

Ideen.  
Gemeinsam.  
Umsetzen.



## MANAGEMENT REPORT

# 2016



# KEY FIGURES

## 2016 FINANCIAL YEAR

### TRIANEL GMBH (INDIVIDUAL FINANCIAL STATEMENTS) In € millions

	2016	2015*	Changes, absolute
Sales	2,136	2,127	9
Sales before balancing	4,631	4,484	147
EBT	-3.2	0.2	-3.4
Annual net income	-4.1	0.1	-4.2
Equity	83.9	88.1	-4.2
Equity ratio	23.9 %	27.7 %	-3.8 %
Balance sheet total	351.5	317.7	33.8
Investments	7.5	15.3	-7.8
Employees	347	340	7

### TRIANEL GMBH (CONSOLIDATED FINANCIAL STATEMENTS) In € millions

	2016	2015*	Changes, absolute
Group external sales	2,173	2,128	45
Group external sales before balancing	4,667	4,485	182
Consolidated annual net income	-4.1	0.2	-4.3

\* The sales proceeds of the previous year were adapted according to the new definition per the Reporting Guideline Implementation Act (BilRUG).

# MANAGEMENT REPORT

---

2016

<b>Summarised management report of Trianel GmbH</b>	<b>5</b>
<b>Financial Statements of Trianel GmbH</b>	<b>35</b>
<b>Consolidated Financial Statements</b>	<b>57</b>
<b>Publishing details</b>	<b>60</b>

---

**“Trianel GmbH’s business activities aim to enhance the competitiveness and therefore independence of municipal utilities.”**

---

# SUMMARISED MANAGEMENT REPORT OF TRIANEL GMBH

---

<b>Company situation</b>	<b>6</b>
Business model	6
Strategy and management of the company	11
<b>Economic report</b>	<b>14</b>
General conditions	14
Business development	16
Company situation	17
<b>Report on forecast, opportunities and risks</b>	<b>20</b>
Forecast	20
Opportunity report	24
Risk report	26
<b>Supplementary report</b>	<b>32</b>
<b>Reporting</b>	<b>33</b>

# A. COMPANY SITUATION

## 1. BUSINESS MODEL

### 1.1 Legal corporate structure

In the 2016 reporting year, Trianel GmbH's shareholder structure remained stable. As of 31 December 2016, the company's share capital is € 20,152,575.

The following presentation gives an overview of the 56 shareholders with participating interests in Trianel GmbH as of the balance sheet date.

Energie- und Wasserversorgung Mittleres Ruhrgebiet GmbH, Bochum	24.69 %	BBSW Energie GmbH, Steinheim	0.50 %
Stadtwerke Aachen AG	11.97 %	ENNI Energie & Umwelt Niederrhein GmbH	0.50 %
RhönEnergie Fulda GmbH	7.44 %	Gemeindewerke Steinhagen GmbH	0.50 %
Stadtwerke Bonn GmbH	5.81 %	Osterholzer Stadtwerke GmbH & Co. KG	0.50 %
Stadtwerke Lübeck Holding GmbH	5.12 %	GWS Stadtwerke Hameln GmbH	0.50 %
SWU Energie GmbH, Ulm	4.78 %	Schleswiger Stadtwerke GmbH	0.50 %
Stadtwerke Energie Jena-Pößneck GmbH	2.99 %	Stadtwerke Bad Salzflen GmbH	0.50 %
NEW Viersen GmbH	2.87 %	Stadtwerke Dachau	0.50 %
N.V. HVC, Netherlands	2.48 %	Stadtwerke Elmshorn	0.50 %
enwor – energie & wasser vor ort GmbH, Herzogenrath	2.21 %	Stadtwerke Gronau GmbH	0.50 %
Salzburg AG für Energie, Verkehr und Telekommunikation, Austria	1.76 %	Stadtwerke Mosbach GmbH	0.50 %
Allgäuer Überlandwerk GmbH	1.74 %	Stadtwerke Rüsselsheim GmbH	0.50 %
Stadtwerke Halle GmbH	1.57 %	Stadtwerke Sindelfingen GmbH	0.50 %
SWT Stadtwerke Trier Versorgungs-GmbH	1.49 %	Stadtwerke Tuttlingen GmbH	0.50 %
Stadtwerke Heidelberg GmbH	1.24 %	Stadtwerke Wedel GmbH	0.50 %
Nvb Nordhorner Versorgungsbetriebe GmbH	1.19 %	T.W.O Technische Werke Osning GmbH	0.50 %
Trianel Suisse AG, Switzerland	1.18 %	Stadtwerke Bad Pyrmont Beteiligungs und Bäder GmbH	0.37 %
Stadtwerke Hamm GmbH	1.12 %	Stadtwerke Uelzen GmbH	0.37 %
Stadtwerke Solingen GmbH	0.99 %	Stadtwerke Detmold GmbH	0.36 %
Stadtwerke Lindau (B) GmbH & Co.KG	0.97 %	Stadtwerke Unna GmbH	0.33 %
GSW Gemeinschaftsstadtwerke GmbH Kamen, Bönen, Bergkamen	0.83 %	Stadtwerke EVB Huntetal GmbH	0.30 %
Stadtwerke Aalen GmbH	0.74 %	Regio Energie Solothurn, Switzerland	0.30 %
Stadtwerke Borken/Westf. GmbH	0.74 %	Stadtwerke Soest GmbH	0.29 %
Stadtwerke Lünen GmbH	0.66 %	Stadtwerke Schwäbisch Hall GmbH	0.26 %
Energie- und Wasserversorgung Rheine GmbH	0.57 %	Stadtwerke Georgsmarienhütte GmbH	0.25 %
Hertener Energiehandelsgesellschaft mbH	0.54 %	Stadtwerke Herford GmbH	0.25 %
Stadtwerke Fröndenberg GmbH	0.53 %	Stadtwerke Lengerich GmbH	0.25 %
		Stadtwerke Verden GmbH	0.25 %
		Teutoburger Energie Netzwerk e.G., Hagen a.T.W.	0.25 %

Date: 31 December 2016

Taking into account the loss for the year of € 4,139 thousand for the 2016 financial year, Trianel GmbH has equity of € 83,938 thousand on the balance sheet date.

On the reporting date of 31 December 2016, Trianel GmbH had direct shares in 15 subsidiaries and participating interests.



\* After economic allocation | Date: 31 December 2015

As shown in the overview, Trianel GmbH holds shares in the following companies:

Gaskraftwerk Hamm GmbH & Co. KG, domiciled in Aachen, has operated the first municipal gas and steam turbine power plant with a capacity of 840 megawatts since 2008 in Hamm-Uentrop (North Rhine-Westphalia). Trianel Gasspeicher Epe GmbH & Co. KG, domiciled in Aachen, manages a natural gas storage facility located in Epe in the district of Borken (North Rhine-Westphalia) since 2009/2010. Trianel Kohlekraftwerk Lünen GmbH & Co. KG, domiciled in Lünen, has been operating a modern, highly efficient 750 megawatt hard coal-fired power station in Lünen (North Rhine-Westphalia) since 2013. Trianel Windkraftwerk Borkum GmbH & Co. KG, domiciled in Aachen, is the project developer and operator of the Trianel offshore wind farm Borkum (formerly Borkum-West II), with a total capacity of 400 megawatts roughly 40 kilometres off the coast of the North Sea island of Borkum (Lower Saxony). The first expansion stage, with a capacity of 200 megawatts began commercial regular operation in 2015. In the 2016 reporting year, planning commenced for the second expansion stage of a further 200 megawatts.

As general partners, the personally liable companies Trianel Gaskraftwerk Hamm Verwaltungs GmbH, Trianel Gasspeicher Epe Verwaltungs GmbH, Trianel Kohlekraftwerk Lünen Verwaltungs GmbH, as well as Trianel Windkraftwerk Borkum Verwaltungs GmbH assume the management for the above limited partnerships as the general partners. Trianel Kraftwerk Krefeld Verwaltungs GmbH manages Trianel Kraftwerk Krefeld GmbH & Co. KG for the development of a gas and steam turbine power plant at the CHEMPARK site in Krefeld-Uerdingen (North Rhine-Westphalia); it is wholly commercially attributed to Trianel GmbH. All companies are domiciled in Aachen.

Established in 2013 as a standard limited partnership (Einheits-KG), Trianel Onshore Windkraftwerke GmbH &

Co. KG (TOW), domiciled in Aachen, plans, builds and operates systems for generating electricity from renewable sources and is also responsible for investment in companies domiciled in Germany that operate systems for generating electricity from renewable sources. In the 2016 reporting year, the targets were reached and Trianel GmbH's participating interest in TOW was reduced from 14.81% to 5.35% effective to 31 December 2016. Trianel Erneuerbare Energien GmbH & Co. KG was founded in the 2015 calendar year, also as a standard limited partnership (Einheits-KG) domiciled in Aachen, with the same business purpose as TOW.

Trianel Finanzdienste GmbH, domiciled in Aachen, is a wholly owned subsidiary of Trianel GmbH. The activities of the Trianel Group which require authorisation for the provision of financial services pursuant to Section 32, para. 1 of the German Banking Act (Kreditwesengesetz, KWG) are pooled in this company.

The Dutch sales and distribution company Trianel Energie B.V. domiciled in Maastricht was forced to apply for insolvency at the end of 2012 due to customer default. The insolvency proceedings are still ongoing.

GESY Green Energy Systems GmbH is domiciled in Berlin, and was once again successful in direct marketing of renewable energy sources.

The strategic orientation of Trianel Service GmbH domiciled in Aachen is currently under review, as a result of which business operations have been suspended. After abandoning the originally planned business activities of Trianel Erdgasförderung Nordsee GmbH & Co. KG domiciled in Aachen, the company was wound up. The personally liable shareholder Trianel Erdgasförderung Nordsee Verwaltungs GmbH merged with Trianel GmbH on 16 December 2015 in accordance with the merger agreement. It was entered in the trade register with Aachen District Court on 26 February 2016.



## 1.2 Business fields

Trianel GmbH's business activities aim to enhance the competitiveness and therefore independence of municipal utilities. As the largest European municipal utilities cooperation, Trianel GmbH opens up the potential of liberalised energy markets by pooling similar interests from the municipal environment. For example, this opens up business fields which would not be economically viable for individual municipal utilities.

Trianel GmbH operates in multiple sectors of the energy industry throughout the entire value chain. Its core business is the procurement and supply of energy. Our company procures energy for redistributors and municipal utilities on wholesale markets. In this way, Trianel helps municipal utilities supply their end customers. The second focal point of Trianel GmbH is the development of large-scale electricity generation and gas storage systems for the energy industry. For existing projects, Trianel takes on the energy business and commercial management and system optimisation. Our third pillar is the planning and support of business activities for the municipal utilities at end customer levels, such as smart metering, energy efficiency and expansion of electromobility.

All activities of Trianel GmbH are developed in close coordination with the business aims of the shareholder companies and tailored for their needs and circumstances.

## 1.3 Important products and services, business processes and projects

Trianel GmbH is active in all trading markets for electricity and gas products, both as a trading partner for bilateral transactions (OTC market) and as a member of the most important energy exchanges. Market access for electricity includes the German, Dutch, Belgian, Swiss and French market areas. In the gas sector, Trianel covers the German market areas, for H-gas and L-gas, as

well as the liquid TTF market. Diverse sales products in the delivery sector are based on activities on the market. That allows the Trianel customer to purchase trade products directly.

Energy business products and services:

In 2016, the portfolio management on the procurement and generation side again formed a main pillar of the activities in the energy business sector. It consists of electricity and gas procurement, marketing and securing electricity from own generation plants and management of storage facilities for our customers.

The performance achieved for each individual customer in procurement portfolio management electricity was measured objectively against a quantitative benchmark again in 2016. Last year's already high performance value of 3.60% was confirmed again at 3.49%. In gas procurement, a performance of 2.89% was achieved. As a result, Trianel GmbH secured an eight-figure procurement cost advantage overall for its customers in the electricity procurement portfolio management sector.

Trianel managed the generation portfolios for its customers equally successfully. In the ranking of generation portfolio managers for shareholders in the Trianel coal-fired power station in Lünen, Trianel Finanzdienste GmbH (TFD) once again came in first place when comparing all companies involved in power station optimisation, generating a seven-figure revenue surplus for its customers. In addition to this, TFD is expanding its role as a comprehensive service provider for optimised marketing of generation plants of all types.

Kohlekraftwerk Lünen (TKL) achieved an additional € 4 million via marketing activities in the spot, intraday and balancing energy markets.

In addition to this, € 4 million was saved as part of shortfall management compared with the failure reserve

contract. The shareholders in TKL benefit from both. Trianel also benefits as part of the contractually defined variable remuneration of these results achieved.

For Gaskraftwerk Hamm, the “warm reserve” agreed with the TGH shareholders achieved a result of € 5.3 million. This value is approx. € 0.6 million above the originally planned value. In addition to this, a block of the power station was marketed to a market partner as part of an option transaction for 2017. Compared with leasing in 2016, the price for this has tripled. Trianel receives a success-related remuneration from these results for its service activities and therefore also benefited from the excellent management. However, the transfer implemented in 2015 of Trianel's Hamm gas-fired power station to the warm power reserve in the reporting year eliminated the basis for services related to managing the individual customer segments.

In sales of flexible and standard products for electricity and gas, the introduction of the ¼-hour EPEX spot auction contributed positively to minimising structural risks from day one. When marketing renewable energy sources in 2016, Trianel was able to rely on its years of experience. Together with GESY Green Energy Systems GmbH, Trianel GmbH expanded its green electricity portfolio to almost 5,000 megawatts by the end of 2016. The portfolio consists primarily of wind energy.

The success story of the Energy Roof product continued in 2016. At the end of the year, 50 municipal utilities were already marketing the Energy Roof, including large-scale municipal utility companies like Stadtwerke München, entega and Stadtwerke Bochum. In addition to the Energy Roof, further products were added, which are all marketed to end customers together via the Trianel PED digital platform.

In the energy efficiency sector, the regulatory requirements for companies to perform energy audits, led to greater utilisation and corresponding results. The topic

of smart metering has passed all regulatory hurdles and reached market maturity by passing the digitisation act. However, the market is still hesitant, but demand is set to increase for 2017.

Trianel has successfully completed the project to prepare for the heightened requirements of the financial and energy market regulation under EMIR and REMIT. In operative regular operation, approx. 1,000 standard transactions and approx. 10 non-standard transactions are reported monthly. In addition to this, Trianel also performs the REMIT reports for 340 other companies as part of its supplier relationship or on a pure service basis.

### **Project development and projects**

The project development business of Trianel GmbH now focuses almost entirely on renewable energy projects. For example, the second expansion stage of the Borkum offshore wind farm was launched successfully in 2015. Together with 23 municipal utilities from the Trianel Group and EWE Oldenburg, Trianel GmbH will develop the next 200 megawatts for the shareholders and project partners. 2016 was dominated by the tenders and award of the major subsections and start of equity and borrowed capital process. The decision to build for the offshore wind farm was passed by the shareholders on 7 April 2017. The financial close was approved on 28 April 2017.

In the reporting year, Trianel Onshore Windkraftwerke GmbH & Co. KG (TOW) concluded its investment activities as planned, and now operates eight wind farms, with a total capacity of 101.3 megawatts after the latest turbines were commissioned. The development projects which remain in the portfolio were sold with value retention. Trianel Erneuerbare Energien GmbH & Co. KG (TEE), founded in 2015, continued its investment activities consistently in 2016. Investments were made in eight wind farms and solar plants with a total of 138.6 megawatts. In addition to this, another roughly 200 megawatts are in development. Besides Trianel, 37 other

municipal utilities and suppliers hold shares in TEE. Investment activities are to end with a portfolio of at least 275 megawatts by 2020 at the latest. In the on-shore project development sector, an uninterrupted transition of project development from TOW to TEE was achieved. At the same time, the project volume implemented successfully was increased significantly. In the conventional major projects and pumped-storage hydro-electric plants, the priority was to preserve the existing options. This reduces the corresponding project development activities significantly.

## 1.4 Management and control

In addition to Sven Becker as Management Spokesman, Dr. Oliver Runte has been appointed as Managing Director of Trianel GmbH since 16 January 2017. Dr. Jörg Vogt resigned from the Management Board on 31 December 2016. The Shareholders' Committee and the fifteen-strong Supervisory Board are among the other corporate bodies.

