

# DIRECTORS' REPORT ON THE OPERATIONS OF RAFAKO S.A.

**IN 2016** 

## RRFAKO

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#### I. General information

#### About us

RAFAKO S.A. (the "Company" or "RAFAKO S.A.") is one of the largest Polish companies acting as general contractor for complete power generating units, engaged in designing, manufacturing, constructing and servicing of power equipment and facilities. Since November 2011, the Company has been included in the PBG Group.

The Company's key products and services include:

## Complete power generating units

 consisting of a boiler (fired with fossil fuels or biomass) together with a turbine coupled with a generator and complete assembly necessary for proper operation of the unit

## Steam generators and heat generators

- fired with fossil fuels, biomass and waste
- with stoker-fired, fluidised bed- and pulverised fuel furnaces
- sub- and supercritical
- manufacture and delivery of heat recovery steam generators

## Air pollution control systems

- manufacture and delivery of wet and semi-dry flue gas desulfurisation units
- manufacture and delivery of flue gas NOx reduction units, including SCR systems
- manufacture and delivery of dust extraction equipment (electrostatic precipitators, bag filters)

## Power equipment, machinery and components

- manufacture of components for steam generators and precipitators
- diagnostics, repairs, and upgrades of boiler equipment
- design, advisory and maintenance services
- manufacture of steel structures and other parts for the power generation

RAFAKO S.A. delivers these products and services in the EPC model (end-to-end project management including design, procurement, manufacture, assembly/construction, and commissioning) or in a non-EPC model (design, procurement, manufacture, assembly/construction in various combinations, with procurement and manufacture as mandatory elements).

The Company operates its own production plants. The main plant, manufacturing mainly pressure equipment, is located in Racibórz, along with the plant management office, design and technology offices, as well as five production floors. Electrostatic precipitators and their components are manufactured in Wyry. RAFAKO S.A.'S total production capacity for 2016 was in excess of 1.1 million man-hours per year, with the potential to be increased to more than 1.35 million man-hours per year. The Company is currently Poland's and EU's leader in terms of the production capacity for pressure equipment.

RAFAKO S.A. has operated in the power sector since 1949. The Company's product offering, initially comprising mainly steam generators and their components, was gradually expanded to include complete flue gas desulfurisation units, dust extraction units, NOx control systems, etc. From a typical manufacturer, the Company was transformed into a general contractor for power construction projects. In 2014, the Company became one of the few companies offering and delivering power generation units under EPC contracts, when it launched, practically on a stand-alone basis, the construction of a 910 MW unit for the Jaworzno Power Plant (the "Jaworzno 910 MW Project").

Since its inception, the Company has been a leading supplier of steam generators for the country's power and industrial sectors. The combined capacity of RAFAKO-delivered steam generators accounts for a significant part of the total capacity installed in Polish commercial and industrial power plants. The most important facilities which use steam generators delivered by the Company include power plants in Bełchatów, Opole, Turów, Dolna Odra (all owned by PGE), Rybnik (EDF), Pątnów-Adamów-Konin, Kozienice (Enea), and power plants owned by Tauron Wytwarzanie, as well as Warsaw CHP Plants – Elektrociepłownie Warszawskie (PGNiG Termika), Wrocław CHP Plants – Zespół Elektrociepłowni Wrocławskich Kogeneracja, Łódź CHP Plants – Zespół Elektrociepłowni Łódź (Dalkia), and Zielona Góra CHP Plant – Elektrociepłownia Zielona Góra (EDF). The Company has also delivered circulating fluidised bed (CFB) steam generators to the Żerań CHP Plant and Bielsko-Biała II CHP Plant (Tauron Wytwarzanie), Siersza Power Plant (Tauron Wytwarzanie), and Zakłady Farmaceutyczne Polpharma Starogard Gdański.





In 2008, a 464 MW unit was commissioned at the Pathow II Power Plant for which RAFAKO S.A., in cooperation with SNC Lavalin, had supplied the steam generator and flue gas delsulfurisation (FGD) unit. The supercritical power generating unit at the Pathow II Power Plant was the first such project in Poland, both in terms of the capital expenditure incurred and generating capacity delivered. It is a high-efficiency unit, which helps significantly reduce harmful gas emissions.

In 2011, an 858 MW unit was commissioned at the Belchatów Power Plant for which RAFAKO S.A. had been the supplier of the boiler island comprising a steam generator, electrostatic precipitator, and flue gas desulfurisation unit. The newly built unit in Belchatów is the most powerful lignite-fired generating unit in Poland.

In 2014, a project was completed to increase the generation capacity of green electricity and heat at PGE Elektrociepłownia Kielce (a CHP plant) through the addition of a pass-out and condensing turbine generator (with a capacity of ca. 6.5 MW) and heat exchanger (with a capacity of ca. 14 MW), coupled with the existing biomass-fired OS-20 steam generator.

Foreign sales account for a significant part of RAFAKO S.A.'s total sales. The largest steam generators manufactured by RAFAKO S.A. operate in former Yugoslavia's power plants; a number of large units have also been delivered to the Czech Republic, China, Turkey, and India. RAFAKO S.A. is also an important player on the European market for steam-generator components. In 2016, RAFAKO products were sold to customers in Serbia, Finland, the United Kingdom, Germany and Hungary.

The Company is solidifying its position on the European market of waste incineration solutions. In 2011, RAFAKO S.A. supplied three heat recovery steam generators to a waste incineration facility in Turin, Italy, and further two heat recovery steam generators to Baku, Azerbaijan. In December 2013, a steam generator was placed in service at a municipal waste incineration plant in Roskilde, Denmark. In 2013, the Company began to perform a contract for delivery of the process section for two lines of the Thermal Waste Treatment Plant for the Szczecin Metropolitan Area. In 2014, we delivered a waste combustion boiler to Billingham, Cleveland County, UK. At the beginning of 2016, a contract providing for delivery of a boiler for a municipal waste incineration facility located in Calvert, Buckinghamshire, UK, was completed.

In 2012, a fluidised bed boiler was commissioned at the Jaworzno Power Plant (Tauron Group). The boiler burns only biomass, as opposed to coal-fired and biomass co-fired units already operated at the plant. In 2014, the construction of a biomass-fired boiler was completed in Wiesbaden, Germany. In the same year, a contract at the Stalowa Wola Power Plant for conversion of an existing PCC boiler into a biomass-fired unit was completed. These innovative projects highlight RAFAKO S.A.'s established position as a supplier of renewable power generation technologies. They are also aligned with Poland's strategy to increase the share of renewables in power generation, as well as with the Company's own pro-environmental strategy.

RAFAKO S.A. is also a leading manufacturer of large environmental protection facilities in Poland. Units of this type have been delivered by the Company to the Jaworzno III Power Plant, Bełchatów Power Plant, Pątnów Power Plant, Ostrołęka B Power Plant, Dolna Odra Power Plant, Siekierki CHP Plant, Łódź CHP Plant, Siersza Power Plant, Skawina Power Plant, Trzebowice Power Plant (for Dalkia, the Czech Republic), Kozienice Power Plant, and Połaniec Power Plant.

In 2012, RAFAKO S.A. delivered one of its largest projects, a wet flue gas desulfurisation unit at the Siekierki CHP Plant owned by PGNiG Termika S.A. The unit is also one of the largest environmental projects in Poland, and one of the largest stand-alone structures ever built by RAFAKO S.A. In 2014, RAFAKO S.A. completed an upgrade of the FGD systems on units 5 and 6 at the Bełchatów Power Plant. In 2015 and 2016, wet FGD units were placed in service at CHP plants owned by the EDF Group. The units were built in Gdańsk, Gdynia, Kraków and Wrocław, as part of the EDF Group's comprehensive plan of bringing its generation assets in line with new environmental requirements.

In 2007–2008, RAFAKO S.A. commissioned high-efficiency semi-dry flue gas desulfurisation units at the Łódź CHP Plant and Skawina Power Plant. The semi-dry system, which is a more cost-efficient solution than the wet method, was engineered exclusively by RAFAKO S.A.

In 2011, the Company entered a new area of pro-environmental projects for the power sector, i.e. the reduction of nitrogen oxides, as it commenced the manufacture of state-of-the-art SCR units on an EPC basis. Following construction of the first such unit on the K8 boiler at PKN Orlen, construction of a second SCR system has been under way since June 2011 at the Kozienice Power Plant. In 2012, a contract for delivery of Catalytic Flue Gas

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NOx Reduction Systems for six power generating units at Elektrownia Połaniec S.A. was signed with GDF SUEZ Energia Polska S.A. In 2014, a consortium formed by RAFAKO S.A. and OMIS S.A. signed a contract with ENERGA Elektrownia Ostrołęka S.A. for the construction of flue gas NOx reduction systems on units 1, 2 and 3 at Elektrownia Ostrołęka S.A. In September 2016, RAFAKO S.A. and ENEA Wytwarzanie Sp. z o.o. signed a contract for delivery and installation of a catalytic flue gas NOx reduction system for AP-1650 boilers No. 9 and 10 and for upgrade of the electrostatic precipitators at ENEA Wytwarzanie Sp. z o.o.

In 2009, dust extraction equipment, including electrostatic precipitators and bag filters, was added to the Company's product offering. In 2010–2013, a number of electrostatic precipitators were put in operation, including on units 10, 4, 3 and 8 at the Kozienice Power Plant; on BB-1150 steam generator of unit 4 (in 2010) and units K5 and K6 (in 2011) at the Bełchatów Power Plant, as well as an electrostatic precipitator with a modernised slag and ash transport system on unit 6-215 MW at the Tuzla CHP Plant (in 2012). In 2014, two electrostatic precipitators were installed by RAFAKO S.A. at the Westfalen Power Plant in Germany and two at the Eemshaven Power Plant in the Netherlands.

2014 was a breakthrough year for RAFAKO S.A. A contract was signed for the construction of a 910 MW power generation unit at the Jaworzno III Power Plant, where RAFAKO will execute this turn-key project on a practically stand-alone basis and, in terms of technologies, will supply the entire boiler island.

In addition, in February 2014, the long-awaited contract for extension of the Opole Power Plant came into effect. Under the contract, two new supercritical 900 MW power generation units are being built, in what is the largest investment project in the Polish power sector since 1989. RAFAKO S.A.'s entire scope of work and services under the contract was subcontracted to Alstom Power Sp. z o.o.

The project designs are based on the state-of-the-art technology of electricity generation by means of supercritical steam generators and turbines, which pushes the efficiency of a generating unit up to 45% or more. The Company has long cooperated with Polish scientists on a concept of generating units with efficiencies in excess of 50% (ultra-supercritical units). Its implementation will mark another milestone in the history of both the Company and Polish power sector, which cannot afford to discontinue the use of domestically produced coal as the key fuel. In May 2014, RAFAKO S.A. signed another ECP contract, this one involving the construction of a new CHP plant in Kędzierzyn for Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. The project provides for the construction of a coal-fired generating unit with a high-efficiency steam generator, state-of-the-art flue gas treatment technology and steam turbine.

The Company provides after-sale support and servicing for all products and equipment supplied. The Company also offers upgrades of existing equipment to enhance its operating parameters and mitigate negative environmental impacts.

Certificates held by RAFAKO S.A. (EMAS, AD 2000-Merkblatt HPO, ASME CODE, SVTI / ASIT, EN 1090 and EN 3834-2) confirm its compliance with the ISO 9001, ISO 14001, PN-N 18001 standards, Directive 97/23/EC and Regulation (EC) 1221/2009 of the European Parliament and of the Council. They also provide assurance to the Company's customers that RAFAKO-manufactured equipment complies with the technical safety requirements applicable in Poland, the EU, and the US.

In 2011, the RAFAKO Group was included in the PBG Group, whose parent is PBG S.A. PBG S.A. is the parent of a group of companies operating on the specialist construction market. The key segments of the Group's business currently include the construction of facilities and structures for the power, natural gas, crude oil and fuel sectors. From June 2012, PBG had had the status of a company 'w upadłości układowej' (in company voluntary arrangement). In August 2015, the meeting of PBG's creditors voted on and approved an arrangement. In October 2015, the arrangement was approved by the court. PBG's arrangement with its creditors became final on June 13th 2016.

For the shareholding structure as at December 31st 2016, see Appendix 9.

