association) Branch at Grupa Azoty S.A. in Tarnów-Mościce; Naczelnna Organizacja Techniczna Federacja Stowarzyszeń Naukowych-Technicznych (Polish Federation of Engineering Associations NOT), Tarnów Council; Stowarzyszenie Inżynierów i Techników Przemysłu Chemicznego (Polish Association of Chemical Engineers); and Towarzystwo Przyjaciół Mościc (Society of the Friends of Mościce).

Local community development
The Group companies conduct a wide range of CSR initiatives. Through these activities, which include educational, cultural and sports projects, the companies support their local communities and regions, thus building and promoting their perception as valued and respected partners and neighbours. These activities also contribute to a significant tightening and strengthening of positive relations between the company and its immediate environment.

Development of education
The Grupa Azoty Group has a long-standing commitment to promoting the local community development, which is delivered through various educational activities, campaigns and programmes designed to support children and young people in pursuing their interests, improving their skills and acquiring new knowledge in such fields as environmental protection.
In 2018, Grupa Azoty S.A. worked in partnership with schools from the Tarnów region, including The Technical School Complex in Tarnów, Comprehensive School Complex No. 1 of Tarnów, Sports School Complex in Tarnów, and the Lifelong and Vocational Education Centre in Tarnów.

Development of sports
The sports development initiatives cover the sports most popular in Poland, such as ski jumping, volleyball, speedway, football, as well as field and track sports. Supporting the best Polish athletes is one of the key elements in building the awareness of the Grupa Azoty brand. In its activities, the Company attaches great importance to supporting local sports, including both professional sports and children’s and teenagers’ sport activities, as part of CSR activities.
In 2018, we supported many sport disciplines, including: AZS (University Sports Association) Sports Club at the State Higher Vocational School (PWSZ) of Tarnów (field and track section), Grupa Azoty PWSZ Tarnów (volleyball), Tarnów Handball Association (handball), Interschool Students’ Sports Club 1811 (basketball), Miejsko-Ludowy Klub Sportowy (sports club) Dąbrovia (archery), and Sokół Students’ Sports Club (swimming).
The Group’s partnership also covers nationwide sports events, and the best known initiative is the cooperation with the Polish Skiing Association as the Main Partner. As part of this cooperation, Grupa
Azoty has for many years supported the Polish ski jumping team. The Group’s support for winter sports takes multiple forms, including sponsoring individual athletes or acting as the main sponsor of major sports events in Poland: the ski jumping World Cup contests in Wisła and Zakopane.

**Development of culture**
Believing that culture is an invaluable social phenomenon and an integral system within the process of education, which stimulates imagination, sensitivity and creativity of successive generations and plays a significant role in shaping both individual and national identity, Grupa Azoty undertook the following initiatives:

- organisation of cultural events and workshops promoting respect for the national and cultural identity,
- support of cultural projects and programmes,
- support for projects promoting the national culture, including the 20th Lesser Poland Cultural Heritage Days held under the ‘Freedom Strengthens!’ slogan.

As part of local art and culture initiatives, Grupa Azoty supported the Mościce Arts Centre, ArtContest Artistic Association of Tarnów (Grupa Azoty International Jazz Contest), BWA City Art Gallery of Tarnów, Tarnów Regional Museum, and Paderewski Centre in Kaśna Dolna.

**Protection of life and health**
Aware of the need to engage in initiatives for the protection of human health and life, help the suffering, sick and terminally ill, as well as those deprived of opportunities for development and unable to function on their own in society, last year the Company extended particular support to the institutions which help those in need.

**Directions for the social and sponsorship activities:**

- Investments benefiting local communities, solving social issues, charitable assistance in the form of cash and non-cash donations and services, addressed directly to the communities or to charitable organisations, NGOs and non-profit organisations,
- Social and sponsorship projects relating to local initiatives, often with a supraregional, or even international, media coverage,

In 2018, Grupa Azoty S.A. pursued social and sponsorship activities for the common good and charitable organisations, NGOs and non-profit organisations.

**Objectives of the social and sponsorship activities:**

- Building a positive image of the Group as a community- and environment-friendly business organisation, the leader of the chemical industry in Poland and Europe,
- Building the Group's and its companies' image as socially responsible businesses supporting local initiatives,
- Promoting the Grupa Azoty brand by increasing its recognition outside the group of its customers and buyers of its products,
- Communicating Grupa Azoty's message to circles which are important for the Company, with focus on the importance of high standards of projects and initiatives implemented by the Group,
- Building the Group's and its companies' reputation, and gaining recognition and favourable perception among the public, particularly for the positive role the Group plays in solving social and environmental issues of today's world,
- Enhancing attractiveness of the regions in which the Group operates as places to live, work, pursue passions and fulfil ambitions; while offering young people the best possible education, health and wellbeing opportunities,
- Supporting promotional and commercial activities.
Charitable giving policy
The charitable giving policy specifies the rules of granting donations and applies to all Group companies. Through donations, the Group seeks to actively respond to the needs of foundations, associations, schools, non-profit organisations and individuals in difficult circumstances. In particular, the Group supports projects contributing to the enhancement of medical care, social and educational development of children and youth, as well as other initiatives benefiting local communities.