# 2. STRATEGY AND MANAGEMENT OF THE COMPANY

## 2.1 Corporate strategy

### Current orientation

Trianel GmbH sees itself as an energy service provider that develops and provides services along the entire value chain in particular for municipal utilities, which enable individual municipal utilities to overcome market entry barriers with size and specialisation advantages and by pooling expertise. Trianel GmbH is supported by municipal utilities. Trianel is the most successful European municipal utilities cooperation in Germany and strives to become the most significant value driver for municipal utilities in Germany. After an extended phase of high growth, Trianel is pursuing a strategy of consolidation and selective growth. Project development and market integration of renewable energy sources, advanced energy services standardised in platforms and amalgamation of high-resolution data on generation, consumption and customers, including the respective influencing factors, are currently the fields for our selective growth. They result from the new opportunities afforded by the transformation of the energy industry due to digitisation and the expansion of decentralised, renewable generation.

Trianel views itself as an independent company that supports the interests of municipal utilities, which are also independent. The business model borne by the shareholders is aimed at common success. The advantages developed by Trianel GmbH are to be passed on to the shareholders as customers.

Thanks to our energy business trend scouting, Trianel and its shareholders are in a position to identify possible business opportunities resulting from the changing general conditions at an early stage, to develop new products and services given the right potential.

### Products and services

For value-optimised consolidation and to grow with the planned focus, Trianel adapts its product range and services for the current general conditions. The adaptations are made on the basis of an in-house market appraisal and energy industry expert reports. The diversified product portfolio stabilises Trianel GmbH's business development and facilitates comprehensive support of shareholders and customers.

## Customers

Independent municipal utilities and regional suppliers of various sizes are typical customers of Trianel, which offers them tailored and efficient solutions for their respective individual requirements. High quality services can be implemented at reasonable prices thanks to the size and specialisation advantages.

## Employees

In a highly-competitive environment, Trianel GmbH develops advantages over its competitors through its expert and committed colleagues with innovation, product depth and maturity, as well as market penetration. The employees are one of the most important assets at Trianel GmbH.

Trianel GmbH had a staff of 347 employees on 31 December 2016, representing an overall increase of six employees (approx. 2%) compared to the end of 2015. Around 31% of the staff are female, and five of these are second and third-level managers. At the end of 2016, the average age of staff in Trianel GmbH was 39.

The pillars of the personnel strategy are positioning Trianel as an attractive employer, developing and binding talent and optimisation of the structural and process organisation. In 2016, Trianel GmbH positioned itself again as a fair, respectful and attractive company in Germany, once again earning the "Fair Company" label from trade journal "Junge Karriere" (Young Career) as so often before. In addition, Trianel successfully took part in the 2016 employer benchmark study "Top Job 2017" for the first time. According to the independent evaluation, Trianel is one of the best employers among German medium-sized enterprises. Binding and developing qualified staff remain a main focus of human resources at Trianel. Regular status evaluations in terms of success-critical skills for all employees allow targeted and systematic derivation and addressing of individual and strategic personnel training requirements.

## Society and the environment

Trianel GmbH was established as a result of the liberalisation of the energy markets and is therefore not only wholly dedicated to competition, but also strives to promote it through its activities. With its shareholders, Trianel pursues the common goal of ensuring decentralised citizen and customer-oriented energy supply. Strong municipal utilities and regional suppliers now characterise the competition on the energy markets. Trianel views the energy transition as an entrepreneurial opportunity. Accordingly, Trianel and its shareholders are jointly and actively shaping the energy transition as a holistic and multi-sector project - also as a constructive and critical dialogue partner for a consistent energy policy.

### 2.2 Internal corporate control system

The management board uses a variety of systems and processes to control and monitor the company and to analyse and document risks and opportunities of the company. The control system focuses on the development of profit and liquidity of the company and monitoring risks. To map this system, profit contributions, structure costs and result figures are calculated. The company's liquidity is monitored via a rolling daily liquidity forecast. By allocating risk capital for the risk types relevant in our sector and continuous measurement of the respective utilisation, we ensure that risks and opportunities are dealt with appropriately. Extreme value considerations provide findings on events not covered by standard processes (see also Risk report). Auditors commissioned by the shareholder companies confirm compliance with the risk guideline on a quarterly basis. The product development strategy is characterised by careful observation of customer requirements as well as the latest market developments and the evaluation of the resulting future developments. Important investment decisions are made using discounted cash flow models. The Management Board regularly checks the progress of the main projects and monitors compliance with project plans and targets.

The management and control mechanisms are adapted to the growing company structures on an ongoing basis. The Supervisory Board is regularly informed of all major economic developments at Trianel GmbH.

The internal audit tasks are performed by an employee of Trianel GmbH and external service providers who each report directly to the management board.

### Financial targets

Trianel GmbH's business model is primarily aimed at contributing to creating value for its customers with its services. At the same time, Trianel strives to earn pre-tax profits which are an appropriate return on equity. Boosting the equity basis is another important financial target, in order to finance the investments required to implement the energy transition, and put the development goals into practice.

Moreover, Trianel wants to increase the value of the company for its shareholders, not just by balance sheet figures, but also contribute in particular to increasing the company value for shareholders.

### Non-financial targets

Shareholder and customer satisfaction is Trianel's main non-financial target. For this purpose, Trianel wants to anticipate the arising demand of its customers as early and well as possible. Trianel continuously and intensively observes market and industry developments together with its shareholders. With a rapid development of potential business fields and products to market maturity, Trianel also wants to give its shareholders and customers a time and technical advantage in competition. Trianel also attempts to support and shape the relevant energy policy topics to benefit an independent municipal energy supply.

Trianel strives to reach as many shareholders as possible with its products and services. At the same time, Trianel also aims to achieve above-average customer satisfaction.

These two goals require utmost process quality and reliability as a basis for service provision.

In addition to this, Trianel pursues and promotes socially acceptable, sustainable and reliable power generation. Trianel wants to continue the path it has taken in this area and implement the energy transition entrepreneurially.

Employees are a key foundation for achieving any goals. Their high qualifications and far above average commitment are what makes success possible. Trianel has set itself a goal to create conditions to optimally promote the capability and capacity of its employees while maintaining high employee satisfaction.

## 2.3 Innovation management

The changes in the energy business have now reached an almost disruptive level. As an innovative service company, Trianel GmbH views the changes as a result of the implementation of the energy transition and the development of the energy markets as an opportunity. It is important for Trianel to continually earn the trust of its shareholders and customers with new, innovative products and services. The good relationship between Trianel GmbH and its customers is also based on close cooperation in a very early phase of product development. Trianel constantly strives to be a step ahead of the market with the market-oriented and customised solutions it develops. The success of innovation management at Trianel GmbH is also revealed in particular in repeated wins of the "TOP 100" innovation award.

Innovation management is embedded in our trend scouting. New trends are systematically identified and evaluated in a multi-stage process. In the past year, innovation management was further intensified through closer interaction of trend scouting, product development and market introduction via pilot projects.

# B. ECONOMIC REPORT

---

## 1. GENERAL CONDITIONS

In 2016, the German economy was in very good shape. The primary energy consumption in Germany in 2016 rose 1.0% compared with the previous year, having already risen by 0.9% in 2015. According to AGEBA, the reason for the rise was the positive economic development, the population increase and the colder weather compared with the previous year, with the resulting higher demand for heating energy. Added to this was the fact that 2016 was a leap year with an additional day in the energy consumption-intensive February.

The gross power consumption in Germany decreased by 0.4% to 592.7 billion kilowatt hours compared with the previous year. According to AGEBA, the gross power generation increased from 646.9 billion kilowatt hours to 648.2 billion kilowatt hours. The balance of the electricity exchange with other countries was –55.4 billion kilowatt hours. Accordingly, Germany exported roughly the annual electricity demand of Switzerland.

Renewable energy sources increased from 29.0% to 29.5% of German gross power generation, at 191.4 billion kilowatt hours, becoming the most important energy source. Of the renewables, wind energy accounted for the highest percentage of gross power generation at roughly 12.3% and roughly 80 billion kilowatt hours. This was followed by biomass with a slight decline to 7.0% and photovoltaics with a slight decrease to 5.9%.

The gross power generation from natural gas increased significantly from 62.0 billion kilowatt hours to 78.5 billion kilowatt hours, and thus a percentage of 12.1%. In particular, the reason was the temporary loss of nuclear generation capacity in other European countries, which led to increasing prices on the exchange. Power generation from hard coal and lignite decreased relatively significantly from 272.2 billion kilowatt hours to 260 billion kilowatt hours. However, at 41.1% of the total electricity mix, it remains an important part. Due to power station closures, the gross power generation from nuclear energy decreased by 6.9 billion kilowatt

hours to roughly 85 billion kilowatt hours and 13.1%. In 2016, the exchange electricity price in Germany dropped again, with the average on the spot market at 2.99 cents/kWh. The prices did not recover from the 11-year low reached in the previous year. In spite of the problems with the French nuclear power stations in autumn 2016, the average price also decreased in France. It decreased from 3.84 cents/kWh in 2015 to 3.68 cents/kWh in 2016. The political measures to support the CO<sub>2</sub> pollution certificates had little success in 2016. In spite of the introduction of the market stability reserve, the price for European Emission Allowances (EUA) at EEX did not stay above € 8/t CO<sub>2</sub>. In the first months of 2016, the value of the certificates decreased by almost half and closed at just € 6.57/t CO<sub>2</sub> after a volatile lateral movement.

The primary energy consumption of petroleum rose by 2% to 4,562 PJ or 155.8 million tonnes of coal equivalent (CE) in 2016. Compared with 2015, consumption of natural gas increased by 8.7% to 3043 PJ or 103.8 million tonnes of CE. The contribution of nuclear power to German primary energy consumption was subject to a significant decline of 8% again, largely due to decommissioning of capacities.

At a national level, 2016 was shaped by important energy policy decisions: on electricity market 2.0, on the German Renewable Energy Sources Act (EEG) and the CHP Act (KWKG) and digitisation of the energy transition.

The restructuring of the electricity market was largely concerned with the question of how reinvestment and new investments in the necessary guaranteed power can be ensured with a continuously increasing percentage of renewable energy sources. Fundamentally, the legislature decided to continue the energy only market for this purpose, supplementing various capacity elements. Like many other companies in the energy industry, Trianel believes that the amendment of the

electricity market act does not reliably ensure the necessary investments in guaranteed power. In addition to this, Trianel does not believe that the provision of security meets the requirements under European law.

The previous power station plans in Southern Germany are at risk based on the new legislation, as the text of the new law no longer requires capacity tenders, with the transmission system operators (TSO) to negotiate capacities finally and bilaterally with the German Federal Network Agency, which the TSO plan and build themselves.

Trianel also views critically the insufficient compensation under the Electricity Market Act for plants which must be used for grid stabilisation (redispatch) at the request of the TSO.

With the 2017 German Renewable Energy Sources Act (EEG 2017), the legislature is implementing a systemic change in support for renewable energy sources: the transition in support from fixed remuneration to a quantity tender with maximum prices. At the same time, the quantity framework of the German Renewable Energy Sources Act (EEG) 2014 was changed, whereby the target of 40% to 45% of renewable electricity in the gross electricity consumption in 2025 remains unchanged. The previous experiences from the pilot tenders for ground-mounted PV plants reveal a significant downward trend in bidding levels, and thus significantly decreasing costs for supporting renewable energy sources. However, to date, there are no final findings on the percentage of ground-mounted projects actually implemented. Trianel successfully participated in multiple rounds of tenders.

Due to concerns on the part of the EU Commission regarding the subsidy law status, the CHP Act (KWKG), that entered into force on 1 January 2016, had to be amended in 2016. The most important change is the new tender segment from 1–50 megawatts. In this class, the support level for CHP plants is only determined in

competitive processes. After more than three years of preliminary work, the German Bundestag passed the law to digitise the energy transition in June 2016. In 2032, 95% of all metering points are to be equipped with modern measuring equipment. The rollout includes both simple digital meters and modern measuring equipment, which facilitate communication and control of the renewable energy plants and electricity consumers. The data collected and prepared in the smart meter gateway also facilitates more reliable grid control. The law results in interesting new business fields for Trianel.

The regulatory requirements and stipulations of the financial market authority under MiFiD II cover the energy sector increasingly. Trianel, along with the entire sector, greatly regret that fewer and fewer exceptions are allowed for the energy sector. Accordingly the differentiation in political debates, justified on its merits, between the system-relevant world of finance and physically driven procurement trade for electricity and gas, is disappearing more and more. The regulatory requirements per EMIR and REMIT in the past two years have faced Trianel and the sector as a whole with a major challenge. However, Trianel has not only succeeded in meeting the necessary requirements, it has also managed to position itself as a service provider for regulatory reports by third parties.

Delays in market deregulation in Switzerland persist. It remains unclear when the market will be deregulated for customers with less than 100 megawatt hours of annual electricity sales. For Trianel, that means that the growth potential for energy industry services is still low although the structural requirements in this market with its granularity offer ideal cooperation requirements. However, incentives for a greater market orientation of municipal utilities and redistributors were derived from a judgement by the Federal Supreme Court, which stipulated that free and “captive” customers must not be priced based on different logic.



## 2. BUSINESS DEVELOPMENT

For the 2016 financial year, the planned pre-tax result of € 0.4 million was not reached. The result of € –3.2 million represents a shortfall of € 3.6 million. The result was largely due to the continuing asset crisis, which meant that significant losses from marketing our virtual long-term energy supply segment in the Lünen coal-fired power station and the storage bundles of Epe natural gas storage facility had to be absorbed. Failure to reach targets for intraday, proprietary trading and market access business and in direct marketing of renewable generation capacities also had a significant influence on the annual result. These effects were not compensated by successful development of wind power and photovoltaic projects, and the effects of capitalising accounts receivable from asserted feed management (FeMan) damage claims and writing up of accounts receivable from the insolvent Dutch subsidiary (TEBV).

The equity ratio of 24% only decreased slightly compared with the previous year (28%). As in previous years, the balance sheet total is also characterised by the high level of accounts receivable with simultaneously high accounts payable. Both reflect the established process in energy wholesale trade of invoicing and paying for energy accounts on a monthly basis. This means that at the end of the year, the accounts receivable and payable from deliveries in December – one of the months with the highest turnover – must be stated regularly. Since Trianel customers are mainly municipal utility companies with a good credit rating and/or their subsidiaries, both with very low default risks, we regard the equity level as being stable and conservative.

The company's liquidity increased over the course of the year by € 9.5 million to € 32.5 million and was in an adequate situation at any time. The primary reason for the increase in liquid assets as of 31 December 2016 were improved working capital effects, which overcompensated the 2016 investments in Trianel Erneuerbare Energien GmbH & Co. KG (TEE) and interest deferrals for Trianel

Windkraftwerk Borkum GmbH & Co. KG and Trianel Gaskraftwerk Hamm GmbH & Co. KG.

On the cut off date of 31 December 2016, the number of employees increased marginally by 6 to 347 compared with the previous year.

---

**“As Trianel’s customers are largely municipal utilities, we view the equity base as sound and conservative.”**

---



## 3. COMPANY SITUATION

### 3.1 Earnings situation

The earnings before tax of Trianel GmbH decreased significantly by € 3,447 thousand compared with the previous year to € –3,234 thousand. The negative earnings before tax in 2016 is largely due to the losses from the power purchase obligations of the Lünen coal-fired power station and the storage facility use contract with Epe gas storage facility, which could not be compensated even with successful activities in the development of renewable power station projects and one-off effects from asserted damage claims (FeMan) and write-ups of accounts receivable vis-à-vis the insolvent Dutch subsidiary (TEBV). The risk provisions for Trianel GmbH's virtual long-term energy supply segment in the Trianel Lünen coal-fired power station (TKL) and our stored bundle shares in the Trianel Epe natural gas storage facility (TGE) was increased slightly.

Taxes on income accrued to the amount of € 899 thousand (prev. year € 85 thousand) and other taxes were € 6 thousand (prev. year € 5 thousand), resulting in a loss for the year of € 4,139 thousand (prev. year annual net income of € 124 thousand). € 899 thousand of the tax expenditures were incurred entirely for corporation tax for previous years.

An analysis of the consolidated net income, which includes Trianel Finanzdienste GmbH in particular in addition to Trianel GmbH, reveals the following components of net income:

The income after tax is € –4,126 thousand (prev. year € +179 thousand) and is dominated by the annual financial statements of Trianel GmbH and the losses posted there from power purchase obligations and the storage facility use contract. Taking into account the financial result of € 662 thousand (prev. year € 929 thousand) and the taxes on income of € –906 thousand (prev. year € –94 thousand),

the consolidated loss for the year amounted to € 4,132 thousand (prev. year € 174 thousand).

