

DIRECTORS' REPORT ON THE OPERATIONS OF THE RAFAKO GROUP and RAFAKO S.A.

for the six months ended June 30th 2018

Racibórz, September 6th 2018



Page

Table of contents

I.	General information	4
П.	Organisation of the RAFAKO Group	7
1 2 3	. Structure of the RAFAKO Group	7 8 8
III.	Economic and financial condition	9
-	rospects	9
2 3	,	10 11
5	3.1. Overview of 2018 half-year results (relative to prior years' half-year results)	12
	3.2. Revenue: amount and structure	13
	3.3. Deliveries, procurement and purchase of production materials	18
	3.4. Operating expenses: amount and structure; gross profit/(loss)	18
	3.5. Other income and expenses and net finance income/costs	19
	3.6. Income: amount and structure	19 19
	3.7. Margins, return on equity and return on assets3.8. Financial liquidity	20
	3.9. Debt	21
	3.10. Off-balance-sheet items	21
	3.11. Assets financing structure	22
	3.12. Non-current assets	23
	3.13. Current assets	24
	3.14. Equity amount and structure3.15. Use of proceeds from the issue of Series K shares	24 24
4		25
5		
а	t the date of issue of the half-year report	26
6 y	. Shareholders holding 5% or more of total voting rights at the parent as at the date of issue of the half- ear report	27
IV.	Key events and developments in the six months ended June 30th 2018 and after the reporting date	28
1	· · · · · · · · · · · · · · · · · · ·	28
2		29
3 4	5 7	30 30
4 5		30 31
6		31
7		32
v.	Growth prospects for 2018	32
1	571 7	32
2		34
3		36
4 5	1 57	36 39
	. Order book osition of the Management Board and Supervisory Board of the parent regarding the qualifications expres	
	y the auditor in the review report	42 seu
	Aanagement Board's statement	43



Appendices:

- 1. Ratios for the first half of 2018, for 2017 and for the first half of 2017
- Consolidated statement of financial position as at June 30th 2018, December 31st 2017 and June 30th 2017 -2. structure, change, % change
- Interim condensed statement of comprehensive income for the first half of 2018, for 2017 and for the first half of 3. 2017
- 4. Structure of and changes in consolidated profit before tax in the first half of 2018, in 2017 and in the first half of 2017



General information

About us

RAFAKO S.A. (the "parent") 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. In addition, the parent is expanding its natural gas, oil and fuel business. Since November 2011, the RAFAKO Group has been included in the PBG Group.

The RAFAKO Group's key products and services include:

Complete power generating units	Heat and power steam generators	Air pollution control systems	Power equipment, machinery and	Natural gas, crude oil and fuels	Other
 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 	rating unitssteam generatorscontrol systemsequ mailisting of a r (fired with fuels or lass) together a turbine led with a rator and oblete assembly e unit• fired with fossil fuels, biomass and waste • with stoker- fired, fluidised bed- and pulverised fuel furnaces• 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 flue gas NOX reduction units, including ser • manufacture and delivery of flue gas NOX reduction units, including scR systems• manufacture and delivery of dust extraction equipment (electrostatic• manufacture and delivery of dust extraction equipment the generators		 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 industry 	 surface installations for oil and gas production installations for unloading, regasification and storage of LNG oil and gas pipelines fuel tanks technical and sanitary installations 	 construction and process design, urban planning engineering and technical advisory services supervision services for the construction, industrial and environment protection sectors equipment assembly in the power and chemical industries property management

The Group delivers its products and services in the EPC model (end-to-end project management including design, procurement, manufacture, assembly/construction, and commissioning) or on a non-EPC basis (design, procurement, manufacture, assembly/construction in various combinations, with procurement and manufacture as mandatory elements).

The parent operates its own production plants. The main plant with five production floors, manufacturing mainly high-pressure equipment, is located in Racibórz, along with the plant management office, design and technology offices. Electrostatic precipitators and their components are manufactured in Wyry. RAFAKO S.A.'s total annual production capacity for 2018 is in excess of 1.1m man-hours.

RAFAKO S.A. has operated in the power sector since 1949. Its 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 parent was transformed into a general contractor for power construction projects. In 2014, the parent became one of the few companies offering and delivering large power generating 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 2018, RAFAKO S.A. has also been offering transport and storage systems and tanks for natural gas, crude oil and other fuels.

Since its inception, the parent has been a leading supplier of steam generators for the domestic power and industrial sectors. The combined capacity of RAFAKO-delivered steam generators accounts for a significant part of the total installed capacity of Polish commercial and industrial power plants. The most important facilities which use steam generators delivered by the parent include power plants in Bełchatów, Opole, Turów, Dolna Odra, Rybnik (all owned by PGE), Pątnów-Adamów-Konin (all owned by ZE PAK), Kozienice (owned by Enea), and power plants owned by Tauron Wytwarzanie, as well as Warsaw CHP Plants – Elektrociepłownie Warszawskie (owned by PGNiG Termika), Wrocław CHP Plants – Zespół Elektrociepłowni Wrocławskich Kogeneracja, Łódź CHP



Plants – Zespół Elektrociepłowni Łódź (owned by Veolia), and the Zielona Góra CHP Plant – Elektrociepłownia Zielona Góra (owned by PGE).

In 2008, a 464 MW unit was commissioned at the Pątnów 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 Pątnów II Power Plant was the first project of this type 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 Bełchatów Power Plant for which a consortium made up of RAFAKO S.A. and Alstom had built the boiler island comprising a steam generator, electrostatic precipitator, and flue gas desulfurisation unit. The newly built unit in Bełchatów is the most powerful lignite-fired generating unit in Poland.

The parent has also delivered circulating fluidised bed (CFB) steam generators to the Żerań CHP Plant (owned by PGNiG Termika), Bielsko-Biała II CHP Plant (owned by Tauron Wytwarzanie), Siersza Power Plant (owned by Tauron Wytwarzanie), Zakłady Farmaceutyczne Polpharma Starogard Gdański, Synthos Dwory 7 in Oświęcim, and further two to Kirka Borax and Mersin Soda Plants in Turkey.

In 2012, a fluidised bed boiler was commissioned at the Jaworzno Power Plant (the Tauron Group). The boiler is fired with biomass only, as opposed to coal-fired and biomass co-fired units already operated at the plant.

In 2014, 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.

The parent is solidifying its position on the 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, RAFAKO S.A. 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 December 2017, the completed facility was put into operation.

The Company has also completed a number of contracts for the delivery of boilers for waste incineration plants in the United Kingdom:

- In 2014, it delivered a waste incineration boiler to Billingham, Cleveland County, UK;
- At the beginning of 2016, a contract for delivery of a boiler for a municipal waste incineration facility in Calvert, Buckinghamshire, UK, was completed;
- From July 2014 to May 2017, the Company executed a project involving the delivery, erection and startup of a waste incineration boiler for Hereford & Worcestershire in the United Kingdom;
- From November 2016 to June 2018, the Company executed a project involving the delivery of pressurised sections for two boilers to a waste incineration plant in Kemsley.

RAFAKO S.A. is also a leading manufacturer of large environmental protection facilities in Poland. Such facilities have been delivered by the parent 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 (Czech Republic), Kozienice Power Plant, and Połaniec Power Plant.

In 2012, one of RAFAKO S.A.'s largest projects was commissioned: a wet flue gas desulfurisation unit for the Siekierki CHP Plant (owned by PGNiG Termika S.A.). The unit is one of the largest environmental projects in Poland.



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 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.

The proprietary semi-dry flue gas desulfurisation system engineered by RAFAKO S.A. is more cost-efficient than the wet method:

- 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 same technology was also used for the construction of a new CHP plant for Grupa Azoty Zakłady Azotowe Kędzierzyn S.A., commissioned in March 2017;
- In October 2015, RAFAKO S.A. signed a contract with ENEA Wytwarzanie Sp. z o.o. for the construction of a semi-dry flue gas desulphurisation plant for K7 and K8 boilers at the Białystok CHP Plant. The units were commissioned in September 2017, and final acceptance took place in March 2018.

In 2011, the parent entered a new area of pro-environmental projects in the power sector, i.e. reduction of nitrogen oxides, as it commenced the manufacture of state-of-the-art SCR units on an EPC basis:

- Starting from June 2011, SCR systems were gradually deployed at units 4, 5, 6, 7 and 8 of the Kozienice Power Plant; the last system was commissioned in 2017;
- In 2012, a contract was signed with GDF SUEZ Energia Polska S.A. (currently Enea Elektrownia Połaniec S.A.) for the delivery of catalytic flue gas NOx reduction systems for five power generating units at the Połaniec Power Plant; the SCR systems for units 2, 3, 6, 7 were commissioned in 2016, and an SCR system for unit 4 was commissioned in 2018;
- In 2014, a consortium of RAFAKO S.A. and OMIS S.A. signed a contract with ENERGA Elektrownie Ostrołęka S.A. for the construction of flue gas NOx reduction systems for units 1, 2 and 3 at Elektrownia Ostrołęka S.A.; the common system for all units was completed in 2016, the separate system for units 2 and 3 was commissioned in 2017, and work on a system for unit 1 is still in progress.

In 2009, dust extraction equipment, including electrostatic precipitators and bag filters, was added to the parent's product offering. In 2010–2013, a number of electrostatic precipitators were put in operation, including at units 10, 4, 3 and 8 at the Kozienice Power Plant; at a BB-1150 steam generator of unit 4 and units K5 and K6 at the Bełchatów Power Plant; as well as at unit 6 at the Tuzla CHP Plant. In 2014, two electrostatic precipitators were installed by RAFAKO S.A. at the Westfalen Power Plant in Germany, and further two at the Eemshaven Power Plant in the Netherlands. In December 2016, RAFAKO completed upgrade of electrostatic precipitators at the Morava Power Plant in Serbia.

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

In February 2014, the long-awaited contract for the extension of the Opole Power Plant came into effect. Under the contract, two new supercritical 900 MW power generating units are being built in what is the largest 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 projects are based on the state-of-the-art technology of electricity generation in supercritical steam generators and turbines, which increases the efficiency of generating units to 45% or more. The parent has long cooperated with Polish scientists to develop generating units with efficiencies in excess of 50% (ultra-supercritical units).

In early 2017, RAFAKO delivered, on an EPC basis, a new CHP plant for Grupa Azoty Zakłady Azotowe Kędzierzyn S.A., comprising a coal-fired generating unit with a high-efficiency steam generator, state-of-the-art flue gas treatment technologies and a steam turbine.

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 the six months ended June 30th 2018, RAFAKO S.A. delivered products to customers in Lithuania, Finland, Germany and the United Kingdom.

The parent is executing two large international contracts involving:

- Construction of a EUR 148m biomass-fired co-generation unit in Vilnius (Lithuania),
- Construction of two coal-fired steam units (2x50 MW) on Lombok Island, Indonesia, worth EUR 70m.

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

Further, the RAFAKO Group intends to focus on the natural gas, oil and fuel sector, both in Poland and on an international scale. This is seen as a promising market in view of the expected multi-billion investments in this sector, mainly relating to the objectives of Poland's energy policy and the necessity to adapt to the requirements of Poland's EU membership.

Certificates held by RAFAKO S.A. (EMAS, AD 2000-Merkblatt HP0, ASME CODE, SVTI / ASIT, EN 1090 and EN 3834-2) confirm its compliance with the requirements of ISO 9001:2015, ISO 14001:2015, PN-N 18001 standards, Directive 2014/68/EU and Regulation (EC) 1221/2009 of the European Parliament and of the Council. They also provide assurance to the parent'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 became a part of the PBG Group, with PBG S.A. as the parent. The PBG Group operates on the market for specialist construction services. 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 was in the process of company voluntary arrangement. In August 2015, the meeting of PBG's creditors voted on and approved the arrangement, which was then approved by the court in October 2015. It became final on June 13th 2016.

