Combined Management Report

Group Fundamentals

GROUP STRUCTURE

Company structure and shareholdings

MVV Energie AG, which has its legal domicile in Mannheim, plays a key role as MVV's listed parent company. It directly or indirectly owns shares in the companies which belong to the Group and also has its own operations. Including MVV Energie AG, the MVV Group includes 155 fully consolidated companies and 36 companies recognised at equity. Our group of companies has its largest locations in Mannheim, Kiel, Offenbach and Wörrstadt. We are also present in more than 20 countries. Alongside Germany, these mainly involve the United Kingdom and the Czech Republic.

Organisational structure

We manage MVV in five segments on which we also base our external reporting:

The **Customer Solutions** reporting segment comprises the business fields of Retail, Business and Commodities.

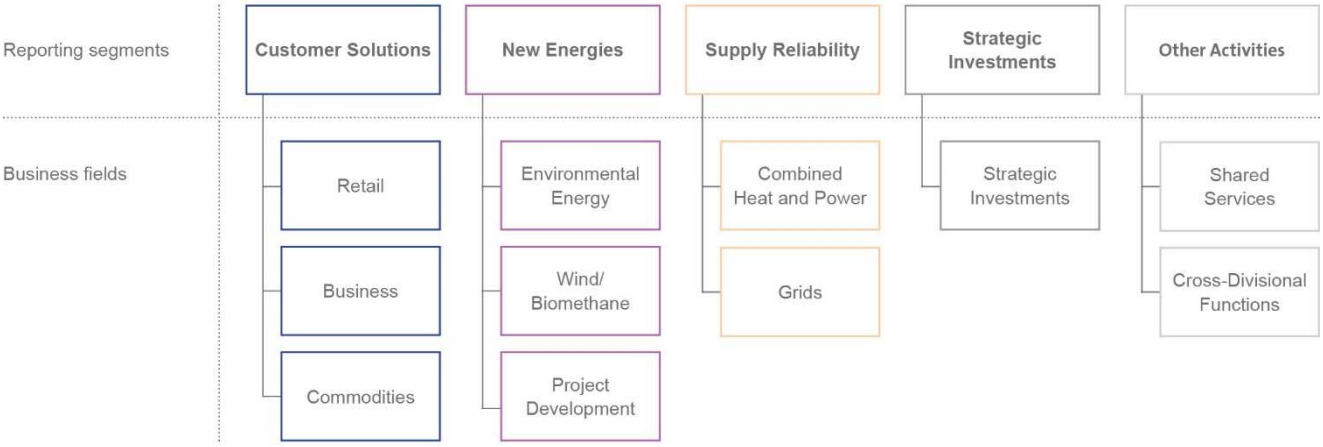
The Environmental Energy, Wind/Biomethane and Project Development business fields are allocated to the **New Energies** reporting segment.

The **Supply Reliability** reporting segment includes the Combined Heat and Power and the Grids business fields.

The **Strategic Investments** reporting segment mainly consists of Köthen Energie and MVV Energie CZ, as well as the at-equity result of Stadtwerke Ingolstadt.

Our shared service companies and cross-divisional functions are pooled in the **Other Activities** reporting segment. The shared service companies perform metering, billing and IT services for MVV.

REPORTING SEGMENTS AND BUSINESS FIELDS



BUSINESS MODEL

Based on calculations compiled by the Association of the German Energy and Water Industries (BDEW), we are one of Germany's leading energy companies. We cover all key stages of the energy industry value chain. We generate energy, trade with it and distribute it via proprietary grid companies. We market energy solutions and operate in the environmental energy business. We also produce and distribute water. We have a special focus on renewable energies, where we are active in project development and operations management for windfarms and solar parks, as well as for biomass power plants, and have these kinds of plant in our own generation portfolio.

Customer Solutions segment

The Customer Solutions reporting segment includes the energy and water retail and wholesale businesses. Here, we aim to provide our customers with energy from environmentally-friendly generation. That is why we have a broad range of products and services meeting ecological standards – from renewable energies through to environmentally-friendly district heating – that we offer to our retail and business customers. These also include the portfolio of solutions we offer to retail and business customers for self-generated solar electricity and e-mobility. E-mobility is also an integral component of our activities in Smart Cities, where we act as a system partner to local authorities and offer networked solutions for towns and cities. Our range of solutions for business customers focuses on projects and measures to enhance efficiency and optimise energy use at industrial, retail and real estate customers. The Customer Solutions segment also includes the commodities, service and trading business at MVV Trading, where we combine energy procurement, energy product trading and portfolio management for our group of companies. We also offer these services to third-party customers on the market. Moreover, our trading subsidiary is also responsible for the renewable energies direct marketing business.

New Energies segment

In the New Energies reporting segment we on the one hand pool our competence in making ecological use of waste and biomass. We draw on this expertise not only at our plants in Mannheim, Offenbach, Leuna, Königs Wusterhausen and Flörsheim-Wicker, but also in the United Kingdom, where we operate an energy from waste plant with heat extraction in Plymouth and a biomass power plant with CHP capability at Ridham Dock. In the Scottish city of Dundee, we took over an existing energy from waste plant two years ago and are building a new plant in the direct vicinity. Furthermore, in Germany we also have biogas and biomethane plants. On the other hand, the New Energies segment also contains our proprietary wind turbines and photovoltaics systems, as well as our national and international project development business. Solar power is the focal point in the international business, while in Germany we also focus on onshore wind power and free-field photovoltaics systems. We also act as operations managers for windfarms and solar parks.

Supply Reliability segment

The Supply Reliability reporting segment includes our generation portfolio for conventional energies with combined heat and power generation. These include our new gas-fired CHP plant in Kiel, our CHP plant in Offenbach and our shareholding in the large power plant in Mannheim (Grosskraftwerk Mannheim – GKM). To guarantee a reliable supply of energy and water, high-performing grids are crucial. For this reason, this segment also includes the grid business at our distribution grid operators in Mannheim, Kiel and Offenbach. All in all, within the MVV Group we operate electricity, district heating, gas and water grids with a total length of more than 19,000 kilometres.

CORPORATE STRATEGY

We are making our contribution to climate protection

Our aim is climate neutrality. We are committed to the targets agreed in the Paris Climate Accord and will be climate neutral as a company by 2050 at the latest.

To achieve this, we will

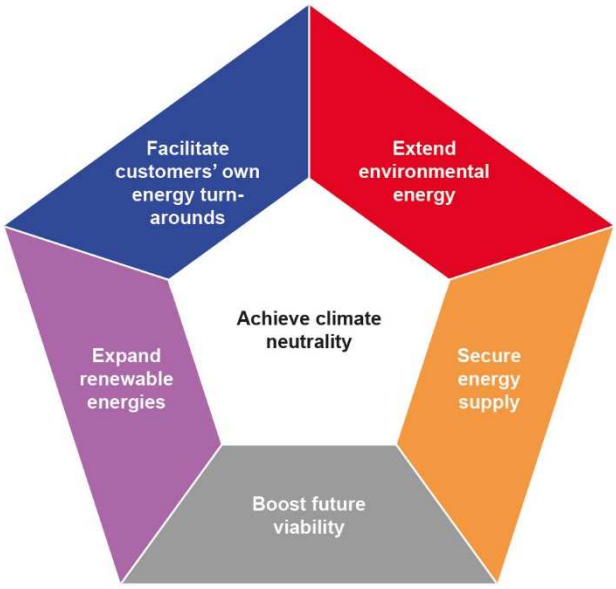
- Continue to press ahead with expanding renewable energies
- Gradually reduce the emissions from our conventional generation positions to zero
- Replace conventional heating energy generation with low-CO_2 and renewable sources
- Offer products and services that facilitate climate neutrality for and at our customers
- Limit unavoidable emissions to a minimum and look into new technologies facilitating the climate-neutral management of unavoidable residual emissions.

We have underpinned this **decarbonisation strategy, Page 48** with specific quantitative CO_2 reduction targets to be achieved by 2030. We have thus complemented the **sustainability targets, Pages 48 and 51** we set in 2016.

We are investing in sustainable growth

One core component of our strategy involves a comprehensive investment programme with a long-term perspective. We are aligning this to our sustainability targets and thus further developing our group of companies. We will continue to act on the opportunities arising in the course of the energy turnaround, and that both in Germany and beyond. We intend to promote our growth in future as well.

We are convinced that by making targeted investments we will tap further potential for MVV.



We are developing solutions for our customers

Our proven expertise and our decades of experience enable us to develop competitive products and services for our customers. We supplement our portfolio of products and services by forging strategic partnerships and acquiring shareholdings.

One key focus in the expansion of our portfolio of solutions relates to e-mobility. As well as charging infrastructure and smart charging management for industrial and commercial customers, we also offer combined products comprising photovoltaics systems, charging stations and e-vehicles to our retail customers. Demand for the charging infrastructure has increased as e-mobility becomes more widespread, as has demand for storage and energy management solutions.

As a partner to local authorities and municipal utility companies, we are developing holistic concepts for towns and cities of the future and decentralised district solutions and putting these into practice.

We are further expanding our activities in our Environmental Energy business field

We also see growth potential for waste and sewage incineration and for organic waste fermentation. Generating electricity and heating energy from waste, an activity which forms part of our Environmental Energy business field, is a key pillar of a modern, resource-efficient, recycling-based economy. Based on analysis performed by the consultancy ecoprog, we are one of Germany's three largest operators of energy from waste and biomass power plants. Not only that, we have been active in the United Kingdom for several years now with our waste-fired CHP plants in Plymouth and Dundee and our biomass plant at Ridham Dock. We plan to make further investments in this business field.

We are also continually working on the further development of our Mannheim energy location at Friesenheimer Insel. In February 2020, we connected our waste-fired CHP plant to the existing district heating grid. Moreover, we are integrating new and innovative technologies into our plant. We will be recycling phosphorous from municipal sewage and simultaneously generating environmentally-friendly energy. This way, we are drawing on the opportunities arising due to amendments in statutory sewage treatment requirements. The phosphorous thereby recovered is a valuable raw material in the production of manure and thus helps to build a sustainable cycle. At other locations as well, we are working on phosphorous treatment solutions and will integrate waste incineration more closely into district heating concepts.

We supply our customers reliably with energy

The further expansion in energy generation from renewable sources also involves challenges given the volatility in the volumes of electricity fed in by wind turbines and photovoltaics systems depending on the time of day and weather conditions. We have set ourselves the standard of providing our customers with a secure and reliable supply of energy. In this respect, the reliability, intelligence and performance capacity of our grids play a key role.

For us, one major focus of supply reliability relates to the future of the heating energy supply. At our locations, the pipeline-based supply of heating energy is and will remain an indispensable component of a sustainable, forward-looking heating energy supply. This will gradually involve lower levels of CO_2 and ultimately, in the target state, the heating energy supply will be entirely free of CO_2. We have invested, for example, in connecting our CHP plant in Mannheim to the regional district heating grid. Our new modular gas-fired CHP plant in Kiel launched operations at the end of November 2019. We are continually developing our heating energy concept further with the goal of decarbonisation and integrating renewable energies into heating energy generation. This way, we are gradually implementing our vision of a sustainable heating energy supply.

We are building on renewable energies

In expanding our portfolio of renewable energy generation plants, we are focusing in the medium term on onshore wind power and photovoltaics. Furthermore, we are reviewing potential repowering options for our existing plants. With our Juwi and Windwärts subsidiaries, we are focusing in our project development activities on developed international markets that offer growth potential and on Germany.

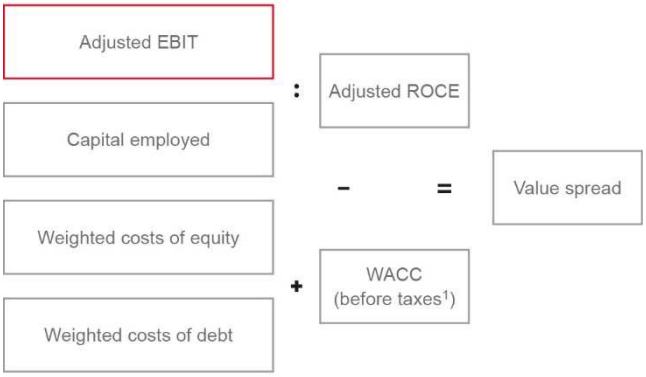
We are enhancing our fitness for the future

We repeatedly review the suitability for future use of all the technologies, procedures and processes which we deploy. In this, we take due account of the economic, ecological and political framework. To maintain our fitness for the future, we are continually enhancing our corporate culture and retaining and expanding our employees' skills. To this end, we draw on the possibilities and opportunities offered by digitalisation on all levels and in a variety of ways. We use digital solutions, for example, to foster the exchange of information and cooperation, as well as to structure existing processes more efficiently. On an operating level, we use digital solutions in both our B2C and our B2B segments. In our decentralised energy solutions and energy efficiency activities, digital solutions form the basis for monitoring, controlling and optimising customer plants. On process level, we work with approaches such as predictive maintenance based on artificial intelligence and big data. These enable us, for example, to optimise maintenance cycles at our power plants or wind turbines and minimise downtime. For our customers, we are also developing apps that are easy to use, such as those offered for e-mobility.

VALUE-BASED CORPORATE MANAGEMENT

Our value-based corporate management has the objective of sustainably increasing MVV's value and offering an attractive dividend to our shareholders. We achieve this by generating a positive value spread, i.e. by ensuring that the return on average capital employed (ROCE) exceeds the costs of capital (WACC). The most important key figure in this respect is adjusted operating earnings before interest and taxes (adjusted EBIT), which we refer to in order to assess the medium and long-term success of our business activities. To calculate this key earnings figure, we eliminate earnings items resulting from the measurement of financial derivatives pursuant to IFRS 9 as of the reporting date, items resulting from the structural adjustment for part-time early retirement and, where applicable, restructuring expenses. We add interest income from finance leases reported below EBIT in the income statement to our adjusted EBIT. This income results from contracting projects and therefore forms part of our operating business.

CALCULATION OF VALUE SPREAD
(simplified presentation)

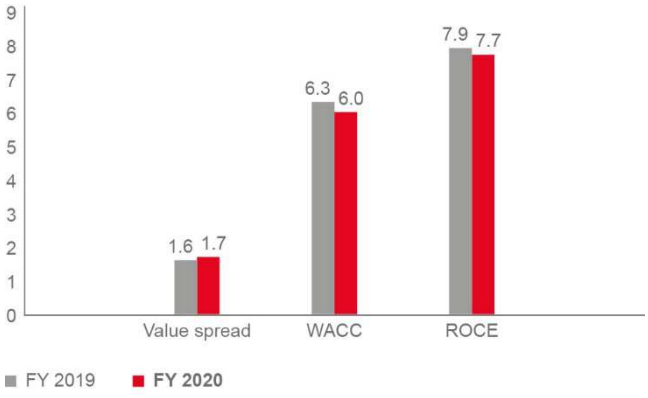


1 WACC before taxes = WACC after taxes/0.7

We reviewed the individual parameters used to calculate MVV's WACC figure for the year under report and updated these in some cases to account for changes in the market.

On this basis, we calculated equity costs of 6.7 % (previous year: 6.5 %) after taxes and debt costs of 1.7 % (previous year: 1.7 %) after taxes. The capital structure of MVV's peer group amounts to 50.1 % for equity (previous year: 55.5 %) and to 49.9 % for debt (previous year: 44.5 %). The Group tax rate stands at 30 % (previous year: 30 %). The WACC calculated on this basis for the 2020 financial year amounts to 4.2 % after taxes (previous year: 4.4 %) and to 6.0 % before taxes (previous year: 6.3 %).

KEY VALUE MANAGEMENT FIGURES
(%)



The ROCE for the 2020 financial year amounted to 7.7 %, as against 7.9 % in the previous year. The lower ROCE figure was due to the fact that, although adjusted EBIT rose, the average volume of capital employed also increased compared with the previous year.

Subtracting the WACC before taxes of 6.0 % (previous year: 6.3 %) from the ROCE of 7.7 % (previous year: 7.9 %) shows that the value spread amounted to 1.7 % in the year under report (previous year: 1.6 %).

TECHNOLOGY AND INNOVATION

Innovative projects

The aim we have set ourselves is to develop smart energy products and innovative solutions that take account of the needs of our customers. Our efforts to reach this objective are driven among others by our Customer Experience and Innovation department. Here, innovation managers and market researchers work together on research and development projects in which colleagues from our operating business fields are also involved. Furthermore, our sales units are also independently involved in forward-looking projects. As a result, the development expenses for technology and innovation are not fully reflected in the research and development expenses reported under IFRS **Notes to Balance Sheet (Note 14), Page 112.**

In what follows, we present some of the projects we continued to pursue or newly initiated in the 2020 financial year.

Decentralised energy management system in FRANKLIN District

The FRANKLIN conversion space in Mannheim is one of nine cells participating in C/sells. This project is developing and demonstrating sample solutions for a digital, secure and environmentally compatible energy supply. It is part of the nationwide “Smart Energy Showcase – Digital Agenda for the Energy Turnaround” initiative promoted by the Federal Ministry for Economic Affairs. The project aims to develop a new smart grid approach with a cellular structure.

At FRANKLIN, we are simulating and testing the energy system of the future by interconnecting the sectors of electricity, heating energy and mobility. The energy system, which is in the planning and execution stage, consists of:

- Effective heating energy generation with solar power and power-to-heat in the low-temperature heating grid
- A control system for several decentralised heating buffer storage facilities to provide heating flexibility
- Interfaces to the e-mobility charging infrastructure and to high-resolution smart meters.

By exchanging their electricity, heating energy and water meters for smart meters and a smart meter gateway, district residents play a decisive role. On the one hand, this grants them transparency about their energy consumption. On the other hand, the data acquired helps to provide visibility as to energy flows in the district, a key prerequisite for optimising the entire district across all sectors. One example: this enables anomalies, such as high power peaks, to be detected and reacted to. Moreover, as the project progresses various value-added services can be developed using the data and then tested by the residents. In summer 2020, two photovoltaics systems were completed and linked up to the district energy management system and the market platforms for balancing power and direct marketing. Not only that, by working with simulations we have already identified initial optimisation potential for the local heating energy grid. The aim here is, based on the FRANKLIN heating energy supply concept, to develop a concept for Spinelli, a CO_2-neutral district. That means the heating energy, warm water and electricity used by residents are CO_2-neutral in the annual energy balance sheet. To achieve this, we will connect a low-temperature grid to the existing district heating grid using a heat exchanger. Energy generated on a decentralised basis from renewable sources will in turn be fed into the local low-temperature grid and the local electricity grid. Both grids will be linked to storage facilities and coupled via a district energy management system (sector coupling).

Smart networking at “SynergieQuartier Walldorf”

The three-year research project “SynergieQuartier Walldorf” was launched on 1 July 2020. This is the follow-up project to “Living Lab Walldorf”, its successfully implemented predecessor. Together with Karlsruhe Institute of Technology (KIT), the FZI Research Center for Information Technology, Stadtwerke Walldorf and our subsidiary Beegy, we aim to further promote the energy turnaround.

The aim of the project is to look into ways of structuring flows of information and payments at electricity producers and consumers and to integrate electricity generated on a decentralised basis. Moreover, grid operations are to be investigated to assess the impact of the additional load resulting from e-mobility and sector coupling. Key factors here are IT security, the legal framework and the integration of the smart meter gateway. One part of this “Quartier” entails pilot households and businesses in Walldorf that have the necessary decentralised energy components, such as photovoltaics systems, e-charging stations or heat pumps. Close dialogue aimed at doing justice to the needs of the owners will be the key to success.

Hydrogen and Green Gases: a market is taking shape

The adoption of hydrogen strategies for Europe and for Germany in 2020 has created a framework which sets out expansion targets for green and blue hydrogen, possible subsidy instruments, timeframes and prioritised sectors for the introduction of a decarbonised hydrogen economy. For Germany, it is planned to add up to 5 GW of electrolyser capacity for producing green hydrogen by 2030 and a further 5 GW by 2040 at the latest. Decarbonised hydrogen will first be launched into the mobility and industry markets, with the energy industry then following suit.

In Green Gases and Hydrogen, a group-wide project which we launched in the 2020 financial year, we are developing MVV's position in the emerging market for hydrogen and green gases. In the first stage, we will assess the impact on existing business activities at our locations, identify new business fields and initiate pilot projects. By planning the Stassfurt Energy Region, we have already specified a first practical pilot project in greater detail. Working together with regional partners, we are developing an integrated solution that involves a 1 MW electrolysis plant to produce hydrogen from regional wind power, as well as the use of hydrogen in mobility and the heating energy supply.

We promote e-mobility in Mannheim and the region

In structuring the transport turnaround and expanding the range of e-mobility solutions, we are pursuing the same course as the City of Mannheim. Drawing on federal grants from the charging infrastructure subsidy programme, since early summer 2019 we have installed more than 120 charging points for electric vehicles in Mannheim and the region. By spring 2021, we will implement the third stage of the subsidy programme, with a focus on providing rapid DC charging infrastructure. This will involve installing 50 further modular charging points in Mannheim and the surrounding districts. We will erect HPC charging points with charging capacity of up to 300 kW each at inner-city locations. Thanks to this programme and the new TENK cooperation platform, we can ensure charging infrastructure availability at sites that are broadly distributed across Mannheim and the metropolitan region.

Innovation processes

Company ideas management

The objective of our ideas management is to involve our employees in the continuous improvement process at MVV. By organising topic-specific special campaigns, which in the year under report focused on climate neutrality and decarbonisation, we support our corporate strategy and call on and reward the wealth of ideas available among our staff.

In the 2020 financial year, we completed 310 proposed improvements. The ideas implemented enabled us to save Euro 117 thousand in the first year of implementation alone. We distributed bonuses of Euro 31 thousand to the relevant employees. The multiyear benefit (over 4 years) currently amounts to Euro 229 thousand.

Tapping the entrepreneurial potential of our employees

In "Take-Off", our internal innovation process, we draw on the creative and entrepreneurial potential available among our employees to develop new products and business models. The winners of the pilot round held in 2018 have since positioned themselves successfully in the market. The MVV start-up project Climap, for example, supports municipalities and homeowners in identifying weak points in buildings where valuable energy is lost. This involves compiling heat maps with the help of thermographic filming. To this end, an airship flew over Schriesheim in mid-March 2020.

Fresh impulses from new companies

Our external innovation process serves to create a transfer of expertise between MVV and newly founded companies, to absorb innovative impulses and to anchor these at our company. Here, we are currently conducting a pilot project with our Beegy subsidiary in which we began by identifying three specific requirements in terms of processes or products. We then compare these with start-ups capable of cooperating with us. Working together with an external service provider, we also regularly look for start-ups which are having a positive influence on the energy turnaround and thus offer added value for MVV.

Group Business Performance

» Adjusted EBIT improves from Euro 225 million to Euro 233 million
» Ongoing high volume of investments
» Expansion in renewables-based generation

MAJOR DEVELOPMENTS AND EXECUTIVE BOARD SUMMARY

Coronavirus pandemic confronts us with challenges

Since early 2020, society as a whole and businesses, and thus also MVV, have been affected by the restrictions, rules and regulations resulting from the coronavirus pandemic. We are addressing this challenge with a cautious approach shaped by our responsibility towards our employees, and towards our customers, suppliers and partners. In this, we are focusing on protecting people's health while upholding our business activities. We introduced targeted measures at an early stage and are continually adapting these in line with the latest developments. As a critical infrastructure operator, we are responsible for ensuring a reliable supply of energy and water: We therefore acted immediately to secure the ongoing functionality of our operating processes. It has become apparent that our proven control and crisis processes have functioned well both before and during the coronavirus pandemic.

Due to the impact of the coronavirus pandemic, we reported a slight reduction in the volume of energy consumed by our customers and postponements in our project development business, particularly for foreign projects. However, we were able to counter these negative effects of the pandemic by implementing targeted measures and cost savings.

Investments in sustainable growth

A comprehensive investment programme has been a firm aspect of our corporate strategy for many years already. In the 2020 financial year, we invested a total of Euro 322 million. Alongside three major projects, our investments particularly focused on expanding our proprietary renewable energy generation portfolio.

Our highly efficient gas-fired CHP plant in Kiel launched its commercial operations at the end of November 2019, i.e. in the 1st quarter of our 2020 financial year. This secures the supply of climate-compatible and environmentally-friendly heating energy to the state capital of Schleswig-Holstein and is helping to significantly reduce CO_2 emissions.

In Mannheim, we linked up our energy from waste plant to the regional heating energy grid in February 2020. In future, this will enable up to 30 % of the annual heating energy needs in Mannheim and the Rhine-Neckar metropolitan region to be covered with renewable energies. In the next stage, we will be integrating new innovative technologies into our plant. We will recycle phosphorous from municipal sewage and simultaneously generate climate-neutral energy. We will invest around Euro 50 million in the new plant, which should launch operations at the end of 2021 already.

The third project is located in the Scottish city of Dundee, where we are building what is one of Europe's most modern energy from waste plants. This new plant is due to start operations in the 1st quarter of 2021.

We took over three windfarms developed and built by Juwi and Windwärts into our proprietary portfolio in the year under report. At the end of the 2020 financial year, our onshore wind turbines thus had total installed capacities of 236 MW, 32 MW more than in the previous year.

Slight increase in adjusted EBIT based on lower sales

We generated adjusted sales of Euro 3.5 billion in the 2020 financial year, as against Euro 3.8 billion in the previous year. This moderate reduction in sales was due above all to delays in our project development business and lower gas trading volumes. These factors were countered by sales growth resulting from, among other aspects, the first-time consolidation of EnDaNet GmbH in the 1st quarter of the year under report and positive developments in our environmental energy business.

At Euro 233 million, adjusted EBIT was slightly higher than in the previous year (Euro 225 million). This earnings performance was driven on the one hand by positive developments in our environmental energy business, where we benefited from good plant availability levels and positive one-off items, and the launch of operations at our new gas-fired CHP plant in Kiel. Moreover, our wind turbines also made higher earnings contributions. On the other hand, earnings were negatively affected by the impact of the coronavirus pandemic, mild weather conditions, initial charges due to the German Coal Exit Act (KAG) and lower income from companies recognised at equity.