Trianel GmbH's turnover largely reflects its function as providers of market access for customers, short-term optimisation transactions and proprietary trading activities. Added to this are the activities for third parties in procuring and marketing energy, which in turn are associated with corresponding back-to-back transactions on the wholesale market. The resulting energy purchases are mapped in the costs of materials of the profit and loss statement of Trianel GmbH. There were hardly any effects on the net income. Fundamentally, the absolute turnover total and the associated total material expenditures do not allow any significant conclusions to be drawn on the economic success of the company.

The sales proceeds amounted to € 2,136 million in the 2016 financial year (prev. year € 2,127 million) and thus increased by 0.4% compared with the previous year. In order to increase the clarity, the proprietary turnover was balanced with the corresponding material expenditures in the reporting year, totalling € 2,494 million (prev. year € 2,357 million).

Other operating income rose by € 5,738 thousand to € 17,074 thousand. They essentially include income from the reversal of short-term provisions (€ 4,371 thousand; prev. year € 332 thousand) and income from write-up of accounts receivable from the TEBV insolvency (€ 3,900 thousand; prev. year € 0 thousand) as well as income from compensation and damage claims (€ 3,573 thousand; prev. year € 198 thousand).

At 98.4%, the cost of materials share rose slightly compared to the previous year.

Personnel expenses rose from € 27,635 thousand to € 29,978 thousand.

Other operating expenditures totalled € 20,511 thousand, down from € 23,060 thousand in the previous year.

The non-adjusted financial result amounted to € 2,114 thousand (prev. year € 2,022 thousand). Adjusted for the neutral effects from the deduction of accounts receivable and addition of provisions totalling € –1,073 thousand (prev. year € 852 thousand), the resulting adjusted financial result is € 3,187 thousand (prev. year € 2,873 thousand). The result from participating interests, at € 1,725 thousand (prev. year € 2,124 thousand), decreased slightly compared to the previous year.

The pressure on net income in the sector can also be seen in Trianel's 2016 accounts. To tackle this development head-on, a comprehensive restructuring and efficiency boosting program was passed to implement significant cost savings in personnel expenditures and third-party services by 2019. Based on the success of measures already in implementation, we assume that Trianel will achieve sustainable positive operating income once the project has been implemented fully.

### 3.2 Financial situation

Trianel GmbH's operating cashflow in the reporting year was € 12,581 thousand, following € –19,227 thousand in the previous year. The positive cash flow was primarily due to an increase in liabilities, whereby the highest growth was in the accounts payable to associate companies, at € 13,831 thousand. The cashflow from investment activities totalling € 2,687 thousand (prev. year € –11,579 thousand) involved investments in intangible assets, current investments in the participating interest in Trianel Erneuerbare Energien GmbH & Co. KG and, offsetting these, the write-down of the participating interest in Trianel Onshore Windkraftwerke GmbH & Co. KG. The cashflow from financing activities totalling € –5,850 thousand (prev. year € –3,748 thousand) contains loan repayments. The cashflow from investment activities in the Group was € –5,850 thousand

following € –5,236 thousand in the previous year. Overall, the total financial resources increased to € 32,528 thousand (prev. year € 23,021 thousand) as of the balance sheet date. The Group had total financial resources of € 36,298 (prev. year € 27,152 thousand). The investments planned for the years to come are to be refinanced suitably in 2017 with matching maturities. Additional borrowing over a 7-year period will give Trianel the security and scope necessary for its future business orientation in the transition phase. Over all, the financial situation in the 2016 financial year was adequate at all times.

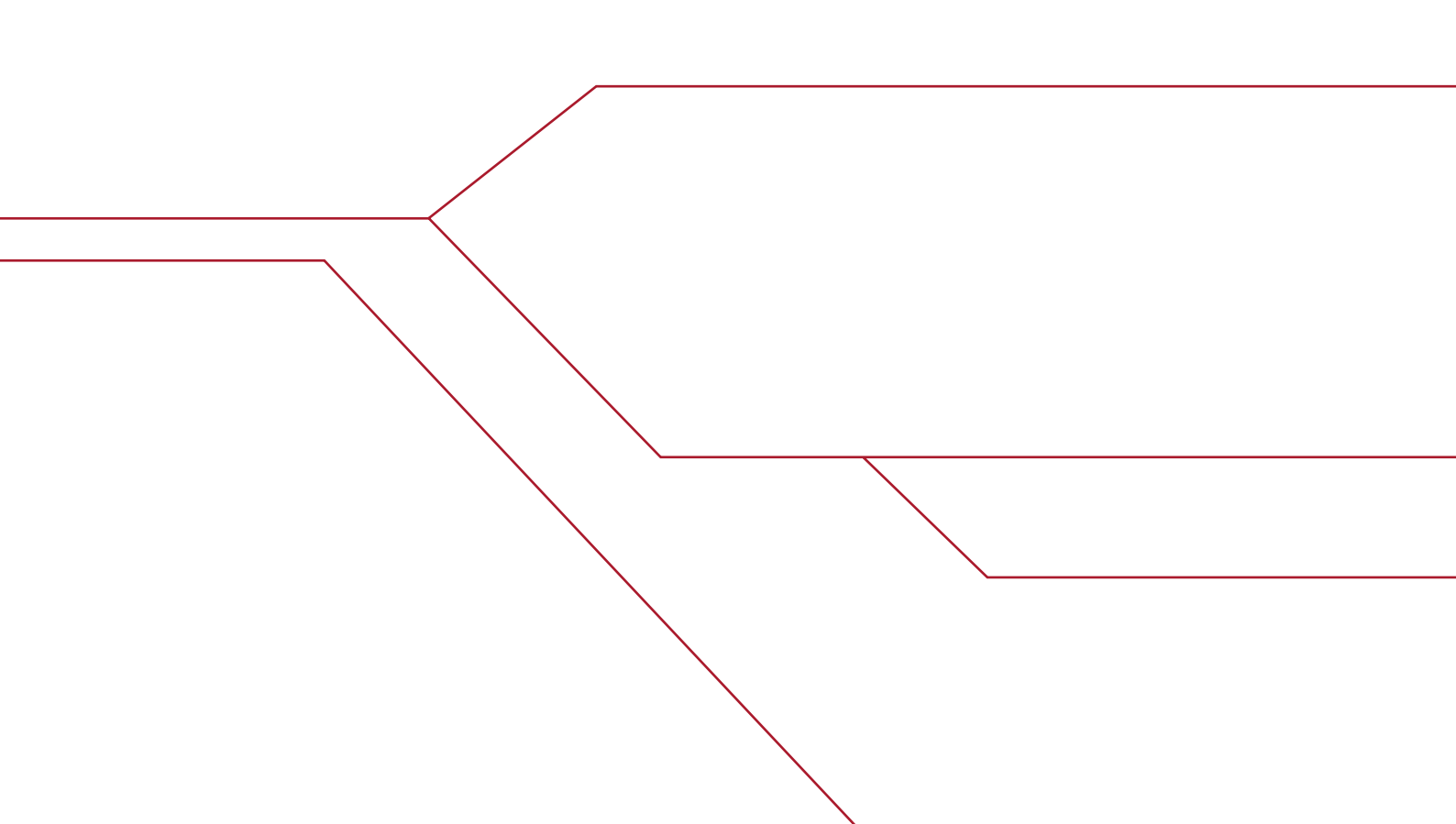
### 3.3 Asset situation

The balance sheet total of Trianel GmbH was € 351,540 thousand on 31 December 2016 (balance sheet total of the Group: € 354,329 thousand) and thus increased on the previous year by € 33,857 thousand or 10.7% (Group: € 35,316 thousand).

On the assets side, the increase is largely due to the significant increase in current assets.

In 2016, the inventories of Trianel GmbH increased by € 573 thousand (Group: € 573 thousand) to € 3,908 thousand (Group: € 3,908 thousand). The inventories primarily comprise Trianel GmbH's share of working gas which was fed to the caverns of Trianel Gasspeicher Epe GmbH & Co. KG, as well as unfinished service resulting from advance performance for project developments and rights.

The accounts receivable and other assets totalling € 213,755 thousand (31/12/2015: € 190,049 thousand) remained unchanged at 60.8% (31/12/2015: 59.8%) of the balance sheet total, and are the largest item on the assets side, and have increased significantly. Trade receivables account for the largest share of this development, increasing considerably by € 18,095 thousand to € 105,260 thousand, and the other assets, which



increased by € 11,839 thousand to € 50,861 thousand. As in the previous year, trade receivables were balanced against similar trade payables from the same business partners. On 31 December 2016, trade receivables and trade payables were balanced to the value of € 301,207 thousand, following an offset of € 248,251 thousand on the previous balance sheet date.

The liquid funds increased significantly by € 9,508 thousand to € 32,528 thousand. On the liabilities side, the increase in the balance sheet total is largely due to the increase in accounts payable.

In the financial year, Trianel GmbH's equity ratio decreased to 23.9% (31/12/2015: 27.7%). The equity ratio for the Group dropped to 23.7%. In absolute figures, the equity fell by € 4,139 thousand to € 83,938 thousand. This change is the result of the loss for the

year 2016 of € 4,139 thousand (consolidated loss for the year 2016: € 4,132 thousand). The provisions decreased by a total of € 4,068 thousand to € 45,414 thousand. The other provisions dropped by € 4,096 thousand to € 45,312 thousand (31/12/2015: € 49,408 thousand), and primarily comprise provisions for anticipated losses from pending transactions (€ 38,486 thousand; 31/12/2015: € 41,742 thousand) and for outstanding invoices (€ 612 thousand; 31/12/2015: € 2,634 thousand).

The development of the balance sheet structure and the key balance sheet figures largely matched the budget, even if individual investments in participating interests were not made and long-term loans were not taken on in 2016.

# C. REPORT ON FORECAST, OPPORTUNITIES AND RISKS

---

## 1. FORECAST

### 1.1 Strategic orientation of Trianel GmbH in the next two financial years

In the next few years, Trianel GmbH's business activities will be highly affected by the following developments:

1. Digitisation of the energy business
2. Decentralisation of generation
3. Consolidation of markets for energy business services

With Trianel DESK, Trianel plays a pioneering role in digitising energy business processes. From forecasts to pricing, portfolio structuring to trading standard and non-standard products, all energy business procurement and sales functions are provided interactively in a consistent, web-based customer interface. Roughly 10 municipal utilities with different performance requirements were integrated in the web-based Trianel DESK platform and manage their electricity and gas portfolios digitally, simply and efficiently. In the last twelve months, Trianel DESK was expanded with a wide range of functions for managing electricity and gas portfolios. Among other things, contribution margin calculation, load cycle calculation per upload, various risk and market valuation functions and currency conversion for Euros and Swiss francs applications were added.

Digital processes are the basis for implementing future (detailed and decentralised) business models that a municipal utility must incorporate to satisfy changing customer requirements. The system infrastructure present in the company is focused on mapping mass processes and only suitable for implementing detailed business models to a limited extent and with high adaptation costs. Establishing a central platform for the processing and invoicing such complex products could be a sustainable business for Trianel. Trianel already started creating a digital business model for municipal utilities

in the end customer market with the Trianel platform for energy services, Trianel PED. Trianel PED is a digital platform that can coordinate and manage providers, tradespeople and end customers.

PV systems, heating systems and charging stations for electric vehicles are currently marketed via Trianel PED.

Trianel agreed a strategic partnership for smart metering with rku.it GmbH from Herne in early 2016, to meet the increasing legal requirements at an early stage. Helping municipal utility sales departments market these new products is another growth area for the future.

A mega-trend in the energy business, decentralisation of generation via weather-dependent generation plants, will provide further impetus for the business development of Trianel GmbH. Trianel GmbH intends to continue to position itself as the leading provider in the municipal environment, and in the industrial environment for optimised marketing and the use of all forms of physical and virtual generation units. Managing and optimising flexibilities as part of demand response management will be key challenges for shaping the energy transition. The further increase of weather-dependent energy feed-in and the resulting price pressure on the electricity exchanges will lead to a replacement of base load power stations for providing balancing energy. Using existing load and generation flexibilities in the industrial environments in conjunction with a "24/7 Market Access" service product is a new area of activity for Trianel GmbH.

Trianel is responding to the current trend away from structured procurement to full supply in its core business with appropriate products, whereby forecast improvements and intraday management based on online measurement data will contribute to optimisation. In order to achieve economies of scale and portfolio advantages,

Trianel aims to grow its market share further in this core segment, focusing increasingly on large municipal utilities and regional cooperations. Companies and regional purchasing groups, which previously covered the wholesale value chain stage independently, are increasingly forced to outsource supplementary services to fulfil the advancing regulatory requirements, for example reporting requirements and balancing group compliance.

As in the previous years, the consolidation of the price level for direct marketing based on the market bonus model continued in 2016. In spite of the continued competitive pressure, Trianel succeeded in securing a joint marketing portfolio of roughly 5,000 megawatts for 2017. Trianel operates successfully in this business field together with its joint venture GESY Green Energy Systems GmbH, a marketing platform for medium-sized operators of renewable generation plants. Mandatory direct marketing has created good fundamental conditions for this. In this way, Trianel is expanding its experience as direct marketers into new segments. After the successful launch of balancing energy marketing, marketing quantities grew strongly. In the industrial customer environment in particular, we recorded significant gains. Trianel GmbH will continue this success story with its "Flexibility Management" and "Market Access" products.

In future, Trianel expects increased demand from municipal utilities for renewable generation capacities. Accordingly, Trianel GmbH has continued to focus its project development on developing renewable generation plants since 2014. In the 2016 reporting year, project development of the second construction phase of the Borkum wind farm continued, with an expected investment volume of approximately € 800 million. The activities focus on implementing tenders and preparing for the decision to build. For this purpose, the

offshore team was expanded and will be working on the TWB, TWB II and the shared infrastructure company IWB projects in the next few years.

In the onshore wind and photovoltaics sectors, project development and procurement is the priority for Trianel Erneuerbare Energien GmbH (TEE), with equity of € 140 million.

In order to serve growing requirements professionally and efficiently, Trianel will restructure its IT and process environment fundamentally, to meet both the requirements on wholesale markets and the individual customer requirements of the municipal utilities.

## 1.2 Anticipated earnings situation

For 2017 and subsequent years in the medium term planning period, Trianel expects continued significant burdens from the long-term energy supply segment and gas storage bundles and participating interests in a gas-fired power station. Also in light of the margin pressure in operative business fields, Trianel has therefore undertaken a comprehensive restructuring project ("Horizon 2018"). In addition to improvements in supporting and optimising business processes, this also includes organisational adjustments and a review of product portfolio compositions. As part of this, Trianel is considering selling individual business activities.

Trianel's activities are grouped in three business fields: Midstream, project development and new business (municipal utilities sales solutions). In addition, the marketing of power stations and gas storage bundles and the participating interest and financial result have more significant effects on the company's net income.

Midstream: In particular, the trade and portfolio management activities, and the IT skills required for this are pooled here. In addition to this, operational management services will remain a key aspect of the profitability of this business field in 2017. The targeted product portfolio streamlining and the efficiency boosting and cost reduction project "Horizon 2018" take the increasing pressure on margins into account. The targeted cost reductions include both third-party services and personnel costs.

Project development: After successful orientation of the activities from conventional to regenerative power station projects, the business field focuses exclusively on developing photovoltaics and wind generation projects. This also includes construction of a second offshore wind farm off Borkum. The decision to build has already been made for this. New business/sales solutions for municipal utilities: This is to focus on "energy-related

services" and "smart meters" as part of the increasing digitisation of the energy sector. As part of the concentration on this, the sale of the successfully positioned sales and logistics platform "Trianel PED" was initiated as a restructuring measure. This will result in positive one-off effects for the 2017 financial year.

With the measures taken, Trianel expects that 2017, when first groundbreaking steps will be taken as part of restructuring Trianel, will end with a slightly positive net income. In the following years, the full implementation of the restructuring measures will lead to sustainable stabilisation of the net income situation in an environment which remains difficult. Opportunities and risks result largely from the regulatory environment and the change in phasing out existing excess capacity in the conventional power station mix. Trading activities are naturally associated with more volatile result development than our service activities. To restrict the resulting risks, further limits were introduced to control the activities. In addition, the processes and systems will also be continuously assessed for potential for improvement and the organisational structure is developed accordingly if necessary in 2017. As has now been established, it may not be possible to streamline business activities through the planned sales in every individual case. By contrast, the targeted efficiency boosting and cost saving objectives should be achieved faster than planned according to current assessments.