#### II. Economic and financial standing

## 1. External and internal factors materially affecting RAFAKO S.A.'s financial performance and development prospects

#### A. External factors:

- domestic and global economic situation;
- situation in the domestic and global power industry;
- competition on the Company's market
- financial condition and market position of the Company's customers, consortium partners, subcontractors and suppliers;
- timeliness of payments by the employers;
- market prices of materials used by the Company in manufacturing, market prices of services, and employee benefits expense;
- foreign exchange rates;
- financial institutions' willingness to provide financing and guarantees for contracts performed by the Company;
- financial condition of the Company's main shareholder;
- limited ability of the Company to obtain guarantee facilities in view of PBG's arrangement proceedings;
- technological progress;
- changes in tax regulations.

#### **B.** Internal factors:

- conclusion and performance of material contracts by the Company;
- maintaining financial liquidity of the Company;
- ability to capitalise on the effects of completed and planned investment projects designed to boost efficiency at the Company, particularly in manufacturing and management, and to increase its capacity to win and execute orders;
- improvement of management processes at the Company, including management of long-term contracts and operating costs (fixed costs);
- formation of large, multi-industry teams for coordination of work on comprehensive power sector facilities;
- maintaining and acquiring new highly-qualified staff for designing and production.

#### 2. Key risks and threats

RAFAKO S.A. has identified the following risks and threats to the Company's operations in the near future:

#### Risks relating to macroeconomic conditions and the sector in which the Company operates:

- 1. Risk factors relating to the macroeconomic situation, including the GDP growth rate, unemployment rate, salaries and wages, growth of the industrial and construction output, capital expenditure, and foreign exchange rates;
- 2. Risk relating to political environment, as well as energy policy and uncertainty over its future directions;
- 3. Currency risk;
- 4. Interest rate risk;
- 5. Risk of competition.

#### Risks specific to the Company:

- 1. Risk relating to non-performance or improper performance of contracts;
- 2. Risk related to non-payment or delayed payment of amounts due under contracts performed by the Company;
- 3. Risk associated with performance of high value contracts and limited number of customers;
- 4. Risk of increased operating costs of the Company resulting from higher prices of supplies and services and increased employee benefits expense;
- 5. Risk of underestimating project costs;
- 6. Risk related to winning new contracts;
- 7. Risks related to execution of certain projects in consortia;
- 8. Risk related to project acquisition and execution in cooperation with suppliers and subcontractors;
- 9. Risk of failure to obtain financial guarantees required to win and perform contracts;
- 10. Risk related to failure to secure external financing in assumed amounts and on expected terms;
- 11. Risk related to full or partial repayment of arrangement receivables by PBG;
- 12. Risk related to failure to maintain appropriate liquidity by the Company;
- 13. Risk of failure to implement the strategy;
- 14. Reputational risk,
- 15. Risk related to the use by the Company of complex and innovative manufacturing technologies;
- 16. The Company's IT systems may suffer a failure or security breach;
- 17. The Company's day-to-day operations and growth depend on its senior management and ability to hire and retain highly-qualified personnel, particularly specialist production staff and engineers;
- 18. Risk that the insurance cover maintained by the Company will prove insufficient;
- 19. Risk related to consequences of accidents at work and occupational diseases;
- 20. Risk related to plant failure or to destruction or loss of the Company's assets.

#### **Regulatory risks:**

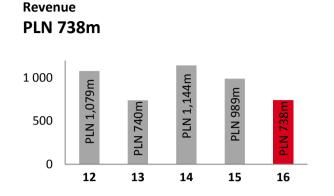
- 1. Risk related to changes in regulations concerning the power sector;
- 2. Risk related to environmental protection;
- 3. Risk of changes in tax laws or their interpretation and changes of private letter rulings;
- 4. Risk associated with related-party transactions.

For information on the objectives and rules of financial risk management, including the specification of the most material risks, see Note 46 to the Company's financial statements.



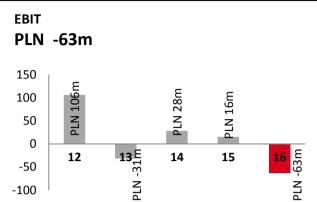
#### 3. Analysis of key financial and economic data

#### **3.1. 2016 highlights** (compared with previous years)



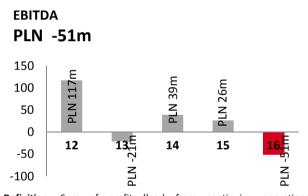
**Definition:** Total sales of products, merchandise and materials, net of VAT.

**Relative to 2015:** Revenue fell by 25.4% as several large projects had been completed and relatively little progress was made on new ones.



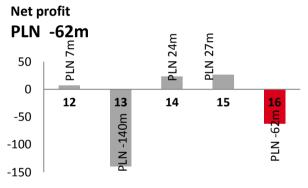
**Definition:** Profit (loss) from continuing operations

**Relative to 2015:** Loss from continuing operations of nearly PLN 63m was recorded, compared with profit from continuing operations of PLN 16m achieved in 2015. The loss resulted mainly from lower revenue, adjustments related to accounting for long-term contracts, higher distribution costs and administrative expenses, as well as net other expenses.



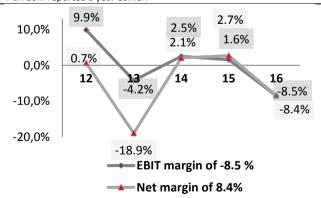
**Definition:** Sum of profit (loss) from continuing operations, depreciation and amortisation

**Relative to 2015:** EBITDA for 2016 was negative at PLN -51m, against PLN 26m reported a year earlier.



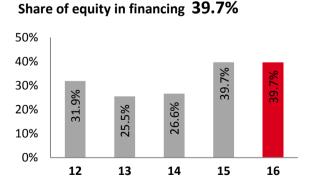
**Definition:** Excess that remains after deducting all costs. Difference between revenue and total costs.

**Relative to 2015:** The Company posted net loss of PLN 62m, compared with net profit of PLN 27m for 2015.



**Definition:** EBIT margin: operating profit (loss) / net revenue from sale of products and merchandise; Net margin: net profit (loss) / net revenue from sale of products and merchandise.

**Relative to 2015:** The Company reported a deterioration in its operating profit margin compared with a year earlier, from 1.6% to -8.4%.



**Definition:** Equity / total assets.

**Relative to 2015:** The share of equity in total sources of financing of assets remained broadly unchanged.



#### 3.2. Revenue and its structure

In 2016, revenue from sales of products, merchandise and materials was PLN 738,227 thousand, having decreased year on year by PLN 251,069 thousand (or 25.4%). Sales of products and services amounted to PLN 735,758 thousand, while revenue from sales of materials was PLN 2,469 thousand.

The principal reason for the sales drop in 2016 was lower revenue from sales of air pollution control systems, including FGD units. The decline in sales of air pollution control systems is related to the completion of projects performed for companies of the EDF Polska Group (with a value of approximately PLN 770m; sales generated in 2016: PLN 19,491 thousand, versus PLN 200,762 thousand in 2015) and lack of new orders of considerable value. Sales of air pollution control systems in Poland amounted to PLN 174,341 thousand, down by 52.2% year on year (PLN 364,395 thousand in 2015).

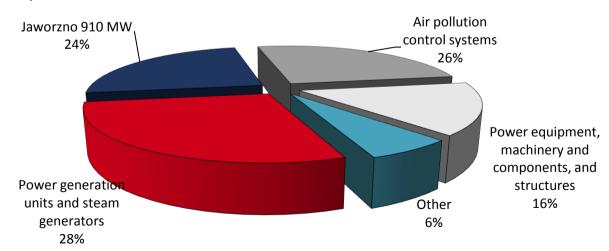
A drop in sales on the domestic market in 2016 was recorded in all product categories. At PLN 371,593 thousand, sales of power generation units and steam generators in Poland were 14.8% lower compared with the previous year (PLN 436,044 thousand in 2015). The decrease was mainly attributable to the completion of the contract for construction of a fluidised bed boiler with a particle collection system for Synthos Dwory (value of PLN 151.6m; sales in 2016: PLN 8,559 thousand, sales in 2015: PLN 93,466 thousand). The drop in sales of power generation units and steam generators was partly offset by higher sales under the Jaworzno 910 MW Project, which amounted to PLN 175,868 thousand (PLN 124,207 thousand in 2015). The value of the Jaworzno Project is PLN 4.5bn and RAFAKO S.A. is responsible for approximately 11.3% of the scope of work.

Sales of power equipment, machinery and components on the domestic market reached PLN 21,006 thousand, having dropped by 64.2% relative to 2015, when they amounted to PLN 58,642 thousand.

The share of export sales in total sales was 22.2%, having increased year on year by 10pp. In 2016, export sales amounted to PLN 163,749 thousand, up by 35.8% from PLN 120,565 thousand reported in 2015. Export sales increased in all product groups except for power generation units and steam generators. Sales of power equipment, machinery and components totalled PLN 95,075 thousand, up by 306.7% on 2015, primarily thanks to execution of a contract on the Serbian market. Exports of air pollution control systems amounted to PLN 17,661 thousand (2015: PLN 5,197 thousand), having increased by PLN 12,464 thousand (or 239.8%). In the other product groups, exports grew to PLN 38,877 thousand.

A decline in exports of power generation units and steam generators (to PLN 12,136 thousand in 2016 from PLN 59,064 thousand in 2015) was mainly attributable to lower sales under the contract for the supply, installation and start-up of a municipal waste incineration boiler for the Hereford & Worcestershire thermal waste treatment plant in the United Kingdom; the contract execution was nearing completion in 2016.

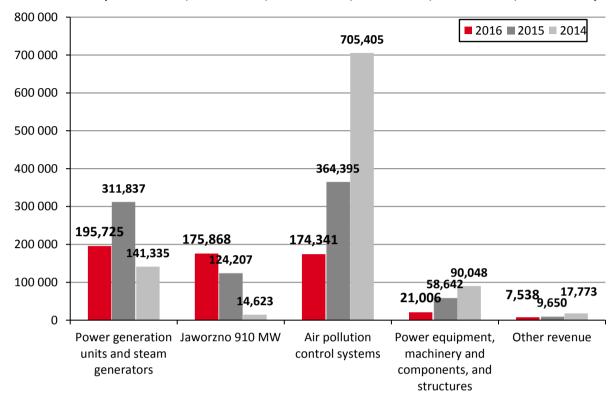
#### In 2016, the sales structure was as follows:



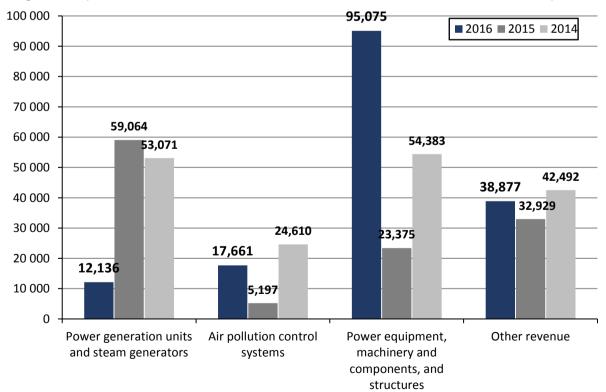
#### Sales by market:

#### Domestic market (2016: PLN 574,478 thousand; 2015: PLN 868,731 thousand; 2014: PLN 969,184 thousand):

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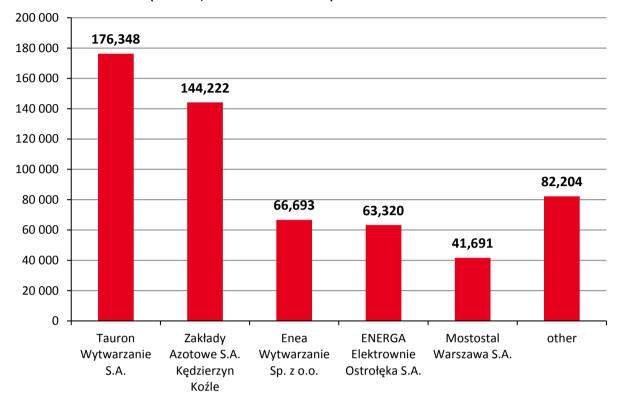


#### Foreign market (2016: PLN 163,749 thousand; 2015: PLN 120,565 thousand; 2014: 174,556 thousand):



#### In 2016, RAFAKO S.A.'s main customers included:





In 2016, Tauron Wytwarzanie S.A. was the Company's main customer with a 23.9% share in total sales (12.7% in 2015). Revenue attributable to this customer was generated mostly in connection with the construction of a 910 MW supercritical power generating unit at the Jaworzno Power Plant. 2016 sales to TAURON Polska Energia S.A. totalled PLN 176,352 thousand.

