



RAFAKO

GRUPA PBG

**DIRECTORS' REPORT
ON THE OPERATIONS
OF RAFAKO S.A.
IN 2019**

Racibórz, June 30th 2020



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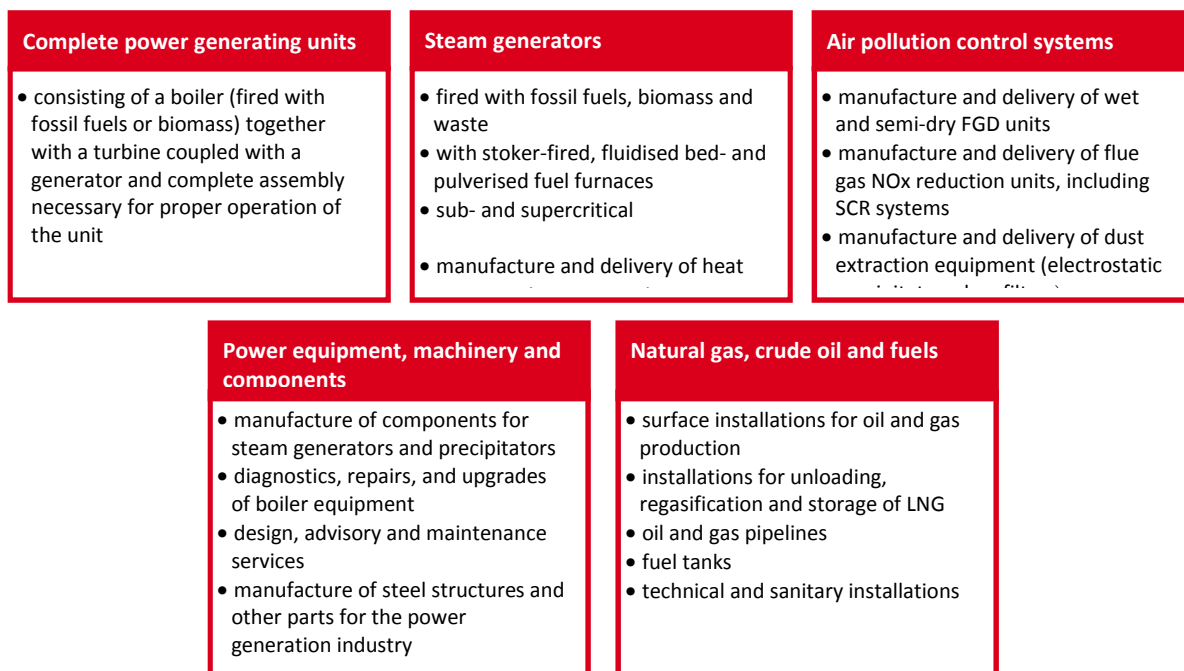


I. General information

About us

RAFAKO S.A. (the “Company” or “RAFAKO S.A.”) provides engineering, procurement and construction (EPC) services to the power sector and the oil and gas industry. As a general contractor for power generating units, the Company offers its proprietary technological solutions and is a leader in the manufacturing of energy generation equipment. Since November 2011, RAFAKO S.A. has been included in the PBG Group.

The Company’s key products and services include:



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

The Company operates its own production plants. The main plant 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 Wry. In 2019, RAFAKO’s total production capacity was approximately 0.8 million man-hours per year.

RAFAKO S.A. has operated in the power sector since 1949. The Company’s product offering, initially comprising mainly steam generators and their components, was gradually expanded to include complete flue gas desulfurization units, dust extraction units, NOx control systems, etc. From a typical manufacturer, the Company was transformed into a general contractor for power construction projects. In 2014, RAFAKO S.A. became one of the few companies offering and delivering power generation units under EPC contracts, when it launched, practically on a stand-alone basis, the construction of a 910 MW unit for the Jaworzno Power Plant (the “Jaworzno 910 MW Project”). Since 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, RAFAKO S.A. has been a leading supplier of steam generators for the country’s power and industrial sectors. The combined capacity of steam generators made by the Company accounts for a significant part of the total capacity installed in Polish commercial and industrial power plants. The RAFAKO S.A.’s reference



projects include delivery of steam generators to Bełchatów, Opole, Turów, Dolna Odra, Rybnik (all owned by PGE), Pątnów-Adamów-Konin (all owned by ZE PAK), Kozenice (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 desulfurisation (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 new unit in Bełchatów is the most powerful lignite-fired generating unit in Poland.

The Company 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 steam generator was commissioned at the Jaworzno Power Plant (the Tauron Group). The generator is fired with biomass only, as opposed to coal-fired or coal 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.

RAFAKO S.A. is solidifying its position on the European market of waste incineration solutions. In 2011, RAFAKO S.A. supplied three heat recovery steam generators to a waste incineration facility in Turin, Italy, and further two heat recovery steam generators to Baku, Azerbaijan. In 2013, a steam generator was placed in service at a municipal waste incineration plant in Roskilde, Denmark.

In December 2017, a Thermal Waste Treatment Plant for the Szczecin Metropolitan Area was placed in service. The Company supplied the process part for two lines of this plant.

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;
- At the beginning of 2016, it supplied a municipal waste treatment boiler to Calvert, Buckinghamshire;
- In 2017, it delivered a waste incineration boiler (including assembly and start-up) to Hereford, Worcestershire;
- In 2018, it executed a project to deliver the pressure section 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 supplied by the Company to the Jaworzno III Power Plant, Bełchatów Power Plant, Pątnów Power Plant, Ostrołęka B Power Plant, Dolna Odra Power Plant, Siekierki CHP Plant, Łódź CHP Plant, Siersza Power Plant, Skawina Power Plant, Trzebowice Power Plant (Czech Republic), Kozenice Power Plant, and Połaniec Power Plant.



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

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 to bring its generation assets in compliance 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. supplied high-efficiency semi-dry flue gas desulfurisation units to 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 2017;
- In September 2017, a semi-dry flue gas desulfurisation unit was commissioned for K7 and K8 steam generators at the Białystok CHP Plant, and the final acceptance of the unit took place in March 2018.

In 2011, RAFAKO S.A. 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 Koźienice 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 SCR systems for 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, 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 the last part of the project – the system for unit 1 – in September 2018.

In 2009, dust extraction equipment, including electrostatic precipitators and bag filters, was added to the Company's product offering. In 2010–2013, a number of electrostatic precipitators were put in operation, including at units 10, 4, 3 and 8 at the Koźienice Power Plant; at a BB-1150 steam generator of units 4, 5 and 6 at the Bełchatów Power Plant; as well as at unit 6 at the Tuzla CHP Plant. In 2014, two electrostatic precipitators were installed by the Company at the Westfalen Power Plant in Germany, and further two at the Eemshaven Power Plant in the Netherlands. In December 2016, RAFAKO S.A. completed the upgrade of an electrostatic precipitator at the Morava CHP Plant in Serbia. In December 2018, the electrostatic precipitator at unit 1 at the Ostrołęka Power Plant (the last part of the project to upgrade electrostatic precipitators at units 1, 2 and 3 at Energa Elektrownia Ostrołęka S.A.) was placed in service.

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 RAFAKO S.A. will execute this turn-key contract on its own and, in terms of technologies, will supply the entire boiler island.

In 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 were built in what is the largest project in the Polish power sector since 1989. The Company's entire scope of work and services under the contract was subcontracted to Alstom Power Sp. z o.o. (currently GE Power Sp. z o.o.). Generating unit 5 was commissioned at the Opole Power Plant on May 31st 2019 and generating unit 6 – on September 30th 2019.

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 revenue. The largest steam generators manufactured by the Company for foreign customers operate in the power plants of the former Yugoslavian



countries, and a number of large generators 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 2019, RAFAKO S.A. supplied such components to customers in Lithuania, Indonesia, Belgium, France, Finland and other countries.

RAFAKO S.A. is currently engaged in the execution of two major foreign contracts:

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

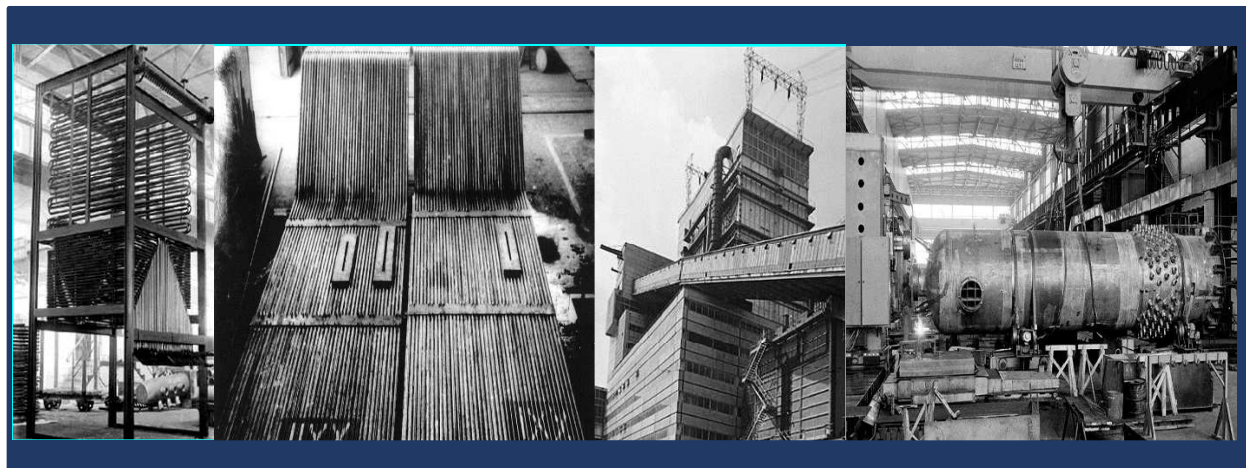
The Company provides after-sale support and servicing for all products and equipment supplied. RAFAKO S.A. also offers upgrades of existing equipment to enhance its operating parameters and mitigate negative environmental impacts.

In 2018, RAFAKO S.A. decided to expand its business into EPC and general contractor services for the oil and gas sector in Poland and on foreign markets. These services are seen as a promising market given the expected multi-billion investments in this sector, mainly relating to the implementation of the energy policy objectives.

Certificates held by RAFAKO S.A. (EMAS, AD 2000-Merkblatt HP0, ASME CODE, EN 1090 and EN 3834-2) comply with the technical, quality, environmental and safety requirements of the 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 applicable in Poland, the EU, and the US.

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 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 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. In February 2020, remedial proceedings were opened with respect to PBG by a court decision. In May 2020, PBG S.A. announced its intention to sell 33.32% of RAFAKO shares.