The key performance figures which guide Trianel's business indicate a gross margin (revenues less cost of materials) of € 48.4 million, a pre-tax result of € 0.7 million, investments of € 16.6 million for the 2017 budget year. The budgeted staff level was 329 employees; however, it will develop depending on the speed of implementation of the restructuring measures.

### 1.3 Anticipated financial situation

For 2017, Trianel expects similar investment expenditure on intangible assets, tangible assets and financial assets as 2016, concentrated in particular on its commitments in the renewable energy sector. The current funding requirements will be financed as previously via bank loans and own cash flow. Trianel succeeded in expanding its credit lines in the 2nd quarter of 2017 to give us greater flexibility. The planned investments in financial assets are to be refinanced suitably by placing a fixed term bond with matching maturities.

The new clearing partner has given the opportunity to replace funds previously bound in initial margins via bank guarantees, freeing up liquidity. In the 1st quarter of 2017, a new surety line was opened primarily for this purpose.

Trianel still expects no restrictions in servicing of debts.

### 1.4 General statement on the business outlook and development forecast of Trianel GmbH by corporate management

The efficiency boosting targets set with the "Horizon 2018" restructuring project incorporate all business activities and Trianel's cross-cutting functions. Among other things, this will focus on pooling IT-related and energy logistics processes in midstream sectors. Here, efficiency increases are to be achieved via increasing standardisation and automation as well as clear responsibilities. In addition to quality improvements and increasing process speeds, Trianel expects significant cost reductions resulting from this in the next two years. The situation in the industry still has serious repercussions for many market participants. In spite of this challenging framework, Trianel believes it is well-positioned for the upcoming years based on the flexibility it has exhibited in the past and in particular due to the optimisation measures already taken and planned for

the future. The employees' approach to opportunities makes us optimistic that Trianel GmbH will continue to confirm its status as a highly active and key partner for the municipal utility shareholders in coping with the challenges. In spite of this, Trianel will not be able to extricate itself from the general industry development, in particular in the power station market.

---

**"With the measures introduced, Trianel assumes that the net income for 2017 will be slightly positive."**

---

---

## 2. OPPORTUNITY REPORT

The extent of closures of power station capacities and the further development of energy and raw material prices determine the profitability of our fuel-based asset items to a significant extent. The current market design (Energy-only 2.0 market) has not led to a market recovery in the short term. Based on the decommissioning of many nuclear power stations in the next legislative period, combined with the closure of lignite capacities set down in the Energy Industry Act (EnWG) and given the current list of the notifications of power station closures at the Federal Network Agency and the continued high political pressure on the introduction of emission-based control elements in addition to ETS, we still expect an improvement in the relevant price spreads, which will have a positive influence on the profitability of highly efficient modern power stations.

Also due to the current difficult economic situation of the Trianel Group's conventional assets (including gas storage facilities), the associated services are under pressure as part of commercial operations management. As the service fees are increasingly success-based, a clear commitment to high quality value-added services must be displayed. The associated risk of inadequate performance is counterbalanced by the opportunity to participate in the success through profit sharing on above-expected performance. In particular for the current warm reserve phase of Trianel's Hamm-Uentrop gas-fired power station (2016 to 2018), we have agreed a purely success-based compensation model with the power station company. In addition to successful use of all market opportunities, we can also benefit from a positive development of the market environment.

With regard to projects in the renewable energy sector, there are opportunities as a result of a favourable development of system prices and financing costs. The existing tender process for photovoltaics and the upcoming tender process for wind from 2017 is exerting significant cost pressure in the project development sector. Trianel sees opportunities here to pool activities in this market

with further professionalisation.

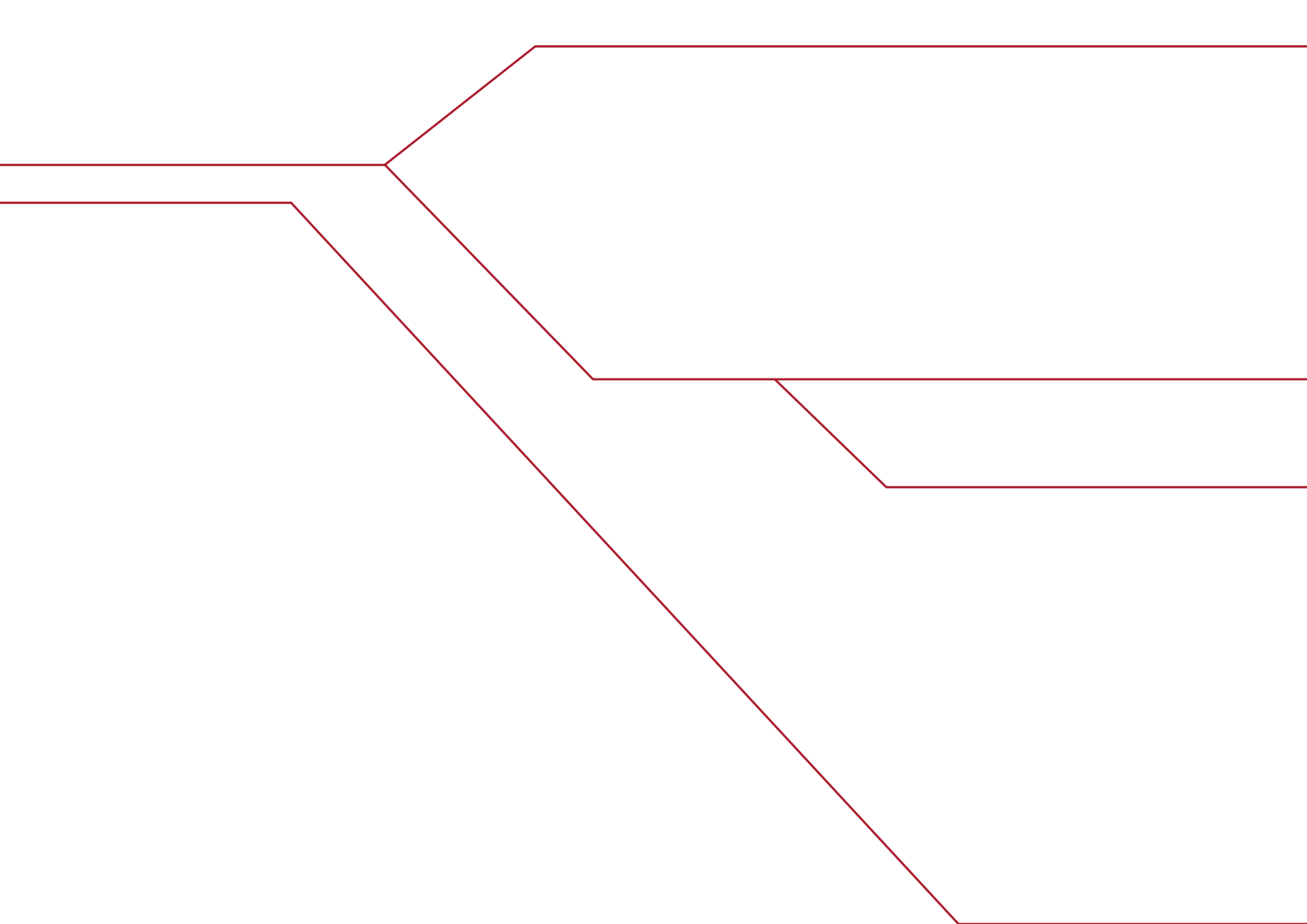
The energy transition requires municipal utilities to expand and adapt existing procurement strategies. They currently have to work on areas such as direct marketing, generation from renewable energy sources, smart metering, decentralised generation and flexibility marketing. Trianel sees good opportunities to offer municipal utilities increased support in these new challenges over the coming years with innovative services and products.

Increasing pressure on margins for most of the municipal utilities applies growing pressure on the company to be efficient. This will enhance the trend to more cooperation and optimisation in procurement of electricity and gas. The "cooperation of cooperations" area will also become increasingly dynamic. Regional cooperations in particular must assess whether they can and want to master the increasingly strict regulatory requirements, especially reporting requirements and balancing group compliance on their own. For example, Trianel GmbH's existing 24/7 services are ideal to efficiently support other cooperations and even larger municipal utilities which have processed all wholesale processes independently.

Trianel plays a pioneering role in digitisation and aims to remain market leader in the automation of energy business processes and customer interfaces. The Trianel DESK platform takes energy business services to a new dimension that offers customers greater benefits and efficiency potential. As a result, Trianel expects to expand its market share in the saturated market of energy services with continued high margin pressure, and increase its profitability.

In future, municipal utilities will be forced to utilise as yet unused own generation potential via professional optimisation. Pilot projects in this area have already revealed considerable potential. Not least the obligatory direct marketing of CHP plants in the current CHP





Act (KWKG) offers significant growth potential for Trianel GmbH's professional wholesale generation marketing services.

For 2017, Trianel's goal is to increasingly automate processes in the rapidly growing intraday trading, to enable it to implement further volume growth in short-term trading. In spot and futures trading, Trianel offers a market platform for external trade partners, which enables them to conclude wholesale transactions. That gives external market participants access to wholesale activities and reduces the costs of credit lines, as Trianel GmbH is a central trade partner. As a result, we see significant development opportunities here.

The arrival of digitisation in the energy business and thus also into the operative business of municipal utilities offers Trianel GmbH immense opportunities. The system infrastructure in the companies focused on mass processes is not able to cope with the growing requirements of digitisation and must tackle the detail and complexity of new business models. There are opportunities here to build many new products and the associated processes centrally, and develop a sustainable business model from this.

## 3. RISK REPORT

The business activity of Trianel GmbH demands that risks are consciously entered into in order to take advantage of opportunities. Also the development of new business fields and markets means that the resulting risks and opportunities must be integrated into a comprehensive risk and opportunity management system.

Since an event can lead to both opportunities and risks, depending on its nature, the term "risk" will be used below to describe both opportunities and risks.

### 3.1 Risk management system

Trianel GmbH's risk-bearing capacity forms the framework for the risk management system. This is aligned with the equity capital and liquid funds available, and derived from the company's risk strategy.

#### Risk management organisation

Risk controlling is responsible for the creation, development and implementation of guidelines, methods and processes for risk assessment and management, and for reporting on the risk situation. Central risk management also monitors compliance with risk guidelines and defined risk limits. In order to support the central unit, management appoints risk officers for every organisational unit. The risk officers are responsible for the control and development tasks assigned to them within the risk management system. In addition to the conventional risk management tasks, Trianel GmbH's central risk management also covers the compliance function. The compliance management system implemented at Trianel ensures that compliance risks are identified in good time and the employees are aware of this and violations of rules are prevented or discovered. The central compliance body is supported in its implementation by compliance field delegates in various organisational units. Regular exchanges by all compliance officers and monitoring of the effectiveness and systematic development of the compliance management system are guaranteed by the compliance committee.

The Trianel GmbH Risk Committee regularly meets to discuss the implementation and need for changes to the risk management system. In addition to this, the risk committee is involved in specific matters such as the development of solution and decision-making submissions and in new risk-relevant matters, market and product clearances, business partner clearances as part of know-your-customer processes, limit assignments for trade partners and allocation of risk capital to risk areas.

The risk management system fulfils the legal requirements. Since Trianel GmbH acts as a service provider for Trianel Finanzdienste GmbH, the standards and ordinances which apply to financial service providers also apply to the Trianel GmbH risk management system. The suitability and functionality of the risk management system are monitored by internal audit, currently performed by two audit service providers, as well as of the external auditors commissioned by the shareholders.

#### Risk management process

The professionalisation of the risk management process at Trianel GmbH comprises the systematic identification, evaluation, aggregation, control and monitoring of risks and internal and external reporting.

In order to guarantee systematic risk identification, various risk areas and fields are defined. They are areas for monitoring which could result in risks for Trianel GmbH. Risk detection also includes identifying interdependencies between risks.

Risk control comprises all measures and tools used for avoiding, reducing or shifting detected risks, as well as consciously entering into certain (residual) risks. The control period is determined by the underlying risks.

Trianel GmbH's risk-bearing capacity and the provision of risk capital derived from this form the framework for risk management. The risk capital approved by the Shareholders' Meeting represents the upper limit of the

overall risk accepted. The risk capital allocation to the risk areas which are defined in this context – market, credit, operational and other risks – is approved by the Management Board.

In order to evaluate the effectiveness of the risk control measures which have been put in place, the target and actual risk situations are continuously compared as part of risk monitoring. In this context, the amount and distribution of the approved risk capital are regularly assessed for appropriateness.

Internal and external addressees are informed on a regular basis of the current results, liquidity and risk situation as well as concerning the accounting precautions taken. The frequency, type and scope of the reporting vary according to the type and the significance of the risk. The Supervisory Board and Shareholders' Meeting were informed of the current results, liquidity and risk situation on a quarterly basis during the reporting year.

The specific design of the phases of the risk management process is documented per risk area and regularly checked for a need to update.

### 3.2 Risk areas and individual risks

The main risks of Trianel GmbH are allocated to the following risk areas in the risk management process.

#### Market risks

Market risks can significantly influence the results situation at Trianel GmbH in the form of market price fluctuations, market liquidity changes and quantity deviations.

Market risks as a result of price fluctuations result from open items, for example. These arise when the volume of purchasing transactions is greater or less than the sales transactions of similar products. The related market risk is determined by the extent of the discrepancy, and by the course the price fluctuation takes. Due to the

sales, direct marketing and trading activities of the company, together with its holdings in power stations, the gas storage facility in Epe, the offshore wind farm off Borkum and various onshore wind farms, market price developments and open items in the commodities electricity, gas and CO<sub>2</sub> are particularly relevant to the company's success.

If the supply of certain products or the demand for them fall, their tradability decreases and the market liquidity drops. This creates the risk for Trianel GmbH that items which are still open can only be closed to a limited degree, or closed at less favourable conditions. To minimise risks, volume limitations are used for certain products and time periods; adherence to these is monitored each working day.

If physical delivery transactions are concluded on the basis of forecast generation or consumption quantities, deviations between the actual physical fulfilment and the planned quantity may occur, leading to open items. Deviations from the forecast must be offset, and thus incur additional costs. Further changes in quantity can occur due to failed or restricted physical deliveries, for example as a result of generation, transportation or storage capacity shortfalls. Measures such as regular updates of forecast load curves, agreement of tolerance ranges in combination with a transfer of the risk to third parties when the tolerances are exceeded, as well as optimisations on the basis of the latest forecast can reduce this type of risk.

For example, the risk of open forward transactions is assessed and limited by calculating the value-at-risk (VaR) figure each working day, with a confidence level of 99%, and a defined holding period. This means that the loss due to an open trading position within the holding period does not exceed the calculated value to a degree of probability of 99%. The VaR is determined and monitored both mandate-specifically for individual assets and for the trade items.

In the 2016 financial year, the VaR figure for the trade mandate was between € 97.1 and € 1,267.6 thousand and always within the specified VaR limits.

The risk reporting is supplemented by stress values. Stress tests are used to examine the effects of external market situations on the portfolio values. The result specified is the assumed worst case loss that can be expected within the holding period.

In addition, the profit-at-risk (PaR) is calculated with a confidence level of 99% to evaluate open spot and balancing energy positions. This process calculates the potential value deterioration, to a degree of probability of 99%, which will not be exceeded in the respective period studied.

In wholesale business, margin payments triggered by market price changes result in fluctuations of the company's free cash flow. At Trianel GmbH, the associated liquidity is limited via position management, monitored each working day and taken into account as part of liquidity control. For example, in order to measure risk, the liquidity-at-risk is calculated at a confidence level of 99%, and with defined holding periods. This means that the maximum liquidity change due to market price fluctuations within the holding periods does not exceed the calculated value to a degree of probability of 99%. Stress tests are used to simulate the effects of extreme market price fluctuation on the forecast free cash flow.

Trianel GmbH also restricts the potential risks via binding market and product release processes. In addition to this, product, portfolio and portfolio group-related loss limits are defined, which serve to limit concentration risks. Overall, roughly 50% of the risk capital used in 2017 is assigned to the market risks (the calculation date for this was 31 December 2016).

Limit systems, measuring methods and the limits of individual portfolios and products are documented in the

appendix of the risk manual.

The current portfolio values and anticipated results and cash flow are regularly calculated and reported, if necessary every working day. The methods and assumptions used are checked regularly during the clean back testing, among other times, and are modified as necessary.

Economic collateral relationships are reported as valuation units in accordance with commercial law regulations.

### **Credit risks**

Unlike exchange transactions, with non-exchange energy trading transactions (OTC), Trianel GmbH is exposed to the risk that contract partners do not fulfil their contractual duties to deliver or pay for a commodity, or do so late.