The current shareholder structure is set out in section III.6.

Organisation of the RAFAKO Group

1. Structure of the Group, and its consolidated subsidiaries

As at June 30th 2018, the RAFAKO Group comprised the parent and eight subsidiaries operating in the power construction, services and trade sectors. As at June 30th 2018, in addition to the parent, the RAFAKO Group comprised:

- Przedsiębiorstwo Gospodarki Lokalami PGL-DOM Sp. z o.o., registered office at ul. Bukowa 1, Racibórz, Poland. The parent holds a 100% interest in the company's share capital and the same percentage of voting rights. Principal business activity: housing community management.
- RAFAKO ENGINEERING Sp. z o.o., registered office at ul. Łąkowa 33, Racibórz, Poland. The parent holds a 51.05% interest in the share capital of the company and the same percentage of voting rights. The company's business includes engineering activities and related technical consultancy.
- ENERGOTECHNIKA ENGINEERING Sp. z o.o. of Gliwice. The parent holds a 100% interest in the share capital of the company and the same percentage of voting rights. Principal business activity: construction and process design, urban planning and engineering consultancy.
- RAFAKO ENGINEERING SOLUTION, registered office at 46, Uciteljska street, Belgrade; The parent holds a 77% interest in the share capital of the company and the same percentage of the voting rights. Principal business activity: process design, including process consultancy and supervision related to construction industry, manufacturing and environmental protection.
- RAFAKO Hungary Kft. of Budapest, Hungary. The parent holds the entire share capital of the company and all voting rights. Principal business activity: equipment assembly services for the power sector and the chemical industry.



- E001RK Sp. z o.o. of Racibórz, entered in the National Court Register on October 9th 2013. The parent holds 100% of the company shares. Principal business activity: development of building projects; construction of roads and highways, railways and subways, bridges and tunnels; engineering activities and technical and scientific consultancy; production, repair and maintenance of machinery and equipment, generation and transmission of and trading in electricity. The company has been established to carry out the Opole Project.
- E003B7 Sp. z o.o. of Racibórz, entered in the National Court Register on November 22nd 2013. The parent holds 100% of the company shares. Principal business activity: development of construction projects, construction, engineering and process consultancy and design. The company has been established to carry out the Jaworzno 910 MW Project.
- RENG-NANO Sp. z o.o. of Racibórz, entered in the National Court Register on February 27th 2017. A subsidiary of RAFAKO ENGINEERING Sp. z o.o., which holds a 60% interest in the share capital of the company and the same percentage of voting rights. Principal business activity: regeneration of SCR catalysts necessary for denitrification of gases; replacement, diagnostics, servicing and testing of catalysts.

As at June 30th 2018, the following subsidiaries were consolidated in the Group's consolidated financial statements:

PGL-DOM	RAFAKO	ENERGOTECHNIKA	RAFAKO	I RAFAKO	E001RK Sp. z o.o.	E003B7 Sp. z o.o.
Sp. z o.o.	ENGINEERING Sp. z o.o.	Engineering	ENGINEERING	Hungary Kft.	100%	100%
100%	51.05%	Sp. z o.o.	SOLUTION d	100%		
		100%	0.0.			
	60%					
			77%			
	RENG-NANO Sp. z o.o.					
	30.63%					

RAFAKO S.A.

The parent holds 1,956 shares in SANBEI-RAFAKO Sp. z o.o. of Zhangjiakou, Hebei Province, China, representing 26.23% of the company's capital. SANBEI-RAFAKO Sp. z o.o.'s principal business activity is manufacture of small steam and water boilers and other power generation equipment. As at June 30th 2018, the parent's interest in the company's capital was not material to the assessment of the Group's assets, liabilities, profits or losses.

The RAFAKO Group's parent is PBG S.A., with its registered office at ul. Skórzewska 35, Wysogotowo, Poland.

2. Structure of the RAFAKO Group

In the six months ended June 30th 2018, there were a number of changes in the Group's structure.

On July 4th 2018, a notarial deed was signed under which a new company, RAFAKO MANUFACTURING Sp. z o.o., was established. The company's share capital is PLN 30,000 and is divided into 300 shares with a par value of PLN 100 per share. The shares were subscribed for by RAFAKO S.A. in exchange for a cash contribution. On July 9th 2018, the District Court of Gliwice, 10th Commercial Division of the National Court Register, entered RAFAKO MANUFACTURING Sp. z o.o. in the National Court Register under No. 0000739782.

3. Parent's governing bodies

The governing bodies of RAFAKO S.A.:

General Meeting

Supervisory Board

Management Board

General Meeting

The Annual General Meeting of RAFAKO S.A. held on June 26th 2018:



- 1. reviewed and approved the Directors' Report on the parent's operations and the parent's financial statements for the financial year 2017,
- 2. reviewed and approved the Directors' Report on the RAFAKO Group's operations and the RAFAKO Group's consolidated financial statements for the financial year 2017,
- 3. approved the report on the activities of the parent's Supervisory Board in 2017,
- 4. granted discharge to members of the parent's Management Board in respect of their duties in 2017,
- 5. granted discharge to members of the parent's Supervisory Board in respect of their duties in 2017,
- 6. decided that the parent's entire loss for the financial year from January 1st to December 31st 2017 would be covered from the statutory reserve funds.

Supervisory Board

The Supervisory Board exercises ongoing supervision over the parent's business.

There were no changes in the composition of the parent's Supervisory Board in the six months ended June 30th 2018 and until as at the date of this report.

As at the date of this report, the composition of the Supervisory Board was as follows:

Jerzy Wiśniewski	Chairman of the Supervisory Board,
Przemysław Schmidt	Secretary of the Supervisory Board,
Krzysztof Gerula	Member of the Supervisory Board,
Dariusz Szymański	Member of the Supervisory Board,
Adam Szyszka	Member of the Supervisory Board,
Małgorzata Wiśniewska	Member of the Supervisory Board.

Management Board

The Management Board manages the parent's business and its day-to-day operations and represents the parent in dealings with third parties.

On February 20th 2018, Krzysztof Burek resigned as Vice President of the parent's Management Board, and Karol Sawicki was appointed to this position by the Company's Supervisory Board.

As at the date of this report, the composition of the RAFAKO Management Board was as follows:

Agnieszka Wasilewska-Semail	President of the Management Board,
Jarosław Dusiło	Vice President of the Management Board,
Edward Kasprzak	Vice President of the Management Board,
Tomasz Tomczak	Vice President of the Management Board,
Karol Sawicki	Vice President of the Management Board,

Economic and financial condition

1. External and internal factors relevant to the RAFAKO Group'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 market on which the Group operates;
- Financial condition and market position of the Group's customers, consortium partners, subcontractors and suppliers;
- Timeliness of payments by the employers;
- Market prices of materials used by the Group in manufacturing, market prices of services, and costs of employee benefits;



- Foreign exchange rates;
- Banks' willingness to provide financing and guarantees for contracts performed by the Company;
- Financial condition of the Group's main shareholder;
- Limited ability of the Group to obtain guarantee facilities in view of PBG's arrangement proceedings;
- Technological progress;
- Changes in tax regulations;
- Legislative changes concerning the power market;
- Approval of more restrictive BAT conclusions by the EU;

B. Internal factors:

- Execution and performance of material contracts by the Group;
- Maintaining financial liquidity of the Group;
- Achieving the expected efficiency and performance improvements thanks to the reorganisation process;
- Improvement of the Group's internal management processes, including management of long-term contracts and operating expenses (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

The RAFAKO Group has identified the following risks and threats to the Group's operations in the near future:

Risks relating to macroeconomic conditions and the sector in which the RAFAKO Group operates:

- 1. Risk factors relating to the macroeconomic situation, including the GDP growth rate, inflation, unemployment rate, salaries and wages, growth of the industrial and construction output, and capital investments;
- 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. Commodity and service price risk;
- 6. Credit risk;
- 7. Competition risk;
- 8. Risk of the EU reducing subsidies in areas of the Group's principal business activity.

Risks specific to the Group:

- 1. Risk of non-performance or improper performance of contracts;
- 2. Risk of non-payment or delayed payment of amounts due under contracts performed by the Group companies;
- 3. Risk associated with performance of high-value contracts and with the limited number of potential customers for the Group's products and services;
- 4. Risk of increase in operating expenses resulting from higher prices of supplies and services and growing employee benefits expense;



- 5. Risk of failure to correctly estimate project costs;
- 6. Risk inherent in the contract acquisition process;
- 7. Risk inherent in execution of certain projects as part of consortia;
- 8. Risk inherent in acquisition and execution of projects in cooperation with suppliers and subcontractors;
- 9. Risk of failure to obtain financial guarantees required to win and perform contracts;
- 10. Risk of failure to secure sufficient external financing on terms expected by the Group;
- 11. Risk related to full or partial repayment of arrangement receivables by PBG;
- 12. Risk of failure to maintain sufficient liquidity of the Group;
- 13. Risk of failure to implement the Group's strategy;
- 14. Reputational risk;
- 15. Technology risk arising from the implementation by the RAFAKO Group of complex, innovative technological processes and quality procedures, manufacturing of components based on challenging high-quality materials in production processes and the associated risk of liquidated damages as a result of potential technology errors;
- 16. Risk associated with potential differences in building and facility measurements between working documentation and construction plan;
- 17. Risk of poor quality or late deliveries;
- 18. Risk of claims and liquidated damages arising as a result of possible contract suspension/ termination by one of the parties;
- 19. Risk of failure or security breach relating to the Group's IT systems;
- 20. Dependence of the Group's day-to-day operations and growth on senior management staff and ability to hire and retain highly-qualified employees;
- 21. Risk of insufficient insurance cover;
- 22. Risk of consequences of accidents at work and occupational diseases;
- 23. Risk related to plant failure or to destruction or loss of the Group's assets;
- 24. Risk of claims due to infringements of exclusive rights of third parties;
- 25. Risk of attrition of RAFAKO S.A. key personnel;

Regulatory risks:

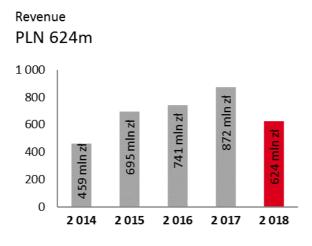
- 1. Risk of changes in regulations in the power sector;
- 2. Risk related to environmental protection;
- 3. Risk of changes in tax laws or their interpretation and changes of private letter rulings;
- 4. Risk inherent in related-party transactions.

The objectives and policies of financial risk management have not changed relative to those published in the most recent full-year financial statements.

3. Analysis of key financial and economic data

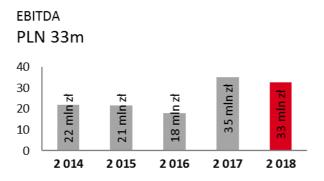


3.1. Overview of 2018 half-year results (relative to prior years' half-year results)



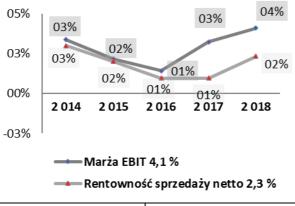
Definition: Total value of products, merchandise and materials sold, net of VAT.

Relative to the six months ended June 30th 2017: Revenue decreased by 28.4%, mainly in consequence of lesser involvement in the Jaworzno 910 MW Project.

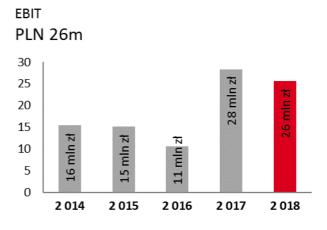


Definition: Total of profit/(loss) from continuing operations, depreciation and amortisation

Relative to the six months ended June 30th 2017: EBITDA declined from PLN 35m to PLN 33m, driven mainly by lower EBIT.