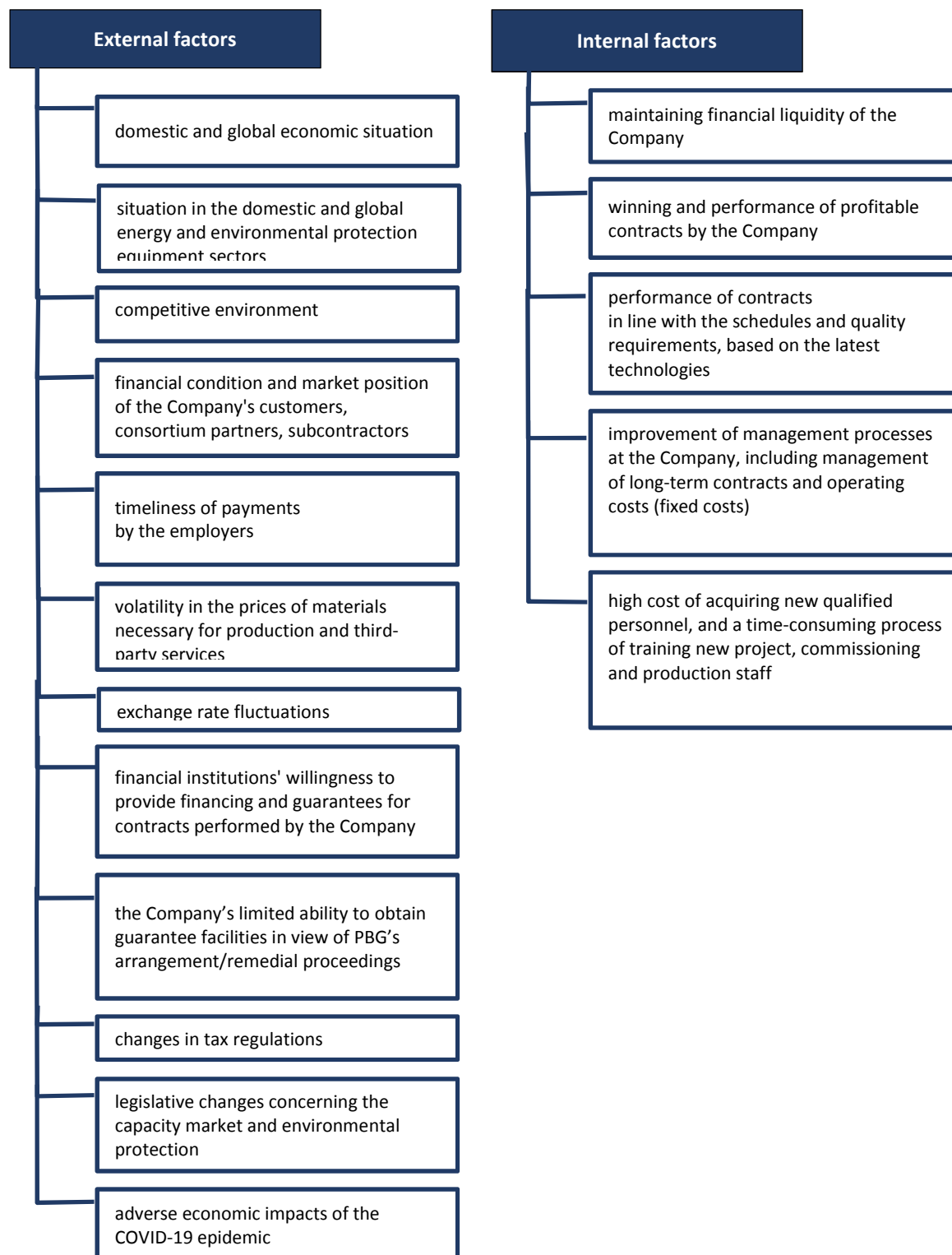
For the shareholding structure as at December 31st 2019, see Appendix 8.





II. Economic and financial condition

1. External and internal factors relevant to the Company's financial performance and development prospects





2. Key risks and threats

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

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

risk factors relating to the macroeconomic situation, including the GDP growth rate, unemployment rate, salaries and wages, growth of the industrial and construction output, and capital expenditure of potential trading partners determining the number of new contract wins;

risk related to the political environment, energy and environmental policies and uncertainty over their future shape

risk of sharp exchange rate fluctuations

risk of an increase in market prices of subcontractors' services and materials

risk of increased competition among smaller companies

interest rate risk and inflation risk

risk of the EU reducing subsidies in areas of the Company's principal business activity

Risks specific to the Company

risk related to completion of the 910 MW unit in Jaworzno after the failure

liquidity risk related to the significant losses incurred in 2019

risk of delays in or improper performance of contracts by the Company

risk of failure to correctly estimate project costs

risk of increase in operating expenses resulting from higher prices of supplies and services and growing employee benefits expense

risk of restricted access to guarantee facilities in sufficient amounts limiting the ability to sign and perform contracts

risk associated with performance of high-value contracts and with the limited number of potential customers for products and services

risk inherent in acquisition and execution of projects in cooperation with suppliers and subcontractors

risk of non-payment or delayed payment of amounts due under contracts performed by the Company



- risk of failure to secure sufficient external financing (insufficient liquidity may result in less favourable financing and business terms)
- risk inherent in execution of certain projects as part of consortia
- risk related to non-payment or partial repayment of arrangement receivables by PBG
- risk of deadlines for preparing and submitting bids being too short
- risk of failure to meet strategic objectives and damage to the Company's reputation
- risk related to the use by the Company of complex and innovative manufacturing technologies
- lack of specialist qualifications and execution credentials
- the Company's day-to-day operations and growth depend on its senior management and ability to hire and retain highly-qualified personnel, particularly specialist production staff and engineers
- risk of insufficient insurance cover
- risk of consequences of accidents at work and occupational diseases
- risk related to plant failure or to destruction or loss of the Company's assets.
- risk of failure or security breach relating to the Company's IT systems

Regulatory risks

- risk of changes in regulations in the power sector
- risk related to changes in environmental laws
- risk related to European Union institutions' requirements for coal policy
- risks inherent in related-party transactions
- risk of changes in tax laws or their interpretation

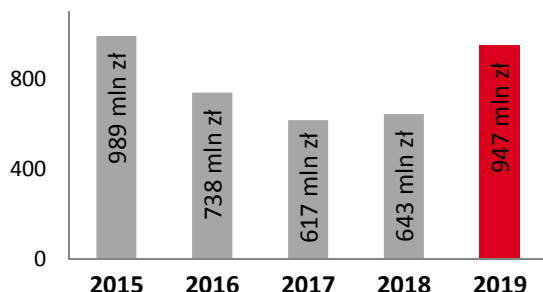
For information on the objectives and rules of financial risk management, including the specification of the most material risks, see Note 46 to the financial statements.



3. Analysis of key financial and economic data

3.1. 2019 highlights (compared with previous years)

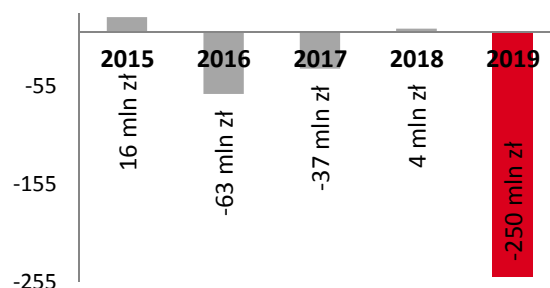
Revenue PLN 947m



Definition: Total revenue, net of VAT

Relative to 2018: Revenue increased 47% as a result of increased involvement in ongoing contracts.

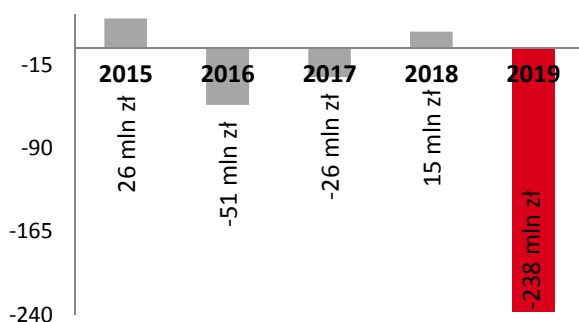
EBIT PLN -250m



Definition: Operating profit/(loss)

Relative to 2018: Operating loss was PLN -250m. The loss was mainly attributable to the revaluation of estimated costs of significant long-term contracts and recognition of impairment losses on receivables from PBG.

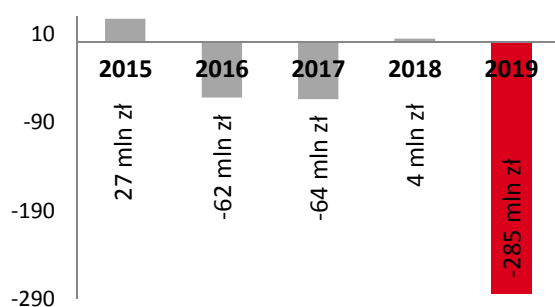
EBITDA PLN -238m



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

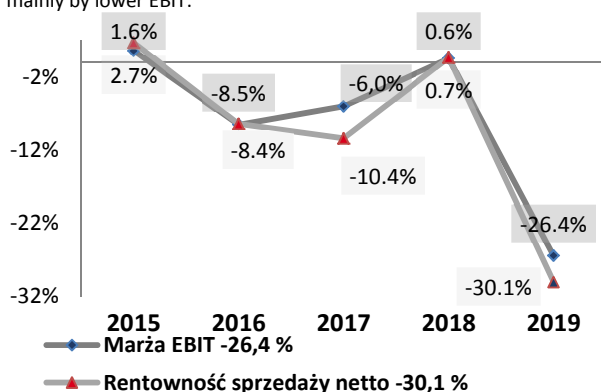
Relative to 2018: EBITDA fell from PLN 15m to PLN -238m, driven mainly by lower EBIT.

Net profit/(loss) PLN -285m



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

Relative to 2018: The Company generated net loss of PLN -285m, compared with net profit of PLN 4m earned in 2018.

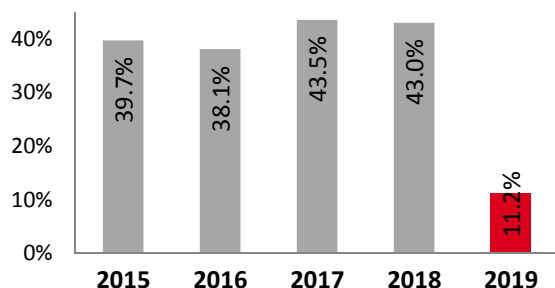


Marża EBIT -26,4%	EBIT margin of -26.4%
Rentowność sprzedaży netto -30,1%	Net margin of -30.1%

Definition: EBIT margin: operating profit/(loss) / net revenue; Net margin: net profit/(loss) / net revenue.

Relative to 2018: Net margin fell significantly, to -30.1%.

Share of equity in financing 11.2%



Definition: Equity / total assets.

Relative to 2018: Due to the recorded loss, the share of equity in financing of total assets fell to 11.2%.

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3.2. Revenue: amount and structure

In 2019, revenue from sales of products, merchandise and materials was PLN 947,061 thousand, having increased year on year by PLN 303,748 thousand (or 47.2%). Revenue from sales of products and services was PLN 945,973 thousand, while revenue from sales of materials was PLN 1,088 thousand.

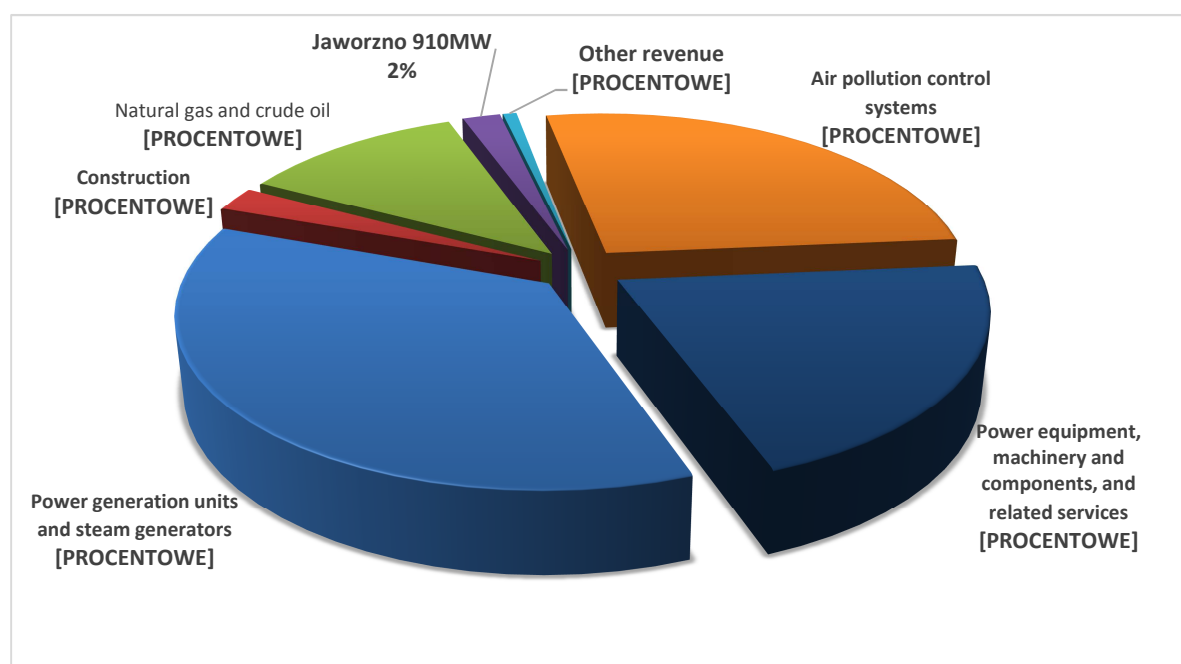
The increase in sales in 2019 was mainly attributable to increased involvement in current projects, the construction of a biomass-fired co-generation unit for UAB VILNIAUS KOGENERACINE JEGAINĖ, and the construction of two coal-fired steam units on Lombok Island, Indonesia (2x50 MW).