In order to limit these counterparty risks, every potential business partner of Trianel GmbH is subjected to a multi-stage evaluation process to classify their credit standing (rating). This also takes externally available information, e.g. assessments by renowned rating agencies, into account. In addition, the credit standing evaluation of the trading partners is reviewed once a year. The individual counterparty limit assigned is assigned based on this credit standing classification and the total risk capital reserved for the counterparty default risk.

In addition to this, business partners provide collateral which increases the flexibility for performing transactions, and/or in the event of a default of a Trianel business partner, can be used to reduce the damage. Compliance with the credit lines granted is monitored and reported on every working day by calculating the credit risks and the remaining flexibility for each business partner. Mapping, monitoring and reporting of the credit risks is supported by a central, database-backed IT system.

The risk from the overall loan portfolio is also simulated regularly. Assuming default and price change scenarios, a credit value at risk (CVaR) is calculated with a confidence level of 99%. As of the balance sheet date, this value was a low-seven figure total for the overall loan portfolio for 2017. For 2017, roughly 20% of the planned risk capital was attributed to the credit risks.

### Operational and other risks

Risks arising from the legal, personnel, process and systems areas are generally referred to as operational and other risks.

Legal risks are defined as the risk that a contract or a group of contracts may not include the legal items required by Trianel GmbH. For example, this includes contractual implementation of payment terms suitable from a liquidity perspective. Furthermore, the uncertainty must be taken into account that (unforeseeable) changes to the legal or regulatory framework may have negative effects on the achievement of planned corporate goals, and that damage may occur as a result. Trianel GmbH counteracts these risks for example by involving its own legal department in all relevant procedures, through the mandatory market and product clearance process described above and by the use of standardised contracts wherever possible.

In addition to this, developments of general business-relevant legal and regulatory conditions are monitored on an ongoing basis, and influenced via involvement in the corresponding association committees where purposeful and possible. In this way, Trianel GmbH faces up to the constantly growing scope of regulatory requirements, among other things with a dedicated organisational unit, "Compliance & Market Regulation".

As part of Trianel GmbH's trend-scouting, political, social, economic and regulatory developments are also analysed intensely to identify opportunities and risks of these developments at an early stage and react to them.

Active and purposeful participation in the political debate is supported to a decisive extent through the presence of Trianel GmbH's Berlin office.

Risks for Trianel GmbH arise in this context in particular from the EU-wide tightening of regulations for the energy trading sector. In this context, the European Market Infrastructure Regulation (EMIR) and Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) and the revision of the Markets in Financial Instruments Directive (MiFID) are of key importance. In 2016, as in previous years, the legal framework drastically changed by this resulted in significant workloads on implementation of the far-reaching requirements and obligations for organisation, processes and systems, and the associated resources required on a permanent basis. This development will continue in 2017 and in the following years.

In this context, portfolios and funding requirements are repeatedly checked and adjusted; products and processes are adapted in accordance with the regulatory requirements via project teams created for this purpose. The necessary project budgets were taken into account in budgeting.

The company's success is also determined to a large extent by the specific expertise, commitment and contacts of its employees. Thanks to flat hierarchies, interdepartmental work and a high degree of personal responsibility, employees are able to use their qualifications in the most effective way at Trianel. The on-going development of all employees, together with support for potential managers from an early stage, is aimed at facilitating the sustainable achievement of corporate goals.

In order to enable effective risk management, there is an organisational separation between those areas, posts and functions that enter into risks in the course of their activities and those that monitor the risks entered into

and limit and report them where necessary. The specific design of the risk management system, particularly in relation to the content, responsibilities, processes, reporting obligations and documentation requirements is documented in the company's Risk Manual. Trianel GmbH also handles further organisational and process risks with binding regulations and process descriptions which are documented for example in the Organisation Manual and in the Compliance Guideline. Compliance with these regulations is ensured via independent auditing and reporting, and by adherence to the dual-control principle.

Communication and information systems are of key importance for the business processes at Trianel GmbH. In particular the IT security, data security and data protection aspects have to be taken into account in this respect. Alongside the general security of applications and data in the IT network, framework contracts and service level agreements oblige IT service providers to guarantee that the required standards are met. All Trianel GmbH employees are instructed with regard to data protection according to Section 5 of the German Federal Data Protection Act (BDSG), and are obliged to observe data privacy. An IT security and data privacy officer has been appointed. Employees are regularly made aware of IT security topics on training courses and via the Intranet. Regulations on this issue are also an integral part of the corporate guidelines.

Other risks arise in particular as a result of possible deviations from the budget for associate companies and the development of asset projects. A simulation-based participation risk model is used to evaluate the participation risks and calculate the associated risk capital requirements. This models the loss of the portfolio of participating interests which will not be exceeded within a defined period (generally the current financial year) at a probability of 99%. For 2017, the resulting risk (PaR99) is estimated to be a high seven-figure or low eight-figure total, depending on the course of time.

This corresponds to roughly 30% of the risk capital used in 2017 (the calculation date for this was 31 December 2016). Also, circumstances leading to key changes in individual risk positions, e.g. granting loans to companies in which a participating interest exists, are only entered into after a case-specific decision by the Shareholders' Committee of Trianel GmbH.

Trianel holds minority participating interests in the key operating project companies (in particular TKL, TGH, TGE, TWB, TOW, TEE) and is informed on the developments and risk situation of the companies via committee documents.

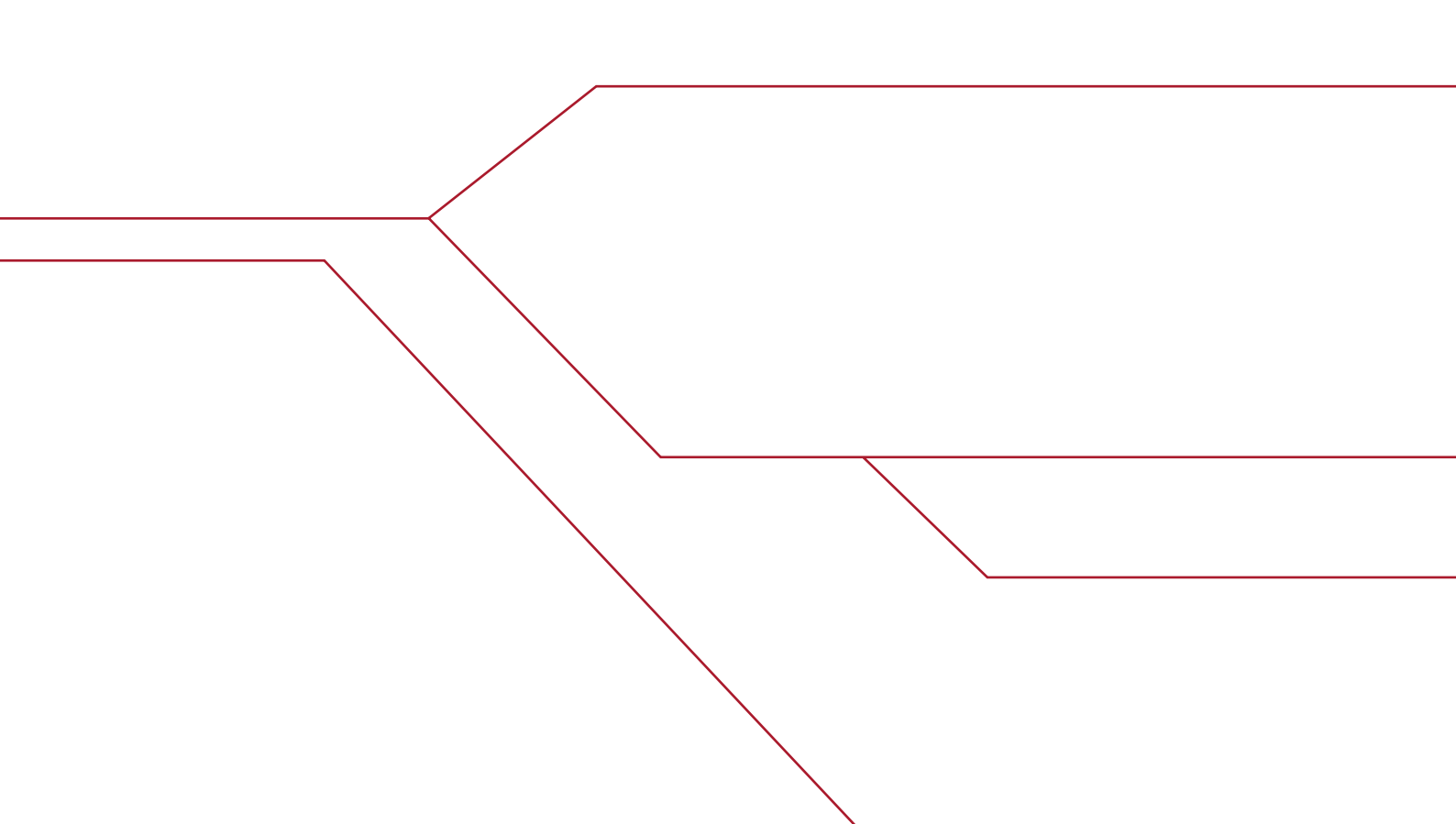
### Use of financial instruments

The financial instruments include original and derivative financial instruments. The original financial instruments on the assets side fundamentally include accounts receivable, liquid funds and financial assets. On the liabilities side, the original financial instruments fundamentally include the accounts payable valued at the amount repayable. The level of the financial assets in the balance sheet indicates the maximum default risk for the items mentioned. When default risks exist, they are taken into account by value adjustments.

Trianel GmbH uses derivative financial instruments to hedge against market risks. These include financial swaps, futures on energy or emission certificates. In addition, financial instruments in the form of interest swap agreements are used to secure bank loans. Transactions with financial instruments are subject to risk guidelines in accordance with the risk management system described above.

### 3.3 General statement on the risk situation

In 2016, neither individual risks nor the overall risk endangered the company's status as a going concern. Precautions were taken in the balance sheet for risks that are likely to take place.



According to the current assessment, the market risks will not be higher than in the previous year in the subsequent years.

In spite of the declining credit standing, including public sector companies, compared with previous years, Trianel GmbH's business model focusing on municipal utilities as customers is assumed to entail a low risk of insolvent business partners in terms of counterparty default risks. The operational and other risks will likely also be dominated by risks from asset projects and participating interests, as well as risks from general regulatory and legal conditions in the future.

We believe that the enforcement of claims from feed management measures (FeMan) is likely to be successful. The political will to strengthen the role of direct marketers is present, but has not been secured yet

through regulatory measures. For this reason, the claims were assessed with an appropriate level of caution. The write-up of accounts receivable vis-à-vis our insolvent Dutch subsidiary (TEBV) was derived from the latest report of the insolvency administrator. Besides the uncertainty regarding the further time sequence, there are also risks in the amount of insolvency assets and dividend.

In spite of the described developments and uncertainties, there are no risks apparent to the Management Board from the current perspective, that could endanger Trianel GmbH's continuation as a going concern.



## D. SUPPLEMENTARY REPORT

---

No significant events occurred following the end of the financial year.







## E. REPORTING

---

### PURSUANT TO SECTION 108 PARA. 3 NO. 2 OF THE NORTH RHINE-WEST- PHALIAN LOCAL GOVERNMENT ORDINANCE (GO NRW)

The purpose of the company is national and international energy trading, with the objective of improving local energy supply. The company may undertake the following tasks to implement this objective:

1. Trading in
  - a. Energy (electricity, gas, oil, coal)
  - b. Energy derivatives and energy-related financial derivatives (as defined in the German Banking Act [Kreditwesengesetz, KWG]; proprietary trading)
  - c. Financial products relating to energy supply, such as weather derivatives and emission certificates (pursuant to the German Banking Act (KWG): proprietary trading)
2. Energy sales
3. Provision of consulting and other fee-based services directly related to energy supply.

The company is entitled to conduct all measures and business transactions through which the purpose of the company can directly or indirectly be promoted. It may, in order to fulfil its tasks, operate other companies, participate in them or establish, acquire and lease such companies as well as auxiliary and ancillary companies, furthermore it may enter into joint ventures and establish subsidiary branches.

The comments and data in the Notes and the Management Report illustrate that we have conformed fully with the public purpose based on our terms of reference as per the Articles of Association.

Aachen, Germany, 27 April 2017  
Trianel GmbH

Sven Becker

Dr. Oliver Runte

Management Board of Trianel GmbH

# ANNUAL FINANCIAL STATEMENTS OF TRIANEL GMBH

---

<b>Balance Sheet</b>	<b>35</b>
<b>Profit and loss statement</b>	<b>37</b>
<b>Notes for the Financial Year 2016</b>	<b>39</b>
Form and presentation of the annual financial statements	39
Accounting and valuation principles	39
Balance sheet notes	41
Notes on the profit and loss statement	49
Other information	51
<b>Development of fixed assets</b>	<b>53</b>
<b>Auditor's Certificate</b>	<b>55</b>

# BALANCE SHEET

AS OF 31 DECEMBER 2016

## ASSETS

In €	31/12/2016	31/12/2015
<b>A. Fixed assets</b>		
I. Intangible assets		
1. Internally generated intangible assets	851,722.00	0.00
2. Purchased rights of use and similar rights	2,452,347.50	2,438,560.50
3. Down payments made	202,522.00	493,062.96
	<b>3,506,591.50</b>	<b>2,931,623.46</b>
II. Tangible assets		
1. Real property, rights equivalent to real property and buildings, including buildings on third-party land	18,312,703.00	18,862,160.00
2. Technical plant and machinery	84,228.00	80,815.00
3. Furniture and fixtures	1,279,286.00	1,435,844.00
4. Down payments made and plants under construction	734.90	0.00
	<b>19,676,951.90</b>	<b>20,378,819.00</b>
III. Financial assets		
1. Shares in affiliated companies	2,819,031.57	2,844,031.57
2. Participating interests	28,727,711.33	32,515,480.13
3. Loans to companies with which a participating interest exists	43,944,933.38	39,975,525.20
4. Other loans	19,962.19	21,937.85
	<b>75,511,638.47</b>	<b>75,356,974.75</b>
	<b>98,695,181.87</b>	<b>98,667,417.21</b>
<b>B. Current assets</b>		
I. Inventories		
1. Work in progress	1,289,036.69	427,260.41
2. Merchandise	2,619,334.95	2,907,326.43
	<b>3,908,371.64</b>	<b>3,334,586.84</b>
II. Accounts receivable and other assets		
1. Trade receivables	105,259,964.94	87,164,855.00
2. Accounts receivable from affiliated companies	2,299,129.83	2,346,340.07
3. Accounts receivable from shareholders	23,127,214.62	28,640,096.89
4. Accounts receivable from companies with which a participating interest exists	32,207,307.81	32,875,995.24
5. Other assets	50,861,085.09	39,021,891.69
	<b>213,754,702.29</b>	<b>190,049,178.89</b>
III. Cash in hand, cash at bank	32,528,227.77	23,020,691.54
<b>C. Accruals and deferrals</b>	<b>2,653,105.78</b>	<b>2,610,600.13</b>
<b>Total</b>	<b>351,539,589.35</b>	<b>317,682,474.61</b>

## EQUITY AND LIABILITIES

	In €	31/12/2016	31/12/2015
A. Equity			
I. Capital stock		20,152,575.00	20,152,575.00
II. Capital reserves		26,129,469.24	26,129,469.24
III. Earnings reserves, other earnings reserves		41,795,066.46	41,670,793.39
IV. Annual net income/loss for the year		-4,139,058.53	124,273.07
		83,938,052.17	88,077,110.70
B. Provisions			
1. Provisions for pensions		102,685.00	74,985.00
2. Other provisions		45,311,606.75	49,407,776.29
		45,414,291.75	49,482,761.29
C. Liabilities			
1. Accounts payable to credit institutions		20,882,458.61	24,094,528.34
2. Down payments received for orders		495,611.34	495,611.34
3. Trade accounts payable		140,482,565.64	118,374,304.61
4. Accounts payable to affiliated companies		928.90	161,146.22
5. Accounts payable to shareholders		11,385,928.84	16,156,007.87
6. Accounts payable to companies with which a participating interest exists		27,778,573.43	13,947,270.86
7. Other accounts payable		20,380,701.04	6,354,385.29
		221,406,767.80	179,583,254.53
D. Accruals and deferrals		780,477.63	539,348.09
Total		351,539,589.35	317,682,474.61

# PROFIT AND LOSS STATEMENT

FOR THE FINANCIAL YEAR FROM  
01 JANUARY 2016 TO 31 DECEMBER 2016

In €	2016	2015
1. Sales proceeds	2,136,458,299.43	2,127,487,199.08
2. Increase in inventory of finished and semi-finished products	1,044,217.21	427,260.41
3. Other operating income	17,073,763.39	11,335,950.78
• Of which from currency conversion	973,083.68	2,257,316.53
4. Cost of materials		
• Expenditure on goods purchased	2,106,981,056.11	2,088,296,365.46
5. Personnel expenditures		
a) Wages and salaries	25,949,206.07	23,733,181.21
b) Social charges and expenditure for pension provision and support	4,028,637.16	3,901,537.43
	<b>29,977,843.23</b>	<b>27,634,718.64</b>
6. Depreciation		
a) On intangible fixed assets and tangible fixed assets	2,270,318.60	2,064,176.87
b) On current assets which exceed usual depreciation in the corporation	184,438.93	3,205.42
	<b>2,454,757.53</b>	<b>2,067,382.29</b>
7. Other operating expenditure	20,510,539.97	23,059,647.54
• Of which from currency conversion	1,097,908.26	2,112,561.85
	<b>-5,347,916.81</b>	<b>-1,807,703.66</b>
8. Revenue from participating interests	291,767.14	1,033,072.52
9. Revenue from profit and loss transfer agreements	1,433,376.03	1,090,776.81
10. Other interest and similar revenues	4,830,334.13	4,579,187.04
• Of which from discounting	722,546.00	680,628.92
11. Interest and similar expenditure	4,441,094.42	4,681,476.06
• Of which from compounding	1,758,345.68	2,313,575.37
	<b>2,114,382.88</b>	<b>2,021,560.31</b>
12. Tax on income and revenue	899,417.60	84,546.58
13. Earnings after tax	-4,132,951.53	129,310.07
14. Other taxes	6,107.00	5,037.00
<b>Annual net income/loss for the year</b>	<b>-4,139,058.53</b>	<b>124,273.07</b>





# NOTES FOR THE FINANCIAL YEAR 2016

---

## 1. FORM AND PRESENTATION OF THE ANNUAL FINANCIAL STATEMENTS

Trianel GmbH is domiciled in Aachen and entered in Commercial Register B of Aachen District Court under number HRB 7729.

