Group Annual Report

Vier Gas Transport GmbH

1 January to 31 December 2018

(Translation – the German text is authoritative)

Contents

Group Management Report

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Introduction

The Vier Gas Transport Group is made up of Vier Gas Transport GmbH (VGT), Essen, as the parent company, and its subsidiary Open Grid Europe GmbH (OGE), Essen, with its equity investments.

VGT largely performs a holding company function for OGE. This Group management report therefore mainly refers to the business activities of OGE, which is active in the field of gas transport logistics.

OGE is Germany's leading natural gas transmission system operator and operates Germany's largest transmission network with a length of approximately 12,000 km. As a network operator, OGE is subject to supervision by the Federal Network Agency (BNetzA), the German regulatory authority, and is bound by both EU and German statutory regulations.

OGE's core activities include marketing gas transport capacities (including determining quantities and billing) in the markets areas of NetConnect Germany GmbH & Co. KG (NCG) and GASPOOL Balancing Services GmbH (GASPOOL), operating, maintaining and repairing the pipeline system as well as controlling and monitoring the network and storage stations. Furthermore, the core activities include the efficient further development of the gas transmission pipeline networks in line with demand on the basis of nationwide network development plans.

Vier Gas Services GmbH & Co. KG (VGS), Essen, is the sole shareholder of VGT.

Overall economic development

The German economy is currently experiencing one of the longest phases of expansion since the end of World War II. The German Council of Economic Experts is expecting gross domestic product (GDP) to grow by 1.6% in 2018. Although a decline was reported in the third quarter of 2018, this was largely due to difficulties in the German automobile industry.

The number of people in employment and the number in jobs subject to social security deductions increased sharply again in 2018. The situation on the labour market is therefore very stable. According to provisional calculations of the Federal Statistical Office, the average number of people in employment rose by 562,000 to 44.83 million in 2018. The unemployment rate decreased by 0.5 percentage points to 5.2%.

Primary energy consumption in Germany

Energy consumption in Germany is at its lowest level since the beginning of the 1970s as a result of rising energy prices, the mild weather in 2018 and greater energy efficiency. This is the conclusion drawn by the Working Group on Energy Balances (AGEB) in its annual report on primary energy consumption in Germany. Therefore, according to initial estimates, consumption was down on the previous year by 5% to 12,900 petajoules. Gas consumption fell by 7.3% as a result of the aforementioned reasons and the increased generation of electricity from renewables. Total consumption of oil for heating and for petrol, diesel and aviation fuel shrank by 5.6% in 2018. Total demand for hard coal fell by 11.2%. Consumption in power stations dropped particularly sharply. Here a decrease of 16% compared with the previous year was reported. The reasons for the sharp drop are greater use of renewables and higher fuel costs. Renewable energy consumption increased overall by 2.1% compared with the previous year.

Energy policy developments in Europe

Virtual interconnection points

The Capacity Allocation Mechanism Network Code (NC CAM) provides for the introduction of so-called virtual interconnection points (VIP) at the market area borders. The marketing and handling of the transport capacities of all gas transmission operators involved is now only to take place at one point per border. Since the wording of the NC CAM regulation was open to interpretation, in the first half of the year an attempt was made at European level to amend the legal instrument in a so-called functionality process between the association of the European Network of Transmission System Operators for Gas (ENTSOG) and the Agency for the Cooperation of Energy Regulators (ACER), but in the end this was rejected by the European Commission. As a result, different VIP models are being implemented in Europe; in Germany it is the so-called dual system where existing contracts remain at the IP. OGE established the first VIP at the border with Gaspool (L-gas) on 1 November 2018, further VIPs are to follow in 2019.

Clean Energy Package and effects on the gas market

In December 2018, the Austrian Presidency of the Council and representatives of the European Parliament reached agreement on the content of the European regulation and the directive on electricity market design, which completed the political negotiations on the Clean Energy Package. The package of laws consists of eight legal texts in total and was already presented as a draft by the EU Commission in November 2016. It is to ensure the EU's competitiveness during the transition to a clean energy economy and regulates areas such as energy efficiency, renewable energies, security of supply and the framework for the electricity market.

The legislative procedure for the Clean Energy Package is in its final stages. Following the expected formal endorsement by the European Council and European Parliament, it will be published in the Official Journal of the EU and therefore transposed into European law. The other six legislative proposals in the package have already passed this step or are currently in this process.

Although the regulations of the Clean Energy Package mainly relate to the electricity market, they will also have an effect on the gas market. In the autumn of 2017, the Directorate-General for Energy announced that it was seeking to revise the legislative framework for the gas market in a similar manner to the changes in electricity market design. A draft of a gas market package is to be presented in 2020 and is based on three pillars:

(1) The mirroring of relevant electricity market regulations and processes from the Clean Energy Package in the gas market (governance, smart meters, consumer protection etc.);

(2) Adjustments to the current gas market design in order to strengthen the internal market (implementation of the network codes, comparison of the regulatory incentive systems etc.);

(3) The future role of gas and gas infrastructure in the energy transition (sector coupling, biogas, hydrogen etc.).

In 2018, the EU Commission conducted primarily preparatory work on the gas market package. Specifically, this work included the preparation or the commissioning of studies on gas market design, on the future role of gas and on the "gas infrastructure 2050“. The results of further studies are also expected in the first half of 2019, dealing with such topics as the effects of biogas and hydrogen on the gas infrastructure as well as poss ble distortion of competition by non-harmonised payment structures in the EU. The results are to be included in the Commission's concrete draft legislation.

Energy policy developments in Germany

Political developments in Germany

Owing to the political developments in 2018 (including delays in the formation of the government and coalition disputes), there were only a few notable energy policy initiatives by the federal government. For example, the so-called Renewable Energy Act 100 Days Act (EEG-100-Tage-Gesetz), which was supposed to come into force in the spring of 2018, was not adopted by the Bundestag as the Omn bus Energy Act until the end of November 2018.

An additional obstacle to new energy policy initiatives from the Federal Ministry for Economic Affairs and Energy (BMWi) was the fact that after the resignation of the State Secretary for Energy in the BMWi in March 2018, the post was not filled until 1 February 2019 by the former managing director of the Wuppertal municipal utilities, Andreas Feicht.

The focuses of energy policy in the coalition agreement between CDU, CSU and SPD can be split into two areas: network expansion is to be speeded up with a further Network Expansion Acceleration Law and legislation on energy efficiency in the building sector is to be reorganised and brought into line with European requirements. In addition, the new Commission on Growth, Structural Change and Employment is to develop measures to ensure the future climate protection goals can be attained as far as possible and a roadmap prepared so the phase-out of coal-based power generation can be achieved.

Commission on Growth, Structural Change and Employment

As one of many commissions laid down in the coalition agreement between CDU, CSU and SPD, the Commission on Growth, Structural Change and Employment took up work at the end of June 2018. In addition to representatives of the federal government and the federal states (Länder), representatives from business, science and civil society are also members of the Commission. One of the tasks of the Commission is to determine a final date for the exit from coal-based power generation in Germany. At the end of January 2019, the Commission made the recommendation to entirely phase out coal-fired power stations by 2038. Future challenges are to prepare a plan for the step-by-step shutdown of the power stations, to clarify financial cushioning of the effects of structural change and to establish how Germany can meet its future climate protection goals.

Federal government increases funds for energy research

In October 2018, the federal cabinet adopted the 7th Energy Research Programme and so gave energy research a new direction. € 6.4 billion will be made available in the period up to 2022. That is 45% more than was available for the 6th Energy Research Programme (2013–2017). The focus of the new programme is on the translation of research results into marketable solutions, e.g. through so-called 'living labs'.

Omnibus Energy Act

On 30 November 2018, the Bundestag adopted the biggest energy-policy plan since the current federal government took office. The so-called Omnibus Energy Act contains amendments to the Renewable Energy Act (EEG), the Combined Heat and Power Act (KWKG) and the Energy Industry Act (EnWG) as well as to other energy law regulations.

In addition to the separate calls for tender for renewable energies and the levy privileges for new combined heat and power generation plants, the subsidy rates for existing combined heat and power generation and photovoltaic plants as well as their connection to L-gas networks were regulated. The contentious issues in the coalition that could not be resolved in the legislative process were deferred to be dealt with in other legislative proposals or in a planned working group. These are, for example, amendments to the Energy Industry Act (EnWG) aimed at integrating renewables and CHPs into redispatching or measures to increase the acceptance of onshore wind power. The Act entered into force on 1 January 2019.

National regulations

By resolution of 13 June 2018, OGE received the final notification on the setting of the calendar-year revenue cap of the third regulatory period (2018-2022) in accordance with section 29, para. 1 of the Energy Industry Act (EnWG) in conjunction with section 32, para. 1, no. 1, 5 and 11 and section 4, para. 2 of the German Incentive Regulation Ordinance (ARegV). This resolution became effective on 16 July 2018. With regard to the regulatory parameters rate of return on equity and general sector productivity factor (Xgen), the notification contains adjustment options in view of ongoing legal appeals against the BNetzA's stipulations. With the notification on the revenue cap, the OGE efficiency factor determined in the efficiency benchmarking in line with section 12 of the German Incentive Regulation Ordinance also became effective. OGE achieved an efficiency factor of 100%. The balance of the regulatory account (2012-2017) is not part of the resolution on the revenue cap and will be decided in separate administrative proceedings. These proceedings have not yet been completed.

In accordance with section 9, para. 3 ARegV, from the third regulatory period onwards the BNetzA must determine the Xgen factor in each case before the start of the regulatory period using state-of-the-art methods. By resolution of 21 February 2018, the Xgen factor was set at 0.49% for gas transmission system operators. Alongside a large number of other gas transmission system operators, OGE has lodged an appeal against this determination with the 3rd Antitrust Senate of the Higher Regional Court of Düsseldorf. A hearing is expected in the course of 2019.

On 5 October 2016, the BNetzA set the rates of return on equity for the third regulatory period. Alongside some 1,100 network operators, OGE also lodged an appeal against this with the 3rd Antitrust Senate of the Higher Regional Court of Düsseldorf and actively conducted these proceedings as one of the total of 29 test appeals. In its ruling of 22 March 2018, the Higher Regional Court of Düsseldorf revoked the stipulation on the rates of return on equity and obliged the BNetzA to make a new decision taking account of the legal opinion of the court. The BNetzA has filed a legal appeal against the Higher Regional Court of Düsseldorf's ruling with the Federal Court of Justice. The outcome of the proceedings is still pending, a hearing before the Federal Court of Justice (BGH) is expected during the course of 2019.

In connection with the Network Fee Modernisation Law and the discussion surrounding the refinancing of the offshore linkup costs for transmission system operators, in November 2018 the Federal Ministry for Economic Affairs and Energy (BMWi) consulted with the industry on a draft statute regarding amendments to regulatory law. The planned amendments also relate to the investment measures (IMA) instrument which was established in the Incentive Regulation Ordinance in 2012 and which regulates the remuneration of electricity and gas transmission system operators for expansion and restructuring investments. In particular, the draft statute of the BMWi provided for the operating cost allowances that had so far been flat rates to be reviewed as part of the IMA approval. In future, they are to be remunerated more on the basis of the actual costs. On 4 January 2019, the federal cabinet passed the Ordinance to Amend the Incentive Regulation Ordinance and submitted it to the Bundesrat for a vote. On 15 February 2019, the Bundesrat approved the draft ordinance of the federal government subject to certain changes including amendments relating to a differentiated approach depending on the time when applications for IMAs are submitted.

According to the latest information, the corresponding amendment to the Ordinance is to enter into force in the spring of 2019. It provides for a separate setting of the future operating cost flat rates by the BNetzA after the ordinance amendment comes into force. The cost-setting process is expected to start during the course of 2019.

Network development plans and market area conversion

The expansion of the network is particularly important for the energy transition which has been decided by the German federal government. Both European and national regulations oblige network operators to draw up plans which determine the future network expansion requirements and set out the plans for network expansion.

In line with the Energy Industry Act (EnWG), natural gas transmission system operators have to jointly submit to the regulatory authority a ten-year network development plan in each even calendar year and, in each uneven calendar year, a joint implementation report on the network development plan last published. This report must contain information on the status of implementation of the last confirmed network development plan and, in the event of any delays in implementation, must also state the main reasons for such delays. The implementation reports are largely to present an update of the reporting on the implementation of the network development plans and avoid timing overlaps in the preparation of the network development plan and the preparation of the scenario framework for the next network development plan.

The gas network development plan is prepared in a public consultation process in close cooperation with all market participants affected. All market participants are included in the process for preparing the gas network development plan by being given the opportunity to submit comments. In compliance with timetable requirements, the German transmission system operators published the draft of the Gas Network Development Plan 2018-2028 (NEP Gas 2018-2028) for the national gas transmission pipeline network pursuant to section 15a of the Energy Industry Act on 29 March 2018 and submitted it to the BNetzA. In this draft network development plan, the forecast gas supply sources, the identifiable requirements and resulting gas flows in the German gas network are modelled for the next ten years and the expansion of and/or potential investments in the German transmission networks determined and proposed.

The transmission system operators' plans in the draft of the Gas Network Development Plan 2018-2028 for the expansion of the German gas infrastructure provide, among other things, for the extension of the gas transmission pipelines by a further 1,390 km as well as an additional 499 MW of compressor capacity. The total investment volume under the Gas Network Development Plan is therefore some € 7 billion by 2028, of which OGE will be investing some € 2.3 billion.

In the confirmation of the scenario framework for the Gas Network Development Plan 2018-2028, the BNetzA obliged the gas transmission system operators to model a separate supply security option that extrapolates the transport situation in the pipeline system caused by the temporary shutdown of sections of a pipeline leg of the Trans Europa Naturgas Pipeline I (TENP I) beyond 1 April 2019 ("Supply security option TENP").

The shutdown of the affected section of the TENP I pipeline in line with the DVGW rules was extended until 30 September 2020 and the corresponding restriction of transport capacity communicated to market players. Extensive investigations continued in 2018 and are still ongoing to permit a reliable statement to be made on the continued safe operation of this section. From the results so far it has not been poss ble to clearly identify the cause of the defects found.

The transmission system operators had already published the necessary modelling parameters of the requested supply security option in the draft of the Gas Network Development Plan 2018-2028. After prior consultation, the modelling result was sent to the BNetzA on 1 August 2018. On the basis of this result and as a supplement to the draft of the Gas Network Development Plan 2018-2028, the transmission system operators suggest that, under the "supply security option TENP", an additional 54 km of transport infrastructure should be built.

The BNetzA made both the draft of the Gas Network Development Plan 2018-2028 communicated to the BNetzA on 29 March 2018 and the supplement under the "supply security option TENP" available for consultation.

On 20 December 2018, the gas transmission system operators received the BNetzA's request for amendments to the Gas Network Development Plan 2018-2028. The gas transmission system operators have to implement the requested changes within three months. The inclusion of the proposed measures under the "supply security option TENP" in the Gas Network Development Plan 2018-2028 depends on the decision to recommission the sections of TENP I not currently available. On 6 March 2019, the TENP shareholders informed the BNetzA that these pipeline sections would not be recommissioned and that the measures under the supply security option will be included in the Gas Network Development Plan 2018.

In a separate chapter, the Gas Network Development Plan 2018-2028 goes into detail on the challenges of L-gas to H-gas conversion plans. For example, one part of the German gas market is supplied with L-gas that originates solely from German and Dutch deposits. The other deposits available in Germany supply H-gas. For technical and calibration law reasons, H-gas and L-gas are transported in separate systems. Due to the steady decline in German and Dutch L-gas production, the conversion of the relevant areas to H-gas is an important element for maintaining gas supply security. The change-over to H-gas means that all gas appliances in the relevant area have to be adjusted to the higher calorific value of H-gas. In accordance with section 19a EnWG, the gas transmission system operators spread the cost of this over the whole of Germany by means of a separate levy.

As part of the plans to switch over from L-gas to H-gas, L-gas balances, both in terms of supply/demand volumes as well as in terms of capacity, are set up for Germany as a whole and for each of the two market areas GASPOOL and NCG in the Gas Network Development Plan 2018-2028. In these supply/demand volume and capacity balances, forecasts for the development of demand and supply are compared taking into consideration the changeover from L-gas to H-gas and declining L-gas production. Through consultation with the Dutch transmission network operator GTS, it was ensured that the decision taken on 14 November 2018 to reduce annual L-gas production in the Netherlands to 19.4 billion m³ per year is in line with the plan assumptions on L-gas demand in Germany made in the Gas Network Development Plan 2018-2028.

A major element in the conversion from L-gas to H-gas is the expansion of the existing gas transmission system in order to permit both the linking up of the areas currently supplied with L-gas to H-gas sources and a step-by-step changeover. The first areas in the OGE network were successfully converted to H-gas in 2018. Large-scale conversion to H-gas begins at OGE in 2019 and, according to current plans, will be completed by 2029.

Technology

Technical operation of the gas transmission network ran to schedule. Important milestones in the expansion of the gas transmission network were reached in the 2018 financial year as planned. Capacity restrictions due to maintenance, repair and integration measures were communicated in good time and information was continually updated on the Internet.

OGE performed various measures to upgrade and expand its technical infrastructure in 2018. These include measures carried out by Mittel-Europäische-Gasleitungsgesellschaft mbH & Co. KG (MEGAL), Essen, Trans Europa Naturgas Pipeline GmbH & Co. KG (TENP), Essen, Mittelrheinische Erdgastransportleitungsgesellschaft mbH (METG), Essen, Nordrheinische Erdgastransportleitungsgesellschaft mbH & Co. KG (NETG), Dortmund and ZEELINK GmbH & Co. KG (ZEELINK), Essen, which are integrated in the OGE network.

On behalf of MEGAL, a project company of OGE and GRTgaz Deutschland GmbH, Berlin, the Rothenstadt compressor station was expanded on the basis of the gas network development plan by increasing compressor capacity by 3 x 15 MW. Following completion of the building and civil engineering work and pipeline construction at the beginning of the year as scheduled, the three compressor units were successfully commissioned in October.

A further MEGAL project is the construction of the Rimpar compressor station on the basis of the gas network development plan with a compressor capacity of 3 x 11 MW. OGE completed design planning in July 2018 and started execution planning. Land purchase has largely been completed and the documents for approval planning are currently being put together. The project is proceeding according to plan.

As part of the Werne project under the Network Development Plan, the existing station was extended by three compressor units and the station made fit for flow reversal. All three new compressor units were successfully commissioned. The technical side of the reverse flow project at Werne was completed in 2018.

The OGE Herbstein compressor station was successfully commissioned and the plant is now available for gas transport.

The new compressor unit driven by an electric motor (13 MW) was installed to schedule in 2018 at the OGE Krummhörn compressor station. Construction of the compressor building and the adjacent local electrics building was completed in 2018 and the process pipework and compressor unit with ancillary plant were installed and commissioned. The project opens up the opportunity to use electricity or gas flex bly as operating energy in Krummhörn. So surplus electricity from wind farms can be put to good use and an expansion of the electricity grid avoided. Here, the gas transmission network is making a meaningful contr bution to the intelligent sector linking of electricity and gas networks. With regard to the next expansion stage of the Krummhörn compressor station, i.e. the installation of a further gas turbine-driven compressor unit (15 MW), design planning was completed in 2018 and execution planning commenced.

In line with the Network Development Plan, construction of the OGE gas transmission pipeline from Forchheim to Finsing (approx. 77 km, DN 1000) was commenced in January 2018. Commissioning is planned for March 2019.

In line with the Network Development Plan, the OGE gas transmission pipeline from Epe to Legden (approx. 15 km, DN 1100) was laid between February and November 2018 and successfully commissioned.

A regional planning procedure application was submitted for the Network Development Plan projects for the Heiden-to-Dorsten pipeline (approx. 18 km, DN 500/600) and the Erfstadt-to-Euskirchen pipeline (approx. 17 km, DN 400) and work started on preparing the application documents for the official planning approval process.

The ZEELINK project - operated by OGE and Thyssengas GmbH, Dortmund – is proceeding to plan. It consists of the two compressor stations in Würselen (3 x 13 MW) und Legden (2 x 15 MW), a gas transmission pipeline running from Lichtenbusch to Legden (approx. 215 km, DN 1000) and four gas pressure regulating and metering stations and one gas pressure regulating station. As the application documents for the total of three planning approval processes were submitted on schedule to the district governments in Cologne, Düsseldorf and Münster, the planning approval decisions are expected in the 1st quarter of 2019. Land purchase and the construction approval process for the Würselen compressor station were successfully completed in 2018. Preparations for the construction work started in September 2018.

As part of the switchover from L-gas to H-gas running until 2030, OGE is planning and constructing gas pressure regulating and metering stations and gas pipes to connect the former L-gas areas to the H-gas pipelines. The first five stations for the areas in Lower Saxony and Central Hesse to be switched over were completed in 2018. Another 20 gas pressure regulating and metering stations are in planning and will be built successively in the next few years.

Occupational health and safety is a matter of highest priority in the VGT Group. For example, the Group aims to continually reduce the number of accidents and other harmful effects on the health of its employees and employees of partner companies over the long term as well as to constantly improve work ergonomics and occupational health. The targets set for the 2018 financial year were achieved. The number of work-related accidents, measured in terms of TRIFcomb[1], is continuing to fall on a long-term average and taking account of the proportion of jobs with an increased risk (construction work). In absolute figures, this non-financial performance indicator TRIFcomb fell noticeably to 4.5 (previous year: 5.3) despite the fact that construction work increased sharply compared with the previous year. The external auditors of the occupational health and safety management system again noted a further improvement in the safety culture. The HSE subcontractor management activities were intensified, particularly in the major new build projects.

Non-financial statement in accordance with section 315b HGB[2]

Environment, climate and energy

The VGT Group attaches particular importance to environmental protection, climate protection and energy efficiency. Meeting and further developing health, safety and environment goals, while taking the requirements of occupational health and safety, environmental protection and energy efficiency into consideration, are major prerequisites for reliable, safe and efficient gas transportation and for the provision of high-quality services for our customers. It goes without saying that in so doing

[1] TRIFcomb = Total number of work-related accidents (accidents at work and on the way to and from work) of own employees and sub-contractors' employees with medical treatment and/or with lost time per one million hours worked.

[2] In accordance with section 317, para. 2 HGB, the contents and subject matter of the chapter was not part of the audit by the financial statement auditors.

the Group observes the applicable statutory regulations, technical rules/standards and contractual agreements.

Occupational health and safety and environmental protection include an obligation to put processes in place that minimise the risks to health and safety as far as possible for all employees and keep the detrimental effects of our business activities on the environment as small as possible. Therefore, the aim is to avoid work-related illnesses, injuries to persons and accidents as well as damage to the environment. Another goal is to further increase energy efficiency and achieve a lasting reduction in energy demand.

An integrated management system has been developed and introduced in order to control and support the relevant activities; this system meets the requirements of the following standards:

- Quality management in accordance with DIN EN ISO 9001:2015,
- Occupational health and safety management system in accordance with OHSAS 18001:2007,
- Environmental management in accordance with DIN EN ISO 14001:2015,
- Energy management in accordance with DIN EN ISO 50001:2011.

In addition, the management system meets the standards required of a technical safety management system in accordance with the DVGW Code of Practice G 1000. The conformity of the integrated management system with the standards is regularly reviewed by accredited certification bodies.

The main impacts on the environment are in the areas of air pollutants, greenhouse gases and the handling of water pollutants. The gas transport compressor stations operated in the VGT Group are subject to the requirements of the German Greenhouse Gas Emissions Trading Act (TEHG). Well-established processes ensure that the requirements of the TEHG are implemented. This is confirmed at regular intervals by accredited environmental auditors.