In 2019, sales on the domestic market grew by 31% year on year. The change was mainly seen in the natural gas and crude oil segment, where sales rose from PLN 5,377 thousand in 2018 to PLN 107,411 thousand in 2019. There was also a significant increase in sales in the power segment and the construction segment, where revenue increased by PLN 61,958 thousand and by PLN 21,825 thousand, respectively.

Foreign sales increased by PLN 186,484 thousand, to PLN 453,203 thousand (an increase of 69.9% on 2018). The share of export sales in total sales was 47.9%, having increased year on year by 6.4pp.

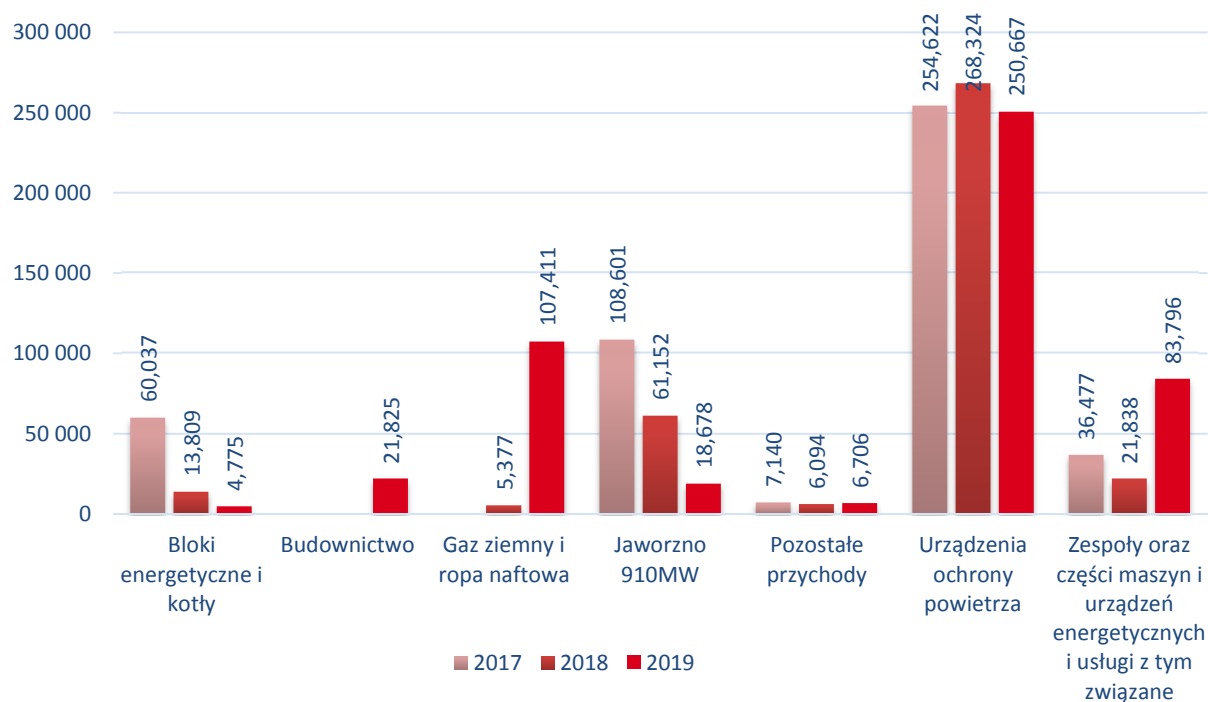
The increase in foreign sales was mainly driven by sales of power generation units and steam generators, assemblies and parts for power generation machinery and equipment and related services. Revenue from sales of power generating units and steam generators was PLN 336,344 thousand (2018: PLN 142,108 thousand), an increase of well over 100% year on year. The sales growth in this product category was mainly attributable to the contracts in Lithuania and Indonesia. Revenue from sales of power equipment, machinery, components and associated services was PLN 113,543 thousand, an increase of 13.6% year on year. Sales in the natural gas and crude oil segment fell by 89%.

In 2019, the structure of sales was as follows:



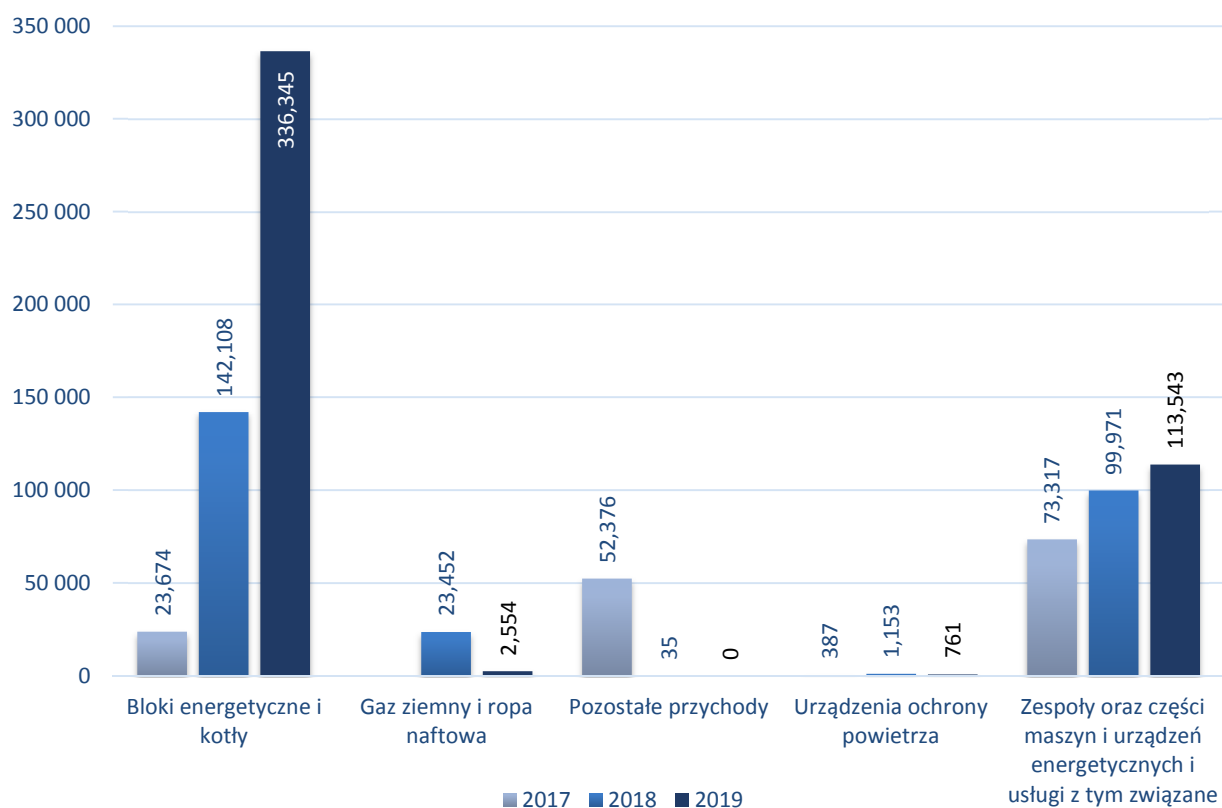
Sales by market:

Domestic market (2019: PLN 493,858 thousand; 2018 PLN 376,594 thousand; 2017: PLN 466,877 thousand):



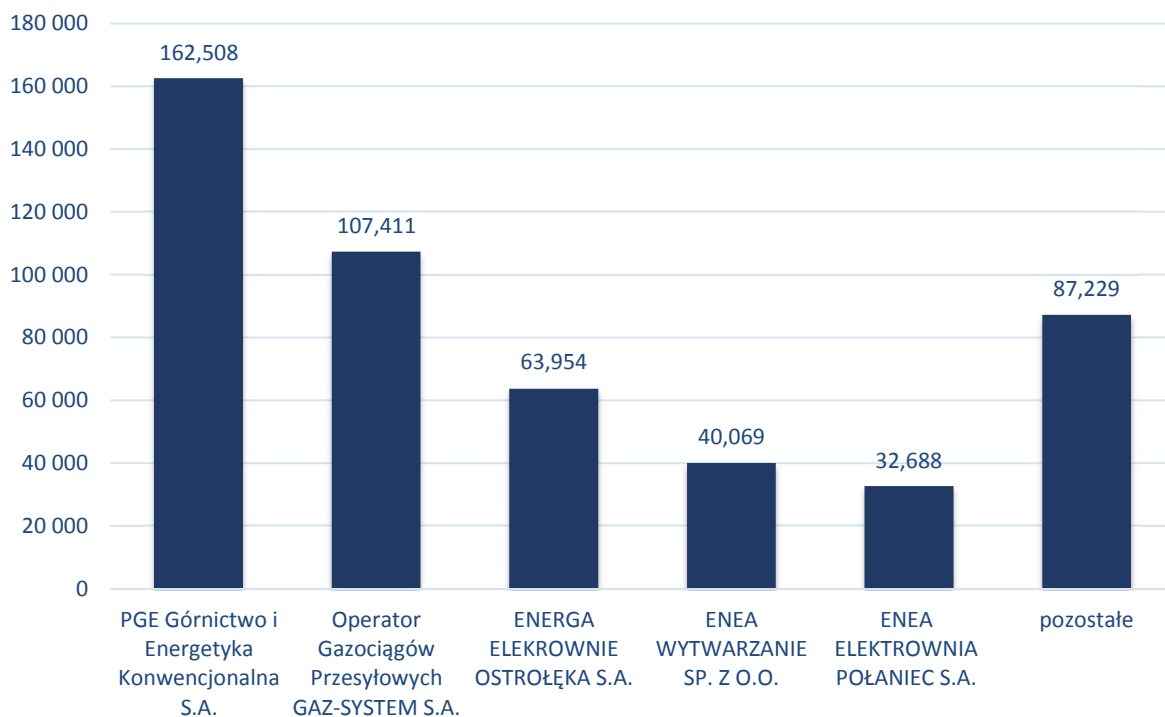
Bloki energetyczne i kotły	Power generation units and team generators
Budownictwo	Construction
Gaz ziemny i ropa naftowa	Natural gas and crude oil
Pozostałe przychody	Other revenue
Urządzenia ochrony powietrza	Air pollution control system
Zespoły oraz części maszyn i urządzeń energetycznych i usługi z tym związane	Power equipment, machinery and components, and related services

Foreign market (2019: PLN 453,203 thousand; 2018 PLN 266,719 thousand; 2017: PLN 149,754 thousand;



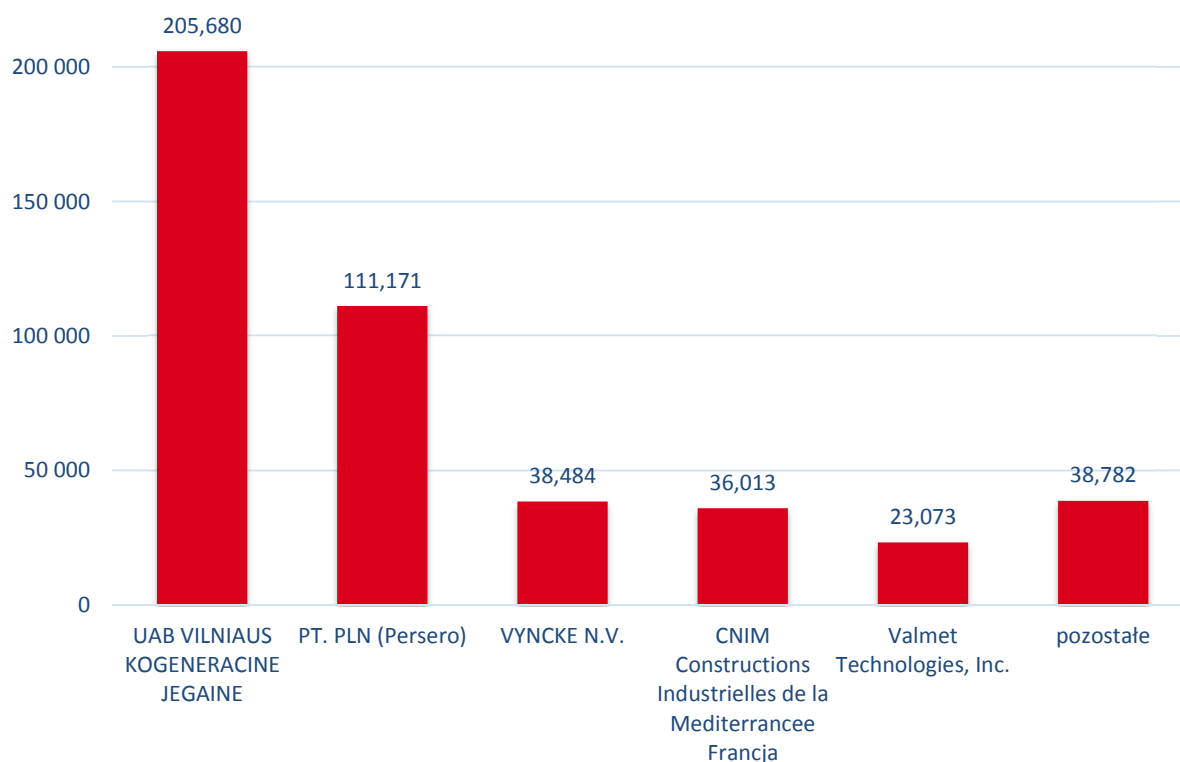
In 2019, RAFAKO S.A.'s main customers were:

on the domestic market (PLN 493,858 thousand in total):



on foreign markets (PLN 453,203 thousand in total):

RAFAKO S.A.