The annual financial statements have been prepared in accordance with the regulations of the German Commercial Code (HGB) for large incorporated companies in conjunction with the supplementary provisions of the GmbH-Gesetz (German Limited Liability Companies Act).

To improve the clarity of the presentation we have provided details on affiliations to other items in the

balance sheet in the Notes. The profit and loss statement is structured according to the expenditure format.

Separate explanatory notes have been provided in respect of the main items in the balance sheet and the profit and loss statement.

For better presentation of the earnings situation, the sales proceeds and costs of materials for proprietary business transactions are balanced against one another for reporting.

## 2. ACCOUNTING AND VALUATION PRINCIPLES

The accounting and valuation were performed based on the assumption that company activities would be continued.

The intangible assets and tangible fixed assets were valued at acquisition cost less depreciation.

Depreciation was scheduled on a straight-line basis or using the declining balance method based on the normal useful life of the capital assets.

The financial assets are evaluated at acquisition cost, taking account of repayment, depreciation and write-

ups. Interest receivables which have not been subjected to interest with a residual term of more than one year are discounted using a market interest rate adequate for the residual term. The evaluation of the value retention of the participation book value and the shareholder loans of Trianel Windkraftwerk Borkum GmbH & Co. KG was made in summarised form due to the close contractual link of the participating interests and loans.

Inventories are valued at acquisition cost using the lower of cost or market principle for depreciation. Accounts receivable and other assets are shown in the balance sheet at their nominal value; necessary value adjustments

were taken into account. In the financial year, the previous general value adjustment was amended from 1% to 0.5%.

Accounts receivable and payable in foreign currencies are converted at the applicable exchange rate on the posting date unless a fixed exchange rate for the Euro exists. Profits and losses incurred due to exchange rate movements up to the balance sheet date are taken into account per Section 256a of the German Commercial Code (HGB).

Liquid funds are stated at nominal value in the balance sheet.

The subscribed capital is included at nominal value.

In the profit use resolution on 8 July 2016, a decision was made to add the 2015 annual net income of € 124 thousand to the earnings reserves.

Pension obligations are calculated according to actuarial principles using the Projected Unit Credit Method (PUC Method). In the PUC Method, the provision amount is defined as the actuarial cash value of the pension obligations earned by the employees until this time based on work performed in the past in accordance with the pension formula and vesting regulation. The "Guide Tables 2005 G" by Klaus Heubeck are used as a biometric calculation basis. The mathematical interest rate is 4.01%, which is equal to the average market interest rate for an assumed residual term of the obligations of 15 years. The pension trend was also incorporated at 1%. The wage trend was not incorporated due to the contractual basis. The difference to a provision approach based on an average market interest rate over the past seven years totals € 22 thousand. The option per

Article 67 para. 1 no. 1 of the Introductory Act for the German Commercial Code (EGHGB) was not exercised.

The provisions are reported at the settlement value necessary according to prudent commercial assessment. Provisions took into account all identifiable risks and contingent liabilities. Provisions with a residual term of over one year were discounted with the average market interest rate of the last 7 financial years in accordance with their residual term as per the German Bundesbank's provision discounting regulations.

The option of capitalising deferred taxes was not exercised.

Accounts payable are stated at the settlement value.

In order to evaluate the physical trade transactions, the posted and pending transactions and gas inventories are always combined in an annual consideration with the corresponding financial transactions to the Asset Electricity, Asset Gas, Trade, Electricity Sales and Gas Sales portfolios, i.e. in the event of the use of the option to form an accounting valuation unit.

Derivative financial instruments were used to secure bank loans and foreign currency transactions, which each form a valuation unit together with the debt items.



## 3. BALANCE SHEET NOTES

### 3.1 Fixed assets

The development of fixed assets and depreciation during the financial year under review is shown in the fixed-asset movement schedule, which is enclosed as a separate document with the Notes.

In 2016, modules of the integrated Trianel DESK energy industry suite were developed and capitalised as

internally generated intangible fixed assets. There is a payout block per Section 286 (8) of the German Commercial Code (HGB) to a total of the current book value of € 852 thousand, however there is sufficient freely available equity.

Shares to the amount of € 2,819,031.57 are held in the following affiliated companies:

COMPANY	Registered office	Participation %	Participation book value €	Equity €	Annual result €
Trianel Finanzdienste GmbH	Aachen	100.0	2,500,000	2,500,000	* 0
Trianel Gaskraftwerk Hamm Verwaltungs GmbH	Aachen	100.0	25,000	40,039	1,194
Trianel Gasspeicher Epe Verwaltungs GmbH	Aachen	100.0	25,000	95,754	23,570
Trianel Kraftwerk Krefeld Verwaltungs GmbH	Aachen	100.0**	25,000	21,212	–3,788
Trianel Kohlekraftwerk Lünen Verwaltungs GmbH	Aachen	100.0	25,000	36,174	1,053
Trianel Windkraftwerk Borkum Verwaltungs GmbH	Aachen	100.0	25,000	62,907	12,626
Trianel Service GmbH	Aachen	100.0	194,032	137,767	–7,656

\* A profit and loss transfer agreement exists between Trianel Finanzdienste GmbH and Trianel GmbH.

\*\* The shares are wholly commercially attributed to Trianel GmbH.

### Participating interests in which Trianel GmbH maintains at least one fifth of the shares

Shares to the amount of € 28,727,711.33 are held in the following participating interests:

COMPANY	Registered office	Participation %	Participation book value €	Equity €	Annual net income/deficit €
GESY Green Energy Systems GmbH	Berlin	24.9	267,427,90	1,025,827*	131,627*
Trianel Gaskraftwerk Hamm GmbH & Co. KG	Aachen	6.12	3,258,353	14,307,313	-21,122,250
Trianel Gasspeicher Epe GmbH & Co. KG	Aachen	7.60	1,588,186	23,906,124	3,008,937
Trianel Kohlekraftwerk Lünen GmbH & Co. KG	Lünen	6.34	9,373,445	-4,450,776	-23,604,262
Trianel Windkraftwerk Borkum GmbH & Co. KG	Aachen	2.69	7,970,000	303,030,007	-30,288,882
Trianel Onshore Windkraftwerke GmbH & Co. KG	Aachen	5.35	2,911,800	55,606,544	482,843
Trianel Erneuerbare Energien GmbH & Co. KG	Aachen	8.17	3,358,498	24,544,581*	-299,396*
Trianel Energie B.V.**	Maastricht, NL	100.0	1	- **	- **

\* Status: 31/12/2015.

\*\* Trianel Energie B.V. applied for insolvency on 27 December 2012 and therefore did not prepare annual financial statements for 31 December 2016. As such, the book value of the holding was written down to a reminder value of € 1.

### 3.2 Current assets

The current assets largely comprise stored quantities of gas, CO2 certificates and work in progress as a result of advance performances for project developments and rights.

Trade receivables mainly consist of outstanding payments for electricity and gas supplies, which were offset against similar payables to the value of € 301,207 thousand (prev. year € 248,251 thousand).

Of the accounts receivable from affiliated companies, € 866 thousand (prev. year € 1,256 thousand) are trade accounts receivable.

Of the accounts receivable from shareholders, € 22,762 thousand (prev. year € 28,367 thousand) are trade accounts receivable. Similar accounts payable totalling € 7,111 thousand (prev. year € 569 thousand) were offset against the accounts receivable.

In addition to trade receivables from energy supplies and service provision, the accounts receivable from affiliated companies include receivables from the insolvent Trianel Energie B.V. (TEBV) totalling € 13,851 thousand, which have been adjusted individually at € 9,946 thousand.

The other assets primarily contain collateral security relating to energy trading, including non-accessible bank credit balances of € 15,030 thousand, input tax of € 7,306 thousand which is not deductible until the following year and damages claimed vis-à-vis grid operators totalling € 3,500 thousand. In addition to this, the other assets include accounts receivable from tax reimbursement claims totalling € 11,814 thousand. They are primarily for income tax reimbursement claims for the 2014 to 2016 assessment periods.

All accounts receivable and other assets are due within one year, with the exception of accounts receivable

and other assets from smart metering, totalling € 2 thousand.

### 3.3 Provisions

Other provisions totalling € 45,312 thousand (prev. year € 49,408 thousand) include provisions for uncertain accounts payable totalling € 6,826 thousand (prev. year € 7,665 thousand), mainly pertaining to personnel costs.

Otherwise, provisions are included for anticipated losses from pending transactions to the amount of € 38,486 thousand (prev. year € 41,742 thousand). As of the balance sheet date, provisions for anticipated losses for asset items totalling € 37,662 thousand (prev. year € 37,564 thousand), totalling € 594 thousand (prev. year € 4,121 thousand) for the trade mandate and € 229 thousand (prev. year € 57 thousand) for the sales mandates were included on the liabilities side.

### 3.4 Accounts payable

The accounts payable to credit institutions include long-term bank loans and accrued interest.

The down payments received for orders are for instalments from B2B customers.

Trade accounts payable predominantly result from energy procurement and consulting services.

Accounts payable to shareholders mainly relate to trade accounts payable resulting from energy supplies.

Accounts payable to companies with which a participating interest exists are exclusively trade accounts payable.

Other accounts payable include accounts payable from wages and church tax totalling € 423 thousand (prev. year € 316 thousand) and from social security totalling € 164 thousand (prev. year € 176 thousand).

LIABILITIES MOVEMENT SCHEDULE In €	31/12/2016	31/12/2016			31/12/2015
	TOTAL	Residual terms			Residual term
		Up to 1 year	1 year to 5 years	Over 5 years	Previous year Up to 1 year
Accounts payable to credit institutions	20,882,458.61	2,843,525.34	18,038,933.27	11,828,799.91	4,503,061.73
Down payments received on orders	495,611.34	495,611.34	0.00	0.00	495,611.34
Trade accounts payable	140,482,565.64	140,482,565.64	0.00	0.00	118,374,304.61
Accounts payable to affiliated companies	928.90	928.90	0.00	0.00	161,146.22
Accounts payable to shareholders	11,385,928.84	11,385,928.94	0.00	0.00	16,156,007.87
Accounts payable to affiliated companies	27,778,573.43	27,778,573.43	0.00	0.00	13,947,270.86
Other liabilities	20,380,701.04	19,916,227.73	464,473.31	0.00	5,723,226.28
<b>Total liabilities</b>	<b>221,406,767.80</b>	<b>202,903,361.32</b>	<b>18,503,406.58</b>	<b>11,828,799.91</b>	<b>159,360,628.91</b>

Accounts payable to companies with which a participating interest exists are exclusively trade accounts payable.

Other accounts payable include accounts payable from wages and church tax totalling € 423 thousand (prev. year € 316 thousand) and from social security totalling € 164 thousand (prev. year € 176 thousand).

### 3.5 Valuation units (VU)/derivative financial instruments

The option of forming balance sheet valuation units per Section 254 of the German Commercial Code (HGB) was utilised to the extent stated below. The effectiveness is documented by measuring the physical delivery equivalents or compliance with specified rules, such as VaR limits as part of the existing risk management system.

Trianel GmbH's operative business is managed and controlled in mandates. Control via mandates does not exclude the possibility of individual contract groups being shown and valued separately in partial portfolios within the mandates, to enable more detailed mapping as well as the delegation of partial tasks if necessary. The items

in the electricity asset mandate which cannot be grouped in a valuation unit must be evaluated according to classic rules under balance sheet aspects. Provisions for potential losses were formed for negative valuation balances for the year.

The figures specified on the risks secured via valuation units and losses reported limited via balancing are theoretical, as all individual transactions were evaluated here, while mandate-specific controlling means that open trade items are restricted appropriately at all times.

Individually, the following valuation units existed on the balance sheet date:

#### Valuation unit: Electricity asset mandate

This valuation unit (VU) combines the shares of existing contracts in relation to our holdings in power station companies with corresponding hedging transactions as portfolio hedges. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 18,947 thousand and hedge transactions totalling € 9,103 thousand. The VU hedges risks from an individual transaction perspective to a total of € 3,759 thousand for 2017. A provision was also formed for 2017 for potential losses from pending transactions totalling € 8,160 thousand. The 2018 VU contains base transactions totalling € 17,621 thousand and hedge transactions totalling € 6,910 thousand. The VU hedges risks from an individual transaction perspective to a total of € 3,642 thousand for 2018. A provision was also formed for 2018 for potential losses from pending transactions totalling € 8,810 thousand. The 2019 VU contains base transactions totalling € 17,626 thousand and hedge transactions totalling € 0 thousand. The VU hedges risks from an individual transaction perspective to a total of € 1,437 thousand for 2019. A provision was also formed for 2019 for potential losses from pending transactions totalling € 8,362 thousand. A provision was formed for potential losses from pending transactions totalling € 7,609 thousand for purchase obligations after the managed periods.

The opposing value changes compensate one another as a result of the existing spread hedging in the respective years in question.

#### **Valuation unit: Gas asset mandate**

This VU combines contractual obligations from storage facility user contracts including gas stocks with the corresponding hedge transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 1,612 thousand and hedge transactions totalling € 466 thousand and a balance sheet stock value of € 1,847 thousand. The VU hedges risks from an individual transaction perspective to a total of € 824 thousand for 2017. The VU hedges risks from an individual

transaction perspective to a total of € 824 thousand for 2017. A provision was also formed for 2017 for potential losses from pending transactions totalling € 812 thousand. The 2018 VU contains base transactions totalling € 1,816 thousand and hedge transactions totalling € 47 thousand. The VU hedges risks from an individual transaction perspective to a total of € 618 thousand for 2018. A provision was also formed for 2018 for potential losses from pending transactions totalling € 1,226 thousand. The 2019 VU contains base transactions totalling € 1,801 thousand and hedge transactions totalling € 47 thousand. The VU hedges risks from an individual transaction perspective to a total of € 652 thousand for 2019. A provision was also formed for 2019 for potential losses from pending transactions totalling € 1,179 thousand. A provision was formed for potential losses from pending transactions totalling € 1,505 thousand for storage facility use obligations after the managed periods.

The opposing value changes compensate one another as a result of the existing spread hedging in the respective years in question.