Also Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. had a significant share in the Company's total sales: 19.5% in 2016 (14.5% in 2015). Revenue from sales to this customer was generated on the construction of a new CHP plant.

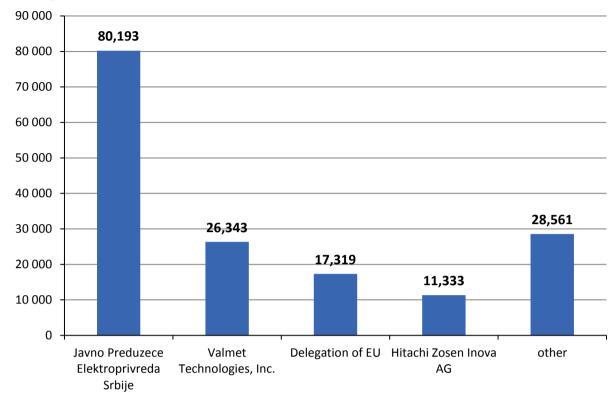
Another major customer was Enea Wytwarzanie S.A., which accounted for 9% of total sales (1.8% in 2015). Revenue from sales to this customer was generated mainly on the construction of an SCR unit at the Kozienice Power Plant (PLN 38,967 thousand) and FGD units for the K7 and K8 boilers of the Białystok CHP Plant (PLN 26,436 thousand).

Significant sales were also made to ENERGA Elektrownie Ostrołęka S.A., which accounted for 8.6% of total sales in 2016 and 7.2% in 2015. Revenue from sales to this customer was generated on the construction of a NOx reduction system and upgrade of electrostatic precipitators on units 1, 2 and 3 of the Ostrołęka Power Plant.



RAFAKO S.A.

#### on foreign markets (PLN 163,749 thousand in total):



RAFAKO S.A.'s main customer on foreign markets was the Serbian company Javno Preduzece Elektroprivreda Srbije, whose share in total sales was 10.9% (2015: PLN 260,000 thousand, or 0.03% of total sales). The subject matter of the contract with this customer was replacement of component parts of a combustion chamber in Boiler B2 at TENT B Obrenovac (Phase 1) and installation of membrane walls in Boiler OP-380b at TE Morava (Phase 2).

Given the nature of the Company's sales, the shares of major customers in total sales exceed 10% at times when large projects are being executed.

The presented revenue data includes construction contract revenue accounted for using the percentage of completion method.

#### 3.3. Deliveries, procurement and purchase of production materials

In 2016, RAFAKO S.A.'s main supply sources included:

	PLN '000			
	2016		2015	
Supply sources		share		share
	Value	in total	Value	in total
		purchases		purchases
Domestic suppliers	495,805	76.7%	704,306	81.2%
Foreign suppliers	150,286	23.3%	163,454	18.8%
TOTAL	646,091	100.0%	867,760	100.0%

In 2016, the Company's supplier structure was highly fragmented as none of the suppliers represented more than 10% of the total value of purchases.

RAFAKO S.A. relies on external suppliers for various services - design work, delivery and assembly of machines and equipment, construction and installation services and transport, as well as pipes, metal

sheets, shaped materials, welding materials and specialist equipment. The range of purchases depends heavily on the nature and requirements of running contracts (customised production). The Company's operations are not affected by limited availability of production materials, supplies or procurement services. Suppliers are chosen based on their ability to provide materials and equipment meeting the relevant technical and quality standards within specified deadlines and in the most cost-effective manner. The procurement process is based on market analysis, with the pool of suppliers including only manufacturers recognised for the quality of their products and compliance with safety, environmental and other relevant standards.

With some contracts, the list of potential manufacturers and service providers must be approved by RAFAKO S.A.'s employers.

Some products made for sale on foreign markets are manufactured from the employers' own materials (customer-provided materials), which on the one hand reduces the risk of cost increases caused by rising prices of supplies, but on the other hand results in lower revenue generated by RAFAKO S.A.

#### 3.4. Related-party transactions

In 2016, the Company did not enter into any material transactions with related parties on non-arm's length terms.

For a detailed list of related-party transactions in 2016, see Note 43 to the full-year financial statements of the Company for 2016.

#### 3.5. Operating expenses, structure of operating expenses and gross profit (loss)

In 2016, cost of sales of products, services and materials was PLN 719,704 thousand, with revenue of PLN 738,227 thousand. Thus, the Company posted gross profit of PLN 18,523 thousand, down by PLN 63,944 thousand year on year.

Gross profit fell mainly due to:

- decline in the Company's revenue,
- decision of the Company's Management Board to adjust the valuation of long-term contracts as at December 31st 2016 following a periodic analysis of costs incurred to perform the contracts and a revision of assumptions regarding future revenue and costs relating to the contracts,
- increase in provisions related to warranties under completed sale contracts.

Gross profit margin fell year on year, to 2.5% (2015: 8.3%).

Administrative expenses totalled PLN 44,285 thousand, having risen by PLN 4,896 thousand year on year, driven, among other things, by higher costs of legal and advisory services, including costs of business support services.

In 2016, distribution costs were PLN 31,578 thousand, having increased by PLN 3,014 thousand year on year. Distribution costs net of impairment losses on trade receivables and write-off of previously impaired trade receivables amounted to PLN 31,361 thousand in 2016, and were higher than the previous year's figure by PLN 3,128 thousand. Impairment losses on trade receivables and write-off of previously impaired trade receivables went up by PLN 217 thousand in 2016 (compared with an increase of PLN 331 thousand in 2015). The increase was mainly due to higher bid preparation costs.

After accounting for distribution costs and administrative expenses, the Company generated a loss on sales of PLN 57,340 thousand in 2016, compared with a profit on sales of PLN 14,514 thousand in 2015.

#### 3.6. Other income and expenses and net finance income/costs

#### 3.6.1. Net other income/expenses

In 2016, the Company recorded net other expenses of PLN 5,633 thousand (compared with net other income of PLN 1,061 thousand in 2015), attributable to:

		PLN '000
1.	recognition of employee benefit obligations related to Voluntary Redundancy Programme	(7,622)
2.	recognition of provision for cost of litigation and disputed claims	(1,066)
3.	donations	(895)
4.	income under sureties	4,964
5.	grants	486
6.	negative net balance of other items of other income and expenses	(1,500)

Recognition of employee benefit obligations resulted from conclusion of the Voluntary Redundancy Programme (VRP), with 128 employees opting for voluntary redundancy. The VRP aims to adjust the level and costs of employment at the Company to current market conditions, while supporting the leaving employees through financial and non-financial measures.

Income under sureties was received pursuant to the Surety Agreement executed to secure the liabilities of E003B7 Sp. z o.o. arising in connection with the agreement for issuance of guarantees for the benefit of TAURON Wytwarzanie S.A. in connection with the Jaworzno III 910 MW Project.

#### 3.6.2. Net finance income/costs

In 2016, the Company recorded net finance costs of PLN 4,545 thousand (2015: net finance income of PLN 17,863 thousand), attributable to:

		PLN '000
1.	interest on financial instruments	(3,530)
2.	change of discount applied to long-term accounts receivable and payable	(1,476)
3.	bank commissions paid on bank borrowings	(876)
4.	net foreign exchange gains	1,232
5.	interest on security deposits provided	782
6.	negative net balance of other finance income and costs	(677)

The 2015 net finance income resulted primarily from the disposal of shares in FPM S.A., a subsidiary (gain on the sale was PLN 11.4m).

#### 3.7. Income and its structure

In 2016, the Company incurred a loss on sales of PLN 57,340 thousand.

After accounting for net other expenses (PLN 5,633 thousand), net finance costs (PLN 4,545 thousand) and income tax (an expense of PLN 5,277 thousand), the Company recorded net loss of PLN 62,241 thousand, compared with profit of PLN 26,587 thousand reported in 2015.

The Company did not publish any financial forecasts or profit guidance for 2016.

For the structure and change of pre-tax profit (loss) in 2016, 2015 and 2014, see Appendix 4.

#### 3.8. Margins and ROE

In 2016, the Company reported a deterioration in its operating profit margin compared with a year earlier. Gross profit margin fell to 2.5% and was 5.8pp lower than in 2015, while operating profit margin amounted to -8.5% (compared with 1.6% in 2015).

As a result of net loss (PLN 62,241 thousand), return on equity was negative at -18.9%. In the same period of the previous year, ROE stood at 6.8%.

Due to net loss (and lower total assets), ROA also fell, to -7.5% in 2016 from 2.7% in 2015.

The 2016, 2015 and 2014 profitability ratios are presented in Appendix 1.

#### 3.9. Financial liquidity

As at the end of 2016, RAFAKO S.A.'s liquidity ratios changed relative to the end of 2015. Both the current ratio (current assets to current liabilities) and the quick ratio (current assets net of inventories to current liabilities) stood at 1.2 (1.3 at the end of 2015).

In 2016, the average collection period lengthened by 21 days (to 79 days), while the inventory cycle shortened by 54 days (to 87 days) and the average payment period shortened by 40 days (to 67 days). The working capital cycle (average collection period + inventory cycle - average payment period) lengthened by 7 days year on year, to 99 days.

In 2016, liabilities to the Social Security Institution (ZUS), State Treasury and employees were settled in a timely manner, although there were delays in payments to suppliers.

The Company continued its multi-purpose credit facility agreement with PKO BP S.A. Several annexes to the agreement were signed, the most recent one extending the availability period until June 30th 2017 and amending certain provisions of the agreement. For detailed information on the amendments, see Section III.4 'Other material events' on page 27.

Changes in the facility's interest rate affected the Company's finance costs. Further, the use of the credit facility bearing interest at a variable rate of 1M WIBOR plus margin exposed the Company to the risk of higher interest expenses typical of such financing instruments.

In terms of financial liquidity, the need to engage substantial cash to secure contract bonds (performance bonds and advance payment guarantees), provided by financial institutions, is a significant burden on the Company.

A factor of key importance from the point of view of financial liquidity will be the Company's access to new bank/insurance guarantees requiring no security in the form of cash collateral, that would enable the Company to free some of the cash serving as performance bonds provided in respect of contracts which are already being performed. Unavailability of a satisfactory amount of guarantee limits may restrict the Company's ability to conclude revenue-generating contracts.

In 2015, the Company carried out a share issue with the main objective of raising funds to finance contract bonds to help the Company build its order book, and to finance working capital requirements to enable the performance of contracts in the future. The Company is planning to allocate 85-90% of the issue proceeds for this purpose.

On August 25th 2015, the Judge Commissioner declared that an arrangement was made between PBG S.A. (parent of the PBG Group, of which RAFAKO S.A. is also a member) and its creditors. PBG's arrangement with its creditors became final on June 13th 2016. The arrangement should have a positive effect on the Group's ability to obtain financial guarantees, and thus on its capacity to win and perform contracts.

The Company is also exposed to currency risk. Changes in PLN exchange rates, especially if frequent and significant, may materially affect both the profitability of contracts and the amount of currency translation differences on assets and liabilities denominated in foreign currencies and translated into PLN.

The Company's currency risk management strategy provides for the use of natural hedging to the extent possible. To this end, the Company seeks to achieve the highest possible level of structural matching of income and expenses denominated in the same currency and related to the running contracts. Apart from natural

hedging, the Company may hedge between 30% and 70% of its net exposure to foreign exchange risk by means of approved derivative instruments (e.g. FX forwards) available on the market.

As at December 31st 2016, the Company did not carry any unsettled FX hedging transactions.

For the objectives and rules of financial risk management, see Note 46 to the financial statements for 2016.

#### 3.10. Debt

In 2016, RAFAKO S.A.'s liabilities towards its creditors decreased by PLN 94 804 thousand. As at December 31st 2016, total non-current and current liabilities were PLN 500,344 thousand, compared with PLN 595,148 thousand as at December 31st 2015.

Total liabilities fell on account of a PLN 86,682 thousand drop in current liabilities, which was largely attributable to a PLN 136,354 thousand decrease in trade payables, mainly due to lower purchases and improved liquidity. Provisions for construction contract work and deferred income went down, too, by PLN 19,384 thousand. On the other hand, interest-bearing borrowings grew by PLN 37,899 thousand.

Non-current liabilities declined by PLN 8,122 thousand, mostly driven by a drop in long-term trade payables by PLN 8,922 thousand.