Corporate social responsibility
Some of the initiatives implemented by the Grupa Azoty Group follows from the requirements to be fulfilled by socially responsible companies. For this reason, the Grupa Azoty Group takes every effort to respond to the needs of local communities and other stakeholders, including employees, local institutions and entities. These effort include both social initiatives and projects dedicated exclusively to employees. These include sports and educational initiatives, but also those related to health and safety at work.

As part of its CSR activities, the Grupa Azoty Group undertakes initiatives for stakeholders engaged in CSR activities. The Grupa Azoty START programme is among such initiatives. It is a proprietary sports and social programme focused on scouting for young talent. The programme supports young people dreaming of excelling in sports. To many of them, this kind of support is a springboard to major achievements.

Grupa Azoty implements many solutions facilitating successful competition in international markets. The Company is particularly focused on innovation. To this end, the Company has set up the ‘Grupa Azoty Brand Ambassador’ programme, consisting in collaboration with academic communities and attracting new qualified staff.

8.16. Report on entertainment expenses, legal costs, marketing costs, public relations and social communication expenses, and management consultancy fees

8.16.1. Introduction
The report was prepared on the basis of Art. 56.1 of the Grupa Azoty S.A. Articles of Association. The data is presented in PLN, with all amounts given in thousands of PLN. The report does not show the amount of input tax. The amounts provided are net of tax.

8.16.2. Expenses
Public relations and social communication expenses amounted to PLN 16,281 thousand (PLN 16,396 thousand including gifts), compared with PLN 17,678 thousand (PLN 17,845 thousand including gifts) in 2017.

These expenditures were mainly related to activities intended to foster (build and maintain) relations with the Company’s and the Group’s external stakeholders (investors, media, local communities, employees) and build a positive image of the Group. They were pursued in particular through:
- Media monitoring,
- Participation and organisation of conferences and other events,
- Sponsorship,
- Initiatives addressed to the Company’s employees and their families,
- Corporate social responsibility (CSR) efforts.

Marketing expenses amounted to PLN 2,237 thousand (PLN 2,239 thousand including gifts), compared with PLN 2,653 thousand (PLN 2,768 including gifts) in 2017.

Marketing expenses were related mainly to the promotion of products offered by Grupa Azoty. They were incurred in particular on: advertising services, advertising materials with logos, organisation of events, participation in fairs, and market research.

Management consultancy fees amounted to PLN 9,120 thousand (2017: PLN 1,749 thousand).

These expenditures were related in particular to: consultancy services in the area of strategic and organisational planning (business consulting), production management, HR consultancy services, business and financial analysis.
Legal fees amounted to PLN 4,629 thousand (2017: PLN 572 thousand). These expenses were made in particular on the preparation of legal opinions, legal advice related to strategic plans, and patent counseling.

Entertainment expenses amounted to PLN 326 thousand (2017: PLN 399 thousand).

9. Other material information and events

9.1. Qualified auditor

Based on the representations of the Parent’s Supervisory Board, we state that the audit firm appointed to audit the full-year separate financial statements and full-year consolidated financial statements has been selected in accordance with applicable laws, including those governing the audit firm selection and appointment procedure. We also state that:

a) the audit firm and the auditors who performed the audit met the conditions required to issue an objective and independent audit report, in accordance with the applicable laws, professional standards, and professional ethics;
b) the laws governing the rotation of audit firms and lead auditors and mandatory cooling-off periods have been complied with;
c) the Company has in place a policy for selection of an audit firm and a policy governing the provision to the Company of additional non-audit services (including services conditionally exempt from the prohibition of being provided by the auditor of financial statements) by the auditor, the auditor’s related party or a member of the auditor’s network.

On March 28th 2017, the Parent’s Supervisory Board appointed a qualified auditor to review and audit the separate financial statements of the Parent and consolidated financial statements of the Grupa Azoty Group for the financial years 2017, 2018 and 2019.

The entity appointed to perform the reviews and audits is Ernst & Young Audyt Polska Sp. z o.o. sp.k., with its registered office at Rondo ONZ 1, 00-124 Warsaw, Poland. Ernst & Young Audyt Polska Sp. z o.o. sp. k. is entered in the list of audit firms under No. 130.

The agreement of June 29th 2017 and annex 1 of January 31st 2018 with Ernst & Young Audyt Polska spółka z ograniczoną odpowiedzialnością sp. k. of Warsaw ("EY") provides for:

- an audit of Grupa Azoty’s Financial Statements and the Group’s Consolidated Financial Statements for the years ended December 31st 2017, December 31st 2018, and December 31st 2019,
Fees for EY services rendered to the Parent

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit of the full-year separate and consolidated financial statements of the Parent and the Group</td>
<td>398</td>
<td>189</td>
</tr>
<tr>
<td>Review of the half-year separate and consolidated financial statements of the Parent and the Group</td>
<td>79</td>
<td>82</td>
</tr>
<tr>
<td>Other services*</td>
<td>101</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>578</td>
<td>282</td>
</tr>
</tbody>
</table>

* Other services include the fee for carrying out the agreed procedures with respect to the terms and conditions of credit facility agreements, the fee for the assurance service concerning the GRI indicators presented in the non-financial statement prepared by the Company, and the fee for the assurance service concerning the project status and delivery report on the implementation of the projects included in the National Investment Plan.