Our pre-tax earnings (adjusted EBT) improved year-on-year by Euro 13 million to Euro 181 million. Due to an increase in minority interests, adjusted annual net income after minority interests showed a less marked increase. This key figure rose by Euro 6 million to Euro 104 million in the year under report. Adjusted earnings per share came to Euro 1.57, as against Euro 1.49 in the previous year.

Executive Board summary of business performance and economic position

Our 2020 financial year was shaped not only by challenging conditions in the energy industry and in terms of energy policy. These factors were exacerbated by the measures and restrictions resulting from the coronavirus pandemic. Despite this backdrop, we can look back on a successful year. On the one hand, many of the decisions taken in recent years came to fruition. On the other hand, we launched new projects that will help us to generate further sustainable and profitable growth.

Due above all to the impact of the coronavirus pandemic, we did not quite meet our target for adjusted sales. We expected sales at approximately the same level as in the previous year. At Euro 3.5 billion, sales nevertheless fell 6 % short of the previous year's figure. By contrast, our adjusted EBIT rose by 4 % to Euro 233 million and thus exceeded our most recent forecast, in which we expected earnings at around the same level as in the previous year.

Overall, if we look at MVV's operating performance we can see that we are pursuing the right strategy. Based on our business model and our corporate strategy, we will seize the opportunities presented by the transformation in the energy system in future as well. This will enable us to generate further long-term growth.

COMPARISON OF EXPECTED AND ACTUAL BUSINESS PERFORMANCE AND OUTLOOK

Comparison of expected and actual business performance and outlook

	Forecast FY 2020	Results FY 2020	Outlook FY 2021
Adjusted sales	Forecast adjusted after end of 1st half of 2020: at around previous year's level (Euro 3.8 billion)	Sales of Euro 3.5 billion	At least at previous year's level; subject to considerable uncertainties mainly influenced by further course of coronavirus pandemic
Adjusted EBIT	Forecast adjusted after end of 1st half of 2020: at around previous year's level (Euro 225 million)	Adjusted EBIT of Euro 233 million	At least at previous year's level; subject to considerable uncertainties mainly influenced by further course of coronavirus pandemic; in general dependent on weather and wind conditions, electricity and fuel prices and the availability of our plants. High volatility in renewable energies project development business
Adjusted equity ratio	Target > 30 %	Adjusted equity ratio of 34.3 %	Target > 30 %
Adjusted ROCE	At around previous year's level (7.9 %)	Adjusted ROCE of 7.7 %	At around previous year's level
Investments	Forecast adjusted after end of 1st half of 2020: at around previous year's level (Euro 310 million)	Total investments of Euro 322 million	Increase on previous year
Employees	Increase in personnel totals in growth fields; further efficiency measures in existing business	Increase in personnel totals to 6,260 employees at 30 September 2020 (previous year: 6,113)	Increase in personnel totals in growth fields; further efficiency measures in existing business

BUSINESS FRAMEWORK

Impact of coronavirus pandemic

Far-reaching economic implications

Like all other affected nations, Germany has also witnessed a severe impact on business and society due to the coronavirus pandemic. The specific effects of the pandemic on individual economies will depend above all on the duration and scope of restrictions, the extent to which compensation is provided to offset their impact and the pace of economic recovery.

Aid packages from Federal Government and EU

To minimise the economic impact of the pandemic, the Federal and State Governments in Germany have introduced several legislative packages since the end of March 2020. The Federal Government approved aid for consumers, families, employees, the self-employed and companies. Special programmes at KfW are available to companies, for example. These are intended to safeguard liquidity, particularly by way of favourably priced loans. Alongside this, an Economic Stabilisation Fund with a guaranteed framework of up to Euro 400 billion assists companies in obtaining refinancing. On the level of the European Union, a total of around Euro 500 billion should be available for loans provided to companies by the European Investment Bank, as well as extended credit lines within the European Financial Stability Facility for governments whose debt rises sharply due to the pandemic.

Energy policy developments

Coal exit and move to “Green Heat”

By adopting the German Coal Exit Act (KAG) in early July 2020, lawmakers demonstrated their commitment to making an economically sustainable move towards a climate-neutral energy system. The German Coal Exit Act sets out the details for the exit while also providing a new framework for replacement investments. The significance of combined heat and power (CHP) generation is underlined with an extension in the German CHP Act (KWKG) through to the end of 2029 and by raising the basic subsidy and increasing the fuel switching bonus. Furthermore, the German Coal Exit Act provides a support framework for linking CHP plants with green heat sources and calls on the government to submit draft legislation for financing renewables-based heating energy before the end of this year.

The Federal Government has been working on subsidy programmes for climate-neutral heating energy generation for quite some time already. The findings of the specialist surveys commissioned for the preparation of programmes should be presented in autumn 2020. A draft version of the “Federal Subsidy Programme for Efficient Heating Energy Grids” (BEW) is therefore expected in the second half of 2020. This is intended to subsidise both individual investments in green heating energy generation and projects aimed at decarbonising entire district heating grids. We expressly welcome this project. In terms of its structure, it meets the needs of the heating energy industry for which we have long campaigned intensively. Now it will be about ensuring that the BEW is provided with adequate financial resources. The subsidies so far envisaged by the Federal Government, namely of a maximum of Euro 1.8 billion over ten years, fall significantly short of what is needed. The “Federal Subsidy Programme for Efficient Buildings”, which focuses on energy savings in buildings, is already in place.

EU agrees on “Green Deal”

The new EU Commission unveiled its key focuses, which include accelerating decarbonisation by 2030, in December 2019 already. The Climate Target Plan presented by the EU Commission in September 2020 provides for reducing emissions by at least 55 % by 2030 compared with 1990. The EU aims to be climate neutral by 2050. Among other measures, this may involve extending the European emissions trading system to the transport and building sectors. From our perspective, this steep exit route will be necessary to reach the climate targets in the Paris Agreement. We therefore welcome the EU Commission’s plans.

In the energy sector, the EU is relying on a more rapid expansion in renewable energies, greater energy efficiency and new guidelines for state aid. Furthermore, European energy markets are to be interlinked even more closely. Depending on their specific structure, the more ambitious emission reduction targets on EU level could lead Germany to raise its own national targets. European legislation can be expected to provide a tailwind for MVV’s strategy in the years ahead as well, particularly with regard to expanding renewable energies, decarbonising the heating energy supply and facilitating climate neutrality at customers.

German Climate Protection Package adopted

The Federal Government adopted its Climate Protection Package in December 2019. This marks the beginning of CO_2 pricing for the transport and building sectors, which are not included in the existing European emissions trading system. Furthermore, the Federal Government will subsidise energy-related building refurbishment, the replacement of building heating systems and conversion to e-mobility. From our perspective, introducing the national CO_2 price is a positive step as it will make it more attractive to convert from fossil to renewable energies for building heating and mobility. This will create opportunities to supply heating energy from efficient and sustainable generation and to expand e-mobility. This is because the new requirements will make lower-emission electricity applications more competitive compared with fuel-based heating (such as oil) or fuel-based mobility (petrol, diesel).

Future CO_2 pricing for heating energy and transport

National emissions trading has been implemented by way of the German Fuel Emissions Trading Act (BEHG), which was adopted by the Federal Parliament at the end of 2019. This provides for CO_2 rights trading for the heating energy and transport sectors from 2021. Trading will be based on a fixed price that will be raised each year through to 2025.

When negotiating the Climate Package, the Federal and State Governments agreed in December 2019 to increase the previously determined CO_2 rights price. Upon the launch of trading in 2021, this should amount to Euro 25, rather than Euro 10 per tonne of CO_2. By 2025, the price should gradually rise to Euro 55 per tonne of CO_2. Starting in 2026, the CO_2 price is then to be determined by way of national emission rights trading, with the volume of emission rights being reduced year by year. For 2026, a price range of between Euro 55 and Euro 65 per tonne of CO_2 will apply. The additional proceeds are to be used in particular to reduce the charge levied on electricity under the German Renewable Energies Act (EEG). The price increase will be implemented in the first BEHG Amendment Act. The draft version of this legislation was forwarded to the Environmental Affairs Committee after its first reading in the Federal Parliament in June 2020.

As of the end of September 2020, it was still not clear whether the generation of energy from municipal waste would explicitly be covered by the BEHG legislation from 2023 onwards and whether energy from waste plants and municipal waste disposal companies would be obliged to participate in national emissions trading.

Better conditions for renewable energies

In September 2020, the Federal Government approved draft legislation to amend the German Renewable Energies Act (EEG). The amendment includes substantial improvements for expanding and promoting electricity generation from wind and solar power and from biomass and is intended to ensure that Germany reaches its target of 65 % of electricity from renewable sources by 2030. Wind power in southern Germany, where demand for electricity is highest, is to receive preferential treatment by way of a “South Germany Quota”. At the same time, EEG subsidies are to be extended to locations with less wind. MVV has long called for both measures, which may help to meet the urgent need for greater wind power expansion in southern states. The draft legislation is due to be adopted by the end of the year and to take effect at the beginning of 2021.

In June 2020, the Federal Government adopted the German Building Energy Act (GEG), which has pooled the German Energy Saving Ordinance (EneV), the German Energy Saving Act (EnEG) and the German Renewable Energies Heat Act (EEWärmeG). The GEG also included amendments, such as those governing the attribution of electricity from renewable energies for the purpose of meeting building energy efficiency requirements.

Furthermore, upon the adoption of the GEG legislation two major changes affecting the further expansion in renewable energies were introduced. The protracted dispute relating to minimum distance requirements between onshore wind turbines and settlements resulted in a compromise. Federal states will in future have the option of setting distances of a maximum of 1,000 metres to residential areas. Details are governed by legislation on state level. In Bavaria, the rule that the minimum distance must be at least ten times the height of the wind turbine continues to apply. For photovoltaics, lawmakers deleted the so-called 52-gigawatt cap from the EEG legislation. In Baden-Württemberg, the amendment to the State Climate Protection Act has provided a further positive framework for expanding photovoltaics. In future, new non-residential buildings and new larger-scale car parks will be obliged to install PV applications.

Partly in order to offset the gradual reduction in coal-based electricity generation volumes, the German Coal Exit Act provides for raising the expansion target for electricity from renewable energies to 65 % in 2030. This target is anchored in the EEG legislation. The volumes required to be tendered in accordance with the EEG for this target to be met are to be stipulated in the EEG Amendment.

Move to a hydrogen economy

Both the European Commission and the Federal Government have looked into how a future hydrogen economy might be structured. Two strategy documents published by the European Commission on 8 July 2020 contain extensive action plans for integrating the energy system and developing a hydrogen economy. The strategies, which are interlinked, are both intended to help implement the “European Green Deal” and ensure that the target of achieving climate neutrality by 2050 can be met. The measures will provide momentum for increasing sector coupling and decarbonising the gas sector. Furthermore, the planned requirements for a liquid EU hydrogen market are significant for MVV’s decarbonisation strategy.

The Federal Government adopted its National Hydrogen Strategy in June 2020 already. This aims to create a home market for hydrogen technologies. Although the long-term objective is “green” hydrogen, the Federal Government also explicitly includes “blue” hydrogen – produced on the basis of natural gas by separating and depositing CO_2 (CCS) – as part of its strategy to build a value chain.

BSI publishes market declaration on installation of smart metering systems

At the beginning of 2020, the Federal Office for Information Security (BSI) presented the so-called market declaration for smart metering systems. This establishes that the rollout of smart metering systems is technically possible in accordance with the German Metering Operations Act (MsbG), as sufficient companies are offering smart metering systems with the necessary attributes on the market. This means that metering point operators responsible for the respective sites are obliged to equip electricity customers and metering points with annual consumption of 6,000 kWh up to a maximum of 100,000 kWh with a smart metering system. Further application cases will follow. Digitalising the energy turnaround is an important aspect of energy and climate policy in Germany, and smart metering systems are viewed as a significant component of this process.

Productivity factor decisions remain disputed

The general sector productivity factor (Xgen) for gas plays a significant role in determining the level of grid fees, and thus earnings at grid operators. In appeal proceedings in July 2019, the Higher Regional Court (OLG) in Düsseldorf already nullified the gas Xgen of 0.49 % stipulated by the Federal Network Agency (BNetzA) for the third regulatory period. In the next instance, the Federal Supreme Court (BGH) will issue a ruling. The Xgen reduces the permissible revenue cap. Its calculation is based on assumed progress in enhancing the productivity of grid operations compared with the overall economy. This effect is countered by inflation, which is expected to remain low for the foreseeable future. In November 2018, the BNetzA had stipulated an Xgen of 0.90 % for electricity supply grid operators, with large numbers of grid operators taking legal action against this as well.

Rates of equity return still important

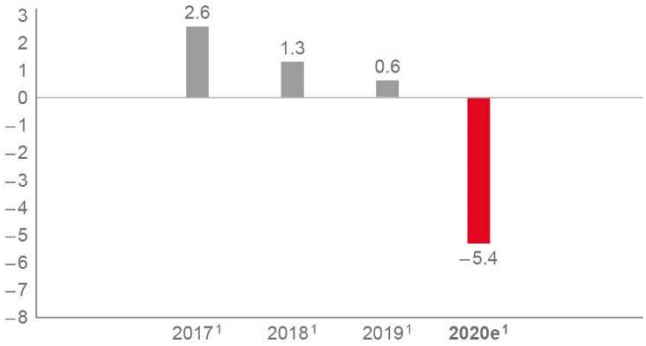
The levels of equity return set by the BNetzA in 2016 for the third regulatory period and since confirmed by the highest courts are among the lowest in Europe, and that even though Germany has some of the greatest grid expansion needs of any EU member state. To master the tasks needed to integrate renewable energies, considerable sums will still have to be invested in energy grids. At the same time, new energy policy objectives, such as sector coupling, e-mobility and digitalisation, also have to be accounted for. Against this backdrop, it is important that the rates of return still to be set for the fourth regulatory period should be measured in such a way that the necessary capital can be mobilised.

Market climate and competition

Pandemic leads German economy to contract

In their autumn survey, experts at Germany's leading economic research institutes forecast a 5.4 % reduction in GDP for the 2020 calendar year, with this being due to the measures taken to contain the coronavirus pandemic.

GDP DEVELOPMENT IN GERMANY
(%)



1 Calendar year

Source: Forecast in autumn survey of leading German economic research institutes (October 2020)

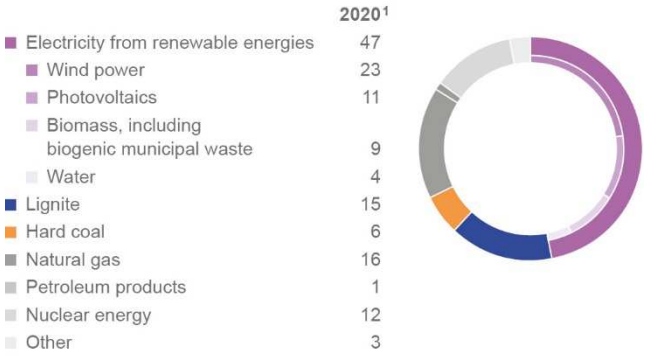
Reduction in electricity generation in Germany

Based on calculations compiled by the Association of the German Energy and Water Industries (BDEW), gross electricity generation volumes totalled 412 billion kWh in the first nine months of 2020 and thus fell around 8 % short of the previous year's figure (447 billion kWh).

Renewables share of German electricity generation rises to 47 %

According to BDEW estimates, the share of gross electricity generation in Germany attributable to renewable energies totalled 47 % in the first nine months of the 2020 calendar year, up from 41 % in the previous year's period. Around half of this relative increase is due to the lower volume of electricity consumption, which fell by 5 % in the first three quarters of 2020 compared with 2019. The increase in the renewables share was significantly due to photovoltaics systems, where electricity generation volumes rose by 13 %. Offshore wind turbines increased their generation by 11 %. Electricity generation volumes from onshore wind turbines were 7 % higher than in the previous year. Biomass and biogenic municipal waste generated around the same amount of electricity as one year earlier. Overall, around 192 billion kWh of electricity was generated from renewable energies.

GROSS ELECTRICITY GENERATION IN GERMANY
Shares (%)



1 January to September 2020

Wind power expansion remains at low level

In January 2020, the German Wind Energy Association (BWE) published its "Wind Energy Fact Sheet Germany" for the 2019 calendar year. Overall, gross wind power capacity totalling 2,189 MW, of which 1,078 MW onshore, was newly installed in Germany. Total installed wind power capacities amounted to 61,428 MW, which was around 4 % higher than the previous year's figure.

Gross onshore wind power capacity totalling 591 MW was added in Germany in the 1st half of the 2020 calendar year. This figure therefore remained low compared with the record years between 2014 and 2017. The gross volume of wind power capacity newly added was nevertheless around twice as high as in the first six months of the previous year. Including offshore turbines, newly installed wind power capacity amounted to 810 MW, which also represented an increase of around 50 % compared with the equivalent previous year's period. At 62,178 MW, total installed wind power capacities were around 4 % higher than the previous year's figure.

Positive market expectations confirm our strategic alignment

In its "Paths to a Climate-Neutral Energy System" study, the Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE) investigated potential developments that would lead to a reduction in energy-related CO_2 emissions by at least 95 % by 2050 compared with the equivalent figure for 1990. The experts concluded that, from a technical and systemic perspective, it should be possible to meet the climate protection targets set for the energy supply by working with renewable energies. Despite a high share of fluctuating renewable energies, a secure supply will be ensured across all consumption sectors. In the scenarios investigated for 2050, total installed wind turbine and photovoltaics system

capacities amounted to between just under 500 GW_e and more than 750 GW_e and thus to between slightly less than five times and seven times the current figure. In all the developments considered, these two technologies covered between 50 % and 60 % of primary energy consumption in 2050. In the scenarios investigated, primary energy consumption for energy applications was significantly lower than today, and that despite the increases in useful energy assumed in most scenarios. This is due above all to the more or less marked displacement of combustion-based technologies (heating boilers, thermal power plants, combustion engines) by electricity-based technologies and thus to a parallel improvement in conversion efficiency across all sectors. This sector coupling represents a core aspect of the energy system transformation. The Fraunhofer ISE experts assume that, together with the increased use of electricity and accelerated reduction in specific emissions from electricity generation, the gradual reduction in the use of fossil fuels in heating (buildings, processes) and transport applications will be core components enabling the targeted reductions in CO_2 emissions in the energy supply to be achieved as inexpensively as possible.

Renewable energies are set to cover 65 % of Germany's electricity needs by 2030. In their study "The Green Electricity Gap, its Electricity Market Effects and How it Can be Filled", Agora Energiewende and Wattsight conclude that, if current trends are extrapolated, only around 55 % of electricity needs will be covered by renewable energies. To fill the green electricity gap, by 2030 it will be necessary to increase offshore wind power capacity to at least 25 GW, to add onshore wind power of at least 4 GW a year again and/or to launch a solar power campaign for 10 GW a year. Assuming electricity consumption remains unchanged, two of the three capacity addition routes, namely offshore wind power, onshore wind power and solar power, will be needed to reach the 65 % target. If higher electricity consumption is assumed for 2030 – due to greater e-mobility, more heat pumps, hydrogen production and additional demand for green electricity in energy-intensive industries – then all three measures will have to be implemented. The experts see the current crisis in adding new onshore wind power capacity as even posing a medium to long-term threat to the overall success of the energy turnaround.

Together with the Institute for Applied Ecology (Öko-Institut) and Hamburg Institut, the Frauenhofer ISE has compiled a heating turnaround roadmap. The institutes all agree that decarbonised district heating is essential if the heating turnaround is to be achieved by 2050. On the way there, measures to expand and increase the density of heating energy grids will also have a very significant role to play.

To achieve the climate protection targets, relevant efforts in the transport sector will also have to be massively stepped up. This is the conclusion reached by Agora Verkehrswende in its study "En route to Paris? Implications of the Paris Agreement for the German Transport Sector". Rapid reductions in emissions are possible by taking measures such as significantly accelerating the electrification of personal and freight transport and pressing ahead with the expansion in renewable electricity generation. The target set by the Federal Government for electric cars in Germany, namely of reaching seven to ten million, is highly ambitious. According to the "Alternative Drive Systems in Germany" study published by the German Energy Agency (dena), however, this target is achievable if high growth rates continue to be achieved. A growth rate of around 42 % would be required. In the years from 2016 to 2018, the average growth rate for electric vehicles amounted to around 82 %. To reach the target set by the Federal Government for one million publicly accessible charging points by 2030, the market will have to develop significantly faster than to date. At 43 % the average annual growth rate for charging points would have to be slightly higher than that for the vehicles.

In the long term, we will benefit from the aforementioned trends in our growth fields: our energy generation from renewable energies, our project development and operations management for renewable energies plants and the direct marketing of such, our decentralised energy and heating supply, and our energy efficiency solutions and service offerings.

Weak wholesale prices for fuel and electricity in period under report

Wholesale prices (average) from 1 October to 30 September

	FY 2020	FY 2019	+/– change	% change
Crude oil [1] (US$/barrel)	47.52	65.72	– 18.20	– 28
Natural gas [2] (Euro/MWh)	14.77	20.08	– 5.31	– 26
Coal [3] (US$/tonne)	59.75	75.67	– 15.92	– 21
CO_2 rights [4] (Euro/tonne)	24.45	24.30	+ 0.15	+ 1
Electricity [5] (Euro/MWh)	41.65	48.76	– 7.11	– 15

1 Brent crude oil; front-month
2 Net Connect Germany market region; front-year
3 Front-year
4 Front December contract
5 Front-year

Prices for Brent crude oil for supply in the following month averaged US$ 47.52 per barrel in the period under report and were thus US$ 18.20 (– 28 %) down on the previous year's period. As the clearest indicator of global economic developments within the energy complex, the oil price was dominated above all by the downturn in the global economy due to the coronavirus crisis. Compared with its high at the beginning of January 2020, the oil price fell by up to 72 % to its low in April. The historic extent of this collapse in prices became clear when negative oil prices were reported for the first time ever in April, in this case for the May contract due to expire for the US crude oil WTI. The rise in prices from May onwards reflects a recovery in the macroeconomic climate. The oil price subsequently peaked at more than US$ 45 per barrel in August, a level that was nevertheless still lower than the annual average price.

Average natural gas price listings for the front-year product in the NetConnect Germany (NCG) market region came to Euro 14.77/MWh in the period under report, Euro 5.31/MWh lower than in the previous year. Due to a very mild winter in conjunction with very good gas availability levels, the first half of our 2020 financial year witnessed a substantial reduction in prices. Compared with its maximum of around Euro 18.50/MWh, the gas price fell by up to 33 % in March. A further fall in prices was averted in spring 2020, but sideways movement led the gas price to repeatedly touch its low. Only in August, when it was supported by growing global demand on the gas markets, was the German gas price able to report a sustainable increase. It nevertheless remained significantly lower than in autumn 2019.

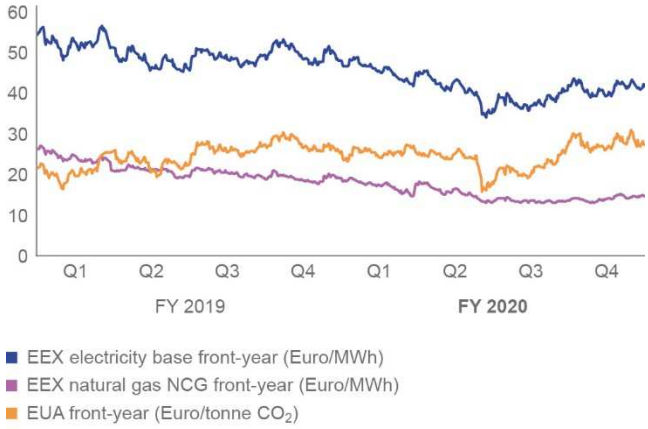
Coal prices also fell significantly compared with the previous year, with average front-year prices per metric tonne of hard coal in the ARA region (Amsterdam, Rotterdam, Antwerp) falling by US$ 15.91 (– 21 %) to US$ 59.75. Unlike in the oil market, prices already slipped in the first quarter of our 2020 financial year, while the downturn subsequently triggered by the coronavirus crisis proved less dramatic. The lowest price, seen in early May, was 17 % lower than that at the beginning of the 2020 calendar year. Due to weak global demand and high volumes of stocks, the coal price nevertheless showed a further sharp reduction in August, before an increase in the share of coal in Germany's electricity mix led it to rise once again in September.

Base load electricity for supply in the following year was priced at an average of Euro 41.65/MWh in the period under report and thus fell by Euro 7.11/MWh compared with the previous year. Having reached their annual high at around Euro 49/MWh in October 2019 already, prices then showed a sharp decline in the first half of our 2020 financial year. The very mild winter with record wind power feed-in volumes in February was followed by an exceptionally sunny spring. Overall, wind and solar power generated a total of around 60 TWh of electricity in the first quarter of the 2020 calendar year, 20 % higher than the previous maximum. With the onset of the coronavirus pandemic, the electricity price fell further, reaching its annual low at Euro 33.20/MWh in March. The recovery in the economy during the second half of our year under report was accompanied by a return to higher prices, which stabilised at pre-crisis levels. Despite the discussions surrounding more ambitious EU emission reduction targets, prices were unable to exceed a level of Euro 43.70/MWh.

Within the energy market, CO_2 emission rights (EUA) were the only commodity that did not witness a year-on-year reduction in average prices in the 2020 financial year. Emission right prices per tonne of CO_2 for supply in the following year averaged Euro 24.45 and thus remained at around the previous year's level of Euro 24.30. Although emission right prices fell dramatically in March 2020, with levels of below Euro 16 being seen, the emissions market showed a clear recovery in the summer, with listed prices reaching a 14-year high in July. Prices of above Euro 30 were also tested again in August and September. Alongside higher electricity demand due to the economic recovery, this rise in prices was driven above all by the discussions and speculation surrounding more ambitious emission reduction targets on the part of the EU Commission.

The margins achieved from generating electricity from hard coal and gas – the clean dark spread (CDS) and the clean spark spread (CSS) – moved in opposite directions in the period under report. Averaging Euro – 1.82/MWh, the CDS fell short of the previous year's level (Euro 0.46/MWh), while the CSS increased by 4.55/MWh to Euro – 0.36/MWh. Due to the low gas price, the CSS reached positive territory for the first time in mid-March 2020 and maintained this until mid-August 2020. Only at the end of September 2020 did the CSS fall back to levels most recently seen in early March. By contrast, having mainly been positive in the first months of our 2020 financial year in July 2020 the CDS fell to the lowest level during the period under report.