As at December 31st 2016, the Company's assets not encumbered with on-balance-sheet (non-current and current) liabilities were PLN 328,760 thousand (as at December 31st 2015, they were 16.1% higher, standing at PLN 391,823 thousand).

Debt (including non-current and current liabilities) to assets ratio measuring the Company's ability to secure repayment of debt with assets, remained close to its previous year's value, at 60.3%.

Debt to assets ratio does not take account of the Company's contingent liabilities under bank and insurance guarantees (mainly performance bonds and advance payment guarantees granted on the Group's instructions; such guarantees are typical for RAFAKO S.A.'s business and the market of power generation equipment), letters of credit and promissory notes issued as security. As at December 31st 2016, the Company's contingent liabilities under these instruments totalled PLN 1,602,229 thousand (PLN 1,275,928 thousand at December 31st 2015). The main item of these liabilities was a PLN 1,394,668 thousand surety issued for the benefit of financial institutions which provided financial security in respect of the Jaworzno 910 MW Project; the surety was provided to secure proper discharge of obligations by the Jaworzno project SPV in connection with financial guarantee agreements.

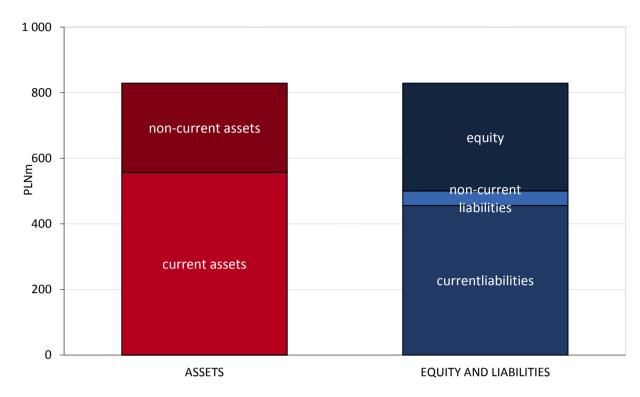
In the 12 months of 2016, guarantees (mainly performance bonds of PLN 107,950 thousand and bid bonds of PLN 45,745 thousand) were issued by banks and insurance companies to the Group's trading partners upon RAFAKO S.A.'s instructions. In this category of liabilities, the largest item was a performance bond of PLN 20,569 thousand issued in September 2016.

In connection with its ongoing contracts, besides contingent (off-balance-sheet) liabilities, the Company also had contingent receivables, which amounted to PLN 233,779 thousand as at December 31st 2016 (PLN 269,811 thousand as at December 31st 2015). The main item of these receivables was represented by bank and insurance guarantees totalling PLN 207,835 thousand. In 2016, the value of guarantees received was PLN 96,332 thousand.

For details of changes in contingent receivables and liabilities, see Note 39 to the financial statements for 2016.

The 2016, 2015 and 2014 liquidity and debt ratios are presented in Appendix 1.

#### 3.11. Assets financing structure



As at December 31st 2016, total assets were PLN 829,104 thousand, having gone down by PLN 157,867 thousand (16.0%) year on year, mainly due to a PLN 104,316 thousand decrease in gross amount due from customers for contract work and a PLN 26,071 thousand drop in current financial assets, partially offset by a PLN 46,820 thousand increase in trade receivables.

Long-term capital (equity plus non-current liabilities) covered the full amount of non-current assets and 18.1% of current assets.

As at December 31st 2016, the assets financing structure was as follows:

- 1. non-current assets of PLN 272,057 thousand were fully financed with equity,
- 2. current assets (and non-current assets held for sale) of PLN 557,030 thousand were financed with:

long-term capital	18.1%,
trade payables	21.6%,
short-term borrowings	26.8%,
amounts due to customers for construction contract work	18.2%,
other current liabilities	15.3%.

#### 3.12. Non-current assets

#### 3.12.1. Structure of non-current assets

The structure of non-current assets changed as a result of execution of investment projects, sale of assets, retirement or disposal of redundant property, plant and equipment, remeasurement of assets, and changes in the deferred tax asset. As at December 31st 2016 and December 31st 2015, it was as follows:

0.1%

2.3%



#### Dec 31 2016 Dec 31 2015 1. Property, plant and equipment, including: 54.4% 55.9% - land and buildings 33.2% 33.6% - plant and equipment 18.1% 19.0% - vehicles 2.6% 2.6% - property, plant and equipment under construction 0.5% 0.7% 2. Intangible assets 4.1% 4.2% 3. Shares and other equity instruments 10.9% 9.2% 4. Other financial assets 12.9% 12.9% 5. Deferred tax asset 17.6% 15.5%

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The most important item of non-current assets was represented by land and buildings, which accounted for 33.2% of non-current assets and about 10.9% of total assets. Other significant items included plant and equipment and deferred tax assets. At the end of 2016, these accounted for 18.1% and 17.8%, respectively, of total assets. Plant and equipment includes mostly machinery, equipment and apparatuses used in the production process, as well as computer sets.

In 2016, non-current assets decreased by PLN 3,277 thousand (1.2%) compared with the previous year. The change in non-current assets was attributable to a PLN 5,657 thousand drop in long-term trade receivables and a PLN 3,681 thousand increase in non-current financial assets.

#### 3.12.2. Key investments in property, plant and equipment

In 2016, the Company incurred capital expenditure on non-financial non-current assets of PLN 6,098 thousand, including:

- PLN 4,909 thousand on property, plant and equipment,
- PLN 1,189 thousand on intangible assets.

6. Other non-current assets

Capital expenditure on property, plant and equipment was primarily connected with the purchase or upgrade of plant and equipment, including IT hardware, and the purchase of vehicles.

Capital expenditure on intangible assets mainly related to the implementation of a new controlling system, as well as the purchase of licences and software.

The expenditure was financed with internally generated funds and through lease agreements.

#### 3.13. Current assets

In 2016, current assets decreased by PLN 154,478 thousand, to PLN 557,040 thousand.

The change in this asset group resulted chiefly from a PLN 104,316 thousand decrease in gross amount due from customers for construction contract work, a PLN 68,969 thousand decrease in other receivables and prepayments (chiefly due to lower security deposits receivable), and a PLN 26,071 decrease in current financial assets.

Material receivables included deposits provided as security for contract guarantees (issued mainly by banks on the Company's instructions). At the end of December 2016, the amount of deposits provided as security for guarantees was PLN 68.1m (PLN 122.7m at the end of December 2015). The change in receivables related to security deposits was mainly a result of the return of a PLN 40m cash security deposit provided by RAFAKO S.A. to secure the performance of a contract (the Jaworzno 910 MW Project), as a result of a bank guarantee issued by mBank.

The change in current assets was attributable to a PLN 46,820 thousand increase recorded in trade receivables, which as at December 31st 2016 amounted to PLN 188,754 thousand.

For the list of loans advanced as at December 31st 2016, see Appendix 7.

#### 3.14. Equity amount and structure

As at December 31st 2016, RAFAKO S.A.'s equity was PLN 328,760 thousand, of which:

- 1. Share capital was PLN 169,864 thousand and comprised 84,931,998 Series A, B, C, D, E, F, G, H, I and J ordinary shares. In the 12 months of 2016, there were no changes in the Company's share capital;
- 2. Share premium was PLN 95,340 thousand. In 2016, there were no changes in the Company's share premium;
- 3. Statutory reserve funds were PLN 131,301 thousand (a PLN 26,585 thousand increase was attributable to the allocation of the 2015 net profit to statutory reserve funds);
- 4. Accumulated losses were PLN 67,676 thousand;
- 5. Exchange differences on translating foreign operations were PLN (-)69 thousand.

In 2016, the Company did not acquire its own shares.

#### 3.15. Changes in RAFAKO S.A.'s equity interests

As at December 31st 2016, the Company's share in total voting rights held in the subsidiaries was equal to the Company's interest in the share capital of those entities, except for ENERGOTECHNIKA ENGINEERING Sp. z o.o., in which RAFAKO Engineering Sp. z o.o. holds 41.74% of preference shares (58.90% of total voting rights); 47.83% of the shares (33.74% of total voting rights) are held by PGL-DOM Sp. z o.o.

On April 29th 2016, the Extraordinary General Meeting of RAFAKO Engineering Sp. z o.o. passed a resolution to increase the share capital from PLN 1,959 thousand to PLN 3,555.5 thousand, i.e. by PLN 1,596.5 thousand, through an issue of 3,193 new shares with a par value of PLN 500 per share. The new shares were acquired pro rata by the existing shareholders, i.e.:

- RAFAKO S.A. acquired 1,630 shares with a par value of PLN 500 per share, and a total value of PLN 815 thousand; the shares were acquired in return for a cash contribution of PLN 4,317 thousand;
- PBG oil & gas Sp. z o.o. acquired 1,563 shares with a par value of PLN 500 per share, and a total value of PLN 781.5 thousand; the shares were acquired for a non-cash contribution with a total value of PLN 4,140 thousand in the form of an organised part of business.

Since the registration of the share capital increase at RAFAKO Engineering Sp. z o.o. on January 5th 2017, the respective interests held in the company by RAFAKO S.A. and PBG oil and gas Sp. z o.o. have not changed and amount to 51.05% and 48.95%, respectively.

On June 30th 2016, PGL DOM Sp. z o.o., a subsidiary, acquired from a minority shareholder 100 shares in ENERGOTECHNIKA ENGINEERING Sp. z o.o., a subsidiary, for PLN 137 thousand, thus increasing its equity interest in the company to 47.83%.

On September 13th 2016, RENG-NANO Sp. z o.o., a new company, was incorporated. The company's share capital amounts to PLN 1m and is divided into 10,000 shares with a par value of PLN 100 per share. Interests in the company's share capital were acquired in return for cash contributions by the following shareholders:

- RAFAKO ENGINEERING Sp. z o.o., which acquired 6,000 shares with a total par value of PLN 600 thousand representing 60% of the company's share capital;
- NANO Corp Ltd. of Seoul, which acquired 3,500 shares with a total par value of PLN 350 thousand representing 35% of the company's share capital;
- Marek Buzanowski-Konakry, who acquired 500 shares with a total par value of PLN 50 thousand representing 5% of the company's share capital.

On February 27th 2017, the District Court in Gliwice, 10th Commercial Division of the National Court Register, registered RENG-NANO Sp. z o.o. in the National Court Register under entry No. 0000663393.





On October 12th 2016, RAFAKO Engineering Sp. z o.o., a subsidiary, acquired from a minority shareholder 40 shares in ENERGOTECHNIKA ENGINEERING Sp. z o.o., a subsidiary, for PLN 20 thousand, thus increasing its equity interest in the company to 41.74%.

#### 3.16. Use of proceeds from the issue of Series J shares

In 2015, based on a resolution passed by the Extraordinary General Meeting of RAFAKO S.A. on March 24th 2014, RAFAKO S.A. carried out an issue of new shares with the existing shareholders' pre-emptive rights waived. Following the issue of 15,331,998 Series J ordinary bearer shares with a par value of PLN 2 per share, the Company's share capital increased by PLN 30,664 thousand.

PLN 89,225 thousand of share issue proceeds were used in 2016, of which:

- PLN 29,187 thousand was used as security for new financial instruments,
- PLN 11,309 thousand was used as financing support for new contracts,
- PLN 5,129 thousand was used to finance R&D work in 2016.

A total of PLN 45,625 thousand was used from proceeds from the issue of Series J shares. The balance of approximately PLN 43,600 thousand is to be used:

- a) to finance contract bonds in building the order book and to finance working capital requirements to enable the performance of contracts in the future. The Company plans to apply approximately 85–90% of the funds raised from the issue towards that purpose;
- b) to increase its research and development spending with a view to advancing its technology portfolio and supplementing it with unique solutions to improve product efficiency and reliability. The Company's key focus in its research and development work financed with proceeds from the issue will be on environmental protection technologies. The Company plans to apply approximately 10–15% of the funds raised from the issue towards that purpose; The final allocation schedule will depend, among other things, on the results the R&D projects.



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#### 4. Human resources and workforce at the Company

In 2016, the average workforce at the Company was 2,045 employees, 98 fewer than in 2015.