In 2019, UAB VILNIAUS KOGENERACINE JEGAINE of Vilnius was the Company's largest customer, accounting for 21.7% of total sales (18.7% in 2018). Sales to this customer involve the construction of a biofuel CHP plant unit made up of fluidised-bed boilers and a biofuel transport and feeding system (PLN 205,680 thousand in 2019).

PGE Górnictwo i Energetyka Konwencjonalna S.A. – for which RAFAKO S.A. performs contracts for air pollution control equipment, upgrades and assemblies, as well as parts of power equipment and related services – also had a significant share in the sales (17.2% in 2019 vs. 6.6% in 2018). In 2019, total sales to PGE Górnictwo i Energetyka Konwencjonalna S.A. were PLN 162,508 thousand.

A large customer in 2019 was PT PLN (Persero), with an 11.7% share in total sales (1.2% in 2018), to which RAFAKO S.A. is supplying two coal-fired steam units on the Indonesian island of Lombok. In 2019, sales to this customer were PLN 111,171 thousand.

Another large customer was Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A., with an 11.3% share in total sales (0.8% in 2018). For this customer RAFAKO S.A. performs contracts in the oil and gas segment (PLN 107,411 thousand in 2019).

The Company delivers high value contracts, which may significantly increase the share of sales to a particular customer in total revenue.

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

3.3. Deliveries, procurement and purchase of production materials

In 2019, RAFAKO S.A.'s main sources of supplies were:

PLN '000	
2018	2019



Source	Value	Share in total purchases	Value	Share in total purchases
Domestic suppliers	394,250	87.1%	658,103	76.83%
Foreign suppliers	58,551	12.9%	198,470	23.17%
TOTAL	452,801	100.0%	856,573	100.00%

In 2019, the Company's supplier base was highly fragmented as none of the suppliers represented more than 10% of the total value of purchases.

RAFAKO S.A. relies on external suppliers for various services – 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. The availability of production materials, supplies or procurement services is not a significant limiting factor for the Company'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 RAFAKO S.A.'s customers.

3.4. Related-party transactions

In 2019, the Company did not enter into any material transactions with related parties on non-arm's length terms.

For a detailed list of related-party transactions in 2019, see Note 43 to the Company's full-year financial statements for 2019.

3.5. Amount and structure of operating expenses and gross profit/(loss)

In the 12 months ended December 31st 2019, cost of sales was PLN 1,071,525 thousand which, with PLN 947,061 thousand in revenue, translated into gross loss of PLN 124,464 thousand. Compared with 2018, when the Company earned gross profit of PLN 61,897 thousand, the result was PLN 186,361 thousand lower.

The loss was mainly attributable to a revision of estimated costs of the following two significant contracts:

- Delivery and installation of an SCR system and upgrade of electrostatic precipitators for AP-1650 steam generators 9 and 10 at ENEA Wytwarzanie Sp. z o.o. The additional cost of the contract, as estimated by the Company, amounts to PLN 65m, and reduced RAFAKO's result for 2019.

The additional cost of the contract is due mainly to an extraordinary increase in market prices during the contract performance and to work which, in the Company's opinion, went beyond the contract's scope, including in particular an increase in costs under contracts settled based on unit rates, claims raised in 2019 by major subcontractors, resulting from some necessary additional work, costs related to longer than assumed execution of the contract, resulting from additional work performed, as well as additional services and deliveries related to an electrostatic precipitator. At the same time, the Company estimated its claims against the employer for the reasons indicated above at PLN 67.8m. A letter containing a settlement proposal was sent to the Employer on March 5th 2020. Its key elements were to recognise the works performed outside the scope specified in the contract; set the completion dates for each stage of the works; and determine the final payment amount. Further to the proposal made by RAFAKO S.A., the parties agreed on the text of an annex that is expected to be signed on June 30th 2020. The annex will address the contract's completion dates and payment terms.



- Construction of a biofuel-fired co-generation unit consisting of fluidised bed boilers, biofuel storage and feeder systems, and a flue gas treatment system in Vilnius, Lithuania.

The additional cost of the contract, as estimated by the Company, is PLN 87.0m, and the total result of the contract, including a PLN 2.4m increase in total revenue, deteriorated by PLN 84.7m. After having recognised additional costs, the Company recorded a loss on the contract. Therefore, the 2019 result included a PLN 27.4m loss recognised under the percentage of completion method, a PLN 22.7m provision for an expected loss, and a PLN 7.8m adjustment to the positive result of the contract recognised by the end of 2018. The overall effect of the contract on the 2019 result was PLN -57.9m. The additional cost of the contract, as estimated by the Company, amounts to PLN 87.0m, due mainly to extraordinary price increases during the Vilnius Project performance, work which, in the Company's opinion, went beyond the project's scope and longer than assumed execution of the project (through no fault of the Company), due in particular to delays in the employer's performance under the contract resulting in delayed orders for deliveries and services, whose prices increased dramatically owing to the expiry of relevant bids. The Company also estimated additional costs related to changes in the contract's scope introduced by the employer, resulting in the need to perform some additional work. The Company estimated its claims at EUR 17.5m.

For a detailed presentation of overall results on the contracts and the related claims, see Notes 11.1.3 and 11.1.4 to the full-year financial statements for 2019.

In 2019, administrative expenses were PLN 35,176 thousand, having decreased by PLN 3,783 thousand year on year, mainly on lower costs of advisory services purchased by the Company.

In 2019, selling expenses were PLN 22,452 thousand, having decreased by PLN 1,601 thousand year on year, mainly due to lower costs of advisory services and lower bid preparation costs.

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

3.6.1. Net other income/(expenses)

In 2019, the Company reported a loss on other operating activities of PLN 56,968 thousand (compared with a profit of PLN 10,969 thousand in 2018), which resulted from:

	<i>PLN '000</i>
1. income from subsidiary for surety provided*	5,236
2. grants received	1,341
3. reversal of impairment loss on non-financial assets	480
4. reversal of provision for other costs	297
5. other income	1,538
6. impairment losses on assets	<i>(45,738)</i>
- impairment loss on other receivables	<i>(36,115)</i>
- impairment loss on trade receivables	<i>(9,589)</i>
7. recognition of provisions for other costs	<i>(14,398)</i>
8. donations	<i>(1,460)</i>
9. other expenses	<i>(4,264)</i>

Impairment losses on receivables were recognised mainly on receivables from PBG S.A. w restrukturyzacji, in respect of which a decision to open remedial proceedings was issued by the District Court of Poznań on February 12th 2020.

3.6.2. Research and development costs

In 2019, research and development costs were PLN 11,336 thousand, that is PLN 5,185 thousand more than in 2018. For a description of research and development projects, see section III.5.



3.6.3. Net finance income/costs

In 2019, the Company incurred a loss on financing activities of PLN 33,865 thousand (compared with a profit of PLN 3,228 thousand in 2018), which resulted from:

	PLN '000
1. interest on financial instruments, including interest on loans, past due receivables, deposits, and bank accounts	6,454
2. interest on security deposits provided	549
3. recognition of impairment losses on financial assets	(27,822)
4. interest on financial instruments, including interest on bank and other borrowings, lease, past due liabilities, and bank loan fees	(5,511)
5. recognition of impairment loss on shares	(5,323)
6. foreign exchange losses	(1,360)
7. employee benefits expense	(730)
8. negative net balance of other finance income and costs	(121)

Impairment losses on financial assets were recognised mainly on bonds of PBG S.A. w restrukturyzacji, in respect of which a decision to open remedial proceedings was issued by the District Court of Poznań on February 12th 2020.

3.7. Income: amount and structure

In 2019, the Company recorded losses at all levels of the statement of profit or loss:

- gross loss was PLN 124,464 thousand, compared with gross profit of PLN 61,897 thousand for 2018,
- operating loss was PLN 250,395 thousand, compared with operating profit of PLN 3,703 thousand for 2018,
- net loss was PLN 284,644 thousand, compared with net profit of PLN 4,302 thousand for 2018.

The Company did not publish any financial forecasts or profit guidance for 2019.

For the structure and change of profit/(loss) before tax in 2019 and 2018, see Appendix 4.

3.8. Margins and ROE

In 2019, gross margin fell from 9.6% in 2018 to -13.1%, while operating profit margin was -26.4% (compared with 0.6% in 2018).

As a result of net loss (PLN -284,644 thousand), return on equity was negative at -272.3%. In the same period of the previous year, return on equity was positive at 1.1%.

The profitability ratios for 2018 and 2019 are presented in Appendix 1.

3.9. Financial liquidity

As a result of the loss incurred, the current ratio (current assets to current liabilities) decreased to 0.85.

Relative to 2018, the average collection period for trade receivables decreased by 24 days (to 77 days), and the average collection period for trade receivables for contract work decreased by 34 days (to 81 days). Inventory turnover fell by 9 days, to 9 days. The average payment period was longer by 3 days (at 112 days), while the average payment period for amounts payable for construction contract shortened by 12 days (to 70 days).



In 2019, RAFAKO S.A.'s liquidity position deteriorated as the costs incurred on large projects were higher than planned. This may lead to increased tension in relations with trading partners and may cause the latter to offer RAFAKO S.A. less acceptable terms of business.

In 2019, liabilities to the Social Security Institution (ZUS), State Treasury and employees were settled in a timely manner, although there were significant delays in payments to suppliers.

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 Company.

The Company is also exposed to currency risk. Changes in PLN exchange rates, especially if frequent and significant, may materially affect both the profitability of contracts and the amount of currency translation differences on assets and liabilities denominated in foreign currencies and translated into PLN. In the reporting period, more than 31.4% of the Company's invoiced revenue was denominated in foreign currencies, primarily in EUR.

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

As at December 31st 2019, the Company did not have any open FX hedging transactions. The Company does not apply hedge accounting.

For the Company to continue as a going concern, a key issue is to maintain financial liquidity. A significant increase in the cost of performance of key contracts, as estimated by the Company, poses a material threat to RAFAKO S.A.'s ability to continue as a going concern. The Management Board believes that negotiations with key customers to increase contract prices will allow it to mitigate the risk.

The Company's Management Board has also identified potential cost optimisation areas and non-core assets which can be potentially divested. The Management Board estimates that these efforts may bring in at least several dozen million zlotys. The money will be used to improve and maintain the Company's liquidity position, which is currently stable.

