



# **ANNUAL REPORT**

## **PZEM 2018**

## COLOFON

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The annual report 2018 can be consulted via [PZEM.nl/jaarcijfers](http://PZEM.nl/jaarcijfers)

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## About this report

In this Annual Report, PZEM N.V. (“PZEM”) gives an account of its activities in 2018. Sustainability and financial reporting have been integrated into this Annual Report to the greatest possible extent. The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Union, and the relevant provisions of the Dutch Civil Code (DCC).

This Annual Report is published by PZEM N.V. (Zeeland Provincial Energy Company).





1

**MANAGEMENT**  
**BOARD REPORT**  
**2018**

# 1.1

## **PZEM SEES MARKETS IMPROVE**



After years of adverse conditions on the electricity market in particular, several fundamental changes to the markets in which we operate are slowly but surely leading to sustained recovery. Energy prices showed a clear upward trend, especially from the second half of the year.

“

**WITH A FLEXIBLE  
AND LOW-CARBON  
PORTFOLIO,  
PZEM IS WELL-  
POSITIONED**



Key drivers for the recovery were measures to decarbonise the energy supply system, including reforms to the EU Emissions Trading Scheme (EU-ETS) and the gradual phasing out of coal-fired power stations across Europe. After the announcement of reforms to the EU-ETS that would see the surplus of carbon emission allowances eliminated from the market, the price of carbon rights jumped by 300% to 25 euros. Moreover, as the most polluting power plants - which generally produce base-load capacity - are being shut down at a rapid pace under national and international rules, spare capacity is reduced further.

Rising gas prices also contributed to the pick-up in prices in 2018. The cold snap in February caused by the Beast from the East left gas storage facilities at very low levels at the end of the winter. These reserves had to be replenished over the summer months. However, gas prices also steadily climbed in 2018 because of supply restrictions due to lower production in Groningen, The Netherlands, and strong competition from Asia on the LNG market. In the Netherlands, gas-fired power plants are currently the most important driver of Dutch wholesale energy prices. Because higher gas and carbon prices drive up production costs, this has a trickle-down impact on electricity prices.

In addition to higher electricity prices, PZEM also expects higher premiums to be paid to producers that can deliver variable production. As an increasingly larger share of our electricity production comes from fluctuating sources such as the sun and wind, there will be a further need for adjustable capacity. Although energy storage becomes more important, we believe that efficient gas-fired power plants will continue to have a key part to play in balancing fluctuations in renewable energy sources for many years to come.

With a flexible and low-carbon portfolio, PZEM is well-positioned to benefit from these trends. Rising energy prices have particularly benefited the company's carbon-free nuclear power plant, but our clean gas-fired power station and biomass plant have also seen their financial performance improve slowly thanks to these developments. As the premium on delivering variable production has become increasingly important for the Sloe power station, we have become more positive about this side of our business as well.

2018 was not only a turning point for market conditions but also a year in which we settled in and got used to our new size and function. Being restricted to production, trading and selling has given us a sharp focus in terms of our operations and organisation and has required us to make clear choices, based on market needs and doing what we do best.

#### Position

As an energy producer and trader, PZEM operates 24 hours a day, 7 days a week. For its electricity production, PZEM uses a varied mix of natural gas, wind, biomass, and nuclear energy. Around 40% of the electricity that we generate comes from renewable sources, and with 100 to 150 grams of CO<sub>2</sub> per kWh, PZEM has the lowest emissions of all major Dutch energy producers. Our flexible capacity is key to ensuring security of supply in the Netherlands when the sun or wind resource dips. In the increasingly dynamic energy markets, PZEM can create added value.

PZEM operates a clean and flexible, state-of the art, gas-fired power station (Sloe). Under various gas storage and transmission contracts, the company ensures effective availability and supply of gas to power stations and customers. We also buy renewable electricity from a large number of large and smaller wind farms under long-term purchasing agreements (PPAs). The PPA with Gemini (the Netherlands' largest offshore wind farm) and the modern, clean and highly flexible Sloe power station are key pillars of our portfolio, in addition to our share interests in EPZ (nuclear power plant) and Evides (water company). Our 50% interest in Evides provides us with a sustained inflow of dividends.

In order to mitigate PZEM's exposure to price risk in the volatile spot market, we sell an important part of the electricity that we expect to produce on the futures market (hedging). Because electricity prices have been under a lot of pressure in recent years, the electricity that we generated in 2018 was sold at relatively low prices. In 2016 and 2017, average prices of electricity supply futures hovered around EUR 30 per MWh. As described above, electricity prices recovered substantially in 2018 so we expect to be able to sell our electricity at higher prices from 2019 onwards. The current price is approximately EUR 50 per MWh. Although further price rises will be necessary to sustain long-term profitability, we do of course welcome this long-overdue correction. In the light of these upbeat prospects and our exceptionally strong cash position, PZEM is well-positioned for the future.

Similar to 2017, we can look back on 2018 as a year in which our trading and sales (B2B) activities exceeded our expectations. Water company Evides (in which we own a 50% share interest) also reported a successful year.

#### Financial performance

In 2018 PZEM incurred a net loss of EUR 54 million. In contrast to 2017, no large exceptional items were reported other than the annual withdrawal from the provision for unprofitable gas contracts. Higher market prices were reflected in the 2018 result only to a minimal extent, as the electricity produced in 2018 had already largely been sold at prevailing market prices in prior years.

PZEM ended the year with EUR 637 million in cash and cash equivalents and investments, net of EUR 269 million in guarantees issued and collateral provided (working capital). At 31 December 2018, the company's solvency ratio was 57.3% (2017: 59.6%).

#### PZEM and the Zeeland economy

PZEM is firmly rooted in the local communities it serves. In 2019 we will continue to work with our shareholders and others to meet the challenges facing us in the Netherlands and globally. Those challenges involving transitioning towards a more sustainable society. As a society, we will need to reduce CO<sub>2</sub> emissions generally and certainly prevent further global warming.

#### Safety performance

In 2018, as in 2017, our TRIR target was 3.0 (Total Recordable Injury Rate; the total number of incidents resulting in absenteeism as a percentage of the total number of hours

worked). Unfortunately, we failed to meet this target and ended the year with a TRIR of 7.6. A number of safety incidents occurred at the biomass power plant in Moerdijk and the Sloe power station. These were addressed fully by management at BMC, Sloe and PZEM through incident analyses and improvement measures. At PZEM, safety always comes first. EPZ reported a very good safety performance during the year.

### Future

Looking ahead, we expect market conditions to improve further, with prices increasing to a level where energy production becomes cost-effective and requires no further government subsidies. In fact, we expect conventional and renewable production to reach an effective and sustained equilibrium over the next few years. The pace at which this will happen depends on a large number of factors. These are of a technical and political nature but are also based on the choices made nationally and, to an important degree, internationally. It is therefore difficult to predict how these factors will evolve in terms of timing.

PZEM will continue to focus on producing low-carbon energy and selling this (and natural gas and carbon allowances) to business customers and on trading markets. In addition to our own, we also sell energy generated by a several wind farms, acting on behalf of the owners of those farms. The Gemini wind farm is an example in point, one which we are proud of.

Investment levels are expected to decline in 2019 as major maintenance was carried out at the Sloe power plant during the year. We will formulate a new strategy in the first half of 2019. By that point, it will also be clear how much we will need to invest to pursue the new strategy.

The number of employees in 2019 will be similar to 2018.

Thanks to its financial position, the quality of its portfolio, and the skills and strength of its staff, PZEM is well-positioned to fulfil an important and sustained role in the ongoing energy transition. Not only regionally but also at a national level. The company will celebrate its centennial in 2019. For a hundred years now, we have been a proven and reliable supplier of energy.

### A word of thanks

2018 was a year in which we were able to gradually shift our focus from consolidation and loss limitation to cautious and controlled growth. A special word of thanks goes to Gerard Uytendewilligen, who for two years stood at the helm of the transformation of our business into what it is today. On 1 July, Mr Uytendewilligen was succeeded by Frank Verhagen. Niels Unger was appointed COO, bringing a wealth of commercial experience to the company. From the second half of 2018, the new PZEM began to take shape, focusing more on market needs. Following Works Council elections, we also at the end of the year welcomed the newly elected members and thanked those leaving for their contribution. Last, but certainly not least, a special word of thanks and appreciation certainly goes to all of our employees. Their dedication and professionalism have contributed to our ability to provide our customers with the best possible services and have shaped our business into one that is ready for the future.

We are also grateful to the Supervisory Board and our shareholders for their ongoing support.

Frank Verhagen  
CEO

Niels Unger  
COO





Left: Frank Verhagen, right: Niels Unger



**LOOKING  
AHEAD, WE  
EXPECT MARKET  
CONDITIONS TO  
IMPROVE FURTHER**

# 1.2

## **PROFILE AND KEY FIGURES**

PZEM is a producer, trader, and supplier of energy products and services to business customers. CO2 emissions from production are limited and our flexible capacity allows us to ensure supply even if the wind and sun are absent. We are trading 24 hours a day, 7 days a week, in order to balance supply and demand. So we know what is going on in the markets and what our trading partners and other customers need. PZEM is a stable factor in a dynamic energy market.

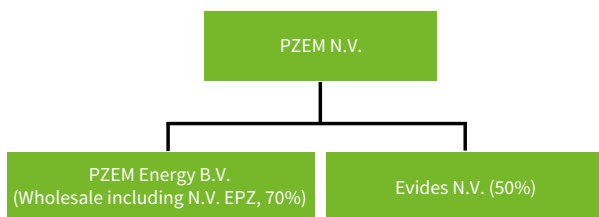
PZEM's shares are held by municipal and provincial authorities in the provinces of Zeeland, Noord-Brabant, and Zuid-Holland. The company's head office is located in Middelburg, The Netherlands.

### 1.2.1 FROM 1919 TO TODAY

PZEM's roots go back a long way. In 1919, the Zeeland Provincial Electricity Company (PZEM) was set up, followed in 1934 by the Zeeland Gas Company (ZEGAM). In 1991 the South West Netherlands Water Company (WMZ) and PZEM merged to form the utility company DELTA Nuts. In 2001 the company was officially renamed DELTA N.V. and, after taking over Internet pioneer ZeelandNet in 2002, also began to provide digital services through this subsidiary.

These years of shared history are one of the main reasons why there is such a special bond between PZEM and Zeeland. On 1 March 2017, following the sale of its retail operations, DELTA N.V. was renamed PZEM N.V. (Zeeland Provincial Energy Company). PZEM has, in one form or another, been part of the local communities for almost a century now.

### 1.2.2 ORGANISATION AT 31 DECEMBER 2018



#### Products and services

##### PZEM Energy (Wholesale and EPZ)

PZEM Energy B.V. generates electricity at power stations that are partly owned by PZEM - including 70% of the power generated by EPZ's nuclear power plant, 50% of production at the gas-fired Sloe power station, and 100% of production at the BMC Moerdijk poultry litter power plant (in which we own a 50% share interest). We also buy electricity from a number of large and smaller wind farms under long-term purchase agreements, trade in asset-backed energy contracts, and supply power and gas to business customers across the Netherlands.

##### PZEM N.V.

In addition to the group companies and joint agreements referred to above, PZEM N.V. also owns a 50% share interest in Evides N.V.

### 1.2.3 WHAT WE STAND FOR

#### Mission

PZEM is a producer, trader, and supplier of energy products and services to business customers. CO<sub>2</sub> emissions from production are limited and our flexible capacity allows us to ensure supply even if the wind and sun are absent. We are trading 24 hours a day, 7 days a week. In order to balance supply and demand. So we know what is going on in the markets and what our trading partners and customers need. PZEM is a stable factor in a dynamic energy market.

#### Vision

International climate policy and national climate agreements to reduce greenhouse gases by significantly expanding renewable energy are set to accelerate the energy transition further. The UN IPCC's recent report on the impact of continued global warming, coupled with the Hague Court of Appeal's recent decision in the Urgenda case, confirm the need for a transition towards sustainable energy supply. In order to achieve the goals set out in the Dutch National Energy Agreement, renewable electricity production needs to more than triple to around 40% by 2023. Due to plant closures, the number of conventional power plants will decrease over the next few years. Moreover, other industries are likely to become greener as well, which will lead to electrification of the manufacturing industry, traffic and transport, and the built-up environment. Various independent studies have shown that a significant increase in conventional production flexibility, demand management, and storage (e.g. batteries, hydrogen, and new storage technologies) are all needed to handle the volatility of renewable energy production, and efficient and flexible gas-fired capacity has a key part to play. In other words, the ability to continuously balance energy supply and demand will be the number one challenge on the road to affordable, low-carbon energy supply.

#### PZEM's position

The Dutch government's climate aspirations, as confirmed in the coalition agreement, are consistent with PZEM's vision and portfolio. Over the last few years, we have worked hard to make our production portfolio future-proof and to limit our CO<sub>2</sub> emissions to around 100 to 150 grams of CO<sub>2</sub> per kWh, compared with a national average of more than 400 grams per kWh. Measures to reduce CO<sub>2</sub> emissions, such as a minimum CO<sub>2</sub> price for electricity generation, will benefit PZEM in the long term. This is of course largely due to the fact that nuclear power and wind do not emit any CO<sub>2</sub> at all. Moreover, due to fickle renewable energy production patterns, additional balancing is required so as to ensure security of supply. With our flexible gas portfolio, people, systems, and 24/7 focus on the market, we can meet that requirement.



### Outlook

Two 'game changers' are set to improve PZEM's asset portfolio substantially.

First of all, climate policy and the energy transition will lead to greener electricity production with low-carbon emissions. This is already happening as wind and solar power account for a growing share of electricity production, coal-fired power plant are being phased out, and carbon prices are rising. This is likely to trigger a need for more flexibility so as to balance volatile renewable generation patterns. Given the company's assets and competencies, PZEM is well-positioned to play a key role in providing the flexibility that is needed to transition to less predictable production methods.

Secondly, conventional spare capacity is gradually disappearing, which will improve conditions on the markets in which we operate. With relatively low-carbon emissions, the conventional capacity that is part of PZEM's portfolio is well-positioned to enable the energy transition.

In response to these trends, PZEM offers a range of products including (without limitation):

- wind PPAs (for example Gemini);
- solar PPAs;
- PPAs of other production units, such as combined heat and power, biomass, and litter;
- delivering products to customers who require a high level of flexibility;
- short-term profiling and balancing of gas portfolios;
- balancing agreements (gas).





## PZEM'S PORTFOLIO

PZEM's flexible portfolio, coupled with variable renewable production and nuclear baseload capacity (nuclear power plant), makes for effective generation and low CO2 emissions.

### 1. Sloe power station

Sloe is one of the Netherlands' most efficient gas-fired power plants.

PZEM's share interest	50%
Type of plant	CCGT
Place	Ritthem
Fuel	Natural Gas
Power Generation	870 MW
Share Power Generation	50%

### 2. EPZ (BS30)

EPZ is the Netherlands' only nuclear power plant for power production.

PZEM's share interest	70%
Type of plant	Nuclear power plant
Place	Borssele (NL)
Fuel	Uranium
Power Generation	485 MW
Share Power Generation	70%

### 3. BMC Moerdijk

BMC Moerdijk is a unique biomass power plant, Europe's only plant to convert poultry litter into green electricity.

PZEM's share interest	50%
Type of plant	Biomass power plant
Place	Moerdijk (NL)
Fuel	Poultry litter
Power Generation	32 MW
Share Power Generation	100%

### 4. Windfarms

Various PPAs across the Netherlands.

PZEM's share interest	0%
Type of plant	Wind turbines
Place	Various sites
Fuel	Renewable
Power Generation	Variable
Share Power Generation	100%

### A. Gas storage

PZEM uses gas storage facilities in depleted salt caverns in the north of the Netherlands.

### B. Gas pipeline infrastructure

PZEM owns the ZBL (Zuid-Beveland) pipeline and has a share interest in the Axel-ELSTA pipeline. PZEM also buys capacity from the ZEBRA gas grid and has long-term access to Fluxys' transport capacity.

### C. Customer portfolio

PZEM has a well-diversified portfolio of large and medium-sized industrial customers.

### PZEM's regular portfolio-based operations

Below is a brief description of PZEM's activities divided into trading, B2B deliveries, and customised contracts (origination). The company's ordinary activities focus on maximising the value of the PZEM portfolio within set risk limits.

#### Trading & Optimization

The Asset Optimisation department is responsible for optimising the total market value of PZEM Energy's production portfolio on the wholesale market. That includes the purchase of renewable electricity production from a number of large and small wind farms under long-term purchase contracts.

The Trading department is responsible for optimising the market value of both the asset portfolio and customer portfolio. This is achieved through gas, electricity and CO2 trading on the northwestern European energy markets. The department operates 24/7.

#### Commercial

The Origination department is responsible for entering into a wide variety of customised contracts with industrial customers and energy suppliers, focusing on electricity, gas, and GoOs (Guarantees of Origin) on the Dutch market.

B2B is responsible for entering into standardised energy contracts with medium-sized business customers. This is done through account management or through the online customer portal where customers can sign up to contracts. Here too, the focus is on electricity, gas, and GoOs on the Dutch market.

### Consumer and Markets Authority's Code of Conduct

PZEM Energy is in compliance with the Code of Conduct for Suppliers of Retail Meters that can be Read Remotely, as published by the Dutch Consumer and Markets Authority (ACM). The full text of our compliance statement is included separately in this Annual Report.

## 1.2.4 STRONG TIES WITH LOCAL COMMUNITIES

Having public-sector shareholders and a local employee base, PZEM has strong ties with its home market. The company is firmly rooted in society and readily accepts its social responsibilities.

Our commitment to society is reflected in our strong reputation in Zeeland.

Although the company has become smaller in size, PZEM still provides many high-skilled jobs. These types of jobs are scarce in Zeeland, which is why we continue to play an important role in the local economy.

## 1.2.5 CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility covers our energy operations and our aim to produce energy with minimal CO2 emissions.

This Annual Report does not include water company Evides, in which PZEM owns a 50% interest. Evides reports on its CSR policy and related activities separately on its website at [www.evides.nl](http://www.evides.nl).

Below is a summary of the key statistics on PZEM's power generation activities. More detailed information is available at [www.epz.nl](http://www.epz.nl), [www.sloecentrale.nl](http://www.sloecentrale.nl) and [www.bmcmoerdijk.nl](http://www.bmcmoerdijk.nl).

## 1.2.6 FINANCIAL STATEMENTS

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs), as endorsed by the European Union, and the relevant provisions of the Dutch Civil Code (DCC). PZEM conducts some of its major activities with others in the form of joint operations.

Our share of assets, liabilities, income and expenses associated with operations conducted by separate legal entities in which PZEM, in its capacity as a shareholder and customer, has the same rights and obligations as its partners, have been included in our financial information since 2013. This provides a better understanding of the structure of our capital base and profits.

Financial highlights (in EURm)	2018	2017	2016	2015
Revenue	602	601	789	1,299
<b>Gross operational margin</b>	<b>87</b>	<b>72</b>	<b>154</b>	<b>236</b>
EBITDA	17	18	69	49
<b>Net profit/(loss)</b>	<b>(54)</b>	<b>314</b>	<b>58</b>	<b>(111)</b>
Investments in (in)tangible fixed assets	23	38	86	88

Share of revenue (in EURm)	2018	2017	2016	2015
Sale of electricity and electricity trading	496	482	590	810
Sale of gas and gas trading	105	118	198	257
Electricity and gas transmission	1	1	1	107
Cable, Internet, and telecommunications	N/A	N/A	N/A	81
Other revenue	0	0	0	44
<b>TOTAL REVENUE</b>	<b>602</b>	<b>601</b>	<b>789</b>	<b>1,299</b>

For full details of the financial statements 2018, please refer to pages 45 et seq.



# 1.3

## **NOTES TO THE FINANCIAL RESULTS**



### Net profit/(loss)

We ended the year with a net loss of EUR 53.6 million, including funds released from the provision for unprofitable contracts. Adjusted for the positive effects of the provision for unprofitable contracts, the underlying net loss came to EUR 75.1 million.

In 2018 the provision for unprofitable contracts (for gas storage and transmission and for the Elsta power plant ) as a whole had a positive impact of EUR 21.5 million, causing net loss in 2018 to improve by this amount. In 2017 the provision made a positive contribution to the profit of EUR 24.8 million.

### Impact of market trends

Electricity prices continued their upward trend in 2018. In the second half of the year, in particular, electricity prices showed a strong increase, driven mainly by higher oil, gas, and carbon prices. Prospects for the coming years have improved and are likely to boost our profitability and cash flows.

Gas prices are one of the key drivers of electricity prices and they also increased, especially in the second half of 2018, causing spreads (the difference between gas and electricity prices) to widen less sharply.

## 1.3.1 REVENUE AND PROFITABILITY

At EUR 601.8 million, revenue was EUR 1.0 million higher than in 2017. Revenue is therefore in line with previous year but this is caused by two opposite effects. On the one hand, revenue in the Business to business (B2B) market declined because of a reorientation on the strategy. On the other hand, revenue from the Gemini windfarm increased significantly because this (largest Dutch) windfarm became fully operational during 2017.

At EUR 87.7 million, gross margin remained virtually stable compared to the previous year. Staff costs in 2018 were similar to 2017. Contracted staff costs fell in 2018 due to a major maintenance stoppage at the EPZ nuclear power station in 2017. Other costs were similar to 2017. Depreciation and amortisation were also in line with the previous year, except for a one-off write-down and the regular fair value amortisation charge on the purchase contract with EPZ at 31 December 2017.

The number of employees fell slightly in 2018. At 31 December 2018, PZEM and its group companies employed a total of 401 FTEs, compared with 426 FTEs at 31 December 2017.

### Interest rates

The funds held by the Foundation that manages the funds to dismantle the Borssele nuclear power plant yielded a negative return of EUR -0.9 million, driven mainly by falling stock markets in 2018. In 2017 the funds had generated a positive return of EUR 2.9 million. In 2018 external net finance income and expense were similar to 2017. Finally, interest added to the provisions was also in line with 2017.

## 1.3.2 CASH FLOW AND INVESTMENTS

PZEM's cash flows deteriorated in 2018 compared with 2017, due to the utilisation of working capital and a number of prepayments made in 2018 for purchasing costs pertaining to 2019. Adjusted for these effects, the underlying cash flow was better in 2018 than 2017.

In 2018 net cash outflow from operating activities was EUR 113.4 million (2017: net cash outflow of EUR 85.6 million). In addition to negative EBITDA we saw a particularly strong cash outflow from working capital in 2018. Prepayments were made for 2019, which will of course reduce purchasing costs in 2019.

The company also provided extra collateral which, if markets expectations remain the same, will flow back from 2019 onwards. The outstanding amount in security deposits and guarantees fell by approximately EUR 15 million during the year.

Receivables and payables remained stable in 2018.

Cash flow from investing activities improved to EUR 30.2 million in 2018 (2017: EUR 21.7 million). In 2017 cash flow from investing activities had been impacted strongly by the sale of the grid and retail operations during that year. In 2018 EUR 85.0 million was withdrawn from cash investments. Adjusted for this withdrawal, there was a net cash outflow from investing activities of EUR 54.8 million. Net cash outflow from investing activities in 2018 mainly comprised maintenance and replacement costs for EPZ and the Sloe power station, and multiple payments made by EPZ into the fund set up to dismantle the nuclear power plant. The payment for 2019 was made in 2018 for business and economic reasons.

Lower investments in tangible and intangible fixed assets compared to 2017 were driven entirely by the discontinuation of investments for grid and multimedia operations as a result of the sale of those entities in the 2017 financial year.

Cash flow generated by the energy production and trading division remained negative in 2018, as did the cash flow of our subsidiary EPZ following a major maintenance stoppage in the summer of 2018. Our subsidiary Evides contributed positively to the cash flow through the payment of dividends.

## 1.3.3 CAPITAL POSITION AND SOLVENCY

In 2018 net realised and unrealised losses were EUR 106.1 million. In addition to the net loss referred to above, there were movements in particular in (the value of) the derivatives portfolio recognised as unrealised gains or losses. These had a negative effect of EUR 52.7 million in 2018 (2017: EUR 17.8 million negative).

Shareholders' equity including net profit or loss was EUR 1,280.7 million year to date. Due to net realised and unrealised losses, our solvency ratio fell to 57.3% at 31 December 2018 (2017: 59.6%).

# 1.4

## **PZEM AND ITS PEOPLE**



The organisational changes first launched in 2016 continued to take shape, with changes also being made at board level with the appointments of a new CEO/CFO and COO.

Also in 2018, the final effects of the restructuring emerged, following the sale of the grid operations. These mainly involved jobs in Facilities Management, Catering, and Reception. The employees concerned are eligible for the Social Plan drawn up by DELTA at the time. The implications for our staff have therefore been handled with the utmost care. In addition to achieving a consensus on a new collective agreement and sectoral social plan, we also discussed with the Works Council our proposal to convert the former DELTA Social Plan into a PZEM Social Plan, whose term is to coincide with that of the sectoral social plan.

#### Inflow/outflow

At the end of 2017, PZEM (excluding EPZ, the Sloe power plant, and Evides) employed 154 FTEs (including 20 FTEs on a zero-hours contract under the Social Plan). PZEM saw its workforce contract during the year from 154 FTEs to 139 FTEs (including 22 FTEs on a zero-hours contract under the Social Plan). This is how the situation stood at 31 December 2018. The decline can be explained by the departure of employees who previously became redundant and found new employment elsewhere, who retired, or indeed who made use of a scheme provided for in the Social Plan. In 2018, 28 employees left the company and we welcomed 7 new employees.

PZEM will continue to draft in temporary workers if necessary to carry out specialist jobs or projects, to cover peak periods, or to create a flexible layer. We encourage our employees – whose jobs have become redundant or who choose to change jobs – to move up within the company so as to utilise, grow, and retain their potential. Not only will this give them more opportunities, but we will also save on costs because we will need fewer expensive contracted staff.

#### Number of employees

At 31 December 2018, PZEM employed a total of 139 FTEs, excluding EPZ, the Sloe power plant, and Evides. At PZEM, 69% of our employees were men and 31% were women. In 2018, the average age was 43.9. With the exception of the board members, all PZEM employees fall within the scope of the collective agreement for energy producers and suppliers. Of our employees, 97% have a permanent contract and 3% a fixed-term contract.

#### Illness absenteeism

Absenteeism at PZEM (excluding EPZ, the Sloe power plant, and Evides) averaged 4.5% in 2018. This is lower than in 2017 (4.9%) and just within our 4.5% target. Long-term absenteeism occurred mainly in the staff departments, including the mobility desk. At 31 December 2018, absenteeism at PZEM (excluding EPZ, the Sloe power plant, Evides, and the staff departments) stood at 5.1% (0.7% short-term, 0.7% medium-term, and 3.7% long-term).

	2018	2017	2016	2015	Target
Absenteeism	4.5%	4.9%	5.1%	4.3%	4.5%

#### Long-term employability

In late December 2017, we launched an extended version of our employee motivation survey with the motto 'long-term employability'. Carried out in collaboration with Loyalis Kennis & Consult and health insurance company Zilveren Kruis, the survey involved filling in a questionnaire, followed by a range of activities aimed at improving long-term employability. A total of 129 employees were invited to take part in the (online) survey, 63 (48%) of whom actually took part. The survey findings formed the basis for a follow-up programme in 2018. 85% of respondents rated their work ability and experience to be satisfactory/good. A project group has converted the findings of the first survey into a plan of action. This has led to various initiatives being taken, such as employability workshops, sports try-out sessions, and theme lunches on exercise, food and health.