DEVELOPMENT IN WHOLESALE MARKET PRICES FOR ELECTRICITY, GAS AND CO_2 RIGHTS



DEVELOPMENT IN WHOLESALE PRICES FOR OIL AND COAL

DEVELOPMENT IN CLEAN DARK SPREAD AND CLEAN SPARK SPREAD 2021

MVV's market position

- Based on analysis performed by the consultancy ecoprog, we are one of Germany's largest operators of energy from waste and biomass plants. At our locations in Germany, we accepted a total of 1.7 million tonnes of waste and refuse-derived fuels for incineration in the 2020 financial year.
- According to the Market Master Data Register at the Federal Network Agency (BNetzA), with our Juwi and Windwärts subsidiaries we are one of Germany's leading renewable energies project developers.
- Directly marketing electricity from renewable energies in the market premium model also forms part of our portfolio. At the end of the year under report, we had renewable energies plants with total capacities of around 4,100 MW under contract in Germany. Energie & Management, the energy market journal, therefore sees us as one of Germany's largest direct marketers.
- Our grid companies in Germany have district heating grids with a total length of around 1,200 kilometres. In the year under report, we generated district heating turnover of 5.6 billion kWh in Germany. According to the report compiled by the AGFW industry association, this makes us Germany's second-largest provider of district heating.
- In the Czech heating energy market, our subsidiary MVV Energie CZ a.s. operates at 15 locations. Based on our own calculations, we are one of the market leaders there.

Impact of weather conditions

Unusually mild weather conditions

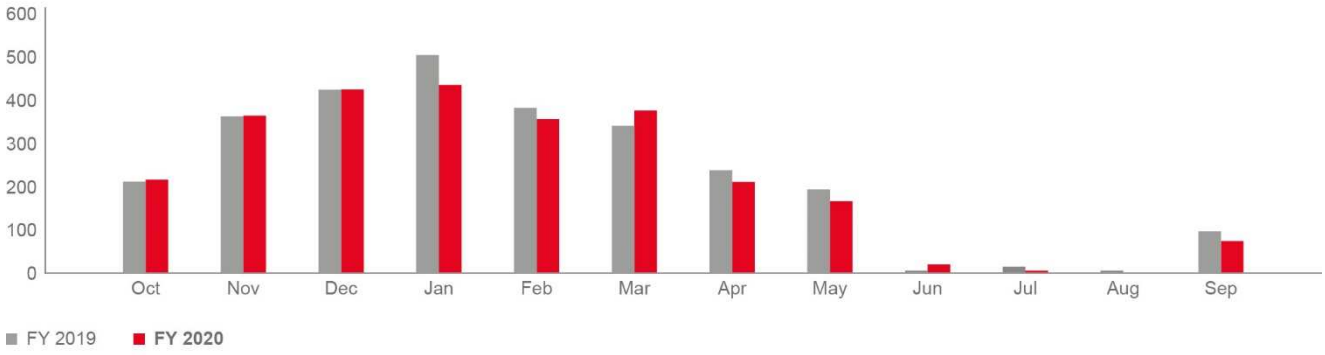
Higher outdoor temperatures lead to lower heating energy requirements at our customers. That is also reflected in lower degree day figures, which are used as an indicator of temperature-based heating energy consumption. Our year under report was the warmest financial year in the past ten years. Overall, degree day figures fell around 4 % short of the already low level already seen in the previous year.

Higher wind volumes than in previous year

Just like our customers' heating energy needs, electricity generation volumes at our renewable energies plants are also influenced by weather conditions. Wind volumes, on which the amount of electricity generated by our turbines depends, are particularly significant in this respect.

In the regions relevant to us, the volume of usable wind power in the 2020 financial year was around 11 % higher overall than the long-term average. The wind yield was ahead of the previous year's figure, which over the same period exceeded the long-term average by around 1%. For this comparison, we draw on the "EMD-ERA" wind index with a reference period (historic average).

DEGREE DAY FIGURES



PRESENTATION OF EARNINGS PERFORMANCE

The period under report is the 2020 financial year, which started on 1 October 2019 and ended on 30 September 2020. Unless otherwise indicated, the comments below refer to the MVV Energie Group ("MVV"), i.e. all companies fully consolidated and the updated measurement of those shareholdings that are recognised at equity.

MVV from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Development in turnover				
Electricity (kWh million)	20,147	20,246	– 99	0
Heating energy (kWh million)	6,249	6,286	– 37	– 1
Gas (kWh million)	24,974	25,719	– 745	– 3
Water (m³ million)	41.4	41.1	+ 0.3	+ 1
Combustible waste delivered (tonnes 000s)	2,388	2,300	+ 88	+ 4
Adjusted sales excluding energy taxes [1]	3,515	3,756	– 241	– 6
of which electricity revenues	1,629	1,668	– 39	– 2
of which heating energy revenues	375	374	+ 1	0
of which gas revenues	635	718	– 83	– 12
of which water revenues	89	89	0	0
Adjusted EBIT	233	225	+ 8	+ 4

1 Previous year`s figure adjusted

Within sales, we eliminate IFRS 9 measurement items, which stood at a net total of Euro – 83 million at 30 September 2020 and Euro – 17 million at 30 September 2019. At Euro 3.5 billion, adjusted sales fell slightly short of the previous year's figure. This means that we did not quite meet our forecast that adjusted sales would approximately match the previous year's figure. The reduction in sales was due in particular to our project development business, as well as to lower gas trading volumes. These developments were opposed by higher sales resulting from, among other factors, the initial consolidation of EnDaNet in the 1st quarter of the year under report and the positive performance of our environmental energy business. Of MVV's consolidated sales for the 2020 financial year, 92 % were generated in Germany (previous year: 88 %) and 8 % abroad (previous year: 12 %).

ADJUSTED SALES EXCLUDING ENERGY TAXES BY REPORTING SEGMENT

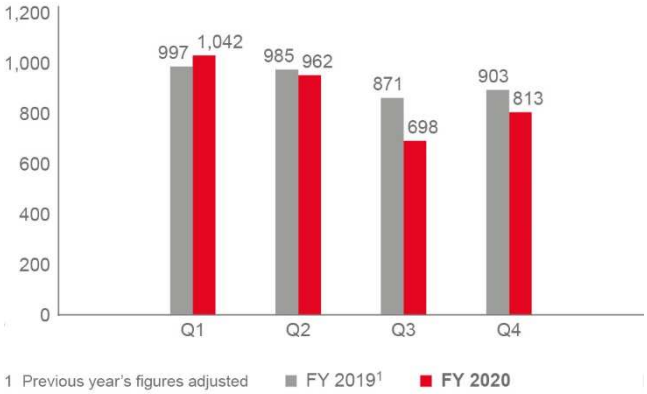
Shares (%)

ADJUSTED SALES EXCLUDING ENERGY TAXES BY REGION

Shares (%)

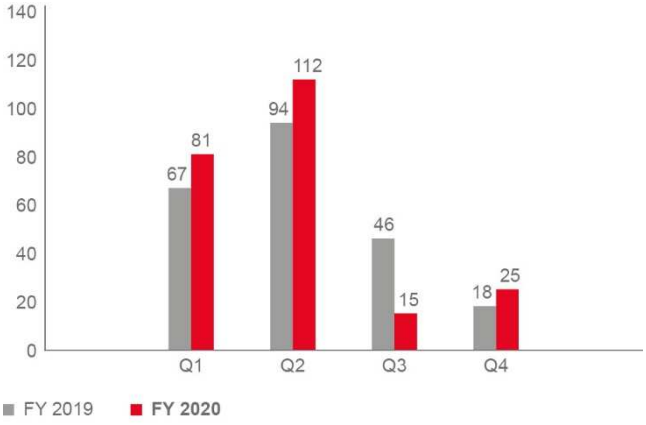
ADJUSTED SALES EXCLUDING ENERGY TAXES BY QUARTER

Euro million



At Euro 233 million, adjusted EBIT was slightly higher than in the previous year and thus exceeded our most recent forecast, in which we expected to generate earnings at around the previous year's level. This improvement was mainly driven by the positive performance in our environmental energy business, the launch of operations at our new gas-fired CHP plant in Kiel, positive one-off items and higher revenues from our wind turbines. Earnings were negatively affected, on the other hand, by the impact of the coronavirus pandemic, mild weather conditions, initial charges due to the German Coal Exit Act (KAG) and lower at-equity earnings.

ADJUSTED EBIT BY QUARTER
Euro million



Customer Solutions reporting segment

Customer Solutions from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Development in turnover				
Electricity (kWh million)	19,496	19,676	– 180	– 1
Heating energy (kWh million)	4,466	4,582	– 116	– 3
Gas (kWh million)	24,661	25,394	– 733	– 3
Water (m³ million)	40.5	40.2	+ 0.3	+ 1
Combustible waste delivered (tonnes 000s)	152	155	– 3	– 2
Adjusted sales excluding energy taxes [1]	2,553	2,656	– 103	– 4
Adjusted EBIT	21	26	– 5	– 19

1 Previous year's figure adjusted

Electricity turnover was at approximately the same level as in the previous year while heating energy decreased, with this being due above all to weather conditions. The reduction in gas turnover was due to lower gas trading volumes.

Alongside lower electricity and gas trading volumes, the reduction in sales was also attributable to lower purchase volumes at our business customers on account of weather conditions and the coronavirus pandemic.

The year-on-year reduction in adjusted EBIT was primarily due to lower earnings contributions from our business customers as a result of the coronavirus pandemic, as well as to mild weather conditions.

New Energies reporting segment

New Energies from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Development in turnover				
Electricity kWh million)	469	409	+ 60	+ 15
Heating energy (kWh million)	1,115	1,014	+ 101	+ 10
Gas (kWh million)	211	218	– 7	– 3
Combustible waste delivered (tonnes 000s)	2,126	2,047	+ 79	+ 4
Adjusted sales excluding energy taxes	591	734	– 143	– 19
Adjusted EBIT	113	109	+ 4	+ 4

Due above all to improved plant availability in our environmental energy business, electricity and waste volumes were both ahead of the previous year's figures. The higher volume of heating energy resulted, among other factors, from the connection of our waste-fired CHP plant in Mannheim to the regional heating energy grid in February 2020.

The reduction in sales was attributable to our project development business and could only be offset in part by the positive performance of our environmental energy business.

The increase in adjusted EBIT was driven on the one hand by the positive performance in our environmental energy business, where we benefited from improved availability at our plants, as well as from one-off items. On the other hand, our wind turbines generated higher earnings contributions. In our project development business, the postponement of projects, some of which due to the coronavirus pandemic, meant that earnings were at the previous year's level.

Supply Reliability reporting segment

Supply Reliability from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Adjusted sales excluding energy taxes [1]	278	278	0	0
Adjusted EBIT	67	69	– 2	– 3

1 Previous year`s figure adjusted

Adjusted sales were at the previous year's level.

Compared with the previous year, adjusted EBIT benefited from the launch of operations at our new gas-fired CHP plant in Kiel. However, this positive factor was more than offset by initial charges due to the German Coal Exit Act (KAG) and lower at-equity earnings. As a result, adjusted EBIT in the Supply Reliability reporting segment showed a slight overall reduction.

Strategic Investments reporting segment

Strategic Investments from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Development in turnover				
Electricity (kWh million)	182	161	+ 21	+ 13
Heating energy (kWh million)	668	690	– 22	– 3
Gas (kWh million)	102	107	– 5	– 5
Water (m^3 million)	0.9	0.9	0.0	0
Combustible waste delivered (tonnes 000s)	110	98	+ 12	+ 12
Adjusted sales excluding energy taxes	91	86	+ 5	+ 6
Adjusted EBIT	24	20	+ 4	+ 20

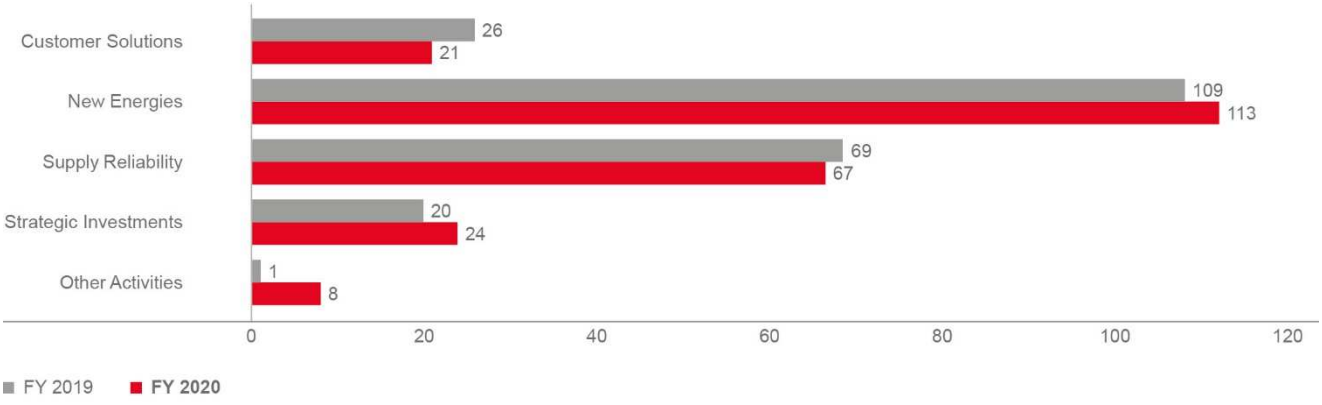
The higher electricity turnover was due to greater generation efficiency at our Czech subgroup, a factor that is also reflected in the development in sales. The earnings performance was influenced, among other factors, by changes in provisions. In the previous year, it had been necessary to recognise new provisions, while in the year under report provisions were reversed. The negative impact of mild weather conditions was offset by positive one-off items.

Other Activities reporting segment

Other Activities from 1 October to 30 September				
Euro million	FY 2020	FY 2019	+/– change	% change
Adjusted sales excluding energy taxes	2	2	0	0
Adjusted EBIT	8	1	+ 7	>+ 100

The main reasons for the increase in adjusted EBIT were earnings items resulting from a property sale and the positive impact of our cost-cutting efforts.

ADJUSTED EBIT BY REPORTING SEGMENT
Euro million



Reconciliation with adjusted EBIT

In the following table, we show how we reconcile the EBIT reported in the income statement for the 2020 financial year with the adjusted EBIT relevant for management purposes.

Reconciliation of EBIT (income statement) with adjusted EBIT from 1 October to 30 September			
Euro million	FY 2020	FY 2019	+/– change
EBIT as reported in income statement	209	165	+ 44
Financial derivative measurement items	20	56	– 36
Structural adjustment for part-time early retirement	<1	<1	0
Interest income in connection with finance leases	4	4	0
Adjusted EBIT	233	225	+ 8

For our value-based management, we refer to adjusted EBIT and calculate this key operating earnings figure by adjusting our operating earnings before interest and taxes to eliminate, among other items, the positive and negative items due to fair value measurement as of the reporting date of financial derivatives recognised pursuant to IFRS 9. These came to a net total of Euro – 20 million at 30 September 2020 and Euro – 56 million at 30 September 2019. These measurement items reflect the development in prices on the commodities and energy markets. They have no impact on payments, neither do they affect our operating business or dividend.

Development in key income statement items

Adjusted cost of materials decreased by Euro 277 million to Euro 2,582 million. This reduction particularly reflected developments in our project development business, price items and the reduction in cost of materials resulting from the decommissioning of the coal-fired power joint power plant in Kiel. These factors were opposed by higher cost of materials due to the initial consolidation of EnDaNet GmbH in the 1st quarter of the year under report and the full consolidation of DC-Datacenter-Group in the 3rd quarter of the previous year, meaning that this company was only included in the previous year's figures on a prorated basis.

At Euro 456 million, adjusted employee benefit expenses were Euro 18 million higher than in the previous year. The main reasons for this increase were first-time consolidation effects due to EnDaNet and collectively agreed pay rises.

Excluding IFRS 9 measurement items, the development in adjusted other operating income **Notes to Income Statement (Note 4), Page 108** was shaped by write-ups to property, plant and equipment and repayments in connection with contracts with suppliers. Overall, adjusted other operating income rose year-on-year by Euro 20 million to Euro 96 million.

Also excluding IFRS 9 measurement items, adjusted other operating expenses **Notes to Income Statement (Note 7), Page 109** fell by Euro 18 million to Euro 168 million. This development was mainly attributable to lower additions to provisions.

In the **Income Statement** **Page 91** IFRS 9 measurement items are included under other operating income and other operating expenses. Their net balance led to a negative item of Euro 12 million in the 2020 financial year. The previous year's measurement item was also negative, in this case at Euro 32 million.

Mainly due to the launch of operations at our new gas-fired CHP plant in Kiel, depreciation and amortisation **Notes to Income Statement (Note 14), Page 112** rose by Euro 24 million to Euro 207 million.

The goodwill write-downs relate to an impairment loss on goodwill at MVV Enamic.

Thanks largely to lower interest expenses for provisions and loans, the adjusted financial result improved by Euro 5 million to Euro – 52 million.

Net of the adjusted financial result, the adjusted EBT of Euro 181 million for the 2020 financial year exceeded the previous year's figure (Euro 168 million).

Adjusted annual net income increased by Euro 13 million and amounted to Euro 128 million for the year under report.

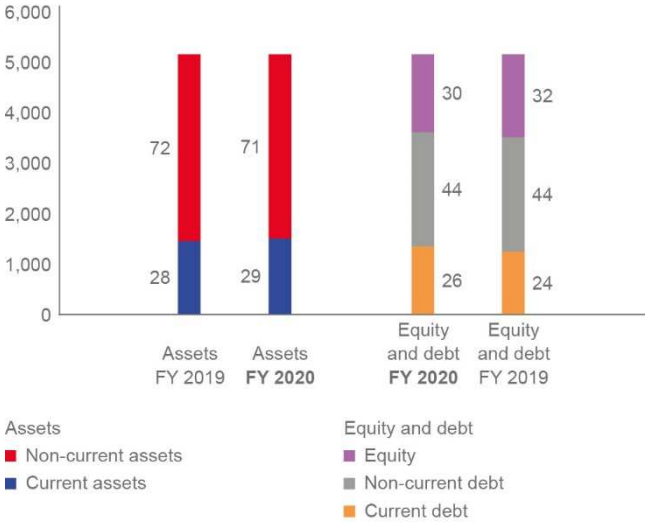
Adjusted minority interests came to Euro 24 million and were thus Euro 7 million higher than in the previous year, a development mainly due to earnings at Energieversorgung Offenbach. Adjusted annual net income after minority interests rose to Euro 104 million (previous year: Euro 98 million). Calculated on this basis, adjusted earnings per share amounted to Euro 1.57 (previous year: Euro 1.49). The number of shares remained unchanged at 65.9 million.

PRESENTATION OF ASSET POSITION

Balance sheet structure

Euro 000s	30 Sep 2020	30 Sep 2019	% change
Assets			
Non-current assets	3,564,401	3,463,827	+ 3
Current assets	**1,466,921**	1,358,370	+ 8
Total assets	**5,031,322**	**4,822,197**	**+ 4**
Equity and debt			
Equity	1,534,300	1,535,267	0
Non-current debt	2,191,933	2,109,348	+ 4
Current debt	**1,305,089**	1,177,582	+ 11
Total equity and debt	**5,031,322**	**4,822,197**	**+ 4**

BALANCE SHEET STRUCTURE
Euro million, shares (%)



Balance sheet development

Total assets amounted to Euro 5,031 million at the balance sheet date and were thus Euro 209 million higher than at 30 September 2019 **Balance Sheet, Page 93.**

On the asset side of the balance sheet, non-current assets rose by Euro 100 million to Euro 3,564 million. Property, plant and equipment grew by Euro 93 million to Euro 2,727 million, a development largely due to investments in the construction of the new gas-fired CHP plant in Kiel and a new energy from waste plant in the Scottish city of Dundee, as well as to the connection of our waste-fired CHP plant in Mannheim to the heating energy grid. Changes also arose in non-current other receivables and assets in particular **Notes to Balance Sheet (Note 22), Page 121**. This line item rose by Euro 31 million to Euro 102 million, as the value of derivative financial instruments grew year-on-year, particularly as a result of more marked changes in market prices and the resultant increase in the fair values of energy trading transactions recognised under IFRS 9.

Current assets rose by Euro 109 million to Euro 1,467 million. On the one hand, current other receivables and assets **Notes to Balance Sheet (Note 22), Page 121** increased by Euro 122 million to Euro 564 million, with this mainly being due to more marked changes in market prices and the resultant increase in the positive fair values of energy trading transactions recognised under IFRS 9. Furthermore, due above all to developments in our project development business inventories grew by Euro 20 million to Euro 199 million. By contrast, as a result of mild weather conditions and lower feed-in volumes in the direct marketing business current other trade receivables **Notes to Balance Sheet (Note 22), Page 121** fell by Euro 32 million to Euro 333 million. Cash and cash equivalents **Notes to Balance Sheet (Note 26), Page 123** fell to Euro 343 million, down Euro 14 million compared with the previous year's balance sheet date. Here, positive effects virtually offset the payments made for investments in current major projects, the payment of the dividend for the 2019 financial year and the substantial rise in inventories.

Our equity including non-controlling interests amounted to Euro 1,534 million at the balance sheet date and thus fell Euro 1 million short of the previous year's figure **Notes to Balance Sheet (Note 27), Page 124.**

For Group management purposes, we adjust our consolidated balance sheet at 30 September 2020 to eliminate cumulative IFRS 9 measurement items. On the asset side, we eliminate positive fair values of derivatives and allocable deferred taxes, which amounted to Euro 450 million in total (30 September 2019: Euro 350 million). On the equity and debt side, we eliminate negative fair values and allocable deferred taxes, in this case Euro 486 million, from debt (30 September 2019: Euro 358 million). In equity, we eliminate the net balance of Euro – 36 million (30 September 2019: Euro – 8 million). This resulted in adjusted equity of Euro 1,571 million at 30 September 2020 (30 September 2019: Euro 1,544 million). As a percentage of adjusted total assets of Euro 4,582 million (30 September 2019: Euro 4,472 million), the adjusted equity ratio came to 34.3 % at 30 September 2020, compared with 34.5 % at 30 September 2019.

Non-current debt increased to Euro 2,192 million, up by Euro 83 million compared with the previous year's balance sheet date. Here, non-current other liabilities **Notes to Balance Sheet (Note 31), Page 131** grew by Euro 70 million to Euro 290 million. This increase was primarily due to more marked changes in market prices and the resultant increase in the negative fair values of energy trading transactions recognised under IFRS 9. Due above all to the taking up of loans, non-current financial debt **Notes to Balance Sheet (Note 30), Page 130** rose by Euro 20 million to Euro 1,553 million.

Current debt increased by Euro 128 million and amounted to Euro 1,305 million in total. This development was notably influenced by current other liabilities **Notes to Balance Sheet (Note 31), Page 131,** which rose by Euro 188 million to Euro 649 million. This increase was in turn chiefly due to a significant movement in market prices. The fall in market prices mainly triggered by the coronavirus crisis led to higher fair values for the energy trading transactions recognised under IFRS 9. Tax provisions **Notes to Balance Sheet (Note 28), Page 125** decreased by Euro 33 million to Euro 1 million. This resulted from a reclassification of income tax items from provisions not meeting IFRIC 23 requirements to tax liabilities. The reduction in trade payables **Notes to Balance Sheet (Note 32), Page 133** by Euro 25 million to Euro 337 million mainly reflects developments in our project development business. Mainly as a result of a lower volume of services not yet invoiced, current other provisions **Note to Balance Sheet (Note 28), Page 125** decreased by Euro 24 million to Euro 128 million.

Investments

We invested a total of Euro 322 million in the 2020 financial year (previous year: Euro 310 million).

Investments from 1 October to 30 September

Euro million	FY 2020	FY 2019	+/– change	% change
Customer Solutions	39	37	+ 2	+ 5
New Energies	104	119	– 15	– 13
Supply Reliability	149	124	+ 25	+ 20
Strategic Investments	19	16	+ 3	+ 19
Other Activities	11	14	– 3	– 21
Total	**322**	**310**	**+ 12**	**+ 4**
of which growth investments	155	181	– 26	– 14
of which investments in existing business	167	129	+ 38	+ 29

INVESTMENTS
Shares (%)

Our largest investment projects included:

- Investments relating to our new gas-fired CHP plant in Kiel
- Building a new CHP plant in Dundee/Scotland
- Expanding our Friesenheimer Insel site in Mannheim
- Developing and buying windfarms for our proprietary generation portfolio
- Maintaining and renewing our distribution grids
- Expanding and increasing the density of our district heating grids
- Building two new sewage incineration plants
- Building a data centre at Energieversorgung Offenbach.

PRESENTATION OF FINANCIAL POSITION

Current and non-current financial debt increased by Euro 15 million to Euro 1,717 million. At the same time, cash and cash equivalents fell by Euro 14 million to Euro 343 million. Overall, net financial debt (current and non-current financial debt less cash and cash equivalents) therefore rose by Euro 29 million to Euro 1,374 million. The taking up of new loans for investments, to buy a windfarm and to build our new plant in Scotland was countered by repayments of existing loans.