Access to external financing is a major factor in ensuring liquidity. In June 2019, the parent and PKO BP S.A. signed an annex to the multi-purpose credit facility agreement; under the annex, RAFAKO S.A. will have access to credit and guarantee facilities totalling PLN 200m until the end of June 2020.

As at the date of these financial statements, the Company received a recommendation from the credit committee and was at the final stage of negotiating the final terms of extending the credit facility from PKO BP Bank Polski S.A. The existing arrangements for renewal of the multi-purpose credit facility agreement with PKO BP S.A. of February 7th 2012, as amended (MPCF), provide for extending the availability period until November 10th 2020 and reducing the facility amount to PLN 142m. A relevant annex will be executed by the end of June 30th 2020, after all corporate approvals are obtained. The Management Board of RAFAKO S.A. is of the opinion that these terms and conditions will have no adverse effect on the Company's liquidity.

RAFAKO S.A. has also secured new bank guarantee and insurance guarantee facilities providing security for its contracts. However, the current amount of the credit and guarantee facilities available to RAFAKO S.A. is insufficient to deliver the plan to expand its order book. Therefore, RAFAKO S.A. takes all reasonable steps to increase its guarantee potential to the level enabling the parent's Management Board to implement its growth strategy and to structure credit facilities so that they better meet the parent's needs.

In 2019, 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.



Access to new bank/insurance guarantees will be of major importance for the Group to be able to maintain liquidity. Unavailability of sufficient guarantee limits may restrict the Company's ability to win new revenue-generating contracts.

For the objectives and rules of financial risk management, see Note 46 to the financial statements for 2019.

3.10. Debt

In 2019, RAFAKO S.A.'s liabilities towards its creditors increased by PLN 304,750 thousand. As at December 31st 2019, total non-current and current liabilities were PLN 828,059 thousand, compared with PLN 523,309 thousand as at December 31st 2018.

The increase was mainly attributable to an increase in current trade payables by PLN 155,940 thousand, current liabilities under construction contracts by PLN 75,788 thousand, and in other short-term provisions by PLN 32,752 thousand. The value of non-current liabilities increased by PLN 19,144 thousand relative to 2018.

As at December 31st 2019, the carrying amount of the Company's assets not encumbered with on-balance-sheet (non-current and current) liabilities was PLN 104,529 thousand (December 31st 2018: PLN 394,426 thousand).

The ratio of debt (non-current and current liabilities) to assets increased to 88.8%, from 57% as at the end of 2018. In other words, equity covers means 11.2% of the Company's assets.

The ratio does not take into account the Company's contingent liabilities under bank and insurance guarantees (mainly performance bonds and advance payment guarantees provided on the Company'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. As at December 31st 2019, the Company's contingent liabilities under these instruments were PLN 1,794,426 thousand (PLN 1,676,531 thousand at December 31st 2018). The largest item was a PLN 1,175,587 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 12 months ended December 31st 2019, the Company's contingent liabilities grew by PLN 117,895 thousand, which resulted from an increase in guarantees granted and an increase in promissory notes issued. In the 12 months ended December 31st 2019, a number of guarantees were issued by banks and insurance companies to trading partners upon the Company's instructions, including performance bonds of PLN 159,338 thousand, advance payment guarantees of PLN 61,448 thousand and bid bonds of PLN 25,702 thousand. In this category of liabilities, the largest item was a performance bond of PLN 35,547 thousand, issued in June 2019. As at the end of December 2019, liabilities under promissory notes issued were PLN 107,900 thousand. The largest item of this category of liabilities is the guarantee promissory note issued for the benefit of the National Centre for Research and Development of Warsaw of PLN 86,552 thousand in connection with the implementation of Phase II of a project executed under a contract for the execution and financing of a project under the 200 + Units Programme. As at the end of December 2019, liabilities under sureties in issue were PLN 1,175,587 thousand. In this category of liabilities, the largest item was the sureties covering E003B7 Sp. z o.o.'s liabilities, issued by RAFAKO S.A. on April 16th 2014 and February 24th 2016 and valid until April 17th 2028, in connection with the project to develop new coal-fired generation capacities at TAURON Wytwarzanie S.A. – construction of supercritical 910 MW generating unit at the Jaworzno III Power Plant – Power Plant II. The largest item of guarantees expired in the 12 months ended December 31st 2019 was a EUR 2,310 thousand performance bond.

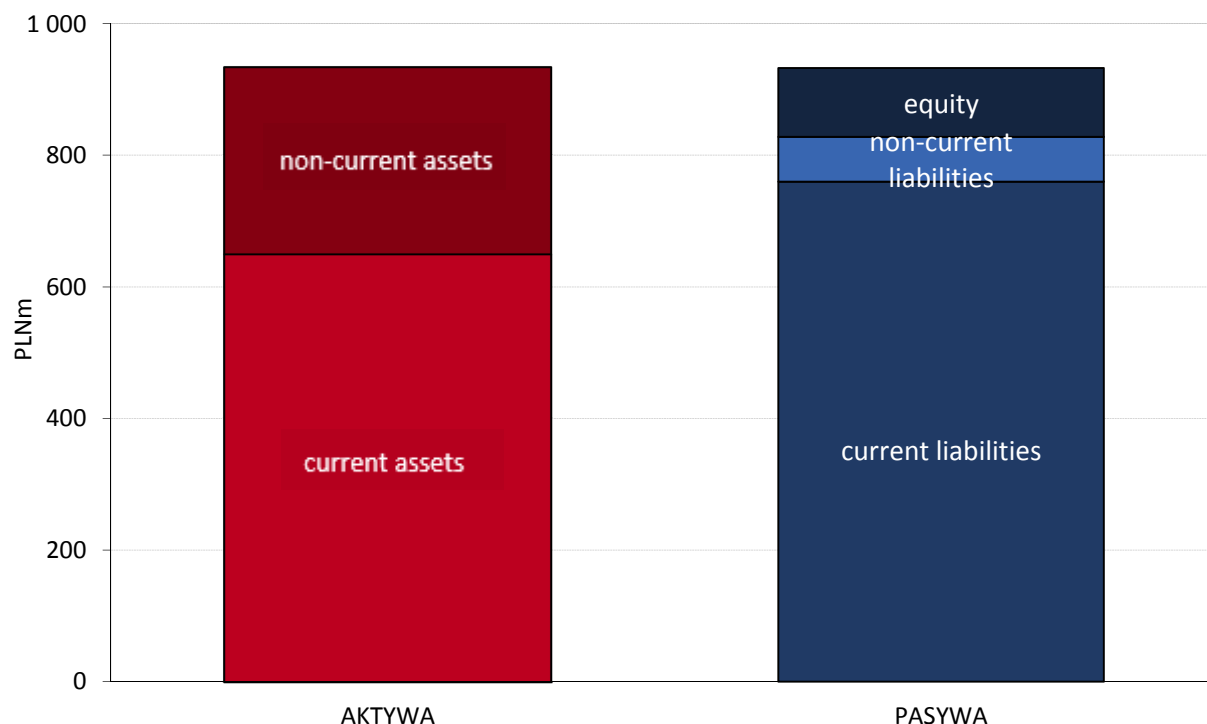
In the 12 months ended December 31st 2019, the Company's contingent receivables (mainly under performance bonds and advance payment guarantees) fell by PLN 6,761 thousand, including a PLN 2,647 thousand increase in receivables under bank and insurance guarantees, a PLN 5,643 thousand increase in letters of credit, and a PLN 1,529 thousand decrease in receivables under promissory notes. The largest item of guarantees obtained in 2019 was a USD 1,268 thousand advance payment guarantee. The largest guarantee which expired in 2019 was a EUR 1,004 thousand performance bond.

For details of changes in contingent receivables and liabilities, see Note 40 to the financial statements for 2019.

The 2019 and 2018 liquidity and debt ratios are presented in Appendix 1.



3.11. Assets financing structure



As at December 31st 2019, total assets were PLN 932,588 thousand, i.e. PLN 14,854 thousand more year on year. The most significant changes were seen in non-current assets, with long-term trade and other receivables growing by PLN 37,492 thousand, and deferred tax assets by PLN 922 thousand. As at the end of 2019, current assets were PLN 649,092 thousand, PLN 6,405 thousand less year on year.

Long-term capital (equity plus non-current liabilities) covered 60.9% of non-current assets.

As at December 31st 2019, the assets financing structure was as follows:

1. non-current assets of PLN 283,393 thousand were partly financed with long-term capital (60.9%), with the balance financed with current liabilities.
2. current assets (and non-current assets held for sale) totalling PLN 649,195 thousand were funded by current liabilities.

3.12. Non-current assets

3.12.1. Structure of non-current assets

The structure of non-current assets changed as a result of execution of investment projects, sale of assets, retirement or disposal of redundant property, plant and equipment, remeasurement of assets, and changes in the deferred tax asset. As at December 31st 2019 and December 31st 2018, it was as follows:

	December 31st 2018	December 31st 2019
1. Property, plant and equipment, including:	50.7%	43.8%
• land and buildings	32.8%	29.7%
• plant and equipment	15.9%	14.5%
• vehicles	2.0%	2.0%



• property, plant and equipment under construction	0.0%	0.0%
2. Intangible assets		2.3%
3. Right-of-use assets	3.6%	3.0%
4. Trade and other receivables	2.0%	15.1%
5. Shares	13.9%	11.0%
6. Other financial assets	13.8%	9.9%
7. Long-term prepayments and accrued income	2.1%	1.7%
8. Deferred tax assets	13.9%	13.1%

Land and buildings were the largest item of non-current assets, accounting for 29.7% of non-current assets and about 9% of total assets. Another important item was plant and equipment, with a 14.5% share in non-current at the end of 2019. Plant and equipment include mostly machinery, equipment and apparatuses used in manufacturing processes, as well as computer hardware.

In 2019, non-current assets increased by PLN 21,318 thousand (8.1%) on the previous year. The change was attributable to an increase in trade and other receivables (by PLN 37,492 thousand), to PLN 42,716 thousand, and an increase in deferred tax assets by PLN 922 thousand.

3.12.2. Key investments in property, plant and equipment

In 2019, the Company incurred capital expenditure on non-financial non-current assets of PLN 2,166 thousand, including:

- PLN 2,029 thousand on property, plant and equipment,
- PLN 137 thousand on intangible assets.

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

Capital expenditure on intangible assets mainly involved purchase of new software and licences for the Company's needs.

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

3.13. Current assets

In 2019, current assets fell by PLN 6,405 thousand, to PLN 649,092 thousand.

The change was mainly attributable to a decrease in other financial receivables and other non-financial receivables by PLN 25,397 thousand and PLN 25,535 thousand, respectively. Trade receivables increased by PLN 22,115 thousand, to PLN 202,051 thousand, cash and cash equivalents by PLN 18,513 thousand, to PLN 23,917 thousand, and short-term prepayments and accrued income by PLN 5,290 thousand.

In 2019, the Company did not grant any loans, and as at December 31st 2019 the Company had no receivables under loans.

3.14. Equity: amount and structure

As at December 31st 2019, RAFAKO S.A.'s equity was PLN 104,529 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 12 months ended December 31st 2019, the share capital did not change;
2. share premium of PLN 165,119 thousand (no change year on year);



3. statutory reserve funds were PLN 15,902 thousand (a PLN 4,302 thousand increase was attributable to net profit earned for 2018);
4. accumulated losses of PLN 331,356 thousand.

In 2019, the Company did not acquire own shares.

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

In the 12 months ended December 31st 2019, the Company established a new subsidiary RAFAKO EBUS Sp. z o.o., registered with the National Court Register on August 9th 2019 under entry No. 0000798943. The carrying amount of the shares in the new company is PLN 5 thousand. The amount of the share capital is PLN 5 thousand and is divided into 10 shares with a par value of PLN 500 per share. The shares were acquired for cash by RAFAKO S.A.

As at December 31st 2019, the Company's share in total voting rights in the subsidiaries was equal to the Company's holdings in the share capital of those entities.

4. Human resources and workforce

In 2019, the average workforce at the Group was 1,487 employees, that is 110 fewer on 2018.