A company-appointed officer for water protection and waste management regularly monitors all plant sites and advises and supports those responsible on site in all questions regarding environmental requirements. The appointment of a waste management officer is voluntary although, on average, only some 2 kt of hazardous and 1.8 kt of non-hazardous waste are produced every year throughout Germany.

Important environmental data in the VGT Group are:

- CO emissions: 0.25 kt[3]
- NOx emissions: 0.48 kt[3]
- CO_2 emissions: 456 kt[4]
- Energy consumption - gas: 2.7 TWh[5]
- Energy consumption - electricity: 66.4 GWh[5]

In addition, approx. 0.6 dam³ of liquid fuels (vehicles and emergency/alternative power generation) are consumed.

There were no relevant environmental incidents in 2018.

Employees

At the end of 2018, the VGT Group had 1,417 employees, excluding management and apprentices. The Group trains apprentices for technical and administrative occupations at eight locations in North Rhine-Westphalia (Essen and Ummeln), Lower Saxony (Krummhörn), Bavaria (Rimpar, Waidhaus and Wildenranna), Hesse (Gernsheim) und Rhineland Palatinate (Mitte brunn).

In the VGT Group, the collective wage agreement and various works agreements and policies basically set the framework for the employment conditions of the employees – irrespective of criteria such as gender, race or religion. In this connection, very close cooperation with the codetermination bodies is a matter of course.

The aim is to create working conditions and workplaces that both satisfy the requirements of the field of work and protect the health of the employees. The subject of occupational health and safety, in particular the avoidance of accidents at work, has high priority. This is evidenced by the many training courses, information materials and events on this subject as well as by an occupational health and safety documentation system that is intensively used. In addition, as part of health management, the VGT Group offers its employees a wide range of benefits every year, such as free cancer screening, dietary advice and fitness checks. Height-adjustable desks are also standard in the offices.

[3] Report for the year 2016 to the monitoring authorities in accordance with the 11th Federal Emission Control Act (BImSchV).
[4] Total plants subject to emissions trading under TEHG for the year 2017.
[5] Consumption of he compressor stations and manned locations in the year 2017.

In order to enable its employees to reconcile their work and family commitments, the VGT Group offers its employees various working time models providing varying degrees of flexibility and numbers of working hours. This provides a good combination of flex bility and planning reliability so employees can cope with the demands of both parts of their lives. These working time models are supplemented, where poss ble, by alternatives to workplaces on the company premises (home offices).

Furthermore, the VGT Group offers employees family caregiver leave models if needed. Employees can also use the counselling services of an external provider if they need help on the subject of caregiving.

Remuneration depends on the relevant position and its evaluation. As part of job evaluations, the “value” of all tasks, responsibilities etc. that the job involves is systemically determined on the basis of qualitative requirement features and the job is then assigned to the pay groups of the applicable collective pay agreement or to the pay classification system for employees outside the collective pay agreement.

The VGT Group offers a comprehensive further training programme to encourage lifelong learning – both with regard to professional qualifications and to social skills. This programme is supplemented by various Human Resources development modules specially designed for various target groups in the company and supporting different career paths.

Social engagement

VGT is aware of its corporate social respons bility. For this reason, OGE has already been running its apprentice training facility in the Altenessen district of Essen for just under 80 years. Every year, this facility trains young people in technical occupations. Commerical apprenticeships are offered at the company's three locations in Essen. This offering is supplemented by apprenticeships for young people in technical occupations at seven sites throughout Germany. At the end of 2018, the company ermployed a total of 75 technical and commercial apprentices.

The VGT Group attaches great importance to the subject of integration. In 2016, OGE took on an additional four apprentices from Syria and Iran. In 2017, another two apprenticeships were created for young refugees so a total of six young male refugees were serving apprenticeships in technical occupations in 2018. Further recruitments are planned for 2019.

Through the annual "Last Few Cents Campaign", the VGT Group and its employees support numerous charity projects, for example in 2018 the Lebensdurst-Ich and BUNTER KREIS societies in the Aachen region, the Schließfach café in Essen and the Wichtelfarm – Wir helfen Kindern e. V., a society helping children in need and their families. The "Last Few Cents Campaign" has been running since 2007. Roughly half of the workforce has joined in and donates the net cent amounts from their monthly salaries to charitable causes. These cents are collected and topped up by the company at the end of the year. Some € 50,000 in donations was raised in the last five years. It helps organisations from different areas to continue their work and makes wide-ranging social engagement possible.

Compliance

Compliance has top priority in the VGT Group. Compliance with law, regulations and internal policies is regarded as a matter of course and is part of the corporate culture. Compliance creates the framework for corporate actions and serves to safeguard the company's sustained business success.

The subject of compliance has gained considerably in importance in recent years. The reasons for this are, on the one hand, the ever-greater complexity of the statutory and regulatory framework. On the other hand, compliance subjects are nowadays increasingly the focus of public interest. The reputation and economic success of a company can be considerably damaged by compliance violations. Therefore, nowadays, a risk-focused and preventive compliance strategy is more important than ever. For this reason, it is the Groups's declared aim to make compliance with external and internal rules and regulations a self-evident part of the thinking and actions of all bodies, managers and employees.

Group-wide, the following points have been identified as the main focuses in the compliance environment:

- Anti-corruption / fraud prevention
- Equal treatment in accordance with EnWG
- Anti-trust law
- Data protection
- Insider law
- Information security

The main points are described in a Code of Conduct and two policies. The workforce of the VGT Group receives regular training on these topics, in particular through e-learning and awareness programmes.

The OGE Compliance Office coordinates all compliance activities of the Group and handles the relevant compliance topics. In addition, the Compliance Office is available to all managers and employees as the central contact and advisor on all compliance questions.

The Code of Conduct that has been rolled out throughout the Group is to convey the key principles and rules for lawful and responsible conduct. It is the duty of all employees to live the values and rules that are detailed in this Code of Conduct and in the company policies and to use them as a benchmark for their actions. It is to serve as a basis and guide for every employee in their daily work and create a binding framework for how to deal with business partners, competitors, officials and public institutions.

The Code of Conduct lays down in particular requirements for dealing with business partners, government bodies and other third parties, for handling confidential information and for dealing responsibly with the property and resources of the company and, where necessary, refers to explicit rules in other policies.

A whistleblower hotline has been set up on which information can be given on violations of the rules in the VGT Group, in particular with respect to corruption, fraud, anti-trust law and infringements of the Code of Conduct. The information received by the Compliance Office is examined according to clearly defined respons bilities and processes while maintaining strict confidentiality.

VGT commits to taking systematic action against any form of corruption. The aim of the internal anti-corruption policy is to lay down clear rules and responsibilities through which cases of corruption are prevented in good time and to pursue any such cases in a rigorous and consistent manner. In addition, internal training courses are to heighten the awareness of all employees of the risks of corruption.

Features of the internal control system

The Group has a uniform accounting and reporting policy for the consolidated financial statements. This includes a description of the accounting and measurement methods to be applied in accordance with IFRS. Furthermore, there is a binding balance-sheet closing calendar.

In conjunction with the closing processes, additional qualitative and quantitative information relevant to accounting and the preparation of financial statements is compiled. Furthermore, dedicated quality assurance processes are in place for all relevant departments to discuss and ensure the completeness of relevant information on a regular basis.

The consolidated financial statements of the VGT Group are prepared using SAP consolidation software in a multi-stage process. The ongoing accounting and annual financial statement preparation processes are divided into discrete functional steps. Automated or manual controls are integrated into each step. Defined organisational procedures ensure that all transactions and the preparation of the consolidated financial statements and annual financial statements are recorded on an accrual basis, processed and documented in a complete, timely and accurate manner. In addition, quality is assured using the four-eye principle.

The results of this quality-assured process, which is used for the preparation of quarterly and annual financial statements as well as for planning at regular intervals, are the basis of internal management reports, which are used for (Group) management purposes. Key financial performance indicators applied in this context are transport revenues, EBITDA (earnings before interest, tax, depreciation and amortisation – but including income from equity investments and from companies accounted for using the equity method) and net debt-asset ratio.

Investments

As expected, the Group's capital expenditure was again significantly high in the 2018 financial year at € 468.7 million (previous year: € 509.7 million). Property, plant and equipment accounted for most of this figure at € 445.0 million (previous year: € 485.9 million).

OGE accounted for € 330.6 million of the Group's total investment in property, plant and equipment. OGE invested in the expansion and modernisation of pipelines including a total of € 99.8 million in the construction of the Schwandorf-to-Forchheim-to-Finsing pipelines and € 28.8 million in the Epe-to-Legden loop line. In addition, OGE invested € 25.0 million in the construction of three new compressor units in Werne. A further € 41.0 million was invested in the expansion of the compressor station in

Herbstein, construction of which started in 2015. MEGAL accounted proportionately for investments of € 30.4 million in property, plant and equipment, relating largely to the construction of a new compressor station in Rothenstadt and one in Rimpar. A further € 70.4 million of Group capital expenditure was attributable to projects at Zeelink relating to construction of the new compressor stations in Würselen and Legden and construction of the new ZEELINK pipelines I and II.

Investments in property, plant and equipment are mostly part of the network development plan.

The additions to financial assets amounted to € 9.1 million, of which € 8.5 million relate mainly to the increase in the equity of GasLINE Telekommunikationsnetzgesellschaft deutscher Gasversorgungsunternehmen mbH & Co. KG, Straelen.

Financing

Since 1 January 2013, there has been a profit-and-loss transfer agreement with OGE, under which OGE undertakes to transfer its entire profit to VGT and VGT undertakes to offset any losses sustained by OGE. The agreement was concluded for a period of five years and is extended by periods of one year if it is not terminated. Consequently, the agreement was extended as of 31 December 2018 by a further year. Since 1 January 2013, VGT and OGE have formed a tax unit for corporate and trade tax purposes, according to which VGT is the controlling company and OGE the controlled company. OGE and VGT have concluded an income tax allocation agreement to allocate to OGE the taxes on income incurred by OGE in its commercial operations. As a result of the income tax allocations, OGE recognises an income tax liability that it would have incurred if it had not formed a single tax unit with VGT.

In addition, since 1 January 2013, there has also been a profit-and-loss transfer agreement with VGS, under which VGT undertakes to transfer its entire profit to VGS and VGS undertakes to offset any losses sustained by VGT. The agreement was also concluded for a period of five years and is also extended by periods of one year if it is not terminated. Furthermore, since 1 January 2013, VGT and VGS have also formed a tax unit for corporate and trade tax purposes, according to which VGS is the controlling company and VGT the controlled company. VGT and VGS also concluded an income tax allocation agreement to allocate to VGT the taxes on income incurred by VGT in its commercial operations. VGT recognises an income tax liability that VGT would have incurred if it had not formed a single tax unit with VGS.

In line with the existing profit-and-loss transfer agreement and in view of considerable future pending investments, the shareholders resolved at the shareholders' meeting, after thorough examination, to leave the entire net income of OGE reported for the year under commercial law in the amount of € 53.7 million in OGE by transferring it to the company's revenue reserves.

In the 2013 financial year, VGT placed three bond tranches with a total volume of € 2,250.0 million on the capital market. A further bond with a volume of € 500 million was issued in the 2018 financial year.

The syndicated loan facility in the amount of € 600.0 million concluded by VGT on 4 August 2017 was extended by one year to 2023 on 16 July 2018. OGE is also a borrower under the loan and therefore entitled to use the credit line. As of the reporting date, the credit facility had not been drawn down. This credit line includes two ancillary facilities in the amount of € 20 million and € 1.5 million. While the former serves as an overdraft facility for the OGE cash pool, the latter is reserved for surety (e.g. bank guarantees) and € 1.0 million had been utilised as of 31 December 2018 for the issuing of bank guarantees.

Owing to the terms of the bonds, which mature in 2020, 2023, 2025 and 2028, and of the RCF with an expected term until 2024 (minimum term until 2023), VGT has, overall, a balanced liquidity profile with a wide maturity spread.

In order to cover their obligations arising from pension entitlements, OGE and METG use a Contractual Trust Agreement (CTA). The trust fund set up in this connection is managed on a fiduciary basis by Helaba Pension Trust e.V. (Helaba), Frankfurt am Main. Plan assets at Helaba have been netted with the corresponding pension obligations in the balance sheet. In the 2018 financial year, € 52.0 million was added to the plan assets for pension obligations. Furthermore, in 2018 remuneration payments of € 0.7 million made for fulfilment shortfalls in connection with part-time phased-retirement programmes were taken from the trust assets over the course of the year. Of this amount, € 0.6 million is for remuneration payments for 2017 and € 0.1 million for remuneration payments for 2018.

Report on economic position

In the following, the Group's main earnings drivers and income statement items are compared with the figures and the prior year's forecast in order to provide a better analysis of the company's situation.

The main driver of the Group's profit is the revenues from OGE's regulated gas transport business.

OGE charges a uniform tariff for entry and exit. Compared with the previous year, this resulted in roughly 9 % higher fees for both entry and exit. Whilst the system for calculating the regulated fees remained the same, the higher fees were due mainly to the forecast decrease in bookings as shippers changed their booking behaviour and to higher cost allocation amounts for the market area conversion levy.

Overall, Group revenues increased by 9.2 % to € 1,008.2 million in 2018 (previous year: € 923.0 million) and therefore exceeded expectations. Total revenues consist solely of revenues from the gas transport business and from the services business. Revenues from the gas transport business and transport-related services amounted to € 883.6 million in the 2018 financial year (previous year: € 803.0 million).

As regards gas transport revenues, the actual capacity marketed was much higher than expected at the time when fees were set. Furthermore, the cost of fuel gas required for gas plant was well below the prior-year figure and the forecasts due to lower volumes. Owing to these effects, the revenues from the gas transport business were € 63.6 million higher than the revenue cap expected and allowed under section 4 of the Incentive Regulation Ordinance (ARegV). In accordance with the new Incentive Regulation Ordinance mechanism, this excess revenue will be spread over the 3-year period from 2020 to 2022 as part of cross-period balancing and will lead to lower revenues in those years.

Contrary to expectations, the revenues of the services business were slightly up on the previous year's level at € 124.6 million (previous year: € 120.0 million). The increase was mainly due to higher project volumes.

Contrary to expectations, the cost of materials fell compared with the previous year by a total of some € 3.8 million. Higher cost allocation amounts for the market area conversion levy were offset by the lower cost of fuel gas and beneficial use fees as well as lower expenses for purchased services.

At the end of 2018, the VGT Group had 1,417 employees (previous year 1,358), excluding management and apprentices. Personnel costs during the financial year totalled € 161.4 million (previous year: € 157.5 million).

Earnings before tax increased substantially compared with the previous year by € 87.7 million to € 316.9 million, largely as a result of the above-mentioned effects. The Group's net income amounted to € 224.6 million in the 2018 financial year and, contrary to expectations, was well above the figure for the previous year (€ 158.9 million). At 22.3%, the profit margin[6] remained at a high level (previous year: 17.2%).

As a key internal control metric, EBITDA is defined as follows:

€ million	31 Dec. 2018	31 Dec. 2017
Income before financial result and taxes	363.6	283.5
Income from equity investments	4.5	-0.6
Income from companies accounted for using the equity method	6.2	15.9
Depreciation and amortisation	151.9	155.1
Earnings before interest, tax, depreciation and amortisation (EBITDA)	526.2	453.9

Owing to the aforementioned developments, at € 72.3 million EBITDA was substantially higher than the previous year's figure and therefore well exceeded the forecast.

The Group's financial result contained interest expense of € 57.9 million (previous year: € 59.8 million), which mainly reflects interest expenses under the VGT bonds and the pro-rata interest expense of the companies MEGAL and TENP (adjusted for capitalised borrowing costs). By contrast, interest income amounted to € 0.5 million (previous year: € 0.1 million; for an exact breakdown, see the Notes to the consolidated financial statements).

Income taxes for the Group totalled € 92.3 million (previous year: € 70.3 million). This figure contains deferred tax income in the amount of € 6.2 million (previous year: € 4.0 million).

[6] Definition: Consolidated net income for the year divided by revenues.

As of 31 December 2018, the Group's total assets amounted to € 5,271.1 million (previous year: € 4,660.1 million), resulting in a net debt-asset ratio of 73.4% (previous year: 76.6%; detailed breakdown in the Notes to the consolidated financial statements), which is in line with expectations. Of the external funds, 6.2% relate to provisions, 82.1% to liabilities and 11.7% to deferred tax liabilities. Financial liabilities contained within liabilities amount to € 3,109.0 million (previous year: € 2,661.6 million). The majority of these liabilities (€ 2,741.3 million) (previous year: € 2,242.1 million) related to bonds issued by VGT. Furthermore, miscellaneous financial liabilities resulted primarily from liabilities of the pipeline companies MEGAL and TENP to banks. Liquid funds amounted to € 411.5 million as of 31 December 2018 and therefore increased by € 305.1 million year on year. This development is in line with the forecast made in the previous year. Of the Group's total assets, fixed assets accounted for € 4,661.5 million as of the reporting date (previous year: € 4,372.1 million).

In the 2018 financial year, the Group generated cash flow from operating activities in the amount of € 466.4 million (previous year: € 388.4 million). Cash used for investing activities totalled € -513.9 million in 2018 (previous year: € -433.7 million).

Cash flow from financing activities amounted to € 275.3 million (previous year: € -37.7 million) and mainly comprised proceeds from the issuance of a new bond in the amount of € 497.9 million, payments to the parent company, VGS, in the amount of € -98.7 million (previous year: € -54.6 million), cash interest payments under VGT bonds and for loans of the companies MEGAL and TENP. Cash flow was therefore as forecast in the previous year.

In summary, the Management believes that the Group's net assets, financial position and results of operations for the financial year are stable and secure, as forecast in the previous year.

Report on opportunities and risks

The Group's opportunities and risks are determined by its main companies.

In its business operations, the Group is exposed to a large number of risks connected with its activities. In line with the requirements of the Corporate Sector Control and Transparency Act (KonTraG), the aim of the Group's internal risk management system is to use a management and control system to identify and record risks which might threaten the continued existence of the company and, if necessary, to take appropriate counteraction.

The basis for risk management is the opportunity and risk policy which is binding throughout the Group. Risk reporting is an integral part of the internal control system, thus ensuring the continual identification and evaluation of significant opportunities and risks.

Description of the opportunity and risk management process

The opportunity and risk situation of the Group is assessed and documented every quarter in a standardised process. The OGE Board of Management and Supervisory Board are regularly informed as part of this process. The aim of the process is to recognise significant opportunities and risks at an early stage and – wherever possible and necessary – take action to exploit opportunities or mitigate risks.

A risk or opportunity is defined as an event which leads to a deviation from the mid-term planning, which covers a period of 5 years.

Risks are evaluated with regard to probability of occurrence and possible net impact (i.e. maximum impact of the event on profit before tax and/or liquidity) and their cumulative impact over the 5-year period reported to the OGE Board of Management. The reporting threshold per individual case is a cumulative net impact of € 10.0 million over the 5-year period. The net impact is defined as the value of the risk after allowance for precautionary measures in the worst case. Risks with a probability of occurrence of more than 50% are always included in the mid-term planning. In addition, potential opportunities are also recorded.

Risks in the order of magnitude of € 100.0 million and more in the above-mentioned period are considered to be significant. Risks of this order of magnitude are reported to the OGE Supervisory Board.

Significant risks

Significant risks are classified according to probability of occurrence and net impact as shown in the following table:

Probability of occurrence in %	low	≤ 5
	moderate	> 5 ≤ 20
	high	> 20
Cumulative net impact in € million over 5 years	low	≥ 100 ≤ 200
	medium	> 200 ≤ 300
	high	> 300

Regulatory framework: The risk situation of OGE is largely governed by the regulatory environment. As a regulated company, OGE's earnings situation and earnings prospects are directly dependent upon decisions made by the regulatory authorities. Important parameters affecting regulated revenues are the approval of the cost base, return on equity, the general sectoral productivity factor and the company-specific efficiency factor. The decisions of the authorities affect the company's revenues, earnings and liquidity situation.

Probability of occurrence: moderate; net impact: low

Information technology: OGE uses complex information technology (IT) to operate and control the pipeline network.

As a consequence, there are fundamentally risks of the failure of parts of the IT systems leading to temporary impairments to business activities. Failure may be the result of deliberate, unauthorised modification (external access) and/or an impairment of functionality due to errors occurring during operation or hardware and software component faults. This could affect both marketing systems and network control systems. A failure of the network control systems could, in the worst case scenario, lead regionally to a total failure of the gas supply system for several days.

Probability of occurrence: low; net impact: high

Integrity breaches may also affect the marketing or the network control systems. System errors or system failure may mean that proper handling of network control or transport capacity marketing can no longer be guaranteed. This may lead to claims for compensation by shippers.

Probability of occurrence: low; net impact: medium

OGE safeguards against these risks with redundant systems as well as comprehensive quality assurance and access protection systems. In 2017, OGE was officially certified by TÜV Rheinland according to the BNetzA's IT security catalogue which is binding for all network operators. The legal requirements are met.

Transport business operation: To ensure fault-free operation of the transport business, OGE employs high quality standards and sophisticated quality assurance concepts. Nevertheless, errors and resultant claims for compensation by customers cannot be entirely excluded.

Probability of occurrence: low; net impact: high

Technical plant and on-site conditions: Local site conditions change over the course of time (e.g. changed soil conditions due to erosion). As a result, measures to restore the original conditions may be necessary.

Probability of occurrence: low; net impact of the individual risks: low

Investment requirements: Due to the high volume of plant and machinery that the OGE business involves, additional investment requirements may lead to considerable additional funding requirements in the medium term. However, against the background of regulation, frequent opportunities arising from additional transport revenues are to be weighed against these additional investments.

Market-driven price developments and additional measures necessary during the performance of a project may lead to increases in the volume of investments.

Probability of occurrence: high; net impact: medium

External influences such as natural disasters may partly or completely destroy important plant (e.g. compressor stations), which may lead to temporary interruptions or a local outage preventing gas transportation. In addition to temporary losses of earnings, any necessary reconstruction work may require additional financing.

Probability of occurrence: low ; net impact: high

The increasing age of plants, additional requirements of market participants, changes to the network development plan or changes in legal requirements (e.g. emission regulations) may make unscheduled investments necessary.

Probability of occurrence: moderate; net impact of the individual risks: low

Risks which are not significant

OGE generates the majority of its revenues from the marketing of transport capacities with a small number of key accounts.

Due to the regulatory account system, terminations of long-term capacity bookings only lead to temporary declines in revenues. Resulting revenue shortfalls in comparison to the approved revenue cap are recognised in the so-called regulatory account, bear interest and are balanced out through an adjustment of the calendar-year revenue cap in future financial years. There is therefore no sustained risk from fluctuations in demand. The syndicated credit line also minimises the liquidity risk.

Financial risks

In the normal course of business, the Group is exposed to various financial risks: market risks (covering foreign exchange risks, interest-related risks due to changes in the fair value, interest-related cash flow risks and market price risks), credit risks and liquidity risks. The overarching Group risk management focuses on unforeseeable developments in the financial markets and its aim is to minimise the potentially negative effects on the Group's financial situation. The Group uses derivative financial instruments to hedge certain risks.

Risk management is performed decentrally both by the Finance department of the service provider OGE and by the Investment Controlling department of the shareholders. Financial risks are identified, assessed and hedged in close cooperation with the Group's operational units. Owing to the very limited volume of transactions in foreign currency as well as the only occasional raising and securing of loans, the currency risks, interest rate risks and credit risks are handled and the use of derivative and non-derivative financial instruments is agreed on a case-by-case basis with the relevant bodies of the company affected.

Foreign currency risks may largely arise from procurement transactions with business partners outside the eurozone. When such non-euro-based procurement transactions are conducted, foreign currency forwards are used to hedge the foreign currency risk. Due to the very limited volume of transactions in foreign currency, the Group is currently only exposed to an insignificant foreign currency risk.