Fees for the audit/review of the financial statements and of the consolidation package of other companies of the Group are paid pursuant to separate agreements executed between the qualified auditor of financial statements and each company.

Fees for EY services rendered to companies of the Group (excluding the Parent)

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit of the full-year separate and consolidated financial statements of the company and audit or review of the consolidation package*</td>
<td>2 690</td>
<td>878</td>
</tr>
<tr>
<td>Review of the half-year separate and consolidated financial statements of the company and review of consolidation package</td>
<td>232</td>
<td>185</td>
</tr>
<tr>
<td>Audit of the consolidation package as at November 30th 2018 (opening balance)**</td>
<td>942</td>
<td>-</td>
</tr>
<tr>
<td>Audit of the consolidation package as at December 31st 2018 (closing balance) **</td>
<td>1,539</td>
<td>-</td>
</tr>
<tr>
<td>Other services***</td>
<td>202</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>5,606</td>
<td>1,123</td>
</tr>
</tbody>
</table>

* The audit of the full-year separate and consolidated financial statements in 2018 includes the fee for the audit of the financial statements of Goat TopCo GmbH and its subsidiaries for the year ended September 30th 2018, i.e. before the date of acquisition of the Goat TopCo GmbH Group by Grupa Azoty S.A.

** The audit of the consolidation packages as at the acquisition date and the reporting date, related to the inclusion of Goat TopCo GmbH and its subsidiaries into the Grupa Azoty Group.

*** In 2018, other services included tax advisory services (services at Goat TopCo GmbH and its subsidiaries prior to their inclusion into the Grupa Azoty Group); in 2017, they included financial audit services related to the audit of the financial statements of the subsidiary Supra Agrochemia Sp. z o.o. for the six months ended June 30th 2017.

9.2. Environmental performance

Sustainable development policy
Grupa Azoty has implemented a strategic approach to sustainable development, based on its long-term Sustainable Development Strategy. The Strategy was developed on the basis of the Company’s existing good practices as well as research and analyses conducted both internally within the Company and among its stakeholders. It is founded on the business strategy. This approach allows the Group to enhance its economic value and to build value for the stakeholders.

The strategy reflects an integrated approach to:
- economic efficiency,
- responsibility towards staff and the natural environment,
- relationship with the environment.
The Sustainable Development Strategy rests on three pillars:
- sustainable production (mitigation of environmental impacts, creation of sustainable products, and increasing environmental awareness),
- dialogue and relationship building (active dialogue with all stakeholder groups, implementing a code of ethics),
- workplace (improving employee satisfaction and workplace safety).

The R&D Centre at Grupa Azoty S.A has been expanded with a view to carrying out research and development work to test new industrial technologies first in the laboratory, and then on an experimental basis. The R&D work will involve:
- implementing new or improved technologies and environment-friendly products,
- reducing the energy intensity of adopted technologies,
- reducing the amount of waste generated by adopted technologies,
- developing new technologies relying on synergies with the Group’s by-products.

The Centre will focus on research into new, effective and environment-friendly technologies. Through these efforts, it will develop new technologies which may reduce the energy intensity of processes, thus helping reduce global greenhouse gas emissions, which is consistent with the Europe 2020 targets.

Respect Index
The purpose of the RESPECT project is to bring to light the companies that excel in communication with the market through current and periodic reports and through websites. Inclusion in the RESPECT Index depends, among other things, on socially responsible conduct vis-à-vis the environment, the community and employees.

The selection of companies to be included in the Index is a three-stage process. The criteria evaluated in the selection process include financial condition, strategy, management processes, environmental factors, human resources policy and employee relations, as well as market impact and customer relations. Thus, Grupa Azoty S.A. has become a member of an elite group of stable, reliable and trustworthy organisations. Grupa Azoty’s inclusion in the RESPECT Index provides investors with additional assurance that Grupa Azoty is a stable and safe enterprise, managed to the highest standards of sustainable development.

The Company has been a constituent of the RESPECT Index since November 19th 2009, which stands as a testament to Grupa Azoty S.A.’s care for sustainable development and responsible management.

Legal requirements
In accordance with the Environmental Protection Law, companies of the Group are required to adjust the permits they hold to the requirements stipulated in applicable laws.

Pursuant to Art. 215.2 of the Environmental Law of April 27th 2001 (consolidated text: Dz.U. of 2017, item 519, as amended), in connection with the publication of:
- Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants, in order to check whether it would be necessary to bring the Group’s units into compliance with the requirements of those conclusions, an integrated permit for the ECII CHP plant’s fuel combustion unit was analysed;
- Commission Implementing Decision of 21 November 2017 establishing best available techniques (BAT) conclusions for the production of large volume organic chemicals, in order to check whether it would be necessary to bring the Group’s units into compliance with the requirements of those conclusions, an integrated permit was analysed for the unit producing Cyclohexanone from phenol, and for the Caprolactam and Formaldehyde units.

Grupa Azoty S.A. performed and submitted these analyses to the Marshal of the Kraków Province. A team was appointed to bring the ECII CHP plant into compliance with the BAT Conclusions under Commission Implementing Decision (EU) 2017/1442 of 31 July 2017.