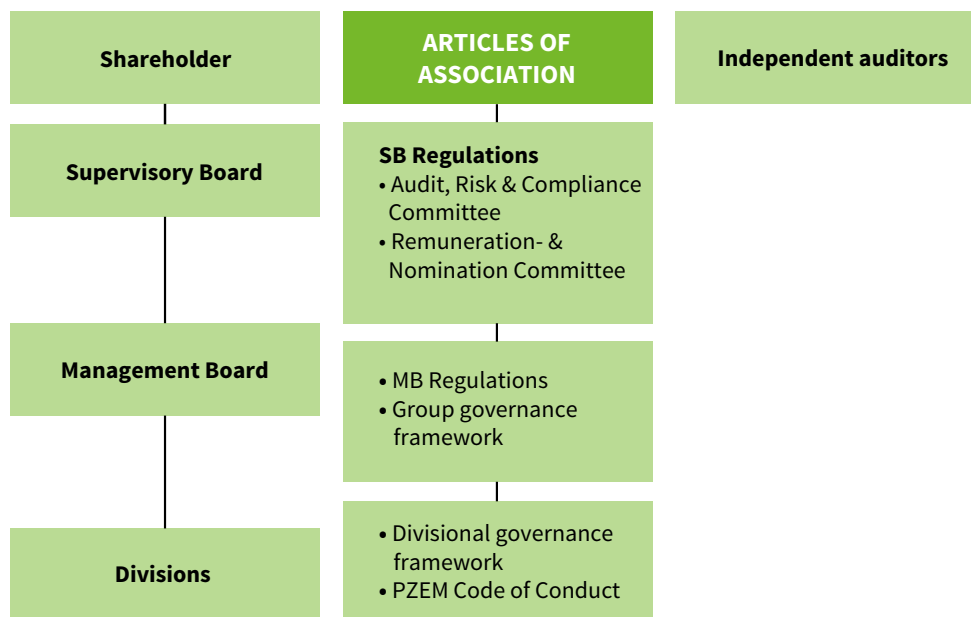


**85% OF RESPONDENTS  
RATED THEIR WORK ABILITY  
AND EXPERIENCE TO BE  
SATISFACTORY/GOOD**

# 1.5

## **PZEM AND CORPORATE GOVERNANCE**

## Governance structure PZEM



Sound business practices, integrity, respect, supervision, transparent reporting, and other forms of accountability are the cornerstones of PZEM's corporate governance policy. We voluntarily adhere to the Dutch Corporate Governance Code, which was drawn up for Dutch-based listed companies. We have adopted the Code's best-practice provisions in so far as they apply to us. In line with the principles of the Code, PZEM will change auditors in the 2019 financial year. In 2018 we invited the big four accounting firms to submit a tender and we eventually selected KPMG.

### Structure

PZEM N.V. is a company with a two-tier board within the meaning of Section 2:154 of the Dutch Civil Code. The involvement of the General Meeting of Shareholders (GMS) and the Supervisory Board with the company's operations is reflected in the company's articles of association and various sets of regulations. These documents also set out when the Management Board requires approval from either the Supervisory Board or the GMS for resolutions regarding investments and/or takeovers or the sale of all or any part of its business. PZEM's amended articles of association came into effect on 1 July 2017. The amount for which shareholder approval is required has been adjusted.

### Management Board

The Management Board's powers and responsibilities are defined in the Management Board Regulations. These provide for a division of duties among the Management Board members, define internal powers of attorney, lay down decision-making procedures, and contain rules that are consistent with the Dutch Corporate Governance Code, including rules dealing with conflicts of interest involving Management Board members.

PZEM endorses the rules on a balanced composition of the Management Board as referred to in Section 391.7, Title 9, Book 2 of the Dutch Civil Code, as introduced on 1 January

2013. The Management Board comprises only two positions, both which are still held by men, despite the changes to its composition. The percentage of women on the Management Board is currently nil. In the event of a future vacancy on the Management Board, the Supervisory Board will again endeavour to find a suitable female candidate.

### Supervisory Board

PZEM's Supervisory Board oversees the company's overall performance, including compliance with its policies, the results achieved by the Management Board, the company's financial position and risk profile, and its financial reporting. The Supervisory Board also acts as a sounding board for the Management Board. In order for the Supervisory Board to carry out its remit effectively, the Board's profile should be consistent with that of the company. The profile drawn up by the Supervisory Board in 2010 describes the capabilities required of its members, having regard to the extended powers of nomination vested in the Works Council.

The Supervisory Board is also in compliance with the Dutch Corporate Governance Code and Section 2.391.7 of the DCC in terms of its membership composition (independence, age diversity, background, and expertise). The Supervisory Board's powers and duties and internal decision-making processes and the role of its chairperson are set out in the Supervisory Board Regulations. These also provide for matters such as periodic reviews of the Supervisory Board's own performance, in accordance with the Corporate Governance Code.

Although decisions are taken by the Supervisory Board in a plenary setting, it has two subcommittees, i.e. the Audit, Risk & Compliance Committee and the Remuneration & Nomination Committee.

### Shareholders

The role of PZEM's shareholders and the powers of the General Meeting of Shareholders (GMS) are set out in the

company's Articles of Association. PZEM's shareholders are committed and dedicated, in part because they are public sector entities (all being municipalities or provincial authorities). Owing to the wide-ranging powers entrusted to the GMS under the Articles of Association, the way in which the shareholders exercise their voting rights has a significant influence on the company's policies and operations.

Two formal general meetings were held during the year.

#### Works Council

Amidst the Articles of Association, board regulations and similar arrangements, the relationship between PZEM and its Works Council should not go unmentioned. It is a relationship built on mutual respect, as reflected in standing consultations between the Works Council and the Management Board.

#### Compliance

PZEM maintains good relations with its regulators. In 2018 no major incidents occurred and no investigations were undertaken by the regulators.

During the year, no use was made of the option available under the Whistleblowing Scheme to report unwanted behaviour at work.



**SOUND BUSINESS PRACTICES,  
INTEGRITY, RESPECT,  
SUPERVISION, TRANSPARENT  
REPORTING, AND OTHER FORMS  
OF ACCOUNTABILITY ARE THE  
CORNERSTONES OF PZEM'S  
CORPORATE GOVERNANCE  
POLICY.**

# 1.6

## **REPORT OF THE SUPERVISORY BOARD**

The Supervisory Board is pleased to report on its activities undertaken in 2018 and the way in which it has fulfilled its supervisory and advisory roles.

#### Membership composition

Until 6 June 2018, PZEM N.V.'s Supervisory Board comprised:

- Mr C. (Cees) Maas (Chairman)
- Ms A.M.H. (Marieke) Schöningh (Vice-Chair and Secretary)
- Mr G.A.F. (Gerard) van Harten
- Mr M.M. (Marc) van 't Noordende
- Ms C.M. (Charlotte) Insinger

After the shareholders' meeting on 6 June 2018, changes were made as follows:

- Mr G.A.F. (Gerard) van Harten (Chairman)
- Mr M.M. (Marc) van 't Noordende (Vice-Chairman)
- Ms W.J.N. (Wendela) van Uchelen (Secretary)

#### Committees

The Supervisory Board's guiding principle is that practically any matter can be discussed at its plenary meetings. From this perspective of collective responsibility, we believe that there is no place for numerous committees consisting of Supervisory Board members entrusted with primary responsibility for individual areas of work. In line with the Dutch Corporate Governance Code, we have made an exception for the Audit, Risk & Compliance Committee and the Remuneration & Nomination Committee.

#### Meetings and other activities

In 2018, the Supervisory Board met six times with the Management Board attending, and five times by means of a telephone or video conference.

The matters discussed included:

- financial matters, such as the quarterly reports and financial statements, and the company's financial plan containing its operational and financial goals;
- PZEM's business strategy and related strategic issues, including the sale of business divisions and investments and disposals;
- health, safety, security and the environment within the various business divisions;
- the main risks arising from the policies implemented;
- HR policy, including management development policy;
- risk management;
- dividend policy;
- investment policy and key investments and disposals;
- finance policy;
- tax issues;
- corporate governance, including the remuneration policy for the Management Board;
- maintenance stoppage at the EPZ nuclear power plant.

The Supervisory Board held regular consultations with the Management Board about the company's business strategy, including in particular the further implementation of the shareholders' strategy to sell PZEM's commercial operations.

Members of the Supervisory Board attended the meetings between the Management Board and the shareholders' committee. These meetings were held four times in 2018 to

discuss PZEM's business strategy and the implementation of the shareholders' strategy.

The Supervisory Board also had its annual meeting with the Zeeland provincial executive.

During the year, the Supervisory Board was updated periodically by PZEM N.V.'s Management Board and EPZ's Board on the situation at EPZ, including the maintenance stoppage, safety, and unplanned shutdown of the nuclear power plant in Borssele.

The Supervisory Board convened several times without the Management Board attending. Key items on the agenda were:

- the business strategy;
- a review of the performance of the Management Board and its members;
- the adoption of the Management Board's remuneration;
- the proposal to change auditors as from the 2019 financial year;
- the recruitment and appointment of a new member to the Management Board on 26 June 2018;
- the recruitment of and proposal to appoint a new member to the Supervisory Board on 6 June 2018.

A Supervisory Board delegation met with a delegation of the Zeeland provincial executive to discuss the governance structure of Evides and how PZEM N.V. and its shareholders were to play a role within that structure.

The Supervisory Board also convened to review its own performance, without the Management Board attending, and to discuss such matters as its main duties and responsibilities (oversight and advice), cultural and behavioural aspects, and areas for improvement.

#### Audit, Risk & Compliance Committee

Until 6 June 2018, the Audit, Risk & Compliance Committee comprised: Mr Van 't Noordende (Chairman) and Ms Insinger. From 6 June, the committee comprised Mr Van 't Noordende (Chairman) and Mr Van Harten.

The Committee met five times during the year.

The issues discussed included:

- the auditor's management letter;
- financial plan;
- quarterly reports, half-year report, financial statements, IFRSs;
- financial results of projects and investments;
- cash flow projections and cash management;
- risk management;
- tax issues;
- design and set-up of the financial functions;
- (dis)investment proposals.

The Committee meetings were attended by the members of the Management Board, the Finance & Control manager, and the independent auditor. The Audit, Risk & Compliance Committee also met with the independent auditor without the Management Board attending.

### Remuneration & Nomination Committee

The Committee comprised Mr Van Harten (Chairman) and Ms Schöningh, who was succeeded by Ms Van Uchelen on 6 June. The Committee met twice during the year. Its main activities involved searching and selecting candidates for appointment to the Management Board and Supervisory Board. With the appointment of Mr Verhagen as CEO/CFO on 1 July, Mr Unger as COO on 26 June, and Ms Van Uchelen as a Supervisory Board member on 6 June, all vacancies were filled.

During the first half of 2018, Committee members conducted performance reviews with the CEO and CFO.

### Management Board membership

Until 1 July 2018, the Management Board comprised Mr G.J.A.(Gerard) Uytendewilligen (CEO) and Mr F. (Frank) Verhagen (CFO). From 1 July, the board consisted of Mr F. (Frank) Verhagen (CEO/CFO) and Mr N. (Niels) Unger (COO).

### Financial statements

The Supervisory Board reviewed and approved the annual report, financial statements, and notes for the 2017 financial year, as submitted by the Management Board. The Management Board prepared the financial statements for 2017 on that basis, and the Supervisory Board recommended their unqualified adoption by the General Meeting of Shareholders. The financial statements 2017 were adopted by the General Meeting of Shareholders in June 2018. On the Supervisory Board's recommendation, again no dividend was paid to the shareholders for that financial year. The General Meeting of Shareholders subsequently granted discharge to the Management Board for the management conducted during the year and to the Supervisory Board for its supervision exercised during the year.

On behalf of PZEM N.V.'s Supervisory Board,  
Gerard van Harten  
Chairman





## Mr G.A.F. (Gerard) van Harten

Nationality: Dutch

First appointed: 25 September 2015

Current term: until 25 September 2019

Profession/main position: former CEO of Dow Benelux B.V.

Other board memberships at 31 December 2018:

- Advisory Board member, Stichting Biobased Delta;
- Supervisory Board chairman, Dow Benelux B.V.;
- Supervisory Board chairman, Green Chemistry Campus B.V.;
- Advisory Board chairman, University College Roosevelt;
- Advisory Board member, Stichting Wonen en Psychiatrie.

## Mr M.M. (Marc) van 't Noordende

Nationality: Dutch

First appointed: 25 September 2015

Current term: until 25 September 2019

Profession/main position: Operating Partner with North Haven Infrastructure Partners, an investment fund managed by Morgan Stanley.

Other board memberships at 31 December 2018:

- Supervisory Board member and Audit Committee chairman, ICE Index BV;
- Supervisory Board chairman, Berenschot Groep B.V.;
- Supervisory Board member and Nomination & Remuneration Committee chairman, Afval Energie Bedrijf N.V.



## Ms W.J.N. van Uchelen

Nationality: Dutch

First appointed: 6 June 2018

Current term: until 5 June 2022

Profession/main position: Head of Legal Affairs, N.V. Nederlandse Spoorwegen, until 1 February 2019. General Counsel with APG from 1 April 2019.

Other board memberships at 31 December 2018:

- Board member, Kids Rights

# 1.7

## **REPORT OF THE WORKS COUNCIL**

In 2018 PZEM embarked on a redefinition of its organisation. This involved formulating a new strategy, mission statement, and vision.

The company also reviewed its accommodation requirements.

The Works Council holds meetings and consults directly with the Management Board.

PZEM N.V. operates a Works Council Support Scheme, which sets out how the company provides Works Council members with facilities so as to carry out their duties effectively. After extensive discussions, the scheme was adopted to the satisfaction of all parties.

Works Council elections had been scheduled for 29 and 30 October 2018. However, as seven candidates signed up, no elections were necessary.

Effective November 2018, the Works Council consists of:

- Stephan de Beer (Chairman)
- Eric Poppe (Vice-Chairman)
- Carel van Veen (Secretary)
- David den Hollander
- Marjo de Jager
- Alwin van de Kop
- Artjan Lambert

In 2018, the Works Council's executive committee comprised:

- Stephan de Beer (Chairman)
- Eric Poppe (Vice-Chairman)
- Carel van Veen (Secretary).

In addition to its standing meetings with the Management

Board, the Works Council also held a "Section 24 meeting" with Gerard van Harten representing the Supervisory Board to discuss, amongst other things, the Management Board job application procedure and PZEM's strategy.

The Works Council discussed a variety of issues. Key issues were:

- appointment of a new Management Board member;
- re-allocation of Management Board responsibilities;
- compliance code;
- GDPR, personal data policy principles;
- implementation of AFAS;
- RI&E action plan.

After a number of turbulent years, the newly elected Works Council wishes to build a constructive, long-term relationship with the Management Board so as to help shape the new organisation.

On the Works Council's behalf,  
Carel van Veen,  
Secretary



**THE NEWLY ELECTED WORKS COUNCIL WISHES TO BUILD A CONSTRUCTIVE, LONG-TERM RELATIONSHIP WITH THE MANAGEMENT BOARD**

# 1.8

## **RISKS AND OPPORTUNITIES**

PZEM wishes to seize market opportunities whilst at the same time minimising risks. To do so, the company has a risk management system in place, which we ensure is applied and adhered to across the company. The risk management system factors takes account of the specific features of the markets in which we operate. We wish to continue our service delivery to customers by offering a variety of products and services.

This section of the Annual Report looks at how risk management is structured within PZEM. We also discuss the main risks and uncertainties facing the company.

#### **PZEM's internal control framework**

The Risk Management department has developed and put in place PZEM's Internal Control Framework (PICF). The PICF supports the divisions and staff departments in meeting their risk management responsibilities and implementing the internal control system. Based on the COSO-ERM model, the PICF ultimately leads to the preparation of a Management in Control Statement (MiCS). Management prepares a MiCS once every six months. The MiCSs are substantiated by validating (i.e. establishing the effectiveness of) key controls. These, in turn, are identified during annual Strategic Risk Assessments and several Thematic Risk Assessments. Divisional management discusses developments likely to impact these risk assessments with the Management Board at least twice a year.

### **1.8.1 DUTIES AND RESPONSIBILITIES SET OUT IN THE PICF**

#### **Management Board and divisional management**

The Management Board has ultimate responsibility for risk management at PZEM. However, primary responsibility lies with the divisions, whose staff and management are responsible for the proper performance of risk management and internal control operations.

#### **Risk Management (including Internal Control and Compliance)**

The Risk Management department advises and provides support to divisional management and staff with regard to risk control. Risk Management is also responsible for internal fraud risk control. A separate compliance function ensures that PZEM is in compliance with applicable laws and that compliance risks are identified and controlled as effectively as possible.

On the Management Board's instructions, Risk Management monitors compliance with the PICF so as to ensure that:

- PZEM is notified in a timely fashion as to when strategic, operational, and financial targets have been achieved;
- financial reporting is reliable;
- PZEM operates in accordance with applicable laws and regulations;
- sites and equipment are safe and secure;
- PZEM has a clear understanding of its obligations;
- effective and efficient processes are in place and adhered to across the company.

#### **Independent audits**

If the Management Board, Supervisory Board or Risk Management department has any indication that there are problems with certain processes, or wishes to have certain processes reviewed independently, then they may instruct a third party to conduct an independent audit. This will give divisional management additional assurance with regard to internal controls.

#### **Independent auditors**

When auditing the financial statements, the independent auditors investigate the design, implementation, and, where appropriate, the operating effectiveness of the company's internal financial reporting controls. The audit findings and recommendations are set out in an annual Management Letter and reported to the Management Board, the Audit, Risk & Compliance Committee, and the Supervisory Board. The Management Letter may lead to processes and/or controls being tightened further.

#### **Supervisory Board**

PZEM's Management Board reports on, and accounts for, the design, implementation and operating effectiveness of the internal risk control system to the Audit, Risk & Compliance Committee and the Supervisory Board. External parties, such as the Dutch Financial Markets Authority (AFM) and Dutch Consumer and Markets Authority (ACM), monitor compliance with applicable laws and regulations.

### **1.8.2 RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM**

#### **Risks and controls in 2018**

Ensuring security of supply is essential to society. PZEM's commitment to society is reflected in the company's strong reputation in Zeeland. Risks that may threaten the delivery of our services are identified as clearly as possible and mitigated where appropriate and economically feasible.

Controls are monitored using IT technology, amongst other things, and the findings are reported periodically to the Management Board.

The company is involved in international gas and electricity trading. Prices on these markets fluctuate strongly. We use financial instruments to mitigate commodity, foreign exchange, interest rate, liquidity and credit risks, subject to the conditions laid down in the Financial Risk Manual and Treasury Charter.

Under the auspices of the Management Board, the Risk Management Committee has put in place general procedures and limits, and is responsible for ensuring that our energy trading and sales activities remain within the defined risk margins.

**How risks evolved in 2018**

Electricity and gas prices remained too subdued for us to make a profit on our production assets.

Although PZEM has a Standard & Poor's rating of BB, following the sale of our retail and grid operations, we have sufficient cash available.

We continued to monitor cyber risk closely during the year. Global trends in cybercrime are changing rapidly and require us to stay alert and focused.

**Risks and controls in 2019**

We will continue to monitor material risks and to mitigate those risks as effectively as possible in 2019. However, our Strategic Risk Assessments have not uncovered any new strategic risks compared with 2018.

**Risk appetite**

PZEM assesses its risk exposures, actions taken to mitigate risks, and any residual risks against its overall risk appetite by carrying out a variety of risk assessments. During those assessments, we determine the probability and impact of each individual risk. If either or both are elevated, we will develop and implement additional mitigating action. If residual risks continue to remain elevated, we may take follow-on action. This may include:

- accepting the elevated residual risk, but stepping up our monitoring efforts and taking additional action to limit any loss or harm if an incident occurs;
- sharing the elevated residual risk with a third party, for example through a joint venture or by taking out insurance.

**Management in Control Statements 2018**

The Management Board twice signed a Management in Control Statement (MiCS) in 2018. EPZ, which is a PZEM subsidiary, combined these into an annual statement. The statements confirmed that management was generally 'in control' during the year.

Although no exceptions were noted, the management team did draw attention to ongoing legal proceedings and the company's vulnerability in terms of staffing and IT (security), and the potential impact that a new commercial strategy might have in that regard. The two MiCSs issued for 2018 formed the basis for the Management Board's In Control Statement as included in this Annual Report.

**1.8.3 Summary of main risks**

Below is a summary of the main risks facing PZEM. The summary also shows how we mitigate the probability and/or impact of those risks.

Major risks facing PZEM are:

**1. Poor market conditions (prices)**

Poor market conditions (low electricity prices, pressure on spark spreads, and lower flexi value) may affect the company's financial performance, causing it to have insufficient financial means and threatening its continuity in the long term.

**Controls**

- Reduce dependence on market conditions by exploring related business activities that have an effective risk/return ratio.

**2. Unexpected outages at power plants**

Unplanned outages at power plants, notably the EPZ nuclear power plant, may cause PZEM to incur additional costs and adversely affect the company's profitability.

**Controls**

- Stricter management of investment and maintenance projects so as to increase availability through:
  - Effective communication between EPZ and PZEM management;
  - Collaboration with co-shareholder RWE;
  - Clarification of maintenance plans and spare parts policy.

**3. Shutdown of nuclear power plant by central government**

If the nuclear power plant operated by EPZ has to shut down temporarily or otherwise following a political decision by central government or on the instructions of the regulatory authority, this will negatively impact PZEM's financial performance and put jobs at EPZ at risk.

**Controls**

- Ensure that EPZ is in compliance with all regulations

**4. Outcome of court cases**

Decisions handed down in court cases may lead to cash outflows or contracts being terminated.

**Controls**

- Seek specific external advice;
- Keep files properly updated;
- Meet contractual obligations (e.g. the provision of collateral).

### 5. Management of cash assets and investments

In light of the large amount of cash and cash equivalents available to the company, there is a risk of funds being misappropriated as a result of fraud or unintentional conduct. Potential bankruptcies in the financial services sector also constitute a major risk.

#### Controls

- Treasury now reports directly to the CEO/CFO;
- The Treasury Charter has been updated and investments have been spread;
- Specific procedures for checking cash in bank accounts have been tightened.

### 6. Loss of key personnel

Because of the company's smaller size and uncertain future, there is a risk that employees with specific knowledge that is critical to our operations may leave the company, causing skills gaps within the organisation, loss of know-how, and processes being run inefficiently.

#### Controls

- Offer career perspectives and prioritise continuity and employment aspects within divisions;
- Follow up on employee motivation survey findings;
- Transparent communications with employees;
- Broader allocation of tasks.

### 7. Legal and regulatory changes

As a result of legal and regulatory changes (EMIR/REMIT/MiFID/GDPR) and Brexit, there is a risk that changes may not be implemented in our operations and systems in a timely fashion, which will cause the company to be non-compliant.

#### Controls

- Put in place a flexible organisation and flexible systems that can respond quickly to legal and regulatory changes;
- Test new contracts against existing and upcoming laws and regulations;
- Draft in external expertise, if necessary.

### 8. IT and Information security

With the growing use of cloud applications and the possibility of cyber attacks, there is a risk that systems may not be available, which in turn will threaten business continuity.

#### Controls

- In 2019 changes will be made to existing protection measures and connectivity (firewall, Threat Management Gateway). In addition to state-of-the-art protection, we will use multiple internet service providers so as to mitigate our growing dependence on the Internet, should an internet service provider become unavailable.
- In 2018 several security tests were conducted to check our vulnerability to cyber attacks.
- Raise awareness among management and end-users, for example by means of phishing tests to check staff alertness. A feature has been added to 'report' phishing messages so as to improve security.
- Keep up to date on cyber security trends.
- A new virus scanner has been introduced that is many times more effective. User rights have been restricted so as to prevent software being installed that contains viruses and/or ransomware.
- In Q4 2018 mobile phones and other mobile devices were fitted with improved protection to ensure a high level of protection.

### 9. Safety

Careless behaviour and/or inattentiveness can cause accidents.

#### Controls

- Continue to raise awareness of potential risks in the workplace;
- Create a culture in which staff feel free to call each other to account over their behaviour;
- Incident monitoring through TRIR and LTIR reports.

**Summarising table:**

	Risk	Control	Risk area	Current risk after mitigating action
1	Poor market conditions	Develop commercial strategy	Strategic	High
2	Unplanned outages at power stations	Strict management of investment and maintenance projects	Operational	Medium
3	Shutdown of nuclear power plant by central government	Comply with all regulations	Compliance	Low
4	Outcome of court cases	Combine internal knowledge and expertise with specific external advice	Financial	Medium
5	Insufficient cash control	Continue to pursue conservative Treasury policy	Financial	Medium
6	Loss of key personnel	Offer perspectives to staff and broaden knowledge base	Operational	Medium
7	Legal and regulatory compliance	Flexible organisation coupled with external advice	Compliance	Low
8	Availability of data and systems (e.g. cyber attacks)	Specific ongoing actions in collaboration with external experts	Operational	Medium
9	Safety incidents	Continue to strengthen safety culture	Operational	Low

### 1.8.4 RISK FEATURES OF THE MARKETS IN WHICH PZEM OPERATES

#### Commodity price risk

Market risks arise from price movements in the markets where PZEM buys and sells (commodities, currencies, transmission capacity, imports/exports capacity, etc.). It is company policy to mitigate the impact of price movements in the short term and to track prevailing market prices in the long term. For systematic risk control purposes, asset allocations and positions are determined on the basis of expected price developments. These positions are monitored on a daily basis. Trading risks are mitigated by strictly enforcing a system of limits, the most important of which is calculated using the Value-at-Risk method.

Potential adverse trends in commodity prices, notably falling electricity prices, pose a risk to PZEM's continuity in the coming years. A price fall may have an immediate dampening impact on the profits of our production units. Sales contracts where there is no correlation between electricity market prices and fuel prices would be hit hardest, such as nuclear power and power from poultry litter (share in profit or loss of associates). Revenues would fall whereas costs would remain virtually stable. Each euro off the selling price would immediately be reflected in profit or loss, unless the output is hedged. Different market studies suggest a further rise in commodity prices.

#### Value-at-Risk

Determining Value-at-Risk (VaR) involves using various assumptions regarding possible changes in market conditions. VaR identifies the maximum portfolio losses likely to be incurred as a result of price changes over a three-day period with a confidence level of 95% (i.e. in 5% of cases the portfolio losses may exceed the VaR limit). VaR is calculated using Monte Carlo simulations based on historical volatilities and correlations. Because portfolios include opposing positions and there is an underlying correlation, the VaR of the total portfolio is smaller than the sum total of individual portfolio VaRs.

#### Cash flow hedges

PZEM uses financial instruments to minimise fluctuations in expected cash flows. The company uses derivatives, including forward contracts and swaps, to control the effects of future changes in market prices. These hedging instruments are derivatives of commodities traded by PZEM and they are entered into to mitigate cash flow, price, and currency risks. Hedge accounting is applied to cushion the total change in value of these derivatives.



**Currency risk**

Currency risk is the risk that the value of assets changes due to movements in foreign exchange rates. PZEM's risk policy is to hedge currency risks associated with positions denominated in foreign currencies. To hedge this risk, the company uses financial instruments (forward contracts) to minimise fluctuations in expected cash flows.

Currency positions arising from commodity and other contracts are hedged and reported directly to the Treasury department. Currency risk limits are set periodically in consultation with the Risk Management Committee and monitored by the Treasury department.

**Interest rate risk**

PZEM's interest rate risk policy is to mitigate the effects of interest rate fluctuations. To hedge this risk, the company uses derivatives, such as interest rate swaps.

**Liquidity risk**

Liquidity risk is the risk that PZEM has insufficient funds available to meet its short-term liabilities. In light of the revenues generated by the recent sale of some of its business divisions, there is currently no such risk. However, liquidity risk may occur in the longer term if, contrary to expectations, market prices fail to improve.