The Group's interest rate risks arise from long-term interest-bearing liabilities. The liabilities with floating interest rates expose the Group to interest-related cash flow risks which are partly offset by bank balances with floating interest rates. The liabilities with fixed interest rates result in an interest-related risk arising from changes in the fair value.

The long-term focus of the business model basically means meeting a high proportion of financing requirements at fixed interest rates. In the Management's opinion, VGT therefore has an interest risk from long-term interest-bearing liabilities in addition to the refinancing risk fundamentally existing on expiry of loans. The liabilities with fixed interest rates basically give rise to a risk of higher financing costs when refinancing has to be performed in future.

In the Management's opinion, credit risks at OGE - and therefore at VGT - result from cash and cash equivalents, derivative financial instruments and deposits at banks and financial institutions as well as from the utilisation of credit facilities by customers involving outstanding receivables and transactions performed. In the financing area, the Group only works with banks with an independent rating given by the three big rating agencies. For cash investments, the rating must be at least "BBB+" to "A-" (Standard & Poor's, Fitch) or "Baa1" to "A3" (Moody's), while for borrowings, on average the rating must be at least "BBB" (Standard & Poor's, Fitch) or "Baa2" (Moody's) (the focus being on the "unsecured long-term rating" if available). The ratings of all banks as well as other indicators of credit standing (such as current prices of credit default swaps) are continuously monitored.

The Group generates the majority of its revenues from the marketing of transport capacities with a small number of key accounts. Key accounts are reviewed in regular credit assessments, using credit ratings from recognised credit agencies.

As long as the Group meets its duty of diligence in the general credit assessment of its customers, payment defaults of individual customers are balanced out as part of the regulated tarification. Therefore, the credit risk from key accounts is only a temporary phenomenon.

In the past, there have been no significant payment defaults. The Management is also not expecting any defaults in future as a result of non-performance by these business partners.

The cash flow forecasts are prepared centrally for every major operating company and combined into a Group forecast. The Management monitors the rolling advance planning of the Group's liquidity reserve to ensure that sufficient liquidity is available to cover operational requirements and that unutilised credit facilities provide enough flexibility at all times. Such forecasts take into account the Group financing plans, compliance with loan agreements, the meeting of internal target balance sheet figures as well as, where applicable, external statutory or official requirements.

Risks associated with financial instruments

There are foreign exchange risks for the VGT Group from procurement transactions with business partners outside the eurozone. If required, derivative financial instruments are concluded exclusively for hedging purposes. The Group had no hedges in its financial portfolio at the end of the financial year 2018.

As of 31 December 2018, interest rate risks due to market interest rate fluctuations of the Euribor from floating-rate loans at the proportionately consolidated Group company, TENP, in the amount of € 70.1 million (nominal amount) and the proportionately consolidated Group company, MEGAL, in the amount of € 68.9 million (nominal amount) are hedged by swap agreements as part of hedging relationships. These interest swaps are microhedges, which are given prospective effectiveness through matched maturities and volumes.

Opportunities

The main opportunities are through additional increases in efficiency compared with the approved revenue cap. However, due to the regulatory framework these are only of a temporary nature.

Moreover, the regulatory framework may change, providing further opportunities and risks for OGE.

Net impact: medium

The risk of higher expansion obligations due to changes in the network development plan also presents, on the other hand, an opportunity for higher returns from additional investments.

Overall assessment of opportunity and risk situation

In summary and as in the previous year, the Board of Management sees no risks threatening the continued existence of the company as at the reporting date and for the forecast period and considers the Group's risk-bearing capability to be fully ensured.

Material legal disputes

In December 2016, OGE (alongside other network operators) lodged an appeal with the Düsseldorf Higher Regional Court against the BNetzA's decision on the rate of return on equity for the third regulatory period. On 22 March 2018, the rate of return set by the BNetzA was revoked by the court's ruling and the BNetzA ordered to set a new rate. The BNetzA has filed a legal appeal against this ruling with the Federal Court of Justice (BGH). The court of final instance ruling is expected in 2019.

Furthermore, in April 2018 OGE lodged an appeal with the Düsseldorf Higher Regional Court against the general sector productivity factor set by the BNetzA for the third regulatory period as there are great doubts about the legality of the methodology used by the BNetzA. The deadline for submission of the statement of the grounds for appeal was extended to November 2019. A date for the hearing has yet to be set.

Report on expected developments

According to the forecast on the overall economic situation made by the German Council of Economic Experts, the German economy is expected to continue to grow in 2019. GDP is forecast to increase to 1.5% on an annual average.

With effect from 1 January 2019, OGE adjusted the standard transport fees for entry and exit. As a result, fees for entry and exit are some 10% higher than in 2018. The system for charging authority-regulated fees remained unchanged. On the one hand, the higher fees are due to an increase in capital expenditure measures. This expansion work under the gas network development plan will not only strengthen supply security in Germany but also permit the start of L/H-gas market area conversion in North Rhine-Westphalia, Lower Saxony and Hesse. On the other hand, the increase in fees is a result of the higher market area conversion levy and effects from the regulatory account.

Overall, the Board of Management is expecting transport revenues in 2019 to be on the same level as in 2018.

Revenues of the services business are expected to be slightly lower than in the 2018 financial year. The cost of materials is forecast to be much higher than in the 2018 financial year, in particular as a result of higher cost allocation amounts for the market area conversion levy.

A substantial increase in interest expense from the bond issued in September 2018 is expected in the financial result (considered on a pro-rata-basis in the 2018 financial year). The financial result will also be impacted by considerably lower income from equity investments compared with the reporting year and depreciation which is forecast to be slightly higher than in the previous year. By contrast, tax charges are expected to be much lower than in the previous year.

In view of the above-mentioned effects, the Board of Management anticipates that EBITDA and Group net income for 2019 will be appreciably lower than the figure for the 2018 financial year. Net debt-asset ratio is forecast to be slightly higher than in the reporting year.

Given continued high capital expenditure on measures under the network development plan, investments are forecast to be appreciably higher than in the reporting year.

Owing to the expected development of results and investments, cash flow for 2019 is expected to be well below the level in the 2018 financial year. In summary, the Board of Management believes that the company's liquidity situation will be stable and secure.

In the field of occupational safety, the Board of Management's aim is to confirm the previous trend towards a reduction in the number of workplace accidents and to further develop the safety culture. In order to achieve this, appropriate measures have been either put in place or continued.

Consolidated Financial Statements

Vier Gas Transport GmbH

1 January to 31 December 2018

Contents

Consolidated Balance Sheet

in € million	Note	31 Dec. 2018	31 Dec. 2017[1]	1 Jan. 2017[1]
Assets				
Non-current assets				
Intangible assets	4.3	47.3	41.8	54.4
Goodwill	4.2	830.4	830.4	830.4
Property, plant and equipment	4.4	3,638.4	3,346.4	2,990.4
Financial assets	4.5	145.4	153.5	168.8
Companies accounted for using the equity method		*112.8*	*121.0*	*126.5*
Other financial assets		*32.6*	*32.5*	*42.3*
Deferred tax assets	4.11	24.3	26.9	24.5
Non-current receivables	4.6	38.0	39.7	54.6
Total		**4,723.8**	**4,438.7**	**4,123.1**
Current assets				
Inventories	4.7	39.3	30.4	32.6
Trade receivables (including advance payments made)	4.8	35.7	33.6	30.9
Receivables from tax creditors	4.8	14.5	13.6	7.8
Other receivables	4.8	46.3	37.4	61.6
Liquid funds	4.9	411.5	106.4	189.4
Total		**547.3**	**221.4**	**322.3**
Total assets		**5,271.1**	**4,660.1**	**4,445.4**

in € million	Note	31 Dec. 2018	31 Dec. 2017[1]	1 Jan. 2017[1]
Equity and liabilities				
Equity				
Subscribed capital	4.10	-	-	-
Additional paid-in capital	4.10	925.6	925.6	925.6
Retained earnings	4.10	254.0	139.7	26.2
Accumulated other comprehensive income	4.10	-0.7	-1.7	-2.3
Total		**1,178.9**	**1,063.6**	**949.5**
Non-current liabilities				
Provisions for pensions and similar obligations	4.12	111.4	130.2	134.3
Other provisions	4.13	95.5	92.5	97.0
Financial liabilities	4.14	3,014.2	2,553.2	2,493.1
Other non-current liabilities	4.14	30.3	29.4	27.0
Deferred tax liabilities	4.11	477.4	492.8	490.1
Total		**3,728.8**	**3,298.1**	**3,241.5**
Current liabilities				
Other provisions	4.13	45.9	34.3	41.3
Financial liabilities	4.14	94.8	108.4	76.6
Trade payables	4.14	92.3	81.7	54.6
Other liabilities	4.14	130.4	74.0	81.9
Total		**363.4**	**298.4**	**254.4**
Total equity and liabilities		**5,271.1**	**4,660.1**	**4,445.4**

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

[1] The prior-year figures have been adjusted owing to the retrospective application of FRS 15. Further information is given in section 2.23.

Consolidated Income Statement

in € million	Note	1 Jan.–31 Dec. 2018	1 Jan.–31 Dec. 2017
Revenues	5.1	1,008.2	923.0
Changes in inventories		-0.4	0.3
Own work capitalised	5.2	27.4	26.2
Cost of materials	5.4	-293.7	-297.5
Personnel costs	5.5	-161.4	-157.5
Depreciation, amortisation and impairment charges	5.7	-151.9	-155.1
Other operating income	5.3	18.2	25.8
Other operating expenses	5.6	-82.8	-81.7
Income before financial result and taxes		**363.6**	**283.5**
Income from equity investments		4.5	-0.6
Income from companies accounted for using the equity method		6.2	15.9
Interest result		-57.4	-59.7
of which interest expense		*-57.9*	*-59.8*
Impairment of financial assets		0.0	-9.9
Financial result	**5.8**	**-46.7**	**-54.3**
Earnings before tax		**316.9**	**229.2**
Current taxes		-98.5	-74.3
of which income tax allocation		*-95.4*	*-73.5*
Deferred taxes		6.2	4.0
Income taxes	**5.9**	**-92.3**	**-70.3**
Net income		**224.6**	**158.9**
Share in net income attr butable to the sole shareholder of the parent company		224.6	158.9

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

in € million	Note	1 Jan.–31 Dec. 2018	1 Jan.–31 Dec. 2017
Net income		**224.6**	**158.9**
Other comprehensive income		**-12.3**	**8.9**
Reclassifiable OCI		1.0	0.6
Cash flow hedges	*4.10*	*0.6*	*0.9*
Deferred taxes	*4.10*	*0.4*	*-0.3*
Not reclassifiable OCI		-13.3	8.3
Remeasurement of defined benefit plans	*4.10*	*-19.6*	*12.3*
Deferred taxes	*4.10*	*6.3*	*-4.0*
Comprehensive income		**212.3**	**167.8**
Share in net income attributable to the sole shareholder of the parent company		212.3	167.8

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

				Change in accumulated other comprehensive income	
in € million	**Subscribed capital***	**Additional paid-in capital**	**Retained earnings**	**Cash flow hedges**	**Total**
1 Jan. 2018	**.**	**925.6**	**139.7**	**-1.7**	**1,063.6**
Comprehensive income			**211.3**	**1.0**	**212.3**
Net income			224.6		224.6
Other comprehensive income			-13.3	1.0	-12.3
Remeasurement of defined benefit plans			*-13.3*		*-13.3*
Change in accumulated other comprehensive income				*1.0*	*1.0*
Profit transferred			**-97.0**		**-97.0**
of which profit transferred in advance			-90.0		-90.0
31 Dec. 2018	**.**	**925.6**	**254.0**	**-0.7**	**1,178.9**

*The subscr bed capital of VGT is € 25k. It is fully paid in and unchanged over the previous year.

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

in € million	Subscribed capital*	Additional paid-in capital	Retained earnings	Change in accumulated other comprehensive income Cash flow hedges	Total
1 Jan. 2017	**.**	**925.6**	**26.2**	**-2.3**	**949.5**
Comprehensive income			**167.2**	**0.6**	**167.8**
Net income			158.9		158.9
Other comprehensive income			8.3	0.6	8.9
Remeasurement of defined benefit plans			*8.3*		*8.3*
Change in accumulated other comprehensive income				*0.6*	*0.6*
Profit transferred			**-53.7**		**-53.7**
of which profit transferred in advance			-45.0		-45.0
31 Dec. 2017	**.**	**925.6**	**139.7**	**-1.7**	**1,063.6**

*The subscr bed capital of VGT is € 25k. It is fully paid in and unchanged over the previous year.

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

Consolidated Cash Flow Statement

in € million	Note	1 Jan. – 31 Dec. 2018	1 Jan. – 31 Dec. 2017
Cash provided by operating activities		**466.4**	**388.4**
Net income		224.6	158.9
Depreciation and amortisation/impairment charges	5.7, 5.8	151.9	165.0
Changes in provisions		28.3	9.1
Changes in deferred taxes	5.9	-6.3	-4.0
Dividends received[2]		29.3	16.8
Changes plan assets		-51.3	-12.4
Interest received	5.8	0.3	0.1
Other adjustments		71.9	53.4
Changes in operating assets, liabilities and income tax		19.3	1.9
Inventories		*-8.9*	*2.1*
Trade receivables		*-2.8*	*-2.6*
Other operating receivables and tax claims		*-35.0*	*-7.5*
Trade payables		*-0.4*	*6.2*
Other operating liabilities and tax obligations		*66.4*	*3.7*
Loss from disposal of assets		-1.6	-0.4
Intangible assets and property, plant and equipment		*-1.6*	*-0.4*
Cash used for investing activities		**-513.9**	**-433.7**
Proceeds from the disposal of intang ble assets and property, plant and equipment	4.3, 4.4	11.5	1.8
Proceeds from the disposal of other equity investments and equity-accounted investments		0.0	18.0
Purchases of investments in intangible assets and property, plant and equipment	4.3, 4.4	-436.2	-469.6
Purchases of other equity investments and equity-accounted investments	4.5	-8.8	-7.7
Proceeds from / purchases of other financial investments		-80.4	23.8
Proceeds from the disposal of other financial investments		*11.5*	*24.1*
Purchases of other financial investments		*-91.9*	*-0.3*
Cash used for financing activities		**275.3**	**-37.7**
Interest paid	5.8	-64.8	-66.3
Proceeds from financial liabilities		1,000.9	162.9
Repayments of financial liabilities		-556.8	-72.6
Dividends paid[3]		-104.0	-61.7
Changes in cash and cash equivalents		**227.8**	**-83.0**
Cash and cash equivalents at beginning of period		**106.4**	**189.4**
Cash and cash equivalents at end of period	**4.9**	**334.2**	**106.4**

[2] Including in 2018 dividends received from non-consolidated equity investments as well as the distribution from outside shareholders resulting from joint operations amounting to € 0 2 million (previous year: € 0.3 million).
[3] The dividends paid consist in particular of the transfer of the profit for the 2017 financial year in the amount of € 8.7 million and the advance profit distribution in the amount of € 90 0 million to VGS (previous year: remaining profit transfer for the 2016 financial year in the amount of € 9.6 million and advance profit transferred in the amount of € 45.0 million). In addition, distributions to outside shareholders resulting from joint operations in the amount of € 5 3 million are presented (previous year: € 7.1 million).

Additional information on cash provided by operating activities

in € million	1 Jan. – 31 Dec. 2018	1 Jan. – 31 Dec. 2017
Income tax paid (minus refunds)	-2.8	-2.5
Non-cash income and expenses from equity adjustment	16.7	5.0

For mathematical reasons the tables may include rounding differences of +/- one unit (€, % etc.).

Further information on the consolidated cash flow statement is given in section 6.1 of the Notes to the consolidated financial statements.

The notes on pages 1 to 48 are an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements of Vier Gas Transport GmbH for the Financial Year from 1 January 2018 to 31 December 2018

1 Basic information

The registered head office of Vier Gas Transport GmbH ("VGT" or "the Company") is Kallenbergstraße 5, 45141 Essen. The sole shareholder is Vier Gas Services GmbH & Co. KG, Essen ("VGS"). VGS is therefore the ultimate domestic parent company of the Group and in principle obliged to prepare consolidated financial statements. However, since Vier Gas Holdings S.à r.l. ("VGH"), Luxembourg, publishes consolidated financial statements and a Group management report as the highest European parent company in the Group, in accordance with Section 291 HGB (German Commercial Code) VGS is exempt from preparing consolidated financial statements and a Group management report. VGS is invoking this exemption. VGT is a capital market-oriented corporation within the meaning of Section 264d HGB. As capital market-oriented parent company domiciled in Germany, VGT is obliged to prepare consolidated financial statements pursuant to Section 315e of the German Commercial Code (HGB).

The Company is registered under HRB 24299 in the commercial register of the Essen local court.

The object of the Company is to acquire, hold and manage as well as sell equity investments in companies or their assets and every action or measure connected therewith and the provision of services of any nature for its subsidiaries, including but not limited to the provision of financial services.

The business operations of the Group are conducted by Open Grid Europe GmbH ("OGE"), Essen, including its equity investments ("OGE Group"). OGE performs the activities of a gas transmission network operator and is subject to supervision by the Federal Network Agency (BNetzA), the German regulatory authority. Furthermore, OGE provides services for the gas industry.

The financial year is the calendar year.

On 15 March 2019, these consolidated financial statements were approved by the Management for publication.

2 Summary of Significant Accounting Policies

2.1 Basis of presentation

These consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union (EU), the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC), the interpretations of the International Accounting Standards Board (IASB) as well as the commercial provisions to be applied in accordance with Section 315e (1) HGB.

The consolidated financial statements of the VGT Group are generally prepared based on historical cost, with the exception of the financial assets recognised at fair value through other comprehensive income as well as financial assets and liabilities (including derivative financial instruments) recognised at fair value through profit or loss.

The preparation of IFRS consolidated financial statements requires management to make estimates. Furthermore, the application of Group-wide accounting policies requires management assessments to be made.

In accordance with IAS 1 "Financial Statements: Presentation", the consolidated balance sheet has been prepared using a classified balance sheet structure. Assets and liabilities are classified as current if they are expected to be realised or are due to be settled or are to be sold within twelve months of the reporting date or within the normal business cycle of the Group.

The consolidated income statement is classified using the nature-of-expense method.

Unless otherwise stated, all figures are in million euros (€ m). Figures under 50 thousand euros are indicated in the tables by the insertion of a full stop.

2.2 Effects of new accounting standards

Accounting standards and interpretations applied for the first time

All new, amended or revised accounting standards are generally applied from the date when the EU requires mandatory application.

In the 2018 financial year, the Group applied the following new or amended standards and interpretations for the first time.

IFRS 9 – Financial Instruments

In July 2014, the IASB published the standard IFRS 9 "Financial Instruments" which sets outs new requirements for classifying and measuring financial assets and liabilities. Furthermore, the standard contains new hedge accounting rules and requirements and the previous impairment model (incurred loss model) has been replaced by the expected loss model. In addition to financial instruments, the expected loss model in accordance with IFRS 15.107 is also applied to contract assets as defined in IFRS 15. We refer to section 2.11 for the accounting and measurement polices. The effects of initial application of IFRS 9 are descr bed in section 2.23.

IFRS 15 – Revenue from Contracts with Customers

In May 2014, the IASB published the new standard IFRS 15 “Revenue from Contracts with Customers” and in April 2016, it provided clarifications to the standard. IFRS 15 replaces existing guidelines on the recognition of revenue such as IAS 18 “Revenue” and IAS 11 “Construction Contracts”. The new standard defines in which amount and at which date revenue is recognised. IFRS 15 specifies a five-step model for revenue recognition, which is generally to be applied to all contracts with customers.

Following the adoption of IFRS 15 and the clarifications into European law, application of this standard is mandatory for financial years beginning on or after 1 January 2018. The Group applies IFRS 15 for the first time for the financial year 2018 according to the fully retrospective method.

The changes to the accounting and measurement policies resulting from the application of IFRS 15 are explained in section 2.19. In addition, the effects of initial application are described in section 2.23.

Accounting standards and interpretations published but not yet applied

New, amended or revised standards and interpretations that have been published but whose adoption is not yet mandatory in the financial year and their impact on the consolidated financial statements are explained in the following:

IFRS 16 – Leases

IFRS 16 "Leases“ was published by the IASB in January 2016. The EU has adopted this standard into European law. Accordingly, application of the amendments is mandatory for financial years beginning on or after 1 January 2019. This new standard replaces the previous lease accounting standard IAS 17 and the Interpretations IFRIC 4, SIC-15 and SIC-27. In future lessees will be required to recognize all leases in the balance sheet in the form of a right-of-use asset and a corresponding lease liability.

The Group will apply the standard for the first time with effect from 1 January 2019 using the modified retrospective transition scenario. Here the Group has elected the alternative to equate the right-of-use asset to the lease liability. To determine the discount rate as at 1 January 2019, the Group focuses on the remaining lease term. All lease contracts that, as of 1 January 2019, have a remaining lease term within 12 months, are classified in the Group as short-term lease contracts and accounted for accordingly.

The Group will not extend the scope of application of IFRS 16 to intangible assets. Recognition exemptions for short-term leases and low-value items are exercised in that a right-of-use asset and a corresponding lease liability are not recognised in the balance sheet. In the Group low-value leased items are all leased items whose value when new does not exceed € 5,000. IT equipment assets are classified as low-value lease assets, as it is assumed that their new price does not exceed the threshold value.

A software solution for presenting leases has been implemented. Information on the relevant lease contracts has been collected and detailed evaluation of these contracts completed. Leases have been identified in the categories land and buildings, technical plant and pipelines, vehicles as well as other equipment, fixtures, furniture and office equipment.

At the end of the financial year 2019, the transition to IFRS 16 will probably lead in the Group to a balance sheet extension in the amount of € 17.6 million, lower operating expense in the amount of € 3.4 million, higher depreciation expense in the amount of € 3.3 million as well as a lower financial result resulting from the effective interest rate in the amount of € 0.3 million. Overall, the above-mentioned effects reduce net income for the year by € 0.2 million.

In the cash flow statement, the introduction of the new standard will probably lead to an improvement in operating cash flow in the amount of € 3.4 million as well as to an increase in cash used for financing activities in the amount of € 3.4 million.

IAS 19 – Employee Benefits

In February 2018, the IASB issued amendments to IAS 19 "Plan Amendment, Curtailment or Settlement". These amendments clarify that after a plan amendment, curtailment or settlement during a reporting period the current service cost and the net interest for the remainder of the reporting period are to be recalculated. The amendments to IAS 19 have not yet been adopted into European law. The IASB has specified first-time application for financial years beginning on or after 1 January 2019. The possible effects on the Group are currently being examined.

2.3 Consolidation policies and scope of consolidation

(a) Subsidiaries

Subsidiaries are all entities in which the Group is exposed to variable returns from its involvement with the entity or has rights in the entity and has the ability to affect those returns through its power over the entity (control as defined in IFRS 10).

Subsidiaries are included in the consolidated financial statements of VGT (full consolidation) from the time at which control passes to VGT. They are deconsolidated at the time at which control ends.

As of the reporting date and unchanged compared with the prior year, four domestic subsidiaries taken over as part of the acquisition of the OGE Group were fully consolidated. The fully consolidated subsidiaries are controlled by virtue of the fact that VGT holds the majority of the voting rights either directly or indirectly. In principle, subsidiaries are not consolidated as long as their net assets, financial position and results of operations are immaterial for the consolidated financial statements of VGT. These subsidiaries are accounted for at cost and shown under financial assets. This applied to three domestic companies and thus remains unchanged compared with the prior year.

(b) Joint Arrangements

Companies which, in accordance with IFRS 11, have been classified as joint operations are, for the purposes of simplification, generally proportionately consolidated in line with the share of ownership interest, with the exception of expansion investments involving only one joint operator. These are recognised in full in the consolidated financial statements of that joint operator.