	Dec 31 2016	Dec 31 2015
Workforce structure at end of period	1,993	2,128
production	897	990
engineering design office	278	314
technology office	71	96
quality control	97	101
maintenance	30	19
other employees (financial and accounting, sales and procurement staff)	620	608

As at December 31st 2016, the Company's employees with university degree or secondary school diploma accounted for 66.6% of the personnel (compared with a similar percentage of 65.7% as at December 31st 2015). The Company's Management Board recognises the importance of recruiting new, well-educated employees. As more than 90% of job positions at the Company require specialist knowledge, persons with specialist university degrees are given priority in the recruitment process. As at December 31st 2016, university graduates accounted for 40.4% of the personnel (compared with 38.7% as at the end of December 2015). The Company also attaches importance to continuous professional advancement, and many employees decide to enrol on part-time university courses.

The age distribution of employees remained stable: the share of employees up to 40 years of age fell from 40.8% as at December 31st 2015 to 38.0% as at December 31st 2016, while the percentage of employees aged between 41 and 50 rose from 23.8% to 24.6%, and the share of employees above 50 years of age increased from 35.4% to 37.4%.

The share of employees working for the Company for up to 10 years was 26.3%, down by 3.7% year on year, while the percentage of employees with 11-20 years of service grew by 1.1% to 16.6%, and the share of employees with over 20 years of service rose to 57.1%, from 54.5% as at the end of December 2015. The Company has personnel with many years of unique professional experience.





#### 5. Other information

For the statement of compliance with corporate governance rules by RAFAKO S.A. in 2016, see Appendix 9.

For information on the amount of remuneration, awards and benefits for members of the Management and Supervisory Boards, see Note 43.7 to the financial statements of the Company.

The Company has entered into a management contract with each member of the Management Board, which includes provisions on compensation in the event of dismissal or resignation.

A member of the Management Board who is dismissed or not re-appointed (except where such dismissal was caused by the member's failure to properly discharge their duties under the contract, or by wilful or negligent conduct adversely affecting the Company's business), or whose contract has been terminated or expired, is entitled to a one-off termination payment, equal to six months' remuneration.

Additionally, the Company is required to pay non-compete compensation to members of the Management Board, equal to 50% of their monthly remuneration, for six months following the date of dismissal, expiry of mandate or end of the notice period.

For information on the number of shares in RAFAKO S.A. and its related entities held by members of the Management and Supervisory Boards, see Note 43.5 to the Company's financial statements.

The Company is aware of the fact (which is publicly available) that on April 20th 2016 PBG S.A. w upadłości układowej (in company voluntary arrangement) and Multaros Trading Company Limited signed agreements with certain banks restricting the transferability of RAFAKO shares, which is connected with fulfilment of PBG's obligations towards some of its creditors. The agreements involve the creation of registered pledges over all RAFAKO shares held by PBG and Multaros.

In connection with the court's decision of June 13th 2016 approving the arrangement between PBG and its creditors, the ordinary pledge over RAFAKO shares held by these companies, created to secure the arrangement, became effective.

Moreover, on December 2nd 2016 RAFAKO S.A. was notified by PBG S.A. of the creation of a registered pledge over RAFAKO shares held by PBG and Multaros Trading Company Limited for the benefit of PBG's arrangement creditors acquiring bonds, in accordance with the arrangement. Shareholders of the Company may have up-to-date information on other such restrictions, if any.

## III. Key events and developments in 2016 and in the period from the end of the financial year to the date of the report

The key events and developments related to the activities of RAFAKO S.A. are presented below.

#### 1. Contract with TAURON (Jaworzno Power Plant)

On April 17th 2014, RAFAKO S.A., acting as the leader of a consortium with Mostostal Warszawa S.A., executed a contract with Tauron Wytwarzanie S.A. for the construction of a power generation unit at the Jaworzno III Power Plant - Power Plant II. The value of the contract is PLN 4.5bn. The subject matter of the contract is design and delivery, on a turn-key basis, of a supercritical 910 MW power generation unit consisting of a steam generator, turbine generator set, main building, electrical and I&C systems.

The coal-fired unit to be erected in Jaworzno will be one of the most advanced facilities of this kind.

#### **Key parameters**

**S**upercritical pulverised-fuel, tower-type, once-through steam generator,

Unit's nominal output (gross) - 910 MW,

Generator's rated thermal input - 1,832 MWt,

Rated capacity - 2,390 t/h,

Temperature of steam at outlet (live/superheated) – 603/621°C,

Pressure of live steam at outlet - 28.5 MPa,

Pressure of superheated steam at outlet - 6.2 MPa,

Efficiency in standard conditions >95%,

Availability > 95%,

Net generation efficiency > 45.91 %.

#### Unit's components

Superheated steam generator,

**S**team turbine powering the electricity generator,

Feed water pump system,

**S**ystems designed to meet the sulfur dioxide, nitric oxide and dust emission standards specified in the Industrial Emissions Directive (IED),

**S**ystems for disposal of combustion waste, as well as for delivery and preparation of various auxiliary media.

The Jaworzno unit will be a high-efficiency base-load electricity generation facility operating within the power system. The operating life of the unit will be at least 200 thousand hours or 30 years.

#### **Environmental implications:**

According to the project owner's estimates, once the project is complete, sulfur dioxide emissions will be sixteen times lower than from the 120 MW units which are to be decommissioned, nitric oxide emissions will be more than five times lower, and dust emissions will be reduced eleven times. In addition, carbon dioxide emissions will be cut by nearly two million tonnes a year.

#### RAFAKO S.A.



#### Key events in 2016 and 2017

2016	
January	Construction of the groundslab for the steam generator.
	Construction of the underground structures of the turbine house and the lower groundslab for the turbine generator set
	On February 24th 2016, SPV Jaworzno and Powszechna Kasa Oszczędności Bank Polski S.A., Powszechny Zakład Ubezpieczeń S.A., Bank Gospodarstwa Krajowego and mBank S.A., signed an annex to the agreement of April 16th 2014 for bank and insurance guarantees required for the Jaworzno 910 MW Project. Under the annex, mBank agreed to issue, in favour of SPV Jaworzno, an advance payment bank guarantee of PLN 48m and a performance bond bank guarantee of PLN 126,334 thousand for the Jaworzno 910 MW Project. Under the annex, the PLN 40m which RAFAKO S.A. had contributed in cash as a performance bond for the main contract was returned to the Company.
February – April	In addition, as part of the security interests, RAFAKO S.A. also concluded an annex to the agreement of October 29th 2014 on the creation of a registered pledge over movables and rights of the Company, as announced by the Company in Current Report No. 47/2014. Under the annex, the scope of the pledge was extended so that, in addition to existing and future receivables of PKO, BGK and PZU, it also secures receivables of mBank, as providers of performance bonds and advance payment guarantees for the Company in connection with the Main Contract. Also, the maximum security amount was changed to PLN 1,300m (the previous value of the security was up to PLN 1,046m).
	entry of the pledge in the register of pledges.
June	Construction of the reinforced concrete structure of pylons.
July	On July 13th 2016, SPV Jaworzno and POLIMEX Energetyka Sp. z o.o. executed a contract for erection of the boiler's pressurised section, performance of tests and participation in the start-up, in connection with the Jaworzno 910MW Project. The contract is worth PLN 118,750 thousand.
September	Construction of the reinforced concrete structure of the building accommodating the control room and electric devices.  On September 14th 2016, SPV Jaworzno and RAFAKO S.A. commenced negotiations with Tauron Wytwarzanie S.A. and Tauron Polska Energia S.A. regarding amendments to the contract. The Parties entered into the negotiations following detailed investigation of the ground designated to accommodate the planned generating unit, which was carried out by SPV Jaworzno after execution of the contract and handing over of the construction site to the Company. The investigation revealed that, contrary to the findings of earlier surveys conducted by the employer, the ground was not suitable for spread foundation of the planned structure. In order to avoid a construction disaster, it was necessary that SPV Jaworzno perform additional work, involving deep foundation of the generating unit's structure with piles and cavity walls. Moreover, after execution of the contract, it turned out that the contractor had to considerably increase the tonnage of steel elements in a number of structures compared with the tonnage assumed as at the contract date, which was the basis for determination of the contractor's remuneration under the contract. The increase was due to a change of the applicable technical standards following the transposition of European standards (Eurocodes) into the Polish regulatory environment.

	As a result, RAFAKO S.A. and SPV Jaworzno approached the employer with a request to increase the contract price by PLN 127m and extend the deadline for completion of work under the contract by ten months.
December	Completion of erection of the load-bearing structure of the steam generator and delivery of the turbine island.
2017	
January	Delivery of the turbine island
	On March 1st, RAFAKO S.A. and Mostostal Warszawa signed annex 5 to the contract for the Jaworzno 910 MW Project with Tauron Wytwarzanie (the employer).
March	Under the annex, the contract price was increased by PLN 71.05m due to the need to change the design and place the structure accommodating the power generating unit on deep foundations, and also to account for the additional work commissioned from the contractor (i.e. RAFAKO S.A. and Mostostal Warszawa S.A.) which involves laying the foundations in the fifth zone (the electrostatic precipitator zone) and extension of the electrostatic precipitator switchgear building. The additional works will enable the employer to bring the unit partly in line with future requirements of the BAT Conclusions. The employer did not acknowledge the claims arising from changes in the design standards (Eurocodes) as valid.
	Under the annex, the contract completion deadline was extended by eight months and five days, and therefore the unit commissioning report will be signed by November 2019.
	Execution of the annex will result in amendments to the project financing documentation, contract performance timetable, project budget and the subcontractor agreement between SPV Jaworzno and RAFAKO S.A.
	As at February 28th 2017, the percentage of project completion was 31.8%.

In its separate financial statements, RAFAKO S.A. recognises only revenue and expenses related to its own scope of work, i.e. 11.3% of the total scope of work to be performed on the Jaworzno 910 MW Project. In its separate financial statements, the Company does not recognise revenue and expenses related to the portion of work performed by E003B7 Sp. z o.o. – they are reported in the separate financial statements of E003B7 Sp. z o.o. and the consolidated financial statements of the RAFAKO Group.

For the rules of accounting for the contract, see Note 12.1.1 to the financial statements.

#### 2. Contract with PGE Elektrownia Opole

In February 2012, RAFAKO S.A., acting as the leader of a consortium comprising RAFAKO S.A., Polimex-Mostostal S.A. and Mostostal Warszawa S.A. executed a PLN 9.4bn contract with PGE Elektrownia Opole S.A. (currently PGE Górnictwo i Energetyka Konwencjonalna S.A. – the "employer") for turn-key design, delivery, construction, assembly, start-up and performance of all related services with respect to a facility consisting of power unit No. 5 and power unit No. 6 at PGE Elektrownia Opole S.A., together with equipment and devices as well as all related buildings and structures.

The units, each with a capacity of 900 MW, will be fired with hard coal. The project will be completed within 54 months from the notice to proceed for unit No. 5, and within 62 months from the notice to proceed for unit No. 6.

The subsidiary E001RK Sp. z o.o. ("SPV-RAFAKO") was appointed by RAFAKO S.A. as its subcontractor in charge of the entire scope of work and services related to the construction of the power generating units at Elektrownia Opole (Opole Power Plant). SPV-Rafako's remuneration for the performance of the works and services is PLN 3.96bn.

On October 26th 2013, E001RK Sp. z o.o. (a company dedicated to the Opole Project, wholly-owned of RAFAKO S.A.) entered into a subcontractor agreement with Alstom. Under the agreement, E001RK Sp. z o.o. appointed Alstom as its subcontractor responsible for 100% of the work and services making up RAFAKO S.A.'s scope of work under the Opole Project.

Presentation of revenue and expenses under the contract has no effect on the values disclosed in the Group's statement of comprehensive income.

For the rules of accounting for the contract, see Note 12.1.2 to the financial statements.

On January 31st 2014, the consortium received a notice to proceed for the Opole Project from the employer. The project is on schedule: construction of the power generating units is half-way through, with invoices issued and payments made without any disruptions. As at December 31st 2016, PLN 2,098,544 thousand (65.1% of the contract's total value) was invoiced in relation to the Opole Project.

#### 3. Events related to other significant contracts

- a. On September 29th 2016, RAFAKO S.A. signed a contract worth EUR 149,650 thousand with JSC Vilniaus Kogeneracinė Jėgainė. The contract provides for the construction of a biomass-fired co-generation unit consisting of boilers with fluidised beds, biomass storage and feeder systems, and a flue gas treatment system. The project will be executed as part of the process to construct a new CHP plant in Vilnius, Lithuania. The award of this project is an important step towards one of RAFAKO's strategic objectives, which is to increase its overall export revenues.
- b. On September 30th 2016, RAFAKO S.A. and ENEA Wytwarzanie Sp. z o.o. signed a contract for delivery and installation of a catalytic flue gas NOx reduction system for AP-1650 boilers No. 9 and 10 and for upgrade of the electrostatic precipitators at ENEA Wytwarzanie Sp. z o.o., worth PLN 289,182.1 thousand.
- c. On October 20th 2016, RAFAKO S.A. signed an annex to the contract for execution of Phase 1 of the 'New CHP Plant at Grupa Azoty Zakłady Azotowe Kędzierzyn S.A.' project with Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. Under the annex, the parties postponed the final deadline for completion of the contract to the end of Q1 2017. The annex also changed the aggregate limit of liquidated damages to 35%.