#### **Valuation unit: Trade mandate**

This VU combines the existing wholesale energy transactions with the corresponding hedging transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each generally considered on an annual basis. In deviation from this, spread hedges explicitly designated in the mandate trade, which aim for a multi-year spread development, multi-year offsetting is also taken into account in the balance sheet. The compensating part plus any excess liability from the designated spread transactions is attributed to the first of the two following spread years. The 2017 VU contains base transactions totalling € 3,969,075 thousand and hedge transactions totalling € 3,956,952 thousand. The VU hedges risks from an individual transaction perspective to a total of

€ 1,164,871 thousand for 2017. The 2017/2018 spread hedge results in a result balance totalling – € 3,142 thousand, which is incorporated in the 2017 VU. A provision was also formed for 2017 for potential losses from pending transactions totalling € 414 thousand. The 2018 VU contains base transactions totalling € 1,200,363 thousand and hedge transactions totalling € 1,211,264 thousand. The VU hedges risks from an individual transaction perspective to a total of € 294,630 thousand for 2018. The 2019 VU contains base transactions totalling € 158,251 thousand and hedge transactions totalling € 158,152 thousand. The VU hedges risks from an individual transaction perspective to a total of € 30 thousand for 2019. A provision was also formed for 2019 for potential losses from pending transactions totalling € 180 thousand.

The opposing value changes compensate one another as a result of the existing hedging relationships in the respective years in question.

#### **Valuation unit: Electricity sales mandate (EW)**

This VU combines the existing electricity contracts with customers with the corresponding hedging transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 628,532 thousand and hedge transactions totalling € 613,572 thousand. The VU hedges risks from an individual transaction perspective to a total of € 142,643 thousand for 2017. The 2018 VU contains base transactions totalling € 215,539 thousand and hedge transactions totalling € 209,718 thousand. The VU hedges risks from an individual transaction perspective to a total of € 44,216 thousand for 2018. A provision was also formed for 2018 for potential losses from pending transactions totalling € 35 thousand. The 2019 VU contains base transactions totalling € 73,781

thousand and hedge transactions totalling € 71,948 thousand. The VU hedges risks from an individual transaction perspective to a total of € 10,499 thousand for 2019. A provision was also formed for 2019 for potential losses from pending transactions totalling € 118 thousand. The opposing value changes largely compensate one another as a result of the existing hedging relationships in the respective years in question.

#### **Valuation unit: Electricity sales mandate (T&O)**

This VU combines the existing electricity contracts with customers with the corresponding hedging transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 48 thousand and hedge transactions totalling € 195 thousand. The VU hedges risks from an individual transaction perspective to a total of € 0 thousand for 2017.

The opposing value changes largely compensate one another as a result of the existing hedging relationships in the respective years in question.

#### **Valuation unit: Gas sales mandate (EW)**

This VU combines the existing gas contracts with customers with the corresponding hedging transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 29,454 thousand and hedge transactions totalling € 28,976 thousand. The VU hedges risks from an individual transaction perspective to a total of € 3,899 thousand for 2017. The 2018 VU contains base transactions totalling € 11,659 thousand and hedge transactions totalling € 11,346 thousand. The VU hedges risks from

an individual transaction perspective to a total of € 1,743 thousand for 2018. The 2019 VU contains base transactions totalling € 3,475 thousand and hedge transactions totalling € 3,438 thousand. The VU hedges risks from an individual transaction perspective to a total of € 551 thousand for 2019. The 2020 VU contains base transactions totalling € 44 thousand and hedge transactions totalling € 0 thousand. The VU hedges risks from an individual transaction perspective to a total of € 0 thousand for 2020.

The opposing value changes largely compensate one another as a result of the existing hedging relationships in the respective years in question.

#### **Valuation unit: Gas sales mandate (T&O)**

This VU combines the existing gas contracts with customers with the corresponding hedging transactions as a portfolio hedge. The risk of price changes from market price fluctuations is hedged. Pending transactions are incorporated in the VUs, which are each considered on an annual basis.

The 2017 VU contains base transactions totalling € 4,857 thousand and hedge transactions totalling € 4,672 thousand. The VU hedges risks from an individual transaction perspective to a total of € 863 thousand for 2017. A provision was also formed for 2017 for potential losses from pending transactions totalling € 75 thousand. The 2018 VU contains base transactions totalling € 1,979 thousand and hedge transactions totalling € 1,977 thousand. The VU hedges risks from an individual transaction perspective to a total of € 257 thousand for 2018. The 2019 VU contains base transactions totalling € 1,842 thousand and hedge transactions totalling € 1,840 thousand. The VU hedges risks from an individual transaction perspective to a total of € 336 thousand for 2019. The opposing value changes largely compensate one another as a result of the existing hedging relationships in the respective years in question.

#### **Interest rate swaps**

The option of forming valuation units was utilised in full. The freezing method was used to map the effective parts of the valuation units formed in the accounts.

Individually, there are two micro-hedges from one base transaction and one hedging transaction each on the balance sheet date. The two base transactions are reported as accounts payable for bank loans of € 2,600 and € 991 thousand (prev. year € 4,312 thousand in total), while the two hedge transactions are not reported as derivative financial instruments (interest rate swaps) as they are pending transactions. The accounts payable for loans are subject to interest at the 6 month EURIBOR plus 75 base points. The interest rate swaps exchange an interest received at the 6 month EURIBOR for a fixed interest rate to be paid of 4.88% and 5.09%. The risk of interest rate changes from interest rate fluctuation is hedged.

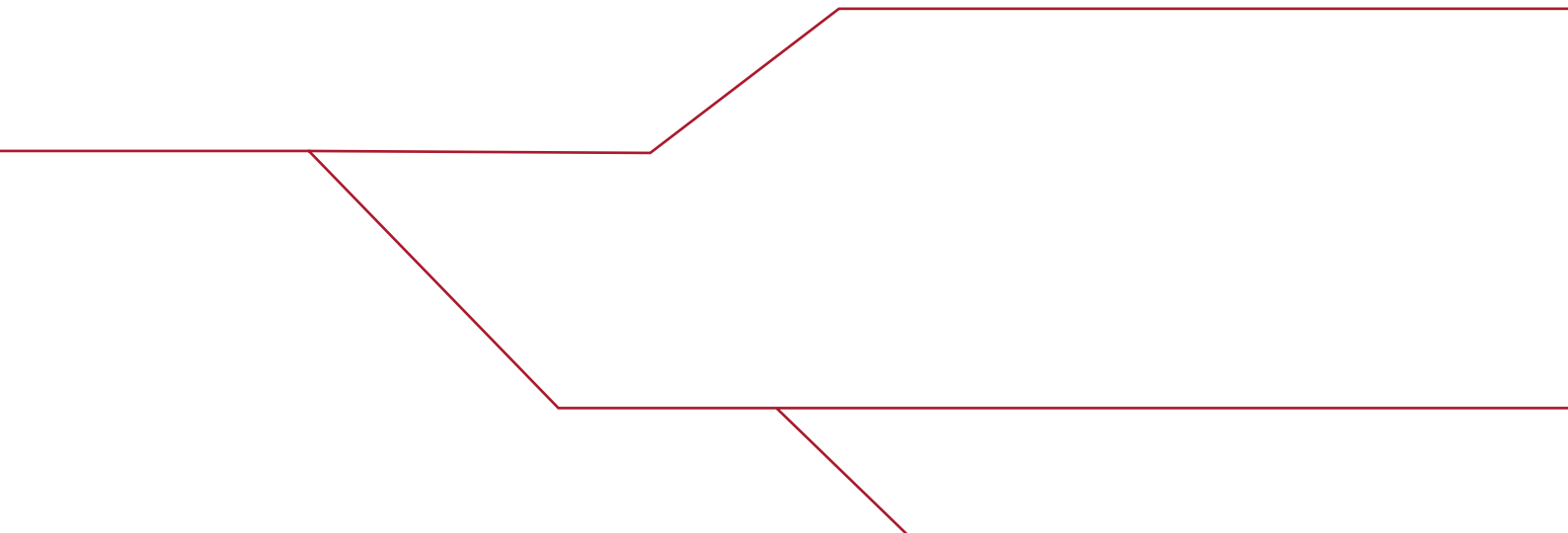
Trianel GmbH has concluded the following unreported derivative financial instruments:

- **Interest rate swap (€ 2,600 thousand)**

In this transaction, starting from 27 May 2008, a variable interest rate account payable with an initial total of € 6,000 thousand is exchanged for a fixed interest rate account payable, thus hedging against market fluctuations. This agreement matures in June 2023. The fair value according to the lending bank's internal risk models is € -443 thousand as of 31 December 2016.

- **Interest rate swap (€ 991 thousand)**

In this transaction, starting from 17 July 2008, a variable interest rate account payable with an initial total of € 2,288 thousand is exchanged for a fixed interest rate account payable, thus hedging against market fluctuations. This agreement matures in June 2023. The fair value according to the lending bank's internal risk models is € -176 thousand as of 31 December 2016.



The market values were determined using the cash value method. According to this, all future payments, on both the fixed and variable side of the interest rate swap, are discounted on the valuation date. Payments on the variable side are determined on the basis of additional due dates which result from the current interest rate structure curve.

The market value changes of the derivatives are offset by opposing market value changes of the base transactions.

### **3.6 Latent taxes**

The trade and tax law value assessments of the internally generated intangible assets, the financial assets, the pension provisions and other provisions result in differences, which are compensated in subsequent financial years. These differences led to latent tax accruals and deferrals. A tax rate of 32.45% is applied when determining the latent taxes.

The calculation results in a surplus of latent tax accruals. The option under Section 274 para. 1 no. 2 of the German Commercial Code (HGB) is not used, and thus no latent tax accrual is formed.



## 4. NOTES ON THE PROFIT AND LOSS STATEMENT

### 4.1 Sales revenues

There is no comparability to the 2015 financial year due to the Reporting Guideline Implementation Act (BilRUG) Section 277 (1) of the German Commercial Code (HGB) in conjunction with Sect. 75 (2) of Introductory Act for

the German Commercial Code (EGHGB) and the initial application. The balanced sales proceeds for 2015 would have been € 2,127,554 thousand per Section 277 (1) of the German Commercial Code (HGB) in the BilRUG version. The gross sales less electricity tax can be broken down into the following areas of activity:

Business field	31/12/2016		31/12/2015	
	Sales in € thousands	Sales in %	Sales in € thousands	Sales in %
Electricity (unbalanced)	2,802,398	60.5 %	3,130,774	69.8 %
Balancing	-1,629,033	65.3 %	-1,785,445	75.8 %
<b>Electricity</b>	<b>1,173,365</b>	<b>54.9 %</b>	<b>1,345,329</b>	<b>63.2 %</b>
Gas (unbalanced)	1,735,778	37.5 %	1,209,137	27.0 %
Balancing	-865,139	34.7 %	-571,369	24.2 %
<b>Gas</b>	<b>870,639</b>	<b>40.8 %</b>	<b>637,768</b>	<b>1.2 %</b>
Certificates trading (unbalanced)	18,441	0.4 %	25,212	0.6 %
Balancing	0	0.0 %	-169	0.1 %
<b>Emissions trading</b>	<b>18,441</b>	<b>0.9 %</b>	<b>25,043</b>	<b>30.0 %</b>
Coal (unbalanced)	34,343	0.7 %	77,156	1.7 %
Balancing	0	0.0 %	0	0.0 %
<b>Coal</b>	<b>34,343</b>	<b>1.6 %</b>	<b>77,156</b>	<b>3.6 %</b>
Services (unbalanced)	39,737	0.9 %	42,274	0.9 %
Balancing	0	0.0 %	0	0.0 %
<b>Services</b>	<b>39,737</b>	<b>1.9 %</b>	<b>42,274</b>	<b>2.0 %</b>
<b>Services (unbalanced)</b>	<b>4,630,697</b>	<b>100.0 %</b>	<b>4,484,554</b>	<b>100.0 %</b>
<b>Total (unbalanced)</b>	<b>-2,494,172</b>	<b>100.0 %</b>	<b>-2,356,983</b>	<b>100.0 %</b>
<b>Total (balanced)</b>	<b>2,136,525</b>	<b>100.0 %</b>	<b>2,127,571</b>	<b>100.0 %</b>

In the financial year, customer discounts of € 67 thousand (prev. year € 84 thousand) were granted. These have not been taken into account in the list.

Non-period turnover totalled € 1,533 thousand (prev. year € 1,073 thousand).

## 4.2 Other operating revenues

There is no comparability to the 2015 financial year due to the Reporting Guideline Implementation Act (BilRUG) Section 277 (1) of the German Commercial Code (HGB) in conjunction with Sect. 75 (2) of Introductory Act for the German Commercial Code (EGHGB) and the initial application. The other operating revenues for 2015 would have been € 11,269 thousand per Section 277 (1) of the German Commercial Code (HGB) in the BilRUG version.

The other operating revenues generally largely result from the reversal of provisions to a total of € 4,371 thousand (prev. year € 332 thousand), write-up of accounts receivable from the TEBV insolvency (€ 3,900 thousand) as well as revenues from claimed damages vis-à-vis grid operators (€ 3,500 thousand). They include earnings not relating to the period totalling € 4,383 thousand (prev. year € 529 thousand).

Sales not relating to the period totalled € 1,533 thousand (prev. year € 1,073 thousand).

## 4.3 Cost of materials

There is no comparability to the 2015 financial year due to the Reporting Guideline Implementation Act (BilRUG) Section 277 (1) of the German Commercial Code (HGB) in conjunction with Sect. 75 (2) of Introductory Act for the German Commercial Code (EGHGB) and the initial application. The costs of materials for 2015 would have been € 2,088,383 thousand per Section 277 (1) of the German Commercial Code (HGB) in the BilRUG version.

The cost of materials not relating to the period totalled € 2,392 thousand (prev. year € 454 thousand).

## 4.4 Personnel expenditure

Personnel expenditures were incurred in respect of an average of 346 employees (prev. year 336 employees). Personnel expenditures include costs for pension provision to the amount of € 296 thousand (prev. year € 454 thousand) and expenditures not relating to the period of € 6 thousand (prev. year € 17 thousand).

## 4.5 Other operating expenditure

There is no comparability to the 2015 financial year due to the Reporting Guideline Implementation Act (BilRUG) Section 277 (1) of the German Commercial Code (HGB) in conjunction with Sect. 75 (2) of Introductory Act for the German Commercial Code (EGHGB) and the initial application.

The other operating expenditures for 2015 would have been € 22,973 thousand per Section 277 (1) of the German Commercial Code (HGB) in the BilRUG version.

Other operating expenditures include expenditure not relating to the period totalling € 106 thousand (prev. year € 273 thousand) and expenditures from currency conversion to a total of € 1,098 thousand (prev. year € 2,113 thousand).

## 4.6 Interest expenditures

The interest expenditures to the amount of € 4,441 thousand (prev. year € 4,681 thousand) include compounding provisions or discounting provisions on accounts receivable totalling € 1,757 thousand (prev. year € 2,315 thousand).

## 4.7 Tax on income

€ 899 thousand (prev. year € 46 thousand) of the tax expenditures in the reporting year were incurred for corporation tax and the solidarity surcharge for previous years.

## 5. OTHER INFORMATION

### 5.1 Other financial obligations

	In € thousands	In € thousands
Obligations from power purchase agreements	4,195,764	(3,028,976)
• Of which payable to shareholders	202,805	(166,117)
Obligations arising from gas supply agreements	1,365,831	(1,143,966)
• Of which payable to shareholders	10,982	(10,982)
Obligations arising from emission certificates	15,711	(12,752)
• Of which payable to shareholders	90	(90)
Obligations arising from coal swaps	5,650	(5,544)
Obligations from leasing and rental agreements	2,104	(348)
Obligations arising from certificates	91	(91)
Obligations from currency transactions	2,610	(927)

( ) = Of which due in 2017

### 5.2 Contingencies

As collateral for bank loans to Trianel Kohlekraftwerk Lünen GmbH & Co. KG, Trianel Gasspeicher Epe GmbH & Co. KG and Trianel Windkraftwerk Borkum GmbH & Co. KG, Trianel GmbH has pledged its shares in these companies, and in Trianel Kohlekraftwerk Lünen Verwaltungs GmbH, including dividends, to the banks concerned. Due to the credit standing of these companies, we consider it unlikely that this will be claimed.

### 5.3 Auditor's fees

In accordance with Section 285 no. 17 of the German Commercial Code (HGB), this information is provided in the consolidated financial statements of Trianel GmbH.