All material transactions and balances between joint operations and other affiliated companies that are included in the consolidated financial statements of VGT are generally proportionately eliminated with the exception of internal revenues from the joint operations and the corresponding cost of materials of the joint operator. As the parties to the joint operation take its entire output, these items are fully eliminated where the share of ownership interest is the same as the share of the output purchased. In the event of differences between the share of ownership interest and the share of output purchased, which is the case in the VGT Group, only revenues or cost of materials measured proportionately in the amount of the difference between the two percentage shares therefore remain in the consolidated financial statements. When applying this procedure, a transaction between the joint operation parties involved is assumed. If one party to the joint operation takes less output than the percentage share it would be due in relation to its share of ownership interest, according to this approach it is assumed that a sale to the other party of the joint operation has taken place in the amount of the "shortfall quantity" – i.e. the difference between the share of output due to the party of the joint operation based on its ownership interest and the share of output it has actually taken. If a party to the joint operation takes more output than the percentage share it would be due in relation to its share of ownership interest, it is similarly assumed that a purchase from the other party to the joint operation has taken place in the amount of the "excess quantity" – i.e. the difference between the share of output actually taken and the share of output due to the party to the joint operation based on its ownership interest. In this fictive transaction it is also assumed that the purchase price is the same as the price at which the joint operation sells to the parties of the joint operation. As joint operations are included and transactions between the

Group and the joint operations generally proportionately eliminated, as described, in line with ownership interest, whilst revenues from the joint operations and the corresponding cost of materials are fully eliminated where the share of ownership interest is the same as the share of the output purchased, receivables and/or liabilities which, from the Group point of view, have not led to revenues or cost of materials may have to be reported in the consolidated financial statements. As transactions between the joint operations and the parties thereto which lead to revenues of the joint operation are generally monthly and immediately cash-effective, such receivables and/or liabilities - where existing at the reporting date - are normally not material compared with the operating receivables or liabilities as a whole reported in the consolidated financial statements.

As of the reporting date and unchanged compared with the prior year, four domestic joint operations were proportionately consolidated. Despite the fact that these companies are legally separate entities, the examination of other factors and circumstances leads to the conclusion that rights to their assets and obligations for their liabilities exist as these companies provide their services exclusively for the joint operation parties. OGE is contractually bound to the other joint operators not only through the Articles of Association but also through consortium agreements. These agreements also form the basis for the classification of the joint arrangements as joint operations. Furthermore, the joint operations grant OGE and the other joint operators the use of their pipeline network under grant-of-use agreements. These pipeline networks are a vital prerequisite for the Company's business activity as a gas transmission network operator on the current scale.

The joint operations operate in a regulated business environment. As a result, there is a general business risk for these companies because of the uncertainty surrounding the development of the regulatory framework in Germany and Europe. However, as the joint operations do not apply for their own revenue caps under the incentive regulation, but lease their pipeline network under individual contracts to the joint operators, the risk is limited.

As of the reporting date and unchanged compared with the prior year, one domestic joint venture was included in the consolidated financial statements. In accordance with the requirements of IFRS 11, joint ventures are accounted for using the equity method. Gains or losses from the sale of the Group's own assets to joint ventures are recognised in the amount of the proportion of the gain or loss attr butable to the interests of the other joint venturers. However, the full amount of any loss on such transactions is recognised immediately if the loss provides reliable evidence of a reduction in the net realisable value of assets to be sold or an impairment loss.

The Group's shares of profits and losses of joint ventures which arise from the purchase of assets from a joint venture are not recognised by the Group until it resells the assets to a company not belonging to the Group. If a loss provides reliable evidence of a reduction in the net realisable value of assets to be purchased or an impairment loss, the Group's share of such losses is recognised immediately.

Unchanged compared with the prior year nine domestic joint arrangements are accounted for at cost in the consolidated financial statements as they are only of immaterial significance for giving a true and fair view of the assets, liabilities, financial position and profit or loss of the VGT Group. They are reported under financial assets.

(c) Associates

An associate is an entity over which the Group has significant influence but does not have exclusive control.

Interests in associates are accounted for using the equity method. Interests in associates accounted for using the equity method are reported on the balance sheet at cost, adjusted for changes in VGT's share of the net assets after the date of acquisition, as well as any impairment charges. Any goodwill resulting from the acquisition of an associate is included in the carrying amount of the associate.

As of the reporting date and unchanged compared with the prior year, six associates were identified. Five of them are still accounted for at cost and shown under financial assets due to their immaterial significance for the consolidated financial statements. The only associate accounted for using the equity method is GasLINE Telekommun kationsnetzgesellschaft deutscher Gasversorgungsunternehmen mbH & Co. KG ("GasLINE KG"), Straelen, whose business is the construction, acquisition, rental, maintenance and grant of use particularly of fibre-optic cables and cable ducts for telecommunications purposes. OGE and GasLINE KG provide services for each other.

See section 7 "List of shareholdings" for a detailed description of the companies included in the consolidated financial statements as well as unconsolidated companies.

(d) Significant restrictions

There are regulatory restrictions on the transfer of assets between the companies within the Group. They relate to the following assets of the affiliates OGE and Mittelrheinische Erdgastransportleitungsgesellschaft mbH ("METG"), Essen, within the consolidated balance sheet:

€ million	31 Dec. 2018	31 Dec. 2017
Assets		
Non-current assets		
Intangible assets	44.0	37.8
Property, plant and equipment	2,776.6	2,568.7
Deferred tax assets	13.9	12.8
Non-current receivables	0.4	2.0
Total	**2,834.9**	**2,621.3**
Current assets		
Inventories	14.1	12.5
Trade receivables (incl. advance payments made)	22.2	20.7
Receivables from tax creditors	2.1	4.8
Other receivables	10.0	13.9
Liquid funds	47.7	47.6
Total	**96.1**	**99.5**
Total assets	**2,931.0**	**2,720.8**

We refer to section 4.5 for the carrying amounts of the joint operations within the consolidated balance sheet.

2.4 Acquisition and establishment of companies

In the 2018 financial year no shareholdings were acquired and no company was established.

2.5 Foreign currency translation

The items contained in the financial statements of each Group company are measured in euros as this currency is the functional currency of all Group companies. The consolidated financial statements are also prepared in euros, which is the functional currency and the reporting currency of VGT.

Transactions denominated in foreign currency are translated into the functional currency at the exchange rate at the transaction date or at the measurement date in the case of remeasurement. Gains and losses resulting from the settlement of such transactions as well as from the translation of monetary assets and liabilities denominated in foreign currency at the reporting date are recognised in the income statement unless they are to be recognised within equity as qualified cash flow hedges and qualified net investment hedges.

Foreign currency gains and losses are shown in the income statement under other operating income and other operating expenses.

2.6 Goodwill

Goodwill is created when subsidiaries, associates and jointly controlled companies are acquired and is the amount by which the consideration transferred exceeds the fair value of the Group's shares in the acquired identifiable assets, the liabilities assumed and the contingent liabilities at the date of acquisition.

In accordance with IFRS 3, "Business Combinations", goodwill is not amortised but rather tested for impairment at the cash-generating unit level on at least an annual basis according to the requirements of IAS 36 "Impairment of Assets". Impairment tests must also be performed between these annual tests if events or changes in circumstances indicate that the carrying amount of the respective cash-generating unit might not be recoverable.

The VGT Group represents one single cash-generating unit and is consequently a one-segment group. Therefore, no allocation of goodwill had to be performed.

2.7 Intangible assets

IAS 38 requires that intangible assets be amortised over their expected useful lives unless their lives are considered to be indefinite. Factors such as typical product life cycles and legal or similar limits on use are taken into account in the classification.

Intangible assets subject to amortisation are measured at cost of acquisition or production and amortised on a straight-line basis over their respective useful lives. Internally generated intang ble assets subject to amortisation are mainly related to software and are amortised over a maximum of ten years. Acquired intangible assets subject to amortisation are largely software and software licences as well as contract-based intang ble assets. The useful life of acquired software and software licences is generally three years. Contract-based intang ble assets are amortised in accordance with the provisions specified in the contracts. Useful lives and amortisation methods are subject to annual review. Intangible assets subject to amortisation are tested for impairment whenever events or changes in circumstances indicate that such assets may be impaired.

Under IFRS, emission rights held under national and international emission-rights systems for the settlement of obligations are reported as intangible assets. Since emission rights are not depleted as part of the production process, they are reported as intangible assets not subject to amortisation. Emission rights are capitalised at cost when issued for the respective reporting period as (partial) fulfilment of the notice of allocation from the national authorities respons ble, or upon acquisition.

The provision is measured at the carrying amount of the emission rights held or, in the case of a shortfall, at the current fair value of the emission rights needed. The expenses incurred for the recognition of the provision are reported under cost of materials.

2.8 Research and development costs

In accordance with IAS 38.57 ff., research and development costs must be allocated to a research phase and a development phase. While expenditure on research is expensed as incurred, development costs must be capitalised as an intangible asset if all of the general criteria for recognition specified in IAS 38, as well as certain other specific prerequisites, have been fulfilled. In the financial year, these criteria were fulfilled for internally generated software, which were capitalised accordingly. No research costs were incurred.

2.9 Property, plant and equipment

Property, plant and equipment are initially measured at acquisition or production cost and are generally depreciated over the expected useful lives of the components, using the straight-line method, unless a different method of depreciation is deemed more suitable in certain exceptional cases. The useful lives of the major components of property, plant and equipment are presented below:

- Buildings 25-50 years
- Technical equipment, plant and machinery 10-40 years
- Other equipment, fixtures, furniture and office equipment 5-14 years

The remaining carrying amounts and economic useful lives are reviewed at every reporting date and adjusted where necessary.

Expenses related to scheduled maintenance work on large-scale plants are capitalised as a separate asset in the amount of the cost of the work and depreciated using the straight-line method over the period until the next maintenance work. The costs for the exchange of components are recognised as assets to the extent that a future additional benefit is expected. The carrying amount of the exchanged components is derecognised. The costs for maintenance and repair work as part of normal business operations are recognised as an expense.

Private investment subsidies do not reduce the acquisition and production costs of the respective assets; they are instead reported on the balance sheet as deferred income.

2.10 Impairment

The impairment test referred to in IAS 36 is carried out for intangible assets and items of property, plant and equipment whenever events or changes in circumstances indicate that an asset may be impaired. Goodwill and other intangible assets with an indefinite useful life are subject to an impairment review at least once a year.

In accordance with IAS 36, the carrying amount of an asset is tested for impairment by comparing the carrying amount with the asset's recoverable amount, which is the higher of its value in use and its fair value less costs to sell. Should the carrying amount exceed the corresponding recoverable amount, an impairment loss equal to the difference between the carrying amount and the recoverable amount is recognised and reported in income under “Depreciation and amortisation".

If the reasons for previously recognised impairment losses no longer exist, such impairment losses are reversed by affecting net income for intangible assets - except goodwill - and for items of property, plant and equipment. A reversal shall not cause the carrying amount of an asset subject to amortisation or depreciation to exceed the amount that would have been determined, net of amortisation or depreciation, had no impairment loss been recognised during the period.

If the recoverable amount for an individual intangible asset or an item of property, plant and equipment cannot be determined, the recoverable amount is determined for the smallest identifiable group of assets (cash-generating unit) to which the individual asset can be assigned.

In a goodwill impairment test, the recoverable amount of the cash-generating unit is compared with its carrying amount, including goodwill. The recoverable amount is the higher of the cash-generating unit’s fair value less costs to sell and its value in use. Measurement from the viewpoint of the fair value less costs to sell is performed using the discounted cash flow method, and accuracy is verified through the use of appropriate multipliers, to the extent available. In addition, market transactions or valuations prepared by third parties for comparable assets are used to the extent available. If needed, a calculation of value in use is also performed. Unl ke fair value, the value in use is calculated from the viewpoint of management. In accordance with IAS 36, it is further ensured that restructuring expenses, as well as initial and subsequent capital investments (where those have not yet commenced), in particular, are not included in the valuation.

If the carrying amount exceeds the recoverable amount, the goodwill allocated to that cash-generating unit is adjusted in the amount of this difference.

If the impairment thus identified exceeds the goodwill, the remaining assets of the unit must be written down in proportion to their carrying amounts. Individual assets may be written down only if their respective carrying amounts do not fall below the highest of the following values as a result:

- fair value less costs to sell
- value in use or
- zero.

Any additional impairment loss that would otherwise have been allocated to the asset concerned must instead be allocated pro rata to the remaining assets of the unit. Impairment charges on the goodwill reported in the income statement under “Depreciation and amortisation” may not be reversed in subsequent reporting periods.

VGT has elected to perform the annual testing of goodwill for impairment at the cash-generating unit level in the fourth quarter of each financial year.

For the impairment test as of 31 December 2018, the recoverable amount was determined, as in the previous year, by taking the fair value less costs to sell on the basis of the forecast of future cash flows ("fair value less costs to sell view“). This method is in line with level 3 of the measurement hierarchy in accordance with IFRS 13.

The cash flow forecasts used for the valuation are based on the medium-term planning of the Group representing the net assets, financial position and results of operations in the past projected into the future. In this context, significant assumptions are regulatory revenues reflecting the current regulatory regime, the planning of operating costs and the investment planning that is mainly characterised by investments under the network development plan. The key parameters of the regulatory framework as well as the network development plan are information that is publicly available. The calculations for impairment-testing purposes are generally based on the five planning years of the medium-term plan. In certain justified exceptional cases, a longer detailed planning period is used as the calculation basis, especially when that is required under a regulatory framework or specific regulatory provisions. The cash flow assumptions extending beyond the detailed planning period are determined using specific growth rates that are based on historical analysis and prospective forecasting. The inflation rate assumed in the medium-term planning is based on publicly available market data and is 2.0 % in the terminal value (previous year: 2.0 %); the sustained growth rate was conservatively derived from this inflation rate and assumed to be unchanged from the previous year at

1.5 %. The interest rate used for discounting cash flows (WACC after tax) is calculated using market data and at the measurement date was 3.3 % (previous year: 3.3 %).

2.11 Financial instruments

(a) Financial instruments under IFRS 9 from 1 January 2018

A financial instrument is any contract that gives rise to a financial asset of the one entity and a financial liability or equity instrument of another entity. The Group only recognises financial assets and liabilities when it becomes party to the contractual provisions of the financial instrument. Financial assets are derecognised when the contractual rights to the cash flows from the financial assets extinguish or are transferred and the Group has transferred substantially all of the risks and rewards of ownership of the asset. A financial liability is derecognised only when it is extinguished, i.e. the obligation specified in the contract is discharged or cancelled or expires.

Financial instruments

At initial recognition, financial instruments are measured at fair value plus, in the case of all financial instruments not subsequently measured at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial instrument. In the case of financial instruments subsequently measured at fair value, the associated transaction costs are recognised in profit or loss. Financial instruments are classified according to the measurement categories of IFRS 9.

With regard to the classification of financial assets, a difference is made between equity instruments and debt instruments as well as derivatives.

The Group designates equity instruments not held for trading as measured at fair value through other comprehensive income. All changes in the fair value after deduction of deferred taxes are recognised in other comprehensive income. In the event of sale, cumulative gains or losses recognised in other comprehensive income are not reclassified to profit or loss. Dividends are presented in the income statement within the financial result. In the past financial year, the Group did not hold any equity instruments for trading.

Derivative financial instruments are measured at fair value through profit or loss. All changes in the fair value are recognised at fair value through profit or loss. Special requirements apply to derivative financial instruments that are part of hedge accounting. For further information, we refer to the section on hedge accounting.

The classification of debt instruments is based, on the one hand, on the business model for managing the financial assets (business model condition) and, on the other hand, on the contractual cash flow characteristics of the financial asset (cash flow condition).

A difference is made between the following business models:

- Held to collect contractual cash flows;
- Held to collect contractual cash flows and to sell; and
- Held for trading.

The cash flow condition requires that the cash flows arise solely from payments of principal and interest.

Debt instruments are measured at amortised cost (AmC) when the objective of the business model is to hold the assets in order to collect contractual cash flows and the cash flow condition is met.

Debt instruments are measured at fair value through other comprehensive income (FVtOCI) when they meet the cash flow condition but are held both for collecting contractual cash flows and for selling.

All other debt instruments that are not allocated to the at amortised cost or FVtOCI categories are measured at fair value through profit or loss (FVtPL).

The Management designates the category of the financial assets at initial recognition.

Non-derivative financial liabilities (including trade payables and bonds) within the scope of IFRS 9 are measured at amortised cost using the effective interest method. Initial measurement takes place at fair value, with transaction costs included in the measurement. In subsequent periods, the residual carrying amount is adjusted for accretion of any premium and amortisation of any discount remaining until maturity. The premium/discount is recognised in the financial result over the term.

Derivative financial liabilities that are not part of a hedging relationship und financial liabilities that meet the definition of held for trading are measured at fair value through profit or loss.

Loss allowances for expected credit losses

The Group recognises loss allowances for financial assets of the "at amortised cost" category and for contract assets as defined by IFRS 15 in the amount of the expected losses. The amount of loss recognised and interest revenue are determined on the basis of the classification of the instrument in 3 stages.

All assets are allocated to stage 1 at initial recognition. For these assets, the present value of the expected credit losses that result from all default events that are possible within the next twelve months from the reporting date is recognised as an expense. Interest revenue is recognised on the basis of the gross carrying amounts, i.e. before recognition of the loss allowance.

The measurement of credit risk at initial recognition takes into account the probability of default as well as the default rate of the relevant assets. Probability of default (PD) is assessed using external credit checks.

The ratings take into account macroeconomic and forward-looking input factors.

Stage 2 applies to all assets for which there is a significant increase in the risk of default as at the reporting date compared with at the initial recognition date. The loss allowance is the present value of all expected losses over the remaining life of the asset. The calculation and recognition of interest revenue is the same as for stage 1.

To assess whether the credit risk of an asset has increased significantly since initial recognition, the Group compares the risk of an expected default occurring as at the reporting date with the risk of a default occurring as at the date of initial recognition, using in particular the following information:

- an actual or probable significant change in the external credit rating of a financial instrument,
- significant increase in the risk of default of other financial instruments of the same debtor, and
- past due information.

Based on experience, the Group does not presume a significant increase in credit risk when contractual payments are more than 30 days past due.

The Group makes use of the simplified approach for measuring the loss allowance for expected credit losses on trade receivables and contract assets. According to this simplified approach, all assets are allocated to stage 2 irrespective of credit quality. Allocation to stage 1 is not permitted for these assets.

Assets are allocated to stage 3 if, in addition to a significant increase in the risk of default as at the reporting date, there is also objective evidence of impairment. In this case, the loss allowance is also measured on the basis of the present value of the lifetime expected losses. However, interest revenue recognised is adjusted in the following periods in that interest revenue is calculated on the basis of the net carrying amount, i.e. after deduction of the loss allowance.

The Group writes off financial assets in their entirety or a portion thereof if one or more events (a loss event) having an adverse impact on the expected future cash flows has occurred and therefore these financial assets are credit-impaired. Objective evidence of credit impairment may include evidence of financial difficulties of a customer or a group of customers such as default or delinquency in interest or principal payments or the increased probability of insolvency.

The amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of expected future cash flows (excluding future credit losses that have not been incurred) – discounted at the financial asset's original effective interest rate. The amount of the loss is recognised in profit or loss. If a financial instrument has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate specified under the contract. If, in a subsequent period, the amount of the impairment decreases and the decrease can be related objectively to an event occurring after the impairment was first recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in profit or loss.

In the case of debt instruments of the at amortised cost category and in the case of contract assets, the loss allowance is deducted from the relevant asset.

In 2018, there was no objective evidence of impairment of financial assets in the VGT Group with the exception of trade receivables for which individual valuation adjustments had been made.

Hedging relationships

The instruments mainly used are foreign currency transactions as well as interest rate swaps. These are measured at fair value for both at initial recognition and in subsequent periods.

The hedge accounting requirements of IFRS 9 cover in particular the documentation of the hedging relationship between the hedged item and the hedging instrument, the hedging strategy as well as the regular prospective measurement of effectiveness. The critical term match method is used for prospective measurement of effectiveness. The hedge accounting is prospectively considered effective when the critical contractual terms of the hedged item and the hedging instrument match.

If a derivative financial instrument qualifies as a cash flow hedge under IFRS 9, the effective portion of the hedging instrument's change in fair value is recognised in equity as a component of other comprehensive income. A risk premium is also taken into consideration. A reclassification into income is performed in the period in which the cash flows of the transaction being hedged affect income. The hedging result is reclassified to profit or loss immediately if it becomes probable that the hedged underlying transaction will no longer occur. For hedging instruments used to establish cash flow hedges, the change in fair value of the ineffective portion is recognised immediately in profit or loss to the extent required.

In the context of cash flow hedges, changes in the fair value of derivative instruments that must be recognised in profit or loss are presented as other operating income or expenses. Gains and losses from interest-rate derivatives are netted for each contract and included in the interest result.

Additional information on financial instruments is provided in sections 3 and 4.1.

(b) Financial instruments under IAS 39 until 1 January 2018

With regard to the accounting and measurement policies under IAS 39 applied until 1 January 2018, we refer to the disclosures in the consolidated financial statements for the 2017 financial year.

2.12 Inventories

Of the inventories, raw materials and supplies are generally measured at the lower of weighted average cost and net realisable value. The net realisable value is the estimated selling price achievable in the ordinary course of business less the necessary variable costs to sell. Inventory risks resulting from excess and obsolescence are provided for using appropriate valuation write-downs.

Work in progress is measured at production cost. In addition to production materials and wages, production costs include pro-rata material costs and production overheads based on normal capacity. The costs of general administration are not capitalised. The acquisition and production costs do not include any borrowing costs.

The gas inventories in the pipeline network are measured at acquisition cost using the weighted average cost method.

2.13 Receivables and other assets

Receivables and other assets are initially measured at fair value, which generally approximates nominal value. They are subsequently measured at amortised cost using the effective interest method. Valuation allowances, included in the reported net carrying amount, are provided for identifiable individual risks. If the loss of a certain part of the receivables is probable, valuation allowances are provided to cover the expected loss.

2.14 Liquid funds

Liquid funds include cheques, cash on hand and bank balances with an original maturity of less than twelve-months. Liquid funds with an original maturity of less than three months are considered to be cash and cash equivalents, unless they are restricted. Further information can be found in section 4.9.

2.15 Borrowing costs

Borrowing costs that arise in connection with the acquisition, construction or production of a qualifying asset from the time of acquisition or from the beginning of construction or production until its entry into service are capitalised and subsequently amortised alongside the related asset. Qualifying assets are assets which necessarily take more than twelve months to get ready for their intended use or sale. In the case of a specific financing arrangement, the respective borrowing costs incurred for that particular arrangement during the period are used. For non-specific financing arrangements, a financing rate uniform within the Group of 2.2 % was applied for 2018 (previous year: 2.3 %). Other borrowing costs are expensed.

2.16 Income taxes

Tax expense for the period consists of current and deferred taxes. Taxes are recognised in the income statement unless they relate to items which have been directly recognised within equity or other comprehensive income. In the latter case, the taxes are also recognised within equity or other comprehensive income.

The current tax expense is calculated using the tax regulations applicable on the reporting date (or soon to apply) of the countries in which the Company and its subsidiaries operate and generate taxable income. The Management regularly reviews tax declarations, above all with regard to issues subject to interpretation, and, when appropriate, establishes provisions based on the amounts which it expects will have to be paid to the tax authorities.