The company's capital management policy focuses on centralising its cash management and borrowing and repayment operations at the level of the holding company PZEM N.V. as effectively as possible. On the basis of its business plan, the company prepares an annual financing plan to give direction to the activities undertaken by the Treasury department. The financing plan also sets out how surplus cash is to be invested (in accordance with the appropriate policy), taking into account the buffers needed for our operating activities. Cash flows are monitored on an ongoing basis.

# 1.9

## **STATEMENT BY THE MANAGEMENT BOARD**

The Management Board is responsible for the design and operating effectiveness of the company's risk management and internal control system: the PZEM Internal Control Framework (PICF). We reviewed its design and operation during 2018, based in part on the Management in Control Statements drawn up within the organisation and reviewed by Risk Management.

Risk-taking is inextricably linked to the company's operations and the implementation of its strategy. The PICF framework allows PZEM to take risks by identifying, controlling, and actively monitoring those risks and taking appropriate action where necessary. The Management Board seeks to minimise the probability and impact of any errors, incorrect decisions, or unforeseen events. We are aware that the PICF does not provide absolute assurance that business targets will be achieved and all misstatements, loss, fraud or breaches of the law eliminated.

When auditing the 2018 financial statements, the independent auditors tested the design, existence and, where appropriate, the operating effectiveness of the company's internal financial reporting controls. They reported their findings to the Management Board, the Audit, Risk & Compliance Committee, and the Supervisory Board.

#### In Control Statement

On the basis of the foregoing, the Management Board believes that the risk management and internal control system operated effectively during 2018 and provides reasonable assurance that the financial statements for the year under review contain no material misstatements.

The Management Board will ensure compliance with the PICF in 2019.

#### Management statement

To our knowledge:

- the financial statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of PZEM N.V.;
- the additional information, as contained in this Annual Report, gives a true and fair view of the state of affairs at 31 December 2018 and of PZEM N.V.'s operations during the 2018 financial year;
- the Risks and Opportunities section, as contained in this Annual Report, provides a description of potential material risks facing PZEM N.V.

Middelburg, The Netherlands, 3 April 2019

The Management Board of PZEM N.V.

Frank Verhagen  
Niels Unger





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**FINANCIAL**  
**STATEMENTS 2018**



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# CONSOLIDATED FINANCIAL STATEMENTS 2018

# CONSOLIDATED BALANCE SHEET

(EUR 1,000)

Ref. no.

31-12-2018

31-12-2017

## Non-current assets

### Intangible assets

1	1,248	2,379
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### Property, plant and equipment

2	472,273	493,825
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3	393,422	385,070
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4	4,879	4,909
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4	6,189	13,903
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4	461,503	461,845
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5	22,432	12,557
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### Financial assets

	888,425	878,284
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### Total non-current assets

	1,361,946	1,374,488
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## Current assets

### Inventories

6	83,811	81,670
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7	59,128	55,135
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7	16,294	26,353
---	--------	--------

7	620,080	595,145
---	---------	---------

5	40,070	22,639
---	--------	--------

### Total receivables

	735,572	699,272
--	---------	---------

### Total current assets

	819,383	780,942
--	---------	---------

### Cash

8	54,891	150,049
---	--------	---------

## TOTAL ASSETS

	2,236,220	2,305,479
--	-----------	-----------

	1,334,373	1,060,715
--	-----------	-----------

	(53,640)	313,603
--	----------	---------

### Group equity

	1,280,733	1,374,318
--	-----------	-----------

9	459,957	476,439
---	---------	---------

10	134,427	147,271
----	---------	---------

11	8,978	14,120
----	-------	--------

11	28,011	26,723
----	--------	--------

5	91,420	59,054
---	--------	--------

### Non-current liabilities

	722,793	723,607
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12	52,820	52,366
----	--------	--------

12	9,870	25,439
----	-------	--------

12	44,168	63,433
----	--------	--------

12	38,902	30,700
----	--------	--------

5	86,934	35,616
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### Current liabilities

	232,694	207,554
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### Total liabilities

	955,487	931,161
--	---------	---------

## TOTAL EQUITY AND LIABILITIES

	2,236,220	2,305,479
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# CONSOLIDATED INCOME STATEMENT

(EUR 1,000)

	Ref. no.	2018	2017
<b>Revenue</b>	<b>13</b>	<b>601,766</b>	<b>600,810</b>
<b>Cost of sales</b>	<b>14</b>	<b>(514,733)</b>	<b>(528,981)</b>
<b>Gross operating margin</b>		<b>87,033</b>	<b>71,829</b>
Other gains and losses (third parties)	15	6,007	15,345
Fair value gains and losses on the trading portfolio	16	(5,319)	(162)
<b>Gross margin</b>		<b>87,721</b>	<b>87,012</b>
Third-party services	17	50,944	56,746
Staff costs	18	41,137	41,098
Depreciation, amortisation and impairment	19	44,903	256,845
Other operating expenses	20	244	1,151
<b>Total net operating expenses</b>		<b>137,228</b>	<b>355,840</b>
<b>Earnings from operations</b>		<b>(49,507)</b>	<b>(268,828)</b>
Share in results of joint ventures and associates	21	21,439	30,014
<b>Operating result</b>		<b>(28,068)</b>	<b>(238,814)</b>
Net finance income (expense)	22	(23,406)	(19,185)
<b>Profit/(loss) before tax</b>		<b>(51,474)</b>	<b>(257,999)</b>
Corporate income tax	23	(2,166)	9,949
<b>Profit/(loss) after tax from continuing operations</b>		<b>(53,640)</b>	<b>(248,050)</b>
Profit/(loss) after tax from discontinued operations		-	561,653
<b>PROFIT/(LOSS) FOR THE YEAR</b>		<b>(53,640)</b>	<b>313,603</b>
<b>ATTRIBUTABLE TO:</b>			
<b>SHAREHOLDERS OF PZEM</b>		<b>(53,640)</b>	<b>313,603</b>

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(EUR 1,000)

2018

2017

<b>Profit/(loss) after tax for the year</b>						<b>(53,640)</b>				<b>313,603</b>
<b>OTHER COMPREHENSIVE INCOME</b>										
Total other comprehensive income not to be transferred to the income statement					-				-	
<b>Items to be transferred to the income statement</b>										
1. Effective portion of gains and losses on cash flow hedges										
Energy derivatives (gross)	(64,066)					(34,704)				
Reclassification adjustments	8,743					11,540				
Interest rate derivatives (gross)	(2,145)	(55,323)				304	(23,164)			
Reclassification adjustments	6,533					6,902				
(Deferred) corporate income tax		4,388					7,206			
		(1,809)					(1,801)			
2. Share of other comprehensive income in joint ventures and associates			(52,744)					(17,759)		
Share of other comprehensive income in joint		288					342			
Reclassification adjustments		-					-			
(Deferred) corporate income tax		288					342			
		-					-			
3. Other movements			288					342		
Other movements		-					-			
Reclassification adjustments		-					-			
(Deferred) corporate income tax		-					-			
		-					-			
			-					-		

4. Other comprehensive income of assets held for sale	-	-
Total other comprehensive income to be transferred to the income statement	(52,456)	(17,417)
Total other comprehensive income	(52,456)	(17,417)
<b>TOTAL COMPREHENSIVE INCOME</b>	<b>(106,096)</b>	<b>296,186</b>
<b>Total comprehensive income attributable to</b>		
<b>SHAREHOLDERS OF PZEM N.V.</b>	<b>(106,096)</b>	<b>296,186</b>

For an explanation of movements in energy and interest-rate derivatives, please refer to Section 5 of the notes to the consolidated balance sheet.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(EUR 1,000)	Total	Paid-up capital	Statutory reserve	Hedge reserve	Other non-distributable reserves	Other reserves	Unappropriated profit/(loss)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2016</b>	<b>1,078,132</b>	<b>6,937</b>	<b>148,123</b>	<b>(39,452)</b>	<b>762</b>	<b>904,252</b>	<b>57,510</b>
Profit appropriation for 2016	-	-	-	-	-	57,510	(57,510)
Payment of dividend	-	-	-	-	-	-	-
Other changes	-	-	(18,851)	-	(439)	19,290	-
Total comprehensive income	296,186	-	342	(17,759)	-	-	313,603
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>1,374,318</b>	<b>6,937</b>	<b>129,614</b>	<b>(57,211)</b>	<b>323</b>	<b>981,052</b>	<b>313,603</b>
Adjustment opening balance as at 1 January 2018	12,511	-	13,484	-	-	-	(973)
<b>ADJUSTED CARRYING AMOUNT AS AT 1 JANUARY 2018</b>	<b>1,386,829</b>	<b>6,937</b>	<b>143,098</b>	<b>(57,211)</b>	<b>323</b>	<b>981,052</b>	<b>312,630</b>
Profit appropriation for 2017	-	-	-	-	-	312,630	(312,630)
Payment of dividend	-	-	-	-	-	-	-
Other changes	-	-	(4,538)	-	(91)	4,630	-
Total comprehensive income	(106,096)	-	288	(52,744)	-	-	(53,640)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>1,280,733</b>	<b>6,937</b>	<b>138,848</b>	<b>(109,955)</b>	<b>232</b>	<b>1,298,312</b>	<b>(53,640)</b>

As a result of the adoption of IFRS 9, the opening balance was restated. The adjustment to the statutory reserves was driven by a change in valuation of a loan granted by a joint venture. This is explained in more detail in Section 1.1 of the accounting policies and Section 3 of the notes to the financial statements. The adjustment to unappropriated profit or loss was driven by a change to the model for measuring financial asset impairments. This is explained in more detail in Section 1.1 of the accounting policies and Sections 4 and 7 of the notes to the financial statements.

The statutory reserve comprises undistributed profits of associates and is therefore not freely distributable. This also applies to the hedge reserve, which should be seen in relation to unrealised income from fair value changes in derivatives used for hedging purposes.

Fair value changes in derivatives after tax are largely shown within the hedge reserve. For further details, see Section 5 'Basis of recognition and measurement of financial instruments' and Section 5.1.3. of the notes to the consolidated balance sheet. Other non-distributable reserves mainly comprise a revaluation reserve for derivatives.

Other reserves mainly comprise retained earnings.

# CONSOLIDATED CASH-FLOW STATEMENT

(EUR 1,000)

2018

2017

## From operating activities

Earnings from operations	(49,507)	(249,403)
Fair value gains and losses on the trading portfolio	5,319	162
Adjustment for deferred income	67	3,766
Depreciation, amortisation and impairment	44,903	272,889
Provisions	(54,231)	(60,112)
Inventories	(2,141)	(13,111)
Trade receivables	(3,204)	70,442
Trade payables	454	(69,231)
Other receivables/payables	(82,014)	(54,847)
Other	1,229	1,703

**From operating activities** **(139,125)** **(97,741)**

Cash flows arising from dividends received from joint ventures and associates	34,489	31,899
Cash flows from finance income and expense	(11,080)	(12,563)
Cash flows from taxes on profits	2,274	(7,211)

**Cash flow from operating activities** **(113,442)** **(85,616)**

## From investing activities

Acquisition and disposal of intangible assets and property, plant and equipment (after deduction of cash acquired)	(22,219)	(64,409)
Acquisition of investments in subsidiaries and associates and interests in joint ventures (after deduction of cash disposed)	(1,931)	(2,167)
Disposal of investments in subsidiaries and associates and interests in joint ventures	-	883,773
Other financial assets	54,324	(795,515)

**Cash flow from investing activities** **30,174** **21,682**

**FREE CASH FLOW BEFORE DIVIDEND** **(83,268)** **(63,934)**

## From financing activities

Paying off borrowings	(11,890)	(11,517)
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**Cash flow from financing activities** **(11,890)** **(11,517)**

**EVOLVEMENT CASH FLOW DURING THE YEAR** **(95,158)** **(75,451)**

Cash as at 1 January	150,049	225,500
Evolution cash position during the year	(95,158)	(75,451)
Cash as at 31 December	54,891	150,049





# ACCOUNTING POLICIES

## ACCOUNTING POLICIES

PZEM N.V. ("PZEM") is a public limited liability company organised and existing under Dutch law. Throughout 2018, PZEM N.V. was the parent company of a number of subsidiaries involved in:

- energy generation, transmission, trading, and supply;
- developing and producing renewable energy, including wind power and water services.

Partly in view of those activities, PZEM owns interests in a number of joint arrangements, associates, and other investments.

PZEM N.V.'s shareholders are the Zeeland provincial authorities, the towns and cities in Zeeland, several towns and cities in the provinces of Zuid-Holland and Noord-Brabant, and the Zuid-Holland and Noord-Brabant provincial authorities.

PZEM N.V.'s registered office is situated at Poelendaelesingel 10, Middelburg, The Netherlands. The company is registered with the Chamber of Commerce under number 22031457.

In 2018, the following changes occurred within the group:

- On 4 October 2018, Business Park Terneuzen B.V. was liquidated.

The company's functional currency is the euro.

PZEM N.V. used the option available under Title 9, Book 2, of the Dutch Civil Code to prepare the company financial

statements in accordance with the International Financial Reporting Standards applied to its consolidated financial statements, with the exception of equity-accounted group companies and investments. The company income statement is presented in abridged form in accordance with Section 402, Title 9, Book 2, of the Dutch Civil Code.

The 2018 financial statements were signed and released for publication by the Supervisory Board on 3 April 2019. The Supervisory Board will present the financial statements for adoption and approval by the General Meeting of Shareholders on 29 May 2019.

# 1. COMPLIANCE WITH IFRSS AND SUMMARY OF CHANGES IN IFRS RECOGNITION AND MEASUREMENT RULES

PZEM's consolidated financial statements have been prepared in compliance with the International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB) and the interpretations issued by the IFRS Interpretations Committee (IFRS IC) of the IASB, as endorsed by the European Commission (EC) up to and including 31 December 2018.

## Adopted new standards and/or improvements

New standards and/or supplements/improvements in relation to the previous financial year were issued by the IASB and endorsed by the European Commission for adoption within the European Union. Changes not yet endorsed by the European Commission are omitted from the summary below.

## 1.1. PZEM ADOPTED THE FOLLOWING STANDARDS AND IMPROVEMENTS IN ITS 2018 FINANCIAL STATEMENTS

### 1. IFRS 15 Revenue from Contracts with Customers.

- This standard aims to improve the financial reporting of revenue and comparability of the top line in financial statements globally.
- IFRS 15 supersedes IAS 18 Revenue, IAS 11 Construction Contracts, IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers, and SIC 31 Revenue - Barter Transactions involving Advertising Services.
- IFRS 15 is effective for annual reporting periods beginning on or after 1 January 2018. PZEM performed an analysis of the potential impact of this standard on its consolidated financial statements. The analysis specifically focused on when to recognise revenue and whether PZEM classifies as an agent or a principal. Application of IFRS 15 did not lead to any differences from accounting rules previously applied to these issues.
- Accordingly, the 2017 comparatives were not restated on adoption of IFRS 15.
- Finally, IFRS 15 requires including in the notes to the financial statements a more detailed breakdown of revenue. In light of the nature of the group's operations, a breakdown by type of product or service was already provided. This will be supplemented by a breakdown of revenue by country. For details, see Note 13 Revenue to these financial statements.

### 2. IFRS 9, Financiële instrumenten.

- This standard aims to improve accounting for financial instruments by addressing concerns that arose in this area during the financial crisis.

In particular, IFRS 9 responds to the G20's call to move to a more forward-looking model for the recognition of expected losses on financial assets.

- IFRS 9 replaces and amends a number of paragraphs of IAS 39 Financial Instruments, Recognition and Measurement. IFRIC 9 Reassessment of Embedded Derivatives has also been repealed.
- Some of the provisions of IAS 39 on hedge accounting have not been adopted for application within the EU (carve-out). The carve-out from IAS 39 will continue to exist, regardless of the adoption of IFRS 9 for use in the EU.
- For a fair value hedge of interest rate risk of a portfolio of financial assets or liabilities (and only for such a hedge), an entity can apply the hedge accounting requirements in IAS 39 instead of those in IFRS 9 (IFRS 9 paragraph 6.1.3). In that case, the entity must also apply the specific accounting requirements for fair value hedging transactions to hedge the interest rate risk of the portfolio (IAS 39 paragraph 71).
- IFRS 9 is effective for annual periods beginning on or after 1 January 2018. Changes arising from the adoption of this standard and its impact on PZEM's financial statements were as follows:
  - The amended paragraphs on the classification and measurement of financial assets (notably derivative financial instruments, trade receivables, and other receivables) had a EUR 13.5 million impact on PZEM's consolidated financial statements. The impact was caused by a loan granted by a joint venture and which, under the amendment, must be stated at market value, whereas it had previously been stated at cost. This amount is shown within the opening balance at 1 January 2018. Shareholders' equity was increased by the same amount in the 2018 opening balance. The 2017 comparatives were not restated.
  - The financial asset impairment model provided for in IFRS 9 differs from that of IAS 39. For PZEM, this mainly concerns the measurement of cash investments and the provision for bad debts. Until 2018 we applied the incurred loss method, which allows a provision to be recognised at the time when a trigger (a specific 'credit event') occurs. Effective 2018, IFRS 9 provides for an expected loss model, according to which this provision is to be measured on the basis of both historical and forward-looking information, because there is always an inherent risk of a debtor failing to meet its payment obligations (or to do so in full). This is why this risk must

already be accounted for on initial recognition of the receivable. The same applies to the accounting for 'amounts billable'. The impact of the amended rules on the measurement of receivables (provision for bad debts) is limited because of the large number of relatively small receivables, generally short-term in nature, which ensures that risks are spread. Similarly, the impact on cash invested is also limited. These investments also have a relatively short term (approx. 1.5 years). Application of the expected loss approach under IFRS 9 instead of the incurred loss approach led to a total extra addition of EUR 1 million. This amount is shown within the opening balance at 1 January 2018. Shareholders' equity was reduced by the same amount in the 2018 opening balance. The 2017 comparatives were not adjusted. The amendment under IFRS 9 had a positive impact on the income statement of EUR 0.3 million. Because of the level of this amount, no further clarification is provided.

- The hedge accounting requirements under IFRS 9 were amended to better reflect companies' risk policies and are less rigid. Because PZEM applied hedge accounting under IAS 39, the introduction of the new standard had no material impact on the company's consolidated financial statements because it could continue all hedging relationships in accordance with IFRS 9 requirements. These amendments had no impact on the 2018 financial statements, the situation at the balance-sheet date 31 December 2018, or the 2017 comparatives.

### 3. Amendments to IFRS 2 Share-based Payment.

- The IASB has published amendments to IFRS 2 on the classification and measurement of share-based payment transactions.
- The amendments cover three areas
  - i. the accounting for cash-settled share-based payment transactions;
  - ii. the classification of share-based payment transactions with net settlement features;
  - iii. the accounting for modification of share-based payment transactions from cash-settled to equity-settled.

### 4. Annual improvements to IFRSs, 2014-2016 Cycle (originally published by the IASB in December 2016).

Effective for annual periods beginning on or after 1 January 2018. For PZEM, that is the 2018 financial year.

The following approved amendments to IFRS 1, IFRS 12, and IAS 28 constitute clarifications or corrections.

#### IFRS 1 First-time adoption of International Financial Reporting Standards.

Deletion of a number of short-term exemptions for first-time adopters.

#### IFRS 12 Disclosure of Interests in Other Entities

Clarifies that the disclosures required in IFRS 12 also apply to interests in other entities classified as 'assets held for sale'.

#### IAS 28 Investments in Associates and Joint Ventures.

Clarifies that the election to measure an investment in an associate or a joint venture at fair value through profit or loss is available for each individual investment on an investment-by-investment basis.

### 5. Amendments to IAS 40 Investment Property

Clarify when an entity is to transfer property (including property under construction or development) into or out of investment property.

### 6. IFRIC 22 Foreign Currency Transactions and Advance Consideration

This interpretation clarifies the accounting for transactions that include the payment of advance consideration in a foreign currency.

## 1.2. PZEM DID NOT ADOPT THE FOLLOWING RELEVANT STANDARDS AND IMPROVEMENTS IN ITS 2018 FINANCIAL STATEMENTS. ADOPTION IS MANDATORY FOR ANNUAL PERIODS BEGINNING ON OR AFTER 1 JANUARY 2019.

### 1. IFRS 16, Leasing.

- This standard aims to improve accounting for leases.
- Adoption is mandatory for annual periods beginning on or after 1 January 2019.
- Approval of IFRS 16 will lead to changes being made to the following standards and interpretations: IFRS 1 First-time Adoption of IFRS, IFRS 3 Business Combinations, IFRS 4 Insurance Contracts, IFRS 7 Financial Instruments: Disclosures, IFRS 9 Financial Instruments, IFRS 13 Fair Value Measurement, IFRS 15 Revenue from Contracts with Customers, IAS 1 Presentation of Financial Statements, IAS 2 Inventories, IAS 7 Statement of Cash Flows, IAS 12 Income Taxes, IAS 16 Property, Plant and Equipment, IAS 21 The Effects of Changes in Foreign Exchange Rates, IAS 23 Borrowing Costs, IAS 32 Financial Instruments: Presentation, IAS 37 Provisions, Contingent Liabilities and Contingent Assets, IAS 39 Financial Instruments: Recognition and Measurement, IAS 40 Investment Property, IAS 41 Agriculture, IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities, IFRIC 12 Service Concession Arrangements, SIC 29 Service Concession Arrangements: Disclosures, and SIC 32 Intangible Assets - Web Site Costs.

- PZEM performed an analysis of the potential impact of this new standard on its consolidated financial statements. The analysis showed that assets (leased assets/tangible fixed assets) and lease liabilities measured at present value (and shown within interest-bearing debt) will increase by EUR 4.1 million. IFRS 16 will also lead to capitalised 'leased assets' being depreciated over the remaining term of the lease and recognised as an expense under 'Depreciation and impairments of tangible fixed assets'. Interest on lease liabilities will be recognised in the income statement under 'Finance expense'. As shown in the analysis performed by PZEM, the impact of this new standard on its financial statements remains below materiality level.
2. **Amendments to IFRS 4 Insurance Contracts.**
    - On 12 September 2016, the IASB published "Applying IFRS 9 'Financial Instruments' with IFRS 4 'Insurance Contracts' (Amendments to IFRS 4)".
    - The amendments to IFRS 4 are intended to address the temporary accounting effects of the different effective dates of IFRS 9 and the new insurance contracts standard that will replace IFRS 4 (IFRS 17).
    - The amendments to IFRS 4 allow entities whose activities are predominantly connected with insurance to postpone the effective date of IFRS 9 until January 2021.
  3. **IFRIC 23 Uncertainty over Income Tax Treatments.**
    - This interpretation clarifies the accounting for uncertainties over income tax treatments under IAS 12. The first test for an entity is to consider whether it is probable that the tax treatment used in its income tax filing will be accepted. If this is probable, then all amounts must be determined consistently with that tax treatment. If it is not, the entity has to use the expected value or the most likely amount.
    - This interpretation is effective for annual periods beginning on or after 1 January 2019.
  4. **Amendments to IFRS 9 Financial Instruments.**
    - The amendment involves an adjustment to IFRS 9 for early repayments, allowing the instrument to be measured at amortised cost, even with negative compensation.
    - This interpretation is effective for annual periods beginning on or after 1 January 2019.
  5. **Amendments to IAS 19 Employee Benefits.**
    - The amendment involves a change to the way in which a plan amendment, curtailment or settlement is to be remeasured.
    - This interpretation is effective for annual periods beginning on or after 1 January 2019.
  6. **Amendments to IAS 28 Investments in Associates and Joint Ventures.**
    - The amendment means that IFRS 9, including its impairment requirements, apply to long-term investments in associates and joint ventures.
    - This interpretation is effective for annual periods beginning on or after 1 January 2019.
  7. **IFRS 3 Business Combinations.**
    - Clarifies the difference between business combinations and the acquisition of a group of assets and liabilities.
    - This interpretation is effective for annual periods beginning on 1 January 2020.
  8. **Annual improvements to IFRSs, 2015-2017 Cycle (originally published by the IASB in December 2017).** Effective for annual periods beginning on or after 1 January 2019. For PZEM, that is the 2019 financial year.
 

The following approved amendments to IFRS 3, IAS 11, IAS 12, and IAS 23 constitute clarifications or corrections.

    - **IFRS 3 Business Combinations.** Clarifies that when an entity obtains control of a joint operation, it has to apply the same principles as those applicable to the stepped acquisition of a business. The acquirer has to remeasure its entire previously held interest in the joint operation.
    - **IFRS 11 Joint Arrangements.** Clarifies that previously held interests in a joint operation do not have to be remeasured if joint control of this entity is obtained and the entity's activities are in the scope of IFRS 3 Business Combinations.
    - **IAS 12 Income Taxes.** Clarifies the existing requirements for the treatment of the income tax consequences of dividends that at the moment apply to all income tax consequences of dividends and no longer to specific situations where there are different tax rates for distributed and undistributed profits.
    - **IAS 23 Borrowing Costs.** Clarifies how borrowing costs are to be recognised when a loan has been taken out to construct an asset. After completion of the asset, the borrowing costs have to be accounted for as general borrowing costs.
  9. **IFRS 17 Insurance Contracts.**
    - This standard is intended to improve financial reporting for insurance contracts and replaces IFRS 4.
    - Adoption is mandatory for annual periods beginning on or after 1 January 2021.
    - IFRS 17 applies to all insurance contracts regardless of the type of company issuing the contract.
    - One of the key changes is that accounting for insurance contracts is to be based on their market value.



## 2. GENERAL ACCOUNTING POLICIES

### 2.1 ESTIMATES AND ASSUMPTIONS

The preparation of financial statements entails the use of estimates and assumptions based on past experience and on factors considered acceptable in management's judgement. These estimates primarily concern the proceeds from the supply and transmission of electricity and gas to end-users based on staggered meter readings, deferred tax assets, and provisions. These estimates and assumptions will affect the information shown in the financial statements, and the actual figures may be different. The effects of changes in estimates are recognised prospectively in the income statement. Changes in estimates may also lead to changes in assets and liabilities or equity components. Such changes in estimates are recognised in the period in which they occur. Any specific disclosures about estimates and assumptions are provided in the notes to the balance sheet and income statement. The provision for unprofitable contracts, in particular, may be affected by future estimates because commodity markets are volatile. Although this provision is based as much as possible on existing contracts and positions, estimated movements in commodity prices (electricity, gas, CO<sub>2</sub>) are a key influencing factor. Expected future price paths are based on recent forecasts issued by a reputable independent firm as at the balance-sheet date. These forecasts are in turn based on in-depth market and regulatory analyses conducted by the firm. Still, these price sets are also projections.

### 2.2 IMPAIRMENT OF ASSETS

Tests are conducted annually to check for indications that assets may be impaired. If that is the case, an estimate is made of the asset's recoverable amount, which is the higher of its fair value less costs to sell and its value in use. If the fair value less costs to sell leads to unavoidable costs, a liability is recognised. Value in use is measured as the present value of the estimated future cash flows, based on the business plans drawn up internally and approved by the Management Board, using a pre-tax discount rate that reflects current market interest rates. Specific risks relating to the asset or the cash-generating unit are incorporated into the estimated future cash flows. Annual impairment tests are conducted for recognised goodwill.

An impairment loss is recognised if the carrying amount of an asset or the cash-generating unit to which the asset belongs exceeds its recoverable amount.

The impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then to reduce the carrying amounts of the other assets of the unit (or group of units) on a pro rata basis. The carrying amount of an asset should not be reduced to below its recoverable amount.