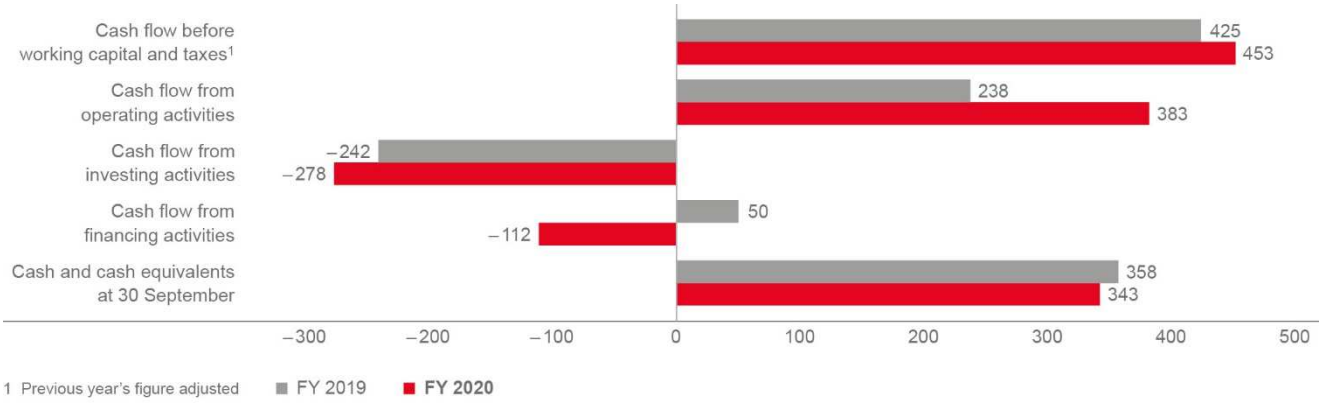
After the elimination of non-cash income and expenses, the improvement in earnings before taxes (EBT) compared with the previous year led cash flow before working capital and taxes to increase by Euro 27 million. The largest item in this elimination related to non-cash IFRS 9 measurement.

This positive development is significantly amplified in the cash flow from operating activities, which showed a year-on-year improvement of Euro 145 million. The largest positive item relates to the settlement of project development activities at Juwi. Further items that significantly increased the cash flow on the one hand include the reduction in trade receivables and on the other hand relate to the receipt of prepayments, mainly for a project in the Customer Solutions segment. The depositing of securities for counterparty default risk (margins) also led to a significantly less marked outflow of funds in the 2020 financial year than in the previous year and thus also contributed to the improvement in the cash flow from operating activities.

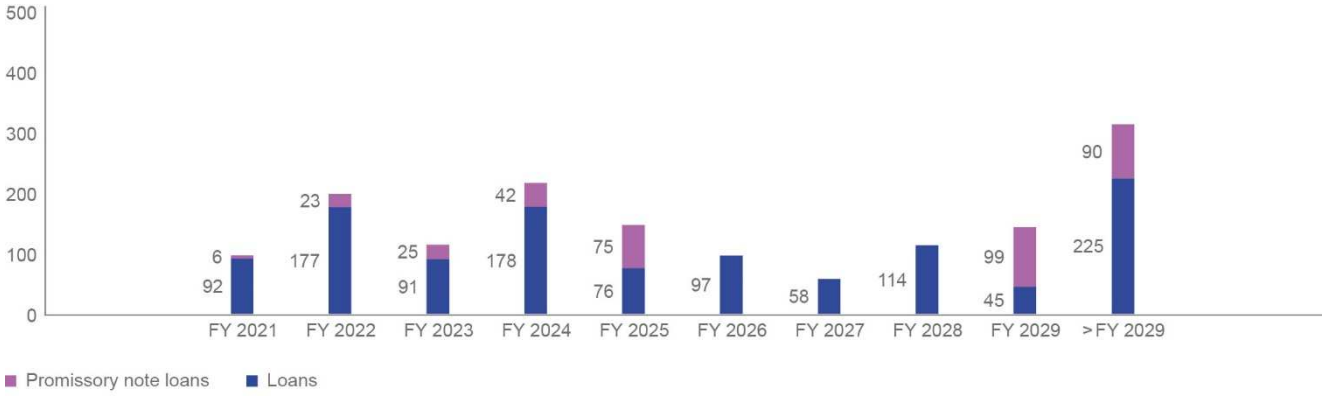
The development in the cash flow from investing activities was mainly influenced by significantly higher investments in property, plant and equipment, particularly in connection with our new gas-fired CHP plant in Kiel. The cash flow was also reduced year-on-year by the payments made for other financial assets. One major item in this respect related to the capital increases at joint ventures recognised using the equity method. An opposing positive factor resulted from lower payments for the acquisition of fully consolidated companies. Overall, the cash flow from investment activities fell by Euro 37 million compared with the 2019 financial year.

The cash flow from financing activities showed a significant year-on-year reduction of Euro 162 million, a development chiefly due to lower net new borrowing.

CASH FLOW STATEMENT
Euro million



REPAYMENT PROFILE
Euro million



Professional financial management

Our access to the capital markets, which remains as strong as ever, enables us to cover MVV's liquidity requirements without any difficulty. In this respect, we benefit from our strong creditworthiness, our diversified business portfolio and our corporate strategy, which focuses on generating sustainable and profitable growth. MVV has very strong liquidity resources in the form of cash funds and credit lines at banks.

Our repayment profile still does not show any significant spikes in the years ahead.

MVV Energie AG manages a cash pool for itself and 29 other companies within our Group. In this capacity, it manages, procures and secures both its own short-term liquidity and that of the subsidiaries connected to the pool. Long-term financing required for investments is provided to the subsidiaries in the form of shareholder loans.

Rating

MVV is not assessed by any rating agencies. In the rating talks we hold with our core banks, we nevertheless receive regular feedback on our creditworthiness. Based on this information, we assume that MVV continues to be classified at stable investment grade level.

COMBINED NON-FINANCIAL DECLARATION

General information

By publishing this Combined Non-Financial Declaration (NFD), we have complied with our reporting obligations in accordance with § 289b (1) and § 315b (1) of the German Commercial Code (HGB). This declaration is submitted both for the MVV Group (MVV) and for its parent company MVV Energie AG. The guidelines and concepts applied by MVV and MVV Energie AG are consistent with each other; no non-financial targets refer solely to MVV Energie AG. The NFD comprises this chapter and forms a constituent part of the Combined Management Report. The reporting in the NFD refers to MVV and thus, as in other sections of this Annual Report, to all subsidiaries fully consolidated in the consolidated financial statements. If, for select reporting topics, we focus on our main locations in Mannheim, Offenbach, Kiel and Wörrstadt and if individual key figures include shareholdings recognised at equity, then we indicate this accordingly. To avoid redundancies within our Combined Management Report, in relevant sections of the NFD we refer to further information included in other chapters. References to disclosures outside the Combined Management Report constitute supplementary information and do not form part of the NFD.

The Supervisory Board commissioned Pricewaterhouse-Coopers GmbH Wirtschaftsprüfungsgesellschaft (PwC), Frankfurt am Main, to perform a limited assurance audit on the NFD. This was based on the International Standards on Assurance Engagements ISAE 3000 (revised). The audit opinion can be found on **Page 183.**

We are consistently working to minimise any potentially negative implications of our business activities and to make measurable contributions to restructuring the energy supply and protecting the climate and environment. In our Annual Report and on our website we have for many years now provided information about the challenges we face and the progress we have made as a company that acts sustainably. In the first quarter of 2021, we will once again publish a separate Sustainability Report for the 2020 financial year. We prepare this in accordance with the core option of the Sustainability Reporting Standards of the Global Reporting Initiative (GRI). By publishing the Sustainability Report, we will, in customary form, satisfy the transparency requirements of our stakeholders.

To identify which sustainability topics are particularly significant to us, in 2020 we once again performed a materiality analysis in accordance with GRI. In the second stage, we allocated the results of this analysis, where applicable, to the aspects listed in § 289c HGB, namely environmental concerns, employee concerns, social concerns, respect for human rights and combating corruption and bribery. We reviewed which disclosures were needed for these aspects to provide an understanding of the course of business, business results and situation of MVV Energie AG and the Group, as well as the implications of our business activities for these aspects. The table on the following page provides an overview of these disclosures. We base our description of concepts and our non-financial key figures in this NFD on GRI Standards. However, we do not comply with all aspects of these standards in this report and thus refer to the forthcoming publication of the separate Sustainability Report.

Business model and risk analysis

We have pursued a sustainability-driven strategy for many years now. This also involves providing our customers with a supply of environmentally-friendly energy and supporting them by offering innovative solutions enabling them to implement their own energy turnarounds. In this, we cover all major stages of the energy industry value chain. Further information can be found in the Business Model and Corporate Strategy chapters **Pages 20 to 22.**

Within our existing risk management system, we record and evaluate all material risks associated with our business activities and business relationships **Page 82.** In our risk management system, we also record and evaluate any material non-financial risks that may have severe negative implications. The review process performed on non-financial risks in the 2020 financial year concluded that there were no risks which satisfied the materiality criteria set out in § 289c (3) Nos. 3 and 4 HGB.

At the same time, we look with some concern to the consequences of the ongoing coronavirus pandemic, whose impact on our own business processes and activities is not only direct. As well as our employees, our partners and customers also face direct and indirect potential health risks. Moreover, the pandemic influences the political implementation of the energy turnaround and decarbonisation, whether due to shifting political priorities or changed fiscal scope. Should the coming months and years witness a greater focus on measures to stabilise the economy and employment, and should this be accompanied by a reduction in the dynamism intended for the energy turnaround on national and European levels, then the long-term objective of climate neutrality would be at risk. MVV would also only be able to escape a potential trend of this nature to a limited extent, as our business depends to a significant extent on the political and regulatory framework. To date, there are no

signs of this kind of development. Quite the reverse: In recent months, the European Commission and the Federal Government have taken further steps aimed at transforming the economy and society. In particular, the resources used to combat the coronavirus pandemic should serve to accelerate this process.

Sustainability management

Our sustainability management focuses on those topics, processes and measures that we view as forming part of our core business **Business Model, Page 20** and on our **Corporate Strategy, Page 21.** Our strategic sustainability targets **Pages 48 and 51** were adopted by the Executive Board for the years 2016 to 2026 and are an integral component of our corporate strategy. In 2020, we supplemented these targets with additional decarbonisation targets which we aim to meet by 2030 at the latest.

Our sustainability management is anchored across various levels of the Group. The Executive Board bears overall strategic responsibility. We continually review, evaluate and manage MVV's performance on the basis of sustainability indicators and medium-term targets. We evaluate investment projects, also by reference to sustainability criteria. The sustainability department is located in organisational terms in our group strategy and energy industry department. It coordinates the sustainability strategy, reports to the Executive Board and sustainability bodies and manages the group-wide sustainability programme. As well as managing the exchange of information between business fields, this department also plans and implements projects and measures.

Disclosures on contents of combined non-financial declaration

Contents of combined non-financial declaration		
Aspects pursuant to § 289 HGB	**MVV area of action pursuant to MVV materiality analysis according to GRI**	**Disclosures on concepts, targets, measures, results, due diligence processes and non-financial key figures pursuant to § 289c HGB in section**
Environmental concerns	Decarbonisation and energy turnaround	Climate protection Renewable energies
	System change	Supply reliability
Employee concerns	Employee concerns	Training and development Diversity Occupational safety and health protection
Social concerns	Social commitment	Social commitment
Respect for human rights and combating corruption and bribery	Value chain[1]	Respect for human rights and combating corruption and bribery
	Compliance[1]	

1 Not material under GRI, but material area of action for MVV

Environmental concerns aspect

Decarbonisation and energy turnaround

Climate protection has rapidly grown in importance as an issue within society, among the general public and in the political arena. In new analyses, such as the IPCC Special Report 1.5°C, climate science has underlined the urgency of adopting a far more ambitious approach towards decarbonisation, not least as global warming is advancing much faster than projected just a few years ago. Over the past 18 months, far-reaching political decisions have been taken in response to international and national movements within society. Among others, these include:

- The national Climate Protection Act (KSG), which provides for binding CO_2 reduction targets for individual sectors by 2030, will require the energy industry sector alone to cut its CO_2 emissions by around one third between 2020 and 2030.
- The exit from coal resolved by the Federal Parliament in summer 2020 provides for a gradual reduction in the volume of electricity generated using coal through to 2038 at the latest.
- The Fuel Emissions Trading Act (BEHG) sets the level of and development in CO_2 prices for fossil fuels in the coming years in cases where fuel use is not governed by European emissions trading.
- With its Green Deal, the European Commission has announced an extensive package of measures that, by working with new fiscal and legislative approaches, aims to ensure that Europe is transformed into a sustainable and climate-neutral continent.
- In summer 2020, the European Parliament adopted an ambitious decarbonisation target for the EU. By 2030, CO_2 emissions should now be reduced by 55 %, rather than the previous target of 40 %, and climate neutrality should be reached by 2050.
- The amendment to the State Climate Protection Act in Baden-Württemberg was also adopted in the summer. This sets ambitious state targets and areas of action to promote climate protection.

In the medium term, the increasingly ambitious approach taken by society and politicians towards climate protection will be reflected in specific political measures. Here, we can expect to see a combination of additional subsidies, pricing instruments and regulatory law that raises the pace of decarbonisation and accelerates the energy turnaround.

The great challenge is the national and European target of becoming climate neutral by 2050. Climate neutrality implies not only decarbonising by at least minus 95 %, but also compensating for or capturing unavoidable residual emissions. For the energy industry, climate neutrality means on the one hand that the use of fossil fuels will have to be reduced even more significantly and more rapidly than previously planned. On the other hand, more renewable energies will have to be planned and implemented to cover the full decarbonisation of other sectors, for example by working with power-to-gas or power-to-liquids. Decarbonisation and energy turnaround are of core significance to us as an energy company.

For us as a company operating in the energy industry, climate protection, decarbonisation and renewable energies are especially important as material factors in the environmental concerns aspect relevant to our business. We have set specific targets in these areas and extended these once again in the 2020 financial year. In our NFD, we therefore accord a great deal of space to these topics, which are presented in such a way that their contents complement one other.

Climate protection

Our objective is climate neutrality
We will achieve climate neutrality as a company by 2050 at the latest.

Climate neutrality does not only mean decarbonising generation; it also includes indirect emissions caused by our business relationships with suppliers and downstream emissions at our customers.

We believe that climate neutrality can only be achieved by working with a long-term work programme that covers all business activities from the largest down to the smallest.

Our decarbonisation strategy covers four areas:

- Generation positions

  We are gradually reducing emissions from our conventional energy generation positions **Page 51** to zero. The trajectory here depends on the specific time at which existing power and heating energy plants are decommissioned, as well as on the relevant replacement investments, including the availability of green gas products, such as renewable hydrogen or biomethane. Key aspects of the underlying conditions will be fixed by the future political framework set out in the German Climate Protection Programme 2030 and the European Green Deal.

- Renewable energies

  We are pressing further ahead with expanding renewable energies. We have set ourselves the interim target of doubling our own renewable electricity generation volumes in the period from 2016 to 2026 **Page 51.** Furthermore, conventional heating energy generation will be replaced by low-CO_2 and renewable sources.

- Climate neutrality at our customers

  Our products and services promote climate neutrality at and by our customers. Today, we already facilitate substantial reductions in CO_2 in other industries and sectors, for example by means of energy efficiency measures, by planning and operating renewable energies plants and by offering innovative services. We will significantly cut energy-related emissions at our customers and improve their climate footprints. Decarbonisation at our customers will be reflected in higher annual net CO_2 savings and the scope of projected volumes of renewable energies. For both these factors, we set specific interim targets in 2016 already for the period until 2026 **Pages 48 and 51.**

- Handling residual emissions

  At our plants, we exploit ways of cutting emissions in order to reduce unavoidable emissions to an absolute minimum. Any remaining residual emissions, such as those resulting from waste incineration, can currently only be offset or used by drawing on new technologies, such as carbon capture and storage (CCS) or carbon capture and utilisation (CCU). This being so, we are monitoring and reviewing all relevant options in terms of reducing, using or offsetting CO_2 emissions.

Consistently implementing our decarbonisation strategy will gradually reduce our group-wide CO_2 intensity. We measure this figure as the relationship between value added and CO_2 emissions. We report on the development in this key figure just as transparently as on our direct and indirect CO_2 emissions and CO_2 savings.

Our decarbonisation strategy is specified in greater detail on a decentralised basis by our business fields, taking due account of local conditions. On group level, the investments made by all business fields are assessed in terms of their contribution to decarbonisation. Successful decarbonisation measures are regularly reviewed by our sustainability management team on group level. Taking due account of their strategic implications, the Executive Board then decides on measures.

Our decarbonisation targets

Using various methods, we regularly measure the success of the work programme based on this decarbonisation strategy.

With our strategic sustainability targets for the period from 2016 to 2026, we already set clear, measurable milestones as we head towards climate neutrality. In 2020, we supplemented these targets with further decarbonisation targets which we aim to achieve by 2030 at the latest.

To become climate neutral as a company by 2050 at the latest, we will have to significantly reduce our direct and indirect greenhouse gas emissions in the coming years. We have specified this in further detail in the following decarbonisation targets which cover all elements of our climate balance sheet:

Scope 1: We will reduce our direct energy industry CO_2 emissions to below 2 million tonnes a year by 2030.

As well as increasing energy efficiency at our own plants, we will gradually further reduce the use of fossil fuels for the generation of electricity and heating energy. The share of green technologies in our energy generation will increase further until this is fully regenerative in the long term. By reducing our direct energy industry CO_2 emissions to below 2 million tonnes, we are making it clear that we are assuming responsibility not only for our own plants, but also on a prorated basis for our at-equity shareholdings.

Scope 1: We will reduce our specific CO_2 emissions from district heating to 120 g CO_2/kWh by 2030

To achieve climate neutrality, we will also fully decarbonise our heating energy generation. Our district heating supply already has a CO_2 footprint that is significantly smaller than for most decentralised heating energy sources. At the same time, this move will involve the challenge, particularly in the Greater Mannheim region, of adopting a path towards decarbonisation in the years ahead that meets ever stricter requirements in terms of making buildings climate neutral in the long term and also satisfies the political objectives of the heating energy turnaround. This target is based on the energetic rating of district heating pursuant to the FW 309-6 (2016) standard of the AGFW industry association and is subject to any methodological changes resulting from the German Building Energy Act (GEG).

Scope 2: Our building use will be climate neutral level (on reporting level) by 2026 at the latest.

This target addresses our Scope 2 emissions and is aimed above all at our large locations in Mannheim, Kiel, Offenbach and Wörrstadt. At less than 10,000 tonnes a year, the greenhouse gases emitted by our business operations are low compared with those resulting from generation activities. However, we aim to reduce these indirect emissions as well by deploying renewable energies and implementing energy efficiency measures. Any remaining emissions in 2026 will be offset or compensated for with MVV-internal CO_2 reduction measures.

Scope 3: We will reduce our indirect emissions in the upstream and downstream value chains by 30 % by 2030.

Even if we are only able to influence a small share of indirect emissions sources, we will reduce our Scope 3 emissions. The key challenge here will be the increase needed in the share of green commodities, such as electricity, heating energy and gas. We will also reduce the CO_2 footprint caused by our suppliers, service providers and partners.

Overall system: We will triple our annual CO_2 savings to 1 million tonnes a year by 2026.

Our existing decarbonisation target that MVV's CO_2 reductions should be measured in terms of their effect on the overall system and not just in Scopes 1, 2 and 3 of MVV's climate balance sheet remains valid. Here, we account for climate-effective CO_2 savings along the entire value chain. We assess the extent to which all new strategic activities, projects and investments at our group of companies impact on direct and indirect greenhouse gas emissions in the overall system. For all activities, we record the average CO_2 savings for a maximum period of ten years from the beginning of the respective measure. We do not account for historic reduction projects and financial transactions. This target also includes our at-equity shareholdings.

Our climate balance sheet

In our climate balance sheet, we distinguish between direct and indirect CO_2 emissions.

The generation of energy at our proprietary plants or at plants from which we procure contingents gives rise to **direct CO_2 emissions**. These are designated as **Scope 1** under the Greenhouse Gas protocol.

On the one hand, direct CO_2 emissions are influenced by weather-based demand for heating energy, as well as by the development in wholesale electricity prices. These factors cannot be influenced by MVV but are reflected in the capacity utilisation rates at our generation plants. On the other hand, the medium to long-term development in direct emissions largely depends on the dates at which existing plants are decommissioned and the replacement investments implemented.

The coal-fired joint power plant in Kiel (Gemeinschaftskraftwerk Kiel – GKK), in which Stadtwerke Kiel owned a 50 % stake, was decommissioned in the 2019 financial year. The new highly efficient gas-fired CHP plant began operations in November 2019. In the before/after comparison, the decommissioning of GKK involves a significant reduction in emissions at the Kiel location in absolute terms. Viewed from a full consolidation perspective, however, MVV's direct CO_2 emissions did not decrease to any significant extent after the launch of operations at the gas-fired CHP plant in the 2020 financial year. That is because the 50 % stake we previously held in GKK was a shareholding recognised at equity whose CO_2 emissions were therefore outside MVV's reporting boundaries from a full consolidation perspective. By contrast, the new, highly efficient gas-fired CHP plant is fully consolidated. This means that, following the launch of operations, 100 % of its emissions are reported under our direct CO_2 emissions.

The counterintuitive circumstance that a reduction in CO_2 by around two thirds in absolute terms does not have a positive impact on our direct emissions figures underlines the limited meaningfulness of this key figure in terms of the decarbonisation success achieved. The same applies to other investments which may lead to an increase in direct greenhouse gases despite a local reduction in CO_2 emissions. We therefore use the "net CO_2 saving in the overall system" key figure to record and report all reductions in CO_2 arising in the economy as a whole as a result of our strategic measures and investments. The operations launch at our gas-fired CHP plant in Kiel in particular, as well as the measures taken to strengthen our proprietary wind power portfolio, meant that our net CO_2 savings in the 2020 financial year were significantly higher than in the previous year.

CO_2 KEY FIGURES BY REPORTING SCOPE

Within reporting scope of MVV's climate balance sheet

Origin	Suppliers	MVV	Customers
CO_2 emissions	» Indirect Scope 3: Mainly emissions upon production of procured goods/services » Indirect Scope 2: Mainly MVV buildings and vehicle pool	» Direct Scope 1: Electricity and heating energy generation plants	» Indirect Scope 3: Mainly customer use of MVV products and commodities
Reduction to be achieved by MVV	» Scope 3: –3% per annum » Scope 2: Climate neutral by 2026	» Scope 1 Energy industry: < 2m tonnes by 2030 » District heating: < 120g CO_2/kWh by 2030	» Scope 3: –3% per annum

Consideration of net CO_2 savings outside reporting scope of MVV's climate balance sheet

CO_2 emissions in overall economy	
Reduction to be achieved by MVV	» Tripling of net CO_2 savings by 2026

Indirect CO_2 emissions (Scope 2) mainly result from the energy we use for our business operations outside energy generation.

Indirect CO_2 emissions (Scope 3) comprise greenhouse gases arising in upstream and downstream stages of the value chain. CO_2 emissions in upstream value chain stages arise at suppliers manufacturing products and services purchased by MVV. These relate, for example, to the production of photovoltaics systems and wind turbines or to the procurement of electricity not generated by MVV. Emissions activities in downstream stages of the value chain chiefly involve the use of the natural gas which MVV supplies to customers.

The annual development in Scope 3 emissions is chiefly determined by sales volumes for electricity, gas and heating energy, as well as by volumes in the renewable energies project development business. In this respect, the reduction in the 2020 financial year mainly reflects the lower sales volumes and the lower volume of capacity installed by our project development business.

Climate balance sheet

1,000 tonnes CO_{2eq}	FY 2020	FY 2019	+/– change	% change
Direct CO_2 emissions (Scope 1) [1]	1,863	1,545	+ 318	+ 21
Energy industry activities	934	594	+ 340	+ 57
Disposal activities (energy from waste plants/RDF)	929	951	– 22	– 2
Direct CO_2 emissions (Scope 1) including companies recognised at equity [1]	3,315	3,582	– 267	– 7
Energy industry activities	2,386	2,631	– 245	– 9
Disposal activities (energy from waste plants/RDF)	929	951	– 22	– 2
Indirect CO_2 emissions (Scope 2) [2]	8	8	0	0
Indirect CO_2 emissions (Scope 3)	5,259	6,346	– 1,087	– 17
Net CO_2 saving	794	486	+ 308	+ 63
Net CO_2 saving including companies recognised at equity	766	439	+ 327	+ 74

1 We refer to industry-typical factors from GEMIS/Öko-Institut for fuel-related emissions, the emissions factors issued by the Federal Environment Agency (UBA) for electricity and the certified emissions factors of the respective locations for district heating.

2 Indirect Scope 2 emissions (location-based) cover the Mannheim, Kiel, Offenbach and Wörrstadt locations; these figures are based on calendar years.

The specific CO_2 emissions for our district heating supply decreased in the past financial year, a development mainly due to the launch of operations at the gas-fired CHP plant in Kiel.

Specific CO_2 emissions for district heating [1]

g CO_2/kWh	FY 2020	FY 2019
Mannheim district heating system [2]	201	201
Offenbach district heating system	150	150
SWKiel district heating system	185	218
Decentralised gas heating systems in Germany	274	274

1 The figures are reassessed every three years if the generation structure has changed.

2 The most recent certification for the Mannheim district heating network was performed as of 1 November 2020 and now amounts to 173g CO_2/kWh.

Renewable energies

Renewable energies contribute to climate protection targets

By 2050, electricity generation in Germany should be based almost entirely on renewable energies. They have a crucial role to play in meeting national climate protection targets. This situation harbours growth potential for our company; not least because of this, renewable energies are a key focus of our strategic alignment. By expanding renewable energies, we are also making a measurable contribution towards the achievement of climate protection targets on behalf of society as a whole.

Here too, we set two specific sustainability targets in 2016 already and intend to reach these by the end of the 2026 financial year.

We will double our proprietary electricity generation from renewable energies between 2016 and 2026.

The target of doubling our generation to more than 800 MW also includes the shareholdings we recognise at equity. We report on their specific renewable energies generation capacities in our separate Sustainability Report. To enable us to reach our target, we are consistently investing in expanding our proprietary renewable energies generation portfolio. One primary focus here involves onshore wind turbines.

The renewable energies electricity generation capacity at our fully consolidated companies amounted to 512 MW at the end of the 2020 financial year and was thus 40 MW higher than in the previous year. This increase was mainly due to the fact that we expanded our wind power portfolio. Electricity generation capacity at our at-equity shareholdings also showed a slight year-on-year increase.

We will connect 10,000 MW of renewable energies to the grid between 2016 and 2026.

Due in particular to Juwi and Windwärts, we have all-round expertise in developing, building and launching operations with renewable energies plants. We intend to reach the projecting target by installing onshore wind turbines and photovoltaics systems both in Germany and abroad. Smaller contributions will be made by biomass plants and photovoltaics systems at customer locations.