Under IAS 12, "Income Taxes", deferred taxes are recognised on temporary differences arising between the carrying amounts of assets and liabilities on the balance sheet and their tax bases (balance sheet liability method). Deferred tax assets and liabilities are recognised for temporary differences that will result in taxable or deductible amounts when taxable income is calculated for future periods, unless those differences are the result of the initial recognition of an asset or liability in a transaction other than a business combination that, at the time of the transaction, affects neither pre-tax profit/loss nor taxable profit (so-called initial differences). Deferred tax liabilities are also not recognised when they result from the first-time recognition of goodwill. IAS 12 further requires that deferred tax assets be recognised for unused tax loss carryforwards and unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the temporary differences, unused tax loss carryforwards and unused tax credits can be utilised. Each of the corporate entities is assessed individually with regard to the probability of a positive tax result in future years. Any existing history of losses is incorporated in this assessment. For those deferred tax assets to which these assumptions do not apply, the value of the deferred tax assets is reduced.

Deferred tax liabilities caused by temporary differences associated with investments in subsidiaries and associates are recognised unless the timing of the reversal of such temporary differences can be controlled within the Group and it is probable that, owing to this control, the differences will in fact not be reversed in the foreseeable future.

Deferred tax assets and liabilities are measured using the enacted or substantively enacted tax rates expected to be applicable for taxable income in the years in which temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of enacted or substantially enacted changes in tax rates and tax law is generally recognised in income. Equity is adjusted for deferred taxes that had previously been recognised directly in equity. The adjustment is generally made in the period in which the legislation mandating the change is substantively enacted.

Deferred taxes for domestic companies are calculated using a total tax rate of 31.0 % as was the case in the previous year. This tax rate includes, in addition to the 15.0 % corporate income tax, the solidarity surcharge of 5.5 % on the corporate tax and the average trade tax rate of 15.0 % applicable to the Group.

Deferred tax receivables and liabilities are netted against each other when a legally enforceable right to netting exists and when the deferred tax receivables and liabilities relate to income taxes levied by the same tax authority for either the same taxable entity or different taxable entities which intend to settle on a net basis.

2.17 Employee benefits

(a) Pension obligations

Various pension plans exist in the Group. The plans are generally funded by payments to insurance companies or trust funds, the amounts paid being based on regularly updated actuarial calculations.

The Group has both defined benefit plans and defined contribution plans: a defined contribution plan is a pension plan under which the Group pays fixed amounts to a company (fund) which does not belong to the Group. The Group has no legal or constructive obligation to pay additional contributions if the fund does not hold sufficient assets to settle the pension entitlements of all employees arising from the current and prior financial years. A defined benefit plan is a plan which is not a defined contr bution plan.

Defined benefit plans typically fix an amount which the employees will receive on retirement and which normally depends on one or more factors (such as age, years of service and salary).

To protect against insolvency and fund the employees' entitlements under pension commitments and similar obligations, the Group as the trustor established a two-sided CTA trust relationship with Helaba Pension Trust e. V. (Helaba), Frankfurt am Main (trustee), under agreements dated 14 December/21 December 2011 and as trustor transferred, as a precautionary measure, assets to the trustee.

The trustee holds and administers the trust assets for the trustor in a fiduciary capacity ring-fenced and separate from the trust assets of other trustors and the trustee's own assets.

The trust assets meet the requirements for being classified as plan assets.

In accordance with IAS 19 "Employee Benefits", the provision for defined benefit plans recognised on the balance sheet corresponds to the present value of the defined benefit obligation (DBO) on the reporting date less the fair value of the plan assets. The DBO is calculated annually by an independent actuary using the projected unit credit method. This method takes into account not only the pension obligations known on the reporting date and acquired vested rights but also economic trend assumptions which are chosen according to realistic expectations. The assessment is based on the 2018 G mortality tables of Prof. Dr Klaus Heubeck which serve as a biometric basis for calculation.

The present value of the DBO is calculated by discounting the expected future cash outflows using interest rates of corporate bonds with a very high rating. The corporate bonds are denominated in the currency in which the benefits will be paid and have terms to maturity approximating the terms of the related pension liabilities.

The expected return on plan assets is determined on the basis of the discount rate used to measure pension obligations.

The remeasurement component, which is based on experience adjustments and changes in the actuarial assumptions, is recognised directly within equity in other comprehensive income in the period in which they occur and thereafter reported under retained earnings.

The employer service cost representing the additional benefits that employees earned under the benefit plan during the financial year is reported under personnel costs; net interest cost/income resulting from the net pension obligation is reported under the financial result.

Past service cost is recognised immediately in income.

With defined contr bution plans, the Group pays contributions to public or private pension insurance plans on the basis of a statutory or contractual obligation or on a voluntary basis. The Group has no further payment obligations beyond the payment of the contributions. The payments are expensed as incurred and reported under personnel costs.

(b) Other post-employment benefits

The Group grants some of its pensioners a post-employment benefit in the form of a gas allowance. An accounting method corresponding to that used for defined benefit plans is used to measure the gas allowances.

(c) Termination benefits

Termination benefits are paid when a Group company terminates an employee’s employment contract before the normal retirement date or when employees volunteers to terminate the employment contract in exchange for severance benefits. The Group recognises severance benefits when it can be proved that it is obliged to terminate the employment of current employees according to a detailed formal plan which cannot be reversed, or if it can be proven that it is obliged to make severance payments after voluntary termination of employment by employees. Benefits which are due more than twelve months after the reporting date are discounted to their present value.

(d) Other long-term benefits

The provisions for long-service anniversary benefits and part-time phased-retirement obligations were calculated in line with actuarial principles, taking into account a reasonable discount rate, reasonable salary increases and - if applicable to the relevant obligation – reasonable pension increases and staff turnover rate. Measurement was performed on the basis of the 2018 G mortality tables compiled by Prof. Dr Klaus Heubeck.

The provisions for long-term working-time accounts are measured using the discount rate for the pension obligations.

The plan assets resulting from the insolvency insurance to cover employee claims under part-time phased-retirement obligations and long-term working-time accounts are offset against the respective provisions.

(e) Short-term benefits

A provision based on estimates is established for performance-related and company success-related bonus payments to employees.

In addition, a provision is recognised in the consolidated financial statements in cases where a contractual obligation exists or where there is a constructive obligation resulting from past business practice. These cases mainly include vacation and short-term working time account provisions. These provisions are measured at the daily rates and/or the average hourly rate including social security contr butions due.

2.18 Provisions

In accordance with IAS 37, "Provisions, Contingent Liabilities and Contingent Assets", provisions are recognised when the Company has a legal or constructive present obligation towards third parties as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are measured in accordance with IAS 37 at the best estimate of expenditure required to settle the present obligation, taking the probability of occurrence and the timing of settlement into account. The provision is recognised at the expected settlement amount. Long-term obligations are reported as liabilities at the present value of their expected settlement amounts if the interest rate effect (the difference between present value and repayment amount) resulting from discounting is material; future cost increases that are foreseeable on the balance sheet date and likely to occur must also be included in the measurement. Long-term obligations are discounted at the market interest rate applicable as of the respective balance sheet date. The accretion amounts and the effects of changes in interest rates are presented as part of the financial result. A reimbursement related to the provision that is virtually certain to be collected is capitalised as a separate asset.

No offsetting within provisions is permitted. Advance payments remitted are deducted from the provisions.

Changes in estimates arise in particular from deviations from original cost estimates, from changes to the maturity or the scope of the relevant obligation, and also as a result of the regular adjustment of the discount rate to current market interest rates.

Where necessary, provisions for restructuring costs are recognised at the present value of the future outflows of resources. Provisions are recognised once a detailed restructuring plan has been decided on by management and publicly announced or communicated to the employees or their representatives. Only those expenses that are directly attributable to the restructuring measures are used in measuring the amount of the provision. Expenses associated with the future business operations are not taken into consideration.

2.19 Revenue from contracts with customers

Revenue from the Transport business

The Group's business operations consist largely of the regulated transport activities of the gas transmission system operations. Revenue from the transport contracts with customers is generally recognised at the time the performance obligation towards the customer is fulfilled. The performance obligation is considered to have been satisfied when the gas transport has been performed and the customer therefore has control over the gas. When the performance obligation has been satisfied, the transaction price allocated thereto is recognised as revenue.

Revenue from the Other Services business

In addition to the Transport business, the Group generates revenue from services in the unregulated gas industry segment. These services comprise technical and commercial activities.

The Group has long-term, time-based service contracts, under which the customer receives a benefit from the individual performance steps at the time of performance. These service contracts are largely negotiated at fixed prices. The revenue is recognised in line with performance of the contract and the services are billed according to the contractually agreed payment schedule.

In addition to providing services, the Group also performs long-term gas industry construction projects for customers.

These contracts consist both of a fixed price and cost-plus-fee agreements. Due to the fact that the Group has no alternative use for the asset created and has a contractually enforceable right to payment for performance completed to date, these construction contracts are measured over time. The respective contracts do not contain any separately identifiable performance obligations which would make it poss ble to identify a performance obligation per contract. Therefore, allocation of the transaction price is not possible. The revenue from these gas industry projects is recognised according to progress towards satisfaction of the performance obligations. This is determined using the input-based cost-to-cost method and is the proportion of contract costs incurred for work performed up to the reporting date relative to the estimated total contract costs. Using the cost-to-cost method gives the truest picture of revenue realisation for the fulfilment of a performance obligation over time as the costs and therefore the percentage of completion can be reliably determined.

Revenue recognition / accounting

Revenue from contracts with customers is recognised net of sales taxes and less any rebates and discounts given as well as returns, and after elimination of intragroup transactions.

Contracts with customers are recognised in the balance sheet as contract assets, contract liabilities or as receivables. In the contract assets line item, the entitlement to a consideration from a contract with a customer for goods and services already transferred to the customer is presented net of any advance payments already received – or the unconditional entitlement thereto. If the advance payments received – or the unconditional entitlement thereto – exceed the entitlement to a consideration for goods and services already transferred to the customer, the resulting balance is recognised in the contract liabilities line item. A receivable is recognised when the entitlement to a consideration only depends on the passage of time. Impairments of contract assets and receivables are measured and recognised in accordance with IFRS 9.

As IFRS 15 contains no specific requirements, expected losses from onerous contracts are not netted against the asset recognised, but treated in accordance with IAS 37.5(g). This results in the presentation of a provision for expected losses in the amount of the unavoidable costs.

In the case of contracts with a significant financing component, the Group adjusts the promised amounts of the compensation for the interest effect. If the time between the transfer of the good or service to the customer and payment by the customer is less than one year, no financing component in accordance with IFRS 15.63 is recognised. At present, the Group has no contracts with a significant financing component.

Generally receivables from contracts with customers are billed in accordance with the contract terms with a payment period of up to 30 days.

Apart from the binding statutory warranty, the Group has no return, refund or guarantee obligations. According to IFRS 15.B31(a), statutory requirements do not constitute a separate performance obligation.

Capitalised costs to fulfil or obtain a contract have not been recognised. No additional costs to obtain contracts have been incurred that can be allocated directly to a performance obligation. Any costs incurred that would also have been incurred if a contract had not been concluded are recognised as expense.

2.20 Leases

Leases in which substantially all of the risks and rewards incident to ownership of the leased property remain with the lessor are classified as operating leases. Payments made under an operating lease (net after deduction of incentive payments made by the lessor) are recorded on a straight-line basis in income over the term of the lease.

No Group company is a lessee under a finance lease in accordance with IAS 17.

2.21 Consolidated cash flow statement

In accordance with IAS 7 “Cash Flow Statements”, the consolidated cash flow statement is classified by operating, investing and financing activities. Income taxes paid and refunded as well as dividends and interest received are classified as cash from operating activities. Dividends and interest paid are classified as cash from financing activities. The purchase prices paid and selling prices received in acquisitions and disposals of companies are reported, net of any cash and cash equivalents acquired (disposed of), under investing activities if the respective acquisition or disposal results in a gain or loss of control. In the case of acquisitions and disposals that do not result in a gain or loss of control, the corresponding cash flows are reported under financing activities.

2.22 Estimates and assumptions as well as judgements in the application of accounting policies

The preparation of the consolidated financial statements requires management to make estimates and assumptions that may influence the application of accounting principles within the Group and affect the measurement and presentation of reported figures. Estimates are based on past experience and on additional knowledge obtained on transactions to be reported. Actual amounts may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Adjustments to accounting estimates are recognised in the period in which the estimate is revised if the change affects only that period, or in the period of the revision and subsequent periods if both current and future periods are affected.

Estimates are particularly necessary for the measurement of the value of property, plant and equipment and of intangible assets, especially in connection with purchase price allocations, the recognition and measurement of deferred tax assets, the accounting treatment of provisions for pensions and other provisions, for impairment testing in accordance with IAS 36, as well as for the determination of the fair value of certain financial instruments.

The underlying principles used for estimates in each of the relevant topics are outlined in the respective sections.

2.23 Changes in accounting policy

IFRS 9 – Financial Instruments

The Group applied the standard IFRS 9 "Financial Instruments" for the first time in the 2018 financial year. In accordance with the transitional provisions in IFRS 9.7.2.15, comparative figures for the previous year are not restated. All adjustments of the carrying amounts of financial assets and liabilities as a result of changes in the classification and measurement requirements have been recognised in retained earnings as of 1 January 2018.

Classification and measurement of financial instruments

The following table shows a comparison of the measurement categories and carrying amounts in accordance with IAS 39 and IFRS 9 as of 1 January 2018:

	IAS 39		IFRS 9	
	Measurement category	**Carrying amount in € million**	**Measurement category**	**Carrying amount in € million**
Equity investments	AmC (available for sale)	.	FVtOCI (designated)	.
Long-term loans granted	AmC (loans and receivables)	3.0	AmC	3.0
Other financial receivables and financial assets	AmC (loans and receivables)	8.8	AmC	8.8
Trade receivables	AmC (loans and receivables)	33.6	AmC	33.6
Other operating assets	AmC (loans and receivables)	47.3	AmC	47.3
Liquid funds	AmC (loans and receivables)	106.4	AmC	106.4
Total assets		**199.1**		**199.1**

There were no changes regarding the classification and measurement of financial liabilities. At the date of initial application, the Group held no liabilities designated as FVtPL.

The Group makes use of the option under IFRS 9.4.1.4 to measure financial investment in equity instruments at fair value through other comprehensive income. At the date of initial application, this relates to one other equity investment with a carrying amount € 4k. This equity investment does not contain any significant hidden reserves.

All financial assets of the loans and receivables category under IAS 39 are still measured at amortised cost under IFRS 9. There were no effects on the balance sheet from the reclassification of these financial instruments.

Expected loss model

At the date of initial application, implementation of the expected loss model did not result in any material effects on the Group's net assets, financial position and results of operations.

Hedge accounting

The new regulations on hedge accounting did not lead to any changes. All existing hedging relationships remain in compliance with the requirements of hedge accounting.

IFRS 15 – Revenue from Contracts with Customers

The Group adopted IFRS 15 "Revenue from Contracts with Customers" for the first time as from the start of the 2018 financial year. The full retrospective method in accordance with IFRS 15.C3(a) was applied for the transition to IFRS 15. IFRS 15 leads to a change in the accounting policies and to a change in balance sheet disclosures.

The Group's existing contracts were examined in full with respect to potential changes in revenue recognition. No contracts were identified that lead to a change in revenue recognition after the entry into effect of IFRS 15. Contracts that were previously classified as construction contracts in accordance with IAS 11 and led to the recognition of revenue according to the percentage of completion (percentage-of-completion method) now lead under IFRS 15 to revenue recognition over time in line with the progress of contract performance.

The transitioning effects from first-time application of IFRS 15 were limited to changes in presentation in the balance sheet and more extensive disclosures in the notes. Following the introduction of IFRS 15, the new contract assets and contract liabilities line items are presented under other receivables and other liabilities in the balance sheet.

The following table gives an overview of the effects on the balance sheet as of 1 January 2017, 31 December 2017 and 31 December 2018:

in € million	Carrying amount under IAS 18 and IAS 11 1 Jan. 2017	Reclassification	Carrying amount under IFRS 15 1 Jan. 2017
Non-current assets			
Non-current receivables	34.0	-34.0	0.0
Current assets			
Other receivables	0.0	+12.6	12.6
Non-current liabilities			
Other provisions	.	0.0	.
Current liabilities			
Other liabilities	31.3	-21.4	9.9

in € million	Carrying amount under IAS 18 and IAS 11 31 Dec. 2017	Reclassification	Carrying amount under IFRS 15 31 Dec. 2017
Non-current assets			
Non-current receivables	29.9	-29.9	0.0
Current assets			
Other receivables	0.0	+7.5	7.5
Non-current liabilities			
Other provisions	.	0.0	.
Current liabilities			
Other liabilities	46.3	-22.4	23.9

in € million	Carrying amount under IAS 18 and IAS 11 31 Dec. 2018	Reclassification	Carrying amount under IFRS 15 31 Dec. 2018
Non-current assets			
Non-current receivables	31.0	-31.0	0.0
Current assets			
Other receivables	0.0	+9.5	9.5
Current liabilities			
Other provisions	0.7	0.0	0.7
Other liabilities	53.2	-21.5	31.7

3 Financial Risk Management

3.1 Financial risk factors

In the normal course of business, the Group is exposed to various financial risks: (a) market risks (covering foreign currency risks and interest risks), (b) credit risks and (c) liquidity risks. The overarching Group risk management focuses on unforeseeable developments in the financial markets and its aim is to minimise the potentially negative effects on the Group's financial situation. The Group uses derivative financial instruments to hedge certain risks.

Risk management is performed decentrally both by the Finance department of OGE, and by the Investment Controlling department of the shareholders. The Corporate Finance department identifies, assesses and hedges financial risks in close cooperation with the Group's operational units. Owing to the very limited volume of transactions in foreign currency as well as the only occasional raising and securing of loans, the currency risks, interest risks and credit risks are handled and the use of derivative and non-derivative financial instruments is agreed on a case-by-case basis with the relevant bodies of the company affected.

In the Group, hedge accounting in accordance with IFRS 9 is used for interest rate derivatives to hedge non-current liabilities as well as for currency derivatives.

Cash flow hedges are used to protect against the risk arising from variable cash flows which result from loans, non-current liabilities and future payment obligations in foreign currency. Interest rate swaps and foreign currency swaps in particular are used to limit the risk resulting from changes in interest rates and exchange rates.

(a) Market risk

(i) Foreign currency risk

Foreign currency risk may largely arise from procurement transactions with business partners outside the euro zone. When such non-euro-based procurement transactions of a significant volume are conducted, foreign currency forwards and currency swaps are used to hedge the foreign currency risk. Owing to the very limited volume of transactions in foreign currency, the Group is currently only exposed to an insignificant foreign currency risk. Hedged procurement transactions already expired during the financial year so that such contracts no longer existed at 31 December 2018.

(ii) Interest rate risk

The Group's interest risks arise from long-term interest-bearing liabilities. The liabilities with floating interest rates expose the Group to interest-related cash flow risks which are partly offset by bank balances with floating interest rates. The liabilities with fixed interest rates result in an interest-related risk arising from changes in the fair value.

The long-term focus of the business model generally means meeting a high proportion of financing requirements at fixed interest rates in the planning period by the securing of fixed-rate loans or by the use of interest rate swaps if floating-rate loans are taken out.

As of 31 December 2018, the hedged transactions in place are included in interest cash flow hedges with maturities of up to six years. The cash flows from hedged transactions secured in cash flow hedge accounting occur in the period from 2019 to 2024 and affect the income statement at the same time.

The hedging of variable interest rates resulted in the following average fixed interest rates, broken down by maturity:

Maturity	2018	2017
Less than 1 year	0.7 %	n/a
1 to 5 years	1.1 %	1.0 %
More than 5 years	1.5 %	1.5 %

This results in the following effects on the net assets, financial position and results of operations:

in € million	2018	2017
Carrying amount of hedging instruments (liability)	-1.2	-1.8
Nominal value of hedging instruments	139.0	139.0
Change in fair value of the hedging instruments	0.6	0.9
Change in value of the underlying hedged items for recognition of ineffectiveness	-0.6	-0.9

The resulting negative market values of the hedging instruments as at the reporting date are presented under other non-current liabilities.

The accumulated other comprehensive income changed in the financial year as follows:

in € million	2018	2017
1 January	-1.7	-2.3
Hedging losses	-0.5	-0.7
Recycling recognised in interest result	1.1	1.6
Deferred taxes	0.4	-0.3
31 December	-0.7	-1.7

There was no ineffectiveness in the financial year.

(iii) Sensitivity analysis

The sensitivity analysis for the relevant risk variables in accordance with IFRS 7 examines what effects the change in the relevant values as at the reporting date would have on the other operating income and expenses and the other comprehensive income for hedging transactions before allowance for deferred taxes.

The interest analysis assumes a shift in the interest rate curve at the reporting date by -/+ 100 basis points (bp) in each case.

The sensitivity analyses of the interest-rate swaps as of 31 December 2018 are as follows:

	Equity sensitivity		Income statement sensitivity	
in € million	Interest curve -1%	Interest curve +1%	Interest curve -1%	Interest curve +1%
Interest-rate swaps	-3.5	3.8	0.0	0.0

The sensitivity analyses as of 31 December 2017 were as follows:

	Equity sensitivity		Income statement sensitivity	
in € million	Interest curve -1%	Interest curve +1%	Interest curve -1%	Interest curve +1%
Interest-rate swaps	-3.1	3.3	0.0	0.0

(b) Credit risk

Credit risk is managed at Group level. Credit risk results mainly from receivables from banks and other financial institutions from bank deposits and derivative financial instruments as well as receivables from wholesale and retail customers.

Only banks with an independent rating given by the three big rating agencies qualify to work with the Group in the financial area. For cash financial investments, a rating of at least "BBB+" to "A-" (Standard & Poor's, Fitch) or "Baa1" to "A3" (Moody's) is required while for borrowing an average rating of at least "BBB" (Standard & Poor's, Fitch) or "Baa2" (Moody's) is necessary, the focus being on the "unsecured long-term rating" if available. The ratings of all banks as well as other indicators of credit standing (such as current prices of credit default swaps) are continuously monitored.

The Group generates the vast majority of its revenues with a small number of key accounts.

Customers are reviewed in credit assessments to the extent customary in the industry. Credit risk is managed in a risk-based manner, i.e. the customers that generate the highest revenues are regularly assessed with regard to their creditworthiness. For this purpose, assessments of recognised credit bureaus or published ratings of renowned rating agencies are used.

The vast majority of revenues are generated in the regulated gas transport business. The regulated fees are largely determined on the basis of the Company's capital and operating costs.

In the past there have been no significant payment defaults. The Management is also not expecting any defaults in future as a result of non-performance by these business partners.

Credit risks result from non-delivery or partial delivery by a counterparty of the agreed consideration for services rendered, from total or partial failure to make payments owing on existing accounts receivable, and from replacement risks in open transactions. Credit risks are monitored and controlled using uniform credit risk management procedures in place throughout the Group which identify, measure and control the credit risks. The maximum risk of default is equal to the carrying amounts of the financial assets.

In accordance with IFRS 9, the Group establishes loss allowances for expected credit losses on material financial assets. The measurement of the credit risk takes into account the probability of default and the default rate of the financial assets to be measured. Probability of default is assessed using external credit checks.

The following table shows the connection between credit rating and the probability of default (PD) determined:

Rating class	Description	PD in %
I	Very good to good credit rating	up to 0.3
II	Good to satisfactory credit rating	0.3 – 0.7
III	Adequate credit rating	0.7 – 1.5
IV	Increased risk	1.5 – 3.0
V	High risk	3.0 – 8.0
VI	Very high risk	from 8.0
VII	Default	100.0

A significant change in the risk of default is assumed when the credit rating has fallen by at least 2 classes.

The ratings take into account macroeconomic and forward-looking input factors. In the financial year, there were no changes in the method or significant assumptions used for estimating expected credit losses.