In terms of environmental protection, Grupa Azoty POLICE operates based on an integrated permit for the operation of units, granted on January 9th 2014, as amended. The validity of the integrated permit is monitored on an ongoing basis. As a result, in 2018 three decisions of the Marshal Office of the Szczecin Province amending the integrated permit were issued. The amendments were necessitated in particular by:
- upgrade of the EC II CHP plant, including the construction of units for flue gas desulfurisation using the wet ammonia scrubbing method and for flue gas denitrification using the SNCR method, and upgrade of the electrostatic precipitators,
- the need to harmonise the permit provisions concerning permitted volumes of emitted gases and particulate matter for the EC I CHP plant with the conclusions,
- the need to amend the permit provisions in connection with modernisation of unloading equipment at the port,
- introduction of changes concerning emission points in titanium white production,
- upgrade of the PF4 unit at the phosphoric acid unit – changing the production technology by implementing the dihydrate hemihydrate DA-HF process to replace the DH dihydrate production method.

The Company is obliged to apply, by February 16th 2019, for harmonising the integrated permit with Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants (“LCP BAT Conclusions”).

On August 24th 2018, the Marshal of the Gdańsk Province issued a decision amending the integrated permit of August 1st 2014 for GZN Fosforz Sp. z o.o., primarily with respect to consent to waste recovery at the fertilizer production unit.

On April 24th 2018, Grupa Azoty PULAWY obtained the Marshal of the Lublin Province’s decision amending the integrated permit with respect to the amount of abstracted water and discharged wastewater.

In the period from October 2017 to March 2018, at Grupa Azoty PULAWY, the Marshal Office of the Lublin Province reviewed the company’s integrated permit for compliance with the BAT Conclusions. On April 3rd 2018, Grupa Azoty PULAWY received a notice requesting the company to obtain an amendment of the integrated permit and specifying its adaptation to the conditions laid down in the BAT conclusions, concerning the emissions of nitrogen oxides, sulfur dioxide, particulate matter and mercury. The Company has taken measures to obtain derogations.

In the period from January to May 2018, the Marshal Office of the Lublin Province carried out a review of the integrated permit for compliance with the BAT Conclusions for melamine and caprolactam units. On July 30th 2018, Grupa Azoty PULAWY received a notice requesting the company to obtain an amendment of the permit and specifying its adaptation to the conditions laid down in the BAT conclusions, concerning in particular the monitoring of channelled air emissions from process furnaces and other channelled air emissions.

In 2018, work was continued to select a contractor for the design and construction of a central biological industrial wastewater treatment plant. The project, once completed, will enable Grupa Azoty PULAWY to meet the requirements defined in the BAT conclusions for common wastewater treatment systems.

The Group companies were actively involved in consulting the new set of legal acts on waste, presenting their comments and proposing amendments.

To fulfil German legal requirements (Verpack V packaging regulation and Verpack G packaging act) in connection with to exporting to Germany packaged products, the Grupa Azoty Group companies registered their packaging with the Central Packaging Register LUCID (for the B2C segment) and as of January 1st 2019 have in place agreements for collection and recycling of packaging.

The Group companies hold all environmental certificates, permits and decisions, and have undergone all environmental reviews required for their operations.

Safety

The Group’s business requires compliance with the most exacting safety standards, which minimise the risk of industrial incidents. Relevant solutions applied across the Group ensure appropriate conditions for the manufacture, storage, transport and distribution of substances to meet the natural environment protection requirements. The Group companies operate in the chemical industry and are classified as facilities with a high risk of a serious industrial incident. Being aware of the possible consequences of their operations, the Group companies strive to mitigate their negative environmental impact.

Advanced technological solutions enable the Group companies to actively engage in pro-environmental efforts, which are often a source of economic benefits as well. Ensuring the responsibility and safety of production processes is a fundamental principle of the Group. The companies have devised and implemented appropriate incident prevention programmes, and safety matters are subject to regular reporting.
Moreover, rescue plans and safety management systems are in place for the Group facilities. Given the nature of its business, the Group is subject to the requirements of the Environmental Protection Law, the Water Law, the Waste Act, and other regulations on environmental protection, OHS and fire safety. The legislation imposes certain obligations on Group companies with respect to production activities, investment projects, site restoration and creating appropriate conditions for the manufacture, storage, transport and distribution of products.

The Group has also implemented the STOP™ Safety Monitoring Programme, designed to raise the degree of OHS involvement among managers and employees of all ranks, develop hazard identification skills, improve communication with respect to OHS matters, raise awareness of the importance of occupational safety by building new attitudes.

In 2018, joint inspections were carried out at the Group by three national supervision and inspection bodies: The State Fire Service, Provincial Inspectorate for Environmental Protection, and National Labour Inspectorate.

The Grupa Azoty Group companies were distinguished with the Gold Card of Safe Work Leader, Which is awarded to businesses that operate effective OHS management systems and have effective OHS prevention programmes in place.

In January 2018, Grupa Azoty PULAWY received a report from an inspection carried out by the State Fire Service between October 17th and November 24th 2017. The Province Commander-in-Chief of the State Fire Service issued a decision not to approve the safety report for an upper tier establishment and notified the Company of having initiated administrative proceedings against it.

Grupa Azoty Zakłady Azotowe Puławy S.A. has appealed against the decision of the State Fire Service. Approval of the report is required in order to place in service a new production plant.