Since the beginning of the 2017 financial year, we have connected renewable energies plants with capacities of 2,144 MW to the grid. In the 2020 financial year, we connected 262 MW of new capacities **Page 53.**

Forward-looking generation portfolio

At the end of the 2020 financial year, electricity generation at renewable energies plants (including biomass CHP and the biogenic share of waste/refuse-derived fuels) accounted for around 46 % of our total electricity generation volumes (previous year: 63%). The volume of electricity generated at renewable energies plants rose year-on-year, but the share of electricity resulting from combined heat and power (CHP) generation grew disproportionately compared with the previous year. This was due to the launch of operations at our new highly efficient gas-fired CHP plant in Kiel, which uses CHP to generate electricity and heating energy. The 50 % stake previously held in GKK, the hard coal-fired predecessor plant, was an at-equity shareholding. From a full consolidation perspective, its electricity generation volumes were therefore outside MVV's reporting boundaries.

Overall, we generated 1,220 million kWh of climate-neutral electricity at our renewable energies plants in the year under report, 117 million kWh more than in the previous year.

Electricity generation capacity from renewable energies and energy from waste (EfW)/refuse-derived fuels (RDF)

MW_e	**FY 2020**	FY 2019	+/– change	% change
Biomass and biogas plants [1, 2]	105	102	+ 3	+ 3
EfW/RDF	165	160	+ 5	+ 3
Wind power	236	204	+ 32	+ 16
Hydroelectricity	2	2	0	0
Photovoltaics	4	4	0	0
Total	**512**	**472**	**+ 40**	**+ 8**

1 Including biomethane plants
2 Previous year`s figure adjusted

Our biomethane plants had capacities of 35 MW in the year under report.

Heating energy generation capacity from renewable energies and energy from waste (EfW)/refuse-derived fuels (RDF)

MW_t	**FY 2020**	FY 2019	+/– change	% change
Biomass and biogas plants [1]	33	123	– 90	– 73
EfW/RDF	719	719	0	0
Total	**752**	**842**	**– 90**	**– 11**

1 Previous year`s figure adjusted

Sustainable recycling-based economy

Even when it has been correctly separated, household and commercial waste is by no means "rubbish", but can rather be used to generate energy. Treating the waste in strictly controlled conditions at an energy from waste plant offers twofold benefits. On the one hand, the waste is sanitised, i.e. poisons and materials harmful to people's health or the environment are destroyed. On the other hand, the energy contained in the waste is used to produce steam for industry, heating energy for the local population and electricity. Put simply, households deliver their waste to MVV and in return receive energy in the form of heat and electricity. Around 50 % of the energy generated is renewable, as around half of the waste is of biogenic origin.

Using the materials and energy contained in waste makes a major contribution towards reaching the target of building an economy that is based as far as possible on recycling. The best solution should always be to design products in such a way that they can remain in the cycle on a permanent basis, for example due to recycling, and do not become waste. That is also the aim of the long-term political targets set out, for example, in the so-called Green Deal of the European Commission. Until that aim is met, and in cases where that is not possible, the second-best solution is to use non-recyclable waste to generate energy. If it were possible to enhance global production in the long term in such a way that all waste incurred is free of fossil fuels, then the energy generated at energy from waste plants would be fully regenerative.

In our environmental energy, business customers and strategic investments business fields, we are making a major contribution to saving resources and building a recycling-based economy by operating a total of eight energy from waste plants in Germany, the UK and the Czech Republic. In the 2020 financial year, these plants incinerated around 2.4 million tonnes of waste and refuse-derived fuels. In the Scottish city of Dundee, we are building a new highly efficient CHP plant that is due to launch operations before the end of 2020. This plant will initially supplement and subsequently replace the existing energy from waste plant.

Increasing significance of our project development business

With our Juwi and Windwärts subsidiaries, we offer end-to-end project development and services for planning, building and managing operations at renewable energies plants.

Concluded development of renewable energies plants

MW_e	FY 2020	FY 2019	+/– change	% change
Wind power	74	62	+ 12	+ 19
Photovoltaics	188	398	– 210	– 53
Total	**262**	**460**	**– 198**	**– 43**

The project development business is by its very nature volatile. The volume of new renewable energies plants at which operations are launched each year depends, among other factors, on social and political acceptance, the length of approval processes, regulations governing subsidies for renewable energies, as well as on specific implementation dates for individual projects, and can therefore vary widely from year to year. Changes in underlying conditions, such as those arising due to the coronavirus pandemic, may have a notable influence on the implementation of projects.

Operations management for renewable energies plants

MW_e	FY 2020	FY 2019	+/– change	% change
Wind power	1,343	1,246	+ 97	+ 8
Photovoltaics	2,386	2,288	+ 98	+ 4
Total	**3,729**	**3,534**	**+ 195**	**+ 6**

System change

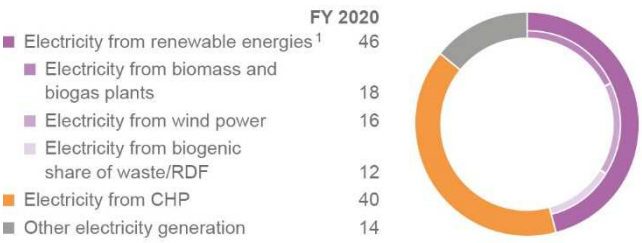
Energy companies play a key role in the energy system transformation. They do this by investing in the energy infrastructure to prepare this for the energy turnaround and make it fit for the future. At the same time, they perform what is for society the important task of ensuring a reliable and stable supply of electricity, gas, heating energy and water. The advancing energy turnaround gives rise to new questions, as the volume of electricity fed in from renewable energies such as wind turbines or photovoltaics fluctuates in line with weather conditions and the time of day. As an energy company and distribution grid operator, we ensure that we provide our customers with a secure and reliable supply of energy at all times. We therefore need to smartly combine renewable energies with highly efficient, flexible and controllable power plants. The reliability, smartness and performance capacity of our grids have a key role to play in this respect. That is why we are investing on an ongoing basis in maintaining, expanding and optimising our grids and plants.

Secure energy supply

Gradual conversion of our generation portfolio

As we shape our course towards the energy system of the future along social, ecological and economic lines, we are working to an increasing extent with renewable and to a decreasing extent with conventional energies and relying here on a variety of energy sources and technologies. Doubling our proprietary electricity generation from renewable energies between 2016 and 2026 **Page 51** will change our generation portfolio, which is set to become even more diversified. This kind of generation portfolio will help us to ensure a secure energy supply for our customers. That is particularly true for the supply of heating energy to those private, business and industrial customers connected to our district heating and industrial steam grids in Mannheim, Offenbach and Kiel.

ELECTRICITY GENERATION
Shares (%)



1 Due to their immaterial shares, electricity generation volumes from hydroelectricity and photovoltaics have not been presented in this overview.

Electricity generation volumes

kWh million	FY 2020	FY 2019	+/– change	% change
Biomass and biogas plants	475	418	+ 57	+ 14
Biogenic share of waste/RDF	314	309	+ 5	+ 2
Wind power	422	370	+ 52	+ 14
Hydroelectricity	5	2	+ 3	>+ 100
Photovoltaics	4	4	0	0
	1,220	**1,103**	**+ 117**	**+ 11**
Electricity from CHP	1,036	418	+ 618	>+ 100
Other electricity generation 1	367	227	+ 140	+ 62
Total	**2,623**	**1,748**	**+ 875**	**+ 50**

1 Previous year's figure adjusted

The increase in electricity generation volumes at biomass and biogas plants and at our plants which generate energy from waste and refuse-derived fuels (biogenic share of waste) was due above all to improved plant availability. We expanded our wind power portfolio in the year under report and also benefited from higher wind volumes compared with the previous year. The electricity volumes generated by our wind turbines showed a corresponding increase.

The substantial increase in the volume of electricity we generated using CHP was mainly due to the operations launch at our new gas-fired CHP plant in Kiel, which produces electricity and heating energy using combined heat and power generation. The 50 % stake previously held in GKK, its hard coal-fired predecessor power plant, was an at-equity shareholding. From a full consolidation perspective, its electricity generation volumes were therefore outside MVV's reporting boundaries. The increase in other electricity generation is also to be viewed in this context: This relates to electricity volumes generated before CHP operations began at the new gas-fired CHP plant.

Heating energy generation volumes

kWh million	FY 2020	FY 2019	+/– change	% change
Biomass and biogas plants [1]	71	207	– 136	– 66
Biogenic share of waste/RDF	1,906	1,725	+ 181	+ 10
	1,977	**1,932**	**+ 45**	**+ 2**
Other heating energy generation	2,328	1,754	+ 574	+ 33
Total	**4,305**	**3,686**	**+ 619**	**+ 17**

1 Previous year`s figure adjusted

The reduction in biomethane volumes was due to a lower level of plant availability compared with the previous year.

Biomethane generation volumes

kWh million	FY 2020	FY 2019	+/– change	% change
Biomethane generation	212	233	– 21	– 9

Safeguarding grid stability despite growing grid loads

One way to assess the reliability of the energy supply involves measuring the frequency and duration of grid downtime. Our three large grid companies MVV Netze, Energienetze Offenbach and SWKiel Netz have set themselves the goal of ensuring a secure supply free of interruptions and thus to avoid grid downtime and remedy any such downtime as quickly as possible. One key task for our grid companies is to work on further developing and operating our grid infrastructure. They therefore invest large sums in maintenance and modernisation measures.

One key non-financial performance indicator which shows the security of the energy supply is the system average interruption duration index (SAIDI), which presents the average interruption to the supply in minutes per year and customer. The SAIDI figure only accounts for unplanned downtimes lasting longer than three minutes and not due to force majeure.

We aim to minimise interruption-induced failure in the power supply.

The management teams at our grid companies are kept regularly informed about interruptions and also discuss this information with the Executive Board. We factor any countermeasures thereby required into our investment and maintenance projects.

We invested Euro 116 million in maintaining and expanding our grids in the 2020 financial year.

Electricity supply interruptions (SAIDI)

Minutes/year	2019 [1]	2018 [1]	+/– change	% change
Electricity MVV	10	17	– 7	– 41
Electricity in Germany [2]	12	14	– 2	– 14

1 Calendar year
2 Source: Federal Network Agency (BNetzA)

The SAIDI figure for our grid regions in 2018 was still affected by an interruption in the Mannheim grid region due to a component replaced in mid-2019. In the 2019 calendar year, we were once again able to provide our customers with an electricity supply that was largely free of interruptions and ahead of the national average.

Employee concerns aspect

We offer attractive and secure jobs to more than 6,200 employees. That is a great responsibility, and one that we are aware of and account for in our strategic decisions.

The coronavirus pandemic presented us with particular challenges in this respect in the 2020 financial year. Working together, however, the Executive Board, managers, employees and employee representatives were able to manage these challenges successfully. The values laid down in our corporate culture, namely Community, Responsibility, Appreciation and Courage, were lived on a daily basis and reflected in the decisions taken to manage the crisis. To protect our employees and safeguard our operating processes, we very quickly agreed procedures, looked for solutions and implemented these. Previous forms of working together and communicating were adapted to the new working requirements, as were existing dialogue formats.

The experience we gained during this time will sustainably change our forms of cooperation, management and communication. We will evaluate this and, where possible, retain the positive aspects in future as well.

Our employees are our future

Motivated, healthy and well-qualified employees are crucial to MVV's success. Viewed in the long term, demographic trends and changes in the population structure will create additional challenges when it comes to finding and retaining suitable employees. This being so, our personnel strategy focuses on the following areas:

- Leadership: We are continually and systematically improving the quality of management at the company and adapting this in line with changing market and employee requirements.

- Demographics, work-life balance, remuneration management: Our aim is to remain an attractive employer. That is why we offer attractive remuneration packages and are committed to helping our employees combine their work with their family or nursing care commitments. In our recruitment, we have a particular focus on promoting women and expanding diversity at the company.

- Ongoing change management: We are making continuing efforts to further develop our company and corporate culture and aim to retain and enhance our employees' skills. To this end, we invest in training our workforce and enhancing its willingness to embrace change. After all, we need highly trained, flexible and innovative specialists and managers willing to make their contribution to the new energy system.

- Talent management: We deliberately identify, support and cultivate upcoming talent – and that from among our trainees and new recruits right up to our managers.

The Executive Board Personnel Director is responsible for all personnel-related activities. Reporting on relevant personnel topics is provided to the full Executive Board on a regular basis and whenever necessary due to individual events or topics. The specific structure and implementation of the personnel strategy is organised on a decentralised basis. This way, targeted focuses can be set in line with circumstances on location.

MVV has a Group Works Council, as well as works council bodies and committees on the relevant levels. The company's management works together with these bodies on a basis of trust, meaning that both the company's concerns and those of its workforce are accounted for in all significant decisions. The Supervisory Board of MVV Energie AG includes equal numbers of shareholder and employee representatives. This means that employee concerns are also central to any important company decisions.

We aim to protect the physical and mental wellbeing of our own employees and of those employees who work on our behalf. To this end, we are continually working to improve work safety at the Group. Consistent with this objective, the work safety committees organised on a decentralised basis offer structured programmes and measures which are also reported on group level and in the Executive Board on a quarterly basis.

Personnel figures (headcount) at balance sheet date

	30 Sep 2020	30 Sep 2019	+/– change	% change
MVV [1]	6,260	6,113	+ 147	+ 2
of which in Germany	5,351	5,232	+ 119	+ 2
of which abroad	909	881	+ 28	+ 3

1 Including 341 trainees (previous year: 330)

We employed a group-wide total of 6,260 individuals as of 30 September 2020. The increase compared with the previous year was due on the one hand to the acquisition and full consolidation of companies. On the other hand, we also increased employee totals in our growth fields.

Our employees abroad include 493 employees at our Czech subgroup, 261 at Juwi's foreign shareholdings and 144 at the British subsidiaries of MVV Umwelt.

Training and development

Training with promising prospects for the future

In Mannheim alone, we offer the next generation of employees training in more than 15 different commercial and technical vocations, as well as combined training and study programmes. In Mannheim, Offenbach, Kiel and Gersthofen close to Augsburg, we are among the largest trainers in the respective regions.

Our broad range of training programmes aims to show young people the wide variety of career opportunities at our company.

As of 30 September 2020, a total of 341 young women and men were in training at MVV. Our trainees also include two former refugees who are training as specialists in metals technology and industrial electricians. We have offered jobs to three other former refugees who have now completed their training.

In the 2020 financial year, we successfully completed a European Union research project with partners from the UK, Lithuania and Austria. This project was managed by City College in Plymouth, which is also a longstanding ERASMUS+ partner of MVV. This European Apprenticeship Talent Programme (EATAP) looked into how, within the ERASMUS+ programme, high-potential apprentices in STEM (Science, Technology, Engineering and Maths) vocations can work together in an international team based on agile, project-based methods. The research project now forms the basis for integrating the findings into the ERASMUS+ programme. Since the beginning of the ERASMUS+ cooperation, an average of 38 % of our second and third-year trainees in programmes offered by the Chamber of Industry and Commerce (IHK) have taken part in this international mobility project.

New further training concept

In the 2020 financial year, we defined numerous internal training measures based on our cultural values, MVV's competency model and the MVV management guidelines. We launched this process by holding a training conference with first-tier managers. The new further training concept includes extensive personnel-related and methodological topics, section head programmes, a Digital Academy for first-tier managers and an individual General Management Programme for management teams.

In view of the coronavirus pandemic, our employees and managers made intensive use of our wide range of virtual training options. Topics particularly important to our employees were agile working, communications, presentation skills and virtual management.

Targeted personnel development

For us, targeted personnel development is a key factor which also determines our competitive success. We have therefore developed numerous measures and instruments based on the experience we have gained in the rapidly changing economic climate in which we operate.

Our further training measures enable us to ensure a shared basis of knowledge on overriding strategic topics. Alongside in-house training on various topics, we also offer team development and individual measures, such as coaching and mentoring.

We aim to develop the potential of our employees.

When it comes to the individual further development measures we provide to our employees, we have set one key focus on the topic of digitalisation. In the 2020 financial year, our main focus was on collaboration. Looking at our everyday working life in a large organisation, the aim here was to network our cooperation even more closely, share knowledge, accept mutual impulses and information and integrate new topics into our own work processes.

In Mannheim, we work with a management review system to record the skills and further training needs of our managers and high-potential employees and to plan their next career steps. This involves a graded process including self-assessment and third-party assessment, internal management review conferences and concluding feedback talks held between employees and managers. In the previous year, 239 managers and employees with management potential took part in this programme. Individual development measures are implemented under the responsibility of specialist departments, while employees with management potential are developed within a well-established talent management process. A separate "talent advisory" function has been established to enable the company to retain high-

potential employees. Our understanding of talent also extends to specialist and upcoming staff, such as trainees and career starters.

The MVV-specific competency model forms the basis for personnel development meetings and individual support programmes. We regularly hold appraisals and surveys at our main locations in Germany. This way, our employees have the opportunity to provide honest feedback and we can enhance the quality of management at our company.

Diversity

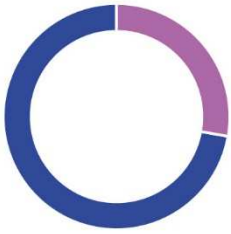
Equal opportunities on all levels

Women have traditionally accounted for a comparatively low share of the overall workforce at energy companies, and MVV is no exception in this respect. That is why we aim to offer more targeted and closer support to women. We are convinced that different skills and management styles impact positively on our business performance. We therefore see raising the share of women in our Group's workforce on a long-term basis as one key to MVV's successful further development. We are addressing the low share of women in management positions typical to our industry with targeted promotional measures.

By 30 September 2021, we aim to raise the female share of our workforce to 35 % and of our total management staff to 25 %.

WOMEN AND MEN
Shares (%)

	FY 2020
Women	28
Men	72



Status: 30 September 2020

These targets were adopted by the Supervisory Board and Executive Board of MVV Energie AG in 2015. Both key figures are collected and analysed each year.

Women accounted for 28 % of our workforce and 15 % of our managers at 30 September 2020. For MVV Energie AG, we report on the share of women in both first and second management tiers. In August 2017, the Executive Board set targets to be achieved by 30 September 2021. By that date, the share of women in the first management tier should have reached 25 %, with a corresponding target of 30 % for the second management tier. At 10 %, the share of female managers in the first tier as of 30 September 2020 was at the same level as in the previous year (30 September 2019: 10 %). The share of women in the second management tier amounted to 27 % (30 September 2019: 29 %) and is thus close to the specified target.

To reach our targets, we are adopting various approaches, drawing on a variety of promotional measures and programmes and expanding these further. One major package of measures involves offering targeted personnel development to women with suitable potential. One example is the individual support offered to women in mentoring schemes. In X-Company-Mentoring, a cross-company programme organised each year in cooperation with other well-known companies in the region, male and female mentors in the management tiers of participating companies pass on their skills and experience to talented female employees for a period of one year. This is intended to support employees in their own personal development, with a separate special focus on management. A further focal point involves building networks between current participants and those who took part in the programme in previous years. As part of our corporate membership of "European Women's Management Development", an association for professional women, we offer free membership for interested female employees. This way, they can benefit, for example, from free contingents of places in presentations and seminars.

Occupational health and safety

Lived Safety

We accord the utmost priority to protecting the health and safety of our employees and of those employees who work on our behalf. To secure this approach at a high level not only for now, but also in future, in the 2020 financial year we launched our “Lived Safety” project.

This project has the following core points:

- For us, protecting the health and safety of our employees is not just a task, but rather an obligation.
- All employees are important to us and are involved in health and safety decisions.
- All managers and employees know their responsibilities and actively live up to these in the areas which they are able to influence.
- The aim is to continually improve the safety and health protection of all employees based on a prevention-driven approach.

It is about people

For “Lived Safety” to be effective, everyone has to make their own individual contribution. Based on clearly defined roles and equipped with corresponding skills, those involved in occupational safety are therefore the key pillars of our safety philosophy.

Our accident statistics and the prevention measures taken are evaluated on Executive Board and group level on a quarterly basis, with further measures also being discussed and planned. The work safety committees formed in line with § 11 of the German Occupational Safety Act (ASiG) are formed by the companies on location and comprise both employer and employee representatives. We liaise closely with professional associations and employee representatives and agree our work safety and prevention strategies and measures with them.

Our aim is to prevent accidents from occurring at all in future.

Every accident is one too many

One matter close to our hearts is the physical and mental health of our employees and of those employees acting on our behalf. We are therefore making continuous efforts to improve work safety at the Group and wish to make clear that every accident is one to many. This is the only way we can help to ensure that safety is actually lived within our company and beyond.

Key foundations are provided by structured programmes and measures, such as an electronic instruction system with occupational safety training tailored to the respective workplace, an inspection concept and regular safety briefings aimed at raising safety awareness and firmly establishing this on all levels.

Accident statistics

	FY 2020	FY 2019	+/– change	% change
Lost time injury frequency rate (LTIF) [1, 2, 3]	6.7	7.7	– 1.0	– 13

1 Includes all fully consolidated companies in Germany and individual at-equity shareholdings in Germany
2 Calculation based on work-related accidents from first day of absence per 1,000,000 working hours
3 Basis for centrally recorded FTE figures:
FTE figures at reporting date on 30 September
Basis for non-centrally recorded FTE figures:
FTE figures received directly from companies at reporting date on 30 September
Working hours = number of FTEs (full-time equivalents) at reporting date on 30 September multiplied by 1,700 hours (≙ 1 FTE)

We had set ourselves the target of achieving an LTIF figure of 3.9 by the 2020 financial year. Regrettably, we have not been able to reach this ambitious target. With an LTIF of 6.7, we nevertheless reduced our accident frequency compared with the previous year and believe that we are on the right course.

With our “Lived Safety” concept, we are making every effort possible to avoid accidents and work-related health risks and to reach our targets.

Protecting health

We aim to promote the health of our employees on a preventative basis and therefore support them with a variety of measures offered within our company health management. Alongside the extensive offerings provided by our company medical services, we also offer further health promotion services at our main locations.

Social concerns aspect

Social commitment

As a company with regional roots, we are an active part of society in the locations and regions in which we operate. We are aware of the important role we play in society. We assume responsibility for our decisions, actions, products and services, and that towards our customers and capital providers, as well as towards the environment and society in which we live. The value we create on site makes us a major economic factor at our locations. We make investments, award contracts to local or regional businesses where possible, secure jobs, offer high-quality training and pay taxes and duties. It goes without saying that we do not use any questionable measures to avoid taxes or move profits across borders.

Regional focuses

At the same time, the companies within our Group are committed to promoting the development in society at their locations and support local and regional projects, especially in the fields of social welfare, education, science, culture and sport. One key focus is on promoting upcoming talent and young people. Based on shared values, the specific structure and scope of regional social commitment is organised on a decentralised basis. Staff on location are familiar with local needs, have contacts to local organisations and facilities and determine the priorities they would like to address and the projects they intend to support with their activities. In most cases, the support provided is financial, taking the form of donations or sponsoring.

We are committed to the social environment in which we operate.

At MVV Energie, the Sponsoring Fund represents one key example of its commitment. Twice a year, this provides financial support to innovative and creative projects at clubs, organisations and institutions in Mannheim and the Rhine-Neckar metropolitan region. Its largest partners in this region are the new Kunsthalle art gallery in Mannheim, which holds MVV Art Evenings with free entry every first Wednesday in the month, the Adler Mannheim ice hockey team, the Reiterverein Mannheim riding club and TSG Hoffenheim football club. With its “Heart and Soul for Your Project!” sponsorship concept, Energieversorgung Offenbach supports regional clubs and organisations. Stadtwerke Kiel has partnered Camp 24/7, in which around 6,000 children and young people a year learn how to sail and the only project of its kind in Germany, since 2002 already.

In dialogue with stakeholders

We operate at a variety of locations and in diverse business fields and therefore come into contact with the interests of numerous, often heterogeneous groups of stakeholders. Our shareholders, employees and customers are among our most important stakeholders, as are government and political representatives. Other major stakeholders include non-government organisations (NGOs), analysts, local residents at our locations, the media, associations and suppliers. These are joined by cooperation partners, business partners and research institutes.

Our aim is to communicate transparently and openly with our stakeholders.

We attach great value to maintaining an open and transparent dialogue with our stakeholders, and that both in our one-to-one contacts and via our websites, in press releases, on social networks and in specialist formats such as analysts and press conferences. We take part in public discussions and other events, such as specialist energy industry conferences and public information events. We play an active role in the relevant bodies, associations and networks, participate in research projects and take part in the public debate focusing on the transformation of the energy system. Via our membership in industry associations, we participate in energy policy and energy industry discussions. We are members, for example, in the following associations relevant to the areas in which we operate: Bundesverband der Energie- und Wasserwirtschaft e. V. (BDEW), Verband kommunaler Unternehmen e. V. (VKU), Energieeffizienzverband für Wärme, Kälte und KWK e. V. (AGFW), Bundesverband Neue Energiewirtschaft e. V. (BNE), Bundesverband WindEnergie e. V. (BWE) and Bundesverband deutscher Wohnungs- und Immobilienunternehmen (GdW). Not only that, our subsidiaries and shareholdings on location are involved in local initiatives and networks. Apart from membership fees and project contributions, we do not make payments to associations or other institutions. We occasionally finance studies and surveys on matters relating to the energy industry. These are published and our involvement is suitably signalised.

We have the responsibility to use our resources to promote the conversion in the energy system to provide a more sustainable and efficient energy supply. Acceptance by local populations is crucial for many projects aimed at expanding renewable energies and the infrastructure needed for these. In view of this, in the 2020 financial year we were once again actively involved in planning and implementing projects together with local populations and their representatives on location, promoting acceptance for these projects on the basis of dialogue and reaching decisions that also convince third parties. We perform these measures on a project-by-project basis.

Respect for human rights and combating corruption and bribery aspect

Value chain

We exercise influence on topics relating to sustainability along our upstream and downstream supply chains as well. In the upstream supply chain, for example, we can decide who we wish to do business with and which minimum requirements we place in our suppliers. Key factors influencing our supplier selection from a non-financial perspective include the topics of anticorruption measures, human rights, employee rights, including work safety, and environmental protection.

We aim to avoid any situation in which activities along our value chain have or favour any harmful effects in terms of human rights.