Trade receivables and contract assets

In accordance with IFRS 9.5.5.15, the Group uses the simplified approach to measure the allowance for expected credit losses on trade receivables and on contract assets. The loss allowances are always measured at an amount equal to the lifetime expected credit losses. The gross carrying amounts as of 31 December 2018 break down as follows:

	Rating class							
in € million	I	II	III	IV	V	VI	VII	Total
Trade receivables	17.9	14.6	2.4	0.0	0.0	0.4	3.8	39.1
Contract assets	3.7	4.5	0.0	0.8	0.0	0.5	0.0	9.5
Total gross carrying amounts	**21.6**	**19.1**	**2.4**	**0.8**	**0.0**	**0.9**	**3.8**	**48.6**

Loss allowances on trade receivables and contract assets changed in the financial year as follows:

in € million	2018	2017
1 January 2018	2.8	4.0
Changes affecting profit or loss	1.1	0.3
Utilisation	-0.5	-1.5
31 December 2018	3.4	2.8

The change in the loss allowance is due mainly to the increase (decrease) in the gross carrying amount.

Other financial assets of the AmC category

The other financial assets measured at amortised cost relate in particular to receivables from other joint operators.

All other financial assets have a low risk of default. Therefore, the loss allowance is determined on the basis of the expected defaults resulting from possible default events within the next twelve months of the reporting date. A low risk of default is assumed when there is a low probability of default and the borrower has a strong capacity to meet its contractual cash flow obligations in the near term.

At the reporting date, loss allowances for other financial assets of the "at amortised cost" category were of an insignificant amount.

Comparative information in accordance with IAS 39

In the previous year, the financial assets shown in other receivables were neither impaired nor past due and totalled € 58.6 million. They were recognised in the balance sheet both under current and non-current assets. The financial receivables were also neither impaired nor past due. They totalled € 8.8 million in the previous year.

(c) Liquidity risk

The cash flow forecasts are prepared at the level of the operating companies and combined in the Group. The Management monitors the rolling advance planning of the Group's liquidity reserve to ensure that sufficient liquidity is available to cover operational requirements and that unutilised credit facilities provide enough flexibility at all times. Such forecasts take into account the Group financing plans, the observance of loan agreements as well as the meeting of internal target balance sheet figures.

The liquidity of the Group comprises cash and cash equivalents as well as cash inflows from operating activities which, owing to the profitability of OGE, guarantee adequate liquidity at all times. The Group continues to minimise the liquidity risk by regular liquidity planning on the basis of which short and medium-term financial requirements are determined.

The following table shows the contractually agreed (undiscounted) cash outflows arising from the liabilities included in the scope of IFRS 7:

	Cash outflows					
	Due within 1 year		Due in 1 to 5 years		Due in more than 5 years	
in € million	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Non-derivative financial instruments	-146.5	-62.3	-1,924.6	-1,127.1	-1,344.6	-1,658.6
Derivative financial instruments	-1.1	-1.1	-0.4	-1.4	0.0	-0.1

For financial liabilities with floating interest rates, the floating-interest rates on the reporting date are used to calculate future interest payments for subsequent periods as well.

In gross-settled derivatives (usually currency derivatives), outflows are accompanied by related inflows of funds or commodities. The derivatives are therefore to be seen in conjunction with the associated underlying transactions.

In line with the approach to loans with floating interest rates, to calculate future payments for net-settled derivatives (here interest rate swaps) the floating rates as of the reporting date are also used for subsequent periods.

3.2 Capital management

The Group's capital structure is regularly measured and monitored. The primary aim is to steer the financing conditions of the Group by securing an investment grade rating. In line with the relevant KPIs of the leading bank and rating analysts, the Group calculates the debt-asset ratio in accordance with IFRS as the ratio of net debt to assets. Net debt comprises all financial liabilities and provisions for pensions less liquid funds and interest-bearing financial receivables. Non-current assets result from the values of intangible assets and property, plant and equipment recognised as of the reporting date. As of 31 December 2018, the Group had a debt-asset ratio of 73.4 % (previous year: 76.6 %).

in € million	2018	2017
Financial liabilities	-3,109.0	-2,661.6
Provisions for pensions	-111.4	-130.2
Deferred tax assets on provisions for pensions[4]	90.0	81.5
Financial receivables	12.0	8.8
Liquid funds	411.5	106.4
Net debt VGT Group	**-2,706.9**	**-2,595.1**
Property, plant and equipment	3,638.4	3,346.4
Intangible assets	47.3	41.8
Debt-asset ratio	**73.4 %**	**76.6 %**

[4] Before netting of deferred tax assets in the balance sheet.

4 Information on the Balance Sheet

4.1 Additional disclosures on financial instruments

Carrying amounts, fair values and measurement categories by class

The balance-sheet value of the current financial assets and current financial liabilities (= carrying amount) is, in the Group's opinion based on the information available at the reporting date, the best-poss ble approximation of the respective fair values of these financial instruments.

All financial instruments recognised at fair value are divided into three categories defined in accordance with IFRS 13, as follows:

- Level 1 – quoted prices in active markets
- Level 2 – valuation techniques (inputs that are observable on the market)
- Level 3 – valuation techniques (inputs that are unobservable on the market)

In the period from 1 January 2018 to 31 December 2018, there were no reclassifications between level 1 and level 2, nor were there any reclassifications to or out of level 3. Furthermore, there was no change in purpose for the financial assets that would have caused a change to the classification of an asset.

There is no net reporting for these financial assets and financial liabilities since no enforceable master netting arrangements or similar agreements exist.

The carrying amounts of the financial instruments, their classification into IFRS 9 (previous year: IAS 39) measurement categories, their fair values and their measurement sources by level are presented in the following table as of 31 December 2018:

					Fair value (IFRS 13)		
in € million	Carrying amounts	Total carrying amounts within the scope of IFRS 7	IFRS 9 measurement category[5]	Fair value	of which level 1	of which level 2	of which level 3
Equity investments	**29.8**	**.**	**FVtOCI**	**.**			
Long-term loans granted	**2.8**	**2.8**	**Amc**	**n/a**			
Trade receivables	**35.7**	**35.7**	**Amc**	**n/a**			
Other receivables	**84.3**	**67.8**		**n/a**			
Receivables from joint operations	42.4	42.4	AmC	n/a			
Financial receivables	12.0	12.0	AmC	n/a			
Other receivables	29.9	13.4	AmC	n/a			
Liquid funds	**411.5**	**411.5**	**AmC**	**n/a**			
Total assets	**564.1**	**517.8**		**n/a**			
Financial liabilities	**3,109.0**	**3,109.0**		**3,273.1**	**2,953.1**	**320.0**	
Bonds	2,741.3	2,741.3	AmC	2,953.1	2,953.1		
Liabilities to banks	223.7	223.7	AmC	224.5		224.5	
Other financial liabilities	144.0	144.0	AmC	95.5		95.5	
Trade payables	**92.3**	**92.3**	**AmC**	**n/a**			
Derivatives with hedging relationships	**1.2**	**1.2**	**n/a**	**1.2**		**1.2**	
Other operating liabilities	**159.5**	**37.2**	**AmC**	**n/a**			
Total liabilities	**3,362.0**	**3,239.7**		**3,274.3**	**2,953.1**	**321.2**	

[5] FVtOCI: Fair value through OCI; FVtPL: Fair value through profit and loss; AmC: Financial assets and liabilities measured at amortised cost; n/a: the derivatives with hedging relationships cannot be assigned to any FRS 9 category.

Carrying amounts as of 31 December 2017:

					Fair value (IFRS 13)		
in € million	**Carrying amounts**	**Total carrying amounts within the scope of IFRS 7**	**IAS 39 measurement category[6]**	**Fair value**	**of which level 1**	**of which level 2**	**of which level 3**
Equity investments	**29.5**	**.**	**AfS**	**.**			
Long-term loans granted	**3.0**	**3.0**	**LaR**	**n/a**			
Trade receivables	**33.6**	**33.6**	**LaR**	**n/a**			
Other receivables	**99.5**	**56.1**		**n/a**			
Receivables from joint operations	42.6	42.6	LaR	n/a			
Financial receivables	8.8	8.8	LaR	n/a			
Other receivables	48.1	4.7	LaR	n/a			
Liquid funds	**106.4**	**106.4**	**LaR**	**n/a**			
Total assets	**272.0**	**199.1**		**n/a**			
Financial liabilities	**2,661.6**	**2,661.6**		**2,819.6**	**2,507.1**	**312.5**	
Bonds	2,242.1	2,242.1	AmC	2,507.1	2,507.1		
Liabilities to banks	281.8	281.8	AmC	219.7		219.7	
Other financial liabilities	137.7	137.7	AmC	92.8		92.8	
Trade payables	**81.7**	**81.7**	**AmC**	**n/a**			
Derivatives with hedging relationships	**1.8**	**1.8**	**n/a**	**1.8**		**1.8**	
Other operating liabilities	**123.9**	**95.4**	**AmC**	**n/a**			
Total liabilities	**2,869.0**	**2,840.5**		**2,821.4**	**2,507.1**	**314.3**	

[6] AfS: Available for sale; LaR: Loans and receivables; AmC: Amortised cost; n/a: the derivatives with hedging relationships cannot be assigned to any IAS 39 category.

The financial assets recognised at fair value through other comprehensive income relate to derivative financial instruments that are included in hedge accounting. These include derivative interest rate hedging contracts, which are based on ISDA (International Swaps and Derivatives Association) agreements and on the German Master Agreement on Financial Derivatives Transactions, which was published by the Association of German Banks. The fair values of the interest hedging instruments were calculated on the basis of discounted, expected cash flows. Discounted cash values are determined for interest rate swaps for each individual transaction as of the reporting date. The market interest rates for the remaining terms of the financial instruments were used. These include market factors which other market participants would also take account of when setting prices.

The carrying amounts of liquid funds and trade receivables are considered realistic estimates of their fair values because of their short maturity.

The financial liabilities measured at fair value through other comprehensive income relate to derivative financial instruments that are included in hedge accounting. These financial instruments comprise derivative interest rate hedging contracts. The fair values of interest rate hedging contracts were calculated on the basis of discounted, expected cash flows. The market interest rates for the remaining terms of the financial instruments were used.

The market value of the bonds is based on the prices quoted on the reporting date.

The fair value of debt instruments that are not actively traded, such as loans received, long-term loans granted and financial liabilities, is determined by discounting future cash flows. Any necessary discounting is performed using current market interest rates over the remaining terms of the financial instruments.

The carrying amount of borrowings under short-term credit facilities and trade payables is used as the fair value owing to the short maturities of these items.

Net result by measurement category

The net result of the financial instruments by measurement category in accordance with IFRS 9 is as follows:

in € million	2018
Financial assets at amortised cost	**-0.8**
Interest income included in interest result	0.3
Change in impairment of financial assets and losses on receivables	-1.1
Financial liabilities at amortised cost	**-68.4**
Interest expense included in interest result	-68.4
Total	**-69.2**

The net result in the previous year by measurement category in accordance with IAS 39 was as follows:

in € million	2017
Loans and receivables	-0.3
Financial liabilities measured at amortised cost	-66.6
Available-for-sale	-9.9
Total	**-76.8**

In addition to interest income from long-term loans granted, the net gain/loss in the loans and receivables category consists primarily of write-downs on trade receivables.

The net gain/loss in the financial liabilities measured at amortised cost category is primarily due to interest on bonds and financial liabilities and the reversal of bond discounts.

Measurement of derivative financial instruments

Derivative financial instruments are measured by determining fair value. The fair value of derivative financial instruments is sensitive to movements in underlying market rates. The Group determines and monitors the fair value of derivative financial instruments at regular intervals. Fair values for each derivative financial instrument are determined as being equal to the price at which one party can sell the rights and/or obligations to an independent third party. The fair values of derivative financial instruments are calculated using common market valuation methods with reference to market data available as at the measurement date including a credit value adjustment in the case of positive market values and a debit value adjustment in the case of negative market values. All derivative financial instruments are measured individually.

Further information on the risk factors can be found in section 3.1 “Financial risk factors”.

4.2 Goodwill

The acquisition of OGE in 2012 results in goodwill which, according to IFRS 3, is not amortised. Therefore, in the financial year, impairment testing in accordance with IAS 36.80 ff. was performed on the basis of the cash-generating unit, which in the present case represents the Group; this impairment testing gave no indication of impairment.

Further details on the impairment test are given in section 2.10.

4.3 Intangible assets

We refer to the consolidated statement of changes in non-current assets for the development and composition of the intangible assets.

In 2018, the Group recorded amortisation expense of € 8.5 million (previous year: € 27.7 million). There were no impairment losses or reversals of impairments.

As of the reporting date, the carrying amount of intangible assets with indefinite useful lives is € 5.5 million (previous year: € 4.5 million). Of this figure, indefinite easements account for € 5.2 million (previous year: € 3.8 million) and emission rights for € 0.3 million (previous year: € 0.7 million).

In the financial year, there were additions of € 1.1 million to the internally generated intangible assets (previous year: € 0.4 million).

4.4 Property, plant and equipment

We refer to the consolidated statement of changes in non-current assets for the development and composition of the property, plant and equipment. Borrowing costs in accordance with IAS 23 in the amount of € 13.3 million were capitalised in 2018 (previous year: € 9.4 million). Depreciation of property, plant and equipment amounts to € 142.5 million (previous year: € 127.4 million). Impairment of property, plant and equipment in the amount of € 0.9 million was due to the decommissioning of pipeline sections.

4.5 Financial assets

in € million	2018	2017
Companies accounted for using the equity method	112.8	121.0
Equity investments	29.8	29.5
Long-term loans granted	2.8	3.0
Total	**145.4**	**153.5**

The list of shareholdings is given in section 7.

The main equity investments are Nordrheinische Erdgastransportleitungsgesellschaft mbH & Co. KG (“NETG“), Dortmund, amounting to € 19.9 million (previous year: € 19.9 million), and PLEdoc GmbH (“PLEdoc“), Essen, amounting to € 4.2 million (previous year: € 4.2 million).

Two companies accounted for using the equity method have been taken into consideration as at the reporting date. They are GasLINE KG as an associate and jordgasTransport GmbH (“JGT“), Hanover, as a joint venture.

The following table provides information in accordance with IFRS 12.B12 ff. on the companies accounted for using the equity method:

GasLINE KG **in € million**	**2018**	**2017**
Dividends received	17.9	10.9
Current assets*	19.5	49.1
Liquid funds	*3.6*	*37.7*
Non-current assets*	341.9	330.5
Current liabilities*	41.2	42.6
Current financial liabilities	*8.7*	*0.0*
Non-current liabilities*	75.6	73.8
Non-current financial liabilities	*0.0*	*0.0*
Pro-rata equity	71.5	76.9
Other effects	1.2	1.1
Carrying amount of company accounted for using the equity method	**72.7**	**78.0**
Revenues*	82.8	86.1
Depreciation and amortisation*	14.0	13.7
Interest income / expense*	-0.6	0.0
Income tax expense*	3.1	7.5
OCI*	0.0	0.0
Income statement result*	**35.4**	**58.9**
Total comprehensive income*	**35.4**	**58.9**

* Figures refer to the total shareholder share (100%).

JGT **in € million**	**2018**	**2017**
Dividends received	9.9	0.0
Current assets*	32.8	32.7
Liquid funds	*18.6*	22.2
Non-current assets*	79.2	83.1
Current liabilities*	30.8	29.8
Current financial liabilities	*10.4*	*6.8*
Non-current liabilities*	1.3	1.3
Non-current financial liabilities	*0.0*	*0.0*
Pro-rata equity	39.9	42.4
Other effects	0.2	0.6
Carrying amount of company accounted for using the equity method	**40.1**	**43.0**
Revenues*	14.0	25.4
Depreciation and amortisation*	3.9	3.9
Interest income / expense*	-	-
Income tax expense*	2.1	3.7
OCI*	0.0	0.0
Income statement result*	**4.7**	**9.6**
Total comprehensive income*	**4.7**	**9.6**

* Figures refer to the total shareholder share (100%).

OGE is connected with the partner of the joint venture JGT through a consortium agreement. Under this agreement, the parties have mutual guarantee obligations, unchanged from the previous year, the infringement of which could lead to mutual claims in the amount of € 5.0 million. Due to the improbability that a guarantee will be infringed, no obligation therefor was recognised in the consolidated financial statements.

The companies MEGAL Mittel-Europäische-Gasleitungsgesellschaft mbH & Co. KG ("MEGAL"), Essen, Trans Europa Naturgas Pipeline Gesellschaft mbH & Co. KG ("TENP"), Essen, NETRA GmbH Norddeutsche Erdgas Transversale & Co. Kommanditgesellschaft ("NETRA"), Schneiderkrug, and Zeelink GmbH & Co. KG ("Zeelink"), Essen, are, as joint operations, included in the Group on a pro-rata basis.

In the financial year, the consolidated balance sheet includes the following carrying amounts of the joint operations:

in € million	MEGAL	TENP	NETRA	Zeelink
Non-current assets				
Intangible assets	-	0.0	0.0	0.0
Property, plant and equipment	370.0	212.9	97.2	126.7
Deferred tax assets	3.9	0.7	-	0.0
Current assets				
Trade receivables (including advance payments made)	2.5	2.9	-	0.0
Receivables from tax creditors	0.2	1.0	2.3	8.0
Other receivables	0.1	3.6	11.8	0.1
Liquid funds	0.6	18.8	1.5	9.7
Non-current liabilities				
Provisions for pensions and similar obligations	0.1	0.2	0.0	0.0
Other provisions	-	-	0.0	0.0
Financial liabilities	168.3	104.6	0.0	0.0
Other non-current liabilities	0.4	21.3	0.2	0.1
Deferred tax liabilities	28.6	14.6	11.3	5.5
Current liabilities				
Other provisions	-	-	-	-
Financial liabilities	42.9	-	0.0	0.0
Trade payables	4.5	1.8	0.0	7.5
Other liabilities	1.0	5.3	0.0	0.3

Carrying amounts of the joint operations in the consolidated balance sheet as of 31 December 2017:

in € million	MEGAL	TENP	NETRA	Zeelink
Non-current assets				
Intangible assets	-	0.0	0.7	0.0
Property, plant and equipment	354.7	215.0	101.0	56.2
Deferred tax assets	4.5	0.6	-	0.0
Current assets				
Trade receivables (including advance payments made)	2.5	5.5	1.4	0.0
Receivables from tax creditors	0.7	0.2	0.0	4.5
Other receivables	-	3.5	2.5	7.1
Liquid funds	2.5	7.5	1.0	3.0
Non-current liabilities				
Provisions for pensions and similar obligations	0.1	0.2	0.0	0.0
Other provisions	-	-	0.0	0.0
Financial liabilities	206.6	104.6	0.0	0.0
Other non-current liabilities	22.0	34.8	0.2	0.0
Deferred tax liabilities	27.1	14.6	10.9	3.6
Current liabilities				
Other provisions	-	-	-	-
Financial liabilities	2.4	0.1	0.0	0.0
Trade payables	4.2	2.1	0.0	0.1
Other liabilities	8.6	4.3	0.2	0.0

The balance sheet and profit/loss data of all other equity investments held by the Group and measured at cost are not material in aggregate.

4.6 Non-current receivables and assets

Non-current receivables include receivables of € 34.6 million (previous year: € 34.6 million) from the two proportionately consolidated pipeline companies MEGAL and TENP from accounting for the one-sided capital contribution. The financial statements of these pipeline companies reflected this by recognising the capital contributions as borrowings in accordance with IAS 32.

4.7 Inventories

Inventories break down as follows:

in € million	2018	2017
Raw materials and supplies	14.2	14.5
Work in progress	2.3	2.7
Gas inventories	22.8	13.2
Total	**39.3**	**30.4**

4.8 Trade receivables and other current receivables

Current receivables break down as follows:

in € million	2018	2017[7]
Trade receivables	35.6	33.5
Contract assets	9.5	7.5
Other current operating receivables	39.4	35.9
Trade receivables and other current operating receivables	**84.5**	**76.9**
Financial receivables	12.0	7.7
Total	**96.5**	**84.6**

[7] The prior-year figures have been adjusted owing to retrospective application of FRS 15.

With the exception of the contract assets, all receivables contained in this line item have a remaining term of less than one year. The contract assets item contains the right to consideration from contracts with customers that have a remaining term of more than one year. There were no unscheduled events that would have had a significant effect on the balance of contract assets.

Other current operating receivables comprise mainly tax refund receivables from tax creditors in the amount of € 14.5 million (previous year: € 13.6 million), receivables from joint operations included on a pro-rata basis in the amount of € 7.8 million (previous year: € 8.0 million), receivables from contractual penalties in the amount of € 3.5 million (previous year: € 3.5 million) as well as receivables from market area conversion and biogas levies in the amount of € 5.7 million (previous year: € 3.4 million).

4.9 Liquid funds

Liquid funds are all balances at banks which are mainly invested as current account balances, overnight money and one-month money. As of the reporting date liquid funds total € 411.5 million (previous year: € 106.4 million), of which € 2.3 million are restricted due to guarantee deposits (previous year: € 0.0 million).

Liquid funds can be reconciled to cash and cash equivalents in accordance to IAS 7 as follows:

in € million	2018	2017
Liquid funds	**411.5**	**106.4**
Fixed deposits more than 3 months	-75.0	0.0
Restricted cash and cash equivalents	-2.3	0.0
Cash and cash equivalents	**334.2**	**106.4**

4.10 Equity

Subscribed capital

The subscr bed capital of VGT is fully paid in and remains unchanged from the previous year at 25,000 shares, each with a value of € 1. The shares are held by the sole shareholder, VGS.

The changes in equity and other comprehensive income are shown separately in the statement of changes in equity and in the statement of total comprehensive income.

Additional paid-in capital

As in the previous year, additional paid-in capital amounts to € 925.6 million.

Retained earnings

Retained earnings total € 254.0 million (previous year: € 139.7 million). The change results from the consolidated net income for the year of € 224.6 million (previous year: € 158.9 million) and the remeasurement of defined benefit plans amounting to € -19.6 million (previous year: € 12.3 million) as well as the deferred taxes thereon of € 6.3 million (previous year: € -4.0 million). Furthermore, in the reporting year the profit in the amount of € 97.0 million (previous year: € 53.7 million) was transferred, € 90.0 million of this figure (previous year: € 45.0 million) being transferred in advance.

Other comprehensive income

Accumulated OCI totals € -0.7 million (previous year: € -1.7 million) and results from the measurement of derivatives amounting to € -1.1 million (previous year: € -1.7 million) and the deferred taxes thereon of € 0.4 million (previous year: € 0.0 million).

4.11 Deferred taxes

The following table shows the deferred tax assets and deferred tax liabilities:

in € million	Deferred tax assets 2018	Deferred tax assets 2017	Deferred tax liabilities 2018	Deferred tax liabilities 2017
Intangible assets	7.9	7.9	4.7	4.6
Goodwill	8.9	4.7	0.0	0.0
Property, plant and equipment	2.2	2.5	490.2	493.1
Financial assets	.	0.2	63.1	62.5
Other assets	29.1	13.9	4.6	9.4
Special reserve items	0.0	0.0	5.2	5.3
Provisions	90.7	81.5	16.1	12.6
Liabilities	4.9	4.7	20.0	2.5
Loss carryforward	7.1	8.7	n/a	n/a
Deferred taxes before netting	**150.8**	**124.1**	**603.9**	**590.0**
Netting	-126.5	-97.2	-126.5	-97.2
Deferred taxes after netting	**24.3**	**26.9**	**477.4**	**492.8**

In 2018, current deferred tax assets of € -14.9 million (previous year: € -0.1 million) and non-current deferred tax assets of € -111.6 million (previous year: € -97.1 million) were netted against deferred tax liabilities.