An impairment loss is reversed if it there has been a change

in the basis on which the recoverable amount was previously determined. An impairment loss is reversed only to the extent that the carrying amount of the asset due to reversal does not exceed its carrying amount less depreciation or amortisation if no impairment loss had been recognised. An impairment loss or reversal of an impairment loss is recognised in profit or loss. Impairment losses on goodwill are not reversed.

### 2.3 MEASUREMENT OF FINANCIAL INSTRUMENTS

Unless stated otherwise in the notes to the individual items in the financial statements, management believes that the carrying amounts of financial instruments are reasonable approximations of the fair value of those instruments.

### 2.4 GOVERNMENT SUBSIDIES

Government subsidies are recognised as soon as it is reasonably certain that the conditions for obtaining the subsidy have been or will be met and the subsidy has been or will be received. When investment projects are capitalised, subsidies received and contributions to the construction costs are deducted from the acquisition cost of the assets. Operating subsidies are shown within revenue. Subsidies in the form of tax breaks are factored into the calculation of the taxable amount.

## 2.5 FOREIGN CURRENCY

Assets and liabilities denominated in a foreign currency are translated into euros at the exchange rates prevailing at the end of the reporting period. Differences arising from movements in exchange rates are recognised in profit or loss, unless relating to the net investment in foreign entities, in which case they are recognised in equity as part of other comprehensive income.

Income and expenses denominated in a foreign currency are translated into euros at the exchange rates prevailing at the time of the transaction.

## 2.6 TAXATION

### 2.6.1 INCOME TAXES

Income taxes comprise current taxes and movements in deferred taxes. These amounts are taken to the income statement or recognised in equity as part of other comprehensive income.

Current taxes comprise amounts that are probably due and capable of being offset against the taxable profit for the year. They are calculated on the basis of the prevailing tax laws and rates.

### 2.6.2 DEFERRED TAXES

Deferred taxes are recognised for differences between the carrying amount and tax base of assets and liabilities. Deferred taxes are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on the prevailing tax laws and rates. Deferred taxes are stated at face value. Deferred tax assets are recognised only if and to the extent that it is probable that sufficient taxable profits and/or other temporary differences will be available against which they can be utilised.

A deferred tax asset is recognised for unused tax losses and unused tax credits if and to the extent that it is probable that taxable profits will be available against which such unused losses or credits can be utilised.

## 2.7 COMPARATIVE INFORMATION

A change in presentation of the comparative information is applied for carbon emission allowances and guarantees of origin (GoOs). Both items are presented in the 2018 financial statements (and comparatives) within 'Short-term receivables' instead of 'Inventories'. As a result, the comparative information for both items for 2017 differs from the information presented in the 2017 financial statements. The 2017 financial statements included a separate note on carbon emission allowances worth EUR 1,148,000. GoOs were presented under 'Inventories' within 'Goods for resale' at EUR 250,000.

Other comparative information is presented consistently with the 2017 financial statements.



### 3. BASIS OF CONSOLIDATION

The consolidated financial statements comprise the financial information of PZEM N.V. and its group companies. Group companies are legal entities and companies over which control is exercised in terms of their governance and operational and financial policies. IFRS 10 Consolidated Financial Statements provides that an investor controls an investee if the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to use its power over the investee to affect the amount of the investor's returns. Existing and potential voting rights that were exercisable or convertible as at the balance-sheet date are considered when determining whether PZEM N.V. controls an entity. Other agreements that allow PZEM N.V. to determine operating and financial policy are also taken into account.

Group companies are included in the consolidation from the date when control is obtained.

Consolidation is discontinued from the date when control over the group company ceases.

Group companies are fully consolidated, with 100% of their equity and profit or loss being included in the consolidation. If the share interest in a group company is less than 100%, the non-controlling interest is shown separately in the balance sheet and income statement.

Joint arrangements are recognised in proportion to PZEM's (group company's) interest in the arrangement if the arrangement involves a joint operation. They are included in the consolidation from the date when the arrangement is entered into. Consolidation discontinues from the date when the arrangement ceases. Joint arrangements that take the form of 'joint operations' are consolidated according to the partial method.

The investment is recognised in the consolidated financial statements as follows:

- Assets to which the investor has direct rights are recognised fully in the financial statements,
- Liabilities for which the investor is directly responsible are recognised fully in the financial statements.
- Revenue from the sale of the investor's share of the output of the joint operation by the joint operation itself is recognised fully in the financial statements (the joint operation itself being responsible for the sale of the output).
- Revenue from the sale of the investor's share of the output of the joint operation by the investor is recognised fully in the financial statements.
- Expenses allocated directly to the investor are fully recognised in the financial statements;
- Assets, liabilities, revenue and expenses that are not directly attributable to the investors are allocated to the investors indirectly in proportion to their interest in the joint operation

Joint arrangements that take the form of 'joint ventures' are accounted for according to the equity method.

Associates are recognised using the equity method.

#### Purchase accounting

The acquisition of a group company is accounted for using the purchase accounting method. The accounting policies adopted by group companies are adjusted, where necessary, to ensure consistency with the policies applied by PZEM.

#### Scope of consolidation

These financial statements include a separate overview of subsidiaries, associates, and joint ventures, specifying the relevant share interests.

## 4. BASIS OF RECOGNITION AND MEASUREMENT OF ASSETS AND LIABILITIES

The financial statements have been prepared under the historical cost convention, with the exception of derivatives (financial instruments), which are carried at fair value, and the differences referred to below. All transactions in financial instruments are recognised on the transaction date.

### 4.1 INTANGIBLE FIXED ASSETS

Intangible fixed assets comprise goodwill paid, software, and acquired transmission rights.

#### Goodwill

Goodwill represents the positive difference between the acquisition cost of a group company and the fair value of the acquisition. Goodwill paid on the acquisition of a group company or joint operation is recognised as an intangible fixed asset. Goodwill paid on the acquisition of an interest in a joint venture or investment in an associate is included in the cost of the interest or investment. If the cost is lower than the fair value of the identifiable assets, liabilities and contingent liabilities acquired (negative goodwill), the difference is recognised directly in profit or loss.

The carrying amount of goodwill is measured at historical cost less accumulated impairment losses. Goodwill is not amortised. Annual impairment tests are conducted to identify any impairment of goodwill. For the purposes of these tests, goodwill is allocated to cash-generating units. If a transaction qualifies as a transaction between owners, the difference between the acquisition cost and fair value is recognised in equity.

#### Software

Capitalised software is carried at historical cost less amortisation. Amortisation is on a straight-line basis over a period of 5 years. The useful life is assessed annually, with any adjustments being accounted for prospectively.

#### Transmission rights

Transmission rights are measured at cost and amortised on a straight-line basis over a period of 20 years. The useful life is assessed annually, with any adjustments being accounted for prospectively.

### 4.2 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost less accumulated depreciation on a straight-line basis over their estimated useful lives, as determined according to technical and economic criteria, taking into account the estimated residual values less accumulated impairment losses. Land is not depreciated. In accordance with IFRIC 18, third-party contributions to the construction costs of an item of property, plant or equipment are no longer deducted from the carrying

amount of the asset; instead, they are recognised within deferred revenue (liability).

External financing expenses for assets (construction period interest) are included in the cost if they can be allocated directly to the asset.

If an asset consists of various components with different depreciation periods and residual values, the components are recognised separately. Investments to replace components are capitalised, with the replaced component being written down simultaneously. Estimated useful lives and estimated residual values are assessed annually when the business plan is prepared. If an impairment test shows an impairment loss, the carrying amount is adjusted accordingly.

Property, plant and equipment under construction is stated at costs incurred as at the balance-sheet date, including the costs of materials and services, direct staff costs, an appropriate share of directly attributable overhead costs, and the financing costs allocated directly to the asset.

### 4.3 NON-CURRENT FINANCIAL ASSETS

#### General

A business combination involves bringing together separate entities or businesses into one reporting entity. Business combinations are accounted for using the acquisition method. Steps in applying the acquisition method are:

1. Identification of the acquirer;
2. Measurement of the cost of the business combination;
3. Allocation of the cost of the business combination as at the acquisition date.

The cost of a business combination is the aggregate of the acquisition-date fair values of the assets acquired, liabilities incurred or assumed and equity instruments issued by the acquirer. With the revision of IFRS 3 (effective since 2009), the costs directly attributable to the acquisition are no longer shown within the cost of the business combination, and instead are recognised directly in profit or loss. Goodwill is measured as the value by which the cost of the business combination exceeds the acquirer's interest in the net fair value of identifiable assets, liabilities, and contingent liabilities.

Negative goodwill is recognised directly in profit or loss. Non-controlling interests are recognised in equity.

#### Joint ventures, associates, and other investments

- Joint ventures are joint arrangements whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. The parties are called joint venturers.
- A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement (such as PZEM N.V. or any of its subsidiaries) have rights to the assets, and obligations for the liabilities, relating to the arrangement. These parties are called joint operators. In the case of a joint operation, PZEM N.V. recognises a proportion of the assets and liabilities, revenue and expenditure equivalent to its interest in the joint operation; its share in the joint operation's equity is therefore not recognised as a non-current financial asset.
- Associates are entities over which PZEM N.V. exercises significant influence, whether directly or indirectly, but which it does not control. Generally speaking, this is the case if PZEM N.V. can exercise between 20% and 50% of the voting rights.
- Other investments are non-associated investments in which PZEM N.V. has an interest of less than 20%

The financial statements include an overview of the main joint arrangements and investments.

#### Valuation of joint ventures, associates, and other investments

Investments in joint ventures and associates are recognised in the consolidated financial statements using the equity method. Under the equity method, the investment is recognised initially at cost, i.e. the fair value of the underlying assets and liabilities, including goodwill. If the fair value exceeds the cost, the positive difference is added to the carrying amount of the investment. The share of profits or losses is recognised in the carrying amount each year and dividend distributions are deducted. If the (cumulative) losses of the joint venture and/or associate lead to a negative book value, then these losses are not recognised, unless PZEM N.V. has an obligation to clear the losses or has made payments to do so.

Movements in other investments are shown within other comprehensive income, unless they involve a permanent impairment, which is then recognised directly in profit or loss. If insufficient information is available, valuation is at cost.

Undistributed profits of joint ventures and associates and direct increases in equity at a joint venture or associate which cannot readily be distributed are added to the statutory reserve.

The accounting policies of joint ventures and investments are adjusted, where necessary, to ensure consistent application of the accounting policies throughout the PZEM group.

#### Loans to other investees

Loans to investees or third parties are initially measured at fair value and subsequently at amortised cost. Amortised cost is usually equivalent to the face value of the loans because they are short-term. Where necessary, a provision is recognised for bad debts and deducted from this value.

#### Term deposits and securities

Cash investments in the form of term deposits or securities are initially measured at fair value and subsequently at amortised cost. The assumption is that all these products are held to maturity. Receivables with a term to maturity of less than one year are shown within receivables.

## 4.4 INVENTORIES

Inventories are stated at the lower of weighted average cost, based on first-in first-out (FIFO), and net realisable value, less a provision for obsolescence. Impairment losses on inventories are recognised as an expense and disclosed separately.

## 4.5 RECEIVABLES

Trade receivables are initially stated at fair value and subsequently at amortised cost less impairment losses. Amortised cost is usually equivalent to the face value of the receivables because they are short-term in nature.

Carbon allowances intended for the company's own use are shown as a netted amount (allowances held less allowances to be used for emissions in 2018). They are stated at historical cost on a FIFO basis.

## 4.6 DERIVATES

Information on derivatives accounting is provided in Section 5 Basis of recognition and measurement of financial instruments.

## 4.7 CASH AND CASH EQUIVALENTS

Cash includes not only cash but also cash equivalents that can be converted into cash with no material risk of impairment. Cash and cash equivalents are stated at fair value.

## 4.8 CAPITAL AND SHARES

Changes in shareholders' equity are presented in the statement of changes in equity. The company's authorised capital amounts to EUR 9,080,000, divided into 20,000 shares with a par value of EUR 454. At 31 December 2018, EUR 6,937,120 worth of shares had been issued and paid up. Dividends are recognised as a liability in the period for which they are declared. No changes occurred during the year. None of the shares come with pre-emptive rights or restrictions.

## 4.9 PROVISIONS

Provisions are recognised for legally enforceable, present obligations relating to operations. Provisions are measured at the present value of expected expenditures less any expected own income. The present value is calculated using a pre-tax

discount rate that reflects current market assessments of the time value of money. Expenditures expected to be incurred within one year of the balance-sheet date are shown within current liabilities.

## 4.10 NON-CURRENT LIABILITIES

Non-current liabilities are measured at amortised cost using the effective interest method. Repayment obligations for non-current liabilities due within one year are shown within current liabilities.

The non-current portion of deferred revenue is classified as a non-current liability. The portion to be released during the next reporting period is shown within current liabilities. The portion relating to the current reporting period is shown within revenue.

# 5. BASIS OF RECOGNITION AND MEASUREMENT OF FINANCIAL INSTRUMENTS

## 5.1 FINANCIAL INSTRUMENTS

PZEM uses financial instruments to manage and optimise normal market risks associated with the company's commodities, currency, and interest-rate exposures. PZEM applies IFRS 9 Financial Instruments. Under this standard, derivatives (derivative financial instruments) are measured at fair value and trading contracts are recognised in the income statement at fair value through profit or loss.

### Definition

A derivative is a financial instrument or other contract that falls within the scope of IFRS 9. It has the following three features:

- its value changes as a result of movements in a particular interest rate, price of a financial instrument, commodity price, exchange rate, or index of prices, interest rates or other variables, provided that, in the case of non-financial variables, the variable is not specific to a contract party (also known as the 'underlying asset');
- no, or only a minor, net initial investment is required in relation to other types of contract that respond in similar ways to movements in market factors;
- settlement takes place in the future.

## 5.2 DERIVATIVES

PZEM is involved in gas, electricity, emissions, and currency trading contracts for the current calendar year and the next three years as a maximum. The company considers the markets for these products to be liquid over this time horizon. Reliable prices are available from brokers, markets, and data providers. The fair value of a commodity contract is calculated according to the DCF method using those prices; no in-house valuation models are used. The monthly, quarterly and annual prices published are adjusted only to reconcile them with the relative periods in the trade systems. PZEM uses derivatives, such as interest rate swaps, to hedge its interest rate risk exposure. These swaps allow a floating rate to be exchanged for a fixed rate. The fair value of interest-rate derivatives is calculated according to the DCF method, using a yield curve that is based on data from the European Central Bank (ECB).

In accordance with IFRS 13 Fair Value Measurement, the fair value of interest rate swaps comprises a credit value adjustment (CVA) and debit value adjustment (DVA) to reflect counterparty risk for all parties involved. Value changes in CVA/DVA are reported in the income statement.

### Classification and netting

A derivative is classified as a current asset if its fair value represents a gain and as a non-current liability if its fair

value represents a loss. Receivables and payables in respect of derivatives for different transactions with the same counterparty are netted if there is a contractual or legally enforceable right of set-off and PZEM also settles the relevant cash flows on a net basis.

### Recognition of fair value gains and losses

Under IFRS 9, energy commodity contracts (electricity, gas, emission allowances, and related currency exposures) and interest rate swaps are classified as derivatives. Under IFRS 9 and IFRS 7 Financial Instruments: Disclosures, all derivatives are measured at fair value on initial recognition.

As a general rule, fair value changes in derivatives are recognised through profit or loss. The exceptions to this rule are:

1. Own use. PZEM applies accrual accounting for commodity contracts intended for its own use or production and for sales and purchasing contracts entered into for the purpose of delivering physical commodities to end users. This means that any changes in value are not shown in the income statement. These transactions are recognised as sales or purchase transactions at the prevailing prices at the time of settlement;
2.
  - a. Derivatives used to hedge an own-use contract. Hedge accounting may be applied for these derivatives on certain conditions;
  - b. Interest rate derivatives. Hedge accounting may be applied for these derivatives on certain conditions.

### Hedge accounting

Hedge accounting allows the impact of fair value changes on profit or loss to be mitigated by taking into account the opposing effects on the profit or loss of fair value changes in the hedges and the hedged items. Fair value gains and losses on derivatives are recognised in equity (through the statement of comprehensive income) until the hedged position/transaction is settled.

PZEM uses derivatives to hedge price and currency risks arising from energy commodity contracts.

Interest rate swaps are used to hedge the risk of cash-flow volatility due to movements in interest rates. PZEM uses cash-flow hedging, which involves entering into hedges to mitigate its exposure to variability of existing and future cash flows that could ultimately affect profit or loss. The hedges are allocated to a specific risk relating to a balance-sheet item or highly probable forecast transaction.

### Criteria for applying hedge accounting

Hedge accounting is subject to strict rules in terms of documentation and effectiveness testing. Hedge accounting is permitted if a derivative meets the following criteria:

1. at the time of entering into the transaction, the derivative is formally classified as a hedge, and the hedging relationship, the objectives of the hedge, and the risk management strategy are documented;
2. in the case of a cash-flow hedge, the forecast transaction that is the subject of the hedge is highly probable and expected to expose the entity to variability in existing or future cash flows that could ultimately affect profit or loss;
3. the effectiveness of the hedge can be reliably measured;
4. the hedge is expected to be highly effective;
5. the hedge is assessed on an ongoing basis and determined to have been highly effective.

### Hedge effectiveness testing and recognition of changes

PZEM formally tests whether derivatives used as hedging instruments have been highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged item, both at the inception of the hedge and during its life. PZEM tests and determines whether changes in fair value or cash flows attributable to the hedged item are offset by changes in fair value or cash flows attributable to the hedging instrument.

The effective portion of fair value changes is recognised in equity and shown within the hedge reserve (through the statement of comprehensive income).

The ineffective portion of a hedging relationship, in a fair value hedge, is the extent to which changes in the fair value of the derivative differ from the changes in the fair value of the hedged item or, in a cash flow hedge, the extent to which changes in the fair value of the derivative differ from the fair value change in the expected cash flow. Ineffective hedges, the ineffective portion of a hedge and gains and losses on components of derivatives that are disregarded when testing the effectiveness of a hedge are recognised directly in the income statement.

The cumulative amounts recognised in equity are taken to the income statement in the same period as the hedged transaction.

PZEM discontinues hedge accounting if the hedging relationship is no longer effective or no longer expected to remain effective.

## 6. ACCOUNTING POLICIES FOR THE INCOME STATEMENT

### 6.1 REVENUE

Revenue represents income arising directly from the supply of goods and services to third parties, net of any discounts and net of sales taxes such as VAT and energy tax.

Revenue is recognised when the material risks and rewards of ownership of the goods have been transferred to the buyer. Revenue from services is recognised in proportion to the services delivered as at the end of the reporting period.

Recognition of revenue from electricity sales is based on the assumption that power generated by the group's own production facilities (including joint arrangements) and third-party production facilities (including key wind power purchase agreements) is sold to third parties. Electricity supplied to end-users is procured entirely from third parties and therefore also shown within revenue.

For gas and electricity trading contracts that do not involve physical delivery, purchases and sales are netted if this was contractually agreed.

### 6.2 NET OPERATING EXPENSES

Net operating expenses are measured on the basis of products and services purchased and in accordance with the measurement and depreciation rules set out above. Expenses are allocated to the financial year in which they are incurred. Gains are recognised in the year in which they are realised; losses are recognised in the year in which they are foreseeable.

Expenses relating directly to sales transactions involving assets held for sale are recognised at the time when the sales proceeds are realised.

### 6.3 NET FINANCE INCOME/ (EXPENSE)

Finance income or expense is allocated to the period to which it relates, using the effective interest method. Costs of external financing associated with the construction or acquisition of property, plant and equipment (construction period interest) are capitalised as and when appropriate.

## 7. ACCOUNTING POLICIES – CASH FLOW STATEMENT

The cash flow statement has been prepared according to the indirect method, based on actual balance-sheet movements. A distinction is made between operating, investing, and financing activities. Although the current portion of non-current liabilities is recognised in the balance sheet as part of other current liabilities, movements in the current portion of non-current liabilities is shown within the cash flow from financing activities in the cash flow statement.

Cash flows relating to minority interests (dividend payments), finance income or expense, and corporate income taxes (tax assessments) are based on actual receipts and payments.







# **NOTES TO THE CONSOLIDATED BALANCE SHEET**

# 1. INTAGIBLE ASSETS

(EUR 1,000)	Total	Software	Transmission rights	Customers Contract
<b>2017</b>				
<b>Carrying amount as at 1 January 2017</b>	<b>4,740</b>	<b>1,690</b>	<b>2,070</b>	<b>980</b>
Investments	-	-	-	-
Depreciation	(2,345)	(1,117)	(1,181)	(47)
Disposals	(16)	(16)	-	-
<b>Carrying amount as at 31 December</b>	<b>2,379</b>	<b>557</b>	<b>889</b>	<b>933</b>
Accumulated depreciation and impairment	35,922	17,088	18,419	415
<b>Acquisition cost as at 31 December</b>	<b>38,301</b>	<b>17,645</b>	<b>19,308</b>	<b>1,348</b>
<b>2018</b>				
<b>Carrying amount as at 1 January</b>	<b>2,379</b>	<b>557</b>	<b>889</b>	<b>933</b>
Investments	-	-	-	-
Depreciation	(1,131)	(196)	(889)	(47)
Disposals	-	-	-	-
<b>Carrying amount as at 31 December</b>	<b>1,248</b>	<b>362</b>	<b>-</b>	<b>887</b>
Accumulated depreciation and impairment	37,053	17,284	19,308	462
<b>Acquisition cost as at 31 December</b>	<b>38,301</b>	<b>17,645</b>	<b>19,308</b>	<b>1,348</b>
Depreciation periods in years		5	20	28

## Impairmentbeoordeling

In 2018 there were no indications necessitating an impairment test for the intangible fixed asset shown above.

## Software

No investments were made in 2018.

## Customer contracts

These intangible fixed assets are amortised over the expected useful life of the Sloe power plant. Amortisation began in 2009.

## 2. PROPERTY, PLANT AND EQUIPMENT

(EUR 1,000)	Total	Land and buildings	Plant and equipment	Other assets	Assets under construction	Third-party contributions
<b>2017</b>						
<b>Carrying amount as at 1 January</b>	<b>712,391</b>	<b>119,223</b>	<b>514,803</b>	<b>48,069</b>	<b>31,788</b>	<b>(1,492)</b>
Investments	38,117	-	526	84	37,507	-
Depreciation	(54,063)	(8,222)	(37,872)	(8,629)	-	660
Impairment	(200,437)	-	(200,437)	-	-	-
Disposals	(2,124)	(2,008)	15	(131)	-	-
Other movements / activated items	(59)	1,078	57,024	1,007	(59,168)	-
<b>Carrying amount as at 31 December</b>	<b>493,825</b>	<b>110,071</b>	<b>334,059</b>	<b>40,400</b>	<b>10,127</b>	<b>(832)</b>
<b>Carrying amount before deduction of contributions</b>	<b>494,657</b>	<b>110,071</b>	<b>334,059</b>	<b>40,400</b>	<b>10,127</b>	
Accumulated depreciation and impairment	722,094	80,877	568,451	62,179	10,587	
<b>Acquisition cost as at 31 December</b>	<b>1,216,751</b>	<b>190,948</b>	<b>902,510</b>	<b>102,579</b>	<b>20,714</b>	
<b>2018</b>						
<b>Carrying amount as at 1 January</b>	<b>493,825</b>	<b>110,071</b>	<b>334,059</b>	<b>40,400</b>	<b>10,127</b>	<b>(832)</b>
Investments	22,642	-	6,785	482	15,375	-
Depreciation	(43,772)	(8,147)	(29,206)	(6,613)	-	194
Impairment	-	-	-	-	-	-
Disposals	(422)	-	-	(422)	-	-
Other movements / activated items	-	2,316	13,854	3,259	(19,429)	-
<b>Carrying amount as at 31 December</b>	<b>472,273</b>	<b>104,240</b>	<b>325,492</b>	<b>37,106</b>	<b>6,073</b>	<b>(638)</b>
<b>Carrying amount before deduction of contributions</b>	<b>472,911</b>	<b>104,240</b>	<b>325,492</b>	<b>37,106</b>	<b>6,073</b>	
Accumulated depreciation and impairment	755,475	89,024	597,657	68,794	-	
<b>Acquisition cost as at 31 December</b>	<b>1,228,386</b>	<b>193,264</b>	<b>923,149</b>	<b>105,900</b>	<b>6,073</b>	
Depreciation periods in years		0 - 40	7 - 40	5 - 15	n.a.	

Investments in plant and equipment (including changes in assets under construction) mainly comprise replacement investments and measures to further increase safety at the EPZ nuclear power plant. They also include major maintenance undertaken at the Sloe power plant. Disposals comprise the sale of several pieces of land.

In 2017 an impairment loss was recognised for the write-down of the book value of EPZ's tolling rights that had arisen when the share interest percentage was increased in 2011. No full or partial reversal of the impairment loss occurred in 2018.

### 3. JOINT VENTURES, ASSOCIATES, AND OTHER INVESTMENTS

(EUR 1,000)	Total	Joint Ventures	Other Investments
<b>Carrying amount as at 1 January 2017</b>	<b>376,518</b>	<b>362,522</b>	<b>13,996</b>
Investments/Disposals	1,570	(194)	1,764
Dividends received	(31,232)	(31,216)	(16)
Share of profits	37,872	37,872	-
Other movements	342	342	-
<b>Carrying amount as at 31 December 2017</b>	<b>385,070</b>	<b>369,326</b>	<b>15,744</b>
Adjustment opening balance as at 1 January 2018	13,484	13,484	-
<b>Adjusted carrying amount as at 1 January 2018</b>	<b>398,554</b>	<b>382,810</b>	<b>15,744</b>
Investments/Disposals	1,931	134	1,797
Dividends received	(34,489)	(34,489)	-
Share of profits	27,138	26,596	542
Other movements	288	288	-
<b>Carrying amount as at 31 December 2018</b>	<b>393,422</b>	<b>375,339</b>	<b>18,083</b>

The opening balance for 2018 was restated due to the introduction of IFRS 9. This led to a change in the valuation of a loan granted by one of the joint ventures. As a result, the joint venture's equity increased by EUR 13.5 million at 1 January 2018.

Dividends received mainly involve the largest joint venture, water company Evides. Additionally, ELSTA made a large capital distribution at the time of expiry of the tolling contract after it had sold the plant.

Share of profits in joint ventures comprises the profits generated by the joint ventures. Movements in the provision for unprofitable contracts relating to the share of profits or losses in joint ventures was adjusted in the Group's income statement.

Other movements mainly comprise a change in shareholders' equity of a joint venture.

### 3.1 JOINT VENTURES

Summary of the information in the balance sheet and income statement relating to joint ventures (under IFRS, based on a 100% interest).