	<i>December 31st 2018</i>	<i>December 31st 2019</i>
Employment structure at end of period	1,530	1,491
production	666	604
design office	212	200
technology office	56	55
quality control	67	68
maintenance	27	19
other employees (financial and accounting, sales and procurement, IT)	502	545

The Management Board attaches great importance to effective management of the staff competences and experience and to the delivery of the 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 December 31st 2019, the Company's employees with university and secondary education accounted for 69.1% of the workforce (December 31st 2018: 67.2%). As at December 31st 2019, university graduates accounted for 44.3% of the total workforce (December 31st 2018: 42%). The Vocational Training Centre at RAFAKO S.A. provides a constant inflow of blue-collar workers, and trains future locksmiths and welders in partnership with the Vocational Technical High School for Mechanical Studies of Racibórz.

Age structure of the workforce: the share of employees aged up to 40 years fell to 29.2% as at December 31st 2019, from 31.8% as at December 31st 2018; the share of employees aged between 41 and 50 fell slightly from 27.6% to 27.2%, while the share of employees aged over 50 increased from 40.5% to 43.6%.

The share of employees with over 10 years of service was 18.3%, a decrease of 1.1% year on year, while the share of employees with 11 to 20 years of service increased by 0.3%, to 20.1%, and the share of employees with over 20 years of service increased to 61.6%, from 60.8% as at the end of December 2018. The Company's workforce has a long-standing and unique professional experience.



5. Other information

For the statement of compliance with corporate governance rules by RAFAKO S.A. in 2019, see Appendix 8.

RAFAKO S.A. will publish a non-financial report pursuant to Art. 49b.11 of the Accounting Act of September 29th 1994 (Dz.U. of 1994, No. 121, item 591, as amended) that will cover RAFAKO S.A. and its subsidiaries. The non-financial report of the RAFAKO Group will be published on the website of RAFAKO S.A.

For information on the amount of remuneration, awards and benefits for members of the Management Board and Supervisory Board, see Note 43.8 to the financial statements of the Company.

The Company has entered into an employment contract or a management contract with each member of the Management Board; the contracts include provisions on compensation for dismissal or resignation.

A member of the Management Board who is for any reason removed from office during their contract term (except where such removal is caused by the member's failure to properly discharge their duties under the contract, or by wilful or negligent conduct adversely affecting the Company's business), or whose contract has been terminated or expired, is entitled to a one-off termination payment equal to their six months' remuneration.

The Company will also pay non-compete compensation to members of the Management Board, equal to 50% of their monthly remuneration, for six months following the date of removal, expiry of mandate or end of the notice period. The parties may resolve to waive the non-compete clause.

Notice periods under employment contracts are governed by the Labour Code. Upon contract termination by the Company, an employee is entitled to receive a severance payment equal to three months' or six months' salary, depending on the length of service.

For information on the number of shares in RAFAKO S.A.'s related entities held by members of the Management Board and Supervisory Board, see Note 43.1 to the Company's financial statements.



III. Key events and developments in 2019 and in the period from the end of the financial year to the date of the report

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

1. Contract with TAURON (Jaworzno Power Plant)

On April 17th 2014, RAFAKO S.A., acting as the leader of a consortium with Mostostal Warszawa S.A., executed a contract with Tauron Wytwarzanie S.A. for the construction of a power generating unit at the Jaworzno III Power Plant - Power Plant II. The contract price is PLN 4.5bn, VAT exclusive. 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	Unit's components
<p>Supercritical pulverised-fuel, tower-type, once-through steam generator,</p> <p>Unit's nominal output (gross) – 910 MW,</p> <p>Generator's rated thermal input – 1,832 MWt,</p> <p>Rated capacity – 2,390 t/h,</p> <p>Temperature of steam at outlet (live/superheated) – 603/621°C,</p> <p>Pressure of live steam at outlet – 28.5 MPa,</p> <p>Pressure of superheated steam at outlet – 6.2 MPa,</p> <p>Efficiency in standard conditions >95%,</p> <p>Availability > 95%,</p> <p>Net generation efficiency > 45.91 %.</p>	<p>Superheated steam generator,</p> <p>Steam turbine powering the electricity generator,</p> <p>Feed water pump system,</p> <p>Systems designed to meet the sulfur dioxide, nitric oxide and dust emission standards specified in the Industrial Emissions Directive (IED),</p> <p>Systems for disposal of combustion waste, as well as for delivery and preparation of various auxiliary media.</p>

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 events in 2019 and 2020



2019	
February	Completion of installation of an FGD unit
June	Closing the operation of plant and machinery to enable steam blasting of the boiler
July	Execution of annex 6 to the master contract and the subcontractor agreement; under the annex, the contract price was increased by PLN 15,428,571.95, exclusive of VAT. In addition, certain contract milestones were sub-divided and their completion deadlines were changed based on the most recent knowledge.
December	Annex 7 to the Master Contract and Subcontractor Agreement was signed, increasing the net contract price by PLN 52,308.4 thousand (VAT exclusive), extending the completion deadline for the Contract by 72 days, with the placement-in-service report to be signed by January 31st 2020, and introducing the Transitional Period, ending three months and 19 days after the signing of the placement-in-service report. On December 31st 2019, the unit was synchronised with the national power system, enabling power to be delivered to the grid.
2020	
February	The deadline for handing over the unit to operations, set for January 31st 2020 in the contract, was not met, because a failure occurred in the steam generator part of the unit during a test run. The emergency committee determined that the failure was caused by a sequence of adverse events which could not, individually, lead to the failure.
May	An agreement was signed on cooperation in investigating the causes of and repairing the failure in the steam generator part of the unit.
June	Annex 8 to the Jaworzno contract was signed to ensure that the unit is promptly and successfully handed over to operations. Annex 8 introduced a new schedule for performance of the contract, confirming November 15th 2020 as the date the unit is to be handed over for use. The parties also agreed to execute a separate annex/agreement to define their other mutual obligations, including with respect to financial settlements. Taking into account all circumstances associated with these events, the Management Board is of the view that both the estimated costs to repair the failure and the costs of contract extension that need to be incurred to complete the contract will be covered from compensation payments and from payments of reasonable claims granted against the Employer. Given these material uncertainties, as at the date of signing of these financial statements the Management Board was unable to determine the outcome of the contract, including whether a loss will be incurred.

In its separate financial statements, RAFAKO S.A. recognises only revenue and expenses related to its own scope of work, i.e. 11.3% of the total scope of work to be performed on the Jaworzno 910 MW Project. In its separate



financial statements, the Company does not recognise revenue and expenses related to the portion of work performed by E003B7 Sp. z o.o. The entire project is presented in the consolidated financial statements of the RAFAKO Group. By December 31st 2019, 89% of the Jaworzno Project's total value had been invoiced. For rules of accounting for the contract, see Note 11.1.1 to the financial statements.

2. Contract with PGE Elektrownia Opole

In February 2012, RAFAKO S.A., acting as the leader of a consortium comprising RAFAKO S.A., Polimex-Mostostal S.A. and Mostostal Warszawa S.A. executed a PLN 9.4bn contract with PGE Elektrownia Opole S.A. (currently PGE Górnictwo i Energetyka Konwencjonalna S.A. – the “employer”) for turn-key design, delivery, construction, assembly, start-up and performance of all related services with respect to a facility consisting of power unit No. 5 and power unit No. 6 (each with a capacity of 900 MW) at PGE Elektrownia Opole S.A., together with equipment and devices as well as all related buildings and structures.

The subsidiary E001RK Sp. z o.o. (“SPV-Rafako”) was appointed by RAFAKO S.A. as its subcontractor responsible for 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 by RAFAKO S.A.) entered into a subcontractor agreement with GE Power (Ge Power Sp. z o.o; previously Alstom Sp. z o.o.). Under the agreement, E001RK Sp. z o.o. appointed GE Power as its subcontractor responsible for 100% of the work and services making up RAFAKO S.A.'s scope of work under the Opole Project. 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 liquidated damages resulting from, inter alia, failure to comply with the project schedule, passed to GE Power.

On January 31st 2014, the consortium received from the employer a notice to proceed with the project execution. The units were handed over to operations by June 15th 2019 and by September 30th 2019.

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



3. Other significant contracts

15-02-2019

- A consortium comprising RAFAKO S.A. PBG oil and gas Sp. z o.o. (consortium member) signed a contract with Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A. of Warsaw for construction work under the project to build the Kędzierzyn Compressor Station. The VAT-exclusive contract price is PLN 168.7m, with the Company's share accounting for 95% of this amount. The time for performing the Contract is 25 months from its date.

16-04-2019

- RAFAKO S.A. signed a contract for the construction of St. John Paul II MEMORY AND IDENTITY Museum in Toruń. The VAT-exclusive contract price is PLN 117.7m. The project completion deadline is 100 weeks from the contract date.

17-04-2019

- RAFAKO S.A. and TAURON Wytwarzanie S.A. executed a contract for the 'Construction of Flue Gas Desulfurisation Systems on power generating units 2 and 3 at the Jaworzno III Power Plant - Power Plant II branch'. The VAT-exclusive contract price is PLN 84.95m. On March 25th 2020, the employer announced termination of the contract. The parties are in the process of calculating amounts due between them.

12-06-2019

- RAFAKO S.A. signed a contract with JSW KOKS S.A. for the construction of a coke gas-fired power generating unit at JSW KOKS S.A.'s Radlin Coking Plant Branch under JSW KOKS S.A.'s energy efficiency improvement programme. The VAT-exclusive contract price is PLN 289m. The project completion deadline is 29 months from the contract date.

5-09-2019

- RAFAKO S.A. signed a contract with PGE Górnictwo i Energetyka Konwencjonalna S.A. for a comprehensive upgrade of flue gas desulfurisation systems on units 8-12 at the Bełchatów Power Plant Branch of PGE GiEK S.A. The VAT-exclusive contract price is PLN 244.94m. The time to complete the contract is 28 months from its date.

20-12-2019

- RAFAKO S.A. announced that the Company qualified for Phase III of the 200+ Units Programme. Innovative technology to change operational regime of 200 MWe power generating units; The total amount granted by the NCBIR to finance the work performed under Phase III is PLN 86.55m (VAT inclusive).

17-03-2020

- RAFAKO S.A. announced that it had signed a contract with JP Elektroprivreda Srbije to upgrade the BB-2000 steam generator for the TENT B1 Obrenovac Power Plant in Serbia. The contract prices is approximately EUR 34.4m (VAT- exclusive), with the share of RAFAKO S.A. and its subsidiary RES Belgrad amounting to approximately EUR 17.35m (VAT-exclusive), of which RAFAKO's share is approximately EUR 14.6m (VAT-exclusive). The completion date for the upgrade and start-up of the steam generator is November 2021.

RAFAKO S.A.



4. Other material events

25-04-2019

- RAFAKO S.A. and HSBC France, Poland Branch of Warsaw, executed an annex to the bank guarantee facility agreement, extending the term of the facility until April 24th 2020 and extending the validity period of guarantees issued under the agreement until April 24th 2025.
- Pursuant to the Agreement, the Bank has provided RAFAKO with a bank guarantee facility, under which RAFAKO may instruct the Bank to issue guarantees within a facility limit of EUR 24.47m. 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: bid bonds, advance payment bonds, performance bonds and warranty bonds.
- 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.

28-06-2019

- RAFAKO S.A. executed an annex to a credit facility agreement with Powszechna Kasa Oszczędności Bank Polski S.A. of Warsaw. Under the annex, the multi-purpose credit facility limit was set at PLN 200m, including an overdraft facility of up to PLN 70m (from February 1st 2020 – up to PLN 50m), a working capital facility of up to PLN 44m, a bank guarantee facility of up to PLN 150m (from February 1st 2020 – up to PLN 170m), and a revolving working capital facility of PLN 170m to cover amounts due by the Company to the Bank in respect of payments made under bank guarantees issued by the Bank. The annex extended the facility's term and maturity date until June 30th 2020.
- 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 31 to the financial statements.

14-09-2019

- RAFAKO S.A. announced that it had passed a resolution to establish a branch in Solec Kujawski.