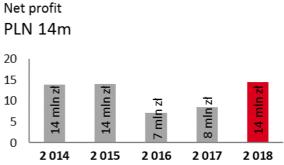


EBIT margin of 4.1%	Marża EBIT 4,1%	
Net margin of 2,3%	Rentowność sprzedaży	
	netto 2,3%	



Definition: Profit/(loss) from continuing operations

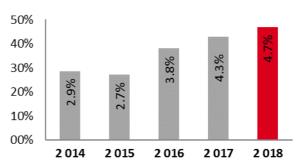
Relative to the six months ended June 30th 2017: Despite a decrease of 9.3% year on year, EBIT remained high at PLN 26m. The decline was caused by the lower revenue.



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

Relative to the six months ended June 30th 2017: The Group earned a net profit of PLN 14m, an increase of PLN 6m on the six months ended June 30th 2017.

Share of equity in financing 47.0%





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 the six months ended June 30th 2017: The EBIT margin increased by 0.9pp, and the net margin by 1.3pp.

Relative to the six months ended June 30th 2017: The share of equity in the total financing of assets increased by 4.1pp.

Definition: Equity / total assets.

3.2. Revenue: amount and structure

In the six months ended June 30th 2018, revenue from sale of products, merchandise and materials was PLN 624,131 thousand, having decreased by PLN 247,738 thousand (or 28.4%) year on year. Revenue from sale of products and services amounted to PLN 623,348 thousand, while revenue from sale of materials was PLN 783 thousand.

The revenue decrease in the six months ended June 30th 2018 was mainly attributable to lower revenue from the Jaworzno contract (construction of a 910 MW power generating unit at the Jaworzno III Power Plant). The Group's revenue recognised under the contract was PLN 329,400 thousand, down by PLN 312,287 thousand relative to the six months ended June 30th 2017. 2017 was a time of the most intense activity in this project. The year-on-year drop in sales in the six months ended June 30th 2018 was driven mainly by the considerably lower value of turbine island deliveries and lower value of construction works relating to the main buildings.

In parallel, there was further progress in the performance of major contracts secured in the six months ended December 31st 2016 (the contract for the construction of a biomass-fired co-generation unit and for the delivery and installation of an SCR system and upgrade of electrostatic precipitators).

On the domestic market, there was an increase in sales of air pollution control systems. Sales reached PLN 150,924 thousand, having grown by 49.5% relative to the six months ended June 30th 2017, when they amounted to PLN 100,954 thousand. Sales for the six months ended June 30th 2018 were generated mainly under the contracts for:

- Delivery and installation of an SCR system and upgrade of electrostatic precipitators at the Kozienice Power Plant,
- NOx reduction on the OP-650 boiler at units 1, 2 and 3 of the Ostrołęka Power Plant,
- Upgrades of electrostatic precipitators at units 1, 2, 3 of the Ostrołęka Power Plant,
- Installation of a reformer flue gas dust removal system at PKN Orlen Płock.

Sales of power generating units and power equipment on the domestic market (excluding the Jaworzno project) totalled PLN 11,512 thousand, down by 67.0% from 34,861 thousand in the six months ended June 30th 2017.

Sales of power equipment, machinery, components and associated services on the domestic market totalled PLN 2,283 thousand, having decreased by PLN 25,672 thousand (vs. PLN 27,955 thousand in the first six months of 2017).

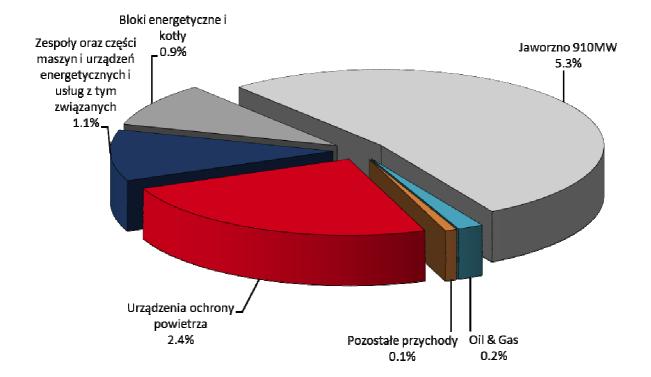
The share of export sales in total sales was 18.7%, up by 12.3 pp year on year. In the six months ended June 30th 2018, revenue from export sales totalled PLN 116,975 thousand, an increase of 108.6% from PLN 56,066 thousand in the six months ended June 30th 2017.

Revenue from sale of power equipment, machinery, components and associated services on foreign markets totalled PLN 65,694 thousand and was 27.7% higher relative to the six months ended June 30th 2017, when it came in at PLN 51,424. The sales growth results from performance of a number of contracts, with the largest contribution from a contract for assembly services in the United Kingdom (PLN 10,564 thousand in sales in the six months ended June 30th 2018) and a contract for the delivery of high-pressure parts for Valmet (PLN 9,105 thousand in sales in the six months ended June 30th 2018).

The increase in export sales involved mainly power generating units and power equipment. Sales of this product line totalled PLN 47,097 thousand, having increased by PLN 44,956 thousand year on year (from PLN 2,141 thousand in the first six months of 2017). This growth was driven mostly by the construction of a biofuel-fired CHP plant unit in Vilnius (a EUR 148m contract); sales in the six months ended June 30th 2018: PLN 45,971 thousand, in the six months ended June 30th 2017: PLN 5,213 thousand).

The Group's sales structure for the six months ended June 30th 2018 was as follows:



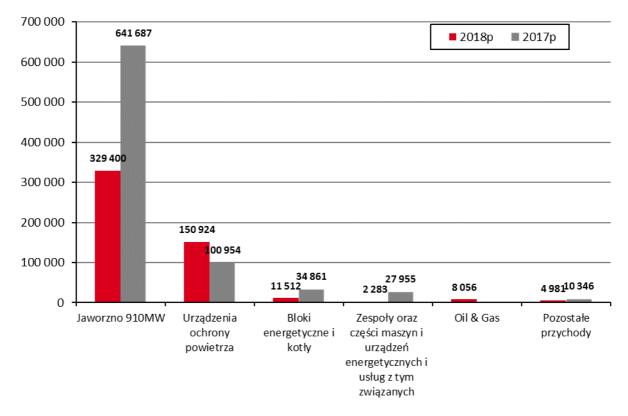


Bloki energetyczne I kotły	Power generation units and steam generators	
Zespoły oraz cześci maszyn i urządzeń energetycznych i usług z tym związanych	Subassemblies and parts of power machinery and equipment, and related services	
Urządzenie ochrony powietrza	Air pollution control systems	
Pozostałe przychody	Other revenue	



Sales by market:

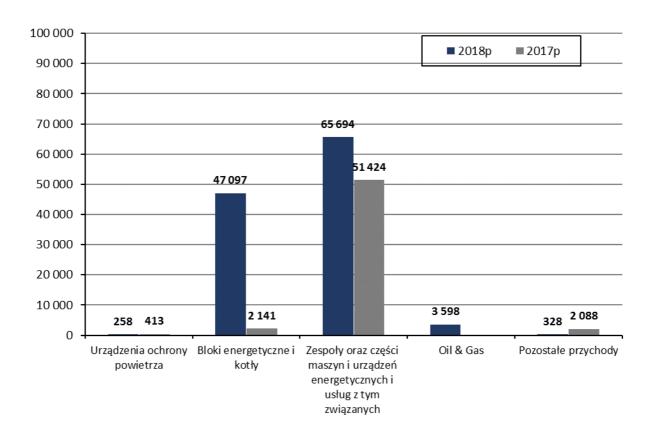
Domestic market (six months ended June 30th 2018: PLN 507,156 thousand; six months ended June 30th 2017: PLN 815,803 thousand):



Air pollution control systems	Urządzenia ochrony powietrza
Power generation units and stream generators	Bloki energetyczne i kotły
Jaworzno 910MW	Jaworzno 910 MW
Subassemblies and parts of power machinery and	Zespoły oraz części maszyn urządzeń energetycznych i
equipment, and related services	usług z tym związanych
Other revenue	Pozostałe przychody

Foreign market (six months ended June 30th 2018: PLN 116,975 thousand; six months ended June 30th 2017: PLN 56,066 thousand):



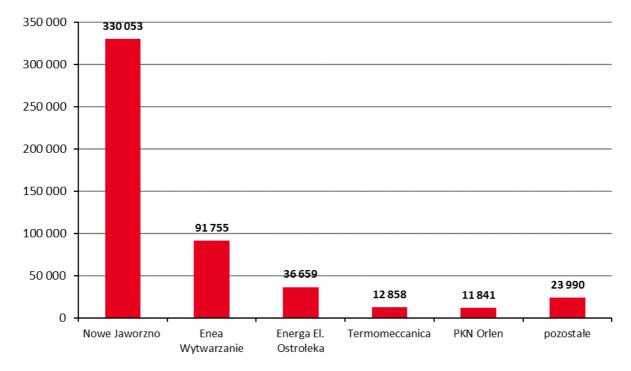


Air pollution control systems	Urządzenia ochrony powietrza
Power generation units and stream generators	Bloki energetyczne i kotły
Subassemblies and parts of power machinery and	Zespoły oraz części maszyn urządzeń energetycznych i
equipment, and related services	usług z tym związanych
Other revenue	Pozostałe przychody

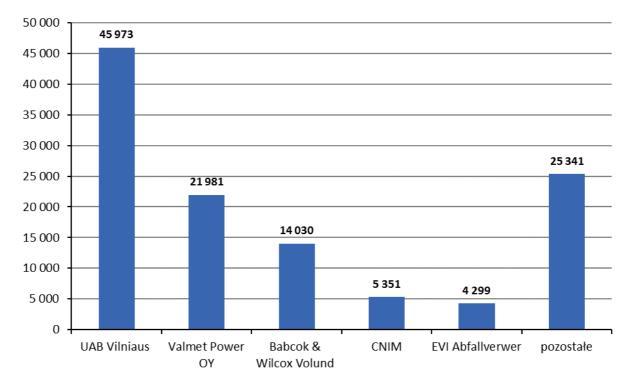
In the six months ended June 30th 2018, the RAFAKO Group's major customers included:

On the domestic market (PLN 507,156 thousand in total):





In the six months ended June 30th 2018, Nowe Jaworzno Grupa TAURON Sp. z o.o. was the Group's main customer, accounting for 52.9% of total sales (73.7% in the six months ended June 30th 2017). Revenue attributable to this customer was generated mostly in connection with the construction of a 910MW supercritical power generating unit at the Jaworzno Power Plant.



On foreign markets (PLN 116,975 thousand in total):

RAFAKO S.A.'s key export customer was UAB VILNIAUS KOGENERACINE JEGAINE based in Lithuania, with a 7.4% share in total sales. Sales to this customer involve the construction of a biofuel-fired CHP plant unit made up of fluidised-bed boilers and a biofuel transport and feeding system.



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

3.3. Deliveries, procurement and purchase of production materials

In the six months ended June 30th 2018, the value of purchases decreased by 37.1% year on year. The Group procured supplies mainly from domestic sources.

	PLN '000				
Source	H1 20	H1 2018		H1 2017	
	Value	Share in total purchases	Value S	hare in total purchases	
Domestic suppliers	429,374	88.9%	588,790	76.8%	
Foreign suppliers	53,404	11.1%	178,177	23.2%	
TOTAL	482,779	100.0%	766,967	100.0%	

In the six months ended June 30th 2018, none of the suppliers accounted for more than 10% of total purchases. The supplier structure was highly fragmented.

The Group relies on external suppliers for various services – delivery and assembly of machinery 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 on the nature and requirements of individual projects (customised production). The availability of production materials, supplies or procurement services is not a limiting factor for the Group's business. Suppliers are chosen based on their ability to provide materials and equipment that meet the relevant technical and quality standards by 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 the safety, environmental and other relevant standards.