The Group companies have appropriate organisational and technical safety measures in place, such as CCTV systems, safeguards, and procedures for incident prevention and mitigation of consequences. They maintain well-trained fire services capable of effective rescue operations, with additional support from supernumerary chemical rescue and technical rescue teams working in a continuous system and other services.

**SPOT**

With the safety of people, their property and natural environment in mind, the Group's plants offer assistance in the event of incidents involving transport of hazardous materials. In 2000, Grupa Azoty, together with a group of other chemical manufacturers and the Polish Chamber of Chemical Industry, established the Assistance System for Transport of Hazardous Materials (SPOT) Association.

The system aids in recovery from incidents involving transport of hazardous materials. Its purpose is to improve the safety of transport in Poland, and in the case of any incidents - to facilitate effective removal of their consequences by joint efforts and measures of the national rescue and fire services and the SPOT members. SPOT's help in actively preventing potential threats and damage to property as well as in providing assistance to rescue services allows hazardous materials to be transported in as safe and reliable a manner as possible.

In 2018, in line with the training schedule for Assistance System for Transport of Hazardous Materials (SPOT) centres, SPOT drills were conducted at the Grupa Azoty Group companies.

**Environmental projects**

Major environmental projects carried out in 2018 by the Parent included the ‘Collection of slag from the ECII CHP plant boilers’ project. The project will create the possibility of using slag to produce building materials, helping to reduce the amount of stored furnace waste.

In addition, in 2018 a number of projects were pursued by Grupa Azoty S.A. to reduce the consumption of energy carriers in production processes and make more efficient use of available resources. Major projects in this area included utilisation of purge gases from ammonia synthesis unit, comprehensive utilisation of heat generated in selective phenol hydrogenation, reduction of steam consumption in caprolactam production, and alteration of the pumping system of the first heating segment.

At Grupa Azoty KĘDZIERZYN, the key environmental projects carried out in 2018 included the completion of an upgrade of the Central Mechanical and Biological Wastewater Treatment Facility. As part of initiatives undertaken in 2018 to support land surface protection, in accordance with a decision of the Regional Director for Environmental Protection, earthworks carried out as part of another land remediation process (on the premises of the Ammonia Department’s former Copper Washing Unit 2) were completed. Further work will only comprise regular monitoring of the land condition until 2031.

At Grupa Azoty PULAWY, on June 8th 2018, as part of the ongoing upgrade of steam generator OP-2015 No. 2 designed to reduce NOx emissions, a turn-key contract for the procurement, construction
The following projects were completed in 2018:

- ‘Wastewater collection and recirculation at Urea I unit.’ The project will allow the Company to reduce the amount of pollutants discharged with wastewater.
- ‘Replacement of the TG-02 turbine generator set.’ The project will improve the reliability of electricity and process steam generation, improve efficiency, reduce industrial production water consumption, and improve safety and ergonomics of employee’s work.

The projects to upgrade steam generator No. 2 and upgrade the existing and construct new nitric acid units are underway.

In 2018, work was continued to select a contractor for the design and construction of a central biological industrial wastewater treatment plant. The project, once completed, will enable the Company to meet the requirements defined in the BAT conclusions for common wastewater treatment systems.

In order to reduce emissions from its units generating high pollutant emissions, Grupa Azoty POLICE performed high-cost overhaul and upgrade work on its gas treatment units (replacement of filter cloths, repairs of absorbers and scrubbers, upgrades of dust filters).

In 2018, GZNF Fosfory Sp. z o.o. recovered phosphorus from the phosphogypsum landfill site in Wiślanka. At GZNF Fosfory Sp. z o.o.’s fertilizers production unit, approximately 10,000 tonnes of leachate from the phosphogypsum landfill site was recovered. Phosphorous recovery accelerates the reclamation of the landfill site, improves the condition of the natural environment and falls in line with the sustainable development strategy by reducing the use of natural resources (water and phosphor materials).

The waste comprises phosphorus, which the European Environmental Agency has recognised as a priority raw material and indicated recycling and recovery of phosphorus from sludge as key ways to balance its consumption. Furthermore, the use of ash as a low-cadmium feedstock helps reduce cadmium content in phosphate fertilizers, which is beneficial for the environment and reduces cadmium accumulation in soil.

Since September 2018, GZNF Fosfory Sp. z o.o. has been able to recover ash from the combustion of sludge classified under waste code 190114.

In 2018, construction of an ash unloading, storage and batching system was also in progress. Performance testing of the system is currently underway.

### Water and wastewater management

Grupa Azoty S.A. uses water for industrial purposes, as a cooling agent, treats it for drinking purposes, uses water to produce process waters, and for fire-fighting applications. The Parent draws water from two sources – a surface intake on the right bank of the Dunajec river and an underground intake from Quaternary water-bearing formations (first aquifer). The allowed amounts of water drawn are specified in the relevant water-law permits.

The Parent’s industrial facilities generate the following types of industrial wastewater: process wastewater, sanitary sewage, spent cooling water, and stormwater. Industrial wastewater is routed for treatment via an underground industrial sewer system and trestle-supported sewer lines. Depending on origin, industrial wastewater is transported to either the Central Wastewater Treatment Plant or the Biological Wastewater Treatment Plant. Industrial wastewater and sanitary sewage undergo mechanical and chemical treatment at the Central Wastewater Treatment Plant. 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 are drained separately, through an EF+A0 collector, collected in a retention pond, and then discharged through a Sutro weir into the Dunajec river.