The Group has trade tax loss carryforwards of € 38.9 million (previous year: € 48.5 million). Deferred tax assets of € 7.1 million (previous year: € 8.7 million) were recognised on these loss carryforwards.

The maturity structure of the deferred taxes is as follows:

in € million	2018 Current	2018 Non-current	2017 Current	2017 Non-current
Deferred tax assets	12.1	12.2	14.7	12.2
Deferred tax liabilities	-4.6	-472.8	-0.8	-492.0
Net amount	**7.5**	**-460.6**	**13.9**	**-479.8**

Of the deferred tax assets shown, € 6.7 million (previous year: € -4.3 million) were recognised within equity in the reporting period.

These deferred taxes are attributable in their entirety to the remeasurement of defined benefit plans recognised in comprehensive income as well as to the measurement of derivatives (cash flow hedges).

in € million	2018 Before tax	2018 Income tax	2018 After tax
Changes from the remeasurement of defined benefit plans	-19.6	6.3	-13.3
Cash flow hedges	0.6	0.4	1.0
Other comprehensive income	-19.0	6.7	-12.3

	2017		
in € million	**Before tax**	**Income tax**	**After tax**
Changes from the remeasurement of defined benefit plans	12.3	-4.0	8.3
Cash flow hedges	0.9	-0.3	0.6
Other comprehensive income	13.2	-4.3	8.9

No deferred taxes were recognised on temporary differences of € 9.2 million (previous year: € 10.3 million) connected with shares in subsidiaries.

4.12 Provisions for pensions and similar obligations

In addition to their entitlements under government retirement systems and the income from private retirement planning, the employees in the Group are also covered by company retirement plans. These company retirement plans are based on company-wide agreements and on agreements in individual contracts.

Both defined contribution and defined benefit plans are in place, which provide retirement, invalidity and surviving dependant benefits. All pension commitments exist solely in Germany.

In the VGT Group, there are currently five different pension plans in the form of direct commitments, of which one pension plan for new employees is still open, and one pension plan in the form of an insurance-based pension vehicle.

With the exception of the insurance-based pension option, the basis for the relevant pension plan is always a works agreement in conjunction with the individual's employment contract. The individual employment contracts of senior executives contain pension commitments. Apart from the statutory rules customarily applying in Germany, the pension plans are not subject to any legal or regulatory rules.

All pension commitments (with the exception of direct insurance) constitute direct legal claims of the employees against the respective company and therefore provisions have to be shown in the balance sheet.

If and insofar as plan assets are created which serve solely to fulfil pension commitments, they are offset in the balance sheet against the present value of the obligation.

Provisions for pension obligations were established solely in connection with defined benefit pension commitments for current and former employees. As part of defined benefit pension commitments, beneficiaries are granted pensions with a defined benefit when they retire.

Employees in the Group mainly have pension commitments with fixed benefit commitments. The majority of pension commitments for the active workforce is based on capital components that the employees earn for each year of service with the company. The amount of the capital component earned in a year depends on the employees' income and their individual ages or length of service with the company.

Defined benefit pension commitments also generally include benefits for invalidity and death. Obligations from defined benefit pension commitments are largely covered by assets in bond, equity and real estate funds which are outsourced on a long-term basis.

Furthermore, the Group makes commitments under defined contribution plans. In this case, fixed contr butions are paid to external insurance companies or funds. The VGT Group has generally no further benefit obligations or risks from these pension plans beyond the payment of the defined contributions. In addition, the Group pays contributions to statutory retirement systems.

Respons bility for managing the pension commitments, in particular with regard to investment plans and contr bution plans, rests with each management.

Individual contractual pension benefit commitments

There are pension commitments under individual contracts of managing directors and senior executives. They contain retirement, invalidity and surviving dependants' benefits based on the Bochumer Verband Benefits Plan, the "VO Pension Plan" and deferred compensation. Employer-financed direct life insurance contracts exist in individual cases.

Defined benefit plans

Defined benefit plan commitments constitute direct pension claims of the employees against the company and therefore provisions have to be shown in the balance sheet. If plan assets are created which serve solely to meet retirement plan commitments, they are offset on the balance sheet against the present value of the obligations.

Extent of obligations for pension commitments

The direct pension obligations, measured by their present value, have developed as follows:

in € million	2018	2017
Present value at start of financial year	**466.1**	**449.0**
Service cost	16.1	16.6
Past service cost	0.7	0.7
Interest cost	9.3	8.9
Gains/losses from plan settlements	-	-0.1
Payments from plan settlements	-0.2	-0.2
Remeasurement of defined benefit plans	5.3	-4.5
Pension benefits paid	-5.5	-4.3
Present value at end of financial year	**491.8**	**466.1**

Past service cost is solely the result of new early retirement agreements and contains not only the social security compensation but also the effects on general pension obligations.

Plan settlements in the reporting period mainly relate to transfers of obligations at the commercial balance sheet carrying amount resulting from transfers of employees.

The remeasurement of defined benefit plans in the financial year is due to gains from changes in the financial assumptions (€ 5.5 million; previous year: loss € 5.7 million) and losses from changes in the demographic assumptions (€ 5.2 million; previous year: € 0.0 million) as well as to losses from experience adjustments (€ 5.6 million; previous year: gain € 10.2 million). The losses from changes in demographic assumptions result from the application of the new Heubeck mortality tables 2018.

The weighted average duration of the obligation is 22.2 years (previous year: 22.7 years) as of the reporting date.

In the following 10 years, the following pay-outs for pension benefits are expected:

	Due within 1 year		Due in 1 to 2 years		Due in 2 to 5 years		Due in more than 5 years	
in € million	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Expected pay-outs for pension benefits	7.9	6.3	8.6	7.1	32.8	29.1	80.5	76.9

Actuarial assumptions

The following parameters were used for measurement:

	31 Dec. 2017	31 Dec. 2016
Discount rate	2.00 %	2.00 %
Expected salary increase rate	2.50 %	2.75 %
Expected pension increase rate	2.00 % or in line with promised guaranteed increase	2.00 % or in line with promised guaranteed increase
Biometric data	Prof. Dr Klaus Heubeck 2018 G mortality tables	Prof. Dr Klaus Heubeck 2005 G mortality tables based on disability incidence rates which are reduced to 80 %

Sensitivity analysis

If the assumptions vary by +/– 0.25 percentage points or the expected mortality in the mortality tables varies by +/- 10 %, the effects on the scope of the obligation will be as follows:

2018	+0.25 %p or +10 %	-0.25 %p or -10 %
Discount rate	-4.81 %	+5.17 %
Future salary increase rate	+1.13 %	-1.10 %
Future pension increase rate	+3.06 %	-2.91 %
Mortality	-2.64 %	+2.96 %

2017	+0.25 %p or +10 %	-0.25 %p or -10 %
Discount rate	-5.01 %	+5.30 %
Future salary increase rate	+1.27 %	-1.23 %
Future pension increase rate	+2.94 %	-2.91 %
Mortality	-2.57 %	+2.87 %

The effects were determined using the same methods as for the measurement of the obligation at the end of the year.

Apart from the normal risks to which the pension commitments expose the Group, such as longevity or volatility of the assets, the Group is not exposed to any unusual or company-specific risks in connection with the pension commitments.

Fair value of plan assets

The fair value of the plan assets changed as follows:

in € million	2018	2017
Start of financial year	**335.9**	**314.7**
Interest income from plan assets	6.7	6.3
Remeasurement of defined benefit plans	-14.2	7.8
Payments into plan assets	52.0	7.1
End of financial year	**380.4**	**335.9**

To minimise the effects of the loss of individual investments or the failure of individual investments to provide the expected return, the Group spreads asset investments widely. The Group intends to ensure that plan assets fully cover the pension obligations under commercial law at every reporting date.

Should the development of plan assets fall short of the development of the obligations, payments into the plan assets are made.

As of the reporting date, the trustee has invested the plan assets in the following asset classes:

%	Target allocation	2018	2017
Bonds	62.5	52.9	58.2
Equity funds	23.8	20.0	24.3
Real estate funds	13.7	13.1	13.1
Cash and money market instruments	0.0	14.0	4.4

All assets are traded in an active market.

The expected return on plan assets for the subsequent year amounts to € 7.6 million. The expected payments into plan assets for the subsequent year amount to € 36.2 million.

Presentation of provisions for pensions

Provisions for pensions changed as follows:

in € million	2018	2017
Start of financial year	**130.2**	**134.3**
Service cost	16.1	16.6
Past service cost	0.7	0.7
Net interest expense	2.6	2.7
Plan settlement gain/loss	.	-0.1
Transfers/payments from plan settlements	-0.2	-0.3
Remeasurement effects	19.5	-12.3
Pension benefits paid	-5.5	-4.3
Payments into plan assets	-52.0	-7.1
End of financial year	**111.4**	**130.2**

Pension cost

The net periodic pension cost for defined benefit pension plans breaks down as follows:

in € million	2018	2017
Current cost (incl. plan settlement gain/loss)	16.1	16.5
Past service cost	0.7	0.7
Interest cost	9.3	8.9
Interest income from plan assets	-6.7	-6.3
Total	**19.4**	**19.8**

The remeasurement of defined benefit plans is accrued and recognised in full. It is reported outside the income statement as part of equity in the statement of recognised income and expenses.

The remeasurements of defined benefit plans recognised in equity and corresponding plan assets are shown in the following table:

in € million	2018	2017
Accumulated remeasurement recognised in equity at start of financial year	**-76.5**	**-88.8**
Remeasurement of the current financial year recognised in equity	-19.6	12.3
Accumulated remeasurement recognised in equity at end of financial year	**-96.1**	**-76.5**

4.13 Other provisions

Provisions with a maturity of more than one year are recognised at the present value of the expected future cash flows.

The other provisions are structured as follows:

Other provisions in € million	2018	thereof current	2017	thereof current
Provisions – pipeline sector	80.9	22.3	71.5	12.8
Provisions – personnel sector	56.8	20.9	52.3	19.6
Provisions – sales sector	1.4	1.4	0.0	0.0
Miscellaneous other provisions	2.3	1.3	3.0	1.9
Total	**141.4**	**45.9**	**126.8**	**34.3**

VGT expects the complete amount of current provisions (€ 45.9 million) to be utilised within the year.

Provisions – pipeline sector

As part of the acquisition of OGE, in 2012 contingent liabilities were identified, measured at fair value, accounted for as provisions and adjusted for changes in accordance with IFRS 3.56. These include provisions for restoration obligations for the decommissioned pipeline network in the amount of € 58.6 million (previous year: € 58.6 million) which are recognised under provisions for the pipeline sector and for which, according to current estimates, utilisation can mainly be expected from 2028 onwards.

Provisions – personnel sector

Provisions for personnel obligations contain mainly provisions for bonus payments, early retirement obligations, obligations for gas allowance payments and for long-service anniversary payments as well as other personnel costs.

€ 20.3 million (previous year: € 17.4 million) of the non-current provisions are expected to be utilised after 5 years. The remaining non-current provisions are expected to be utilised within the next 5 years.

Provisions – sales sector

The provisions relating to the sales sector include expected costs in the amount of € 1.4 million (previous year: € 0.0 million).

Miscellaneous other provisions

Miscellaneous other provisions exist in the amount of € 2.3 million (previous year: € 3.0 million).

The following table shows the change in other provisions:

in € million	1 Jan. 2018	Additions	Disposals	Unwinding of discounting	Reclassifi-cations	Change in plan assets	Utilisation	31 Dec. 2018
Provisions – pipeline sector	71.5	11.8	0.0	0.0	0.0	0.0	-2.4	80.9
Provisions – personnel sector	52.3	28.5	0.0	0.1	0.0	0.2	-24.3	56.8
Provisions – sales sector	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.4
Miscellaneous other provisions	3.0	0.9	-0.3	0.0	0.0	0.0	-1.3	2.3
Total	**126.8**	**42.6**	**-0.3**	**0.1**	**0.0**	**0.2**	**-28.0**	**141.4**

4.14 Liabilities

The following table provides a breakdown of the liabilities:

	2018		2017[8]	
in € million	**Current**	**Non-current**	**Current**	**Non-current**
Bonds	0.0	2,741.3	0.0	2,242.1
Liabilities to banks	42.7	181.1	62.5	219.3
Liabilities to proportionately consolidated companies	11.7	0.0	7.7	0.0
Other financial liabilities	40.4	91.8	38.2	91.8
Financial liabilities	**94.8**	**3,014.2**	**108.4**	**2,553.2**
Trade payables	92.3	0.4	81.7	1.5
Investment grants / construction cost grants	0.0	10.1	0.0	7.5
Liabilities to proportionately consolidated companies	2.0	0.0	9.5	0.0
Liabilities to affiliated companies	53.4	0.0	5.2	0.0
Accruals	13.6	0.0	13.2	0.0
Liabilities from derivative financial instruments	0.0	1.2	0.0	1.8
Contract liabilities	31.7	0.0	23.9	0.0
Other operating liabilities	29.7	18.6	22.2	18.6
Trade payables and other operating liabilities	**222.7**	**30.3**	**155.7**	**29.4**
Total	**317.5**	**3,044.5**	**264.1**	**2,582.6**

There were no unscheduled events that would have had a significant effect on the balance of contract liabilities.

[8] The prior-year figures have been adjusted owing to the retrospective application of IFRS 15.

In the 2013 financial year, VGT placed three bond tranches with a total volume of € 2,250.0 million on the capital market. A further bond with a volume of € 500.0 million was issued in the 2018 financial year.

The revolving credit facility ("RCF") in the amount of € 600.0 million concluded by VGT in the 2017 financial year was extended in July 2018 by a year to 2023. To provide supplementary cover for short-term liquidity requirements, a Euro Commercial Paper Programme for a total volume of € 500.0 million was set up and came into effect on 5 March 2018. Notes were issued under this programme during the course of the 2018 financial year. As of the reporting date, there were no Euro Commercial Paper issues outstanding.

In view of the terms of the bonds, which mature in 2020, 2023, 2025 and 2028, of the RCF, which has a maximum term until 2024 (minimum term until 2023), and the Euro Commercial Paper Programme as a further short-term source of finance, VGT has, overall, a balanced liquidity profile with a wide maturity spread.

Other financial liabilities include promissory notes in the amount of € 76.2 million and registered bonds in the amount of € 15.6 million, both unchanged from the previous year.

Other operating liabilities mainly result from obligations to Uniper Global Commodities SE ("Uniper"), Düsseldorf, from a subsequent adjustment to the purchase price of OGE in the amount of € 7.7 million (previous year: € 7.7 million). There are also liabilities from other taxes amounting to € 6.9 million (previous year: € 2.4 million) as well as liabilities to other shareholders of joint operations amounting to € 0.9 million (previous year: € 5.3 million).

5 Information on the Income Statement

5.1 Revenues

Revenue from contracts with customers

In the following table, the revenues generated are split into revenues from contracts with customers and revenues from leases and then broken down into the divisions Transport business and Other Services business:

	Transport business		Other Services business		Total	
in € million	2018	2017	2018	2017	2018	2017
Revenue from contracts with customers	883.6	803.0	123.7	119.1	1,007.3	922.1
Revenue from leases	0.0	0.0	0.9	0.9	0.9	0.9
Total revenues	**883.6**	**803.0**	**124.6**	**120.0**	**1,008.2**	**923.0**

Generally, revenues from the Transport business are recognised at a point in time and revenues from the Other Service business are recognised over time. Revenues from the Transport business are subject to regulation by the BNetzA and revenues from the Other Services business are basically generated in the unregulated gas industry segment.

The classification into Transport business and Other Services business is in line with the segment reporting disclosures at company level.

All contract liabilities that were contained in the balance of contract liabilities at the beginning of the financial year led to revenues in the reporting period. This also applies to the retrospectively adjusted prior-year figures.

The revenues from contracts with customers recognised within revenues basically result from performance obligations that were satisfied in the reporting period.

The total value of the performance obligations from contracts with customers that had not yet been satisfied at the reporting date amounts to € 121.9 million (previous year: € 122.8 million). These obligations are expected to be satisfied as follows:

Performance obligations not yet satisfied		
in € million	2018	2017
Probable satisfaction in ≤ 1 year	37.6	41.4
Probable satisfaction in > 1 year	84.3	81.4
Total	**121.9**	**122.8**

5.2 Own work capitalised

Own work capitalised amounts to € 27.4 million (previous year: € 26.2 million) and results primarily from engineering services in the network sector and in connection with new construction projects.

5.3 Other operating income

Other operating income includes mainly income from market area conversion and biogas levies in the amount of € 5.7 million (previous year: € 3.4 million) as well as € 3.6 million (previous year: € 15.5 million) from the purchase price adjustment due to the tax clause agreed between VGT and Uniper on the acquisition of OGE. There is also income in the amount of € 2.1 million (previous year: € 0.8 million) from the disposal of property, plant and equipment.

Realised exchange rate gains and income from foreign currency translation on the reporting date were of an insignificant amount (< € 50k.).

5.4 Cost of materials

in € million	2018	2017
Expenses for raw materials and supplies	203.4	197.2
Expenses for purchased goods	90.3	100.3
Total	**293.7**	**297.5**

Expenses for raw materials and supplies mainly comprise expenses for fuel energy, usage fees and load flow commitments. This item also includes expenses for market area conversion and biogas levies, which are largely passed on to the customers and collected in revenues of the transport business. The expenses for purchased goods mainly relate to maintenance costs as well as other services purchased in connection with the services business.

5.5 Personnel costs

Personnel costs contain the following components:

in € million	2018	2017
Wages and salaries	124.4	121.7
Social security contributions	19.3	18.2
Pension costs and other employee benefits	17.7	17.6
Total	**161.4**	**157.5**

Of the pension costs and other employment benefits totalling € 17.7 million, € 0.4 million (previous year: € 0.4 million) relate to defined contribution plans.

In the reporting period, the Group employed an average of 1,474 employees (previous year: 1,438), of which 330 were industrial workers (previous year: 322), 1,055 were salaried employees (previous year: 1,040), 75 were apprentices (previous year: 72), 9 were placement students (previous year: 0) and 5 were managing directors (previous year: 4). As in the previous year, the figure includes four employees from proportionately consolidated Group companies.

The personnel figures were determined on an average basis from the end figure of each quarter. Employees from proportionately consolidated companies were included in full.

5.6 Other operating expenses

The other operating expenses break down as follows:

in € million	2018	2017
IT costs	31.2	32.2
Market area conversion and biogas levies	7.2	4.6
Expenses for services rendered by third parties	5.4	6.4
Social security contr butions	5.4	3.8
Vehicle costs	4.9	4.7
Insurance premiums	3.7	3.5
Travelling costs	3.5	3.5
External audit and consulting costs	3.1	2.3
Rental and lease costs	2.3	2.3
Miscellaneous other operating expenses	16.1	18.4
Total	**82.8**	**81.7**

5.7 Depreciation, amortisation and impairment charges

in € million	2018	2017
Amortisation of intangible assets	8.5	27.7
Depreciation of property, plant and equipment	142.5	127.4
Impairment of property, plant and equipment	0.9	0.0
Total	**151.9**	**155.1**

The impairment in the amount of € 0.9 million results from the decommissioning of pipeline sections.

5.8 Financial result

in € million	2018	2017
Income/loss (-) from equity investments	**4.5**	**-0.6**
Income from companies accounted for using the equity method	**6.2**	**15.9**
Interest income	**0.5**	**0.1**
Interest expenses	**-57.9**	**-59.8**
Interest share of the addition to provisions	*-2.8*	*-2.7*
Other interest expenses	*-55.1*	*-57.1*
Impairment of financial assets	**0.0**	**-9.9**
Financial result	**-46.7**	**-54.3**

Dividend income is recognised when the right to receive payment is established. Interest income is recognised as the interest accrues using the effective interest method.

The interest share of the addition to provisions is mainly the interest cost from pension provisions (€ 9.3 million) - after deduction of the expected return on plan assets (€ 6.8 million) – as well as the unwinding of discounting of the other non-current personnel provisions totalling € 0.3 million.

Other interest expenses are largely interest on debt in connection with the bonds (€ 62.0 million; previous year: € 60.0 million).

An interest expense of € 1.5 million (previous year: € 1.5 million) resulted from the effective interest rate of the bonds.

The other interest expenses are reduced by the capitalised interest on debt amounting to € 13.3 million (previous year: € 9.4 million).

5.9 Income taxes

A profit-and-loss transfer agreement has existed since 1 January 2013 with OGE as the controlled company and VGT as the controlling company which provides the reason for the establishment of a fiscal entity for income tax purposes between VGT and OGE. Since then, following the conclusion of a further profit-and-loss transfer agreement, a further fiscal entity for income tax purposes has also existed with VGT as the controlled company and VGS as the controlling company.

In addition, income tax allocation agreements were concluded between VGT and OGE, and between VGS and VGT with the aim of allocating the income taxes economically incurred by OGE and VGT to these companies. Consequently, the VGT Group shows income tax allocations for the reporting year.

The domination and profit-and-loss transfer agreements between OGE as the intermediate controlling company and its subsidiaries METG, Open Grid Regional GmbH, Essen ("OGR"), PLEdoc, Open Grid Service GmbH, Essen ("OGS"), Line WORX GmbH, Essen and NEL Beteiligungs GmbH, Essen ("NELB") continue in existence. No agreements on income tax allocation were made between OGE and its controlled companies.

The income taxes break down as follows:

in € million	2018	2017
Income taxes for current financial year	3.1	0.8
Income tax allocations	95.4	73.5
Income taxes for prior financial years	0.0	0.0
Deferred taxes for current financial year	0.9	-5.2
Deferred taxes for prior financial years	-7.1	1.2
Income taxes	**92.3**	**70.3**

The pro-rata trade tax of proportionately consoldiated partnerships is shown as an effective tax expense for the current year. Taxes for prior financial years include deferred tax income from partnerships.

The deferred tax effects are due to the change in temporary differences.

The following reconciliation shows the differences between the expected and the recognised tax expense / rate in the Group:

		2018		2017	
		in € million	%	in € million	%
	Profit before tax in accordance with IFRS	**316.9**		**229.2**	
	Group income tax rate		31.0		31.0
	Expected income tax expense	**98.2**		**71.1**	
1	Permanent effects	-0.7	-0.2	-3.4	-1.3
2	Difference due to the trade tax assessment base	0.6	0.2	2.4	0.9
3	Taxes not relating to the period	-7.1	-2.3	-1.2	-0.5
4	Effect from measurement using the equity method	-1.0	-0.3	-1.6	-0.6
5	Change in deferred taxes on loss carryforwards	0.0	0.0	0.0	0.0
6	Other	2.3	0.7	3.0	1.2
	Effective tax expense / rate	**92.3**	**29.1**	**70.3**	**30.7**

The difference between the calculated tax expense and the effective tax expense is due largely to prior-period tax income from tax base adjustments at OGE.

6 Other Information

6.1 Information on the Cash Flow Statement

Cash provided by operating activities amounted to € 466.4 million in the reporting year (previous year: € 388.4 million). The increase of € 78.0 million is largely due to an increase of € 65.7 million in consolidated net income, the changes in plan assets of € -51.3 million (previous year: € -12.4 million) as well as liabilities to VGS from income tax allocations in the amount of € 46.4 million (previous year: receivable in the amount of € 3.4 million).

The cash used for investing activities changed in the financial year by € -80.2 million to € -513.9 million. Cash outflows for investments, largely in new build and expansion measures, decreased by € 33.4 million to € 436.2 million. Of the total additions to property, plant and equipment and intangible assets in the amount of € 459.6 million, € 68.1 million were non-cash.

In addition, the prior-year non-cash investments resulted in cash outflows in the amount of € 44.7 million. Of the cash flows from other financial investments in the amount of € -80.4 million, € -75.0 million relates largely to purchases of term deposits.

In addition, cash flow from investing activities includes restricted liquid funds in the amount of € 2.3 million (previous year: € 0.0 million), which were provided as guarantee deposits for various business transactions.