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

3.4. Operating expenses: amount and structure; gross profit/(loss)

In the six months ended June 30th 2018, the cost of sales of products, services and materials totalled PLN 561,722 thousand which, together with PLN 624,131 thousand in revenue, translated into a gross profit of PLN 62,409 thousand. Compared with the six months ended June 30th 2017, gross profit went down by 21.5%. The change was primarily due to a decrease in the value of sales under running contracts in the six months ended June 30th 2018 relative to the six months ended June 30th 2017.

Administrative expenses totalled PLN 26,557 thousand, having decreased by PLN 3,297 thousand year on year, mainly on a decline in the cost of salaries and wages.

Distribution costs in the six months ended June 30th 2018 totalled PLN 12,851 thousand, down by PLN 3,891 thousand year on year. The main reasons behind this decline were lower costs of promotion and advertising, bid preparation and salaries and wages.

After distribution costs and administrative expenses, the Group earned a profit on sales of PLN 23,001 thousand (vs. PLN 32,912 thousand in the six months ended June 30th 2017).



3.5. Other income and expenses and net finance income/costs

3.5.1.Net other income/(expenses)

In the six months ended June 30th 2018, the Group recorded net other income of PLN 2,616 thousand (vs. PLN 4,655 thousand in net other expenses in the six months ended June 30th 2017), attributable to:

		PLN '000
1.	Reversal of the provision for restructuring costs and the voluntary redundancy programme	5,857
2.	Income from liquidated damages	483
3.	Disposal of non-financial non-current assets	286
4.	Balance of impairment losses and write-downs on assets (mostly trade receivables)	(2,820)
5.	Write-offs of statute-barred, cancelled or uncollectible receivables	(388)
6.	Donations and grants	(204)
7.	Positive net balance of other income and expenses	(598)

3.5.2.Net finance income/costs

In the six months ended June 30th 2018, the Group recorded net finance income of PLN 3,111 thousand (vs. PLN 7,130 in net finance expenses in the six months ended June 30th 2017), attributable to:

		PLN '000
1.	Net foreign exchange gain	3,009
2.	Discount of long-term settlements	1,821
3.	Interest income on financial instruments (mainly bank accounts)	753
4.	Interest expense on financial instruments (mainly loans)	(1,710)
5.	Commission fees on bank borrowings and guarantees	(679)
6.	Negative net balance of other finance income and costs	(83)

3.6. Income: amount and structure

The main source of the Group's profit before tax amounting to PLN 28,728 thousand in the six months ended June 30th 2018 (vs. PLN 21,127 thousand in the six months ended June 30th 2017) was profit on sales of PLN 23,001 thousand earned by the Group on its core operations, which was lower by PLN 9,911 relative to the six months ended June 30th 2017. A decline of PLN 7,188 thousand in administrative expenses and distribution costs relative to the six months ended June 30th 2017 had a positive effect on the profit on sales.

After accounting for net other operating income of PLN 2,616 thousand, net finance income of PLN 3,111 thousand, and income tax of (PLN 14,243 thousand), the Group generated net profit of PLN 14,485 thousand, vs. PLN 8,460 thousand in the six months ended June 30th 2017.

The Group did not publish any financial forecasts or profit guidance for the six months ended June 30th 2018.

For data on the structure and change of profit/(loss) before tax in the six months ended June 30th 2018 and the six months ended June 30th 2017, see Appendix 4.

3.7. Margins, return on equity and return on assets

In the six months ended June 30th 2018, the Group reported a year-on-year improvement in its operating profit margin. Gross profit margin expanded to 10.0% and was 1.9pp higher than in the six months ended June 30th 2017, while operating profit margin was 4.1% (compared with 3.2% in the six months ended June 30th 2017).

With a net profit of PLN 14,485 thousand, the Group's return on equity (ROE) for the six months ended June 30th 2018 was 2.5%. In the six months ended June 30th 2016, ROE was 1.9%.



The return on assets (ROA) increased by 0.4 pp year on year to 1.2% (while the balance sheet total grew by 20.5% and the net profit increased by 71.2%).

For information on the profitability ratios for the six months ended June 30th 2017 and 2018, see Appendix 1.

3.8. Financial liquidity

As at the end of June 2018, the current ratio (current assets to current liabilities) increased to 1.67 from 1.59 at the end of 2017.

Relative to 2017, the average collection period (days) for the gross amount due from customers for contract work increased by 73 days in the six months ended June 30th 2018 (to 125 days), mostly as a result of delayed issuance of invoices under the Group's largest contract.

As at the end of June 2018, the average payment period for trade payables increased by 32 days relative to 2017 and stood at 124 days. An upward trend is also seen in the average collection period for trade and other receivables, which stood at 100 days as at the end of June 2018 (vs. 98 days as at the end of 2017), as well as inventory turnover, which was 9 days as at the end of June 2018 (vs. 6 days at the end of 2017).

The Group is able to meet its obligations when due. In the six months ended June 30th 2018, liabilities to the Social Security Institution (ZUS), State Treasury and employees were settled in a timely manner, however, there were delays in payments to suppliers. The Group was able to maintain its financial liquidity chiefly due to the rigorous and consistent application of its rules of payment to subcontractors and efficient collection of receivables from customers. In 2018, the Company used bank loans and long-term financing in the form of lease contracts. In late 2017, it also generated proceeds from the issue of Series K shares.

The parent continued its multi-purpose credit facility agreement with PKO BP S.A., whereby the bank granted to the parent a multi-purpose credit facility for the financing of its day-to-day operations. In the six months ended June 30th 2018, an annex to the agreement was signed, extending the facility's availability period until June 30th 2019 and amending certain provisions of the agreement. For detailed information on the amendments, see section IV.4.d 'Other material events'.

In 2018, the Company used a bank credit facility and long-term lease contracts with interest rates based on the 1M WIBOR reference rate plus margin. However, it did not use any commercial loans. Therefore, any potential changes in interest rates on such instruments, or changes involving higher margins on credit instruments offered by banks, affected the level of the Company's finance costs, but did not pose any threat to its business in that period.

The Company does not use any financial instruments to hedge the identified risks, as it believes that the effect of such hedges on net profit (loss) and liquidity would be immaterial.

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

Access to new bank/insurance guarantees will be of paramount importance for the Group to be able to maintain liquidity. Unavailability of sufficient guarantee limits may restrict the Group's ability to win new revenue-generating contracts. In 2018, the parent secured new guarantee facilities totalling EUR 25.5m. As at the end of June 2018, the facilities amounted to EUR 20.5m.

The Group 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 currency risk management strategy adopted by the Group companies involves reducing the currency exposure to the Company's most important currency pair, that is EUR/PLN, by matching the currency structure of costs and income. The Company mainly uses natural hedging. Currency is sold or bought on an ongoing basis.

As at June 30th 2018, the Group did not have any open FX hedging transactions. Forward transactions were made to hedge the USD/PLN exchange rate risk in the six months ended December 31st 2017. In the six months ended June 30th 2018, the Company held forward contracts to hedge the sale of USD 4m, which were settled in that period. The Company does not apply hedge accounting.



The objectives and policies of financial risk management have not changed relative to those published in the most recent consolidated full-year financial statements for 2017.

3.9. Debt

In the six months ended June 30th 2018, the RAFAKO Group's liabilities towards its creditors decreased by PLN 57,811 thousand. As at June 30th 2018, total non-current and current liabilities were PLN 656,483 thousand, compared with PLN 714,294 thousand as at December 31st 2017.

In the six months ended June 30th 2018, short-term liabilities went down by PLN 48,018 thousand to PLN 574,645 thousand. This was mainly due to a decrease of PLN 27,702 thousand in trade and other payables (from PLN 415,013 thousand as at December 31st 2017), a decrease of PLN 21,021 thousand in other short-term provisions (from PLN 35,795 thousand as at December 31st 2017), and a decrease of PLN 14,578 thousand in gross amount due to customers for contract work, provisions for contract work and deferred income (from PLN 33,736 thousand as at the end of 2017), with a concurrent increase of PLN 16,524 thousand in the short-term portion of interest-bearing bank borrowings (from PLN 98,728 thousand as at the end of 2017).

Relative to December 31st 2017, non-current liabilities decreased by PLN 9,793 thousand to PLN 81,838 thousand.

As at June 30th 2018, the Group's assets not encumbered with on-balance-sheet (non-current and current) liabilities totalled PLN 580,948 thousand (vs. PLN 566,959 thousand as at December 31st 2017).

The debt (non-current and current liabilities) to assets ratio, measuring the Group's ability to pay its debts with its assets, slightly declined to 53.1% from 55.8% as at the end of 2017.

The ratio does not take into account the Group's contingent liabilities under bank and insurance guarantees (mainly performance bonds and advance payment guarantees provided on the Group's instructions; such guarantees are typically used in contracts on the market for power generation equipment), letters of credit and promissory notes issued as security.

The debt ratio (non-current and current liabilities to total equity) was 113.0% as at June 30th 2018, having decreased by 13.0% from the end of December 2017. This was due to a 2.5% growth in equity and a 8.1% drop in liabilities.

Equity financing of non-current assets changed as well, up by 12.2% to 207.3% relative to the end of December 2017.

For information on the liquidity and debt ratios in the six months ended June 30th 2018, in 2017, and in the six months ended June 30th 2017, see Appendix 1.

3.10. Off-balance-sheet items

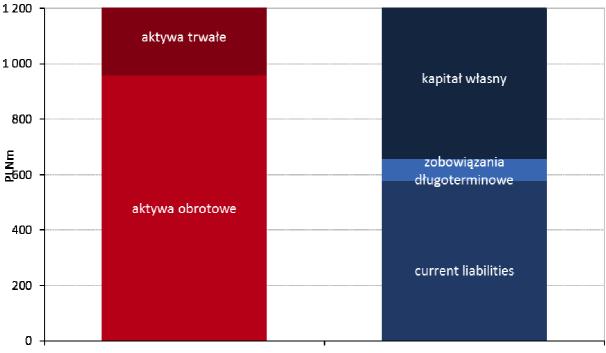
As at June 30th 2018, the Group's contingent liabilities under bank and insurance guarantees, letters of credit and promissory notes issued as security were PLN 1,643,589 thousand. The main item was a PLN 1,294,375 thousand surety issued for the benefit of financial institutions which provided performance bonds for the Jaworzno project SPV's obligations under the Jaworzno Project; the surety was used in connection with financial guarantee agreements. In the six months ended June 30th 2018, banks and insurance companies acting on the parent's instruction provided guarantees (mainly performance bonds of PLN 51,284 thousand and bid bonds of PLN 17,668 thousand) to the Group's trading partners.

In connection with its running contracts, the Group also had contingent receivables, which as at June 30th 2018 amounted to PLN 734,700 thousand (PLN 694,179 thousand as at December 31st 2017). The main item of these receivables were bank and insurance guarantees totalling PLN 696,155 thousand.

For details of changes in contingent receivables and liabilities, see Note 21 to the interim condensed consolidated financial statements for the six months ended June 30th 2018.



3.11. Assets financing structure



AKTYWA

PASYWA

ASSETS	АКТҮЖА	
EQUITY AND LIABILITIES	PASYWA	
Aktywa trwałe	Non-current assets	
Aktywa obrotowe	Current assets	
Kapitał własny	Equity	
Zobowiązania długoterminowe	Non-current liabilities	

As at June 30th 2018, total assets were PLN 1,237,431 thousand, PLN 43,822 thousand (3.4%) less than as at December 31st 2017. The share of equity in the financing of assets increased by 2.7pp relative to December 31st 2017 December 1st, to 47.0%.

Long-term capital (equity plus non-current liabilities) covered the full amount of non-current assets and 40.0% of current assets.

As at June 30th 2018, the structure of assets financing was as follows:

- 1. Non-current assets of PLN 280,245 thousand were fully financed with long-term capital,
- 2. Current assets and non-current assets held for sale of PLN 957,186 thousand were financed with:

long-term capital	40.0%,
trade and other payables	40.5%
short-term borrowings	12.0%
employee benefit obligations and provisions	
gross amount due to customers, provision for contract work and deferred income	2.0%
other current liabilities	2.0%.