The Parent is well prepared for any wastewater system failure. In order to prevent wastewater escape, the system can be entirely shut off by closing the storm water outflow valve and pumping all wastewater to the Central Treatment Plant. 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.

Relevant parameters of the industrial wastewater are monitored on an ongoing basis at individual system nodes with remote analysers. Also, wastewater samples are laboratory-tested for pollutants at a predetermined frequency. The discharged wastewater meets the parameters defined in the integrated permit.
Grupa Azoty POLICE operates a sustainable water and wastewater management programme. The company takes care to ensure that the emission parameters are compliant with the terms of its integrated permit by supervising the wastewater treatment process. For its power-generation or industrial process purposes, the company draws water from two surface water intakes:

- Western arm of the Oder river, through a river-bank water intake located on 48+900 km of the Szczecin –Świnoujście seaway,
- Gunica river (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. Water is periodically abstracted from the Oder river, depending on its salinity).

The water is used for industrial purposes, as a cooling agent, and for fire-fighting applications. Industrial wastewater from production processes is treated at the Company Wastewater Treatment Plant. Spent cooling water and stormwater from the plant are discharged directly into the surface waters of the Oder river. Spent cooling water undergoes regular automatic pH monitoring. Industrial wastewater, leachate from the phosphogypsum landfill site, leachate from the iron sulfate (II) landfill site, sanitary sewage, and municipal wastewater from the town of Police are treated at the company's collective mechanical and chemical wastewater treatment plant.

The treated wastewater is monitored in accordance with the terms of the integrated permit. At present, the volume of discharged wastewater is monitored on an ongoing basis, while the quality of wastewater discharged into water is regularly examined by an accredited laboratory. Tests are performed in line with reference methods set forth in the Regulation of the Minister of the Environment on conditions to be met when discharging wastewater into water or soil, and on substances particularly harmful to the water environment, dated November 18th 2014. The company meets all the requirements defined in the integrated permit for the quantities of abstracted water, volumes of discharged wastewater, pollution parameters of treated wastewater, as well as the amounts of stormwater and spent cooling water.

In 2018, the amount of abstracted water went up slightly (by 4.3%) due to an increase in the output of Grupa Azoty KĘDZIERZYN products leading to higher demand for various water types. At the same time, the volume of discharged wastewater dropped by 14.5%, owing to lower rainwater volumes. In the case of main pollutants (COD and total nitrogen) discharged in wastewater, the average load of organic compounds fell by 18.9% owing to a lower COD load reaching the last treatment facility with rainwater, and to a 22.0% drop in the load of nitrogen compounds as a direct effect of the upgrade of the Central Mechanical and Biological Wastewater Treatment Plant, completed in April 2018.

The expenditure incurred on the execution of the project was counted towards administrative penalties imposed in 2010-2012.

Solid waste management
In 2018, ash and slag were the main waste type. Wet ash was transferred for commercial use, while fly ash was delivered to external customers for use in construction. Another major waste type was used oils and lubricants. The waste was transferred to MIS-Poland, which manages used oils on Grupa Azoty S.A.’s premises. Another waste type - packaging containing residual amounts of hazardous substances - was transferred to Grupa Azoty PKCh Sp. z o.o. for disposal. On Grupa Azoty S.A.’s premises, also plastic waste was commercially reused in a recovery process at the compounding units.

In accordance with the Waste Act, Grupa Azoty S.A. also operates a selective waste collection programme on its premises (for waste paper, plastics, wood, glass, used batteries, and used electric and electronic equipment). With environmental concerns in mind, in contracts with external providers of waste collection services and services involving generation of waste Grupa Azoty S.A. incorporates 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. Grupa Azoty S.A. also works with Branżowa Organizacja Odzysku S.A. and the Polish Chamber of Commerce to meet the appropriate targets applicable to recovery and recycling of packaging waste, including composite and hazardous materials packaging waste. The main type of waste by-product generated by Grupa Azoty POLICE is phosphogypsum, which is disposed of by being deposited in the company's phosphogypsum landfill site. Grupa Azoty POLICE managed waste in compliance with the terms of its integrated permit. Additionally, in order to meet the appropriate targets applicable to recovery and recycling of packaging waste, including composite and/or hazardous materials packaging waste, Grupa Azoty POLICE works with Branżowa Organizacja...

In accordance with the amended Waste Act, the company filed new applications for the recognition of iron sulfate, hydrolytic acid, ash, slag and phosphogypsum as by-products. In accordance with the applicable regulations, at present, the Marshal Office’s ‘tacit consent’ to recognising iron sulfate, hydrolytic acid, ash and slag as by-products applies. Pursuant to the amended Waste Act, the consent is valid until March 3rd 2019.

Emissions
The Group has implemented a range of environmental protection solutions contributing to lower air emissions.

The air pollution control equipment reduces the amount of flue gases and particulate matter discharged into the atmosphere:

- Particulate matter emissions can be reduced thanks to the use of wet scrubbers, cyclones, multicyclones and electrostatic precipitators;
- Reduced levels of pollutants in gases are achieved by using scrubbers and thermal reducers, and thanks to the desulfurisation and NOx removal units.