#### 4. Other material events

- a. Amendments to the Company's Articles of Association (consolidated text of the Articles of Association was published in Current Report No. 5/2016) of February 26th 2016.
- b. In March 2016, the Management Board passed a resolution to reorganise the Company. The purpose of the reorganisation is to adapt the Company's business model as well as its resources and key processes to the increasingly more demanding market in which it operates, and also to the new markets where the Company intends to purposefully and effectively operate in the forthcoming future.

Key objectives of the planned changes are as follows:

- to implement a CRM-based model and a system-based foreign markets management,
- to implement a system-based foreign markets management,
- to introduce uniform standards for bidding and project implementation,
- market orientation of production.

The Company's Management Board assumed that the most effective way to achieve these objectives would involve:

- adapting the organisational structure to challenges faced by the Company as well as building business awareness and responsibility for the implementation of strategic objectives at all levels of the organisation, and
- remodelling business processes (including the sale and manufacturing processes) as well as financial processes (mainly the controlling and accounting processes).

As at June 30th 2016, changes were made to the organisational structure, while work continued on the remodelling of business and financial processes.

- c. On June 30th 2016, an annex to the Credit Facility Agreement with Powszechna Kasa Oszczędności Bank Polski S.A. of Warsaw was executed. Under the annex, the terms and conditions of the financing were changed as follows: as part of the multi-purpose credit facility (the "Facility"), the Bank provided RAFAKO S.A. with:
  - a current account overdraft facility of up to PLN 100m,
  - a revolving working capital facility of up to PLN 50m (disbursements under the facility are to be
    made on the basis of the Company's instructions) for the financing of current liabilities as they
    arise in the course of day-to-day operations;
  - a bank guarantee facility, on the terms and conditions specified in the Agreement, and a revolving
    working capital facility of up to PLN 100m for the financing of payments under bank guarantees
    issued by PKO BP, provided, however, that the aggregate amount drawn under the Facility may
    not exceed PLN 200m. The annex extended the availability and final repayment date of the Facility
    until June 30th 2017.

Furthermore, under the annex the Company agreed to change the existing security, i.e. a registered pledge over a set of movables and rights comprising the entire business of RAFAKO S.A., by extending the security to cover all liabilities which may arise under the Facility.

RAFAKO S.A. also undertook to make changes to the joint contractual mortgage of up to PLN 300m so that the mortgage secures all debts that may arise under the Facility.

Additionally, the annex includes a condition that if in 2016 RAFAKO does not acquire a new order book with a net value of PLN 900m, to be reviewed as at December 31st 2016, PKO BP will be entitled to reduce the amount of the PLN 100m overdraft facility available to the Company by the percentage by which the new order book falls short of the assumed value, rounded to the nearest million. In such a case, the next review of the order book for the previous 12 months, i.e. from April 1st 2016 to March 31st 2017, will be made as at March 31st 2017. Review of the planned value of the order book will be based on RAFAKO's representation submitted to PKO BP. The value of orders acquired in 2016 exceeded PLN 900m (see Section 3).

Furthermore, in the annex PKO BP reduced the level of security in the form of cash deposits from the sub-limit for guarantees granted.

The other terms and conditions of the Credit Facility Agreement were not materially amended under the annex. The Facility bears interest at 1M WIBOR + bank margin. The Agreement also provides for customary bank fees and commissions. Interest is payable on a monthly basis.

- d. In May 2016, the Company's Management Board updated the RAFAKO Group's Stable Growth Strategy for 2015–2018; the update was a result of the completed implementation of certain objectives, as well as changes in the market, competitive and legal environments. The Company's main strategic objectives are to:
  - strengthen its R&D activity;
  - consolidate its position as a leader on the Polish market of technologically advanced and environmentally-friendly solutions for the power and industrial sectors;
  - expand foreign sales;
  - optimise management of its business and Group, and in particular to expand the maintenance function.
- e. Following the rescission by general contractor Mostostal Warszawa S.A. on June 14th 2016 of the contract for design, delivery and erection of a grid, boiler and flue gas treatment system for two lines of the Thermal Waste Treatment Plant in Szczecin, on July 7th 2016 RAFAKO S.A. rescinded the project subcontractor agreement, having previously found the rescission of the subcontractor agreement submitted by Mostostal Warszawa to be defective and invalid, and therefore legally ineffective.

On October 11th 2016, the Company filed a claim against Mostostal Warszawa S.A. with the Regional Court of Gliwice, demanding payment of PLN 8,042,475 plus statutory interest accrued from August 3rd 2016 as a refund of 70% of the amounts retained by Mostostal as a performance bond. The grounds for the claim were that the parties had effectively terminated their cooperation under the subcontractor agreement made on December 18th 2012. As cooperation on the project had been discontinued, Mostostal Warszawa S.A. was obliged to refund the amounts retained as a performance bond, because the contractual basis for providing a performance bond had ceased to exist.

For more details on these court proceedings, see Note 41 to the Company's financial statements.

f. On July 14th 2016, RAFAKO S.A. and POLIMEX Energetyka Sp. z o.o. of Warsaw signed a letter of intent expressing the parties' intention to jointly participate in a potential tender for expansion of power generation capacities at the Ostrołęka Power Plant and perform works under the contract to be concluded if the consortium of Polimex Energetyka Sp. z o.o. and RAFAKO S.A. wins the project, on the terms and dates provided for therein.

The parties plan to participate in the project as a consortium. In the consortium agreement, the parties will specify the detailed scope of bid preparation and works for each Party, and the rules to be followed by each party in using its resources, granting credentials etc.

If the parties decide to conclude the consortium agreement, Polimex Energetyka Sp. z o.o. will be the consortium leader and will perform the assembly and construction works for the project. RAFAKO S.A. will be the consortium member and will perform the technology part of the project (excluding the turbine island), to be defined in detail in the agreement.

g. On August 2nd 2016, the Company received a debit note from ENERGA Elektrownia Ostrołęka S.A. (the "employer") for PLN 13,491 thousand, issued in connection with the contract for NOx emissions reduction on OP 650 boilers No. 1, 2, and 3 at the Ostrołęka B Power Plant, concluded on December 10th 2014 and performed in consortium with OMIS S.A. (with RAFAKO S.A. as the consortium leader (57.76% interest) and OMIS S.A. as the consortium member (42.24% interest)). ENERGA Elektrownia Ostrołęka S.A. charged liquidated damages for: i) delay in the completion of installation work, and ii) delay in the commissioning of the unit. Subsequently, as a result of negotiations held between the parties, ENERGA decided to waive the second claim for liquidated damages in whole, which reduced the debit note amount by PLN 899,400. On September 20th 2016, the consortium filed an action with the Regional Court of Białystok for determining non-existence of the liabilities towards ENERGA in connection with non-performance or improper performance of the contract. On October 27th 2016, ENERGA sent a letter to RAFAKO S.A. and OMIS S.A. in which it notified them of deducting PLN 6,453,698.68, representing part of the liquidated damages, from current payments due to the consortium under the contract. The consortium refuses to accept that set-off, which it deems groundless given the contested grounds for charging the liquidated damages, which are now under litigation.

For more details on these court proceedings, see Note 41 to the Company's financial statements.

h. On June 13th 2016, the Regional Court of Poznań dismissed creditors' complaints against the decision to approve the arrangement, whereupon the arrangement became final. PBG had the status of a company 'w upadłości układowej' (in company voluntary arrangement) from June 2012. In August 2015, the meeting of PBG's creditors voted on and approved the arrangement. In October 2015, the arrangement was approved by the court. PBG's Arrangement with its Creditors became final on June 13th 2016.

On February 10th 2017, the Management Board of RAFAKO S.A. effectively submitted a declaration of acceptance of the invitation to acquire secured ordinary bonds in book-entry form, issued in series from B1 to I1 by PBG S.A., with a nominal value of PLN 100 per bond, that is a total of 388,492 non-interest bearing bonds with a total nominal value of PLN 38,849.2 thousand.

The total issue price will be covered through a set-off of the debts owed to RAFAKO S.A. under the arrangement concluded by PBG S.A. in the course of its arrangement proceedings.

On February 10th 2017, the bonds were allotted to RAFAKO.

The bonds will be redeemed in individual series, as presented in Note 42 to the Company's financial statements.





The last series is to be redeemed on June 30th 2020.

- i. On November 15th 2016, the Management Board of RAFAKO S.A. resolved to launch a Voluntary Redundancy Programme for the Company's employees. The VRP aims to adjust the level and costs of employment to the conditions prevailing in the market where the Company operates, while supporting the leaving employees through financial and non-financial measures. Ultimately, the programme is to cover around 200 employees. First and foremost, the programme is targeted at:
- employees who have reached the retirement age,
- employees who are entitled to pre-retirement protection,
- other employees who meet certain conditions.

The total number of the Company's employees who have benefited from the programme is 128, and the final amount of obligations arising in connection with the programme (for which a provision was set up affecting entirely the earnings for 2016) will be about PLN 7.7m.

j. On December 2nd 2016, the Company received from PBG S.A., a person closely associated with a person discharging managerial responsibilities at RAFAKO S.A. – Mr Jerzy Wiśniewski, Chairman of the Supervisory Board of RAFAKO, a notification of a transaction creating a pledge over Company shares, executed on November 29th 2016.

In addition to the agreements specified in Section 4, partnership and cooperation agreements significant for the Company's business and executed in 2016 also include insurance agreements.

A list of insurance agreements in effect as at December 31st 2016 is presented in Appendix 5.

For information on the agreement with the qualified auditor of financials statements, see Note 45 to the Company's financial statements.

#### 5. Research & development and quality improvement projects

Last year, the Group's research & development activity was focused primarily on developing new products intended for new markets. Key initiatives in this area rely on cooperation with a number of entities as part of projects commissioned by the National Centre for Research and Development, EIT through Knowledge & Innovation Community, or by the European Commission.

RAFAKO S.A. cooperates with institutions of science education, especially with the Wrocław University of Technology, Silesian University of Technology, Cracow University of Technology, AGH University of Science and Technology, Jagiellonian University, Stanislaw Staszic Institute for Ferrous Metallurgy, and the Polish Institute of Welding.

At the end of 2016, six patent applications were being reviewed by the Patent Office, and several more were being prepared.

The most significant research & development and quality improvement projects completed in 2016 included:

- a. Work on innovative low-emission technologies (DUO-BIO) for reconstruction of coal-fired power plants with 200 MW generating units
- b. Work related to a rotary air pre-heaters control system development of a new control system featuring low-budget applications for small air pre-heaters

#### 6. Projects related to management and deployment of computer-based processes

RAFAKO S.A. uses ERP Infor LN10 systems, communication software (Lotus Notes) as well as CAD/CAM/CAE tools for computer aided design, integrated at the level of basic elements of business (client, project, supplier). With this software package, the Company is able to perform a broad range of cross-sectional analyses and build reliable decision-support databases.

In 2016, the Company commenced work on the implementation of a new document flow system and a controlling system for planning and budgeting.

#### 7. Other information

The Company did not launch any employee share option schemes.

The Company has a self-reporting branch in Turkey, which prepares its financial statements in accordance with Turkish law. The functional currency of the branch is EUR. The branch was established for the purpose of executing a turn-key contract for upgrade of two steam generators at the Yenikoy Power Plant, signed in November 2007 with Elektrik Uretim A.S. of Turkey, and any future contracts on that market.

#### 8. Disputes, pending litigation, arbitration or administrative proceedings

For information on material disputes and litigation, see Note 41 to the Company's financial statements.

#### IV. Company's development prospects in 2017

#### 1. Energy policy

#### Power market and environmental protection regulations

The power market, especially its commercial segment, is subject to extensive regulation governing both the way in which it operates and its future development and structure in the context of increasingly stringent environmental protection standards. The highly-regulated nature of the segment follows from the power market's strategic importance to the energy security of every country, with environmental protection and reduced CO<sub>2</sub> emissions becoming a global priority in international relations. Such regulations include both the legislative framework and general objectives of the national and EU-level energy policies concerning environmental protection.