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 June 30th 2018 and December 31st 2017, it was as follows:

	Jun 30 2018		Dec 31 2017	
	Amount	Percentage	Amount	Percentage
1. Property, plant and equipment, including:	166,892	59.6%	170,934	58.8%
- land	23,705	8.5%	23,759	8.2%
- buildings	86,212	30.8%	87,748	30.2%
- plant and equipment	47,106	16.8%	50,059	17.2%
- vehicles	8,642	3.1%	8,152	2.8%
 property, plant and equipment under construction 	329	0.1%	258	0.1%
- other	899	0.3%	957	0.3%
2. Intangible assets	17,595	6.3%	18,071	6.2%
 Long-term trade receivables, other receivables and prepayments 	45,157	16.1%	41,074	14.1%
4. Non-current financial assets	16,772	6.0%	17,700	6.1%
5. Deferred tax assets	32,434	11.6%	42,542	14.6%
6. Shares in other entities	1,395	0.5%	242	0.1%

The largest item of non-current assets was land and buildings, which accounted for 39.2% of non-current assets. Other significant items included plant and equipment, trade and other receivables and long-term prepayments. As at the end of June 2018, these accounted for 16.8% and 16.1% of total assets, respectively. Plant and equipment include mostly machinery, equipment and apparatuses used in manufacturing processes, as well as computer hardware. Deferred tax assets accounted for 11.6% of non-current assets.

In the six months ended June 30th 2018, non-current assets decreased by PLN 10,318 thousand (or 3.6%) compared with the end of 2017. The strongest decline, of PLN 10,108 thousand or 23.8% relative to the end of December 2017, was recorded in deferred tax assets. This was accompanied by a decrease in of PLN 4,042 thousand property, plant and equipment and an increase of PLN 4,083 thousand in trade and other receivables compared with the end of 2017.

3.12.2. Key investments in property, plant and equipment

In the six months ended June 30th 2018, the Group incurred capital expenditure on non-financial non-current assets of PLN 3,081 thousand, including:

- PLN 2,775 thousand on property, plant and equipment,
- PLN 306 thousand on intangible assets.

Capital expenditure on property, plant and equipment involved mainly purchases of vehicles, plant and equipment, and IT hardware, and upgrades to buildings and structures.

The expenditure was financed with internally generated funds and finance leases.



3.13. Current assets

In the six months ended June 30th 2018, current assets decreased by PLN 33,494 thousand, to PLN 957,071 thousand. The change resulted from a PLN 139,586 thousand reduction in trade receivables (to PLN 346,330 thousand as at the end of June 2018), a PLN 73,743 thousand drop in cash and cash equivalents (to PLN 106,548 thousand at the end of June 2018), with the concurrent increase in gross amount due from customers for contract work and related accruals and deferrals, which grew by PLN 173,660 thousand in the six months ended June 30th 2018, to PLN 432,779 thousand.

Material receivables included deposits provided to the Group as security for contract guarantees. As at the end of June 2018, deposits provided as security for guarantees totalled PLN 66m (vs. PLN 62m at the end of December 2017).

3.14. Equity amount and structure

As at June 30th 2018, RAFAKO S.A.'s equity stood at PLN 572,465 thousand and included:

- 1. Share capital of PLN 254,864 thousand, comprising 127,431,998 Series A, B, C, D, E, F, G, H, I, J and K ordinary shares. In the six months ended June 30th 2018, there were no changes in the amount of the share capital;
- 2. Parent's share premium of PLN 165,119 thousand;
- 3. Reserve funds of PLN 191,580 thousand;
- 4. Retained earnings / accumulated losses of PLN -38,538 thousand;
- 5. Translation reserve, negative at PLN -560 thousand;
- 6. Equity attributable to non-controlling interests of PLN 8,483 thousand.

In the six months ended June 30th 2018, the Group companies did not acquire their own shares.

3.15. Use of proceeds from the issue of Series K shares

In 2017, based on a resolution passed by the Extraordinary General Meeting of RAFAKO S.A. of September 12th 2017, the parent carried out a new share issue. Following the issue of 42,500,000 Series K ordinary bearer shares with a par value of PLN 2 per share, the parent's share capital increased by PLN 85,000 thousand.

Proceeds from the issue of Series K shares, totalling PLN 163,368 thousand, were used as follows in 2017:

- PLN 121,980 thousand to finance contracts,
- PLN 1,604 thousand to finance projects related to putting new products, including polygeneration islands, into production, and to finance projects related to gasification of waste and biomass,
- PLN 3,336 thousand to finance R&D projects.

A total of PLN 126,920 thousand was used from the issue proceeds. The remaining balance is PLN 36,448 thousand.



4. Workforce at the RAFAKO Group

In the six months ended June 30th 2018, the average headcount at the Group was 2,028 employees, 123 fewer than in 2017, mainly due to reorganisation and the resulting collective redundancies.

Jun 30 2018

Employment structure at end of period	2,029
production	862
engineering design offices	363
technology offices	58
quality control	98
maintenance	65
other (financial and accounting, sales, procurement, IT etc.)	583

The parent's Management Board attaches great importance to effective management of the staff competences and experience across the Group and to the implementation of its HR strategy. 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 June 30th 2018, the Group's employees with university degree or secondary school diplomas accounted for 73.1% of the personnel (as at December 31st 2017: 72.2%. As at June 30th 2018, university graduates accounted for 49.7% of the personnel (up by 2.2% on December 31st 2017). The Vocational Training Centre at RAFAKO S.A. guarantees a constant inflow of blue-collar workers, educating future locksmiths and welders in cooperation with the Vocational Technical High School for Mechanical Studies of Racibórz.

Employment structure at the Group at end of period	2,029
RAFAKO S.A.	1,601
ENERGOTECHNIKA ENGINEERING Sp. z o.o.	105
E003B7 Sp. z o.o.	130
Przedsiębiorstwo Gospodarki Lokalami PGL-DOM Sp. z o.o.	25
RAFAKO ENGINEERING SOLUTION doo.	11
RAFAKO ENGINEERING Sp. z o.o.	145
RAFAKO Hungary Kft.	7
E001RK Sp. z o.o.	2
RENG – NANO Sp. z o.o.	3

Over the last 6 months, the workforce structure has slightly changed in terms of employee age and length of service.

Age distribution in the workforce: the share of employees aged 30 or below declined from 13.9% as at December 31st 2017 to 11.8%. The share of employees aged between 31 and 40 also declined, from 25.8% as at December 31st 2017 to 24.2%. The share of employees aged between 41 and 50, who accounted for 26.8% of the total workforce (vs. 26.4% as at December 31st 2017), slightly increased. The share of employees above 50 years of age grew by 3.3% to 37.2% as at the end of June 2018.



Length of service: a decline has been observed in the number of employees with up to 10 years of service, who represented 23.2% of the Group's total workforce as at June 30th 2018 (vs. 27.1% as at December 31st 2017). The share of employees with 11 to 20 years of service grew by 1.9%, to 22.1%. The share of employees with over 20 years of service increased by 2.0%, to 54.7% as at June 30th 2018. The Group's staff has a long-standing and unique professional experience.

5. Number of RAFAKO shares or rights to RAFAKO shares held by the management and supervisory staff as at the date of issue of the half-year report

According to the information available to the Company, as at the date of this report, the holdings of RAFAKO shares by the management and supervisory staff of the consolidated Group companies did not change in the period from the issue of the previous consolidated quarterly report and were as follows:

	As at May 25 2018	Increase	Decrease	As at Sep 6 2018
Supervisory personnel of RAFAKO S.A.	_	-	-	-
Management personnel of RAFAKO S.A.	64,695	-	-	64,695
- Agnieszka Wasilewska-Semail, President of the Management Board	20,245	_	-	20,245
 Edward Kasprzak, Vice President of the Management Board 	24,450	_	-	24,450
- Jarosław Dusiło, Vice President of the Management Board	20,000	_	_	20,000



6. Shareholders holding 5% or more of total voting rights at the parent as at the date of issue of the half-year report

Shareholder	Number of shares	Number of voting rights	Ownership interest	% of total voting rights at GM
PBG S.A., Multaros Trading Company Ltd. and Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych, in accordance with the agreement of October 24th 2017 referred to in Art. 87.1.6) of the Public Offering Act (*), of which:	55,081,769	55,081,769	43.22%	43.22%
PBG S.A. ¹	42,466,000	42,466,000	33.32%	33.32%
including:				
held directly:	7,665,999	7,665,999	6.02%	6.02%
held indirectly through Multaros Trading Company Limited1 (a subsidiary of PBG S.A.)	34,800,001	34,800,001	27.31%	27.31%
Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych 2	12,615,769	12,615,769	9.90%	9.90%
Nationale-Nederlanden Otwarty Fundusz Emerytalny managed by Powszechne Towarzystwo Emerytalne S.A. 3	12,582,710	12,582,710	9.87%	9.87%

¹ Number of shares based on PBG's and Multaros's notifications of December 28th 2017.

² Number of shares based on a notification of January 3rd 2018 received from Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych.

³ Number of shares estimated based on the annual asset structure published by Nationale-Nederlanden Otwarty Fundusz Emerytalny (as at December 29th 2017).

In the six months ended June 30th 2018 and as at the date of this report, there were no changes in major holdings of shares after the issue of the previous quarterly report.

In 2011, RAFAKO S.A. joined the PBG Group, whose parent is PBG S.A.

The PBG Group operates on the market for specialist construction services. The key segments of its business currently include the construction of facilities and structures for the power, natural gas, crude oil and fuel sectors.

From June 2012, PBG was in company voluntary arrangement. 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. The arrangement became final on June 13th 2016.



Key events and developments in the six months ended June 30th 2018 and after the reporting date

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 generating unit at the Jaworzno III Power Plant - Power Plant II. The value of the contract is PLN 4.5bn. The contract provides for the design and delivery, on a turn-key basis, of a supercritical 910 MW power generating unit consisting of a steam generator, turbine generator set, main building, and electrical and I&C systems.

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

Key parameters	
Supercritical pulverised-fuel, tower-type, once- through steam generator, Unit's nominal output (gross) – 910 MW, Generator's rated thermal input – 1,832 MWt,	Unit's components
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 %.	Superheated steam generator, Steam turbine powering the electricity generator, Feed water pump system, Systems designed to meet the sulfur dioxide, nitric oxide and dust emission standards specified in the Industrial Emissions Directive (IED), Systems 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. Carbon dioxide emissions will be cut by nearly two million tonnes a year.



Key developments in 2018

2018	
Mariah	Completion of installation of the membrane walls of the steam generator (to the extent
March	necessary for hydraulic test of the generator).
April	Hydraulic testing of boiler and pipelines
June	Completion of the assembly of steam system and feedwater piping

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 on the Jaworzno 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. By June 30th 2017, 71.8% of the contract's total value had been invoiced.

For rules of accounting for the contract, see Note 10.1.1 to the interim condensed consolidated financial statements for the six months ended June 30th 2018.

2. Contract with PGE Elektrownia Opole

In February 2012, the parent, 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 Elektrownia Opole, 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. SPV-RAFAKO's consideration for the performance of the work 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 the parent's scope of work under the Opole Project.

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

For rules of accounting for the contract, see Note 10.1.2 to the interim condensed consolidated financial statements for the six months ended June 30th 2018.

On January 31st 2014, the consortium received from the employer a notice to proceed with the project execution.

On September 26th 2017, RAFAKO S.A., Polimex-Mostostal S.A., Mostostal Warszawa S.A. and GE Power proposed to the employer that the Opole Project schedule be updated in order to move the commissioning dates for Unit 5 and Unit 6 from July 31st 2018 to December 20th 2018 and from March 31st 2019 to July 31st 2019, respectively. The proposed changes in the project schedule follow from technical and organisational issues.