#### JOINT VENTURES

##### EVIDES N.V.

(EUR 1,000)

31-12-2018

31-12-2017

Current assets	68,851	68,315
Non-current assets	1,134,002	1,089,486
Current liabilities	(162,177)	(158,061)
Non-current liabilities	(522,030)	(514,090)
	<b>2018</b>	<b>2017</b>
Revenue	303,782	315,050
Profit from continuing operations	40,853	46,898
Profit from discontinued operations	-	-
Profit for the year	40,853	46,898
Other comprehensive income	575	681
Total comprehensive income	41,428	47,579
Dividend received by PZEM	17,700	20,500
<b>Abovementioned income statement consists among others of the following:</b>		
Depreciation, amortisation and impairment	76,359	74,115
External finance income/expenses	2,526	1,569
Corporate income tax	6,624	7,198
	<b>31-12-2018</b>	<b>31-12-2017</b>
Equity	518,646	485,650
PZEM's interest	50%	50%
Goodwill	95,502	95,502
<b>CARRYING AMOUNT AS AT</b>	<b>354,825</b>	<b>338,327</b>

**ELSTA B.V. & CO. C.V.**  
 (EUR 1,000)

	31-12-2018	31-12-2017
Current assets	-	22,660
Non-current assets	-	29,637
Current liabilities	-	(5,889)
Non-current liabilities	-	-
	<b>2018</b>	<b>2017</b>
Revenue	52,976	72,996
Profit from continuing operations	21,999	33,106
Profit from discontinued operations	-	-
Profit for the year	21,999	33,106
Other comprehensive income	-	-
Total comprehensive income	21,999	33,106
Dividend received by PZEM	16,456	10,550
<b>Abovementioned income statement consists among others of the following:</b>		
Depreciation, amortisation and impairment	15,435	19,313
External finance income/expenses	8,024	11,227
Corporate income tax	-	-
	<b>31-12-2018</b>	<b>31-12-2017</b>
Equity	-	46,408
PZEM's interest	24,75%	24,75%
Goodwill	-	-
Other	-	(180)
<b>CARRYING AMOUNT AS AT</b>	<b>-</b>	<b>11,306</b>
<b>OTHER JOINT VENTURES</b>		
(EUR 1,000)	<b>31-12-2018</b>	<b>31-12-2017</b>
Profit from continuing operations attributable to PZEM N.V.	1,019	6,661
Profit from discontinued operations attributable to PZEM N.V.	-	-
Other comprehensive income attributable to PZEM N.V.	-	-
Total comprehensive income attributable to PZEM N.V.	1,019	6,661
<b>TOTAL CARRYING AMOUNT AS AT</b>	<b>20,513</b>	<b>19,693</b>

Other joint ventures mainly comprise the share interest in BMC Moerdijk.

## 3.2 OTHER INVESTMENTS

All entities presented as other investments are included in the list of non-consolidated companies.

In 2007, as part of the Borssele Agreement, the Sustainable Energy Technology Fund (SET-Fund C.V.) was set up by the former energy companies DELTA (with DELTA Investeringsmaatschappij B.V. acting as limited partner; currently PZEM and PZEM Investeringsmaatschappij B.V, respectively) and Essent (now an RWE company). Both partners own a 50% interest in the partnership.

In light of the Fund's articles of association and the change in ownership interests in N.V. EPZ, a new fund (SET-Fund II C.V.) was launched on 23 December 2011. PZEM owned a 69.65% interest and Essent (RWE) a 29.85% interest in SET Fund II C.V.'s initial share capital of EUR 10 million. In view of the limited degree of control, the investments in both entities are classified as financial instruments and stated at fair value. At 31 December 2018, PZEM held a 18.83% interest in SET Fund II C.V. (through PZEM Investeringsmaatschappij B.V. acting as limited partner) (31 December 2017: 18.83%).

## 3.3 RELATED-PARTY TRANSACTIONS

Related-party transactions are recognised if the value of the related party is material to PZEM's financial information and sales and purchase transactions, receivables and payables, and loans granted involve at least EUR 5 million. Transactions with Elsta B.V. are based on tolling agreements (cost-plus method). Other transactions are at arm's length.

No provision for bad debts is recognised for amounts owed by related parties because there is no need to do so. Although PZEM's shareholders (provincial and municipal authorities) are related parties, no significant transactions are conducted between PZEM and its shareholders. The remuneration paid to the Management Board and Supervisory Board is shown within staff costs and other operating expenses.

## RELATED-PARTY TRANSACTIONS

(EUR 1,000)

		Sales		Purchases		Trade receivables	
	% Interest	2018	2017	2018	2017	31-12-2018	31-12-2017
Evides N.V.	50.00%	212	13,106	-	-	-	-
ELSTA B.V. & Co C.V.	24.75%	}	-	17,792	25,163	-	142
ELSTA B.V.	25.00%		-	6,949	5,756	44	11
BMC Moerdijk B.V.	50.00%	163	209	-	1,740	-	-
Zebra Gasnetwerk B.V.	33.33%	-	-	-	-	-	-
<b>TOTAL</b>		<b>375</b>	<b>13,315</b>	<b>24,741</b>	<b>32,658</b>	<b>44</b>	<b>153</b>

(EUR 1,000)

		Trade payables		Loans granted		Interest	
	% Interest	31-12-2018	31-12-2017	31-12-2018	31-12-2017	2018	2017
Evides N.V.	50.00%	-	-	-	-	-	-
ELSTA B.V. & Co C.V.	24.75%	}	-	-	-	-	-
ELSTA B.V.	25.00%		-	-	-	-	-
BMC Moerdijk B.V.	50.00%	488	526	4,422	4,422	314	586
Zebra Gasnetwerk B.V.	33.33%	-	-	-	-	-	-
<b>TOTAL</b>		<b>488</b>	<b>526</b>	<b>4,422</b>	<b>4,422</b>	<b>314</b>	<b>586</b>

## 4. OTHER NON-CURRENT FINANCIAL ASSETS

(EUR 1,000)	Total	Loans to joint ventures and associates etc.	Deferred tax asset	Other financial assets
<b>CARRYING AMOUNT AS AT 1 JANUARY 2017 (LONG TERM)</b>	<b>174,250</b>	<b>11,990</b>	<b>12,066</b>	<b>150,194</b>
New loans	308,617	-	-	308,617
Results	6,696	-	3,647	3,049
Repayments	(7,096)	(7,081)	-	(15)
Transferred to equity as hedge reserve	(1,810)	-	(1,810)	-
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>480,657</b>	<b>4,909</b>	<b>13,903</b>	<b>461,845</b>
<b>Adjustment opening balance as at 1 January 2018</b>	<b>(481)</b>	<b>-</b>	<b>-</b>	<b>(481)</b>
<b>ADJUSTED CARRYING AMOUNT AS AT 1 JANUARY 2018</b>	<b>480,176</b>	<b>4,909</b>	<b>13,903</b>	<b>461,364</b>
New loans	257,793	-	-	257,793
Results	(6,941)	-	(6,854)	(87)
Repayments	(2,107)	(30)	-	(2,077)
Transferred to equity as hedge reserve	(860)	-	(860)	-
Movement expected credit loss IFRS 9	121	-	-	121
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>728,182</b>	<b>4,879</b>	<b>6,189</b>	<b>717,114</b>
Current portion of financial assets	(255,611)	-	-	(255,611)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018 (LONG TERM)</b>	<b>472,571</b>	<b>4,879</b>	<b>6,189</b>	<b>461,503</b>

### 4.1 LOANS TO JOINT VENTURES, ASSOCIATES, AND OTHER INVESTMENTS

These comprise loans to joint ventures, associates and other investments. Loans are stated at face value. The amount of EUR 4.9 million shown comprises two subordinated loans.

In 2018, the weighted average interest rate was 7.0% (2017: 7.7%).



## 4.2 DEFERRED TAX ASSETS

(EUR 1,000)

31-12-2018

31-12-2017

Intangible assets and property, plant and equipment	-	-
Financial assets	(78)	(108)
Provisions	-	-
Unutilised tax losses	860	6,800
Hedge reserve pursuant to IAS39/derivatives	5,407	7,211
<b>TOTAL DEFERRED TAX ASSET</b>	<b>6,189</b>	<b>13,903</b>

Deferred tax assets only comprise EPZ and the Sloe power plant. To be on the safe side, no deferred tax assets of PZEM N.V.'s fiscal unity were recognised in the balance sheet due to uncertainty over whether and when they might be utilised.

The deferred tax asset relating to intangible assets and property, plant and equipment largely arises from differences between the tax bases and carrying amounts for reporting purposes of assets as at 1 January 1998 (the opening balance sheet for tax purposes for PZEM N.V.). The deferred tax asset relating to provisions arises from liabilities recognised in the financial statements which are either not recognised or recognised in a different manner for tax purposes. In all cases, these are temporary differences which will be reflected in the effective tax rate in the coming years. Due to differences between tax bases and carrying amounts, EUR 46.8 million in deferred taxes could be recognised. These would include a hedge reserve for unrealised fair value gains or losses on derivatives and trading contracts in compliance with IFRS 9. At 31 December 2018, the hedge reserve would result in a deferred tax asset of EUR 22.7 million.

When preparing the financial statements, an annual assessment is made of the extent to which unused tax losses may result in future tax-savings. If it is likely that the tax losses can be utilised within the statutory nine-year period, a deferred tax asset is recognised.

At 31 December 2018, no deferred tax asset was recognised for EUR 182,7 million in tax loss carryforwards due to uncertainty over whether and when the unused tax losses or unused tax credits might be utilised. The amount in unused tax losses is uncertain because PZEM is still in discussion with the Dutch tax authorities regarding a number of valuations for tax purposes. EUR 20.6 million in unused tax losses will expire within 5 years. The remaining losses have a carryforward period of more than 5 years.

## 4.3 OTHER NON-CURRENT FINANCIAL ASSETS

At 31 December 2018, other non-current financial assets mainly comprised cash invested and collateral provided. IFRS 9 required adjusting the opening balance for cash investments and collateral provided.

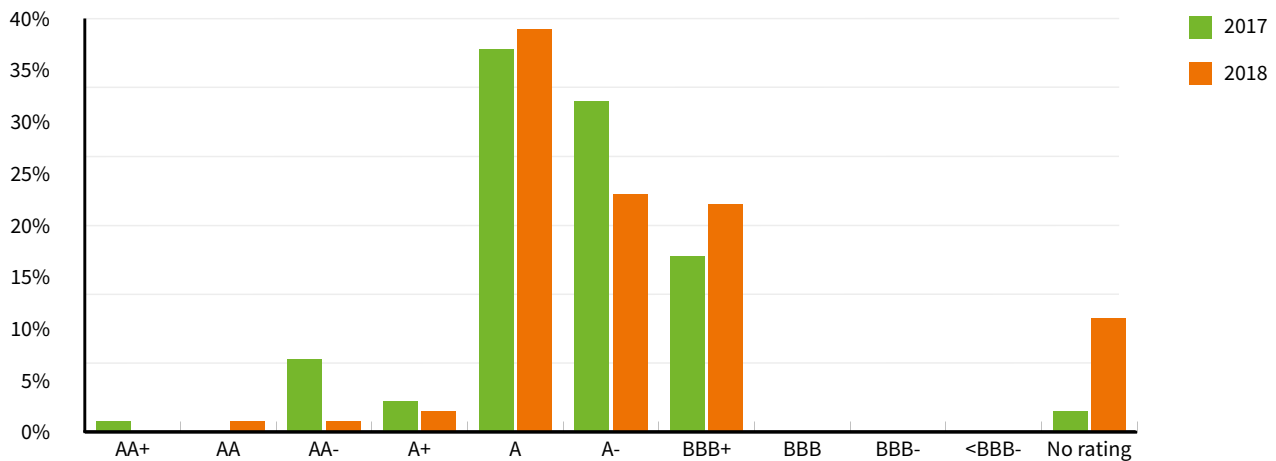
The financial asset impairment model provided for in IFRS 9 differs from that of IAS 39. For PZEM, this mainly concerns the measurement of cash investments and the provision for bad debts. Until 2018, the company applied the incurred loss method, which allows a provision to be recognised at the time when a trigger (a specific 'credit event') occurs. Effective 2018, IFRS 9 provides for an expected loss model, according to which this provision is to be measured on the basis of both historical and forward-looking information because there is always an inherent risk of a debtor failing to meet its payment obligations (in full). This is why this risk must already be accounted for on initial recognition of the receivable. The impact of these changes in the rules on the recognition of cash investments is limited. Cash invested and collateral provided are relatively short-term in nature (currently approximately 1.5 years).

To estimate expected losses, PZEM looked at the external ratings of counterparties and elected to use the following percentages for those ratings:

External credit rating	Expected loss percentage
> A-	0.1%
BBB+	0.2%
BBB of BBB-	0.5%
< BBB- or no rating	1.0%

PZEM elected to apply relatively low percentages because cash invested and collateral provided are relatively short-term in nature (approximately 1.5 years).

The chart below shows the percentage distribution of all cash investments and collateral provided (both long-term and short-term) across the different credit ratings:



Summary of counterparty credit ratings and cash investments and collateral provided as a % of the total amount.

Application of the expected loss approach under IFRS 9 instead of the incurred loss approach led to a total extra addition of EUR 1.0 million (EUR 0.5 million long-term and EUR 0.5 million short-term). This amount is shown within the opening balance at 1 January 2018. This change under IFRS 9 had a positive impact on the income statement for 2018 of EUR 0.3 million (EUR 0.1 million long-term and EUR 0.2 million short-term).

#### Term deposits and securities

Because of the sale of the grid and retail operations in 2017, PZEM received a significant amount in cash. These funds are used first and foremost for our operating activities. What remains is invested in accordance with the Treasury Charter. At 31 December 2018, these investments mainly comprised term deposits held with banks, bonds and securities representing a value of EUR 596.4 million (excluding expected loss provision). Of this total sum, EUR 254.0 million (excluding expected loss provision) had a term to maturity of more than 1 year. An amount of EUR 78.8 million consists of investments made by PZEM in the fund in which EPZ also invests via Stichting Beheer Ontmantelingsgelden Kerncentrale Borssele. At 31 December 2018, a total of EUR 251.8 million (including EPZ's share) was invested in this fund.

#### Collateral provided

Collateral provided comprises security deposits and bank guarantees. Some of the collateral has been provided to counterparties for operating activities including trading activities, driven mainly by the corporate credit rating downgrade. The downgrade led to the obligation to provide extra collateral to trading parties. Furthermore, guarantees were issued as a result of legal proceedings. At 31 December 2018, EUR 142.5 million in collateral was provided (excluding expected loss provision), EUR 34.1 million of which (excluding expected loss provision) with a term to maturity of more than 1 year.

Other financial assets also comprise the investments made through Stichting Beheer Ontmantelingsgelden Kerncentrale Borssele to provide security as required by the Nuclear Energy Act, which stipulates that sufficient funds must be available to dismantle the nuclear power plant after its expected closure date. Keeping the money in a separate foundation covers the risk of the available funds becoming part of the permit holder's assets in the event of the company going into liquidation.

## 5. DERIVATIVES AND RISK MANAGEMENT

PZEM is involved in energy commodity and currency trading contracts for the current calendar year and the next three years. The company considers the markets for these products to be sufficiently liquid over this time horizon. Prices are available from brokers, markets, and data providers. The fair value of commodity contracts is calculated on the basis of those published prices; no in-house valuation models are used. The monthly, quarterly and annual prices published are adjusted only to reconcile them with the relative periods in the trade systems.

PZEM uses derivatives, such as interest rate swaps, to hedge its interest rate risk exposure. These swaps allow a floating rate to be exchanged for a fixed rate.

This section covers the following topics:

### 5.1 Derivatives

- 5.1.1 Correlation between derivatives in the financial statements
- 5.1.2 Derivatives position
- 5.1.3 Movements in the hedge reserve
- 5.1.4 Hierarchy of financial instruments

### 5.2 Risk management

- 5.2.1 Risk control
- 5.2.2 Market risk
- 5.2.3 Liquidity risk
- 5.2.4 Credit risk

## 5.1 DERIVATIVES

### 5.1.1 CORRELATION BETWEEN DERIVATIVES IN THE FINANCIAL STATEMENTS 2018

(EUR 1,000)	BALANCE OF DERIVATIVES				MOVEMENTS IN DERIVATIVES	
	Assets 2018	Assets 2017	Liabilities 2018	Liabilities 2017	Movements in assets 2018	Movements in liabilities 2018
DERIVATIVES ON THE BALANCE SHEET						
Non-current assets	22,432	12,557			9,875	
Current assets	40,070	22,639			17,431	
	62,502	35,196			27,306	
Non-current liabilities			91,420	59,054		32,366
Current liabilities			86,934	35,616		51,318
			178,354	94,670		83,684
OTHER BALANCE-SHEET ITEMS RELATING TO DERIVATIVES						
Hedge reserve (see 5.1.3)			(109,955)	(57,211)		(52,744)
Deferred tax (see 5.1.3)	5,406	7,211	-	-	(1,805)	-
Subtotal	5,406	7,211	(109,955)	(57,211)	(1,805)	(52,744)
Cumulative ineffectiveness (Sloe derivatives)			310	430		(120)
Cumulative ineffectiveness (Market-to-Market)			(801)	4,518		(5,319)
	5,406	7,211	(110,446)	(52,263)	(1,805)	(58,183)
TOTAL	67,908	42,407	67,908	42,407	25,501	25,501

Of the value changes, a loss of EUR 50.9 million (2017: loss of 16.0 million) is recognised in the hedge reserve.

## 5.1.2A OFFSETTING FINANCIAL ASSETS

(EUR 1,000)

## ASSETS

	Non-current assets			Current assets		
	Gross amount	Offsetting	Net amount	Gross amount	Offsetting	Net amount
<b>2018</b>						
<b>COMMODITY CONTRACTS</b>						
Gas	47,672	32,431	15,241	133,574	107,368	26,206
Electricity	88,696	88,459	237	221,027	218,244	2,783
Other	18,857	12,501	6,356	15,794	6,715	9,079
<b>OTHER DERIVATIVES</b>						
Foreign exchange contracts	598	-	598	2,002	-	2,002
<b>TOTAL</b>	<b>155,823</b>	<b>133,391</b>	<b>22,432</b>	<b>372,398</b>	<b>332,327</b>	<b>40,070</b>

## 5.1.2B OFFSETTING FINANCIAL ASSETS/LIABILITIES

(EUR 1,000)

## LIABILITIES

	Non-current liabilities			Current liabilities		
	Gross amount	Offsetting	Net amount	Gross amount	Offsetting	Net amount
<b>2018</b>						
<b>COMMODITY CONTRACTS</b>						
Gas	(36,597)	(32,431)	(4,166)	(116,282)	(107,368)	(8,913)
Electricity	(157,309)	(88,459)	(68,850)	(288,235)	(218,244)	(69,991)
Other	(12,501)	(12,501)	-	(6,715)	(6,715)	-
<b>OTHER DERIVATIVES</b>						
Foreign exchange contracts	(229)	-	(229)	(2,058)	-	(2,058)
<b>TOTAL</b>	<b>(206,635)</b>	<b>(133,391)</b>	<b>(73,245)</b>	<b>(413,289)</b>	<b>(332,328)</b>	<b>(80,962)</b>

## 5.1.3 MOVEMENTS IN THE HEDGE RESERVE

Fair value changes in derivatives after tax are shown within the hedge reserve, which is a non-distributable reserve. Movements in the hedge reserve in the past two years are presented below.

### MOVEMENTS IN THE HEDGE RESERVE

(EUR 1,000)

## COMMODITY CONTRACTS

## SWAPS

	Gas	Electricity	CO <sub>2</sub>	Foreign Exchange	Total	Interest rate swaps	Total
<b>2017</b>							
<b>Hedge reserve at 1-1-2017 (gross)</b>	<b>9,214</b>	<b>(21,673)</b>	<b>331</b>	<b>(288)</b>	<b>(12,416)</b>	<b>(36,047)</b>	<b>(48,463)</b>
<b>Movements in 2017</b>							
Recognised directly in equity	11,117	(50,953)	5,132	-	(34,704)	304	(34,400)
Released to income	(3,121)	14,514	(141)	288	11,540	6,902	18,442
<b>TOTAL MOVEMENTS IN 2017</b>	<b>7,996</b>	<b>(36,440)</b>	<b>4,991</b>	<b>288</b>	<b>(23,164)</b>	<b>7,206</b>	<b>(15,958)</b>
<b>Hedge reserve at 31-12-2017 (gross)</b>	<b>17,210</b>	<b>(58,113)</b>	<b>5,322</b>	<b>-</b>	<b>(35,580)</b>	<b>(28,841)</b>	<b>(64,421)</b>
Deferred tax	-	-	-	-	-	7,210	7,210
<b>HEDGE RESERVE AT 31-12-2017</b>	<b>17,210</b>	<b>(58,113)</b>	<b>5,322</b>	<b>-</b>	<b>(35,580)</b>	<b>(21,631)</b>	<b>(57,211)</b>
<b>2018</b>							
<b>Hedge reserve at 1-1-2018 (gross)</b>	<b>17,210</b>	<b>(58,112)</b>	<b>5,322</b>	<b>-</b>	<b>(35,580)</b>	<b>(28,841)</b>	<b>(64,421)</b>
<b>Movements in 2018</b>							
Recognised directly in equity	23,405	(98,476)	11,005	-	(64,066)	(2,150)	(66,216)
Released to income	(9,098)	19,742	(1,901)	-	8,743	6,533	15,276
<b>TOTAL MOVEMENTS IN 2018</b>	<b>14,307</b>	<b>(78,734)</b>	<b>9,104</b>	<b>-</b>	<b>(55,323)</b>	<b>4,383</b>	<b>(50,940)</b>
<b>Hedge reserve at 31-12-2018 (gross)</b>	<b>31,517</b>	<b>(136,846)</b>	<b>14,426</b>	<b>-</b>	<b>(90,903)</b>	<b>(24,458)</b>	<b>(115,361)</b>
Deferred tax	-	-	-	-	-	5,406	5,406
<b>HEDGE RESERVE AT 31-12-2018</b>	<b>31,517</b>	<b>(136,846)</b>	<b>14,426</b>	<b>-</b>	<b>(90,903)</b>	<b>(19,052)</b>	<b>(109,955)</b>

The composition of the hedge reserve in relation to commodities, on a gross basis, at year-end 2018 is attributable to the years ahead as follows:

### STAND HEDGE-RESERVE COMMODITIES BRUTO

(EUR 1,000)

## COMMODITIES

	Gas	Electricity	CO <sub>2</sub>	Total
<b>2019</b>	18,762	(67,914)	8,528	(40,625)
<b>2020</b>	11,105	(55,058)	5,139	(38,814)
<b>2021</b>	1,650	(13,874)	759	(11,465)
<b>TOTAL</b>	<b>31,517</b>	<b>(136,846)</b>	<b>14,426</b>	<b>(90,903)</b>

The release from the commodities hedge reserve to profit or loss is shown within gross operating margin.

The timing of expected cash flows does not always coincide with their recognition in the income statement. This is because some hedges have a 'timing effect.' This is the case, for example, with the majority of gas hedges, in which the gas price for the first quarter of a year can be determined on the basis of the average oil price over the six months preceding that quarter. The value of the swaps used in such a hedging relationship, settlement of which takes place in the six months preceding the quarter in which delivery is made, is recognised in the hedge reserve up to the beginning of the delivery quarter, with the gain or loss being recognised in profit or loss in the first quarter of delivery. The maximum time lag on contracts in a hedging relationship is 9 months.

During the year, no hedging relationships were discontinued on the basis that an expected transaction did not go ahead.

## 5.1.4 HIERARCHY OF FINANCIAL INSTRUMENTS

Financial instruments are all recurring valuations, measured at fair value, and classified according to the following hierarchy as required by IFRS 13 Fair Value Measurement:

Level 1: Level 1 inputs are (unadjusted) prices quoted on active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 2 inputs include:

- a) Quoted prices for similar assets or liabilities in active markets;
- b) Quoted prices for identical or similar assets or liabilities in markets that are not active;
- c) Inputs other than quoted prices that are observable for the asset or liability in question, for example:
  - i) interest rates and yield curves that are published on a regular basis;
  - ii) implied volatilities; and
  - iii) credit spreads (differences in interest rates);
- d) Market-corroborated inputs.

Level 3: Level 3 inputs are unobservable inputs for the asset or liability.

## ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

(EUR 1,000)

### FAIR VALUE HIERARCHY

	Total as at 31 December			Level 1:		Level 2:		Level 3:	
	2018	2017	2018	2017	2018	2017	2018	2017	
<b>Assets</b>									
Derivatives	62,502	35,196	-	-	62,502	35,196	-	-	
Part of other investments and other financial assets	268,109	155,442	251,826	140,945	-	-	16,282	14,497	
<b>TOTAL ASSETS</b>	<b>330,611</b>	<b>190,638</b>	<b>251,826</b>	<b>140,945</b>	<b>62,502</b>	<b>35,196</b>	<b>16,282</b>	<b>14,497</b>	
<b>Liabilities</b>									
Derivatives	178,354	94,670	-	-	178,354	94,670	-	-	
<b>TOTAL LIABILITIES</b>	<b>178,354</b>	<b>94,670</b>	-	-	<b>178,354</b>	<b>94,670</b>	-	-	

Movements in 'Part of other investments and other non-current financial assets' in 2018 were EUR 112.7 million, EUR 112.8 million of which related to investments/new receivables and EUR 0.1 million concerned a loss.

Other investments include the share interests in SET Fund C.V. and SET Fund II C.V. (see also note 3.3).

Other non-current financial assets include the investments made through Stichting Beheer Ontmantelingsgelden Kerncentrale Borssele - the foundation that manages the funds earmarked for the dismantling of the nuclear power

station - (see also note 4.3), and investments by PZEM in the same fund in which EPZ invests via the foundation.

The fair values are based on:

- measurements in accordance with the International Private Equity and Venture Capital (IPEV) Guidelines issued by IPEV and approved by Invest Europe (formerly the European Private Equity and Venture Capital Association (EVCA));
- specially established asset funds with their own market value per unit.

## 5.2 RISK MANAGEMENT

### 5.2.1 RISK CONTROL

PZEM is involved in international gas and electricity trading. Prices on these markets fluctuate strongly. We use financial instruments to manage and mitigate commodity, currency, interest rate, liquidity, and credit risks, subject to the conditions laid down in the Financial Risk Manual and Treasury Charter.

Under the auspices of the Management Board, the Risk Management Committee has put in place general procedures and limits and is responsible for ensuring that PZEM's energy trading and sales activities remain within the defined risk margins.

The following paragraphs describe the different types of risk and the way in which PZEM manages the related exposures.

### 5.2.2 MARKET RISK

#### 5.2.2.1 COMMODITY PRICE RISK

Market risks arise from price movements in the markets where PZEM buys and sells (commodities, currencies, transmission capacity, imports/exports capacity, etc.). It is company policy to mitigate the impact of price movements in the short term and to track prevailing market prices in the long term. For systematic risk control purposes, asset allocations and positions are determined on the basis of expected price developments. These positions are monitored on a daily basis. Trading risks are mitigated by strictly enforcing a system of limits, the most important of which is calculated using the Value-at-Risk method.

Potential adverse trends in commodity prices, notably falling electricity prices, pose a risk to PZEM's continuity in the coming years. A price fall may have an immediate dampening impact on the profits of our production units. Sales contracts where there is no correlation between electricity market prices and fuel prices would be hit hardest, such as nuclear power and power from poultry litter (share in profit or loss of associates). Revenues would fall whereas costs would remain virtually stable. Each euro off the selling price would immediately be reflected in profit or loss, unless the output is hedged.

#### 5.2.2.2 VALUE-AT-RISK

Determining Value-at-Risk (VaR) involves using various assumptions regarding possible changes in market conditions. VaR identifies the maximum portfolio losses likely to be incurred as a result of price changes over a three-day period with a confidence level of 95% (i.e. in 5% of cases the portfolio losses may exceed the VaR limit). VaR is calculated using Monte Carlo simulations based on historical volatilities and correlations. Because portfolios include opposing positions and there is an underlying correlation, the VaR of

the total portfolio is smaller than the sum total of individual portfolio VaRs.

VaR is an important tool for PZEM to manage its Trade portfolio and it is therefore calculated and reported on a daily basis. Although the VaRs for the assets and total portfolio are reported on a daily basis, they are not used as a primary management parameter. The assets are hedged on the basis of a predetermined lock-in schedule to receive the average market value. Variations from the schedule fall within the Trade Books, for which VaR is the key measure of risk. At 31 December 2018, the Trade portfolio's VaR was EUR 0.3 million (2017: EUR 0.1 million), well within the approved limit.