### 5.4 Supervisory Board

In the 2016 financial year, the Supervisory Board was composed of the following members:

- Dietmar Spohn, Bochum, Management Spokesman of Stadtwerke Bochum Holding GmbH (Chairman)
- Waldemar Opalla, Diepholz, Managing Director of Stadtwerke EVB Huntetal GmbH (Vice Chairman), until 16 February 2016
- Christoph Hüls, Detmold, Managing Director of Stadtwerke Detmold GmbH (Vice Chairman), from 16 February 2016
- Dr. Christian Becker, Aachen, Member of the Management Board of Stadtwerke Aachen Aktiengesellschaft
- Prof. Dr. Marc Oliver Bettzüge, Cologne, Director of the Institute of Energy at the University of Cologne, (elected Expert Member of the Supervisory Board)
- Dr. Ulf Böge, Meckenheim, retired President of the German Federal Cartel Office (elected Expert Member of the Supervisory Board)

- Klaus Eder, Ulm, Managing Director of SWU Energie GmbH
- Dr. Achim Grunenberg, Lünen, Managing Director of Stadtwerke Lünen GmbH
- Michael Hegel, Cologne, Banker (elected Expert Member of the Supervisory Board)
- Martin Heun, Fulda, Management Spokesman of RhönEnergie Fulda GmbH
- Ulrich Koch, Herne, Member of the Management Board of Stadtwerke Herne AG
- Michael Lucke, Kempten, Managing Director of Allgäuer Überlandwerk GmbH
- Christian Meyer-Hammerström, Lilienthal, Managing Director of Osterholzer Stadtwerke GmbH
- Jürgen Schöffner, Lübeck, Managing Director of Stadtwerke Lübeck Holding GmbH
- Dr. Leonhard Schitter, Salzburg, Member of the Management Board of Salzburg AG für Energie, Verkehr und Telekommunikation
- Marco Westphal, Bonn, Managing Director of Stadtwerke Bonn GmbH
- Thomas Zarembo, Jena, Managing Director of Stadtwerke Energie Jena-Pößneck GmbH

Trianel GmbH reimbursed a total of € 41 thousand (prev. year € 38 thousand) as expenses in the 2016 financial year.

## 5.5 Management Board

As of the balance sheet date 31 December 2016, the Managing Directors of the company on the balance sheet date were Dipl.-Volkswirt Sven Becker, certified economist (Spokesman) and Dr. Jörg Vogt (Dipl.-Verwaltungswissenschaftler; certified public administrator).

As of 31 December 2016, Dr. Vogt stepped down as a managing director. Effective from 16 January 2017, Dr. Oliver Runte (Dipl.-Chemiker, certified chemist) has been appointed as another Managing Director of the company.

The company has opted not to disclose the emoluments paid to the Managing Directors in the financial year under review in accordance with Section 286, para. 4 of the German Commercial Code (HGB).

## 5.6 Annual financial statements

The annual financial statements are published in the Electronic Federal Bulletin under number HRB 7729.

## 5.7 Appropriation of earnings

The management board will propose to the shareholders' committee to carry the loss for the year 2016 totalling € 4,139,058.53 forward to new account.

Aachen, 27 April 2017  
Trianel GmbH

Sven Becker

Dr. Oliver Runte

Management Board of Trianel GmbH

# DEVELOPMENT OF FIXED ASSETS

## IN THE 2016 FINANCIAL YEAR

ACQUISITION COSTS							
	In €	Status 01/01/2016	Additions	Write-ups	Divestitures	Cross entries	Status 31/12/2016
A. Fixed assets							
I. Intangible assets							
1. Internally generated intangible assets		0.00	725,659.67	0.00	0.00	226,502.46	952,162.13
2. Purchased rights of use and similar rights		10,253,176.80	1,212,804.50	0.00	0.00	23,630.00	11,489,611.30
3. Down payments made		493,062.96	251,166.50	0.00	291,575.00	−250,132.46	202,522.00
Total intangible assets		10,746,239.76	2,189,630.67	0.00	291,575.00	0.00	12,644,295.43
II. Tangible assets							
1. Real property, rights equivalent to real property and buildings, including buildings on third-party land		19,903,595.05	73,882.50	0.00	0.00	0.00	19,977,477.55
2. Technical plant and machinery		92,491.47	16,566.40	0.00	0.00	0.00	109,057.87
3. Furniture and fixtures		3,000,696.47	155,059.07	0.00	41,289.49	0.00	3,114,466.05
4. Down payments made and plants under construction		0.00	734.90	0.00	0.00	0.00	734.90
Total tangible assets		22,996,782.99	246,242.87	0.00	41,289.49	0.00	23,201,736.37
III. Financial assets							
1. Shares in affiliated companies		3,154,030.57	0.00	0.00	25,000.00	0.00	3,129,030.57
2. Participating interests		32,515,480.13	1,749,031.20	0.00	5,536,800.00	0.00	28,727,711.33
3. Loans to companies with which a participating interest exists		39,975,525.20	3,268,850.47	700,557.71	0.00	0.00	43,944,933.38
4. Other loans		21,937.85	0.22	0.00	1,975.88	0.00	19,962.19
Total financial assets		75,666,973.75	5,017,881.89	700,557.71	5,563,775.88	0.00	75,821,637.47
Total fixed assets		109,409,996.50	7,453,755.43	700,557.71	5,896,640.37	0.00	111,667,669.27

	In €	DEPRECIATION			BOOK VALUES	
		Status 01/01/2016	Additions	Divestitures	Status 31/12/2016	Status 31/12/2015
<b>A. Fixed assets</b>						
I. Intangible assets						
1. Internally generated intangible assets	0.00	100,440.13	0.00	100,440.13	851,722.00	0.00
2. Purchased rights of use and similar rights	7,814,616.30	1,222,647.50	0.00	9,037,263.80	2,452,347.50	2,438,560.50
3. Down payments made	0.00	0.00	0.00	0.00	202,522.00	493,062.96
<b>Total intangible assets</b>	7,814,616.30	<b>1,323,087.63</b>	<b>0.00</b>	<b>9,137,703.93</b>	<b>3,506,591.50</b>	<b>2,931,623.46</b>
II. Tangible assets						
1. Real property, rights equivalent to real property and buildings, including buildings on third-party land	1,041,435.05	623,339.50	0.00	1,664,774.55	18,312,703.00	18,862,160.00
2. Technical plant and machinery	11,676.47	13,153.40	0.00	24,829.87	84,228.00	80,815.00
3. Furniture and fixtures	1,564,852.47	310,738.07	40,410.49	1,835,180.05	1,279,286.00	1,435,844.00
4. Down payments made and plants under construction	0.00	0.00	0.00	0.00	734.90	0.00
<b>Total tangible assets</b>	2,617,963.99	<b>947,230.97</b>	<b>40,410.49</b>	<b>3,524,784.47</b>	<b>19,676,951.90</b>	<b>20,378,819.00</b>
III. Financial assets						
1. Shares in affiliated companies	309,999.00	0.00	0.00	309,999.00	2,819,031.57	2,844,031.57
2. Participating interests	0.00	0.00	0.00	0.00	28,727,711.33	32,515,480.13
3. Loans to companies with which a participating interest exists	0.00	0.00	0.00	0.00	43,944,933.38	39,975,525.20
4. Other loans	0.00	0.00	0.00	0.00	19,962.19	21,937.85
<b>Total financial assets</b>	<b>309,999.00</b>	<b>0.00</b>	<b>0.00</b>	<b>309,999.00</b>	<b>75,511,638.47</b>	<b>75,356,974.75</b>
<b>Total fixed assets</b>	<b>10,742,579.29</b>	<b>2,270,318.60</b>	<b>40,410.49</b>	<b>12,972,487.40</b>	<b>98,695,181.87</b>	<b>98,667,417.21</b>

# AUDITOR'S CERTIFICATE

---

## FOR THE FINANCIAL YEAR 2016

We audited the consolidated financial statements drawn up by Trianel GmbH – consisting of the balance sheet, profit and loss statement, notes, cash flow statement and equity capital analysis – and the Group Management Report for the financial year from 1 January to 31 December 2016. The consolidated annual financial statements and Group Management Report were prepared in accordance with the German Commercial Code and the supplementary provisions of the articles of association at the responsibility of the company's legal representatives. Our assignment is to issue an assessment of the consolidated accounts and of the group management report on the basis of the audit carried out by us.

We conducted our audit of the annual financial statements in accordance with Section 317 of the German Commercial Code (HGB) and observing the auditing principles generally accepted in Germany as stipulated by the Institute of German Certified Public Accountants (IDW). Those principles require that we plan and perform the audit to obtain reasonable assurance regarding the detection of any errors or irregularities with respect to the impression given of the company's net worth, financial and profit situation, as reported through its annual financial statements, set up in accordance with the generally accepted accounting principles, its company accounts, and its management report. When determining audit procedures, knowledge of the company's business operations, as well as its economic and legal environment, and anticipation of possible errors are taken into consideration. As part of the audit, the effectiveness of the accounting-related internal control systems and documentation of the data in the consolidated financial statements and Group Management Report are judged largely on a test basis. The audit includes the assessment of the correctness of the annual financial statements for the companies incorporated in the consolidated financial statements,

the definition of the consolidated group, the accounting and consolidation principles applied, and of the fundamental assessments of the legal representatives, and a consideration of the overall presentation of the consolidated financial statements and Group Management Report. In our view, our audit provides a sufficiently reliable basis for our opinion.

Our audit did not result in any objections.

In our opinion, based on the information gained in the audit, the consolidated annual financial statements are in conformity with statutory requirements and the supplementary provisions of the articles of association and, in compliance with the generally accepted accounting principles, they give a true and fair view of the net assets, financial situation and results of operations of the group. The Group Management Report tallies with the consolidated financial statements, complies with the statutory requirements, conveys an accurate representation of the situation of the group overall, and presents the opportunities and risks of future developments accurately.

Duisburg, 28 April 2017

PKF FASSELT SCHLAGE  
Partnerschaft mbB  
Auditing Firm  
Tax Consultants  
Attorneys

Jahn	Hesse
Certified Public Accountant	Certified Public Accountant

# CONSOLIDATED ANNUAL FINANCIAL STATEMENTS

---

Consolidated balance sheet	57
Consolidated profit and loss statement	59



# CONSOLIDATED BALANCE SHEET

AS OF 31 DECEMBER 2016

## ASSETS

In €	31/12/2016	31/12/2015
<b>A. Fixed assets</b>		
I. Intangible assets		
1. Internally generated industrial property rights and similar rights and values	851,722.00	0.00
2. Purchased licences, industrial property rights and similar rights and values, as well as licenses to such rights and values	2,452,347.50	2,438,560.50
3. Down payments made	202,522.00	493,062.96
	<b>3,506,591.50</b>	<b>2,931,623.46</b>
II. Tangible assets		
1. Real property, rights equivalent to real property and buildings, including buildings on third-party land	18,312,703.00	18,862,160.00
2. Technical plant and machinery	84,228.00	80,815.00
3. Other assets, furniture and fixtures	1,279,286.00	1,435,844.00
4. Down payments made and plants under construction	734.90	0.00
	<b>19,676,951.90</b>	<b>20,378,819.00</b>
III. Financial assets		
1. Participating interests in affiliated companies	267,427.90	267,427.90
2. Participating interests	28,460,283.43	32,248,052.23
3. Loans to companies with which a participating interest exists	43,944,933.38	39,975,525.20
4. Other loans	19,962.19	21,937.85
	<b>72,692,606.90</b>	<b>72,512,943.18</b>
	<b>95,876,150.30</b>	<b>95,823,385.64</b>
<b>B. Current assets</b>		
I. Inventories		
1. Work in progress	1,289,036.69	427,260.41
2. Merchandise	2,619,334.95	2,907,326.43
	<b>3,908,371.64</b>	<b>3,334,586.84</b>
II. Accounts receivable and other assets		
1. Trade receivables	108,466,631.56	89,388,017.21
2. Accounts receivable from shareholders	23,933,276.54	28,640,096.89
3. Accounts receivable from affiliated companies	3,518.47	0.00
4. Accounts receivable from companies with which a participating interest exists	32,312,306.04	33,033,939.23
5. Other assets	50,877,226.38	39,028,877.18
	<b>215,592,958.99</b>	<b>190,090,930.51</b>
III. Cash in hand, cash at bank	36,298,051.63	27,152,488.56
<b>C. Accruals and deferrals</b>	<b>2,653,304.55</b>	<b>2,611,968.92</b>
<b>Total</b>	<b>354,328,837.11</b>	<b>319,013,360.47</b>

## EQUITY AND LIABILITIES

In €	31/12/2016	31/12/2015
<b>A. Equity</b>		
I. Capital stock	20,152,575.00	20,152,575.00
II. Capital reserves	26,129,469.24	26,129,469.24
III. Earnings reserves	41,840,473.94	41,679,763.26
IV. Consolidated loss for the year (prev. yr. net income)	-4,132,222.18	173,686.22
	<b>83,990,296.00</b>	<b>88,135,493.72</b>
<b>B. Difference from capital consolidation</b>	<b>29,683.58</b>	<b>29,683.58</b>
<b>C. Provisions</b>		
1. Provisions for pensions	102,685.00	74,985.00
2. Provisions for taxes	582.00	178.50
3. Other provisions	45,457,390.86	49,557,041.65
	<b>45,560,657.86</b>	<b>49,632,205.15</b>
<b>D. Liabilities</b>		
1. Accounts payable to credit institutions	20,882,533.21	24,094,617.48
2. Down payments received for orders	495,611.34	495,611.34
3. Trade accounts payable	142,223,096.47	119,549,465.79
4. Accounts payable to shareholders	12,166,430.44	16,156,007.87
5. Accounts payable to affiliated companies	42,180.04	0.00
6. Accounts payable to companies with which a participating interest exists	27,736,938.71	13,947,270.86
7. Other accounts payable	20,420,931.83	6,433,656.59
• Of which from taxes € 387,336.72 (prev. year € 336,338.18)		
• Of which for social security € 164,894.96 (prev. year € 175,542.09)		
	<b>223,967,722.04</b>	<b>180,676,629.93</b>
<b>E. Accruals and deferrals</b>	<b>780,477.63</b>	<b>539,348.09</b>
<b>Total</b>	<b>354,328,837.11</b>	<b>319,013,360.47</b>

# CONSOLIDATED PROFIT AND LOSS STATEMENT

FOR THE FINANCIAL YEAR FROM  
01 JANUARY 2016 TO 31 DECEMBER 2016

In €	2016	2015
1. Sales proceeds	2,172,947,047.82	2,128,237,238.37
2. Increase in inventory of finished and semi-finished products	1,044,217.21	427,260.41
3. Other operating income <ul style="list-style-type: none"> <li>• Of which from currency conversion: € 973,500.57 (prev. year € 2,263,989.01)</li> </ul>	17,034,520.84	11,258,271.48
4. Cost of materials <ul style="list-style-type: none"> <li>• Expenditures associated with raw materials and supplies and for purchased goods</li> </ul>	-2,141,622,388.32	-2,087,474,637.86
5. Personnel expenditures		
a) Wages and salaries	-26,150,748.30	-23,950,035.49
b) Social charges and expenditure for pension provision and support	-4,043,187.54	-3,915,631.15
	<b>-30,193,935.84</b>	<b>-27,865,666.64</b>
6. Depreciation		
a) On intangible fixed assets and tangible fixed assets	-2,270,318.60	-2,064,176.87
b) On current assets which exceed usual depreciation in the corporation	-184,438.93	-3,205.42
	<b>-2,454,757.53</b>	<b>-2,067,382.29</b>
7. Other operating expenditure <ul style="list-style-type: none"> <li>• Of which from currency conversion: € 1,099,661.79 (prev. year € 2,115,803.61)</li> </ul>	-20,634,831.17	-23,170,674.45
8. Revenue from participating interests	271,605.78	1,033,072.52
9. Other interest and similar revenues <ul style="list-style-type: none"> <li>• Of which from discounting: € 722,546.00 (prev. year € 680,628.92)</li> </ul>	4,830,512.28	4,579,368.55
10. Interest and similar expenditure <ul style="list-style-type: none"> <li>• Of which from compounding: € 1,758,468.43 (prev. year € 2,316,479.80)</li> </ul>	-4,441,217.17	-4,683,225.82
	660,900.89	929,215.25
11. Tax on income and revenue	-906,514.08	-94,595.82
12. Earnings after tax	-4,125,740.18	179,028.45
13. Other taxes	-6,482.00	-5,342.23
<b>Consolidated loss for the year (prev. yr. net income)</b>	<b>-4,132,222.18</b>	<b>173,686.22</b>



## Publishing details

Trianel GmbH  
Unternehmenskommunikation  
Krefelder Straße 203  
52070 Aachen  
Germany  
Fon +49 241 413 20-0  
Fax +49 241 413 20-300  
[www.trianel.com](http://www.trianel.com)

Pictures: Trianel GmbH

Layout and typesetting:  
Jessica Bala, Aachen  
[www.la-bala.com](http://www.la-bala.com)