On February 22nd 2018, the Management Board of PGE Polska Grupa Energetyczna S.A. ("PGE") announced that following talks with the consortium and GE Power, new commissioning dates for Unit 5 and Unit 6 of the Opole Power Plant were estimated. The new commissioning dates announced by the consortium were May 31st 2019



for Unit 5 and September 30th 2019 for Unit 6. Due to the complexity of the project and the nature of the delays, the negotiations between PGE, the consortium and GE Power are still in progress.

As part of subcontracting E001RK Sp. z o.o.'s scope of work, all legal consequences of the contract between RAFAKO S.A. and the employer, in particular those relating to performance bonds and, consequently, any potential contractual penalties resulting from, inter alia, failure to comply with the project schedule, passed to GE Power.

By June 30th 2018, PLN 2,751,299 thousand (85.3% of the total value of the contract) was invoiced in relation to the Opole Project.

3. Other significant contracts

a. On April 11th 2018, a consortium of RAFAKO S.A. and PT. Rekayasa Industri (consortium leader) received a notice to proceed (NTP) from its Indonesian customer PLN PERSERO under a contract for the construction of two 50 MW coal-fired steam units on Lombok Island, Indonesia. RAFAKO S.A.'s contract is valued at EUR 70.28m. Commissioning is scheduled for April 2021.

b. On May 29th 2018, the parent signed a contract with Wartsila Finland Oy for the construction of a $30,000 \text{ m}^3$ LNG storage tank in Hamina. The contract is valued at EUR 13.4m. The project completion deadline is 23 months from the contract date.

c. On May 30th 2018, RAFAKO S.A. signed a contract with Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A. for construction work under the project to construct the Goleniów-Płoty section of the DN 700 Szczecin-Gdańsk pipeline with auxiliary facilities and the necessary infrastructure for its operation. The net value of the contract is PLN 124.9m. The project completion deadline is 24 months from the contract date.

d. In June 2018, the parent's Management Board was notified that GAZ Operator Gazociągów Przesyłowych GAZ- SYSTEM S.A. of Warsaw had selected the Company's bid, submitted in a consortium with Przedsiębiorstwo Budowy Kopalń PeBeKa S.A. (the consortium leader), as the winning bid in the contract award procedure for construction work under the project to construct the DN 1000 MOP 8.4 MPa Pogórska Wola-Tworzeń gas pipeline. The value of the consortium's bid is PLN 687m net of VAT, with RAFAKO S.A. accounting for 50% of this amount. The project completion deadline is 24 months from the contract date.

e. On July 24th 2018, a contract was signed for the construction of flue gas desulfurisation unit II at Ostrołęka Power Plant B by a consortium of: RAFAKO S.A. (consortium leader) and ENERGA Serwis Sp. z o.o. (consortium member). The consortium contract is worth PLN 199.25m, with a PLN 126.25m share of RAFAKO S.A. The project completion deadline is set at the earlier of 24 months from the contract date and June 30th 2020.

f. On July 31st 2018, RAFAKO S.A. and PGE GIEK S.A. signed a contract for comprehensive upgrade of the flue gas desulphurisation systems at units No. 3, 4, 5 and 6 at the Bełchatów Power Plant of PGE GIEK S.A. The contract is valued at PLN 181.6m. The project completion deadline is scheduled for May 31st 2021.

4. Other material events

- a. On January 18th 2018, shares issued in November 2017 were registered by the Central Securities Depository of Poland (Krajowy Depozyt Papierów Wartościowych S.A.) and floated on the WSE main market (the issue involved 42,500,000 Series K shares worth PLN 170,000,000 (at PLN 4.00 per share)).
- b. On April 27th 2018, the parent and HSBC Bank Polska S.A. of Warsaw (the Bank) executed a bank guarantee facility agreement. As of the date of the agreement, the Bank provided RAFAKO with a bank guarantee facility, under which RAFAKO may instruct the Bank to issue guarantees up to the facility limit of EUR 20,475,000. The facility may only be used to finance RAFAKO's day-to-day operations related to the performance of contracts by the Company, in the form of guarantees issued upon RAFAKO's instructions. The following types of guarantees may be issued under the facility:



- (a) Bid bonds,
- (b) Advance payment guarantees,
- (c) Performance and warranty bonds.

RAFAKO may use the facility only after it has meet all contractual requirements, including the requirement to create security interests that are customary for agreements of such type. The facility is a revolving facility, which means that whenever a guarantee issued by the Bank expires, the available facility amount is increased by the amount of the expired guarantee. The expiry date of a guarantee issued by the Bank must be a date falling on or before April 24th 2024.

c. On June 29th 2018, the parent signed an annex to the credit facility agreement with Powszechna Kasa Oszczędności Bank Polski S.A. of Warsaw. The annex provides for the multi-purpose credit facility amount of up to PLN 200m, including an overdraft facility of up to PLN 70m, a working capital facility of up to PLN 80m, bank guarantees available on the terms laid down in the agreement, and a revolving working capital facility up to PLN 150m to finance payments (if any) under exercised bank guarantees issued by PKO BP.

The annex extended the facility's term and maturity date until June 30th 2019.

The annex includes a condition that if in 2018 RAFAKO S.A. does not add PLN 900m net of VAT in new contracts to its order book, to be reviewed as at January 31st 2019, PKO BP will be entitled to reduce the amount of the overdraft facility by the percentage by which the new order book falls short of the assumed value, rounded to the nearest million.

The other terms and conditions of the credit facility agreement were not materially amended under the annex.

For more details on the credit facility agreement, see Note 15 to the interim condensed consolidated financial statements for the six months ended June 30th 2018.

d. July 31st 2018 saw the completion of another stage of the Company's reorganisation aimed at building a flexible and more cost-effective organisation, adapted to current market conditions. As part of the reorganisation process, employment was reduced and optimisation measures were taken across the organisation.

As a result of the reorganisation, the number of reduced FTEs did not exceed 276, as agreed with the trade unions, and the total value of savings resulting from the reduction of employment from the beginning of the restructuring process to the end of this year should reach PLN 15m, including PLN 12m in 2018 alone. This amount does not include savings resulting from additional optimisation measures undertaken as part of the reorganisation process.

The costs related to the execution of this stage of the Company's reorganisation will not exceed the additional provision created for this purpose.

5. Pending litigation, arbitration or administrative proceedings

For information on material disputes and litigation, see Note 22 to the interim condensed consolidated financial statements of the Group.

6. Related-party transactions concluded by the issuer or any of its subsidiaries

In the six months ended June 30th 2018 and 2017, the parent and its subsidiaries did not enter into any material related-party transactions on non-arm's length terms.

For a detailed list of related-party transactions executed in the six months ended June 30th 2018, see Note 25 to the interim condensed consolidated financial statements of the Group for the six months ended June 30th 2018.



7. Loan sureties or guarantees provided by the parent or its subsidiaries

In the first half of 2018, neither the parent nor its subsidiaries granted or provided any loan sureties or guarantees to a single entity or its subsidiaries where the aggregate amount of such sureties or guarantees would represent 10% or more of the parent's or its subsidiaries' equity.

For a description of changes in contingent assets and liabilities, see Note 21 to the interim condensed consolidated financial statements of the Group for the six months ended June 30th 2018.

Growth prospects for 2018

1. Energy policy

The energy market

The Group's core market is the domestic and international energy market.

This market, and its commercial segment in particular, are heavily regulated in terms of their current organisation, future development and structure in the context of the increasingly stringent environmental protection standards. The regulated nature of the industry follows from the power market's strategic importance to the energy security of every country, with environmental protection and reduced CO_2 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 in terms of 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. As a result, the number of new projects in the power segment is growing, including construction of low-emission, high-efficiency power plants and upgrades to the existing energy sources to ensure their compliance with the strict environmental requirements imposed under EU laws, which stimulates demand for the products and services offered by the Group.

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 to:

- a. Ensure the functioning of the energy market;
- b. Ensure security of energy supply in the Union;
- c. Promote energy efficiency and energy saving and the development of new and renewable forms of energy;
- d. 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 emissions 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.

On July 31st 2017, the European Commission issued a communication on Best Available Techniques for large combustion plants (BAT LCP), i.e. those whose capacity is above or equal to 50 MW. BAT conclusions will be binding for a number of power plants and CHP plants in Europe, and thus in Poland. BAT conclusions provide a reference for setting emission and monitoring standards in integrated permits under which combustion plants operate. The deadline for ensuring compliance with the BAT conclusions is four years from the date of their publication in the Official Journal of the European Union, i.e. mid-2021.



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 CO2, SO2 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 Poland's economy;
- To reduce the environmental impact of the heat and power sector.

Poland's draft Energy Policy until 2050 envisages three scenarios for the development of the Polish energy mix. The first 'sustainable' scenario assumes an equal share of 15% to 20% of gas, nuclear power and RES in the energy mix, while maintaining the dominant position of fossil fuels. The 'nuclear' scenario assumes a 45% to 60% share of nuclear power, a 10% to 15% share of coal and lignite, a 10% to 15% share of crude oil, a 10 to 15% share of natural gas, and an approx. 15% share of renewable energy sources. The third 'gas and RES' scenario envisages that natural gas and renewable energy sources would have a 50% to 55% share in the energy mix. The share of coal and lignite would be around 30%, and of crude oil – 15% to 20%. The 'gas' scenario assumes minimum shares of renewable energy sources at 20% and of nuclear sources at approx. 12%.

At the beginning of January 2016, a Transitional National Plan (TNP) was introduced in Poland under a regulation of the Minister of Environment of July 2015. The Plan is designed to implement the provisions of the Industrial Emissions Directive of the European Parliament and of the Council of November 2010 (IED) into the Polish legal system. 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 by the IED is the Transitional National Plan, 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 President of Poland signed the Energy Efficiency Act, which implements EU regulations into Polish law to further improve the energy efficiency of the Polish economy. The Act came into force on October 1st 2016. Under the Act, certain entities are required to conduct an energy efficiency audit every four years. The energy efficiency audit is a procedure whose purpose is to carry out detailed and validated calculations with regard to proposed implementation of projects contributing to an improvement in energy efficiency and to provide information on potential energy savings.

On December 6th 2017, the Sejm (lower house of the Polish Parliament) enacted the Capacity Market Act. The capacity market is expected to guarantee the availability of sufficient demand-driven capacities of electricity-generating sources. The purpose of the new legislation is to address the generation capacity shortages resulting from an expected increase in peak demand for capacity and electricity on the one hand, and from considerable



number of generating units scheduled for decommissioning on the other hand. The Act introduces a new model for a centralised capacity market. In this model, a central buyer (the transmission system operator) acquires an obligation from capacity providers to provide, and keep ready to provide the system with sufficient capacity in certain situations. This capacity obligation is offered by capacity providers: generators, energy storage facilities and some electricity consumers, as well as entities representing groups of generators or consumers (so-called aggregators), in auctions.

On June 29th 2018, the President of Poland signed a government bill to amend the Renewable Energy Sources Act. The new provisions regulations are expected to enable a more effective utilisation of renewable energy sources and meeting of international obligations. The main objective of the amendment is to ensure full compatibility between the provisions of the Renewable Energy Sources Act of February 20th 2015 and state aid legislation, to which Poland has committed itself to the European Commission in the notification procedure, and to bring the regulations in line with EU requirements.

Market in natural gas, oil and fuel

In line with its strategy adopted in early 2018, the Group also intends to focus on the natural gas, oil and fuel sector, both in Poland and on an international scale. This is seen as a promising market in view of the expected multi-billion investments in this sector, mainly relating to the objectives of Poland's energy policy and the necessity to adapt to the requirements of Poland's EU membership. The projects include but are not limited to the construction of gas stations, transmission pipelines, underground gas storage facilities, and gas compressor stations for the construction of natural gas and oil production facilities.