#### 5.2.2.3 CASH FLOW HEDGES

PZEM uses financial instruments to minimise fluctuations in expected cash flows. The company uses derivatives, including forward contracts and swaps, to control the effects of future changes in market prices. These hedging instruments are derivatives of commodities traded by PZEM and they are entered into to mitigate cash flow, price, and currency risks. Hedge accounting is applied to cushion the total change in value of these derivatives.

To the extent permitted, PZEM accounts for these financial instruments and the physical purchase and sale contracts in a cash flow hedge relationship in accordance with IFRS 9. The hedged item is the future purchase transaction (power stations, long-term sourcing) or sales transaction for gas or electricity.

## CASH FLOW HEDGES FOR ELECTRICITY AND FUELS

(EUR 1,000)

### CASHFLOW HEDGES

	2019	2020	2021	2022 and beyond	Total	Average price	Contract value
<b>2018</b>							
Gas forwards	14,671	9,774	1,071	-	25,515	0.175	(203,785)
Electricity forwards	(59,776)	(50,529)	(16,355)	-	(126,660)	38.836	187,212
CO <sub>2</sub> forwards	-	4,225	694	-	4,919	15.622	(7,545)
<b>TOTAL</b>	<b>(45,105)</b>	<b>(36,530)</b>	<b>(14,590)</b>	<b>-</b>	<b>(96,226)</b>		

	2018	2019	2020	2021 and beyond	Total	Average price	Contract value
<b>2017</b>							
Gas forwards	8,456	4,215	1,673	-	14,344	0.166	(270,925)
Electricity forwards	(17,056)	(19,711)	(18,237)	-	(55,004)	33.330	232,730
CO <sub>2</sub> forwards	1,923	1,831	1,753	-	5,507	5.601	(11,650)
<b>TOTAL</b>	<b>(6,677)</b>	<b>(13,665)</b>	<b>(14,811)</b>	<b>-</b>	<b>(35,153)</b>		

The hedge reserve comprises value changes in derivatives in the period in which they are included in an effective hedging relationship. Derivatives shown in the analysis of cash flow hedges comprise derivatives that were part of a hedging relationship as at the balance-sheet date.

A mismatch occurs because:

- the analysis of cash flow hedges also includes the ineffective portion of the hedging instrument;
- the gains and losses on the hedging instruments entered into to form a hedging relationship are also included in the analysis of cash flow hedges;
- the hedge reserve also includes the gains and losses on hedging instruments that were part of a hedging relationship in the past but were no longer included in a hedging relationship at the end of the financial year.

The amounts recognised in the hedge reserve take account of the date on which an instrument was designated as part of a hedging relationship, which may be different from the date of the related trade.

In addition, the hedge reserve comprises only the effective portion of the total fair value of hedging instruments recognised in the hedge reserve.

### 5.2.2.4 CURRENCY RISK

Currency risk is the risk that the value of assets changes due to movements in foreign exchange rates. PZEM's risk policy is to hedge currency risks associated with positions denominated in a foreign currency. To hedge this risk, the company uses financial instruments (forward contracts) to minimise fluctuations in expected cash flows.

Currency positions arising from commodity and other contracts are reported directly to the Treasury department and hedged. Currency risk limits are set periodically in consultation with the Risk Management Committee and are monitored by the Treasury department.

The following exchange rates against the euro were used to convert currency positions as shown in the balance sheet:

### RATES

Middle rates	31-12-2018	31-12-2017
US dollar	1.1439	1.1977
Pound sterling	0.8972	0.8873



### 5.2.2.5 INTEREST RATE RISK

PZEM's interest rate risk policy is to mitigate the effects of interest rate fluctuations. To hedge this risk, the company uses derivatives, including interest rate swaps.

#### Hedged loans

The Group holds a number of interest rate swaps, all of which were effective at the balance-sheet date. Sensitivity is measured by increasing or reducing the floating spot by 10%.

Several of these interest-rate derivatives can be classified as option contracts, which qualify for the exemption referred to in IFRS 9, paragraph 6.2.4. Changes in fair value are accounted for in the hedge reserve, with changes in the time value being recognised through profit or loss. The table shows the effects of a 10% increase and 10% decrease compared with the carrying amounts as at 31 December 2018. No Value-at-Risk (VaR) is calculated for interest-rate derivatives.

## INTEREST RATE RISK SENSITIVITY ANALYSIS

(EUR 1,000)

(EUR 1,000)		10% INCREASE						10% DECREASE		
	At 31 December		Value based on yield curve		Increase in value relative to carrying amount		Value based on yield curve		Decrease in value relative to carrying amount	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
<b>Derivatives</b>										
Derivatives	(24,458)	(28,841)	(23,991)	(28,071)	467	770	(24,305)	(29,189)	153	(348)
Deferred tax	5,371	7,210	5,298	7,018	(73)	(192)	5,359	7,297	(12)	87
<b>TOTAL</b>	<b>(19,087)</b>	<b>(21,631)</b>	<b>(18,693)</b>	<b>(21,053)</b>	<b>394</b>	<b>578</b>	<b>(18,946)</b>	<b>(21,892)</b>	<b>141</b>	<b>(261)</b>
<b>Interest rate swaps</b>										
Hedge reserve	19,087	21,631	18,301	21,477	(786)	(154)	18,946	21,892	(141)	261
<b>TOTAL</b>	<b>19,087</b>	<b>21,631</b>	<b>18,301</b>	<b>21,477</b>	<b>(786)</b>	<b>(154)</b>	<b>18,946</b>	<b>21,892</b>	<b>(141)</b>	<b>261</b>
<b>Gains/ (losses) on swaps</b>	-	-	-	-	-	-	-	-	-	-

At 31 December 2018, interest-rate derivatives represented a loss. An upward movement in the yield curve will reduce this loss.

The hedge reserve relating to interest-rate swaps as at 31 December 2018 constituted a debit item in equity. An upward movement in the yield curve will reduce the amount of this debit item.

#### Unhedged loans

The vast majority of loans at 31 December 2018 carried a fixed rate of interest or were hedged. Because the hedges were entered into quite a while ago, actual interest rates are well above current market interest rates.

### 5.2.3 LIQUIDITY RISK

Liquidity risk is the risk that PZEM has insufficient funds available to meet its short-term liabilities. In light of the revenues generated by the recent sale of some of our business divisions, there is currently no such risk. However, liquidity risk may become an issue in the longer term if, contrary to expectations, market prices fail to improve.

PZEM's capital management policy focuses on centralising its cash management and borrowing and repayment operations at the level of the holding company PZEM N.V. as effectively as possible. On the basis of its business plan, the company prepares an annual financing plan to give direction to the activities undertaken by the Treasury department. The financing plan also sets out how surplus cash is to be invested (in accordance with the appropriate policy), taking into account the buffers needed for our operating activities. Cash flows are monitored on an ongoing basis.

A number of PZEM Group companies have their own credit facilities, more specifically:

1. Sloe Centrale B.V. has been financed through project funding. At 31 December 2018, an amount of EUR 148.9 million was outstanding (based on a 50% share interest);
2. N.V. EPZ has no credit lines because it has sufficient cash. If it requires any external funding, this will be arranged on a non-recourse basis.

In 2017 Standard & Poor's downgraded PZEM's credit rating to BB following the sale of its retail and grid operations. The corporate credit rating downgrade led to the obligation to provide additional collateral to commodity and other trading partners, putting additional pressure on our cash position. At the balance-sheet date, EUR 50 million in collateral had been provided. Our current rating has a stable outlook.

To clarify PZEM's liquidity risk exposure, the following table presents the contractual maturities of the company's financial obligations:

## CONTRACTUAL MATURITIES OF FINANCIAL OBLIGATIONS AS AT 31 DECEMBER 2018

(EUR 1,000)	< 1 year	1-5 years	> 5 years	Total
Trade payables	52,820	-	-	52,820
Interest-bearing loans	13,125	59,091	75,336	147,552
Derivatives	86,934	91,420	-	178,354
Provisions	44,167	99,936	360,022	504,125
Other	35,647	-	28,011	63,658
<b>TOTAL</b>	<b>232,693</b>	<b>250,447</b>	<b>463,369</b>	<b>946,509</b>
Related interest payable	478	1,437	496	2,411

## CONTRACTUAL MATURITIES OF FINANCIAL OBLIGATIONS AS AT 31 DECEMBER 2017

(EUR 1,000)	< 1 year	1-5 years	> 5 years	Total
Trade payables	52,366	-	-	52,366
Interest-bearing loans	12,171	55,643	91,628	159,442
Derivatives	35,616	59,054	-	94,670
Provisions	63,433	112,231	364,208	539,872
Other	43,968	-	26,723	70,691
<b>TOTAL</b>	<b>207,554</b>	<b>226,928</b>	<b>482,559</b>	<b>917,041</b>
Related interest payable	515	1,614	519	2,648

The contractual maturities of financial liabilities reflect the expected outgoing cash flows related to outstanding financial commitments as at the balance-sheet date.

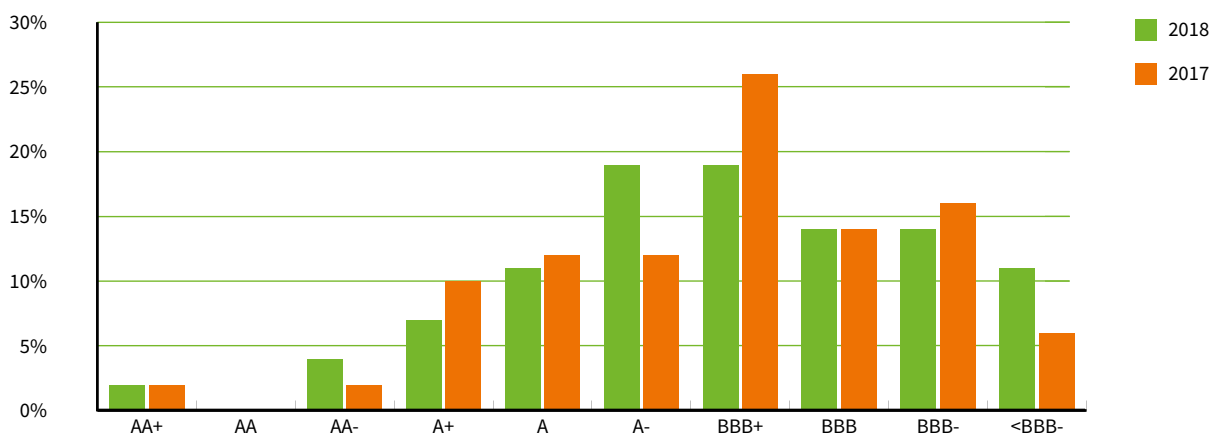
Provisions are shown within contractual obligations because they are largely based on underlying contracts. Because of the nature and extent of the obligations, provisions are presented in the table above.

## 5.2.4 CREDIT RISK

Credit risk is the risk that a counterparty defaults on its contractual obligations. In order to mitigate its credit risk exposure, PZEM has set credit limits for external counterparties. The company's internal rating system sets a credit limit for each external counterparty. The system uses publicly available information about the companies or guarantors concerned (financial statements, credit ratings, etc.). If the external counterparty's or guarantor's credit rating is not, or no longer, investment grade, no additional credit risk will be accepted. Several external non-investment grade counterparties were deleted from this summary in 2018 as the last few outstanding positions were settled.

The number of counterparties declined as no new transactions were entered into with external non-investment grade counterparties and some counterparties discontinued energy trading. At the same time, carbon trading involves a growing number of external parties. We have been trading with these parties on a limited scale (in terms of value as well as number) and they are often non-investment grade companies. The chart below shows the percentage distribution of PZEM's external counterparties by credit rating class at 31 December 2018:

### CREDIT RATINGS COUNTERPARTIES



In addition to credit limits based on credit ratings, PZEM uses various other instruments to mitigate credit risk, including standard contracts and standard terms of business, market trading, end-user diversification, and additional collateral.

The creditworthiness of energy end-users who buy energy from PZEM is determined on the basis of information from external data providers. As regards existing customers, their payment record is also taken into consideration when deciding whether or not to enter into a supply contract.

We have hedged our credit risk exposure to some corporate end-users through credit insurance. Additional collateral in the form of a bank guarantee, security deposit or advance payment is requested where necessary.

## 6. INVENTORIES

(EUR 1,000)	31-12-2018	31-12-2017
Raw materials	73,361	73,936
Consumables	3,171	3,038
Finished products	3,483	3,368
Goods for resale	4,985	2,531
<b>Total</b>	<b>85,000</b>	<b>82,873</b>
Less: Provision for obsolescence	(1,189)	(1,203)
<b>TOTAL INVENTORIES</b>	<b>83,811</b>	<b>81,670</b>

At 31 December 2018, raw materials included EUR 26.4 million worth of prepaid nuclear fuel elements. EUR 12.8 million in collateral was received in exchange.

## 7. RECEIVABLES

(EUR 1,000)	31-12-2018	31-12-2017
<b>Trade receivables</b>	<b>59,128</b>	<b>55,135</b>
<b>Current tax assets</b>	<b>16,294</b>	<b>26,353</b>
Deposits held with banks and bonds	341,859	493,832
Security interest provided	108,254	26,571
Cash not available on demand	134,543	57,498
CO2 rights & GoO's	21,380	1,398
Other receivables, prepayments and accrued income	14,044	15,846
<b>Total other receivables</b>	<b>620,080</b>	<b>595,145</b>
<b>TOTAL RECEIVABLES (EXCLUDING DERIVATES)</b>	<b>695,502</b>	<b>676,633</b>

Total receivables at 31 December 2018 were in line with 2017.

Because of the sale of its grid and retail operations in 2017, PZEM received a significant amount in cash. These funds are used first and foremost for our operating activities. What remains is invested in accordance with the Treasury Charter. At 31 December 2018, these investments mainly comprised term deposits held with banks and bonds representing a value of EUR 596.4 million (excluding expected loss provision). Of this total sum, EUR 342.3 million (excluding expected loss provision) had a term to maturity of less than 1 year.

Collateral provided comprise security deposits and bank guarantees. Some of the collateral was provided to counterparties for operating activities including trading activities, driven mainly by the corporate credit rating downgrade in 2017. The downgrade led to the obligation to provide extra collateral to trading parties. Furthermore, guarantees were issued as a result of legal proceedings. At 31 December 2018, EUR 142.5 million in collateral was provided (excluding expected loss provision), EUR 108.3 million of which (excluding expected loss provision) with a term to maturity of less than 1 year.

Cash not available on demand comprises deposits relating to market trading activities. A provision for possible bad debts totalling EUR 0.6 million (2017: EUR 8.6 million) was recognised for trade receivables.

As a result of IFRS 9, an adjustment was made to the opening balance for cash investments, collateral provided, cash not available on demand, and trade receivables. For more details, please refer to the accounting policies.

Application of the expected loss approach under IFRS 9 instead of the incurred loss approach led to a total extra addition of EUR 1.0 million (EUR 0.5 million long-term and EUR 0.5 million short-term). This amount is shown within the opening balance at 1 January 2018. This change under IFRS had a positive impact on the 2018 income statement of EUR 0.3 million (EUR 0.1 million long-term and EUR 0.2 million short-term).

## MOVEMENTS IN DEPOSITS, SECURITIES AND CASH NOT AVAILABLE ON DEMAND

(EUR 1,000)

2018

2017

<b>Balance as at 1 January</b>	<b>577,901</b>	<b>51,123</b>
Adjustment opening balance as at 1 January	(726)	-
<b>Adjusted balance as at 1 January</b>	<b>577,175</b>	<b>51,123</b>
Movement deposits and securities	7,544	526,778
Movement expected credit loss IFRS 9	(63)	
<b>Balance as at 31 December</b>	<b>584,656</b>	<b>577,901</b>
<b>Devided in:</b>		
Deposits held with banks and bonds	341,859	493,832
Security interest provided	108,254	26,571
Cash not available on demand	134,543	57,498
	<b>584,656</b>	<b>577,901</b>

## MOVEMENTS IN BAD DEBT PROVISION

(EUR 1,000)

2018

2017

<b>Balance as at 1 January</b>	<b>8,551</b>	<b>8,628</b>
Adjustment opening balance as at 1 January	164	-
<b>Adjusted balance as at 1 January</b>	<b>8,387</b>	<b>8,628</b>
Bad debts written off	(7,379)	(596)
Added/released	(402)	519
<b>Balance as at 31 December</b>	<b>606</b>	<b>8,551</b>

The expected loss percentages used for each age bracket are shown in the table below. These percentages are low because credit insurance has been taken out for some of the receivables. We do not apply any percentages in excess of 75% because PZEM can also claim a refund of some of the energy tax and VAT if a debtor fails to pay. If a debtor defaults or is involved in debt collection proceedings, a provision is recognised for 75% of all outstanding amounts (regardless of how long payment has been overdue).

(EUR 1,000) Age (in days)	EXPECTED CREDIT LOSS	31-12-2018	31-12-2017
Not yet due	0.1%	38	33
< 30	0.1%	17	17
31-60	1%	16	15
61-90	15%	87	60
91-120	50%	40	256
> 120	75%	184	371
determined individually	75%	224	7,635
<b>TOTAL</b>		<b>606</b>	<b>8,387</b>
Bad debt provision as at 31 December 2017			8,551
<b>ADJUSTED OPENING BALANCE</b>			<b>(164)</b>

## AGED ANALYSIS OF TRADE RECEIVABLES

(EUR 1,000) Age (in days)	31-12-2018	31-12-2017
< 30	53,746	55,582
31-60	4,773	337
61-90	510	1,071
91-120	79	21
> 120	626	6,675
<b>TOTAL</b>	<b>59,734</b>	<b>63,686</b>
Bad debt provision	(606)	(8,551)
<b>TOTAL TRADE RECEIVABLES</b>	<b>59,128</b>	<b>55,135</b>

The <30 days bracket includes an amount of EUR 20.2 million (2017: EUR 22.4 million) in receivables connected with trading operations. Settlement of these accounts always takes place within one month.

## 8. CASH AND CASH EQUIVALENTS

(EUR 1,000)	31-12-2018	31-12-2017
Deposits	-	24,500
Cash / Bank	54,891	125,549
<b>TOTAL CASH</b>	<b>54,891</b>	<b>150,049</b>

Cash includes not only cash but also cash equivalents that can be converted into cash with no material risk of impairment.

The amounts placed on deposit become available within three months.

## 9. PROVISIONS

(EUR 1,000)	Total	Unprofitable contracts	Employee benefits	Dismantling costs	Other provisions
<b>CARRYING AMOUNT AS AT 1 JANUARY 2017</b>	<b>490,701</b>	<b>108,038</b>	<b>15,566</b>	<b>289,248</b>	<b>77,849</b>
Reversal of current portion of provision	86,603	29,604	6,740	5,986	44,273
Added	22,700	7,840	726	(3,988)	18,122
Interest added	11,927	2,517	11	9,399	-
Released	(1,664)	-	(1,664)	-	-
Utilised	(70,125)	(35,191)	(7,735)	(2,652)	(24,547)
Other movements	(270)	-	(23)	-	(247)
<b>Carrying amount as at 31 December 2017</b>	<b>539,872</b>	<b>112,808</b>	<b>13,621</b>	<b>297,993</b>	<b>115,450</b>
Current portion of provisions	(63,433)	(25,509)	(6,375)	(7,180)	(24,369)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>476,439</b>	<b>87,299</b>	<b>7,246</b>	<b>290,812</b>	<b>91,081</b>
Reversal of current portion of provision	63,433	25,509	6,375	7,180	24,369
Added	18,984	5,699	791	1,141	11,353
Interest added	11,743	1,990	10	9,743	-
Released	(34,161)	(29,184)	(3,706)	(1,271)	-
Utilised	(32,312)	-	(1,944)	(5,744)	(24,624)
Other movements	-	-	-	-	-
<b>Carrying amount as at 31 December 2018</b>	<b>504,125</b>	<b>91,313</b>	<b>8,772</b>	<b>301,861</b>	<b>102,179</b>
Current portion of provisions	(44,168)	(11,476)	(5,250)	(10,443)	(16,999)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>459,957</b>	<b>79,837</b>	<b>3,522</b>	<b>291,418</b>	<b>85,180</b>

The release of provisions scheduled within one year involved an amount of EUR 44.2 million (2017: EUR 63.4 million) and is shown within current liabilities.



### Use of inflation expectations

Provisions are measured using an expected annual inflation rate of 2%. The ECB's policy is to achieve an annual inflation rate of 2% or just under 2%.

### Use of discount rates

The description of provisions specifies the discount rate used for each type of provision.

The discount rates used are based on IAS 37, which, under Measurement of Provisions, stipulates that a pre-tax discount rate should be used that reflects the current market assessments of the time value of money and the risks specific to the liability. The discount rate should not factor in risks which are already factored into the estimated future cash flows.

The discount rate is based on market interest rates (from different sources), plus a mark-up that depends on the nature, duration, amount, and profile of the provision and related cash flows.

Provisions with a term in excess of 10 years are discounted at a rate of 3.5% and provisions with a shorter maturity (less than 10 years) at a rate of 2.0%. The same discount rates were applied to the provisions in 2017.

Provisions in excess of EUR 5 million are clarified below.

### Unprofitable contracts

Due to negative spreads between electricity (sales) and gas (consumption), a tolling contract previously signed with a combined heat and power plant ceased to be profitable and a provision for unprofitable contracts was recognised. Withdrawals were made annually to offset the negative gross margin on the contract. Any profit or loss made by the production unit involved was added or charged to the provision annually because of the causal link between the investee's profit or loss and the costs paid by PZEM. The provision was reviewed each year in the light of developments on the electricity and fuel markets, relevant legislation, and contractual agreements. Movements in electricity and fuel prices were based on independent price curves (see below). The tolling contract expired in 2018.

Additionally, a provision was recognised in the past for the negative value of a number of long-term gas contracts. The cost of transmission and storage capacity is based on long-term contractual arrangements. The optimisation returns on transmission and storage contracts are based on historical returns, combined with previously contracted positions at the balance-sheet date and estimated future returns.

No provision is necessary for the tolling contract with the Sloe power plant in the light of trends in electricity and fuel prices based on independent price curves.

Nor does a provision have to be recognised for the tolling contract with the nuclear power plant. The review was conducted on the basis of the existing tolling contract, the operational and investment plan for the nuclear plant until 2033, the positions locked in at the balance-sheet date, and the current electricity price curve. Forward prices at the balance-sheet date are used for the next three years because

those prices are formed in liquid markets and PZEM is actively trading on those markets. Forward (market) prices for the next three years rose substantially during the year.

Anticipated movements in electricity, gas and carbon prices constitute the main uncertainty affecting the provision for unprofitable contracts. The future price curves used were obtained from an independent firm and involved Q4 2018 forecasts. The source used by PZEM to obtain independent price curves is a leading firm that publishes solid quarterly reports on various price curve trends that are frequently used by companies within the industry. Current models anticipate a market recovery (in the sense that profits can be made) in the medium-term, meaning that margins are expected to remain under pressure and cash outflows to continue in the coming years, driven by obligations arising from gas contracts and existing tolling obligations.

The independent firm always issues three scenarios, i.e. a Central (Mid), High, and Low scenario. PZEM initially used the Central price set to underpin its business plan and account for its loss-making contracts. In mid-2017, we switched to using a Central-Low scenario, which is the arithmetic average of the Central and Low price scenarios. The reason for this move was our finding that in falling energy markets a fifty-fifty combination of Central and Low proved to reflect the actual situation more effectively. Also, PZEM's business profile changed after the sale of the grid and retail operations in 2017. PZEM is dependent on electricity price levels, now even more so than before. Given this change in business profile, we believe it is appropriate to exercise greater caution in drawing up our business plan and measuring the provisions for loss-making contracts.

In late 2018, we saw that falling trends had changed to rising trends in the past two years and so the Central price set had proved to be the most effective on average for those years. However, we continued to apply a conservative estimate because of the company's changed business profile. With effect from the end of 2018, provisions are measured on the basis of a weighted average of 75% of the Central price curve and 25% of the Low price curve. However, the revised weighting of these two scenarios has had no impact on the outcome in terms of whether or not to recognise a provision.

Other gas-related operations comprise the sale of gas to end-users. The review showed that there was no need to recognise a provision for unprofitable contracts for any of these (combined) operations.

Volatility in the electricity and gas markets creates uncertainty for our financial position going forward, both in terms of our profits, cash flows, the level of the provision, and the need to recognise provisions for other production assets. Strong movements in prices may lead to significant changes having to be made to the provision for unprofitable contracts in the future.

We applied a discount rate of 3.5% to long-term provisions and 2.0% to provisions with a shorter remaining duration (less than 10 years). The same discount rates were applied to the provisions in 2017.

### Staff costs

These provisions are recognised so as to be able to meet existing and future financial obligations.

- Under the terms of the collective agreement, employees are paid long-service benefits. From the start date of employment, a provision is recognised for these benefits, based on past years of service, expected price and pay rises, probability of retention, and invalidity and mortality rates.
- On the basis of the “own-risk bearer” principle, a liability is recognised for unemployment benefits that are already in payment.
- The provision also covers the obligation to continue to pay the salaries of employees who, at the balance-sheet date, were expected to remain partly or fully unfit for work due to illness or disability.

The discount rate is 2.0% (2017: 2.0%).

In 2016, a reorganisation provision was recognised for the GAMMA2 programme to cover our liabilities to those of our employees who, as a result, would be leaving the PZEM Group within two years. These liabilities are measured taking into account the arrangements set out in the Social Plan and the employee's years of service within the industry, his or her age, various pay components, and estimates in terms of his or her ability to find other employment. In 2018, as in 2017, several of our employees covered by the provision at 31 December 2016 left the company, which led to a substantial withdrawal from the provision.

The provision also covers liabilities relating to staff redundancies in connection with the closure of EPZ's conventional power station on 31 December 2015. It covers the expected costs of terminating the employment contracts, support and coaching expenses, and direct reorganisation costs.

A discount rate of 2.0% (2017: 2.0%) was applied to both reorganisation provisions.

### Demolition of energy generation units

This provision covers the costs of future demolition of units once they stop operating. The expected ultimate demolition costs are based on the findings of periodic studies, allowing for price developments, recent insights, and estimated potential environmental impacts.

The provision for the demolition of the nuclear power plant is structured in such a way that demolition work on the power plant can start as soon as it stops operating in 2034, in accordance with the arrangements made with central government under the Borssele Nuclear Power Station Agreement. The provisions are discounted at a rate of 3.5% (2017: 3.5%), except for the coal-fired power plant, which will go out of operation within 10 years and is subject to a discount rate of 2.0%.

## OTHER PROVISIONS

Other provisions comprise:

### Provision for costs of processing and storing nuclear fuels

This provision covers existing obligations. It is calculated as the present value of the estimated future processing and storage costs, less the estimated present value of the residual products released in future and the net value of the amounts payable and receivable. The discount rate is 2.0% (2017: 2.0%).

### Pension liabilities

Virtually all PZEM employees are members of the ABP pension fund (Stichting Pensioenfonds ABP). The ABP plan is a multi-employer plan. The members bear nearly all of the actuarial and investment risks in the plan. Employers taking part in this plan have no obligation to make supplementary contributions in the event of a funding shortfall.

Our obligations are limited to paying contributions as determined by the fund. The ABP's board determines this contribution annually, based on its own data and subject to the parameters and requirements imposed by the Dutch Central Bank (De Nederlandsche Bank), which is the regulatory authority. The obligation to pay contributions ensues from PZEM's participation in the fund during the year and not from its participation in previous years. For reporting purposes, the ABP plan is classified as a defined contribution plan. The contributions are therefore recognised as an expense and no further explanatory notes are required.

At 31 December 2018, the ABP's funding ratio was 97.0%. Its average funding ratio in 2018 was 103.8%.