The majority of our procurement volumes involve energy carriers such as electricity and natural gas. We typically hedge these by way of financial transactions but do not physically procure them. In recent years, there has been increasing public interest in the greenhouse gas emissions resulting from the production and transport of natural gas. This relates in particular to natural gas from Russia and LNG gas from overseas. We analyse the issues involved very closely but cannot directly influence these or the origin of the natural gas.

One matter of public interest is the origin of the hard coal used at power plants and whether we exert influence on production conditions at the coal mines. The only coal-powered plant we operate ourselves is the CHP plant in Offenbach. For this, we directly procured around 70 thousand tonnes of hard coal in the 2020 financial year. Most of this came from Russia. We do not have any direct contractual relationships to mine operators but, given the low volumes involved, procure the fuels via intermediaries. Not only that, our very low volume of demand means that we have hardly any possibility of exerting influence on location. Hard coal is also used at the large power plant in Mannheim (Grosskraftwerk Mannheim – GKM), where we are minority shareholders. Here, we have no direct influence on business activities and fuel procurement, as we are not the operators of the plant. We are nevertheless aware of our responsibility and show our commitment by, for example, raising sustainability topics and requesting information.

Apart from commodity procurement, our remaining procurement volumes are comparatively low. They mostly involve procuring goods and highly qualified services from contract partners often known to us for many years.

The basis for our cooperation with suppliers and service providers in Germany and the EU is provided by applicable laws and ordinances, compliance regulations and forms of conducts and work practices relevant to us.

Contractual relations with suppliers are additionally governed by our compliance guidelines, which are published on our website at **www.mvv.de/zentraleinkauf.** Our compliance guidelines include specific requirements in terms of compliance, adherence to human and employee rights and environmental protection. We expect our suppliers, for example, to uphold the basic human and employee rights set out in the international conventions of the United Nations (UN), the International Labour Organization (ILO), and the Organisation for Economic Cooperation and Development (OECD), as well as the UN Global Compact. Any breaches of these conventions are sanctioned with the option of termination and of claims to contractual penalties or damages compensation.

Suppliers to MVV Energie, Energieversorgung Offenbach, Juwi and Stadtwerke Kiel are all regularly assessed in terms of sustainability, risks and compliance, as are the subcontractors we approve. In our supplier management system, all suppliers are required to provide disclosures on whether they have compliance or anticorruption requirements and a code of conduct, as well as on whether they are committed to the UN Global Compact. Moreover, they must disclose whether they have a sustainability concept and, if so, how this is implemented. Corresponding information and certificates are deposited in our supplier management system. These aspects are monitored within our compliance management system. Compliance with social welfare standards also forms part of our contract awarding process. As a general rule, we do not obtain data from suppliers located further upstream in the supply chain.

The overwhelming share of our business activities takes place in Germany, the UK and the Czech Republic, i.e. in European countries where respect for human rights is a core aspect of entrepreneurial activity. Within our supplier management, we have taken specific measures to perform a sustainability evaluation of select business areas with potentially critical conditions. If we access new regions or markets outside Europe, this mostly relates to our project development business. To safeguard respect for human rights along the value chain there as well, and more clearly than previously, in the 2019 financial year we already launched new processes and measures in the respective compliance management systems. Among other measures, we further developed our human rights policy, procurement terms and compliance guidelines. Furthermore, the internal procedure used to identify potential human rights risks was adapted in terms of its contents and processes to the National Action Plan for Business and Human Rights adopted by the Federal Government and then integrated into regular processes. Acquisitions of companies or shareholdings are subject to a painstaking review process that also covers compliance with human rights, adherence to compliance-related requirements and further sustainability aspects, such as environmental protection and occupational safety.

Large numbers of subcontractors, most of which based in European Union countries, work on behalf of MVV. As human and employee rights are legally protected in these countries, we assume that employment conditions there are humane. High safety standards are also important to us for our subcontractors. We are therefore committed to ensuring that they comply with legal requirements and have issued corresponding requirements which provide, for example, for health and safety instructions to be issued to employees at third-party companies. We review our subcontractors in individual cases, particularly for major projects. We do not yet keep comprehensive records of working conditions at our subcontractors, especially at their production locations.

Compliance

Consistent adherence to all regulations and laws applicable to MVV is an absolute prerequisite for the company to act and be accepted as a reliable and trustworthy partner. High-quality compliance also makes an important contribution to our company's sustainable development and value creation.

Our compliance management system (CMS) helps us to safeguard compliance with applicable laws, as well as with in-company guidelines and the ethical standards to which we are committed. This way, we protect the integrity of our employees, our customers and business partners and save MVV from any negative consequences.

We have summarised the most important requirements and the necessary organisational structures in our Compliance Management Handbook, which also lists relevant personnel responsibilities and lays down details about our reporting system. This handbook is binding for all limited liability companies at the Mannheim subgroup of MVV Energie AG and is permanently available for downloading to all of the employees at this subgroup. The other subgroups have introduced equivalent compliance management systems. Our Compliance Management Handbook is also available in English, for example for our British and Czech subgroups.

Our CMS is structured in such a way as to ensure that breaches of compliance are basically avoided in advance, above all by working with preventative measures in the respective business processes (systemic compliance). We already check relevant processes in sensitive areas during the respective operating process, for example, and act early to take corrective measures where necessary. Donations and payments to parties and political organisations are strictly prohibited. Payments to equity providers are made exclusively in the form of dividends.

The Compliance Officer compiles relevant compliance regulations, documents them and sees to their implementation in business processes. He is responsible for ensuring that employee training measures are implemented and that due account is taken of all CMS processes. Furthermore, he also acts in an advisory and supportive capacity to accompany measures intended to prevent and, where necessary, investigate any violations of the law, corruption or deliberate acts harmful to the company. He reports to the Executive Board and the Audit Committee on compliance and any violations of human rights.

We aim to avoid any infringements of compliance requirements on a preventative basis.

By actively implementing prevention measures within the relevant business processes themselves, we make every effort to avert all criminal or grossly incorrect actions or violations of the law. MVV has a zero-tolerance policy towards bribery and all other forms of corruption. To help prevent corruption, we therefore provide training, especially to employees working in sales, related areas and procurement. Employees also receive instructions on how to deal with gratuities and invitations. We record and check any gratuities offered or invitations received. These measures enable us to minimise the risk of "soft bribery". We also continually monitor adherence to compliance requirements, and that in all business fields, specialist divisions, group departments and subsidiaries. Employees and third parties can contact the Compliance Officer or an external confidence lawyer directly. Via "Whistleblower Hotlines", they can provide anonymous tip-offs on potential misconduct. The telephone number of the confidence lawyer is also published on our website at 💻 **www.mvv.de**.

Apart from a low number of minor infringements, no compliance incidents came to light in the period under report. One focus of our efforts to enhance the compliance management system was on improving prevention in the energy trading business.

To make sure that all of MVV's managers and all employees with contact to customers or suppliers are well informed of general compliance requirements and familiar with the legal requirements relevant to their respective business units, we also provide regular training. The topics covered by this training include the requirements of capital market, securities and stock market law, competition and cartel law, combating money laundering, sanctions lists and energy industry law. In the 2020 financial year, 245 employees at the Mannheim subgroup and 27 employees at the other subgroups took part in this training. These figures are notably lower than in the previous year. Due to the coronavirus pandemic, numerous sessions could not be held as on-site training. Where possible, we therefore held online sessions. In addition, over the same period 505 individuals completed an online training programme provided by our Stadtwerke Kiel and Energieversorgung Offenbach subsidiaries.

At the end of each financial year, all senior managers and managing directors of subsidiaries and certain shareholdings are required to submit a Compliance Management Declaration (CMD) in which they must state whether the relevant compliance regulations and legal requirements have been complied with. The matters covered by the CMD include an enquiry as to whether, as required, the employees of the respective manager have received instruction and suitable training for the CMS. Moreover, in the CMD the managers also respond in detail to questions specifically tailored to circumstances at their respective business unit.

Respect for human rights is also integrated into our compliance management system. In our human rights policy 💻 **www.mvv.de/responsibility,** we underline our commitment to internationally recognised principles of human rights. With this commitment, we also take due account of the National Action Plan for Business and Human Rights (NAP). Our human rights policy was adopted by our Executive Board, while the management at our companies and locations is responsible for compliance with all requirements of the policy. In this year's due diligence process performed to identify any potential risks relevant to human rights, we concluded that there were no risks relevant to our reporting in terms of great significance or high probability of occurrence. We will nevertheless continue to monitor select aspects within our sustainability management processes.

Business Performance of MVV Energie AG

Notes to Annual Financial Statements of MVV Energie AG (HGB)

As the publicly listed parent company of the MVV Energie Group ("MVV"), MVV Energie AG prepares its annual financial statements in accordance with the requirements of the German Commercial Code (HGB) and the supplementary requirements of the German Stock Corporation Act (AktG) and the German Energy Industry Act (EnWG). The consolidated financial statements of MVV Energie AG are prepared in accordance with International Financial Reporting Standards (IFRS) in the form requiring application in the EU. Unlike in the HGB separate financial statements, in the consolidated financial statements income and expense items at consolidated subsidiaries are included in individual income and expense items in the consolidated income statement. Further differences between the separate financial statements of MVV Energie AG and the consolidated financial statements relate in particular to differences between the requirements of commercial law and those of IFRS international accounting standards in terms of the recognition and measurement of individual items.

The annual financial statements of MVV Energie AG, MVV's consolidated financial statements and the combined management report for the 2020 financial year are published in the Federal Gazette (Bundesanzeiger). The complete 2020 annual financial statements of MVV Energie AG can be downloaded at **www.mvv.de/investors,** as can the consolidated financial statements and the combined management report.

By adopting the German Coal Exit Act (KAG) on 3 July 2020, lawmakers demonstrated their commitment to moving towards a climate-neutral energy system on economically sustainable terms. The coal exit resolved by the Federal Parliament provides for a gradual end to the generation of electricity from coal by 2038 at the latest. While the KAG includes legal requirements which set binding and thus plannable decommissioning dates for lignite power plants, backed up by a public law contract, the exit from generating electricity from hard coal will initially be managed with tenders and only subsequently with legal requirements. For new hard coal power plants, the KAG states that premature write-downs and undue hardship should be avoided. This may be achieved by providing compensation consistent with state aid requirements in cases of undue hardship or by implementing measures with the same effect.

The entry into effect of the KAG has led to shorter useful lives for the generation blocks at the large power plant in Mannheim (Grosskraftwerk Mannheim – GKM). At MVV, this led to additional expenses in a medium single-digit million amount in the year under report already. Based on the relevant investment volumes, these expenses are solely due to the aforementioned reduction in useful lives. They do not account for profits lost for the years of operation not realised between the date of statutory decommissioning and the original operating life, if longer, or for any compensation granted for undue hardship.

Future compensation of this nature for expenses caused by the coal exit has been recognised under other receivables at the MVV RHE subsidiary.

Presentation of earnings performance of MVV Energie AG

Income statement

Euro 000s	**1 Oct 2019 to 30 Sep 2020**	1 Oct 2018 to 30 Sep 2019
Sales	1,404,404	1,474,286
less electricity and natural gas taxes	– 110,981	– 113,123
Sales less electricity and natural gas taxes	**1,293,423**	**1,361,163**
Increase or reduction in finished and unfinished products	– 173	173
Other own work capitalised	198	674
Other operating income	27,252	29,574
Cost of materials	1,104,497	1,158,676
Employee benefit expenses	79,106	75,255
Depreciation and amortisation	18,811	17,328
Other operating expenses	85,662	89,790
Financial result	94,162	76,790
Taxes on income	27,627	27,720
Earnings after taxes	99,159	99,605
Other taxes	435	449
Annual net income	**98,724**	**99,156**
Allocation to other revenue reserves	36,112	39,840
Unappropriated net profit	**62,612**	**59,316**

Sales less energy taxes at MVV Energie AG fell year-on-year by Euro 68 million to Euro 1,293 million. MVV Energie AG thus met its forecast that sales would roughly match the previous year's figure of Euro 1.3 billion. These sales were generated exclusively in Germany. The electricity business accounted for 58.6 % of total sales (previous year: 59.6 %) and remains the strongest division in terms of sales at MVV Energie AG.

At Euro 1,104 million, cost of materials was Euro 55 million lower than in the previous year. The change in this line item was largely consistent with the development in sales.

Other operating income decreased by Euro 2 million to Euro 27 million. This reduction was primarily due to lower income from disposals of assets and lower write-ups to financial assets. These factors were countered by higher reversals of provisions.

MVV Energie AG had 892 employees at 30 September 2020, 8 fewer than at the previous year's balance sheet date. At Euro 79 million, employee benefit expenses were Euro 4 million higher than in the previous year, with this increase largely being due to collectively agreed pay rises and higher pension expenses.

Mainly due to the addition of a high volume of assets, particularly in connection with the linking up of the CHP plant in Mannheim to the district heating grid, depreciation and amortisation rose by Euro 2 million to Euro 19 million. No impairment losses were recognised on non-current assets in the year under report or the previous year.

Other operating expenses fell by Euro 4 million to Euro 86 million. This change was chiefly due to the discontinued statement of provisions.

The financial result improved year-on-year by Euro 17 million to Euro 94 million. This development was due above all to higher income from profit transfer agreements, lower write-downs of financial assets and lower interest expenses from the compounding of provisions.

At Euro 99 million, earnings after taxes were at the previous year's level (Euro 100 million). As previously forecast, net of other taxes the annual net income of Euro 99 million generated by MVV Energie AG in the 2020 financial year was at the same level as in the previous year (Euro 99 million). Based on the profit utilisation resolution adopted by the Annual General Meeting on 13 March 2020, the unappropriated net profit of Euro 59.3 million was fully distributed to shareholders of MVV Energie AG. The dividend amounted to Euro 0.90 per share.

Revenue reserves of Euro 36,112 thousand were formed from the annual net income for the year under report. MVV Energie AG reported unappropriated net profit of Euro 63 million at 30 September 2020. The Annual General Meeting will be held on 12 March 2021 and will decide on the dividend proposal adopted by the Executive and Supervisory Boards. The Executive Board will propose to the Annual General Meeting that the dividend should be increased to Euro 0.95 per share (previous year: Euro 0.90 per share); the Supervisory Board will decide on its proposal in December 2020.

Presentation of asset and financial position of MVV Energie AG

Balance sheet

Euro 000s	30 Sep 2020	30 Sep 2019
Assets		
Non-current assets		
Intangible assets	454	533
Property, plant and equipment	469,136	436,108
Financial assets	1,454,302	1,482,984
	1,923,892	**1,919,625**
Current assets		
Inventories	4,201	13,085
Receivables and other assets	321,444	270,391
Cash and cash equivalents	102,259	111,693
	427,904	**395,169**
Deferred expenses and accrued income	559	587
	2,352,355	**2,315,381**
Equity and liabilities		
Equity		
Share capital	168,721	168,721
Capital reserve	458,946	458,946
Revenue reserves	510,543	474,431
Unappropriated net profit	62,612	59,316
	1,200,822	**1,161,414**
Income grants received	40,442	42,774
Provisions	76,775	85,982
Liabilities	1,034,316	1,025,211
	2,352,355	**2,315,381**

Total assets increased year-on-year by Euro 37 million to Euro 2,352 million.

The asset side of the balance sheet is largely shaped by financial assets. These totalled Euro 1,454 million at 30 September 2020, equivalent to a 62 % share of total assets. The respective figures for the previous year were Euro 1,483 million and 64 %. This decrease in financial assets by Euro 29 million was chiefly due to a reclassification of loans to associates to current assets in line with their respective terms. Property, plant and equipment rose year-on-year by Euro 33 million to Euro 469 million. This was mainly due to investments made in connection with linking the CHP plant in Mannheim to the city's district heating grid.

Current assets rose to Euro 428 million, up Euro 33 million compared with 30 September 2019. This increase primarily resulted from higher current loans to associates and other receivables from associates, which offset reductions in inventories of CO_2 rights and cash and cash equivalents.

The company increased its equity by Euro 40 million in the year under report. Equity therefore amounted to Euro 1,201 million at the balance sheet date. At 51.1 %, the equity ratio at 30 September 2020 was slightly higher than the previous year's figure of 50.2 %, reflecting the solid equity resources available at MVV Energie AG.

Mainly due to lower tax provisions and lower non-current obligations, provisions decreased overall by Euro 9 million to Euro 77 million, while liabilities rose by Euro 9 million to Euro 1,034 million. The increase in liabilities resulted from higher liabilities to banks and opposing items in the other liability line items.

MVV Energie AG performs the financing function for its associates. In this capacity, it safeguards the operating liquidity of numerous companies and, in the form of shareholder loans, supplies these with the long-term capital they need for investments. An adequate volume of committed credit lines is available to secure liquidity.

2020 activity statements

With its 2020 activity statements, MVV Energie AG has satisfied its obligations pursuant to § 6b of the German Electricity and Gas Supply Act (German Energy Industry Act – EnWG) and § 3 of the German Metering Point Operation Act (MsbG). In our internal financial reporting, we maintain separate accounts for the activities of electricity and gas distribution, for metering operations, for other activities within the electricity and gas sectors and for other activities outside the electricity and gas sectors. Furthermore, we also prepare balance sheets and income statements for our electricity and gas distribution and our metering operations.

Electricity distribution

The electricity distribution activity field reported sales of Euro 45 million for the year under report (previous year: Euro 44 million). The gross performance for the 2020 financial year was thus slightly higher than in the previous year. In terms of total electricity sector sales of Euro 629 million (previous year: Euro 675 million), sales in the electricity distribution activity are of subordinate significance. Alongside income from the leasing of its electricity girds to MVV Netze GmbH, earnings in the electricity distribution activity field at MVV Energie AG also include income from concession duties. MVV Netze GmbH manages and operates the distribution facilities and grids at MVV Energie AG and is responsible for their maintenance. Other operating income resulting from the charging on of the concession duty to MVV Netze GmbH through to 30 September 2020 was opposed by corresponding other operating expenses. The electricity distribution activity field generated annual net income of Euro 1 million in the 2020 financial year (previous year: Euro 3 million).

At 30 September 2020, total assets in the electricity distribution activity field came to Euro 142 million (previous year: Euro 131 million). This corresponds to a 49 % share of total assets in the electricity sector at MVV Energie AG (previous year: 34 %). Property, plant and equipment relating to electricity distribution increased compared with the previous year's balance sheet date. At Euro 131 million (previous year: Euro 120 million), this item accounted for a 92 % share of total electricity distribution assets (previous year: 92 %). On the equity and liabilities side, electricity distribution liabilities rose from Euro 44 million to Euro 49 million. Liabilities to associates mainly involve liabilities due to MVV Netze GmbH.

Metering operations (mME/iMSys)

Consistent with the unbundling requirements of § 3 (4) Sentence 2 MsbG with corresponding application of § 6b (3) EnWG, sales of Euro 0.4 million were reported for metering operations using modern measuring equipment and intelligent measuring systems in the year under report (previous year: Euro 0.4 million). Gross performance for the 2020 financial year amounted to Euro 0.4 million. Measured in terms of total electricity sector sales of Euro 629 million (previous year: Euro 675 million), sales in the mME/iMSys metering operations activity field are of subordinate significance. Earnings in the MME/iMSys metering operations activity field at MVV Energie AG include income from the leasing of electricity meters (mME/iMSys) to Soluvia Energy Services GmbH. Soluvia Energy Services GmbH is MVV's shared services company. As a metering point operator and smart meter gateway administrator, it performs services which include all metering services. These are countered by depreciation of Euro 240 thousand on the electricity meters (mME/iMSys) recognised

under non-current assets at MVV Energie AG (previous year: Euro 148 thousand). In the 2020 financial year, mME/iMSys metering operations posted annual net income of 58 thousand (previous year: Euro 18 thousand).

At 30 September 2020, total assets in the mME/iMSys metering operations activity field amounted to Euro 1.8 million (previous year: Euro 1.6 million), corresponding to a 0.6 % share of total assets in the electricity sector at MVV Energie AG (previous year: 0.4 %). At the balance sheet date, property, plant and equipment relating to mME/iMSys metering operations amounted to Euro 1.8 million (previous year: Euro 1.5 million) and thus accounted for a 99 % share of total assets in mME/iMSys metering operations (previous year: 94 %). On the equity and liabilities side, liabilities of Euro 0.8 million were reported for mME/iMSys metering operations (previous year: Euro 1.5 million). These mainly involve liabilities due to other activity fields.

Gas distribution

In the year under report, the gas distribution activity field posted sales of Euro 27 million (previous year: Euro 26 million). Gross performance thus rose by Euro 1 million in the 2020 financial year. Compared with total gas sector sales of Euro 65 million (previous year: Euro 97 million), the gas distribution activity field is of subordinate significance. By analogy with electricity distribution, as well as income from the leasing of its grids to MVV Netze GmbH earnings in the gas distribution activity field also include income from concession duties. The other operating income from charging on the concession duty to MVV Netze GmbH through to 30 September 2020 was opposed by corresponding other operating expenses. The gas distribution activity field generated annual net income of Euro 3 million in the year under report (previous year: Euro 7 million).

Total assets in the gas distribution activity field amounted to Euro 112 million (previous year: Euro 103 million) at the balance sheet date on 30 September 2020 and accounted for some 85 % of total assets in the gas sector at MVV Energie AG (previous year: 58 %). At Euro 105 million, property, plant and equipment in gas distribution was Euro 8 million higher than in the previous year and corresponded to a 94 % share of total assets in this activity field (previous year: 94 %). On the equity and liabilities side, gas distribution liabilities rose from Euro 35 million to Euro 41 million. Liabilities to associates mainly involve liabilities due to MVV Netze GmbH.

Corporate Governance Declaration (§ 289f HGB)

Publicly listed companies are obliged under § 289f of the German Commercial Code (HGB) to submit a Corporate Governance Declaration. In this, they report on their latest Declaration of Conformity with the German Corporate Governance Code pursuant to § 161 of the German Stock Corporation Act (AktG) and on corporate governance practices applied over and above legal requirements. Furthermore, they report on the mode of operation of the Executive and Supervisory Boards, on the composition and mode of operation of the Supervisory Board committees and on the equal participation of women and men in management positions.

The Corporate Governance Declaration with the Declaration of Conformity on **Page 67** was published together with our Annual Report on 10 December 2020 on our website at **www.mvv.de/corporate-governance.**

Declaration pursuant to § 312 AktG

The Executive Board has compiled a report on relationships with associates for the 2020 financial year (dependent company report) pursuant to § 312 AktG. In this report, it states: “MVV Energie AG received commensurate compensation for each of the transactions listed in its report on relationships with the City of Mannheim and associates based on the circumstances known to the Executive Board at the time at which the transactions were performed.”

Non-Financial Declaration (§ 315b, § 315c in conjunction with § 289b et seq. HGB)

The Non-Financial Declaration for the 2020 financial year has been jointly compiled for MVV Energie AG and the MVV Energie Group (“MVV”) and published as a Combined Non-Financial Declaration in the Combined Management Report in this Annual Report on **Page 45.**

Corporate Governance Declaration

MVV views high-quality transparent corporate governance as forming the basis for responsible company management and supervision aimed at long-term value creation. That is why we promote close cooperation based on trust between the Executive and Supervisory Boards and employees, take account of the interests of all our stakeholders, comply with applicable laws and structure our reporting and corporate communications transparently and openly. After all, we are convinced: High-quality corporate governance boosts the trust placed in our company, whether by shareholders, customers, business partners, employees or the general public.

The following Corporate Governance Declaration pursuant to § 289f and § 315d of the German Commercial Code (HGB) includes both the Declaration of Conformity with the German Corporate Governance Code pursuant to § 161 of the German Stock Corporation Act (AktG) and those further disclosures on corporate governance at MVV Energie AG requiring inclusion pursuant to § 289f HGB.

MVV's Executive and Supervisory Boards addressed the company's corporate governance in detail once again in the 2020 financial year. As in previous years, in the year under report MVV Energie complied with all recommendations made by the Code in its version dated 7 February 2017. Since 16 December 2019, there has been a new version of the Code. This was presented to the Executive and Supervisory Boards and discussed in both bodies. The following Declaration of Conformity shows: MVV Energie complies with the recommendations made in the new version of the Code with just one exception. We intend to follow the suggestions made by the Code in future as well.

Declaration of Conformity with the German Corporate Governance Code (§ 161 AktG)

The Executive and Supervisory Boards adopted the following Declaration of Conformity with the German Corporate Governance Code in September 2020:

The Executive and Supervisory Boards of MVV Energie AG hereby declare that the company complied and complies with the recommendations made by the German Corporate Governance Code Government Commission. For the past, this declaration refers to the version of the Code dated 7 February 2017, which was published in the Federal Gazette on 24 April 2017 and republished in corrected form in the Federal Gazette on 19 May 2017. For the future, it refers to the version of the Code dated 16 December 2019 and published in the Federal Gazette on 20 March 2020.

No application has been made of the following recommendation of the Code in its version dated 16 December 2019:

G.10: "Management Board members' variable remuneration shall be predominantly invested in company shares by the respective Management Board member or shall be granted predominantly as share-based remuneration. Granted long-term variable remuneration components shall be accessible to Management Board members only after a period of four years. Any benefits granted to Management Board members in a later year should be suitably explained in the remuneration report."

MVV does not provide any remuneration by way of shares in the company, share ownership obligations or corresponding share-based remuneration models. Variable remuneration is settled with a payment. MVV's remuneration system nevertheless accounts for the interest of the company and its stakeholders in long-term, value-based and sustainable growth. The variable sustainability bonuses presented in greater detail in the Remuneration Report on **Page 75** are based on the company's operating performance in the given financial year as expressed in its adjusted EBIT and on the company's average return on capital employed (ROCE) over a three-year period. Variable remuneration is disbursed when minimum thresholds specified in advance are exceeded. In particular, the link to ROCE and its development over a three-year period enables account to be taken of MVV's capital-intensive business and the long-term performance of the company to be reflected in variable remuneration. The ROCE measures how efficiently a company uses its capital. It is the most suitable key figure for assessing whether MVV has developed sustainably with its capital-intensive infrastructure and taken the right long-term strategic decisions. Moreover, MVV's shareholder structure, and in particular its low level of free float, make it less appropriate to offer variable remuneration based on shares in the company or other share-based remuneration models.