The gas market in Poland is regulated by the Energy Regulatory Office. In line with its decision, Gaz-System S.A. has been and will be the Transmission System Operator in Poland from October 2010 until the end of 2030. Its main task is to develop the existing transmission system to ensure the long-term ability of the gas system to meet the legitimate needs for transmission of gas fuels in domestic and cross-border trade by expanding the system and, where applicable, by expanding interconnections with other gas systems.

Gaz-System S.A. has developed a strategy for the National Development Plan for 2016 to 2025, covering the whole industrial infrastructure located in Poland.

Currently, seven underground gas storage facilities cooperating with the existing transmission system are used in Poland, including PMG Wierzchowice, PMG Husów, PMG Strachocina, PMG Swarzów, PMG Brzeźnica, KPMG Mogilno, and KPMG Kosakowo, of which the first five are in natural gas deposits and the latter two are in salt deposits. Gas Storage Poland Sp. z o.o., wholly-owned by PGNiG S.A., acts as the storage system operator for all storage facilities.

Additionally, Gaz-System S.A. owns 15 gas compressor stations, which are linked to the transmission network and located all over Poland. Five more compressor stations are located on the Polish section of the Yamal pipeline and operated by EuRoPol GAZ S.A.

Gas compressor stations are essential for the efficient operation of the gas system. In the coming years, the infrastructure in this area is going to be expanded both in Poland and in Europe.

Projects involving LNG regasification plants are also in the pipeline, which is related to the plans for connecting new areas of Poland to the gas network. New areas are to be connected to the gas network on an island distribution basis, which means that LNG regasification stations will be built and connected to distribution networks. Main gas market players include Polskie LNG S.A., Polska Spółka Gazownictwa Sp. z o.o. (a subsidiary of PGNIG S.A.), and Unimont S.A. (through its subsidiaries).

The oil market involves mostly crude oil transmission, storage, distribution and trading. Most fuel pipelines in Poland are owned by PERN S.A., a state-owned joint-stock company. In the near future, further development of the pipeline network and expansion of crude oil storage capacities are to be expected.

2. Investment plans

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. The rising demand for electricity will translate into more investment projects in new generating capacities and upgrade of existing power generating units. It is estimated that energy demand will reach 194.6 TWh in 2020 and 217.4 TWh in 2030.



Investments are additionally driven by the wear of electricity-generating units and tightening of EU environmental standards.

Factoring in the phase-out of existing capacities in the Polish power system, the maximum net capacity of the country's generating units is expected to increase to 46.4 GW or so in 2030. A capacity decline is expected for coal-fired power plants, while the capacities of renewable energy power plants (mainly wind, biogas and biomass-fired power plants) and nuclear power plants are expected to increase.

The PGE Group is implementing two major investment projects: construction of new units at the Opole Power Plant (2x900MW), and construction of a 450 MW lignite-fired unit at the Turów Power Plant. In the longer term, the company is contemplating the construction of new capacities based on gas fuel at the Dolna Odra Power Plant (two gas-fired units, 500 MW each).

The Tauron Group has been building a 910MW unit at the Jaworzno Power Plant and a 450MW combined-cycle unit at the Stalowa Wola CHP Plant. In addition, the company invests in distribution activities, connecting new customers and generating facilities to the network, and plans to implement projects involving improvements in safety and quality of electricity supply to customers.

In December 2017, the Enea Group completed the construction of a 1,075 MW unit in Kozienice. In addition, Enea plans to engage in the construction of new sources or acquisition of existing ones to expand its capacity by 1,500 to 2,000 MW by 2025. Some of these activities will be carried out in partnerships with other main power market players. At the same time, the company is going to upgrade its existing 200 MW and 500 MW units at the Kozienice Power Plant to the extent necessary to ensure that they operate efficiently and meet the required environmental standards, and consequently to ensure the market viability of its assets in the perspective until 2030. The total installed capacity of conventional generation sources is expected to increase to 5.8–6.3 GW in 2025.

In the six months ended December 31st 2018, the ENERGA Group will commence the construction of the 1,000 MWe Ostrołęka C Power Plant. In parallel, the company invests in the development of power grids in view of connecting new users, and in distribution network upgrades in order to improve the reliability of energy supply.

The programme for construction of municipal waste incineration plants, launched in 2007 and included on the Indicative List of the Ministry of Regional Development under the Operational Programme Infrastructure and Environment, envisaged the construction of 12 municipal waste incineration plants: in Szczecin, Koszalin, Poznań, Gdańsk, Olsztyn, Białystok, Bydgoszcz, Łódź, Warsaw, Kraków and two facilities in Silesia. Currently, there are already 7 waste incineration plants in operation in Poland (in Warsaw, Białystok, Bydgoszcz, Konin, Kraków, Poznań, Szczecin). Further local governments (including but not limited to those in Gdańsk, Olsztyn, and Wrocław) are contemplating the construction of such facilities.

The PGNiG Group additionally plans to invest approximately PLN 3bn in 2018 and 2019 through Polska Spółka Gazownictwa. Some of the funds will be allocated for the connection of new users, construction of new and upgrades of existing gas distribution networks, connection of new areas to the gas network, investments in infrastructure accompanying the development of gas distribution networks, such as communication, metering, ICT. The projects will include the construction of LNG regasification stations in the Grajewo, Mońki, Augustów, Czyżew and Hajnówka municipalities. Further, the Białystok gas pipeline will be redeveloped and a gas distribution network will be built in Bielsko Podlaskie.

Moreover, Gaz-System plans to further expand the domestic transmission network, including the construction of new pipelines in the North-South gas corridor and adding new interconnections with Lithuania, Slovakia and the Czech Republic. The company's plans include building gas storage facilities at the Lubień Kujawski mine and Damasławek salt dome, building a gas compressor station in Strachocina, and development of gas compressor stations in Goleniów, Odolanów and Gustorzyno.

PERN S.A. intends to invest around PLN 4bn over the next four years. The company plans to build two new 100,000 cubic metre crude oil storage tanks at its terminal in Gdańsk, and to add 360,000 cubic metres to the Gdańsk Oil Terminal, which will double its capacity. The company additionally plans to build new fuel tanks at its terminals in Nowa Wieś Wielka, Koluszki and Dębogórze, and thereafter at other trading terminals, such as Emilianów or Boronów. Moreover, a second oil pipeline connecting Płock with Gdańsk may potentially be built.

Major investment projects have been announced by PKN Orlen as well. The company plans to expand its plants in Płock and Włocławek.



3. 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 and international markets. Given the limited number of projects and customers on each market, as well as specific contract requirements, contractors competing with the Group 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 Group 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 Power Systems, Amec Foster Wheeler, CNIM, all of which have proprietary energy generation technologies, as well as organisational capacities necessary to carry out EPC projects. These companies, like the RAFAKO Group, offer the products required to build 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. They compete against the RAFAKO Group relying solely on technologies and products supplied by the Group's aforementioned direct competitors, including GE Power, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, Bilfinger Berger Power Systems, CNIM, and many more.

With respect to specific products, such as steam generators, desulfurisation units, NOx reduction units and waste incineration facilities, main competitors of the RAFAKO Group are again GE Power, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, Bilfinger Power Systems, Amec Foster Wheeler, SES TImace, 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 Group'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.

4. The RAFAKO Group's strategy

Considering the shifts and trends prevailing in the parent's core market, including declining investment in conventional energy projects (chiefly in new large generating units in Poland), at the start of 2018 RAFAKO decided to update its strategy and expand its operations to include EPC and general contracting services for the oil and gas upstream and downstream sectors. This growth direction is expected to diversify revenue sources and ensure further development of the Group's business. Following this decision, the



RAFAKO Group's core and strategic business segments comprise the power construction segment and the natural gas, crude oil and fuels segment.

RAFAKO's strategy is to deliver long-term value growth by building the largest Polish engineering and construction group and an important international player, offering specialist construction services for the heat and power sector and for the oil and gas upstream and downstream sectors.

The Group conducts its business taking into account corporate social responsibility standards, with respect for the natural environment, in compliance with ethical principles, and with care for the employees' and customers' satisfaction.

The Group's strategic objectives are to:

- a) Strengthen its position in the domestic power construction market by delivering and participating in the largest capital investment projects in Poland, capturing a market share in the market for services related to the modernisation of heat and power infrastructure, and ensuring compliance with BAT regulations;
- b) Complete the Group's first contracts in the natural gas, oil and fuel sector by leveraging the capabilities, experience and credentials of the PBG Group;
- c) Expand operations in foreign markets in both of the Group's core segments;
- d) Develop the Group's solutions, especially its proprietary technologies;
- e) Capture a market share in industrial construction;
- f) Optimise contract financing and contract performance security;
- g) Improve profitability through control and mitigation of project risks;
- h) Achieve dividend distribution capacity in 2020.

These objectives are feasible provided the Group is properly organised and focused on the provision of EPC project management and general contracting services in both strategic business segments. Internal reorganisation of the Group will, on the one hand, involve acquisition of EPC capabilities in the natural gas, crude oil and fuels sector, and on the other – separation of services from the manufacturing operations through a planned spin-off of an organised part of the RAFAKO Group's business, namely the Steam Generator Plant, and its subsequent contribution by RAFAKO to a subsidiary. To this end, RAFAKO MANUFACTURING Sp. z o.o. was established on July 4th 2018, a company wholly-owned by RAFAKO S.A. The transfer of the oil and gas segment capabilities will take place through a merger of RAFAKO Engineering with PBG Oil and Gas. Additionally, PGL Dom Sp. z o.o. will be included in the transaction, with a view to strengthening the balance sheet and thus the borrowing capacity of the combined entity, in which RAFAKO will acquire a majority interest. This will increase the RAFAKO Group's capacity to bid for and deliver projects within the areas of its expanded capabilities and will naturally facilitate its business growth by leveraging synergies between the merged companies. The spin-off of the Steam Generator Plant within the RAFAKO Group is designed to better orient this business towards the market, enhance competitiveness through rightsizing, and streamline the organisational structure.

Power construction segment

RAFAKO has been operating in the power sector since 1949, designing, manufacturing and supplying steam generators and environmental protection facilities, including under EPC contracts, for this sector. RAFAKO owns end-to-end technology for the construction of traditional generating units and is among Europe's largest manufacturers of steam generators and environmental protection facilities for the power sector. RAFAKO is the undisputed leader of the Polish market for power generation equipment. In line with the adopted strategy, the operations of the RAFAKO Group in the power sector are expected to significantly boost the Group's revenue. In the near future, the Group intends to focus on further developing and improving its capabilities relevant to EPC and general contracting services in the power sector through the participation in and execution of the largest projects in Poland, as well as participation in projects executed on foreign markets. Given the Group's experience as well as the solutions and technologies it offers, the Group also plans to actively participate in the market for modernisation of heat and power infrastructure, in particular 200 MW and smaller generating units, and in the market for modernisation of environmental protection facilities in accordance with the IED (Directive 2010/75/EU on industrial emissions) and BAT (Best Available Techniques). Given its proprietary technologies and credentials, RAFAKO is well prepared to take part in such tenders and meet market expectations.