In the financial year, cash flow from financing activities totaled € 275.3 million (previous year: € -37.7 million). The placing of a bond by VGT under the Debt Issuance Programme led to proceeds in the amount of € 497.9 million. The Euro Commercial Paper Programme resulted in cash inflows and outflows in the amount of € 455.0 million for short-term financing. Furthermore, the repayment of the revolving credit facility existing in the previous year led to cash outflows of € 60.0 million.

The following shows the changes in liabilities from financing activities in the financial year:

	Financial liabilities		
in € million	Current	Non-current	Total
Start of financial year 2017	**76.6**	**2,493.1**	**2,569.7**
Cash-effective changes	-32.1	58.7	26.6
Non-cash changes	63.9	1.4	65.3
End of financial year 2017	**108.4**	**2,553.2**	**2,661.6**
Cash-effective changes	-117.8	497.9	380.1
Non-cash changes	104.2	-36.9	67.3
End of financial year 2018	**94.8**	**3,014.2**	**3,109.0**

The non-cash changes result almost exclusively from accrued interest and from reclassifications for maturity reasons are classified under "other changes" in accordance with IAS 7.44B (e).

For the purposes of the cash flow statement, cash and cash equivalents comprise exclusively cash at banks totalling € 334.2 million (previous year: € 106.4 million).

See section 4.5 for information on the liquid funds of the joint operations.

6.2 Contingencies

All financings in the VGT Group (in the form of bonds or bank loans) are granted to the borrowing Group companies without the provision of collateral security. As of 31 December 2018, the total amount of bank guarantees in favour of third parties was € 3.3 million (previous year: € 1.0 million).

6.3 Other financial obligations

The other financial obligations which cannot be seen from the balance sheet amount to € 51.2 million per annum (previous year: € 68.3 million) as of the reporting date and arise from long-term contracts for the grant of use of the pipeline network. The minimum lease payments for pipeline networks listed in section 6.4 are not included.

The following purchase commitments existed as of the reporting date:

in € million	2018	2017
Purchase commitment for investments in intang ble assets	1.7	4.3
Purchase commitment for investments in property, plant and equipment	368.2	552.3
Purchase commitment for maintenance work (incl. inventory materials)	167.8	145.7
Total purchase commitment	**537.7**	**702.3**

6.4 Leases

The Group rents pipeline networks, business premises, vehicles and other operating equipment under cancellable operating leases. For significant operating leases, there is an option to extend the contract. The existing contract relationships result in the following minimum lease payments for the Group:

	Due within 1 year		Due in 1 to 5 years		Due in more than 5 years	
in € million	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Buildings	1.7	1.7	5.4	5.5	.	.
Vehicles, IT and others	4.1	4.0	5.6	5.5	0.0	0.0
Minimum lease payments	**5.8**	**5.7**	**11.0**	**11.0**	**.**	**.**

In the 2018 financial year, payments under leases of € 6.3 million were recognised in income (previous year: € 18.4 million).

The Group is also a lessor under operating leases. The lease business is, however, only a side-line activity for the Group.

The existing leases do not normally refer to individually separable assets and also do not grant a particular customer exclusive usage of a separable asset; thus there is no indication in the balance sheet of the assets bound by operating leases. The contract relations with the Group as lessor result in minimum lease payments received as follows:

	Due within 1 year		Due in 1 to 5 years		Due in more than 5 years	
in € million	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Buildings	0.7	0.7	0.6	0.6	0.0	0.0
IT and others	0.1	0.1	0.3	0.3	0.0	0.0
Minimum lease pay-ins	**0.8**	**0.8**	**0.9**	**0.9**	**0.0**	**0.0**

In the 2018 financial year, payments under leases of € 0.9 million were recognised in income (previous year: € 0.9 million).

Sub-leases under the operating leases were only made with one subsidiary not included in the Group in an insignificant volume.

6.5 Segment reporting

In accordance with IFRS 8, the segments are defined according to the internal steering and reporting in the VGT Group (management approach). The entire Management of OGE is identified as the chief operating decision-maker (CODM) of the VGT Group. In particular the implementation of the concept of an Independent Transmission Operator (ITO) prohibits intervention of higher levels in the business operations of the OGE Group. Consequently, resource allocation at higher level is not poss ble.

The VGT Group has two business segments, the Transport and Other Services businesses. The revenues of these two business segments are reported separately to the Management of OGE. However, as expenses exist in both business segments which are neither immaterial nor independent of revenues, the revenues are not a result metric within the meaning of IFRS 8.5 (b). Another result metric for the two business segments is not reported separately to the Management of OGE. As a result, the VGT Group constitutes a "one segment company".

Entity-wide disclosures

External revenues break down as follows:

in € million	2018	2017
Transport business	883.6	803.0
Other Services business	124.6	120.0
Total	**1,008.2**	**923.0**

Information on geographical regions in accordance with IFRS 8.33 is not given as the business of the VGT Group largely relates to one region (Germany; place of performance and/or seat of the companies).

The VGT Group generated € 201.7 million with one customer in 2018 (previous year: € 162.7 million). That is more than 10 % of total revenues.

6.6 Business transactions with related parties

From the Group's perspective, the following companies and bodies are related parties as defined by IAS 24:

Controlling companies: through VGH and VGS, a consortium consisting of the British Columbia Investment Management Corporation (32.15 %), Abu Dhabi Investment Authority (24.99 %), Macquarie Infrastructure and Real Assets (23.58 %), Münchener Rückversicherungs-Gesellschaft AG (18.73 %) as well as Halifax Regional Municipality Master Trust (0.55 %), together holding 100 % of the shares in VGT.

On the basis of the profit-and-loss transfer agreement concluded with VGS on 1 January 2013, VGT is to transfer its profits of € 97.0 million to VGS (previous year: € 53.7 million) and to pay € 95.3 million (previous year: € 73.5 million) to VGS under the income tax allocation agreement with VGS. An advance payment of € 138.9 million (previous year: € 122.0 million) was already made to VGS on the basis of these two agreements. On the reporting date, the total remaining amount of € 53.4 million (previous year: € 5.2 million) after deduction of tax receivables chargeable to VGS is recorded in current operating liabilities to affiliated companies.

Apart from the above, no significant business transactions were performed in the reporting period with controlling companies.

Associates and joint arrangements

The list of shareholdings is given in section 7. Significant business relations only exist with NETG, DEUDAN - Deutsch/Dänische Erdgastransport-Gesellschaft mbH & Co. Kommanditgesellschaft, Handewitt, GasLINE KG, JGT and NetConnect Germany GmbH & Co. KG, Ratingen. The individual business transactions were as follows:

in € million	2018	2017
Receivables	3.3	3.9
Liabilities	3.7	1.7
Revenues	17.6	18.0
Cost of materials	18.1	14.9

Most of the revenues (€ 13.8 million; previous year: € 13.6 million) were generated with technical and commercial services. At € 14.9 million (previous year: € 11.4 million), fees for usage contracts for the pipeline network account for most of the cost of materials.

Related parties

In line with IAS 24, the remuneration of key management personnel (Management of VGT as well as Management and members of the Supervisory Board of OGE) is to be disclosed. With one exception, the managing directors of VGT are employed at the member companies of the controlling investor consortium and receive no remuneration from VGT for their work. As the managing directors perform similar pipeline and monitoring activities for a large number of companies and the costs are not allocated to the individual companies, it is not possible to attr bute the individual remunerations to their VGT management work.

The Supervisory Board of OGE received remuneration totalling € 0.1 million in the reporting period, the same as in the previous year. The remuneration received by the members of the OGE Management Board and by the managing director employed at VGT for their services as employees (in line with IAS 24.17) breaks down as follows:

in € million	2018	2017
Salaries and other current benefits	2.5	2.7
Post-termination benefits	0.3	0.3
Other benefits due in the long term	0.8	0.8
Total remuneration	**3.6**	**3.8**

Otherwise, no transactions took place with members of the Management in key positions.

6.7 Events after the balance sheet date

Up to the date of the preparation of the consolidated financial statements, no business transactions of material significance had taken place which have an effect on the presentation of the net assets, financial position and results of operations of the Group in the reporting period.

6.8 Independent auditors' fees

The auditors of the VGT consolidated financial statements are PricewaterhouseCoopers GmbH WPG, Essen. The fees for financial statement audits include in particular fees for statutory auditing of the consolidated financial statements and the annual financial statements of the Group companies of VGT. Other assurance services include in particular assurance services from contractual obligations that are not financial statement audits and are not used in connection with the audit. The fees for other services mainly comprise fees for project-related advisory services.

in € million	2018	2017
Financial statement audits	0.5	0.5
Other assurance services	0.1	0.0
Other services	0.2	0.2
Total	**0.8**	**0.7**

6.9 Management

The following persons have been appointed to the Management and as representatives of the Company:

Stephan Kamphues
Chairman of the VGT Board of Management

Hilko Cornelius Schomerus
Managing Director, Macquarie Infrastructure & Real Assets
Frankfurt am Main

John Benedict McCarthy
Global Head, Infrastructure Division, ADIA, until 13 November 2018
Abu Dhabi/United Arab Emirates

Laurent Fortino
Senior Investment Manager, Infrastructure Division, ADIA, from 13 November 2018
Abu Dhabi/ United Arab Emirates

Lincoln Hillier Webb
Vice President, Private Placements, British Columbia Investment Management Corp.
Victoria, British Columbia/Canada

Dominik Damaschke
Senior Investment Manager, Private Equity & Infrastructure, MEAG MUNICH ERGO Asset Management GmbH
Munich

Cord von Lewinski
Managing Director, Macquarie Infrastructure & Real Assets
Frankfurt am Main

Richard W. Dinneny
Portfolio Manager, Private Placements, British Columbia Investment Management Corp.
Victoria, British Columbia/Canada

Guy Lambert
Head of Utilities, Infrastructure Division, ADIA
Abu Dhabi/United Arab Emirates

With the exception of Stephan Kamphues, the managing directors are not employees of the Company.

7 List of Shareholdings as of 31 December 2018

Name	Seat	Trade register number	Share in %	Equity in € k[1]	Net income in € k[1]
Consolidated					
Open Grid Europe GmbH	Essen	HRB 17487	100.00	1,964,841	198,697
Open Grid Regional GmbH	Essen	HRB 19964	100.00	500	48
Mittelrheinische Erdgastransportleitungs-gesellschaft mbH	Essen	HRB 24567	100.00	64,150	55,600
Line WORX GmbH	Essen	HRB 23536	100.00	84,725	18,151
Proportionately consolidated					
MEGAL Mittel-Europäische-Gasleitungsgesellschaft mbH & Co. KG	Essen	HRA 8536	51.00	89,246	27,694
NETRA GmbH Norddeutsche Erdgas Trans-versale & Co. Kommanditgesellschaft	Schneiderkrug	HRA 150471	40.55	61,061	17,387
Trans Europa Naturgas Pipeline Gesellschaft mbH & Co. KG	Essen	HRA 8548	51.00	89,101	4,352
Zeelink GmbH & Co. KG	Essen	HRA 10610	75.00	217,513	-435
Equity-accounted					
GasLINE Telekommun kationsnetzgesellschaft deutscher Gasversorgungsunternehmen mbH & Co. Kommanditgesellschaft [2]	Straelen	HRA 1805	29.24	76,403	35,403
jordgasTransport GmbH [2]	Hanover	HRB 214	50.00	86,091	9,903
Non-consolidated companies due to immaterial importance					
caplog-x GmbH [2] [5]	Leipzig	HRB 23614	31.33	627	427
DEUDAN - Deutsch/Dänische Erdgastransport-Gesellschaft mbH & Co. Kommanditgesellschaft [2] [3]	Handewitt	HRA 3848 FL	24.99	4,833	318
DEUDAN-Deutsch/Dänische Erdgastransport-Gesellschaft mbH [2] [3]	Handewitt	HRB 3531 FL	24.99	79	2
e-loops GmbH	Essen	HRB 28610	49.00	495	-30
GasLINE Telekommun kationsnetz-Geschäftsführungsgesellschaft deutscher Gasversorgungsunternehmen mbH [2] [5]	Straelen	HRB 4812	29.24	69	2
LIWACOM Informationstechn k GmbH [2] [5]	Essen	HRB 7829	33.33	553	157
MEGAL Verwaltungs-GmbH [3]	Essen	HRB 18697	51.00	50	2
NEL Beteiligungs GmbH [4]	Essen	HRB 23527	100.00	25	-1
NetConnect Germany GmbH & Co. KG [2] [5]	Ratingen	HRA 20201	35.00	5,000	0
NetConnect Germany Management GmbH [2] [5]	Ratingen	HRB 59556	35.00	78	3
NETRA GmbH-Norddeutsche Erdgas Trans-versale [2] [3]	Schneiderkrug	HRB 150783	50.00	113	2
Nordrheinische Erdgastransportleitungs-gesellschaft mbH & Co. KG [2] [3]	Dortmund	HRA 17834	50.00	31,559	8,040
Nordrheinische Erdgastransportleitungs-Verwaltungs-GmbH [3]	Dortmund	HRB 26278	50.00	39	1
Open Grid Service GmbH [4]	Essen	HRB 22210	100.00	132	-167
PLEdoc GmbH [4]	Essen	HRB 9864	100.00	589	1,331
PRISMA European Capacity Platform GmbH [2] [6]	Leipzig	HRB 21361	1.33	516	254
Trans Europa Naturgas Pipeline Verwaltungs-GmbH [3]	Essen	HRB 18708	50.00	48	2
Zeelink-Verwaltungs-GmbH [3]	Essen	HRB 27607	75.00	30	2

(1) Equity and net income are based on country-specific accounting policies
(2) Equity and net income refer to the previous year
(3) Joint arrangement (not consolidated pro rata/measured using the equity method)
(4) Non-consolidated affiliated company
(5) Associate (not measured using the equity method)
(6) Other equity investments

8 Statement of Changes in Non-current Assets

Consolidated Statement of Changes in Non-current Assets of the VGT Group from 1 Jan. to 31 Dec. 2018

							Accumulated depreciation and amortisation				Carrying amounts
	1 Jan. 2018	Additions	Appreciation	Disposals	Re-classifications	31 Dec. 2018	1 Jan. 2018	Additions	Disposals	31 Dec. 2018	31 Dec. 2018
	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million
Intangible assets											
Internally generated industrial property rights and similar rights and assets	4.4	1.1	0.0	-0.3	0.5	5.7	-2.6	-0.7	0.3	-3.0	2.7
Purchased concessions, industrial property rights and similar rights and assets and licences to such rights and assets	170.7	11.0	0.0	-11.8	4.3	174.2	-153 3	-7.8	11 2	-149 9	24.3
Advance payments	22.6	2 5	0.0	0.0	-4.8	20.3	0.0	0.0	0.0	0.0	20.3
	197.7	**14.6**	**0.0**	**-12.1**	**0.0**	**200.2**	**-155.9**	**-8.5**	**11.5**	**-152.9**	**47.3**
Goodwill	**830.4**	**0.0**	**0.0**	**0.0**	**0.0**	**830.4**	**0.0**	**0.0**	**0.0**	**0.0**	**830.4**
Property, plant and equipment											
Land, leasehold rights and buildings including buildings on third-party land	176.0	28.4	0.0	-0.4	58.5	262.5	-27.4	-7.3	0.1	-34.6	227.9
Pipeline system	2,248.0	74 9	0.0	-9.7	47.7	2,360.9	-366 5	-74.4	1.3	-439.6	1,921.3
Technical plant, equipment and machinery	940.3	118.7	0.0	-3.5	252.0	1,307.5	-221 2	-55.6	2.8	-274.0	1,033.5
Other equipment, fixtures, furniture and office equipment	55.7	5 9	0.0	-1.2	0.3	60.7	-27 9	-6.1	1.1	-32 9	27.8
Advance payments and construction in progress	573.3	217.1	0.0	0.0	-358.5	431.9	-4.0	0.0	0.0	-4.0	427.9
	3,993.3	**445.0**	**0.0**	**-14.8**	**0.0**	**4,423.5**	**-647.0**	**-143.4**	**5.3**	**-785.1**	**3,638.4**
Financial assets											
Companies accounted for using the equity method	121.0	8 5	0.0	0.0	-16.7[9]	112.8	0.0	0.0	0.0	0.0	112.8
Equity investments	48.8	0 3	0.0	0.0	0.0	49.1	-19 3	0.0	0.0	-19 3	29.8
Long-term loans granted	3.0	0 3	0.0	-0.5	0.0	2.8	0.0	0.0	0.0	0.0	2.8
	172.8	**9.1**	**0.0**	**-0.5**	**-16.7**	**164.7**	**-19.3**	**0.0**	**0.0**	**-19.3**	**145.4**
	5,194.2	**468.7**	**0.0**	**-27.4**	**-16.7**	**5,618.8**	**-822.2**	**-151.9**	**16.8**	**-957.3**	**4,661.5**

[9] Under financial assets, effects from at-equity adjustments are presented within reclassifications.

Consolidated Statement of Changes in Non-current Assets of the VGT Group from 1 Jan. to 31 Dec. 2017

							Accumulated depreciation and amortisation				Carrying amounts
	1 Jan. 2017	Additions	Appreciation	Disposals	Re-classifications	31 Dec. 2017	1 Jan. 2017	Additions	Disposals	31 Dec. 2017	31 Dec. 2017
	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million	in € million
Intangible assets											
Internally generated industrial property rights and similar rights and assets	3.7	0.4	0.0	0.0	0.3	4.4	-1.8	-0.8	0.0	-2.6	1.8
Purchased concessions, industrial property rights and similar rights and assets and licences to such rights and assets	167.6	3.3	0.0	-0.7	0.5	170.7	-126.5	-26.9	0.1	-153.3	17.4
Advance payments	11.4	12.0	0.0	0.0	-0.8	22.6	0.0	0.0	0.0	0.0	22.6
	182.7	**15.7**	**0.0**	**-0.7**	**0.0**	**197.7**	**-128.3**	**-27.7**	**0.1**	**-155.9**	**41.8**
Goodwill	**830.4**	**0.0**	**0.0**	**0.0**	**0.0**	**830.4**	**0.0**	**0.0**	**0.0**	**0.0**	**830.4**
Property, plant and equipment											
Land, leasehold rights and buildings including buildings on third-party land	172.2	3.4	0.0	-0.1	0.5	176.0	-21.8	-5.6	0.0	-27.4	148.6
Pipeline system	2,124.9	84.2	0.0	-1.4	40.3	2,248.0	-296.9	-69.9	0.3	-366.5	1,881.5
Technical plant, equipment and machinery	858.1	41.4	0.0	-0.8	41.6	940.3	-175.5	-45.7	0.0	-221.2	719.1
Other equipment, fixtures, furniture and office equipment	48.6	3.9	0.0	-1.0	4.2	55.7	-22.7	-6.2	1.0	-27.9	27.8
Advance payments and construction in progress	307.5	353.0	0.0	-0.6	-86.6	573.3	-4.0	0.0	0.0	-4.0	569.3
	3,511.3	**485.9**	**0.0**	**-3.9**	**0.0**	**3,993.3**	**-520.9**	**-127.4**	**1.3**	**-647.0**	**3,346.3**
Financial assets											
Companies accounted for using the equity method	126.5	7.5	0.0	-18.0	5.0[10]	121.0	0.0	0.0	0.0	0.0	121.0
Equity investments	48.6	0.2	0.0	0.0	0.0	48.8	-9.4	-9.9	0.0	-19.3	29.5
Long-term loans granted	3.1	0.4	.	-0.5	0.0	3.0	0.0	0.0	.	0.0	3.0
	178.2	**8.1**	**0.0**	**-18.5**	**5.0**	**172.8**	**-9.4**	**-9.9**	**0.0**	**-19.3**	**153.5**
	4,702.6	**509.7**	**0.0**	**-23.1**	**5.0**	**5,194.2**	**-658.6**	**-165.0**	**1.4**	**-822.2**	**4,372.0**

[10] Under financial assets, effects from at-equity adjustments are presented within reclassifications.

Essen, 15 March 2019

Vier Gas Transport GmbH

The Management

Stephan Kamphues

Hilko Cornelius Schomerus

Laurent Fortino

Lincoln Hillier Webb

Dominik Damaschke

Cord von Lewinski

Richard W. Dinneny

Guy Lambert

INDEPENDENT AUDITOR'S REPORT

To Vier Gas Transport GmbH, Essen

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Vier Gas Transport GmbH, Essen, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Vier Gas Transport GmbH for the financial year from January 1 to December 31, 2018. In accordance with the German legal requirements, we have not audited the content of the non-financial group statement pursuant to § [Article] 315b Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code].

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of the non-financial group statement referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for

Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matter of most significance in our audit was as follows:

Recoverability of goodwill

Our presentation of this key audit matter has been structured as follows:

① Matter and issue

② Audit approach and findings

③ Reference to further information

Hereinafter we present the key audit matter:

Recoverability of goodwill

① Goodwill amounting in total to € 830.4 million (15.8% of total assets) is reported under the "Goodwill" balance sheet item in the consolidated financial statements of Vier Gas Transport GmbH, Essen. Goodwill is tested for impairment by the Company once a year or when there are indications of impairment to determine any possible need for write-downs. The impairment test is carried out at the level of the cash-generating unit to which the relevant goodwill is allocated. The carrying amount of the cash-generating unit, including goodwill, is compared with the corresponding recoverable amount in the context of the impairment test. The recoverable amount is generally calculated on the basis of fair value less costs of disposal. The present value of the future cash flows from the cash-generating unit normally serves as the basis of valuation. The present values are calculated using discounted cash flow models. For this purpose, the budget projections of the Group prepared by the executive directors form the starting point which are extrapolated based on assumptions about long-term regulatory developments. The discount rate used is the weighted average cost of capital for the cash-generating unit.

The impairment test determined that no write-downs were necessary.

The outcome of this valuation is dependent to a large extent on the estimates made by the executive directors with respect to the future cash inflows from the cash-generating unit, the discount rate used, the rate of growth and other assumptions about the long-term margin development and the development of the relevant regulatory factors, and is therefore subject to considerable uncertainty. Against this background and due to the highly complex nature of the measurement, this matter was of particular significance in the context of our audit.

② As part of our audit, we assessed the methodology used for the purpose of performing the impairment test and evaluated the calculation of the weighted average cost of capital, among other things. Furthermore, we satisfied ourselves as to the appropriateness of the future cash flows used in the measurement in particular by comparing this data with the budget projections and assessing the data on the basis of sector-specific and regulatory market expectations, and in the process of doing so, making use of the executive directors' explanations regarding key value drivers. In the knowledge that even relatively small changes in the discount rate applied can have a material impact on the value of the entity calculated in this way, we focused our testing in particular on the parameters used to determine the discount rate applied, and verified the calculation model. We performed sensitivity analyses in order to reflect the uncertainty inherent in the projections. Taking into account the information available, we determined that the carrying amounts of the cash-generating unit, including the allocated goodwill, were adequately covered by the discounted future net cash inflows. Taking into consideration the information available, in our view the measurement parameters and assumptions used by the executive directors were properly derived for conducting impairment tests.

③ The Company's disclosures on impairment testing and on the "Goodwill" balance sheet item are contained in sections 2.6 and 4.2 of the notes to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the non-financial group statement pursuant to § 315b Abs. 1 HGB.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Audit Committee for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The audit committee is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the shareholders' meeting on April 10, 2018. We were engaged by the management on October 8, 2018. We have been the group auditor of Vier Gas Transport GmbH, Essen, without interruption since the financial year 2012.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Bernhard Klinke.

Essen, March 15, 2019

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

(sgd. Bernhard Klinke) Wirtschaftsprüfer (German Public Auditor)	(sgd. ppa. Ronald Koch) Wirtschaftsprüfer (German Public Auditor)