The Parent also measures emission volumes and pollutant concentration levels at major emitters. Measurements are taken on a continuous basis (at the CHP plant and the dual-pressure nitric acid unit) or on a periodic basis at selected process emitters. Emission volumes and pollutant concentrations are measured in keeping with the applicable legal 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 reviews its annual reports and obtains rights on an annual basis.

In an effort to preserve clean air, the Parent constantly monitors air quality at five sites across Tarnów. The locations of the measurement sites were selected to span the wide area that may be affected by particulate matter and gas emissions from the plant.

Grupa Azoty POLICE takes special care to ensure compliance with the terms of its integrated permit and applicable legal regulations on emissions into the air from production nodes. At the moment, two units are monitored on a continuous basis:

- the EC II CHP plant – for SO\textsubscript{x}, NO\textsubscript{x}, and particulate matter emissions,
- the titanium dioxide production unit: measurement of particulate matter emissions from feedstock and dry pigment milling, as well as measurement of sulfur dioxide emissions from calcination and feedstock decomposition processes.

The company monitors the volumes of emissions of gaseous pollutants and particulate matter in accordance with the requirements defined in the integrated permit. To reduce pollutant emissions from the highly polluting units, overhaul and upgrading work is performed on gas treatment units, which requires substantial expenditure, including on replacement of filter cloths, repairs of absorbers and scrubbers, upgrades of dust filters. Grupa Azoty Police meets legal requirements pertaining to integrated air protection, and complies with the requirement to provide external supervisory authorities with relevant reports in a timely manner.

In addition, in accordance with the terms of its integrated permit, ambient concentrations are monitored on a 24/7 basis from three measurement stations whose location allows the company to assess the impact of pollutants generated during everyday operation of its units.

In 2018, at Grupa Azoty KĘDZIERZYN, the volume of total pollutant emissions into the air (excluding CO\textsubscript{2}) decreased by 9.3% compared with 2017. The reduction was recorded for gaseous emissions and resulted mainly from intensifying the operation of the new K-10 boiler with an efficient flue gas desulfurization system and a nitrogen oxides reduction system, as well as from the efficient operation of drum dryers at the CAN Division and modernisation of the urea unit.

Gas emissions were down 9.7%, mainly due to lower emissions of sulfur dioxide, nitrogen oxides, hydrogen chloride and carbon oxide from the Company’s CHP Plant, as well as ammonia emissions from the CAN and urea production units.

On March 19th 2018, the Provincial Inspectorate for Environmental Protection imposed a PLN 408,213 fine on Grupa Azoty PUŁAWY for the release of pollutants (sulfur dioxide and particulate matter) from the Company’s CHP plant in 2017, in volumes exceeding the set limits. In connection with Grupa Azoty PUŁAWY’s implementation of projects designed to prevent the excess emissions, on May 22nd 2018 the Provincial Inspectorate for Environmental Protection deferred the fine payment until June 30th 2021.
As Grupa Azoty PULAWY exceeded the emission limits applicable to its CHP plant in 2018, it will be obliged to pay a fine estimated at PLN 6,350,990.85. Grupa Azoty PULAWY will apply for deferral of the fines, and subsequently for their reduction to zero, as in March 2018 it commenced an upgrade of the flue gas desulfurization unit.

On January 3rd 2018, the MiFID II regulation package took effect and the EU Council approved the proposed new EU ETS Directive for 2021-2030, marking the last formal step of the legislative procedure. MiFID II classifies emission allowances as financial instruments and introduces safety mechanisms for trading in emission allowances (as it does in the case of the financial market).

In Poland, on April 6th 2018, the Act of March 1st 2018 Amending the Act on Trading in Financial Instruments and Certain Other Acts was published, enabling the application of EU regulations governing the markets in financial instruments (MiFID II Directive and MiFIR Regulation). The Act imposes a number of new obligations on all Polish companies and extends the definition of financial instruments to include, inter alia, contracts for commodities (natural gas and electricity) as well as for CO₂ emission allowances.

In addition, the amended EU ETS Directive for 2021-2030 authorises the European Commission to adopt a delegated act which would supplement the Directive with provisions for sectors and subsectors exposed to the risk of carbon leakage (CL) over the entire 10-year time horizon of MiFID II. Accordingly, the European Commission commenced the work on drawing up a list of sectors and subsectors exposed to carbon leakage.

On May 8th 2018, “The preliminary list of sectors and subsectors exposed to a significant risk of carbon leakage for 2021-2030” was published. The European Commission included 44 sectors in the list. Compared with the current list of 175 sectors, the carbon leakage list will be significantly reduced to 44 or, at most, 72 sectors. The 44 sectors on the carbon leakage list include the chemical industry, which means that the Grupa Azoty Group’s chemical units are classified as exposed to the risk of carbon leakage and continue to benefit from preferential terms, i.e. free emission allowances.

In December 2018, the COP24 climate summit was held in Katowice, at which the final draft of the ‘Katowice Package’ was adopted, laying down the rules for submission by individual countries of plans for fighting global warming. Plan details will be the same for all countries and will be publicly available. This will enable the national plans to be compared and also publicly verified. It has also been agreed that national plans for fighting climate change will be created (primarily plans for greenhouse gas emissions reduction), to be presented by all countries.