16-01-2020

- RAFAKO S.A. entered into a cooperation agreement with Agencja Rozwoju Przemysłu S.A., setting out the terms of cooperation between the parties and initiating talks aimed at obtaining a business plan and valuation for Agencja Rozwoju Przemysłu S.A. and RAFAKO S.A. The documents will be used for the purposes of a proposed transaction to sell the Solec Kujawski Branch by RAFAKO S.A. The business objects of the latter will be the manufacture and sale of electric vehicles, provision of design services, and related research and development work.
- RAFAKO granted Agencja Rozwoju Przemysłu S.A. exclusive rights to negotiate and carry out the transaction until June 30th 2020. On June 29th 2020, the Company received a preliminary proposal setting out the scope and terms of the transaction and the other party's expectation that the exclusivity period be extended until July 31st 2020.

25-05-2020

- The administrator of PBG S.A. w restrukturyzacji of Wysogotowo gave notice to RAFAKO S.A. and PFR TFI S.A. (the manager of the closed-end investment fund Fundusz Inwestycji Polskich Przedsiębiorstw Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych) of its intention to sell a holding of RAFAKO S.A. shares conferring in total 33.32% of voting rights at the Company's General Meeting, comprising 7,665,999 shares held by PBG S.A. and 34,800,001 shares held by Multaros Trading Company Ltd. ("Multaros").

28-05-2020

- Acting pursuant to Art. 397 of the Commercial Companies Code, given the recognition of a cumulative loss of approximately PLN 304.7m, that is a loss exceeding the aggregate amount of RAFAKO S.A.'s statutory reserve funds, capital reserves and one-third of its share capital by PLN 38.7m, the Company's Extraordinary General Meeting resolved that the Company would continue in existence.



5. Research & development and quality improvement projects

In its R&D activity, RAFAKO S.A. partners with the academic community, including the Wrocław University of Technology, Silesian University of Technology, Cracow University of Technology, AGH University of Science and Technology, Institute of Fluid-Flow Machinery of the Polish Academy of Sciences, Institute for Chemical Processing of Coal, and other scientific and research institutions. Key initiatives in this area rely on cooperation with a number of entities on projects commissioned by the National Centre for Research and Development and by InnoEnergy – Knowledge & Innovation Community.

The Company's research and development activity has two directions: improvement of the products in the current offering and search for completely new products for new markets.

The former seeks to ensure that the Company keeps pace with emission reduction requirements.

Design methodologies and a technology for revamping 200 and 360 MWe units were developed in 2019 with a view to creating innovative low-emission coal-fired plants as a source of standby capacity.

Work on the following projects was completed:

- CO₂-SNG – CO₂ methanation for storage of cheap, surplus energy through SNG production (with InnoEnergy's co-financing);
- Polygen – a municipal polygeneration system fired with biomass and refuse-derived fuel (financed by InnoEnergy);
- The new product development projects implemented in 2019 and continued in 2020:
- 200+ Units Programme – innovative technology to change operational regime of 200 MWe power generating units (phase II was completed, and the project design was developed);
- Shockwave – shockwave technology (low input, comprehensive technology for removing components covered by emission restrictions from flue gas produced by steam generators);
- Mercury concentration in flue gas treatment media – examination of the degree of mercury precipitation in flue gas treatment systems.

The technologies available to RAFAKO S.A. allow it to continuously increase production capacities and the range of services provided, improve the quality of its products, and reduce the costs of operations.

The new product development initiatives included the project to build an 8.5 metre-long electric bus that was launched back in 2017. The key developments in the E-BUS project in 2019 included:

- presentation of the vehicle at the Silesia fair in Sosnowiec, with the first prize of the fair and an honourable mention awarded to the project;
- test drives of an 8.5-metre bus are launched;
- full vehicle certification is obtained, permitting the vehicle to be used on public roads to carry passengers;
- presentation of the bus at the Busworld international fair in Brussels and selected as one of the top 12 most innovative vehicles;
- design and implementation work on prototype 2 (an 8.5m school bus) is conducted;
- agreement is signed between RAFAKO S.A., RAFAKO EBUS and Agencja Rozwoju Przemysłu to participate in a procedure run by the NCBiR.

In 2020, the 8.5-metre vehicle has been tested by the municipal transport company of Racibórz, the Gietrzwałd Municipality and Arriva Polska. At present, the tender procedures announced in 2020 are being analysed.

The Solec Kujawski Branch was established by a resolution of October 14th 2019. On February 1st 2020, a resolution was passed to transfer employees and assets and liabilities related to the E-bus project to the Solec Kujawski Branch. Work is under way on the planned transaction to sell the spun-off assets and liabilities of the E-bus project to ARP. On June 29th 2020, the Company received a preliminary proposal setting out the scope and terms of the transaction and



the other party's expectation that the exclusivity period be extended until July 31st 2020 (see Section 4). The transaction will have a positive effect on the Company's liquidity position.

6. Other information

The Company did not launch any employee share option schemes.

In 2019, no changes were made to the key policies on managing the Company.

For information on the agreement with the qualified auditor of financials statements, see Note 44 to the financial statements.

7. Disputes, pending litigation, arbitration or administrative proceedings

For information on material disputes and litigation, see Note 42 to the financial statements.



IV. Growth prospects

1. Energy policy

The energy market

The energy market, both in Poland and abroad, is the core market for RAFAKO S.A.

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 CO₂ 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 RAFAKO S.A.

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.

According to the Energy Union (2015), the five main aims of the EU's energy policy are to:

- Ensure the functioning of the internal energy market and the interconnection of energy networks;
- Ensure security of energy supply in the EU;
- Promote energy efficiency and energy saving;
- Decarbonise the economy and move towards a low-carbon economy in line with the Paris Agreement;
- Promote the development of new and renewable forms of energy to better align and integrate climate change goals into the new market design;
- Promote research, innovation and competitiveness.

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

Poland's Energy Policy until 2040, prepared by the Ministry of Economy, plays a major role in setting the development directions for the energy sector. The objectives set out in the draft document include:

- 56%–60% share of coal in electricity generation by 2030;
- 21%–23% share of RES in final gross energy consumption by 2030;
- implementation of nuclear power generation by 2033;
- 30% reduction in CO₂ emissions by 2030 (relative to the 1990 level);
- 23% increase in energy efficiency by 2030 (relative to the 2007 primary energy forecast).

The need to diversify the structure of electricity generation will contribute to reducing the share of coal in Poland's energy mix.

New coal-fired generating units built after 2025 will use technology meeting the emission standard of 450 kg of CO₂ per MWh of energy output. In order to ensure efficient use of fuels and mitigate the adverse environmental



impacts, new methods for the use and processing of coal (gasification, oxyfuel combustion, other clean coal technologies) will be sought and implemented.

Further advancement of photovoltaics (particularly after 2022) and offshore wind farms (the first offshore wind farm will be launched around 2025) will play a crucial role in the power generation industry given the increased cost-effectiveness of these energy sources and the expected increase in market flexibility necessary for RES development.

Utilisation of non-agricultural waste for energy generation should also increase, With sludge, industrial waste meeting the statutory definition of hazardous waste (including hospital waste) and municipal waste offering the biggest potential. The use of biomass in power generation will increase considering the growing volumes of biowaste and the tightening of bio-waste storage regulations.

Given their desired environmental impact, no cost burden of climate and environmental policies and stability of generation, nuclear power sources will be integrated into the power system. Poland's first nuclear power reactor (with a capacity of approximately 1–1.5 GW) will be launched around 2033. Another five reactors with a total capacity of 5–7.5 GW will be launched every two to three years.

Oil and gas market

In line with its strategy adopted in early 2018, the RAFAKO S.A. also intends to focus on the oil and gas 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 implementation of Poland's energy policy objectives. 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 demand for natural gas will be growing as it can be used as fuel in power plants and generates lower emissions relative to other fossil fuels.

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.

Diversification of gas supply directions and sources is to be achieved through the following two key projects:

- construction of the Northern Gate,
- expansion of connections with the neighbouring countries.

This will create favourable conditions for developing a gas transmission and trade centre in Poland for CEE and Baltic countries. An expansion of the national network and storage infrastructure is also necessary.

Gas Storage Poland Sp. z o.o., wholly-owned by PGNiG S.A., acts as the natural gas storage system operator.

In the coming years, the natural gas infrastructure is going to be expanded both in Poland and in Europe.

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.

On February 22nd 2019, the Sejm (lower house of the Polish parliament) passed a special act on preparing and implementing strategic projects in the oil sector. The new act, which simplifies the procedures for obtaining the necessary administrative approvals, is designed to facilitate the preparation and, consequently, the implementation of the projects strategic to Poland's energy security, such as the construction and upgrade of oil and fuel pipelines.

2. Investment plans



According to the conclusions from forecast analyses performed for the purposes of Poland's Energy Policy until 2040, demand for electricity in Poland is expected to grow. Power was generated largely from conventional fuels (hard coal and lignite). In the next dozen or so years (especially after 2029) a significant part of the currently operated generating units will be decommissioned. This process is driven by the wear and tear of power generating units and tightening of the EU environmental standards. The increase in demand for electricity will be covered by sources other than conventional hard coal- and lignite-fired power plants. To meet the growing demand for electricity, in view of the significant decommissioning prospects, the capacity market has been implemented as an investment stimulus to ensure the stability of supplies.

Given the expected phase-out of existing capacities in the Polish power system, 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 completed the construction of new units at the Opole Power Plant (two units with a capacity of 900 MW each). The project to build a 450 MW lignite-fired unit at the Turów Power Plant is nearing completion. On January 30th 2020, a contract was signed to build two CCGT units with a total capacity of 683 MWe each at the Dolna Odra Power Plant.

The PGE Group aims to preserve leadership in the RES segment and secure an approximately 25% share of domestic RES generation by 2030. To that end, the PGE Group intends to implement highly advanced onshore wind farm projects and an offshore wind farm project with a capacity of approximately 1,000 MW, and to expand its distributed generation business.

The Group's 2018–2023 capex budget amounts to approximately PLN 6.9bn, including ca. PLN 3.2bn to be spent on advancing new initiatives and approximately PLN 0.8bn to be spent on expanding district heating networks and generation assets in current locations. Environmental and maintenance expenditure will amount to approximately PLN 2.9bn.

The 2024–2030 capex plan of approximately PLN 10.6bn comprises growth capex of ca. PLN 8.1bn and environmental and maintenance capex of PLN 2.5bn.

New strategic directions for the Tauron Group are based on developing clean energy sources, as a foundation for creating the Tauron Group's value. By 2025, the Tauron Group plans to invest in the construction of onshore wind farms (a capacity addition of 900 MW), photovoltaic sources (a capacity addition of 300 MW) and offshore wind projects. Once completed, these projects will increase the share of low- and zero-emission sources in the volume of electricity generated by the Tauron Group to nearly 30% in 2025 and more than 65% in 2030.

The Enea Group plans to invest over PLN 64bn by 2035. Projects to build new generation capacities intended to support its low-carbon transition will require capital spending of PLN 22bn, with PLN 14.7bn earmarked directly towards renewable energy sources. The Enea Group's total installed capacity will gradually increase to 8,287 MW in 2030. Once the strategic goals are delivered, its installed capacity will reach 9,672 MW by 2035. The Enea Group has set itself a target of 60% of electricity output coming from gas-fired and renewable energy sources by 2035.

The Energa Group is expanding its onshore wind capacities and developing photovoltaic projects, while its long-term plans are to engage in offshore wind projects.

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 8 waste incineration plants in operation in Poland (in Warsaw, Białystok, Bydgoszcz, Konin, Kraków, Poznań, Szczecin, and Rzeszów). Further local governments, including but not limited to those in Gdańsk, Olsztyn and Wrocław, are contemplating the construction of such facilities.

Also the PGNiG Group has plans to invest (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. PGNiG's plans also include expansion of gas storage capacities.

Gaz-System plans capital expenditure of PLN 11bn in 2019–2022. In the 2020–2029 Development Plan, Gaz-System envisages more than 30 major projects, which will increase the length of the national transmission network from 11,000 km to approximately 14,800 km. The document sets two time horizons: until 2023 and until 2029. In the first one, the ongoing investment programmes defined in the previous plan for 2018–2027 are to be continued. The programmes include in particular those related to diversification of natural gas supplies to Poland, that is the Baltic Pipe programme, expansion of the LNG terminal in Świnoujście, construction of a connection with Lithuania, and construction of the North-South Corridor, which includes opening a connection with Slovakia. In Poland, the Baltic Pipe programme provides for construction of a link between the Baltic Pipe and the Polish transmission system and a gas pipeline connecting Goleniów and Lwówek, expansion of the gas compressor stations in Goleniów and Odolanów, and construction of a new gas compressor station in Gustorzyn. The second time horizon (until 2029) will be the time for carrying out investment projects whose implementation will depend on the development of gas markets in Poland and the region.