## 10. MOVEMENTS IN LONG-TERM DEBT

(EUR 1,000)	31-12-2018	31-12-2017
<b>Carrying amount as at 1 January</b>	<b>159,442</b>	<b>170,833</b>
Repayments	(12,171)	(11,693)
Release of capitalized costs	281	302
	<b>147,552</b>	<b>159,442</b>
Current portion	(13,125)	(12,171)
<b>LONG-TERM DEBT</b>	<b>134,427</b>	<b>147,271</b>

Long-term debt comprises amounts owed to credit institutions, EUR 75.3 million of which falling due after more than five years. In 2018, the average rate of interest paid was 0.3% (2017: 0.3%). Collateral was provided for the non-recourse funding obtained for the Sloe power plant in line with what is usual for this type of funding, including a pledge over shares, related contracts, and the power plant.

(EUR 1,000)	Interest bearing		Other financial		Total
<b>1 january 2018</b>		<b>159,442</b>		-	<b>159,442</b>
Financing cash flows		(12,171)		-	(12,171)
Changes arising from obtaining or losing control of subsidiaries or other businesses	-		-		-
Effect of changes in exchange rates	-		-		-
Changes in fair values	-		-		-
Non-cash changes		-		-	-
Other changes		281		-	281
<b>31 DECEMBER 2018</b>		<b>147,552</b>		-	<b>147,552</b>

## 11. NON-CURRENT LIABILITIES

### 11.1 OTHER NON-CURRENT LIABILITIES

(EUR 1,000)	31-12-2018	31-12-2017
Deferred tax liabilities	8,978	14,120
Other non-current liabilities	28,011	26,723
<b>TOTAL OTHER NON-CURRENT LIABILITIES</b>	<b>36,989</b>	<b>40,843</b>

#### Deferred tax liabilities

Deferred tax liabilities comprise valuation differences between the commercial balance sheet and tax balance sheet.

At 31 December 2018, deferred tax liabilities related to EPZ and the Sloe power plant.

EPZ's deferred tax debt decreased, causing a reduction in total deferred tax liabilities at 31 December 2018.

#### The deferred tax liabilities arise from:

(EUR 1,000)	31-12-2018	31-12-2017
Property, plant and equipment	14,569	16,905
Other	(5,591)	(2,785)
<b>TOTAL</b>	<b>8,978</b>	<b>14,120</b>

#### Other non-current liabilities

These comprise the accrual of costs for N.V. EPZ in connection with the final nuclear fuel load left in the reactor core when the nuclear power station comes to the end of its lifespan. The accrual shown is based on the known nuclear fuel costs for the final fuel load as at 31 December 2018, measured as the present value (at a discount rate of 3.5%) of the estimated future value of the remaining core, including reprocessing and storage costs.

**11.2 MOVEMENTS IN OTHER NON-CURRENT LIABILITIES**

(EUR 1,000)

**2018****2017****Balance as at 1 January****40,843****38,307**

Release of deferred tax liability

(5,142)

1,339

Other movements

1,288

1,197

**31 DECEMBER****36,989****40,843**

## 12. CURRENT LIABILITIES

(EUR 1,000)		31-12-2018		31-12-2017
Trade payables		52,820		52,366
Other current tax liabilities		9,870		25,439
Current portion of provision		44,168		63,433
Current portion of long-term debt	13,125		12,171	
Accruals and deferred income	25,777		18,529	
Other current liabilities		38,902		30,700
<b>TOTAL CURRENT LIABILITIES (EXCLUDING DERIVATIVES)</b>		<b>145,760</b>		<b>171,938</b>

Similar to trade receivables, trade payables were in line with 2017.

Other current tax liabilities mainly comprise VAT payable. Current tax liabilities also include wage tax and social security contributions payable and energy taxes payable. In addition to other current liabilities and accruals and deferred income, current liabilities include repayments on long-term loans and withdrawals from provisions scheduled for 2019. Unused days of paid leave are also shown within this item.

## OFF-BALANCE SHEET ASSETS AND LIABILITIES

A summary of off-balance sheet assets and liabilities is given below, to the extent that they have an estimated potential impact on profit or loss in excess of EUR 5 million.

### A. OPERATIONAL

#### Energy, energy production and commodity contracts

PZEM's risk management policy aims to actively control the risk exposures arising from its production assets and long-term procurement contracts. Positions arising from trading activities are controlled through a strictly enforced system of limits, using both financial and energy derivatives, including swaps and forwards.

Sales contracts included in the portfolio comprise energy supplies to end-users and trading partners and related financial instruments. At the balance-sheet date, sales contracts were worth EUR 410 million (2017: EUR 335 million, excluding the Sloe power plant's tolling liabilities).

Procurement contracts included in the portfolio comprise production and purchase contracts with trading partners and related contracts for financial instruments. At the balance-sheet date, procurement contracts were worth EUR 3,221 million (2017: EUR 3,292 million, excluding the Sloe power plant's tolling liabilities).

Financial instruments are measured on the basis of market values, having regard to transactions entered into for purposes of physical commodities trading. Major contracts involve existing tolling liabilities for power stations, related fuel purchases, and gas transmission and storage capacity in the Netherlands. Loss-making tolling liabilities already provided for in the balance sheet at 31 December are not included in the liabilities referred to in this section.

A number of trading contracts entail the obligation to provide additional collateral if the company's credit rating is downgraded to non-investment grade. The related exposure was EUR 49 million (2017: EUR 63 million).

## SPECIFICATION OF SALES AND PROCUREMENT CONTRACTS AT 31 DECEMBER 2018

(EURm)	Sales contracts	Procurement contracts
Tolling agreement (EPZ's nuclear power plant, BMC)	-	3,215
Electricity (customers)	332	-
Gas (customers and sourcing, respectively)	76	-
Derivatives	1	7
<b>TOTAL</b>	<b>410</b>	<b>3,221</b>

Tolling liabilities for the nuclear power plant comprise EPZ's own fuel obligations. EPZ has entered into long-term purchasing contracts to meet its fuel requirements. About half of its fuel requirement, in terms of both value and volume, is covered by contracts that run until the end of the unit's useful life.

The itemisation presented above does not include (net) liabilities arising from the gas storage and transmission contracts. These are recognised in the balance sheet within the provision for unprofitable contracts. Underlying gross nominal liabilities were EUR 150.0 million for the gas contracts (tolling charges, transmission and storage costs).

#### Investment commitments

At 31 December 2018, financial commitments relating to investments still to be carried out were in the order of EUR 7.0 million (2017: EUR 11.6 million).

## BORSSELE AGREEMENT

In 2006, an agreement was reached with central government to extend the service life of the nuclear power station until 2033. As part of the agreement, arrangements were also made in terms of the efforts which PZEM (and Essent) were to make to embrace and provide technical and financial support for new renewable energy developments. In addition to purchasing an interest in Sustainable Energy Technology (SET) Fund C.V., these commitments included investing in

additional innovative projects. In 2011, an interest was also acquired in Sustainable Energy Technology (SET) Fund II C.V.

At the balance-sheet date, the remaining commitment to SET Fund and SET Fund II was EUR 3.0 million (2017: EUR 4.5 million).

## STRANDED COSTS

On 1 January 2001, the Transitional Act for the Electricity Generation Industry (Overgangswet elektriciteitsproductiesector) came into force. Under Section 2 of the Act, Dutch power generation companies are jointly liable for the costs arising from, inter alia, contracts for gas and electricity imports entered into by NEA (formerly SEP). These stranded costs are allocated to the various companies according to a formula adopted by the Herkströter Commission. For EPZ, this comes down to a sizeable 28.5% share. In recent years, these stranded costs have largely been settled by commuting import contracts for the supply of electricity. Taking into account NEA's remaining shareholders' equity, the decision was made to continue current policy and not to recognise a provision for stranded costs.

## B. COLLATERAL AND GUARANTEES

PZEM has issued and received financial collateral as security for transactions it has entered into:

Collateral granted				Term in years
(EUR 1,000)	< 1 year	1 – 5 years	> 5 years	Total
Collateral granted for associates and joint ventures	-	-	-	-
Other collateral granted	1,075	-	32,376	33,451
<b>TOTAL COLLATERAL GRANTED</b>	<b>1,075</b>	<b>-</b>	<b>32,376</b>	<b>33,451</b>

Collateral received				Term in years
(EUR 1,000)	< 1 year	1 – 5 years	> 5 years	Total
Collateral received for associates and joint ventures	-	-	-	-
Other collateral received	15,184	14,424	127,073	156,681
<b>TOTAL COLLATERAL RECEIVED</b>	<b>15,184</b>	<b>14,424</b>	<b>127,073</b>	<b>156,681</b>



## MAIN COLLATERAL GRANTED

PZEM has issued EUR 24.6 million worth of guarantees to the Zuid-Holland provincial authorities for the costs of capping the Derde Merwedehaven landfill site in Dordrecht. This guarantee is expected to be taken over by KatoenNatie, which bought our share interest in Indaver. PZEM has received a counter guarantee from the buyer.

## MAIN COLLATERAL RECEIVED

Collateral received comprises EUR 140.3 million (2017: EUR 140.2 million) in bank and other guarantees received, mainly in connection with PZEM's trading activities.

EPZ received 16.3 million (70% share) in collateral, mainly in connection with advance fuel payments (2017: EUR 22.4 million/70% share).

## C. LAWSUITS AND CLAIMS

For a number of years now, PZEM has been involved in a lawsuit filed by a former solar power business partner. Following an interim decision by the Court of Appeal, the case was put before the Supreme Court, which referred the case back to the Hague Court of Appeal for a final decision. On 15 January 2019, the Court of Appeal found fully in favour of PZEM. At the time when the financial statements were released for publication, the period for filing an appeal with the Supreme Court had not yet expired. If no appeal is filed, the case can be finalised in 2019. If an appeal is filed, PZEM looks forward to the outcome of the case with confidence. Security has previously been provided to the claimant. This security interest is recognised in the balance sheet within short-term receivables.

In 2018 PZEM Energy B.V. became involved in legal proceedings over the exclusive electricity purchase contract which it had entered into with the owners of the Gemini wind farm. We are confident that the outcome of the case will be positive.

The trustee in the bankruptcies of the bio diesel entities that were PZEM group companies until 2010 was unable to complete the administration of those bankruptcies during the year. PZEM still has a substantial claim against the estate in connection with a loan previously granted to the bankrupt company.

## D. OTHER

Under the REMIT Regulation, PZEM has an obligation, amongst other things, to publish the planned and unplanned unavailability of its facilities and any changes in availability. We do so on our website.

In 2017, the Dutch Consumer and Markets Authority (ACM) launched an investigation into possible violations of the Regulation. At the balance-sheet date, the investigation was still ongoing. We have already developed possible improvements to the publication process so as to publish the planned and unplanned unavailability of our facilities even more effectively.



# **NOTES TO THE CONSOLIDATED INCOME STATEMENT**

## 13. REVENUE

(EUR 1,000)	2018	2017
Electricity supply	495,898	481,808
Gas supply	104,814	117,905
Electricity and gas transport	1,054	1,097
<b>TOTAL REVENUE</b>	<b>601,766</b>	<b>600,810</b>

Revenue from electricity and gas supply services and trading remained relatively stable. All revenue was generated in the Netherlands.

(EUR 1,000)	2018	2017
The Netherlands	601,766	600,810
Foreign	-	-
<b>TOTAL REVENUE</b>	<b>601,766</b>	<b>600,810</b>

## 14. COST OF SALES

PZEM buys part of its electricity requirement from ELSTA (until September 2018) and BMC Moerdijk, both of which are related parties (and recognised as joint arrangements for reporting purposes) in which PZEM owns a share interest. The electricity is procured largely on a cost-plus basis. Cost of sales is adjusted for movements in gains or losses on the provisions for unprofitable contracts.

## 15. OTHER OPERATING INCOME

Other operating income mainly comprises payments received from third parties for services rendered, sales proceeds generated by a few smaller business operations, and compensation payments for losses.

## 16. FAIR VALUE GAINS OR LOSSES ON THE TRADING PORTFOLIO

PZEM uses derivatives to hedge price and currency risks arising from energy commodity contracts (electricity, gas, carbon emission allowances) and exchange rates. More specifically, the company applies cash-flow hedging, which involves entering into hedges to mitigate its exposure to variability of existing and future cash flows that could ultimately affect profit or loss.

The hedges are allocated to a specific risk relating to a balance-sheet item or highly probable forecast transaction. The effective portion of fair value changes is recognised in equity and shown within the hedge reserve. The cumulative amounts recognised in equity are taken to the income statement in the same period as the hedged transaction. Movements in the value of the contract portfolio that are not hedged (non-effective hedges) is recognised as a fair value change in profit or loss.

In 2018, movements in energy prices led to a reduction in fair value of the contract portfolio by EUR 60.6 million, EUR 5.3 million of which was expensed and EUR 55.3 million recognised in equity.

## 17. THIRD-PARTY SERVICES, MATERIALS, AND OTHER EXTERNAL EXPENSES

(EUR 1,000)	2018	2017
Third-party work and services	38,334	39,558
Consumption of materials	5,238	5,689
Other external charges	7,372	11,499
<b>TOTAL</b>	<b>50,944</b>	<b>56,746</b>

Third-party work and services mainly comprise costs associated with electricity and gas infrastructure. They also comprise ICT costs. A large portion of external expenses relate to the operating activities of EPZ and the Sloe power plant. In 2018, costs of materials used by EPZ and the Sloe power plant amounted to EUR 4.7 million (2017: EUR 5.0 million), costs for third-party services came to EUR 23.0 million (2017: EUR 19.4 million), and other external expenses totalled EUR 6.1 million (2017: EUR 8.4 million).

## 18. STAFF COSTS

(EUR 1,000)	2018	2017
Salaries	33,968	33,051
Social securities contributions	3,804	3,446
Pension charges	4,619	4,600
Additions to staff provisions	(2,915)	(939)
Other staff costs	1,661	940
<b>Staff costs</b>	<b>41,137</b>	<b>41,098</b>
Capitalised staff costs	-	-
<b>TOTAL</b>	<b>41,137</b>	<b>41,098</b>
Number of employees (FTEs) as at 31 December	401	426
Average number of FTEs (related to the above total staff costs)	413	981
<b>FTE AVERAGE: SEGMENT</b>	<b>2018</b>	<b>2017</b>
Energy	124	360
Corporate	23	35
EPZ	266	274
Grids and Networks	-	312
<b>TOTAL</b>	<b>413</b>	<b>981</b>
<b>FTE AVERAGE: GEOGRAPHICAL</b>	<b>2018</b>	<b>2017</b>
The Netherlands	413	981
Foreign	-	-
<b>TOTAL</b>	<b>413</b>	<b>981</b>

The Group employed a total of 537 FTEs on permanent contracts (2017: 564), including all FTEs under joint arrangements (N.V. EPZ and Sloe Centrale B.V.). The average number of FTEs for 2017 included the FTEs employed by the grid and retail divisions.

PZEM is “own-risk bearer” in terms of its financial obligations under the Dutch Unemployment Benefit Act (Werkloosheidswet; WW). This means that it remits no

unemployment benefit contributions to the UWV social security payment agency, and that any unemployment benefits paid to former employees will be claimed back from PZEM.

IFRS does not allow a general provision to be recognised for these liabilities. Instead, PZEM determines for each entity whether current recourse obligations as at the balance-sheet date provide a reason for recognising a separate provision.

**Remuneration of PZEM N.V.'s Management Board members in accordance with registration with Chamber of Commerce**

The General Meeting of Shareholders adopted a new remuneration policy on 13 December 2017. With effect from 1 January 2018, board pay will generally be based on the rules set out in the Dutch Act on the Standardisation of Public and Semi-Public Sector Executive Pay (WNT). Board remuneration is capped at an average of 50% of the WNT maximum and 50% of the executive pay benchmark. The latter benchmark uses a Q3 level where 25% of peer positions at comparable companies are paid more and 75% are paid less. Existing contracts will not be affected.

No variable pay arrangements have been made with Management Board members. Management Board members are covered by the same pension plan as all other employees (ABP pension fund).

Of the current Management Board members, Mr Verhagen has a permanent employment contract and a term of office of four years. The employment contract was drafted accordingly and, in addition to a minimum 6-month notice period to be observed by the employer, provides for severance pay amounting to a maximum of one year's salary in line with the Dutch Corporate Governance Code.

In June 2016, Mr Uytendewilligen was appointed CEO of PZEM N.V. (formerly DELTA N.V.) under a temporary contract expiring on 30 June 2018. Mr Uytendewilligen stepped down as CEO on 1 July and was succeeded by Mr Verhagen, who will also remain in office as CFO. Mr Verhagen's remuneration was not affected by his appointment as CEO. On 26 June 2018, Mr Unger was appointed as PZEM N.V.'s new COO under a four-year fixed-term contract.

**REMUNERATION EXECUTIVE BOARD PZEM N.V.**

<b>2017</b>	<b>G. Uytendewilligen CEO</b>	<b>F. Verhagen CFO</b>	
(EUR)			
Remuneration	400,628	333,300	
Expense allowance	12,500	6,600	
Pension cost allowance	60,000	54,627	
ABP pension contributions	25,034	20,648	
Retention fee	-	166,650	
<b>TOTAL</b>	<b>498,162</b>	<b>581,825</b>	

<b>2018</b>	<b>G. Uytendewilligen CEO</b>	<b>F. Verhagen CEO/CFO</b>	<b>N. Unger COO</b>
(EUR)	In office till 01-07-2018		In office 26-06-2018
Remuneration	199,998	338,304	94,769
Expense allowance	6,244	8,741	4,514
Pension cost allowance	30,000	58,940	8,636
ABP pension contributions	13,225	24,472	10,495
<b>TOTAL</b>	<b>249,467</b>	<b>430,457</b>	<b>118,415</b>



PZEM operates an optional company car scheme for Management Board members. Mr Verhagen was provided with a company car for both years. Mr Unger was provided with a company car from the time of his appointment.

Mr Verhagen's company car expenses were EUR 16,745 (2017: EUR 18,260) and Mr Unger's company car expenses were EUR 7,712 from the time of his appointment.

## 19. DEPRECIATION, AMORTISATION AND IMPAIRMENT

(EUR 1,000)	2018	2017
<b>Intangible assets</b>		
Amortisation	1,131	2,345
<b>Property, plant and equipment</b>		
Depreciation	43,966	54,723
Impairment	-	200,437
Third-party contributions released	(194)	(660)
<b>TOTAL</b>	<b>44,903</b>	<b>256,845</b>

Impairments in 2017 only comprised a fair value impairment of tolling rights for EPZ's nuclear power plant. Additionally in 2017, the fair value of those rights was subject to a normal amortisation charge of EUR 12.5 million.

## 20. OTHER OPERATING EXPENSES

(EUR 1,000)	2018	2017
Added to provision for bad debts	(402)	519
Debt collection costs	23	-
Other operating expenses	1,660	1,774
Added to other provisions	(1,037)	(1,142)
<b>TOTAL OTHER OPERATING EXPENSES</b>	<b>244</b>	<b>1,151</b>

Other operating expenses include the remuneration paid to members of the company's Supervisory Board.

The release of other provisions mainly comprised the release of the EPZ provision due to demolition expenses for the closed coal-fired power station being lower than previously expected.

### Remuneration of the Supervisory Board in 2018

Effective 6 June 2018, the Supervisory Board consists of a chairperson and two members. On the same date, changes were made to the remuneration for new appointments. The arrangements made with existing members will remain unchanged until expiry of their term of office.

The annual remuneration is as follows:

Supervisory Board chairperson	15% of the remuneration paid to a Management Board member
Supervisory Board members	10% of the remuneration paid to a Management Board member

New members will receive no additional remuneration for membership of the Audit, Risk & Compliance Committee or Nomination & Remuneration Committee. The arrangements made with existing members will remain unchanged until expiry of their term of office. They will continue to receive a fee for membership of the Audit, Risk & Compliance Committee or Nomination & Remuneration Committee.

The remuneration paid to existing Supervisory Board members was not index-linked in 2018. The total remuneration paid to Supervisory Board members was EUR 122,338 in 2018 (2017: EUR 170,500), as shown below:

## SPECIFICATION COMPENSATION SUPERVISORY BOARD

(EUR)	2018	2017	Session
C. Maas	18,969	43,700	from 16 May 2014 to 6 June 2018
A.M.H. Schöningh	13,282	30,600	from 17 May 2013 to 6 June 2018
M.M. van 't Noordende	32,800	32,800	from 25 September 2015 to 25 September 2019
G.A.F. van Harten	31,950	30,600	from 25 September 2015 to 25 September 2019
C.M. Insinger	14,237	32,800	from 22 September 2016 to 6 June 2018
W.J.N. van Uchelen	11,100	-	from 6 June 2018 to 5 June 2022
<b>TOTAL</b>	<b>122,338</b>	<b>170,500</b>	

## 21. SHARE OF PROFIT OR LOSS IN JOINT VENTURES AND ASSOCIATES

This comprises PZEM's share of the profits or losses made by joint ventures and associates.

## 22. NET FINANCE INCOME/(EXPENSE)

(EUR 1,000)	2018	2017
External finance income	625	1,114
External finance expense	(8,968)	(9,536)
Interest added to provisions	(11,743)	(11,927)
Other finance income (expense)	(3,320)	1,164
<b>TOTAL FINANCE INCOME (EXPENSE)</b>	<b>(23,406)</b>	<b>(19,185)</b>

Finance income comprises interest received on cash and cash equivalents invested and interest included in sales. Finance expense comprises interest paid on the non-recourse loan for the Sloe power plant.

Other finance income and expense mainly comprises returns on investments in the Borssele Nuclear Power Plant Dismantling Fund.

## 23. CORPORATE INCOME TAX

(EUR 1,000)

2018

2017

### CORPORATE INCOME TAX RECOGNIZED IN PROFIT OR LOSS

Current income tax charge	(1,403)	(2,929)
Deferred tax	(763)	6,758
<b>INCOME TAX EXPENSE</b>	<b>(2,166)</b>	<b>3,829</b>

Relating to discontinued operations	-	6,120
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### INCOME TAX EXPENSE REPORTED IN THE STATEMENT OF PROFIT OR LOSS

<b>(2,166)</b>	<b>9,949</b>
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### CURRENT INCOME TAX CHARGE

Reconciliation of the tax base and the accounting profit resulting in the current income tax:

Accounting profit before tax (including discontinued operations)	(51,474)	309,774
Participation exemption	(21,988)	(292,048)
Temporary differences relating to the valuation of assets	(4,274)	202,965
Temporary differences relating to the valuation of provisions	(11,106)	(28,360)
Other non-deductible expenses and differences	854	3,880
Tax loss carry forward	(26,953)	(184,528)
Unvalued tax loss carry forward	120,582	61

<b>DOMESTIC TAX BASE</b>	<b>5,640</b>	<b>11,744</b>
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Current corporate tax rate for profitable amount under € 200,000	20.00%	20.00%
------------------------------------------------------------------	--------	--------

Current corporate tax rate for profitable amount over € 200,000	25.00%	25.00%
-----------------------------------------------------------------	--------	--------

Tax expense current year	(1,403)	(2,929)
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Differences in respect to prior years	-	-
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<b>CURRENT INCOME TAX CHARGE</b>	<b>(1,403)</b>	<b>(2,929)</b>
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### MOVEMENT IN DEFERRED TAX ASSETS AND LIABILITIES

The deferred tax results from differences between the accounting value and the bookvalue for tax purposes as well as from the valuation and usage of tax loss carry forward.

<b>MOVEMENT IN DEFERRED TAX</b>	<b>(763)</b>	<b>498</b>
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**RECONCILIATION OF STATUTORY TAX TO EFFECTIVE TAX**

(EUR 1,000)

**2018****2017****Tax expense using statutory rate**

12,869

(77,444)

Net profit before taxes

(51,474)

309,774

Statutory tax rate (NL)

25%

25%

Effect of the participation exemption

5,497

73,012

Effect of 20% rate for profitable amount up to € 200,000

5

5

Effect of non taxable revenues and non tax deductible expenses  
(amongst other goodwill)

(213)

(970)

Effect on non-rated deferred tax assets

(19,560)

2,468

Effect on deferred tax assets

(771)

6,758

Effects from prior periods

9

-

**TAX EXPENSE USING EFFECTIVE RATE****(2,166)****3,829**



# **NOTES TO THE CONSOLIDATED CASH FLOW STATEMENT**

In accordance with IFRS 5, the presentation of the cash flow statement includes business divisions ‘held for sale’. This concerns the comparative information for 2017. The cash flow statement has been prepared according to the indirect method. Given that a number of items in the income statement and balance sheet generate no direct cash-flow effects, cash flows for these items have been neutralised. This essentially concerns three items:

- **Treatment of derivatives**

Fair value gains and losses on the trading portfolio lead to current and non-current movements in assets and liabilities in the balance sheet. Some of these gains and losses are also partly included in the operating profit or loss, and some in the hedge reserve as part of group equity. However, none of these changes generate a direct cash flow. This is why all changes are recognised in the cash flow from operating activities so that positive and negative changes cancel each other out.

- **Share of profit or loss in joint ventures and associates**

The share of profits in joint ventures and associates is only partly distributed as a dividend. The undistributed portion leads to an increase in the entity’s shareholders’ equity and, accordingly, to a movement in non-current financial assets in PZEM’s balance sheet. The decision was therefore made to recognise in the cash flow only the actual dividends received.

- **Corporate income tax**

Net profit or loss takes into account not only corporate income tax payable on the pre-tax profit, but also deferred tax assets and liabilities arising from unused tax losses and the agreement with the Dutch Tax and Customs Administration regarding the opening balance sheet for tax purposes in 1998. Because they generate no actual cash flows, movements in deferred tax assets and liabilities are eliminated from the cash flow.

PZEM’s cash flows deteriorated in 2018 compared to 2017 due to the utilisation of working capital and a number of prepayments. The underlying cash flow improved in 2018 compared with 2017.

In 2018, net cash outflow from operating activities was EUR 113.4 million (2017: net cash outflow of EUR 85.6 million). In addition to negative EBITDA, we saw a particularly strong cash outflow from working capital in 2018. This comprised prepayments made for 2019 so as to achieve a better return. PZEM also provided extra collateral which, if markets expectations remain the same, will flow back from 2019 onwards. The outstanding amount in security deposits and guarantees fell by approximately EUR 15 million during the year. Receivables and payables remained stable in 2018.

Cash flow from investing activities declined in 2018 and ultimately came to EUR 30.2 million (2017: EUR 21.7 million). In 2017, cash flow from investing activities had been impacted strongly by the sale of the grid and retail operations during that year. In 2018, EUR 85.0 million was withdrawn from cash investments. Adjusted for this withdrawal, we reported a negative net cash flow from investing activities of EUR 54.8 million, driven mainly by maintenance and replacement costs for EPZ and the Sloe power station, and multiple payments made by EPZ into the fund set up to decommission the nuclear power plant. For business and economic reasons, the payment for 2019 was made in 2018.

Lower investments in tangible and intangible fixed assets compared to 2017 were driven entirely by the discontinuation of investments by the grid and retail divisions following the sale of those entities in 2017.

Cash flow generated by the energy production and trading division remained negative in 2018, as did the cash flow of our subsidiary EPZ following a major maintenance stoppage in the summer of 2018. Our subsidiary Evides contributed positively to the cash flow through the payment of dividends.



## **POST-BALANCE-SHEET EVENTS**

No post-balance-sheet events were identified.