Because of the introduction of more stringent environmental protection standards, businesses generating flue gases, such as CHP plants and power plants, are required to upgrade their existing units and install new equipment to reduce air emissions. This translates into more investment projects in the power segment, including construction of low-emission, high-efficiency power plants and upgrade of existing power plants to make them comply with the strict environmental requirements imposed under EU law, which may in turn boost demand for products and services offered by the Group.

#### Environmental protection regulatory environment in the EU

The EU's energy policy is formulated by Member States as well as EU institutions. The legal basis for the energy policy is the Treaty on the Functioning of the European Union. Under the Treaty of Lisbon, key objectives of the EU's energy policy are:

- a. to ensure the functioning of the energy market;
- b. to ensure security of energy supply in the Union;
- c. to promote energy efficiency and saving and the development of new and renewable forms of energy;
- d. to promote the interconnection of energy networks.

The current energy policy provides for a comprehensive and integrated approach to energy and climate policy. In 2014, the heads of EU Member States and governments set the following goals:

- greenhouse gas reduction by 2030 by at least 40% compared with 1990,
- increasing the share of renewable energy to at least 27% of the EU's energy consumption,
- increasing energy efficiency by at least 27% (indicative) in 2030.

On November 30th 2016, the European Commission presented a package of measures (Winter Package) to keep the European Union competitive as the clean energy transition is changing the energy markets.

The main goal of enacted regulations should be to put the European Union closer to fulfilling its commitments under the Paris Agreement, i.e. to cut  $CO_2$  emissions, increase the share of renewables in energy consumption, improve energy efficiency and provide a fair deal for consumers. The package is still a proposal, which over the next year will be addressed by the European Parliament, the respective energy ministers of individual Member States, and other entities.

#### Regulatory environment in Poland

The key legal act regulating the operation of the Polish energy sector is the Energy Law. It lays down the rules governing development of the energy policy, rules and conditions for supply and use of fuels and energy, including heat, and operation of energy companies.

Poland's Energy Policy until 2030, prepared by the Ministry of Economy, plays a major role in setting the development directions for the energy sector. Its objectives include:

- improving electricity generation efficiency through the construction of high-efficiency generating units and a two-fold increase in the quantity of electricity from high-efficiency co-generation (by 2020);
- increasing the share of renewable energy sources in total energy consumption in Poland to 15% in 2020 and 20% in 2030.

The Policy also highlights the need to reduce the environmental impact of the energy sector (including the reduction of CO<sub>2</sub>, SO<sub>2</sub> and NOx emissions), which would enable Poland to meet its international obligations. Among the objectives relating to electricity and heat supplies, the Policy lists the construction of new generating capacities to balance the domestic electricity demand and maintain an operationally available capacity surplus of at least 15% of the maximum domestic demand during the peak use of total capacity of the domestic generation sources. The Policy defines the key priorities and directions in which Poland's energy policy, and thus the Polish energy market, will develop.

The work on Poland's Energy Policy until 2050 has begun. The draft of August 2014 sets the following three operational objectives designed to support the main objective:

- to ensure national energy security;
- to increase the competitiveness and energy efficiency of Polish economy;
- to reduce the environmental impact of the heat and power sector.

The Polish energy strategy until 2050 should reflect the assumptions of EU's climate policy and the respective policies of individual Member States.

At the beginning of January 2016, a Transitional National Plan (TNP) was introduced in Poland in line with the Regulation of the Minister of Environment of July 2015. The plan is designed to implement into the Polish legal system the provisions of the directive of the European Parliament and of the Council of November 2010 on industrial emissions (IED). The directive introduces mechanisms that make it possible to postpone compliance with the obligation to apply new emission limits for sulfur dioxide, nitrogen oxides and dust (derogations). Derogations provide the operators of energy installations with time to complete investment projects designed to technically adapt them to the more stringent emission requirements. One of the mechanisms introduced under IED is the Transitional National Plan, which will be applicable in the period from January 1st 2016 to June 30th 2020. During that period, the installations covered by the Plan will have to meet the relevant emission ceilings set for each year.

In 2016, the Polish President signed the Energy Efficiency Act, which implements EU regulations into Polish law to further improve the energy efficiency of Polish economy. The Act came into force on October 1st 2016. Other bills signed into law in 2017 include the amended RES Act, whose purpose is to clarify the status of producers of electricity from renewable energy sources and the rules of granting staid aid to such producers, as well as the amended Energy Law, whose new regulations are expected, among other things, to improve the energy security of Poland.

#### 2. Asset development plans of the power sector

According to the conclusions from forecast analyses performed for the purposes of Poland's Energy Policy until 2050, demand for electricity in Poland is expected to grow. According to Polskie Sieci Elektroenergetyczne, in 2016 electricity consumption totalled 165 TWh, compared with 161 TWh the year before. The estimated year-on-year growth in demand for electricity in Poland may reach 1.5-2%. The rising demand for electricity will translate into more investment projects in the power sector, which is where the RAFAKO Group's key customers operate.

In Poland, recent years have seen some slowdown in the execution of power generation projects (due, among other things, to the economic downturn in late 2012/early 2013). As a result, a number of ongoing investment projects have been delayed by about 2 years, and some projects have been suspended. The cost of both replacement and development projects in the power segment until 2020 is estimated at about PLN 129bn.

In 2017, work on the construction of three largest coal-fired units will be continued. First to be completed is the unit in Kozienice (1,075 MW), which is to be placed in operation in December 2017. The second most advanced project involves the construction of new generating units at the Opole Power Plant (2x900 MW), with unit No. 5 to be placed in service in July 2018 and unit No. 6 – in February 2019. The third project in terms of progress is the construction of a 910 MW unit at the Jaworzno Power Plant, which is scheduled to go online in the fourth quarter of 2019.

Among large gas-fired power units currently being built, the project that should be specifically mentioned is the construction of a 463 MWe CCGT unit at the Włocławek Power Plant for PKN Orlen. Built by the General Electric International and SNC-Lavalin Polska consortium, the unit is expected to be fully completed in the second quarter of 2017.

The second project involving a gas-fired unit is the construction of a 449 MW CCGT unit at the Stalowa Wola CHP Plant for Tauron/PGNiG, under a contract signed in 2012. The unit is expected to come online in 2019.

In 2013 and 2014, several smaller projects were launched, including:

- a 50 MW coal-fired unit at the Tychy plant, constructed for Tauron Ciepło by Elektrobudowa; the project was completed in June 2016;
- a 138 MW CCGT unit at the Gorzów plant, constructed for PGE by Siemens; the unit was placed in service in February 2017;
- a 75 MW coal-fired unit at the Zofiówka plant, constructed for Jastrzębska Spółka Węglowa by Energoinstal; under the construction contract the unit is to be ready for commercial operation at the end of April 2017;
- a 596 MW CCGT unit at the Płock plant, constructed for PKN Orlen by the consortium of Siemens AG and Siemens Spółka z o.o.; the unit is scheduled to come online in the fourth quarter of 2017;

2015 saw the inauguration of construction of a 450 MW lignite-fired unit at the Turów Power Plant. The unit will be constructed for PGE GiEK by the consortium of MHPSE, Budimex and Tecnicas Reunidas. In June 2015, work began on the construction of a new CHP plant in Zabrze. The 220 MW unit to be fired with hard coal, biomass and alternative fuel (RDF) is being built for Fortum by ILF Consulting Engineers Polska under an EPCM (Engineering, Procurement, Construction Management) contract.

Projects to be commenced in the near future include: construction of a 400-500 MW CCGT unit at the Żerań CHP Plant for PGNiG Termika (the submitted bids are currently being reviewed and evaluated), construction of an approximately 120 MW CCGT unit at the Konin Power Plant for ZE PAK, and construction of a 400 MW CCGT unit for Grupa Azoty Puławy.

Also, in June 2016 the project for the construction of a new 1,000 MW supercritical coal-fired unit in Ostrołęka for ENERGA S.A. was reactivated.

Apart from that, talks are under way to launch a contract award procedure for another 1,000 MW supercritical coal-fired unit at PGG (formerly: Kompania Węglowa). The project, which had been put on hold, is to be subject to further economic analyses. Another major coal-fired power plant construction project is Elektrownia Północ (target capacity of 2x800 MW). The project is to be executed by Polenergia of the Kulczyk Investments Group. In December 2015, the Governor of the Gdańsk Province revoked the building permit in whole and referred the case for re-examination. The Provincial Administrative Court of Gdańsk upheld the Gdańsk Province Governor's decision revoking the building permit for the Elektrownia Północ project. The Provincial Administrative Court's ruling is not final.

The programme for construction of municipal waste incineration facilities, launched in 2007 and included in the Indicative List of the Ministry of Regional Development under the Operational Programme Infrastructure and Environment, initially comprised 11 items. 12 municipal waste incineration facilities were to be built: in Szczecin, Koszalin, Poznań, Gdańsk, Olsztyn, Białystok, Bydgoszcz, Łódź, Warsaw, Kraków and two facilities in Silesia. At present (at the end of 2016), six new waste incineration facilities are operated in Poland, and several more are under construction or specific plans have been made for their construction.

In 2001, the Municipal Solid Waste Disposal Plant in Warsaw was opened. 2015 saw the completion of projects in Białystok, Bydgoszcz, Konin and Kraków. In 2016, the operation of a municipal waste incineration facility in Poznań commenced. The initial deadline (December 2016) for commissioning of a thermal waste treatment plant in Szczecin will be postponed due to Mostostal Warszawa S.A.'s rescission of the contract in June 2016.

More local governments (e.g. from Gdańsk and Olsztyn) are contemplating the construction of waste incineration plants.

#### **Competitive environment**

The Group operates on a market dominated by large, mainly international players. On this market, contracts are typically awarded through tenders announced by clients, and projects can take as much as several years to complete.

Given the significance of factors such as experience, credentials, technological capabilities and financial resources in bidding for new contracts, the Group faces a limited number of competitors, which are typically companies specialising in EPC projects. In line with market requirements, the majority of the Group's projects are also implemented under EPC contracts.

The Group operates on the Polish market (77.8% of revenue in 2016 came from domestic sales) and on foreign markets (22.2% of revenue in 2016). Given the limited number of projects and customers on each market, as well as specific contract requirements, contractors competing with the Company for projects in Poland (major foreign companies often have branches in Poland) usually also bid for foreign contracts.

There is considerable competition in terms of the products and services which are part of EPC projects. Each company which the Company believes to be a significant competitor has proprietary energy generation technologies, extensive credentials and many years of experience in delivering EPC contracts. While some of them specialise in specific types of steam generators, others offer a comparable range of products and have access to technologies allowing them to bid for contracts within the same product scope as the Group. Complete generating units are constructed by GE Power, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, COVEC, CNEEC, SEC, Bilfinger Berger Power Systems, Amec Foster Wheeler, and CNIM, all of which have proprietary energy generation technologies, as well as organisational capacities necessary to pursue EPC contracts. These companies, as well as the Group, offer products necessary to construct complete generating units that can run on any kind of fuel.

On the Polish market, there are several companies, such as WARBUD, BUDIMEX and POLIMEX, which plan to enter the power construction industry by including EPC contracts into their offering or, at the very least, by offering assembly and construction services. Developing capabilities necessary to design and manufacture equipment for the power sector is complicated and requires considerable expenditures over long periods of time. In their competition with the Group, these companies rely solely on the technologies and products supplied by the Group's direct competitors, including GE Power, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, Bilfinger Berger Power Systems, and CNIM.

With respect to specific products, such as steam generators, desulfurisation units, NOx reduction units and waste incineration facilities, the Group's major competitors again include GE Power, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, Bilfinger Berger Power Systems, Amec Foster Wheeler, SES Tlmace, HZI, and CNIM, as well as Andritz, Valmet and Strabag.

The market is also seeing a number of Chinese companies, whose competitive edge consists primarily in lower prices and different – uncertain in the Company's opinion – technical specifications. The Group believes that customers on the Polish and European markets, including Turkey, perceive the offering of Chinese companies as unreliable, but the situation may well change if the Chinese competitors are able to maintain low prices while improving the technological quality of their products. Then those companies may become important players on the market of electricity generation technologies.

Furthermore, given the nature of large EPC contracts, it cannot be ruled out that the Group will partner with the above-mentioned companies for certain projects, especially those consisting in the supply of steam generators, their pressurised components or flue gas desulfurisation units.