The PERN Group's business consists in the operation of the pipeline network, storage and distribution of crude oil and petroleum products, including fuels. Its Long-Term Strategic Plan for 2018–2022 provides for the Group's capital expenditure of PLN 3.1bn. The strategy also provides for increasing the scale of PERN's operations and ensuring a stable increase in revenue and financial resources for the execution of key projects. The capex plan envisages the construction of new fuel and oil storage capacities and new pipelines. Some of the key projects planned for 2020 include expansion of the Gdańsk Oil Terminal, expansion of the fuel and oil storage capacities and construction of the Boronów- Trzebinia pipeline.

Major growth projects have also been announced by the ORLEN Group, including the expansion of the Płock and Włocławek plants.

Some of the capital projects may be cancelled or postponed due to the COVID-19 epidemic.

3. Competitive environment

RAFAKO S.A. operates on a market dominated by large, mainly international players. On this market, contracts are typically awarded through tenders announced by clients, and projects usually take several years to complete.

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

There is considerable competition in terms of the products and services which are part of EPC projects. Each company which the Company considers 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 RAFAKO S.A. Complete power generating units are constructed by: GE Power, Alstom Power Systems, Mitsubishi Hitachi Power Systems Europe, Doosan Power Systems, COVEC, CNEEC, 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, as well as RAFAKO S.A., offer products necessary to construct complete generating units that can run on any kind of fuel.

With respect to specific products, such as steam generators, desulfurisation units, NOx reduction units, dust removal units, waste incineration facilities and oil and gas facilities, RAFAKO S.A.'s main competitors are Polimex Energetyka, Polimex Mostostal, Budimex, Erbud, SBB Energy, SES Tlmace, Bertsch, Aalborg, Sefako, Fakop, Energoinstal, Duro Djakovic, Stabo, Mostostal Warszawa, Control Process, GE Power, Mitsubishi Hitachi Power Systems Europe, Remak Energomontaż, Yara, Instal-Filter, Balcke-Dürr Polska, ELWO Engineering, Eco Instal, Hitachi Zosen Inova, CNIM, Steinmueller Babcock, TM.E..



Furthermore, given the nature of large EPC contracts, it cannot be ruled out that RAFAKO S.A. 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 desulfurization units.

4. Factors and developments relevant for the Company's prospects in 2020

In 2020, the following factors and developments will have the greatest bearing on the Company's development and prospects:

- completion of the 910 MW supercritical power generating unit at the Jaworzno Power Plant,
- implementation of the divestment and cost optimisation programmes,
- securing financial liquidity and obtaining access to new bank/insurance guarantees that will enable the Group to perform new contracts,
- making good progress on the construction of a biomass-fired co-generation unit in Vilnius (Lithuania),
- progress in the construction of two coal-fired steam units (2x50 MW) on the Lombok Island, Indonesia,
- performance of a large number of significant contracts in the Polish and European markets, including construction of modern steam generators, flue gas desulfurisation and NOx reduction units, and pressurised parts of steam generators,
- performance of new contracts in the natural gas and oil segment,
- acquisition of new material contracts.

It should also be noted that as part of cooperation with KPMG, initiated in December 2019, an independent assessment of the Company's and the RAFAKO Group's contracts was carried out, the correctness of the Company's financial model was reviewed, and an independent medium-term liquidity model for the Company was prepared. The outcome of the accounting firm's work, as well as the steps taken to change the contract reporting model, have enabled the Company to identify the risks involved in the projects it is carrying out and the measures it must promptly take to minimise losses. The outcome will also contribute to the stabilisation of the Company's and the Group's reported performance.

The Company has also undertaken an analysis aimed at redefining and streamlining its own and the RAFAKO Group's product portfolio and individual business lines based on operational efficiency and market outlook criteria and indicators.

The World Health Organisation declaring the coronavirus outbreak a pandemic prompted many governments to introduce various restrictions aimed at limiting spread of the disease. Shortly after the state of epidemic was announced in Poland in mid-March 2020, the Company adapted to the situation to the largest extent possible. In order to ensure that the highest safety standards are met, a Crisis Management Team has been established, which monitors the situation on an ongoing basis, takes decisions and prepares operating guidelines related to the risk of coronavirus infection. Based on the guidelines from the Ministry of Health and Chief Sanitary Inspector, the sanitary rules have been tightened both at the Company's headquarters and at the contract performance sites, where additional sanitary procedures have been implemented by the employers.

Despite these efforts, the epidemic has affected the performance of contracts by the Company. This holds true particularly for subcontracted work and foreign supplies. The impact of the epidemic is being analysed and estimated in consultation with project owners on a case-by-case basis.

As at the date of these financial statements, the future development of the epidemic in Poland and globally and its impact on the Company's operations and financial results are unknown and cannot be predicted. Taking into account the gradual easing of lockdown restrictions, the dedicated team is monitoring the situation on an ongoing basis and takes appropriate measures to mitigate its adverse impacts on the Company's operations, and its priority is to maintain business continuity and keep employees and stakeholders safe.



The Company plans no major capital expenditure in 2020. Some capital spending has been earmarked for research and development work, mainly the 'E-bus – an innovative small electric bus' project. The capex projects will be financed primarily with internally generated funds.

5. Order book

As at December 31st 2019, the value of RAFAKO S.A.'s order book was PLN 2,086m (an increase of PLN 108m on December 31st 2018).

RAFAKO S.A.'s order book does not contain a significant part of the Jaworzno 910 MW Jaworzno project executed by SPV Jaworzno with planned revenue of PLN 447m as at the end of December 2019.

At present, the order book comprises mostly power construction projects.

	ORDER BOOK (PLNm)			Due for execution in		
	as at December 31st 2018	as at December 31st 2019	2020	2021	after 2021	
RAFAKO	1,978	2,086	1,624	435	27	

As regards the value of RAFAKO S.A.'s order book, the data presented in these financial statements is based on the following assumptions:

- the value of the order book is equal to the aggregate amount of remuneration under the individual contracts executed by the RAFAKO Group in the period to December 31st 2019; the figure does not take into account any planned contracts that have not yet been signed, but it does take into account the contracts signed conditionally.
- the value of the order book is disclosed as at December 31st 2019; actual revenue from contracts and completion periods depend on a number of factors, which may be outside the Company'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 contract price 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 NO_x, SO₂ and dust emission standards, i.e. an SCR unit, an FGD 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.

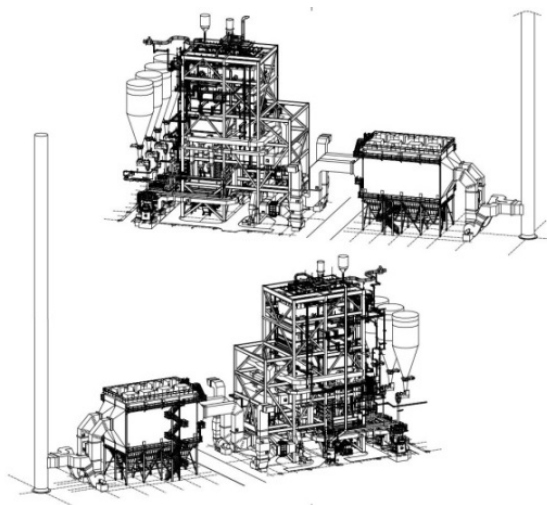
The contract was signed on September 29th 2016 with JSC Vilniaus Kogeneracinė Jėgainė. The notice to proceed (“NTP”) was set for June 1st 2017.

The current contract price is EUR 149m.

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 PLN 850.3m in total, VAT exclusive), including the remuneration of RAFAKO S.A., amounting to EUR 70.3m 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.

4) Construction of a coke gas power generation unit for JSW KOKS S.A. of Radlin

In June 2019, the Company signed a contract for the ‘Improvement of energy efficiency at JSW KOKS S.A. – Construction of a coke gas power generation unit’ project at JSW KOKS S.A. KKZ Branch - Radlin Coking Plant.

The project will consist of two steam generators, a condensing-extraction steam turbine, a power generator and a set of auxiliary facilities.

The contract price is PLN 289m, and the project completion deadline is 29 months from the contract date.

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 289.6m.





2) Upgrade of 3-6" FGD unit for PGE Górnictwo i Energetyka Konwencjonalna S.A.

The project consists of a comprehensive upgrade of the flue gas desulfurization systems on units 3, 4, 5 and 6. The VAT-exclusive value of the order is PLN 181.6m.

The work began with upgrading FGD absorbers and accessories, process pipelines and other equipment on units 3 and 4. As a result of this work, the FGD systems on units 3 and 4 were handed over to operations in a timely manner. Preparations are being made for work to start on the FGD systems in units 5 and 6.

The project completion date is scheduled for December 2021.

3) Upgrade of 8-12" FGD unit for PGE Górnictwo i Energetyka Konwencjonalna S.A.

The project consists of a comprehensive upgrade of the flue gas desulfurisation systems on units 8–12, to be completed in five phases. The VAT-exclusive contract price is PLN 244.9m. The project completion date is January 2022.

4) Construction of flue gas desulfurization unit (FGD II) at Ostrołęka Power Plant B

On July 24th 2018, a contract was signed for the construction of a wet lime and gypsum flue gas desulfurisation unit at Ostrołęka Power Plant B. The contract is performed by a consortium comprising RAFAKO and ENERGA Serwis Sp. z o.o. The portion of the contract price attributable to RAFAKO (consortium leader) is PLN 126m.

The completion date agreed in Annex 2 is August 2020.



Major contracts in the oil and gas segment:

1) 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 to construct section V Goleniów-Płoty of the DN 700 Szczecin-Gdańsk pipeline with auxiliary facilities and the necessary infrastructure for its operation.

The total contract price as at the execution date is PLN 125m, and the completion deadline is scheduled 24 months after that date.

2) Construction of the Kędzierzyn Compressor Station

On February 15th 2019, a contract for the construction of a compressor station in Kędzierzyn-Koźle was signed between Operator Gazociągów Przemysłowych GAZ-SYSTEM S.A. and RAFAKO S.A.

The VAT-exclusive contract price is PLN 168m. The contract is to be completed within 25 months.

Other contracts of significant value:



1) Construction of St. John Paul II MEMORY AND IDENTITY Museum in Toruń

The contract provides for the design and construction of a complex comprising a museum, an auditorium and scientific and creative sections of the compound, with facilities. The contract was signed by the parties on April 16th 2019.

The contract price is PLN 117m, and the project is to be completed within 100 weeks.





Management Board's statement

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

- 1) to the best of their knowledge, the financial statements for the year ended December 31st 2019, as well as comparative data for the year ended December 31st 2018, were drawn up in compliance with the applicable accounting standards and give a true, fair and clear view of the Company's assets, its financial condition and performance, and that the Directors' Report on the operations of RAFAKO S.A. gives a true view of the Company's development, achievements and standing, including a description of key risks and threats;
- 2) the auditor of the full-year financial statements, being an entity qualified to audit financial statements, was appointed in compliance with the applicable laws, and the auditing firm and the auditors who conducted the audit satisfied the auditor independence criteria to deliver an unbiased and independent auditor's opinion on the audited full-year financial statements, in compliance with the applicable laws and professional standards.

Signatures of Management Board members

.....
Agnieszka Wasilewska-Semail
*acting President of the Management Board of
RAFAKO S.A.*

.....
Radosław Domagalski-Łabędzki
Vice President of RAFAKO S.A. Management Board

.....
Jacek Drozd
Vice President of RAFAKO S.A. Management Board

.....
Michał Sikorski
*Member of the Supervisory Board
delegated
to serve on the Management Board*



June 30th 2020



General
information



Economic and
financial condition



Key developments



Growth prospects



RAFAKO S.A.
ul. Łąkowa 33
47-400 Racibórz, Poland
www.rafako.com.pl