Shareholders and Annual General Meeting

Shareholders in MVV Energie AG exercise their voting and control rights at the Annual General Meeting. Each shareholder is entitled to participate in the Annual General Meeting if he or she registers within the relevant deadline and meets the conditions for participating in the meeting and exercising voting rights. Shareholders may make statements on all agenda items at the meeting. Furthermore, they may submit relevant questions and motions. For the purposes of voting, each share entitles its holder to one vote. By casting their votes before or during the meeting, our shareholders may participate in the adoption of all resolutions. Here, shareholders can draw on a range of options – they can vote in person or via a proxy of their choice, be represented by a voting proxy appointed by MVV Energie AG to act in accordance with their instructions, or by a bank or shareholders' association. Moreover, shareholders can submit their votes by post in advance of the Annual General Meeting provided that they register within the relevant deadlines. Alternatively, they have the option of communicating all declarations electronically using our password-protected shareholder portal at MVV's website.

Despite the coronavirus pandemic, we were still able to hold our 2020 Annual General Meeting as a physical event. We adhered to the hygiene and safety measures recommended by the health authorities. Not least as significantly fewer people were expected to attend in person, we broadcast our Annual General Meeting for the first time live and in its entirety on our website. Not only that, votes could be cast via the internet-based shareholder portal through to the end of the general debate. This way, our shareholders could also decide on how to cast their votes at very short notice. We have already taken precautions enabling us to hold a virtual Annual General Meeting should the restrictions on large-scale events still apply in March 2021 and the provisions of the Act on Mitigating the Consequences of the COVID-19 Pandemic be extended beyond 31 December 2020. We currently expect both requirements to be met, as a result of which we are very likely to hold our Annual General Meeting in virtual form.

On our website at **www.mvv.de/investors,** we publish all relevant documents relating to our Annual General Meeting in line with the requirements of stock corporation law. In particular, these include the invitation to the meeting and all reports and information needed for the resolutions.

Transparent and prompt communications

We aim to ensure great transparency and equal treatment of our shareholders in terms of their access to information. We have therefore set ourselves the standard of providing all stakeholders with simultaneous, equivalent and extensive information about material developments and about the company's situation. Prompt sources of information for this purpose chiefly include our websites – and here especially **www.mvv.de** and **www.mvv.de/investors.** The information we publish on these sites includes our financial reports, analysts' conference presentations, press releases, ad-hoc announcements and our financial calendar. We always comply with the reporting obligations incumbent on us under the German Stock Corporation Act (AktG), the German Commercial Code (HGB) and the German Securities Trading Act (WpHG).

Disclosures on auditor

The Annual General Meeting of MVV Energie AG held on 13 March 2020 elected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, (PwC), Essen, as auditor for the 2020 financial year. Prior to this, the Supervisory Board convinced itself of the auditor's independence. We comply with all statutory requirements resulting from the Audit Regulation and from § 316 et seq. HGB, including those governing the selection, appointment and rotation of the auditor and of the persons responsible for managing the audit, through to commissioning the auditor to perform non-audit services.

Reporting and audit of financial statements

MVV Energie AG prepares its annual financial statements on the basis of the German Commercial Code (HGB). We prepare the consolidated financial statements and the interim financial statements in accordance with International Financial Reporting Standards (IFRS) in the form requiring application in the European Union. We present the situation of the MVV Group and of MVV Energie AG in a combined management report.

The auditor audits the annual financial statements of MVV Energie AG which were prepared by the Executive Board. The financial statements are first discussed by the Audit Committee and then examined, approved and thus adopted by the Supervisory Board. Following detailed scrutiny by the Audit Committee, the consolidated financial statements prepared by the Executive Board and audited by the auditor are also presented to the Supervisory Board for its own review and approval. In its audit of the financial statements, the auditor also audits the combined management report.

The quarterly statements for the first three months and first nine months and the half-year financial report are prepared by the Executive Board and discussed with the Audit Com-

mittee prior to publication. These publications are not subject to any review requirement by the auditor.

The combined non-financial declaration is subject to a limited assurance audit based on International Standards on Assurance Engagements ISAE 3000 (revised).

Compliance and risk management

Making sure that our dealings with each individual stakeholder are characterised by transparency, trust, fairness and integrity – that is the standard we have set ourselves. With our compliance management system (CMS), we aim to safeguard compliance with applicable laws, as well as with in-company guidelines and the ethical standards to which we are committed. This is intended on the one hand to ensure that our managers and employees understand and adhere to these and on the other hand to monitor all relevant business activities and processes within our Group.

The most important requirements and all necessary organisational structures and processes are summarised in our Compliance Management Handbook. In this, we also list the names of those employees who are responsible for our reporting system and present further details. The handbook is binding for all limited liability companies at the Mannheim subgroup of MVV Energie AG and is permanently available for downloading to all its employees. The other subgroups have introduced equivalent compliance management systems. Our Compliance Management Handbook is available both in German and English, which is important for our British and Czech subgroups, for example.

MVV's Compliance Officer is responsible for our CMS system with regard to its contents, organisation and processes. He compiles the relevant compliance regulations and exchanges information for this with the various organisational units involved. He documents the regulations and sees to their implementation within business processes. He is also responsible for ensuring that employee training measures are implemented and that all CMS processes are adhered to. The Compliance Officer reports to the Executive Board and the Audit Committee. Furthermore, he acts in an advisory capacity to accompany measures intended to prevent and, where necessary, investigate any violations of the law, corruption or deliberate acts harmful to the company.

We have provided our CMS system with a preventative structure and thus pursue a systemic compliance approach. Breaches of compliance are principally avoided by implementing preventative measures in the respective business processes. We perform advance checks on relevant processes in sensitive areas, for example, and act early to take corrective measures where necessary. Donations and payments to parties and political organisations are strictly prohibited. Payments to equity providers are made exclusively in the form of dividends.

We actively implement preventative measures within all our business processes in order to avert criminal or grossly improper violations of the law. In this respect, we pursue a zero-tolerance policy towards bribery and all other forms of corruption. We provide extensive corruption prevention training, particularly to employees working in sales, related areas and procurement. We show them, for example, how they should deal with gratuities and invitations, which we record and check. These measures enable us to minimise the risk of so-called soft bribery. We also continually monitor adherence to compliance requirements in all business fields, specialist divisions, group departments and subsidiaries. Via anonymous "whistleblower hotlines", employees and third parties can contact the Compliance Officer or an external confidence lawyer directly and thus provide tip-offs on potential misconduct. We have published the telephone number of the confidence lawyer, also on our website at **www.mvv.de.**

Apart from a small number of minor infringements, no compliance incidents came to light in the period under report.

All of MVV's managers and all employees with contact to customers or suppliers are provided with regular training to make sure they are well informed of general compliance requirements and are also familiar with the legal requirements relevant to their respective business units. These include, for example, legal requirements relevant to the capital market and securities, stock market, competition and cartel law, combating money laundering, handling sanction lists and the requirements of energy industry law. In the 2020 financial year, 245 employees at the Mannheim subgroup and 27 employees at other subgroups took part in this training. The coronavirus pandemic meant that many of these training sessions could not be held in person. Using the available possibilities, we therefore provided online training. Over the same period, 505 individuals completed an e-learning programme offered by our Stadtwerke Kiel and Energieversorgung Offenbach subsidiaries. From a specific management level upwards, all managers are required to submit a Compliance Management Declaration (CMD) at the end of each financial year. The same requirement applies to the managing directors of our subsidiaries and specific shareholdings. In this, they must state whether all compliance regulations and legal requirements have been complied with. In the CMD we also ask, among other issues, whether the employees of the individual manager have received the required instruction and suitable training for the CMS. Moreover, in the context of the CMD the managers also respond in detail to questions specifically tailored to circumstances at their respective business unit.

Compliance requirements governing the prevention of money laundering and terrorism financing were updated to account for the provisions of the German Money Laundering Act (GwG), which has been amended several times, most recently in June 2020. Given its customer base, products and geographical areas of activity, MVV is only subject to a low potential risk in this respect. To eliminate the risk of participating in money laundering and terrorism financing entirely, cash transactions are generally not permitted and are absolutely prohibited for amounts of Euro 10,000 upwards. Furthermore, when establishing business relationships requirements have to be met in terms of identifying the contract partners and their economic beneficiaries.

The energy industry supply chain is characterised by fuel trading, which is handled on energy exchanges or in bilateral agreements. Only a comparatively small share of our total procurement volumes relates to suppliers who provide us with goods or perform highly qualified services for us. We attach great importance to compliance in our cooperation with these suppliers as well. We make use of supplier management systems and request information from new suppliers, particularly regarding anti-corruption measures, environmental protection and social responsibility. Our cooperation with suppliers and service providers in Germany and the European Union is based on applicable laws and regulations, as well as on those compliance regulations, forms of conduct and work practices relevant to us. These include, for example, the international conventions of the United Nations (UN), the International Labour Organization (ILO) and the Organisation for Economic Cooperation and Development (OECD), as well as the UN Global Compact. We agree with our suppliers that they will adhere to our compliance guidelines, which we publish on our website **www.mvv.de/de/partner/lieferanten/zentral-einkauf/downloadbereich.** Our suppliers undertake to comply with legal requirements governing the combating of corruption, and the protection of employees and the environment. Should these obligations be breached, then contractual sanctions, including contractual penalties, termination and damages payments, are provided for.

Further major components of our corporate management include our risk management system and internal control system in respect of the financial reporting process (IKS). Our IKS system covers relevant accounting and financial reporting processes at all major locations. The aim is to minimise those risks that might contravene our objective of ensuring correct, complete, prompt and understandable financial reporting. To this end, we regularly analyse all processes and interfaces involved in preparing the consolidated financial statements, the financial statements of MVV Energie AG and the combined management report of MVV.

Dual management system

As a listed stock corporation with its legal domicile in Mannheim, MVV Energie AG is governed by the requirements of German stock corporation law. One basic principle of this legislation is the dual management system, which provides for a strict separation between the Executive and Supervisory Boards in terms of their composition and function. The Executive Board is responsible for managing the company and conducting its business, while the Supervisory Board is entrusted with advising and monitoring the Executive Board. The Executive and Supervisory Boards of MVV Energie AG work together closely and on a basis of trust in the interests of the company.

Composition and mode of operation of Executive Board

The Executive Board manages the company under its own responsibility and pursues the objective of generating sustainable and profitable growth. It determines the company's strategic alignment and lays down its financial, investment and personnel planning. It assesses whether the strategy is being implemented in a targeted manner and whether the risk management system is fit for purpose. Furthermore, it monitors risk controlling, the internal control system in respect of the financial reporting process (IKS) and the compliance management system, as well as more far-reaching decentralised management and controlling systems. It takes due account of the interests of the company's stakeholders when reaching decisions.

The Supervisory Board has imposed a Code of Procedure governing the activities of the Executive Board. This lays down the divisional responsibilities as well as those tasks and decisions incumbent on the overall Executive Board. Moreover, it defines the responsibilities of the Chief Executive Officer (CEO), the ways in which the Executive Board adopts resolutions and those transactions which require Supervisory Board approval. The Executive Board, which has to comprise at least two members, currently has four positions/divisions: CEO/Commercial Affairs, Personnel, Technology and Sales.

The CEO coordinates the work within the Executive Board. Furthermore, he represents the Executive Board externally. Executive Board members otherwise have equal rights and bear joint responsibility for managing the company. Each member of the Executive Board manages their division under their own responsibility but nevertheless subordinates the specific interests of their division to the overriding interests of the company.

Diversity concept for composition of Executive Board

In June 2020, the Supervisory Board decided to adapt the diversity concept for the composition of the Executive Board to the amended recommendations of the current German Corporate Governance Code.

The composition of the Executive Board is consistent with MVV's entrepreneurial approach. Together with the Executive Board, the Supervisory Board ensures that long-term succession planning is in place. The Executive Board of MVV Energie AG should be composed in such a way that qualified leadership, control and business management is at all times ensured for MVV Energie AG and the MVV Group. Candidates for the Executive Board of MVV Energie AG therefore have to be able to correctly assess the economic situation and technical framework of a listed energy supplier with municipal roots and to successfully shape its sustainable development. Individual Executive Board members are not each expected to have the full range of specialist skills, competencies and experience that are specifically required. Overall, their qualities should nevertheless complement each other in such a way that the Executive Board as a whole has the necessary expertise and a suitable breadth of experience. The members of the Executive Board bear joint responsibility for managing the company and the Group. They must therefore have sufficient expertise for mutual supervision and deputisation.

When concluding employment contracts, an upper age limit of 65 years should be complied with. The term of first-time appointments should not exceed three years. Moreover, the Supervisory Board should work together with the Executive Board to find long-term succession solutions. The Supervisory Board had set the target of raising the share of women on the Executive Board. In 2017, it set a target of 25 % to be reached by 30 September 2021. With the appointment of Verena Amann to the Executive Board, this target was met as of 1 August 2019, two years earlier than planned.

We have published the CVs of Executive Board members on our website at **www.mvv.de/investors** to provide information about their experience, expertise and skills.

Composition and mode of operation of Supervisory Board and its committees

The Supervisory Board advises the Executive Board with regard to its management of the company and supervises its activities. Its responsibilities also include appointing and dismissing members of the Executive Board. It is involved in all decisions that are of fundamental significance for the company. In view of this, the Executive Board provides the Supervisory Board with regular, prompt and comprehensive information about its strategy and other fundamental matters of corporate planning. Moreover, the Executive Board provides report to the Supervisory Board on the company's business performance and situation, as well as on its risk situation and risk management.

The Supervisory Board of MVV Energie AG consists of 20 members, Of these, ten represent the company's shareholders and ten its employees; they have identical terms in office. Eight of the shareholder representatives are elected by the Annual General Meeting, while two, namely the Lord High Mayor and the relevant specialist head of department, are directly delegated by the City of Mannheim. This applies to the extent that the City of Mannheim is a shareholder and, directly or indirectly, holds shares corresponding to more than half of the company's share capital. Employee representatives are elected by employees in accordance with the German Codetermination Act (MitbestG). The Chairman of the Supervisory Board coordinates the work of the Supervisory Board, whose activities are governed by a Code of Procedure. We have published the Code of Procedure for the Supervisory Board on our website at **www.mvv.de/investors.**

To perform its activities efficiently and provide effective support, the Supervisory Board of MVV Energie AG has formed five committees with a specialist focus. The members of these committees are each particularly qualified in terms of their specialism. The Audit Committee meets regularly, and at least five times a year. By contrast, the Personnel, Nomination, Mediation and New Authorised Capital Creation Committees are only convened when necessary.

The **Audit Committee** addresses corporate planning, strategy and the performance of individual business fields, as well as the development and structure of individual controlling systems. It also deals with fundamental financial reporting issues. Its responsibilities also include preparing the selection of the auditor, reviewing and discussing the annual and consolidated financial statements and discussing the interim consolidated financial statements for the first half of and the interim financial statements for the first three and first nine months with the Executive Board. The Committee monitors the effectiveness of the internal control system (IKS) and the internal audit and risk management system. It checks whether the organisational precautions taken are sufficiently effective to ensure compliance with legal requirements and internal company guidelines. Tasks incumbent on the Audit Committee also include determining key audit focuses and setting thresholds for the commissioning of non-audit services. The Audit Committee comprises three shareholder and three employee representatives. The Chairman of this committee is Prof. Heinz-Werner Ufer. As an independent and expert member, he meets the requirements of § 100 (5), § 107 (4) AktG and of Point 5.3.2 (3) Sentences 2 and 3 of the German Corporate Governance Code (DCGK). The Supervisory Board Chairman is a permanent guest in the committee. The Audit Committee had the following members at 30 September 2020: Prof. Heinz-Werner Ufer (Chairman), Heike Kamradt (Deputy Chair), Peter Erni, Detlef Falk, Dr. Lorenz Näger and Christian Specht. At the end of the 2020 financial year, Christian Specht stood down from his position. Gregor Kurth was newly elected to the committee as of 1 October 2020. Moreover, since 1 October 2020 Christian Specht and Dr. Stefan Seipl will attend Audit Committee meetings as permanent guests.

The work of the **Personnel Committee** relates in particular to preparing Supervisory Board resolutions concerning the conclusion of employment contracts with Executive Board members, as well as any amendments to or rescission of such. It proposes suitable candidates to the Supervisory Board for appointment to the Executive Board. In this, it takes due account of legal requirements and of the recommendations made by the German Corporate Governance Code. Subsequent to this preparation by the Personnel Committee, the Supervisory Board is responsible for appointing new members to the Executive Board and for decisions relating to existing employment contracts. When selecting new Executive Board members, the Supervisory Board develops and works with current requirement profiles based on the diversity concept for the composition of the Executive Board. The Personnel Committee comprises six members: the Supervisory Board Chairman, who is also Personnel Committee Chairman, his deputy and four Supervisory Board members, of which two shareholder and two employee representatives. The Personnel Committee had the following members at 30 September 2020: Dr. Peter Kurz (Chairman), Heike Kamradt (Deputy Chair), Ralf Eisenhauer, Peter Erni, Steffen Ratzel and Jürgen Wiesner. Steffen Ratzel stood down from his position as of 30 September 2020. Gregor Kurth was newly elected to the committee as of 1 October 2020.

The **Nomination Committee** determines targets for the composition of the Supervisory Board and recommends suitable candidates to the Supervisory Board for its own proposals to the Annual General Meeting. In this, it takes particular account of legal requirements, the diversity concept and the recommendations of the German Corporate Governance Code. The five committee members include the Supervisory Board Chairman, who also chairs the committee, and four further shareholder representatives. The Nomination Committee had the following members at 30 September 2020: Dr. Peter Kurz (Chairman), Ralf Eisenhauer, Barbara Hoffmann, Steffen Ratzel and Prof. Heinz-Werner Ufer. Steffen Ratzel stood down from his position as of 30 September 2020. Gregor Kurth and Tatjana Ratzel were newly elected to the committee as of 1 October 2020. With six members, all the positions on the committee are occupied.

Consistent with § 27 (3) of the German Codetermination Act (MitbestG), the **Mediation Committee** submits further personnel proposals to the Supervisory Board if the two-third majority required to appoint and dismiss Executive Board members is not achieved in the first ballot. The Mediation Committee had the following members at 30 September 2020: Dr. Peter Kurz (Chairman), Heike Kamradt, Steffen Ratzel and Jürgen Wiesner. Steffen Ratzel stood down from his position as of 30 September 2020. Gregor Kurth was newly elected to the committee as of 1 October 2020.

The **New Authorised Capital Creation Committee** is charged with exercising the powers of the Supervisory Board in connection with any capital increase based on authorised capital. This committee comprises eight members: the Supervisory Board Chairman, who chairs the committee, his deputy and six further Supervisory Board members, of which one employee and five shareholder representatives. Dieter Hassel stood down from the committee as of 26 June 2020. The New Authorised Capital Creation Committee had the following members at 30 September 2020: Dr. Peter Kurz (Chairman), Ralf Eisenhauer, Peter Erni, Heike Kamradt, Steffen Ratzel, Christian Specht and Prof. Heinz-Werner Ufer. Steffen Ratzel stood down from his position as of 30 September 2020. Gregor Kurth and Tatjana Ratzel were newly elected to the committee as of 1 October 2020.

Diversity concept for composition of Supervisory Board

The diversity concept for the composition of the Supervisory Board was also adapted in June 2020 to account for the amended recommendations made in the current version of the German Corporate Governance Code.

The specialist and personal requirements set for the Supervisory Board are intended both to ensure a transparent and systematic selection process for new Supervisory Board members and to provide a suitable and well-balanced composition for the Board as a whole. The aim is for the Supervisory Board of MVV Energie AG, as is the case in its current composition, to be able at all times to provide qualified supervision and advice to the Executive Board in its activity on behalf of MVV. Candidates for the Supervisory Board of MVV Energie AG have to be able to correctly assess the economic situation and technical context of a listed energy supplier with municipal roots and successfully accompany its sustainable development. Individual Supervisory Board members are not expected to have the full range of specific specialist skills, competencies and experience required. However, their qualities should complement each other in such a way that the full Board has the competence and experience needed for it to perform the duties incumbent on the Supervisory Board and its committees.

Furthermore, the Board must include at least one financial expert with the qualifications called for by the German Stock Corporation Act (AktG) and the German Corporate Governance Code. The Supervisory Board should include an adequate number of independent members.

When proposing candidates, due account should be taken of the upper age limit of 70 years. As a general rule, this limit should also not be exceeded during the term in office.

According to § 96 (2) Sentence 1 AktG, the Supervisory Board of a listed company should comprise at least 30 % women and at least 30 % men. § 96 (2) Sentence 2 AktG states that this requirement basically applies for the overall Supervisory Board. At MVV Energie AG, however, both the employee and the shareholder representatives on the Supervisory Board have drawn on the possibility provided for in § 96 (2) Sentence 3 AktG, namely of deciding that these minimum shares should be met not only for the Supervisory Board as a whole, but also for employee and shareholder representatives respectively. Accordingly, of the positions allocable to shareholder and employee representatives at least three for each group must be held by women and at least three by men.

One task incumbent on the Nomination Committee involves implementing the diversity concept for the composition of the Supervisory Board. It proposes suitable candidates to the Supervisory Board for its election proposals to the Annual General Meeting. In this, it takes due account of legal requirements and of the recommendations made by the German Corporate Governance Code. Before nominating a proposed candidate, the Supervisory Board ascertains whether the potential candidate has sufficient time at his or her disposal to discharge the duties involved in the position and whether he or she has any business and/or personal links to the group of companies or any of its competitors. The selection of employee representatives is governed by the provisions of codetermination law.

Information about the experience, expertise and skills of our Supervisory Board members can be found in their CVs as published on our website at **www.mvv.de/investors.**

The Supervisory Board last conducted a self-assessment to evaluate the effectiveness of its work and that performed by its committees in the 2019 reporting year. Based on the findings, ideas and recommendations were then devised as to how the Supervisory Board might optimise its efficiency and effectiveness. The next evaluation is scheduled for the 2022 financial year.

Conflicts of interest and independence of Supervisory Board members

Any conflicts of interest arising on the part of Executive or Supervisory Board members are disclosed to the Supervisory Board immediately. In its report to the Annual General Meeting, the Supervisory Board provides information as to whether any conflicts of interest arose and, if so, how these were addressed.

In respect of Point 5.4.2 of the German Corporate Governance Code in its version dated 7 February 2017 and Points C1 and C6 et seq. of the German Corporate Governance Code in its version dated 16 December 2019, we are of the opinion that all members of our Supervisory Board were and are independent in the spirit of the Code. Both the previous version and the new version of the Code consider a Supervisory Board member to be independent if he or she is independent of the company and its Executive Board and independent of any controlling shareholder. This is the case for all Supervisory Board members. We also view Supervisory Board members who sit on the city council or work for the city administration and are delegated by the City of Mannheim as independent in this sense. The City of Mannheim owns a majority of the shares in MVV Energie AG. Pursuant to the Municipalities Code of the State of Baden-Württemberg, the city council is the topmost political body representing the city. It is therefore logical that the City of Mannheim, as majority shareholder in MVV Energie AG,

should be represented on the company's Supervisory Board by members of the city council and the city administration. The decisive factor in determining independence is whether there are any material conflicts of interest. This is particularly not the case for those Supervisory Board members appointed in accordance with the Articles of Incorporation, namely Dr. Peter Kurz and Christian Specht. The same is true of the other Supervisory Board members who sit on the city council or did so in the 2020 financial year.

Even if a differing view is taken as to the independence of those Supervisory Board members who are simultaneously members of the city administration or city council of the City of Mannheim, the Supervisory Board nevertheless includes an appropriate number of independent members, namely Sabine Dietrich, Barbara Hoffmann, Dr. Lorenz Näger, Gregor Kurth, Tatjana Ratzel, Dr. Stefan Seipl and Prof. Heinz-Werner Ufer. The three members who stood down from the Supervisory Board at the end of the financial year also met the criteria of being independent of the Executive Board, the company and the controlling shareholder.

Some members of our Supervisory Board have been members for more than twelve years. These include Dr. Peter Kurz (since 2007) and Christian Specht (since 2005), who are shareholder representatives delegated to the Supervisory Board in accordance with the Articles of Incorporation, and Detlef Falk (since 2007) and Johannes Böttcher (since 2006) as employee representatives. Despite the length of their membership, the Supervisory Board does not harbour any doubts as to their independence of the company and its Executive Board.

Report on equal participation of women and men

The Supervisory and Executive Boards of MVV Energie AG firmly believe that the company can generate sustainable business success only when responsibility is assigned to women and men on a basis of equality. Particularly in view of demographic change, it makes sense for both social and economic reasons to promote all talents regardless of their gender. Among others, this approach has the benefit of proactively countering the effects of any shortage of specialist and management staff. To date, women have only made up a comparatively low share of the overall workforce at companies operating in the energy sector. The Supervisory and Executive Boards of MVV Energie AG believe that increasing the share of women working at the group of companies on a long-term basis is one key to the company's successful further development. We therefore aim to raise the female share of our Group's workforce to 35 % by 30 September 2021, up from 27 % as of 30 June 2015. With a 28 % share of female employees as of 30 September 2020, we came slightly closer to reaching this target. We also aim to raise the share of female managers, in this case from 14 % as of 30 June 2015 to 25 %. At the balance sheet date on 30 September 2020, this key figure came to 15 %. To enable us to meet our targets by 30 September 2021, we will consistently implement and in the years ahead further expand our range of promotional measures and programmes. That is particularly true for our targeted personnel development for women with suitable potential.

For MVV Energie AG, we report on the share of women in both the first and the second management tiers. In August 2017, the Executive Board set targets which are to be met by 30 September 2021. By then, women should account for 25 % of managers in the first and 30 % in the second management tier. At 10 %, the share of female managers in the first management tier as of 30 September 2020 was at the previous year's level (30 September 2019: 10 %). Women accounted for 27 % of managers in the second management tier (30 September 2019: 29 %). This share has thus almost reached the specified target. In addition to those measures that are already in place to promote women, we are implementing measures to increase the number of applications we receive from promising external and internal female candidates.

Remuneration Report

In this section, we set out the principles underlying our remuneration system for the MVV Energie AG Executive Board. We also provide information about the structure and level of remuneration paid to members of our Executive Board and our Supervisory Board.