#### 3. Operational plans

RAFAKO S.A. is prepared to face the challenges of the power market. The Company currently offers the widest selection of power technologies in Europe. In addition to all environmental protection facilities, which are constantly developed and upgraded, RAFAKO S.A. has capabilities necessary to construct power units for all parameters and fuel types. RAFAKO S.A. is one of Europe's four companies (the other being Alstom, Hitachi Power Europe and Doosan Babcock) offering the complete technology for the construction of supercritical power units.

In response to the shortage of new capacities, environmental requirements and insufficient energy resources, the Company's strategy meets the expectations of power sector clients by offering them high-efficiency power facilities and environmental protection systems.

In 2017, RAFAKO S.A. will continue to offer on the domestic and foreign markets:

- Complete thermal power stations, including:
  - o supercritical power units,
  - o municipal waste incineration facilities,
  - o units with coal-fired and biomass-fired steam generators,
  - CCGT units;
- Deliveries of complete conventional 'technology islands', including:
  - subcritical steam generators and water boilers fired with various types of fuels: coal/gas/oil/biomass; stationary and circulating fluidised bed combustors, supercritical steam generators,
  - environmental solutions, including flue gas desulfurisation units (wet/semi-dry/dry technology), flue gas NOx reduction units and dust extraction equipment (electrostatic precipitators, bag filters), etc.;
- Comprehensive rehabilitation projects designed to improve efficiency and reduce emissions into the environment; complete power installations provided under EPC contracts;
- Manufacture of steam generator parts;
- Engineering and maintenance services, including diagnostics, modernisation and repair of steam generators and auxiliaries.

Given the need to comply with more exacting EU environmental standards, RAFAKO should continue to increase its presence on the domestic market of environmental protection systems, where it currently offers technologies for the construction of complete flue gas desulfurisation units, industrial and municipal waste incineration systems and biomass-fired units, upgrading of boilers to reduce NOx emissions, as well as dust extraction equipment.





In 2017, the following factors and developments will have the greatest bearing on the Company's development and prospects:

- securing financial liquidity and obtaining access to new bank/insurance guarantees that will enable the Group to perform new contracts,
- making good progress on the construction of a 910 MW supercritical power generating unit at the Jaworzno Power Plant,
- performance of a large number of significant contracts in the Polish and European markets, including construction of modern steam generators, flue gas desulfurisation and NOx reduction units, municipal waste treatment and incineration systems, as well as pressurised parts of supercritical boilers,
- · acquisition of new material contracts.

Capital expenditure planned for 2017 on property, plant and equipment will mainly be incurred on purchase of computer hardware, upgrade of buildings and structures, purchase or upgrade of plant and equipment, and purchase of vehicles. The most significant investment projects related to intangible assets will include purchase of a system for project budget planning, purchase of Microsoft licences, and purchase of a system enabling real-time production monitoring. The investment projects will be financed primarily with the Company's own funds, but also using external sources (e.g. leases).

The Company's Management Board continues its efforts to win new contracts and believes that the key assumptions underlying its financial projections will materialise, ensuring the Company's liquidity in 2017.



#### Order book

As at December 31st 2016, the value of RAFAKO S.A.'s order book was in excess of PLN 4.0bn. The order book's largest item is the Jaworzno 910 MW Project – the amount outstanding under the contract is PLN 2.6bn, of which PLN 0.3bn is attributable to RAFAKO S.A. and PLN 2.3bn to SPV Jaworzno. The order book does not include the Opole contract (RAFAKO's outstanding share in the project, worth PLN 1.1bn, was subcontracted outside the RAFAKO Group). At present, the order book comprises only power construction projects.

ORDI	ER BOOK
Dec 31 2016	Dec 31 2015
~ PI N 4.0hn	~ PI N 4.6hn

	ORDER BOOK as		Due for execution i	n
	at December 31st 2016	2017	2018	after 2018
TOTAL	~4.0bn	~1.8bn	~1.4bn	~0.9bn
RAFAKO	~1.7bn	~0.7bn	~0.6bn	~0.4bn
SPV Jaworzno	~2.3bn	~1.1bn	~0.75bn	~0.46bn

As regards the value of RAFAKO S.A. and SPV Jaworzno's order book, the data presented in this document is based on the following assumptions:

- a. the order book value is equal to the aggregate amount of RAFAKO S.A.'s and SPV Jaworzno's remuneration under individual contracts executed by the Company in the period to December 31st 2016; the figure does not take into account any planned contracts that have not yet been signed;
- b. the order book value is disclosed as at December 31st 2016; actual revenue from contracts and performance periods depend on a number of factors, which may be outside RAFAKO's control.

## Key contracts for power generating units, boilers, power equipment, machinery and components

#### 1) Construction of a biomass-fired co-generation unit in Vilnius

The contract provides for the construction of a biomass-fired co-generation unit consisting of boilers with fluidised beds, biomass storage and feeder systems, and a flue gas treatment system. The project will be executed as part of the process to construct a new CHP plant in Vilnius, Lithuania.

On September 29th 2016, a contract worth EUR 149,650 thousand was signed with JSC Vilniaus Kogeneracinė Jėgainė.

The project completion deadline is 28 months as of the date of the notice to proceed, which will be issued no later than nine months after the contract date. If the employer fails to issue the NTP within those nine months (condition), the contract will be null and void.

The award of this project is an important step towards one of RAFAKO's strategic objectives, which is to increase its overall export revenues.

#### 2) Construction of a 910 MW supercritical power generating unit at the Jaworzno Power Plant

On April 17th 2014, RAFAKO S.A., acting as the leader of a consortium with Mostostal Warszawa S.A., executed a contract with Tauron Wytwarzanie S.A. for the construction of a 910 MW supercritical power generation unit at the Jaworzno III Power Plant - Power Plant II. The value of the contract is PLN 4.5bn.

The consortium will construct the unit together with a complete set of key facilities, installations and external equipment required for its safe and proper operation. The unit will be fitted with a coal-fired supercritical pulverised-fuel once-through steam generator and a condensing steam turbine coupled with the power generator. The unit will be connected to a new 400 kV substation supplying electricity to the National Power Grid. The unit's gross capacity will be 910 MWe, with a net efficiency of 45.91% and design coal consumption of ca. 345 t/h at nominal capacity.

The unit will be a high-efficiency base-load electricity generation facility operating within the power system. It will be fitted with systems enabling compliance with the NOx, SO2 and dust emission standards, i.e. an SCR unit, a desulfurisation unit and an electrostatic precipitator. The operating life of the unit will be at least 200 thousand hours or 30 years, and its output will increase the total capacities of the Polish electric utility sector by approximately 2.5%.

#### 3) Execution of the first phase of the 'New CHP Plant at Grupa Azoty ZAK S.A.' project

On May 23rd 2014, RAFAKO S.A. and Grupa Azoty Zakłady Azotowe Kędzierzyn S.A executed a contract for approximately PLN 320m.

The contract provides for:

- construction and supply of equipment and services, as well as start-up of a boiler house with a coalfired pulverised-fuel boiler, with a capacity of 140 Mg/h of steam with temperature of 495°C and pressure of 7.5 MPa;
- construction and supply of equipment and services, as well as start-up of a 25 MWe pass-out and condensing turbine in the existing turbine house, to be fed inlet steam with temperature of 490°C and pressure of 7.0 MPa;
- construction of a building (housing the central control room, DCS control system and social amenities), including equipment supply and start-up.

On October 20th 2016, the Company and Grupa Azoty Zakłady Azotowe Kędzierzyn S.A. signed an annex to the contract for execution of Phase 1 of the 'New CHP Plant at Grupa Azoty Zakłady Azotowe Kędzierzyn S.A.' project. Under the annex, the parties postponed the final deadline for completion of the contract to the end of Q1 2017. The annex also changed the aggregate limit of liquidated damages to 35%.

#### Key contracts for air pollution control systems

#### 1) Installation of a catalytic flue gas NOx reduction unit at ENEA Wytwarzanie Sp. z o.o.

On September 30th 2016, the Company and ENEA Wytwarzanie Sp. z o.o. signed a contract for delivery and installation of a catalytic flue gas NOx reduction system for AP-1650 boilers No. 9 and 10 and for upgrade of the electrostatic precipitators at ENEA Wytwarzanie Sp. z o.o. for PLN 289,182.1 thousand.

The contract, to be executed on a turn-key basis, is divided into two tasks subject to separate acceptance procedures:

Task 1 – Preparation of a construction plan for the entire contract, construction of an SCR unit at boiler No. 9 with a DRiM II Station – entire scope, multidisciplinary approach (development of documentation, delivery, performance of construction, electrical, mechanical, and I&C works), replacement of flue gas ducts at the boiler outlet stub – LUVO 1÷3 inlet stub section, replacement of electrostatic precipitator with the ash removal system and the flue gas inlet and outlet ducts, replacement of flue gas fans, removal of REGAVO and auxiliary fans including the construction of new flue gas ducts in place of the removed REGAVO and auxiliary fans, and construction of protection system for flue gas ducts from the FGD I absorber outlet to stack No. 5.

Task 2 – Construction of an SCR unit at boiler No. 10 and connecting the unit to the DRiM II Station – entire scope, multidisciplinary approach (development of documentation, delivery, performance of construction, electrical, mechanical, and I&C works), replacement of flue gas ducts at the boiler outlet stub – LUVO 1÷3 inlet stub section, replacement of flue gas fans, and upgrade of electrostatic precipitator with flue gas ducts upstream and downstream of the electrostatic precipitator (adaptation to new pressures following the construction of the SCR unit).

The contract completion deadline is:

- a) for Task 1 May 18th 2018 (placing the SCR unit, DRiM II Station and EP 9 in service),
- b) for Task 2 August 25th 2018 (placing the SCR unit and upgraded EP 10 in service).

#### 2) Construction of catalytic flue gas NOx reduction system at the Kozienice Power Plant

Since June 28th 2012, RAFAKO S.A. has carried out work at the Kozienice Power Plant under a contract executed with Enea Wytwarzanie S.A. for the turn-key delivery of complete, advanced catalytic (SCR) flue gas NOx reduction units. The total value of the contract is PLN 191m.

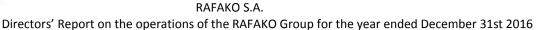
Thanks to the unit for OP-650 boilers, which is to be fitted on five biomass- and coal-fired 200 MW units (No. 4-8), the boilers will be able to operate in line with the environmental requirements.

#### 3) SCR systems in Polaniec

On June 14th 2012, RAFAKO S.A. signed a contract for delivery of SCR Catalytic Flue Gas NOx Reduction Systems to the Połaniec Power Plant. The contract, providing for delivery of the systems for six units (No. 2–7), will be carried out in stages until 2017. The total value of the contract is PLN 240m. The contract also includes optional delivery of equipment with a value of PLN 26m.

#### 4) Construction of a flue gas desulfurisation unit for boilers K7 and K8 at the Białystok CHP Plant

On October 23rd 2015, RAFAKO S.A. signed a PLN 78,500 thousand contract with ENEA Wytwarzanie Sp. z o.o. The contract provides for the construction of a flue gas desulfurisation unit for boilers K7 and K8 at the Białystok CHP Plant.





#### **Management Board's statement**

The Management Board of RAFAKO S.A. hereby represent that:

- 1) to the best of their knowledge, the financial statements for the year ended December 31st 2016, as well as comparative data for the year ended December 31st 2015, were drawn up in compliance with the applicable accounting standards and give a true, fair and clear view of the Company's assets, its financial condition and performance, and that the Directors' Report on the operations of RAFAKO S.A. gives a true view of the Company's development, achievements and standing, including a description of key risks and threats;
- 2) the auditor of the full-year financial statements, being an entity qualified to audit financial statements, was appointed in compliance with the applicable laws, and the auditing firm and the auditors who conducted the audit satisfied the auditor independence criteria to deliver an unbiased and independent auditor's opinion on the audited full-year financial statements, in compliance with the applicable laws and professional standards.

#### Signatures of Management Board members

March 21st 2017	Agnieszka Wasilewska-Semail	President of the Management Board	
March 21st 2017	Krzysztof Burek	Vice President of the Management Board	
March 21st 2017	Jarosław Dusiło	Vice President of the Management Board	
March 21st 2017	Edward Kasprzak	Vice President of the Management Board	
March 21st 2017	Tomasz Tomczak	Vice President of the Management Board	