In 2018, the average spot price of EUA was EUR 15.76, up by 171.26% (nearly threefold, from EUR 5.81 in 2017). Over the same time, the price of CO₂ emission allowances ranged from the minimum of EUR 7.62 to the maximum of EUR 25.19.

Numerous experts believe that the increase in EUA prices is attributable to the conclusion of the reform of the ETS Directive for 2021–2030 (Phase 4 of the EU ETS), as a result of which almost one-fourth of the surplus allowances on the market will be withdrawn (starting from January 2019) through the Market Stability Reserve mechanism, and potentially hundreds of millions of allowances will have been permanently cancelled by mid-2020.

Experts predict that in 2019 almost 400 million allowances in EUA auctions organised by EU member states or about 40% of the 915.8m EUAs planned to be sold in spot transactions in 2019 will be withdrawn. The aim is to rapidly eliminate the lasting oversupply of nearly 2bn EUAs and thus increase their price.

According to the currently available projections, the average EUA price may be EUR 23 in 2019.

**Joint Implementation Project**

Grupa Azoty S.A. has been reducing emissions of nitrous oxide as a GHG since 2013, to the levels achieved during the Joint Implementation Project, in an effort to satisfy the BAT (Best Available Technique) criteria for nitric acid production.

**Noise emissions**

As production processes tend to generate noise, the Group companies select equipment with appropriate acoustic parameters for every new unit already at the design stage. In accordance with the integrated permits, noise generation must not exceed the permitted levels. This applies to both the noise at the workplace and the noise emitted outside. The Group monitors its noise emissions, and measures them in accordance with the requirements set out in the integrated permits.

The selection of equipment featuring proper noise emission parameters or methods of reducing noise applies to workplace noise as well as noise emitted to the environment. In accordance with the integrated permits, noise generation must not exceed the permitted levels.

The main sources of noise affecting the acoustic climate include sources related to the operation of process units (compressors, turbocompressors, reactor and distiller agitators, granulator drive...
motors), sources related to ancillary process units (such as transmission pipelines, pump systems, fans, cooling facilities, screw and belt conveyors), sources related to the operation of machinery and equipment during the start-up and shut down of process units.

Typical means of reducing noise nuisance are applied, including:
- installing soundproof enclosures,
- placing equipment in buildings and casings,
- exhaust silencers.

In 2018, noise measurements were taken in the proximity of Grupa Azoty S.A. facilities, in line with the requirements of integrated permits.

10. **Non-financial statement**

Pursuant to Art. 49b.9 of the Accounting Act, the Group and the Parent do not prepare a non-financial statement, because they prepare a separate non-financial report, which is available at the website [http://tarnow.grupaazoty.com/pl/relacje/raportyokresowe.html](http://tarnow.grupaazoty.com/pl/relacje/raportyokresowe.html) from the date of publication of the financial report, i.e. April 25th 2019.

11. **Supplementary information**

**Explanation of differences between actual results and the financial forecasts for 2018**

As no forecasts for 2018 were published, the position of the Parent’s Management Board concerning achievement of such forecasts is not presented.

**Litigation**

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

**Related-party transactions**

In 2018, the Group companies did not execute any related-party transactions otherwise than on arm’s length terms.

**Parent’s branches**

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

**Shares, share issues**

In 2018, the Parent did not issue, redeem or repay any debt or equity securities. The Company had spent the proceeds from Public Offerings by the end of 2013. The proceeds were used in line with the original issue objectives.

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

The Company does not operate any control system for employee share ownership plan.

**Events after the reporting period**

On April 16th 2019, the Management Board of Grupa Azoty PULAWY passed a resolution on initial approval of the bid submitted by a consortium of: Polimex-Mostostal S.A., Polimex Energetyka Sp. z o.o. and SBB ENERGY S.A. in the tender procedure for the selection of an EPC contractor for the project to construct a coal-fired power generation unit in Puławy. Three bids were submitted in the tender. Among all the bidders, the selected consortium best met the requirements set out in the tender documentation.

Based on an analysis of the bids, the amount of remuneration payable under the EPC contract for the project will not exceed PLN 1.16bn (VAT exclusive). The amount will also necessitate updating the Project’s total budget, which, based on estimates, should not exceed PLN 1.2bn (VAT exclusive).

The final selection of the bid in the tender procedure for the selection of the EPC contractor for the project and the execution of the EPC contract is planned for the third quarter of 2019, after the corporate bodies of Grupa Azoty PULAWY approve an update of the project budget and give their
consent to the execution of the EPC contract with the consortium. The implementation of the Project under the contract is to take 36 months.

This Directors’ Report on the operations of Grupa Azoty for the 12 months ended December 31st 2018 contains 145 pages.

Signatures of members of the Management Board

Signed with qualified electronic signature

Wojciech Wardacki, PhD
President of the Management Board

Signed with qualified electronic signature

Witold Szczypiński
Vice President of the Management Board
Director General

Signed with qualified electronic signature

Pawel Łapiński
Vice President of the Management Board

Signed with qualified electronic signature

Grzegorz Kądzielawski, PhD
Vice President of the Management Board

Signed with qualified electronic signature

Mariusz Grab
Vice President of the Management Board

Signed with qualified electronic signature

Artur Kopeć
Member of the Management Board

Tarnów, April 25th 2019