## CONSOLIDATED COMPANIES

		Main activity	Head quarters	Share interest	Voting rights
				31-12-2018	31-12-2017
PZEM Com B.V.	2)	Energy	Middelburg	100%	100%
PZEM Energy B.V.	2)	Energy	Middelburg	100%	100%
PZEM Ficus Holding B.V.	2)	Energy	Middelburg	100%	100%
PZEM Pipe B.V.	2)	Energy	Middelburg	100%	100%
Deltius B.V.		Energy	Ritthem	100%	100%
PZEM Tolling Sloe B.V.	2)	Energy	Middelburg	100%	100%
DELTA Saefthinge N.V.	3)	Energy	Doel, Belgium	99.9%	99.9%
Limo Energie Nederland B.V.		Energy	Middelburg	100%	100%
PZEM Investerings Maatschappij B.V.	2)	Other	Middelburg	100%	100%
PZEM Development & Water B.V.	2)		Middelburg	100%	100%
Triqua B.V.			Wageningen	100%	100%
DELTA Biovalue B.V. (in staat van faillissement)			Eemshaven	100%	100%
DELTA Biovalue Nederland B.V. (in staat van faillissement)			Eemshaven	100%	100%
DELTA Biopat B.V. (in staat van faillissement)			Eemshaven	100%	100%
Sunergy Investco B.V.			Middelburg	100%	100%
PZEM Middelburg B.V.	2)	Other	Middelburg	100%	100%

The parent company's share interest is shown.

- 1) Joint Operations incorporated and liquidated or sold in 2018 are not shown in this statement. Details are given in the Accounting Policies section
- 2) The company's name was changed on 1 March 2017 in connection with the sale of DELTA Comfort B.V., DELTA Kabelcomfort Netten B.V. and Zeelandnet B.V.
- 3) The company's name was not changed on 1 March 2017 in connection with the expected sale of this company.

## CONSOLIDATED COMPANIES

		Main activity	Head quarters	Share interest		Voting rights
				31-12-2018	31-12-2017	
<b>JOINT ARRANGEMENTS</b>						
<b>Joint Operations (partly consolidated)</b>						
PZEM Energy B.V.	2)					
N.V. EPZ		Energy	Borssele	70%	70%	70%
Sloe Centrale Holding B.V.		Energy	Vlissingen	50%	50%	50%
Sloe Centrale B.V.		Energy	Vlissingen	100%	100%	100%

The parent company's share interest is shown.

- 1) Joint Operations incorporated and liquidated or sold in 2018 are not shown in this statement. Details are given in the Accounting Policies section
- 2) The company's name was changed on 1 March 2017 in connection with the sale of DELTA Comfort B.V., DELTA Kabelcomfort Netten B.V. and Zeelandnet B.V.

## NON-CONSOLIDATED COMPANIES

		Main activity	Head quarters	Share interest		Voting rights
				31-12-2018	31-12-2017	
<b>JOINT ARRANGEMENTS</b>						
<b>Joint Ventures</b>						
PZEM Energy B.V.	2)					
BMC Moerdijk B.V.		Energy	Moerdijk Antwerpen, Belgium	50.00%	50.00%	50.00%
NPG Willebroek N.V.		Energy		50.00%	50.00%	50.00%
PZEM N.V.	2)					
Evides N.V.		Water	Rotterdam	50.00%	50.00%	50.00%
Elsta B.V.		Energy	Middelburg	25.00%	25.00%	25.00%
Elsta B.V. & Co C.V.		Energy	Middelburg	24.75%	24.75%	24.75%

The parent company's share interest is shown

- 1) Joint Operations incorporated and liquidated or sold in 2018 are not shown in this statement. Details are given in the Accounting Policies section
- 2) The company's name was changed on 1 March 2017 in connection with the sale of DELTA Comfort B.V., DELTA Kabelcomfort Netten B.V and Zeelandnet B.V.

## NON-CONSOLIDATED COMPANIES

		Main activity	Head quarters	Share interest		Voting rights
				31-12-2018	31-12-2017	
<b>OTHER COMPANIES</b>						
PZEM N.V.:	2)					
PZEM Investerings Maatschappij B.V.	2)					
Sustainable Energy Technology Fund C.V.		Other	Amsterdam	49.93%	49.93%	49.93%
Sustainable Energy Technology Fund II C.V.		Other	Amsterdam	18.83%	18.83%	18.83%
Business Park Terneuzen B.V.		Other	Terneuzen	0.00%	15.00%	15.00%
Zeeland Airport B.V.		Other	Arnhem	10.73%	10.73%	10.73%
PZEM Middelburg B.V.	2)	Other	Middelburg			
Synergia Capital B.V. (in liquidatie)		Other	Veenendaal	5.10%	5.10%	5.10%
N.V. EPZ:						
B.V. NEA		Energy	Arnhem	28.50%	28.50%	28.50%
KSG Kraftwerks-Simulator-Gesellschaft mbH		Energy	Duitsland	2.05%	2.05%	2.05%
GfS Gesellschaft für Simulatorschulung mbH		Energy	Duitsland	2.05%	2.05%	2.05%

The parent company's share interest is shown

- 1) Joint Operations incorporated and liquidated or sold in 2018 are not shown in this statement. Details are given in the Accounting Policies section
- 2) The company's name was changed on 1 March 2017 in connection with the sale of DELTA Comfort B.V., DELTA Kabelcomfort Netten B.V and Zeelandnet B.V.



# **COMPANY FINANCIAL STATEMENTS 2018**

# COMPANY BALANCE SHEET AS AT 31 DECEMBER 2018 (BEFORE PROFIT OR LOSS APPROPRIATION)

(EUR 1,000)

Ref. no.

31-12-2018

31-12-2017

<b>ASSETS</b>					
<b>Non-current assets</b>					
Property, plant and equipment	1		6,828		7,283
Financial assets					
Investments in subsidiaries	2	35,594		149,959	
Other investments	2	355,148		349,962	
Receivables from subsidiaries	2	29,192		-	
Other Loans	2	275,410		305,611	
Deferred tax assets	3	-		-	
			695,344		805,532
			<b>702,172</b>		<b>812,815</b>
<b>Current assets</b>					
Receivables from subsidiaries		103,048		416,088	
Other receivables	4	444,038		513,800	
			<b>547,086</b>		<b>929,888</b>
<b>Cash</b>			<b>50,159</b>		<b>75,997</b>
<b>TOTAL ASSETS</b>			<b>1,299,417</b>		<b>1,818,700</b>
<b>Liabilities</b>					
<b>Shareholders' equity</b>					
Shareholders' equity	5	1,334,373		1,060,715	
Net profit/(loss)	5	(53,640)		313,603	
			<b>1,280,733</b>		<b>1,374,318</b>
<b>Provisions</b>	<b>6</b>		<b>236</b>		<b>1,339</b>
<b>Non-current liabilities</b>					
Payables to subsidiaries		11,830		-	
			11,830		-
<b>Current liabilities</b>					
Payables to subsidiaries		85		432,754	
Other payables	7	6,533		10,289	
			<b>6,618</b>		<b>443,043</b>
<b>TOTAL LIABILITIES</b>			<b>1,299,417</b>		<b>1,818,700</b>



## COMPANY INCOME STATEMENT

(EUR 1,000)

	2018	2017
Profit/(loss) on parent company's activities	(1,539)	(7,707)
Share of profit/(loss) in subsidiaries, joint ventures, and associates	(52,101)	321,310
<b>PROFIT/(LOSS)</b>	<b>(53,640)</b>	<b>313,603</b>

## NOTES TO THE COMPANY FINANCIAL STATEMENTS

PZEM N.V. is the Dutch-based holding company of a number of group companies involved in generating, transmitting, and supplying energy. The company's functional currency is the euro. PZEM N.V. used the option available under Title 9, Book 2, of the Dutch Civil Code to prepare the company financial statements in accordance with the International Financial Reporting Standards used in the consolidated financial statements, with the exception of equity-accounted group companies and investments. The company income statement is presented in abridged form in accordance with Section 402, Title 9, Book 2, of the Dutch Civil Code.

### Accounting policies

Associates and joint ventures are measured according to the equity method and stated at net asset value (in accordance with the IFRSs applied to the consolidated financial statements), adjusted for goodwill paid on acquisition and less any impairment losses on goodwill.

For the other accounting policies, please refer to the notes to the consolidated financial statements.

# NOTES TO THE COMPANY BALANCE SHEET

## 1. PROPERTY, PLANT AND EQUIPMENT

(EUR 1,000)	Total	Land and buildings	Other fixed assets	Assets under construction
<b>2017</b>				
<b>Carrying amount as at 1 January</b>	<b>7,833</b>	<b>6,482</b>	<b>848</b>	<b>503</b>
Investments	-	-	-	-
Depreciation	(26)	(26)	-	-
Disposals	(126)	(126)	-	-
Other movements	(398)	157	(52)	(503)
<b>CARRYING AMOUNT AS AT 31 DECEMBER</b>	<b>7,283</b>	<b>6,487</b>	<b>796</b>	<b>-</b>
<b>Carrying amount before deduction of contributions</b>	<b>7,283</b>	<b>6,487</b>	<b>796</b>	<b>-</b>
Accumulated depreciation and impairments	21,024	18,847	2,177	
<b>Acquisition cost as at 31 December</b>	<b>28,307</b>	<b>25,334</b>	<b>2,973</b>	<b>-</b>
Depreciation period in years		0 - 40	5 - 15	n.a.
<b>2018</b>				
<b>Carrying amount as at 1 January</b>	<b>7,283</b>	<b>6,487</b>	<b>796</b>	<b>-</b>
Investments	-	-	-	-
Depreciation	(453)	(399)	(54)	-
Disposals	(2)	-	(2)	-
Other movements	-	-	-	-
<b>CARRYING AMOUNT AS AT 31 DECEMBER</b>	<b>6,828</b>	<b>6,088</b>	<b>740</b>	<b>-</b>
<b>Carrying amount before deduction of contributions</b>	<b>6,828</b>	<b>6,088</b>	<b>740</b>	<b>-</b>
Accumulated depreciation and impairments	21,479	19,246	2,233	
<b>Acquisition cost as at 31 December</b>	<b>28,307</b>	<b>25,334</b>	<b>2,973</b>	<b>-</b>
Depreciation period in years		0 - 40	5 - 15	n.a.

## 2. NON-CURRENT FINANCIAL ASSETS (EXCLUDING TAX ASSETS)

(EUR 1,000)	Total	Investments in subsidiaries	Other investments	Receivables from other investments	Other receivables
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2016</b>	<b>655,935</b>	<b>285,550</b>	<b>349,446</b>	<b>20,924</b>	<b>15</b>
Acquisition/grant of loans	305,611	-	-	-	305,611
Share of profit/(loss)	321,310	290,021	31,289	-	-
Disposals/repayment/dividends	(460,483)	(408,429)	(31,115)	(20,924)	(15)
Movements in hedge reserve	(17,759)	(17,759)	-	-	-
Other movements	918	576	342	-	-
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>805,532</b>	<b>149,959</b>	<b>349,962</b>	<b>-</b>	<b>305,611</b>
Adjustment opening balance as at 1 January 2018	13,129	-	13,484	-	(355)
<b>Adjusted carrying amount as at 1 January 2018</b>	<b>818,661</b>	<b>149,959</b>	<b>363,446</b>	<b>-</b>	<b>305,256</b>
Acquisition/grant of loans	254,836	-	-	29,192	225,644
Share of profit/(loss)	(52,101)	(77,731)	25,630	-	-
Share premium payment	19,838	19,838	-	-	-
Disposals/repayment/dividends	(34,217)	-	(34,217)	-	-
Movements in hedge reserve	(52,747)	(52,747)	-	-	-
Movement expected credit loss IFRS 9	121	-	-	-	121
Other movements	(3,437)	(3,725)	288	-	-
Current portion of financial assets	(255,611)	-	-	-	(255,611)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>695,344</b>	<b>35,594</b>	<b>355,148</b>	<b>29,192</b>	<b>275,410</b>

The opening balance for 2018 was restated due to the introduction of IFRS 9. This led to a change in the valuation of a loan granted by one of the joint ventures. As a result, the joint venture's equity increased by EUR 13.5 million at 1 January 2018.

An adjustment was also made to the opening balance for other receivables. The financial asset impairment model provided for in IFRS 9 differs from that of IAS 39. For PZEM, this mainly concerns the measurement of cash investments and the provision for bad debts. Until 2018, we applied the incurred loss method, which allows a provision to be recognised at the time when a trigger (a specific 'credit event') occurs. Effective 2018, IFRS 9 provides for an expected loss model, according to which this provision is to be measured on the basis of both historical and forward-looking information because there is always an inherent risk of a debtor failing to meet its payment obligations (or to do so in full). This is why this risk must already be accounted for

on initial recognition of the receivable. The impact of these changes in the rules on the recognition of cash investments is limited. Cash invested and collateral provided are relatively short-term in nature (currently approximately 1.5 years).

To estimate expected losses, PZEM looked at the external ratings of counterparties and elected to use the following percentages for those ratings:

External credit rating	Expected loss percentage
> A-	0.1%
BBB+	0.2%
BBB of BBB-	0.5%
< BBB- or no rating	1.0%

PZEM elected to apply relatively low percentages because cash invested and collateral provided are relatively short-term in nature (approximately 1.5 years).

Application of the expected loss approach under IFRS 9 instead of the incurred loss approach led to a total extra addition of EUR 1.0 million (EUR 0.4 million long-term and EUR 0.6 million short-term). This amount is shown within the opening balance at 1 January 2018. This change under IFRS 9 had a positive impact on the 2018 income statement of EUR 0.1 million (EUR 0.1 million long-term and EUR 0.0 million short-term).

The hedge reserve showed a negative trend in 2018.

At 31 December 2018, other receivables mainly comprised cash invested and collateral provided.

#### Term deposits and securities

Because of the sale of its grid and retail operations, PZEM received a significant amount in cash. These funds are used first and foremost for our operating activities. What remains is invested in accordance with the Treasury Charter. At 31 December 2018, these investments mainly comprised term

deposits held with banks and bonds representing a value of EUR 596.4 million (excluding expected loss provision). Of this total sum, EUR 254.0 million (excluding expected loss provision) had a term to maturity of more than 1 year.

#### Collateral provided

Collateral provided comprises security deposits and bank guarantees. Some of the collateral was provided to counterparties for operating activities including trading activities, driven mainly by the corporate credit rating downgrade. The downgrade led to the obligation to provide extra collateral to trading parties. Furthermore, guarantees were issued as a result of legal proceedings. At 31 December 2018, EUR 142.5 million in collateral was provided (excluding expected loss provision), EUR 34.1 million of which (excluding expected loss provision) with a term to maturity of more than 1 year.

## 3. DEFERRED TAX ASSETS

Deferred tax assets arise from differences between the carrying amount in the financial statements and the corresponding tax base. Deferred tax assets also comprise unused tax losses. To be on the safe side, no deferred tax assets were recognised in the 2018 balance sheet due to uncertainty over whether and when they might be utilised.

## 4. SHORT-TERM RECEIVABLES

(EUR 1,000)	31-12-2018	31-12-2017
Trade receivables	938	1,030
Other current taxes	163	113
Deposits held with banks and bonds	341,859	493,833
Security interest provided	100,919	18,471
Other receivables	159	353
<b>TOTAL</b>	<b>444,038</b>	<b>513,800</b>

Non-current financial assets comprise receivables relating to term deposits and securities, on the one hand, and collateral provided on the other. The current portions of these assets amounted to EUR 342.3 million and EUR 101.0 million, respectively (excluding expected loss provision).

As a result of IFRS 9, an adjustment was made to the opening balance for cash investments, collateral provided, and

receivables. This is explained in more detail in Section 2 of the notes to the company financial statements.

Application of the expected loss approach under IFRS 9 instead of the incurred loss approach led to a total extra addition of EUR 1.0 million (EUR 0.4 million long-term and EUR 0.6 million short-term). This amount is shown within the opening balance at 1 January 2018. This change under

IFRS 9 had a positive impact on the 2018 income statement of EUR 0.1 million (EUR 0.1 million long-term and EUR 0.0 million short-term).

The expected loss approach applied under IFRS 9 had no impact on trade receivables.

## MOVEMENTS IN DEPOSITS AND SECURITIES

(EUR 1,000)

	2018	2017
<b>BALANCE AS AT 1 JANUARY</b>	<b>512,304</b>	-
Adjustment opening balance as at 1 January	(618)	-
Adjusted balance as at 1 January	511,686	-
Movement deposits and securities	(68,928)	512,304
Movement expected credit loss IFRS 9	20	-
<b>BALANCE AS AT 31 DECEMBER</b>	<b>442,778</b>	<b>512,304</b>
Divided in:		
Deposits held with banks and bonds	341,859	493,833
Security interest provided	100,919	18,471
	<b>442,778</b>	<b>512,304</b>

## 5. STATEMENT OF CHANGES IN EQUITY

(EUR 1,000)	Total	Paid-up capital	Statutory reserve	Hedge reserve	Other non-distributable reserves	Other reserves	Unappropriated profit
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2016</b>	<b>1,078,132</b>	<b>6,937</b>	<b>148,123</b>	<b>(39,452)</b>	<b>762</b>	<b>904,252</b>	<b>57,510</b>
Profit appropriation for 2016	-	-	-	-	-	57,510	(57,510)
Payment of dividend	-	-	-	-	-	-	-
Other changes	342	-	(18,509)	-	(439)	19,290	-
Movement in hedge reserve (energy derivatives)	(17,759)	-	-	(17,759)	-	-	-
Net profit for 2017	313,603	-	-	-	-	-	313,603
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>1,374,318</b>	<b>6,937</b>	<b>129,614</b>	<b>(57,211)</b>	<b>323</b>	<b>981,052</b>	<b>313,603</b>
Adjustment opening balance as at 1 January 2018	12,511	-	13,484	-	-	-	(973)
<b>ADJUSTED CARRYING AMOUNT AS AT 1 JANUARY 2018</b>	<b>1,386,829</b>	<b>6,937</b>	<b>143,098</b>	<b>(57,211)</b>	<b>323</b>	<b>981,052</b>	<b>312,630</b>
Profit appropriation for 2017	-	-	-	-	-	312,630	(312,630)
Payment of dividend	-	-	-	-	-	-	-
Other changes	288	-	(4,250)	-	(91)	4,630	-
Movement in hedge reserve (energy derivatives)	(52,744)	-	-	(52,744)	-	-	-
Net profit for 2018	(53,640)	-	-	-	-	-	(53,640)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>1,280,733</b>	<b>6,937</b>	<b>138,848</b>	<b>(109,955)</b>	<b>232</b>	<b>1,298,312</b>	<b>(53,640)</b>

As a result of IFRS 9, an adjustment was made to the opening balance for equity. The adjustment to the statutory reserve was driven by a change in valuation of a loan granted by a joint venture. The adjustment to unappropriated profit or loss was driven by a change to the model for measuring financial asset impairments. This is explained in more detail in Section 1.1 of the consolidated financial statements and Sections 2 and 4 of the notes to the company financial statements.

The statutory reserve comprises undistributed profits of associates and is therefore not freely distributable. This also applies to the hedge reserve, which should be seen in relation to unrealised income from fair value changes in derivatives used for hedging purposes.

Other movements comprise changes in equity of non-consolidated associates.

For an explanation of changes in equity, please refer to the consolidated financial statements.

**PROPOSED DIVIDEND PAYOUT TO SHAREHOLDERS**

(EUR 1,000)

**2018****2017**

Profit/(loss) for the year

(53,640)

313,603

**PROPOSED DIVIDEND TO SHAREHOLDERS**

-

-

Addition/ withdrawal to other reserves

(53,640)

313,603

Given the fact that PZEM reported a loss and an underlying negative cash flow for 2018, we propose taking the loss fully to the other reserves.

## 6. PROVISIONS

(EUR 1,000)

	Total	Employee benefits
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2016</b>	<b>7,896</b>	<b>7,896</b>
Reversal of current portion of provision	6,690	6,690
Added	1	1
Interest added	10	10
Released	(1,309)	(1,309)
Utilised	(5,549)	(5,549)
Other movements	(25)	(25)
<b>Carrying amount as at 31 December 2017</b>	<b>7,714</b>	<b>7,714</b>
Current portion of provisions	(6,375)	(6,375)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2017</b>	<b>1,339</b>	<b>1,339</b>
Reversal of current portion of provision	6,375	6,375
Added	-	-
Interest added	10	10
Released	(3,706)	(3,706)
Utilised	(150)	(150)
Other movements	-	-
<b>Carrying amount as at 31 December 2018</b>	<b>3,868</b>	<b>3,868</b>
Current portion of provisions	(3,632)	(3,632)
<b>CARRYING AMOUNT AS AT 31 DECEMBER 2018</b>	<b>236</b>	<b>236</b>

At 31 December 2017 and 2018, long-term provisions only comprised employee benefits.

In 2016, a reorganisation provision was recognised for the GAMMA2 programme to cover our obligations to those of our employees who, as a result, were expected to leave the PZEM Group within two years. These liabilities are measured taking into account the arrangements set out in the Social Plan and the employee's years of service within the industry, his or her age, various pay components, and estimates in terms of his or her ability to find other employment. In 2018, as in 2017, several of our employees covered by the provision at 31 December 2016 left the company, which led to a substantial withdrawal from the provision. A discount rate of 2.0% (2017: 2.0%) was applied to the reorganisation provision.

Under the terms of the collective agreement, PZEM pays its employees long-service benefits. From the start date of employment, a provision is recognised for these benefits, based on past years of service, expected price and pay rises (at an average rate of 2%), and dismissal, invalidity, and mortality rates. The discount rate applied was 3.5% (2017: 3.5%).



## 7. CURRENT LIABILITIES (EXCLUDING GROUP COMPANIES)

(EUR 1,000)	31-12-2018	31-12-2017
Trade payables	569	899
Current tax liabilities	1,179	855
Current portion of provisions	3,632	6,375
Accruals and deferred income	1,153	2,160
Total other payables	4,785	8,535
<b>TOTAL</b>	<b>6,533</b>	<b>10,289</b>

Other payables include the current portion of the provisions and outstanding supplier accounts.

Current tax liabilities comprise VAT and energy tax payable.

## OFF-BALANCE SHEET LIABILITIES

A summary of off-balance sheet liabilities is given below, to the extent that they have an estimated potential impact on profit or loss in excess of EUR 5 million.

### Main collateral granted

PZEM has issued EUR 24.6 million worth of guarantees to the Zuid-Holland provincial authorities for the costs of capping the Derde Merwedehaven landfill site in Dordrecht. These guarantees are expected to be taken over by KatoenNatIE. PZEM has received a counter guarantee from the buyer.

### Lawsuits and claims

For a number of years now, PZEM has been involved in a lawsuit filed by a former solar power business partner. Following an interim decision by the Court of Appeal, the case was put before the Supreme Court, which referred the case back to the Hague Court of Appeal for a final decision. On 15 January 2019, the Court of Appeal found fully in favour of PZEM. At the time when the financial statements were released for publication, the period for filing an appeal with the Supreme Court had not yet expired. If no appeal is filed, the case can be finalised in 2019. If an appeal is filed, PZEM looks forward to the outcome with confidence. Security has previously been provided to the claimant. This security interest is recognised in the balance sheet within short-term receivables.

The trustee in the bankruptcies of the bio diesel entities that were PZEM group companies until 2010 was unable to complete the administration of those bankruptcies during the year. PZEM still has a substantial claim against the estate in connection with a loan previously granted to the bankrupt company.

### 403 Declarations

PZEM N.V. filed a statement with the Chamber of Commerce as required under Section 2:403 of the Dutch Civil Code, assuming joint and several liability for debts arising from legally binding transactions entered into by the following subsidiaries as at the balance-sheet date:

- PZEM Energy B.V.
- PZEM Ficus Holding B.V.
- PZEM Pipe B.V.
- PZEM Tolling Sloe B.V.
- DELTIUS B.V.
- LIMO Energie Nederland B.V.
- PZEM Com B.V.

On that basis, and on the grounds of annual authorisation statements from the shareholders filed with the Chamber of Commerce, these companies are exempt from using the prescribed format in preparing their financial statements.

### Fiscal unity

PZEM N.V. heads a fiscal unity for VAT purposes. PZEM N.V. and its subsidiaries that are members of the fiscal unity are jointly and severally liable for the fiscal unity's tax debt.

## NOTES TO THE COMPANY INCOME STATEMENT

At 31 December 2018, PZEM N.V. employed 114 FTEs (2017: 135 FTEs).

For details of the remuneration of PZEM N.V.'s Management Board members, please refer to note 18 (Staff costs) to the consolidated financial statements.

For details of the remuneration of PZEM N.V.'s Supervisory

Board members, please refer to note 20 (Other operating expenses) to the consolidated financial statements.

### Auditors' fees

In 2018, PZEM N.V. paid the following fees for its consolidated companies:

(EUR 1,000)	Deloitte Accountants B.V.		Other members of Deloitte's NL network		Total	
	2018	2017	2018	2017	2018	2017
Total fee for auditing PZEM Group's financial statements	405	374	-	-	405	374
Fee for related audit services	27	131	-	-	27	131
Tax advisory services	-	-	-	4	-	4
Other non-audit related services	28	6	-	-	28	6
<b>TOTAL</b>	<b>460</b>	<b>511</b>	<b>-</b>	<b>4</b>	<b>460</b>	<b>515</b>

No performance-related fees were paid.

**Signed for approval:**

**Management Board:**

F. Verhagen

N.C. Unger

**Supervisory Board:**

G.A.F. van Harten

M.M. van 't Noordende

W.J.N. van Uchelen

Signed,

Middelburg, The Netherlands, 3 April 2019





# 3

## OTHER INFORMATION

## OTHER INFORMATION

### Profit appropriation according to the Articles of Association

Article 41 of the Articles of Association provides for the appropriation of profit or loss as follows.

1. Any loss reported in the income statement, as included in the adopted financial statements, shall be taken to the general reserves. If those reserves hold insufficient funds to cover such loss, the remainder of the loss shall be charged to any profits achieved in future years.
2. If the income statement, as included in the adopted financial statements, reports any profit, the Supervisory Board may use such profit to add funds to the general reserves. Any profit remaining shall be at the disposal of the General Meeting of Shareholders.
3. The General Meeting may declare one or more interim dividends and/or make other interim distributions, provided that the requirements of Section 2:105 (2) of the Dutch Civil Code are satisfied, as evidenced by an interim financial statement as referred to in Section 2:105 (4) of the Dutch Civil Code.







**For the independent auditor's report see the Dutch version of the annual report 2018.**

## STATEMENT

*Code of Conduct Compliance Statement for Suppliers, including metering companies for which they are responsible, regarding the use of meters that can be read remotely and which are installed at the premises of consumers and small businesses.*

*Name of legal entity:*

*PZEM Energy B.V.*

*Place of registered office:*

*Middelburg, The Netherlands*

*Period:*

*1 January 2018 until 31 December 2018*

*To ensure the proper delivery of its services, PZEM Energy B.V. makes use of data obtained from meters that can be read remotely and which are installed at the premises of consumers and small businesses. In addition to compliance with the Personal Data Protection Act (Wet bescherming persoonsgegevens), Dutch energy suppliers and the metering companies for which they are responsible have drawn up a code of conduct for the use, registration, sharing, and storage of data obtained from such meters.*

*PZEM N.V., duly represented by its director F. Verhagen, and acting in its capacity as a director of PZEM Com B.V., based in Middelburg, The Netherlands – PZEM Com B.V. acting in its capacity as a shareholder of PZEM Energy B.V. – hereby declares that, to the best of their knowledge, PZEM Energy B.V. was in compliance with the rules and obligations set out in the 2012 Code of Conduct for Suppliers of Smart Meters during the period stated above.*

*Middelburg, The Netherlands, 3 April 2019*

*Signed*

*F. Verhagen*

*The Management Board of PZEM N.V.*



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