Oil and gas segment

The reasons for RAFAKO's entry into this strategic segment of the PBG Group's operations include primarily the market environment, growth prospects, and opportunities to use of the Group's potential. The experience, credentials and know-how acquired by PBG during more than 20 years of its operations in this specialist construction services market will be concentrated within the RAFAKO Group. Historically, the PBG Group was the leader of this market in Poland and the implementation of multi-billion projects enabled the Group to obtain unique credentials that can be now used in tenders and which represent an added value for the entire Group. The credentials include experience as a general contractor in turnkey projects covering the design, delivery, assembly, construction and commissioning of the complete LMG (Lubiatów-Międzychód-Grotów) oil and gas production facility, a power plant worth PLN 1,397m (VAT exclusive), and unique experience in implementing a turnkey project to construct an LNG terminal with a value of PLN 2,368m (VAT exclusive). The LMG facility is the largest oil and gas production facility in Poland with production capacities reaching 1,300 tonnes of crude oil per day and 35,000 Nm³ of gas per hour. Since 2013, PBG Oil and Gas has also been playing an important role in the PBG Group's operations in the gas and oil upstream and downstream segment. Over the last five years (from 2013 to 2017), PBG Oil and Gas generated revenue in excess of PLN 400m and acquired relevant credentials for the construction, repairs and upgrades of gas pipelines and expansion of underground gas storage facilities. In 2017, PBG Oil and Gas successfully completed the construction of the Radoszyn production facility, the third largest oil and gas production facility in Poland, with daily production capacity reaching 80 tonnes of crude oil. Through its active participation in the market and implementation of contracts, PBG Oil and Gas has developed capabilities in managing projects at each stage of execution. These include planning of design, production and construction work necessary to execute an entire project, and comprehensive management of the supply chain and logistics to ensure timely delivery and high quality of products and services. The company also has the important experience and capabilities related to the start-up and commissioning of projects.

The RAFAKO Group intends to actively participate in the market of investment projects related to gas and oil production and to the development and modernisation of gas networks in Poland and abroad. The Group is interested in participating in projects of key importance to Poland's energy security, related to the expansion of underground gas and oil storage facilities and distribution infrastructure, including gas compressor stations.

The RAFAKO Group plans to increase its activity in foreign markets in both of its strategic business segments, i.e. the natural gas, oil and fuel segment and the power construction segment, including in markets where:

- The Group has maintained a continuous presence;
- The Group was present in the past and where it intends to return, i.e. on Asian markets (India, etc.);
- The Group has never been present to supply its products and services, in particular Central Asia, Vietnam, Mongolia, and Indonesia.

In the countries where RAFAKO was active in the past, mainly as a subcontractor for steam generator facilities (e.g. in West European countries), the Group plans to continue cooperation with the customers who purchased steam generators and pressurised sections manufactured by the Company's Boiler Production Plant in the past. In addition to supplying steam-generator components, the Group will also be involved in the execution of projects to upgrade power facilities using the technologies provided in the past by RAFAKO. A new business area in the EU countries are installations for gas, oil, and fuel segment operators, which are an element of strategic plans to end the EU countries' dependence on oil and gas supplies from countries east of Poland.

In expanding back into the foreign markets where the Group was present in the past and where it intends to return, the Group plans to develop its business by collaborating with both international players and selected local partners.

As many countries have made commitments to bring their coal-fired generation plants and industrial enterprises in compliance with the increasingly stringent environmental protection requirements, the



Group may now more easily enter the market for environmental protection facilities, including in the countries where RAFAKO was present as a supplier of steam generator systems in the past (e.g. India). The Group's proprietary technologies and credentials based on which local strategic partners may carry out projects give the Group a competitive advantage for building its presence on those markets. The Group will focus here on exporting technologies as a consortium or technology partner, which may include issuing contractor licences to local businesses.

In Central Asia, Vietnam, Mongolia, and Indonesia, the Group plans to develop its operations by collaborating with strong local partners who know the local markets and can guarantee access to local contractors. With regard to new markets, the Group – in addition to cooperating with local entities – relies on the expertise of internationally recognised legal, tax, and financial advisers.

The Group also has the benefit of being able to win contracts based on a greater use of the financial instruments offered by the companies of the PFR Group, which in 2017, through Fundusz Inwestycji Polskich Przedsiębiorstw, acquired a significant equity interest in RAFAKO.

Development of the Group's solutions, especially proprietary technologies

The RAFAKO Group's critical competitive edge lies in the wide array of technologies enabling it to flexibly respond to market expectations, including to developments in the power sector. The Group has engaged in a number of research and development projects designed to:

- Modify and improve traditional products, such as steam generators and environmental protection equipment,
- Develop new products, including a programme to improve the flexibility of 200 MW generating units, together with a comprehensive upgrade offering, polygeneration islands (the POLYGEN project), CO2 methanation, and electromobility (an innovative school/city bus project).

Dividend policy

The Company's objective is to regain its dividend payment capacity in 2020. The dividend policy will be defined following the completion of the project to construct the 910 MW supercritical power generating unit at the Jaworzno Power Plant.

5. Order book

As at June 30th 2018, the value of the Group's order book was in excess of PLN 3.1bn. The largest item is the PLN 1.2bn Jaworzno Project, with PLN 0.1bn outstanding under the contract and attributable to the parent and PLN 1.1bn outstanding under the contract and attributable to SPV Jaworzno. The order book does not include the Opole contract (RAFAKO's entire share in the project worth PLN 3.2bn was subcontracted outside the RAFAKO Group, of which PLN 0.5bn is still outstanding).

	ORDER BOOK			
	Jun 30 2018		Dec 31 2017	
	PLN ~3.1 bn		PLN ~3.3 bn	
	ORDER BOOK		Due for execution in	
	as at Jun 30 2018	Jul-Dec 2018	2019	after 2019
TOTAL	~3.1bn	~0.8bn	~1.9bn	~0.4bn
RAFAKO Group	~1.9bn	~0.4bn	~1.1bn	~0.4bn
Jaworzno 910 MW	~1.2bn	~0.4bn	~0.8bn	~0.0bn



As regards the value of the RAFAKO Group's order book, data presented in this document is based on the following assumptions:

- a. The order book value is equal to the aggregate amount of the Group's consideration under individual contracts executed by Group companies by June 30th 2018; the figure does not include any planned contracts that have not yet been signed, but it does include contracts signed conditionally;
- b. The order book value is disclosed as at June 30th 2018; actual revenue from the contracts and performance periods depend on a number of factors, which may be outside the Group's control.

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

1) 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 generating 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, SO_2 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%.

2) 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.

The contract was signed on September 29th 2016 with JSC Vilniaus Kogeneracinė Jėgainė. The notice to proceed ("NTP") was set for June 1st 2017; the contract delivery period is 32 months from that date.

Currently, the contract is valued at EUR 148,325 thousand.

The award of this project is an important step towards one of the RAFAKO Group's strategic objectives, which is to increase Group-wide export revenues.

3) Construction of two coal-fired steam units (2x50 MW) on Lombok Island, Indonesia

On December 28th 2017, a consortium comprising RAFAKO S.A. and PT. Rekayasa Industri of Indonesia, as the consortium leader, signed a conditional agreement with PT. PLN (PERSERO), INDONESIA for the construction of two coal-fired steam units (2x50 MW) on Lombok Island, Indonesia. The total value of the consortium agreement is EUR 70.3m, USD 18.9m, and IDR 1,590,700m (approximately 850.3m in total, VAT-exclusive), including consideration of RAFAKO S.A. amounting to EUR 70.3m (approximately PLN 295m), VAT-exclusive, representing ca. 35% of the total value of the consortium agreement.

The employer set the notice to proceed ("NTP") at April 11th 2018. The contract delivery period is 36 months for the first unit and 39 months for the second unit.

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 parent 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.

Key contracts for natural gas, crude oil and fuels solutions:

1) Design and construction of a storage depot in Rashaant, Mongolia

On October 16th 2017, a consortium comprising RAFAKO (leader, 90% interest) and Gmax Group concluded with National Trading & Transport Group Co Ltd. (NTT Group) a conditional agreement for the design and construction of a fuel storage depot in Rashaant, Mongolia, for EUR 46.97m, VAT exclusive. RAFAKO's interest in the consortium is 90%. The contract completion deadline is 30 months from the date of handing over the construction site and technical documentation to the consortium.

In accordance with its terms, the contract will become effective provided that:

• It is signed by authorised representatives of both parties, i.e. the NTT Group and the consortium, and is delivered to the other party;

• The NTT Group makes an advance payment that will be credited to the consortium's bank account;

• The work under the contract will be financed by Bank Gospodarstwa Krajowego S.A. or Korporacja Ubezpieczeń Kredytów Eksportowych S.A. on the terms and conditions set out in the contract.

As the NTT Group and the consortium have signed the contract and the advance payments have been made, the only condition that remains to be satisfied for the contract to become effective is that the NTT Group obtains financing for the work.

2) Construction of the DN700 Szczecin-Gdańsk gas pipeline, section V Goleniów-Płoty

On May 30th 2018, a contract was signed between Operator Gazociągów Przemysłowych GAZ – SYSTEM S.A. and RAFAKO S.A. for general contractor services in the project involving the construction of section V Goleniów-Płoty of the DN 700 Szczecin-Gdańsk pipeline with auxiliary facilities and the necessary infrastructure for its operation.

The total value of the contract on the execution date is PLN 125m, and the completion deadline is scheduled 24 months after that date.



Position of the Management Board and Supervisory Board of the parent regarding the qualifications expressed by the auditor in the review report

a) Quantitative and qualitative effect on the interim financial statements, including on profit or loss and other financial data, of the issue referred to in the qualification, in each case with a presentation of materiality assessment

The company holds bonds (as described in detail in Note 11.9.1. to the Group's interim consolidated financial statements for the six months ended June 30th 2018), which were issued by the parent and offered to creditors whose claims are to be satisfied in accordance with the Terms of the Arrangement. The bonds are secured bonds within the meaning of the Bonds Act of January 15th 2015. In accordance with IFRS 9, the parent classifies the above assets as 'financial assets measured at amortised cost'. At the end of each reporting period, the parent recognises an impairment loss for expected credit losses.

In the opinion of the parent's Management Board, the carrying amount of the bonds presented in the interim financial statements, that is PLN 24.8m, has been calculated correctly and is equal to the recoverable amount. As at the date of this report, the parent's Management Board is not able to estimate the effect of this issue on profit or loss. However, the maximum effect could be PLN 24.8m. Profit before tax, net profit and equity would decline accordingly.

b) Measures taken and planned to be taken by the parent in view of the situation described above

Reasons for the auditor's qualification in the reporting period may be removed if the parent (of the Group) presents relevant security and documents confirming cash flows that will guarantee payment to the parent of the liabilities under the bonds throughout the life of the asset. This is clearly beyond the control of the parent's Management Board. In assessing the probability of recovering the amounts due to the parent under the bonds issued by PBG S.A., the parent's Management Board takes into account not only the present value of the security created for the issuer's bonds, but also the market prospects for the entire PBG Group.

The parent's Management Board believes that the risk of non-recoverability of those assets is minimal.

c) Opinion of the supervisory body

The parent's Supervisory Board, exercising ongoing supervision over the parent's operations, has repeatedly addressed the issue of recoverability of amounts due to the parent under the bonds issued by PBG S.A. In the Supervisory Board's opinion, proving that the recoverability of amounts due under the bonds issued by PBG S.A. is sufficiently secured is beyond the control of the parent's Management Board, and therefore removal of the reason for the qualification is also beyond its control.



Management Board's statement

The Management Board of RAFAKO S.A., the parent of the RAFAKO Group, hereby represent that:

- 1) To the best of its knowledge, the interim condensed consolidated financial statements for the six months ended June 30th 2018, as well as comparative data for the six months ended June 30th 2017 and for the year ended December 31st 2017, were drawn up in compliance with the applicable accounting standards and give a true, fair and clear view of the Group's assets, its financial condition and performance, and that the Directors' Report on the operations of the RAFAKO Group gives a true view of the Group'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 half-year condensed consolidated financial statements, in compliance with the applicable laws and professional standards.

September 6th 2018	Agnieszka Wasilewska-Semail	President of the Management Board	
September 6th 2018	Karol Sawicki	Vice President of the Management Board	
September 6th 2018	Jarosław Dusiło	Vice President of the Management Board	
September 6th 2018	Edward Kasprzak	Vice President of the Management Board	
September 6th 2018	Tomasz Tomczak	Vice President of the Management Board	

Signatures of Management Board members