EXECUTIVE BOARD REMUNERATION

Remuneration system

The system and level of remuneration paid to members of our Executive Board are determined and regularly reviewed by the Supervisory Board. The Personnel Committee of the Supervisory Board prepares the required resolutions.

The basic features of our remuneration system are structured in such a way as to incentivise the sustainable and long-term development in the company's value and its economic success. We take due account of the requirements of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG), as well as the recommendations set out in the latest version of the German Corporate Governance Code.

Executive Board remuneration comprises non-performance-related and performance-related components. Should an Executive Board member prematurely leave the company, the following requirements apply to any potential compensation agreement: Payments to a retiring Executive Board member may not exceed the value of two annual remuneration packages and may also not exceed the remuneration due for the remaining term of the employment contract. No transitional allowances are granted upon the premature termination or non-extension of the employment contract.

No payments were either committed or made by third parties to Executive Board members in connection with their activities as such.

Non-performance-related remuneration

The non-performance-related remuneration components paid to the Executive Board consist of fixed basic remuneration, fringe benefits and pension commitments.

The fixed remuneration is paid in prorated instalments in the form of a monthly salary. Furthermore, Executive Board members receive fringe benefits, which mainly involve contributions to insurance policies customary to the market and the non-cash benefit in kind resulting from company car use. The Executive Board members are required to tax the fringe benefits under their own individual responsibility.

All Executive Board members of MVV Energie AG have been granted defined contribution pension commitments whose volume is based on the balances on virtual pension accounts at the time at which the benefits are claimed. Pension contributions bearing annual interest are credited to these accounts each year. The commitments also include benefits to cover permanent inability to work and provision for surviving dependants.

Performance-related remuneration

Two components, each of which furnished with appropriate minimum thresholds and caps, determine the variable remuneration paid to our Executive Board members. The first is the annual bonus, which is measured by reference to the adjusted EBIT generated by MVV in the past financial year. The second is the sustainability bonus, which is linked to the sustainable increase in the company's value.

The latter bonus is based on MVV's average ROCE (return on capital employed) before IFRS 9 items, with the calculation including the figures both for the financial year under report and for the two preceding financial years. The ROCE figure measures how effectively the company has used its capital employed. As the capital required for operations is influenced in particular by long-term strategic decisions, this figure is suitable to appraise the company's sustainability. The sustainability bonus is only paid out when the ROCE calculated for a three-year period exceeds a specified minimum threshold.

Compared with the annual bonus, the sustainability bonus accounted for the predominant share of variable remuneration paid to the members of MVV's Executive Board in the 2020 financial year. No further multiyear remuneration is provided for, neither does the company maintain any stock option programmes or comparable instruments.

Any remuneration paid for positions held on group-internal supervisory boards is imputed to and deducted from the performance-related remuneration each year.

Total Executive Board remuneration

The Executive Board of MVV Energie AG received total remuneration of Euro 2,812 thousand in the year under report (previous year: Euro 2,439 thousand).

The following tables show both the benefits granted and the actual incomes paid in the year under report in accordance with the recommendations of the German Corporate Governance Code, as well as total remuneration pursuant to German Accounting Standard 17 (DRS 17). Given the structure of our remuneration system, benefits granted and actual incomes paid are identical.

Former members of the Executive Board received benefits of Euro 630 thousand in the year under report (previous year: Euro 531 thousand). We stated provisions totalling Euro 20,288 thousand for pension obligations to former Executive Board members and their surviving dependants (previous year: Euro 21,401 thousand). Of this total, an amount of Euro 64 thousand was added in the year under report (previous year: Euro 347 thousand).

Remuneration of related parties

According to IAS 24, management staff performing key functions count as related parties. Alongside the Executive Board, at MVV this group of persons includes active division heads and authorised representatives of MVV Energie AG. Our division heads and authorised representatives receive their remuneration exclusively from MVV Energie AG. In the year under report, the corresponding remuneration totalled Euro 2,955 thousand (previous year: Euro 3,015 thousand), with Euro 2,845 thousand of this involving payments with current maturities (previous year: Euro 2,906 thousand). Unless they are insured via municipal supplementary pension companies (ZVKs), these persons receive a defined contribution company pension amounting to up to 8.6 % of their fixed remuneration. The total expenses incurred for this remuneration amounted to Euro 110 thousand in the 2020 financial year (previous year: Euro 108 thousand).

Benefits granted and income paid

	Dr. Georg Müller, CEO				Verena Amann, Personnel Director (since 1 August 2019)			
		Min	Max			Min	Max	
Euro 000s	**FY 2020**	FY 2020	FY 2020	FY 2019	**FY 2020**	FY 2020	FY 2020	FY 2019
Fixed remuneration [1]	524	524	524	524	313	313	313	52
Fringe benefits [2]	31	31	31	31	41	41	41	6
Other activities [3]	11	11	11	16	6	6	6	–
Total	**566**	**566**	**566**	**571**	**360**	**360**	**360**	**58**
Variable remuneration	394	–	1,048	444	264	–	626	49
Total pay	**960**	**566**	**1,614**	**1,015**	**624**	**360**	**986**	**107**
Pension expenses [4]	349	349	349	245	331	331	331	211
Total remuneration	**1,309**	**915**	**1,963**	**1,260**	**955**	**691**	**1,317**	**318**

	Ralf Klöpfer, Sales Director				Dr. Hansjörg Roll, Technology Director			
		Min	Max			Min	Max	
Euro 000s	**FY 2020**	FY 2020	FY 2020	FY 2019	**FY 2020**	FY 2020	FY 2020	FY 2019
Fixed remuneration [1]	313	313	313	313	313	313	313	313
Fringe benefits [2]	39	39	39	46	23	23	23	26
Other activities [3]	11	11	11	11	6	6	6	16
Total	**363**	**363**	**363**	**370**	**342**	**342**	**342**	**355**
Variable remuneration	259	–	626	296	264	–	626	296
Total pay	**622**	**363**	**989**	**666**	**606**	**342**	**968**	**651**
Pension expenses [4]	302	302	302	191	316	316	316	196
Total remuneration	**924**	**665**	**1,291**	**857**	**922**	**658**	**1,284**	**847**

1 Annual fixed remuneration including CEO allowance of Euro 211 thousand for Dr. Georg Müller
2 Contributions to health insurance, nursing care insurance, voluntary contributions to employers' mutual insurance association, non-cash benefits/benefits in kind
3 Remuneration for board activity at subsidiaries and shareholdings (entitlement in respective financial year). This is deducted from variable remuneration.
4 Service cost from commitments of pensions and other benefits pursuant to IAS 19

Pension obligations

	Development in virtual pension accounts			Pension provision	Allocation to pension provision	
Euro 000s	Balance at 1 Oct 2019	Pension contribution	**Balance at 30 Sep 2020 [1]**	**Balance at 30 Sep 2020 [1]**	Service cost	Interest expenses
Dr. Georg Müller	2,846	394	3,369	6,175	349	19
Verena Amann	16	103	120	485	331	1
Ralf Klöpfer	781	183	995	2,105	302	5
Dr. Hansjörg Roll	697	214	940	1,949	316	5
Total	**4,340**	**894**	**5,424**	**10,714**	**1,298**	**30**

1 Including interest
2 Equivalent to present value of vested claims

SUPERVISORY BOARD REMUNERATION

Remuneration system

The Articles of Incorporation of MVV Energie AG stipulate that members of the Supervisory Board should receive fixed annual remuneration and a meeting allowance, the amount of which is determined by the Annual General Meeting. The remuneration paid to our Supervisory Board members is commensurate to the responsibility they bear and to the scope of their activities. By resolution of the Annual General Meeting on 13 March 2020, annual remuneration was adjusted and retrospectively increased as of 1 October 2019. Each Supervisory Board member thus received annual remuneration of Euro 15 thousand in the 2020 financial year. The Supervisory Board Chairman received annual remuneration of Euro 30 thousand and his deputy was paid Euro 22.5 thousand. Members joining or leaving the Supervisory Board during the financial year received prorated remuneration. Moreover, the Audit Committee Chairman received additional annual remuneration of Euro 10 thousand, while other members of the committee each received Euro 5 thousand. Each Supervisory Board member received a meeting allowance of Euro 1 thousand for each meeting of the full Supervisory Board or committee meeting attended. The Supervisory Board Chairman receives twice this amount for each meeting of the Supervisory Board, as does the Audit Committee Chairman for each Audit Committee meeting.

Total remuneration of Supervisory Board

Remuneration totalling Euro 525 thousand was paid to Supervisory Board members in the year under report (previous year: Euro 400 thousand).

Supervisory Board remuneration FY 2020

Euro	Annual Remuneration	Meeting allowances
Dr. Peter Kurz, Chairman	30,000	18,000
Johannes Böttcher	15,000	7,000
Timo Carstensen	15,000	5,000
Ralf Eisenhauer	15,000	9,000
Peter Erni	20,000	9,000
Detlef Falk	20,000	10,000
Gabriele Gröschl-Bahr	15,000	1,000
Dieter Hassel (until 26 June 2020)	11,083	3,000
Barbara Hoffmann	15,000	6,000
Prof. Dr. Heidrun Kämper	15,000	7,000
Heike Kamradt	27,500	14,000
Brigitte Kemmer	15,000	7,000
Gregor Kurth (since 3 July 2020)	3,667	4,000
Thoralf Lingnau (since 24 January 2020)	10,292	4,000
Dr. Lorenz Näger	20,000	11,000
Steffen Ratzel	15,000	9,000
Bernhard Schumacher	15,000	7,000
Christian Specht	20,000	10,000
Prof. Heinz-Werner Ufer	25,000	17,000
Susanne Wenz	15,000	5,000
Jürgen Wiesner	15,000	9,000
Total	**352,542**	**172,000**

Takeover-Related Disclosures

The Combined Management Report includes takeover-related disclosures as per § 289a (1) and § 315a (1) of the German Commercial Code (HGB). The Executive Board has examined these disclosures and offers the following explanatory comments:

Composition of share capital

At the balance sheet date on 30 September 2020, the company's share capital totalled Euro 168,721,397.76 and was divided into 65,906,796 individual non-par registered shares with a prorated amount in the share capital of Euro 2.56 per share. Each share entitles its holder to exercise one vote at the Annual General Meeting of MVV Energie AG, as well as to the rights and obligations accruing to it by law and the Articles of Incorporation.

Restrictions on voting rights and transferability; shares with special rights

As far as we aware, the City of Mannheim, as the municipal principal shareholder, and its subsidiaries MKB Mannheimer Kommunalbeteiligungen GmbH and MV Mannheimer Verkehr GmbH on the one hand and FS DE Energy GmbH and its material shareholders, FS Energy TopCo S.à r.l. and First State Investments International Limited, on the other hand, concluded a shareholders' agreement on 2 April 2020 which includes understandings concerning proposals for the composition of the Supervisory Board and, apart from this, excludes any other voting pacts and acknowledges that MVV Energie AG should continue to be a company controlled by the City of Mannheim. Furthermore, the shareholders' agreement includes understandings concerning the transfer of shares. In particular, certain MVV shares may only be sold by FS DE Energy GmbH prior to 1 January 2029 with the approval of the City of Mannheim. There are no shares with special rights conferring powers of control.

Direct or indirect shareholdings exceeding 10 % of voting rights

The City of Mannheim indirectly held 50.1 % of the share capital and voting rights in MVV Energie AG at the balance sheet date. FS DE Energy GmbH, an indirect subsidiary of funds managed by First Sentier Investors (previously: First State Investments), directly held 45.68 % of the share capital and voting rights. These disclosures are based on the voting right notifications provided to us by the shareholders and the entries in the Share Register.

Control of voting rights

There is no control of voting rights as defined in § 289a (1) No. 5 and § 315a (1) No. 5 HGB.

Regulations for appointing and dismissing Executive Board members and to amend Articles of Incorporation

The appointment and dismissal of Executive Board members is based on § 76 et seq. of the German Stock Corporation Act (AktG), and especially on § 84 AktG and § 30 et seq. of the German Codetermination Act (MitbestG). In line with the Articles of Incorporation, the company's Executive Board consists of at least two members. The Supervisory Board is responsible for determining the number of members and for appointing and dismissing members. Members are appointed for a maximum five-year term, with repeated appointments permitted.

Amendments to the Articles of Incorporation must be undertaken in accordance with § 133 and § 179 AktG in conjunction with § 19 of the company's Articles of Incorporation. Pursuant to § 19 (1) of the Articles of Incorporation, a simple majority of the share capital with voting entitlement participating in the adoption of a resolution is also sufficient to amend the Articles of Incorporation, unless mandatory legal provisions require a larger majority. Pursuant to § 11 (3) of the company's Articles of Incorporation, the Supervisory Board is authorised to adopt amendments to the Articles of Incorporation that only affect the respective wording.

Executive Board powers to issue and buy back shares

By resolution on 13 March 2020, the Annual General Meeting authorised the Executive Board until 12 March 2025 to acquire treasury stock up to an amount of 10 % of existing share capital upon adoption of the resolution.

By resolution on 8 March 2019, the Annual General Meeting also authorised the Executive Board until 7 March 2024, subject to approval by the Supervisory Board, to raise the share capital by a total of up to Euro 51.2 million by issuing up to 20 million new individual non-par registered shares on one or several occasions in return for cash and/or non-cash contributions.

The Executive Board of MVV Energie AG has not yet made use of these authorisations.

Compensation agreements and change of control clauses

MVV Energie AG has no material agreements that are subject to a change of control resulting from a takeover bid (change of control clause). The company also has not concluded any compensation agreements with Executive Board members or employees for the event of a takeover bid.

Outlook, Opportunity and Risk Report

- Ongoing great uncertainty due to coronavirus pandemic
- Energy policy and industry climate remain challenging
- Sales and earnings expected to at least match previous year's level
- Investments set to remain high

OUTLOOK

Macroeconomic framework

Since the start of 2020, society, politicians and businesses have been confronted with the coronavirus pandemic, its developments and its effects. The consequences which the pandemic will have for overall economies and for individual companies can only be forecast to a limited extent, whether in qualitative or in quantitative terms. In their autumn survey for the 2020 calendar year, Germany's leading economic research institutes expect to see a 5.4 % reduction in the country's gross domestic product. For the 2021 calendar year, they have forecast growth of 4.7 %. According to the experts, the greatest risk involved in these forecasts is the uncertainty surrounding the further course of the pandemic, an observation which ongoing developments have proven to be valid.

Energy policy framework

In terms of the underlying conditions that will affect MVV's future business performance, the most important are the efforts being made to protect the climate and the associated acceleration in the energy turnaround. In Germany, these are specifically expressed in the amendment to the German Renewable Energies Act (EEG), the implementation of the German Coal Exit Act (KAG) and the legislative measures relating to green heating energy options. Further details about these can be found in the chapter **Business Framework** **Page 28.** Our international solar and wind project development business will be affected above all by the respective national regulations and market factors.

Executive Board summary of expected business performance

The forecast for the 2021 financial year therefore has to be provided against a backdrop of great macroeconomic uncertainty due to the coronavirus pandemic on the one hand and the emergence of a more ambitious approach to climate protection on the other. Both factors will affect the energy industry, and thus also MVV. Our top priority in future as well will be to protect the health of our employees, customers and partners. We acted early to take targeted measures in this respect and are continually adapting these in line with the latest developments. As a company that provides critical infrastructure, we are thus managing to safeguard a reliable supply of energy and water and to ensure that waste is suitably disposed.

We will continue to pursue our existing strategy. This is aligned to the transformation of the energy system and therefore focuses on energy efficiency, renewable energies, new products and services and supply reliability. We feel that our alignment has been confirmed by developments, particularly also in these times of the coronavirus pandemic. We are countering the charges resulting from this transformation and the pandemic by implementing measures to improve our processes and procedures and reduce our costs. This way, we are providing MVV with a foundation for its sustainable growth in future as well.

Despite this clear alignment, like large parts of the overall economy we too are currently unable to quantify future developments, and thus the implications of the pandemic for our company, to the customary extent. Our forecast for the 2021 financial year is therefore subject to greater uncertainty than in previous years. We have commented on the material individual potential risks that could result from the further course of the pandemic in the **Opportunity and Risk Report** **Page 82.**

Sales and earnings performance

Despite the impact of the coronavirus pandemic, we concluded the 2020 financial year with year-on-year earnings growth. This shows that we are well positioned in terms of our structures and that we have robust business models which also complement and counterbalance each other within the overall portfolio. This approach will guide our activities in the 2021 financial year as well. From an operating perspective, we are thus confident that adjusted sales (excluding energy taxes) and adjusted EBIT will each at least match the previous year's level (Euro 3.5 billion and Euro 233 million respectively). Our sales performance will depend above all on trading activities and commodity prices, customer demand and weather conditions. Further major factors that influence our earnings include wind volumes, the development in electricity and fuel prices and availability levels at our plants. The volume of solar and wind power projects marketed, a factor which is generally subject to greater volatility, is particularly significant both for our sales and for our earnings performance.

Should the coronavirus pandemic have only a limited impact on our company, then in view of the investments we have made and the new business models we have established in recent years we also see opportunities to achieve growth in the above key figures. If possible, we will issue statements in this respect in the context of our reporting during the financial year.

Expected performance of MVV Energie AG in separate financial statements

The sales and earnings performance of MVV Energie AG as well will depend on the course and impact of the coronavirus pandemic. Overall, for the 2021 financial year we expect both sales (excluding energy taxes) and annual net income after taxes at MVV Energie AG to approximately match the previous year's figures (Euro 1.4 billion and Euro 99 million respectively). Sales and sales volumes in the heating energy business are significantly influenced by weather conditions, particularly during the heating period. Earnings in the separate financial statements are also significantly influenced by grid operations, the sales business and income from group shareholdings.

Dividend

We aim to pay a dividend to our shareholders that is aligned to MVV's earnings performance in future as well. In view of this, the Executive Board has decided to propose a dividend of Euro 0.95 per share, corresponding to an increase of Euro 0.05 per share, for approval by the Annual General Meeting on 12 March 2021. The Supervisory Board will decide in December 2020 on its dividend proposal to be submitted to the Annual General Meeting.

Investments

From a current perspective and provided the coronavirus pandemic does not prevent us from doing so, we will increase our volume of investments in the 2021 financial year while retaining the same strategic investment focuses.

Capital resources and financing structure

We continue to have very good access to the financial market and are therefore able to cover MVV's financing and liquidity needs at all times. Thanks to our adjusted equity ratio of around 34 %, we can also continue to make a high volume of investments. We finance investments in our existing business primarily from depreciation. For our growth projects, we draw on retained earnings and on optimised project-based financing facilities. We pool projects with structural similarities and comparable terms and draw on the bank and promissory note loan markets. By defining and adhering to key figures as guidelines for debt-financed growth, we ensure an implicit rating on investment grade level for MVV.

Forward-looking statements and forecasts

Our Combined Management Report for MVV (IFRS) and MVV Energie AG (HGB) includes forward-looking statements that are based on current assumptions and estimates. Although the Executive Board is convinced that these assumptions and budgets are accurate, actual future developments and actual future earnings may deviate from these forecasts due to high current levels of uncertainty and numerous internal and external factors.

OPPORTUNITY AND RISK REPORT

The energy industry has been undergoing a process of fundamental change for years now – and the industry and MVV still face numerous uncertainties. The opportunities and risks resulting from factors including such changes are an integral part of our entrepreneurial activity. One key task for our corporate management involves identifying both at an early stage of developments, exploiting opportunities and countering risks with suitable measures. We have installed suitable instruments and processes for this purpose. On the one hand, these include our internal control system (IKS) in respect of the financial reporting process, which serves to ensure correct, reliable and uniform companywide financial reporting. On the other hand, they also include our risk management system (RMS), with which we record developments relevant to our company at an early stage, and in particular those relating to competitive, regulatory and technological developments. By systematically addressing the resultant opportunities and risks, we are able to safeguard and extend MVV's competitiveness.

Explanation of internal control system (IKS)

Our financial reporting should be correct, complete, prompt and easily understandable. We safeguard this with our internal control system (IKS) in respect of the financial reporting process. This comprises all principles, procedures, regulations and measures to ensure that all business transactions are promptly, completely and accurately recorded. We deploy the IKS system to monitor compliance with legal requirements and our internal regulations, such as the principles of proper accounting, the requirements of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG), international accounting requirements and the supplementary requirements of our Articles of Incorporation and our internal organisational manual. Furthermore, the IKS system also helps us to avoid material misstatements resulting from errors or irregularities.

The IKS system is a fixed component of relevant accounting and financial reporting processes at all our major locations. We regularly analyse all processes and interfaces involved in preparing MVV's consolidated financial statements and combined management report. Here, we check whether there are any risks that could contravene our objective of ensuring correct, complete, prompt and easily understandable financial reporting. To minimise any risks of this nature, we have introduced suitable organisational safeguards and internal checks, including training for those employees involved and detailed schedules governing the preparation of quarterly statements, interim consolidated financial statements, the half-year financial report, consolidated financial statements and the combined management report.

The executive board members and managing directors of our subsidiaries are required to submit internal balance sheet oaths on a quarterly basis, as are selected division and group division heads.

Basic principles and organisation of IKS system

Our consolidated financial statements are centrally prepared by the commercial division at MVV Energie AG. They comply with International Financial Reporting Standards (IFRS) as adopted by the EU as well as the supplementary requirements of commercial law set out in § 315a (1) HGB. Key accounting matters are processed by employees at the accounting and tax department, who are also available to act as contact partners to our subsidiaries.

The consolidated financial statements are prepared in a multistage process. The individual subsidiaries first prepare their financial statements. These are then audited by the respective auditors. After this, we use a consolidation software to aggregate these financial statements into the consolidated financial statements at MVV Energie AG. Our consolidation process is based on in-house guidelines, procedural instructions and processes, compliance with which is checked upon preparation of the financial statements. The consolidated financial statements are reviewed by the Audit Committee and the full Supervisory Board before being approved and adopted by the latter and subsequently published by the company in accordance with the relevant requirements.

Our IKS system requires consistent application of the dual control principle and the separation of critical functions for all processes involved in preparing the financial statements. Guidelines, procedural instructions and approval processes are supported by an information and communications system. All companies included in our consolidated financial statements are required to base their accounting and reporting on uniform guidelines that are applicable to annual and interim financial statements. These guidelines lay down the accounting policies requiring application under IFRS and also include requirements as to how we have to meet other reporting obligations, such as industry-specific or regulatory obligations. Moreover, in preparing the financial statements we also aggregate further qualitative and quantitative information that is relevant for the purpose of preparing the financial statements. We regularly discuss this information in specified processes with representatives of the various specialist departments. Within the framework of our

quality assurance, we record this information and thus ensure that all relevant data is fully documented. We have subdivided our day-to-day accounting and the preparation of the annual financial statements based on functional perspectives across all hierarchical levels and structured this in individual process steps. We have installed automatic or manual checks in all process steps involving risks.

In our accounting, we work with an integrated enterprise resource planning (ERP) system which enables numerous sources of error to be avoided. This way, only complete business transactions with valid data are processed. Not only that, a strict authorisation concept is in place for all users to prevent unauthorised access to accounting data.

Uniform standards across all locations

The commercial division at MVV Energie AG is responsible for preparing the financial statements and for the overall Group's internal control system (IKS) in respect of the financial reporting process. This way, the IKS system is subject to uniform standards applicable throughout the Group. We ensure that our IKS system is documented and effective in terms of its structure and functionality.

Our IKS managers at all major group companies work together with the Group's IKS manager to ensure that local internal control systems are consistent with the Group's uniform requirements. The Group's IKS manager compiles the aggregate IKS report based on annual status reports submitted by local IKS managers, internal audit reports and proprietary information. The results of this report form the basis for our IKS reporting.

Using special software, the processes relevant to financial reporting are documented together with the embedded internal checks and made available to all employees on MVV's intranet. This process documentation has been and continues to be supplemented where necessary to include regulations applicable to individual cases.

Regular reporting

Within the reporting process executed during the financial year, the group controlling department monitors whether the targets set out in the business plan and approved by the Supervisory Board are actually met. Variances, whether to planned developments or to developments in the previous financial year, are documented and included in the quarterly financial reports provided to the Executive Board. These present the business performance in detail and include comments on all reporting segments and business fields. Based on the insights thereby gained, suitable measures are proposed within the reporting framework. The Executive Board manages MVV's business based on this information.

Explanation of risk management system (RMS)

Our risk management system (RMS) is structured in such a way as to enable us to detect opportunities and risks at an early stage of developments. Opportunities may lead to a positive variance in company earnings compared with the value budgeted, while risks may result in a correspondingly negative divergence. We evaluate opportunities and risks at the Group on the basis of in-depth market and competitive analyses. We reduce risks wherever possible or pass them on to third parties. Here, we devise suitable measures and monitor their implementation. A successful strategy may also involve deliberately entering into risks, provided that these are managed and offset by suitable opportunities.

Basic principles and organisation of RMS system

The Executive Board determines the company's risk policy and lays down all processes and responsibilities. Responsibility for operative risk management is located with the legal business units and business fields and, more specifically, with the respective risk bearers. These are the employees responsible for operating earnings at the business units. One of their core tasks involves regularly reviewing the current business situation. They identify material opportunities and risks and assess the potential implications of these for adjusted EBIT. They report their assessments in standardised form to our central risk controlling function. The tasks incumbent on risk bearers also include implementing, or monitoring the implementation, of measures enabling risks to be managed or reduced and opportunities to be exploited.

Our central risk controlling function monitors the risk situation at the Group. It continually monitors those opportunities and risks that are relevant to our business and aggregates these into an opportunity/risk profile. This profile represents a net analysis, which means that it already accounts for all countermeasures taken to reduce risks. Existing opportunities and risks are aggregated using probability methods.

RISK MANAGEMENT SYSTEM

In our risk report, we list the largest single risks separately. We combine the implications of opportunities arising or risks materialising with their respective probability of occurrence and evaluate the opportunity/risk situation accordingly. In our short and medium-term planning, we carefully assess opportunities and risks and account for these in our earnings forecast.

The Executive and Supervisory Boards are provided with a quarterly risk report presenting the Group's opportunity/risk profile. Significant risks arising at short notice are reported immediately to the Executive Board, which in turn informs the Supervisory Board as appropriate.

Supervision of IKS and RMS systems

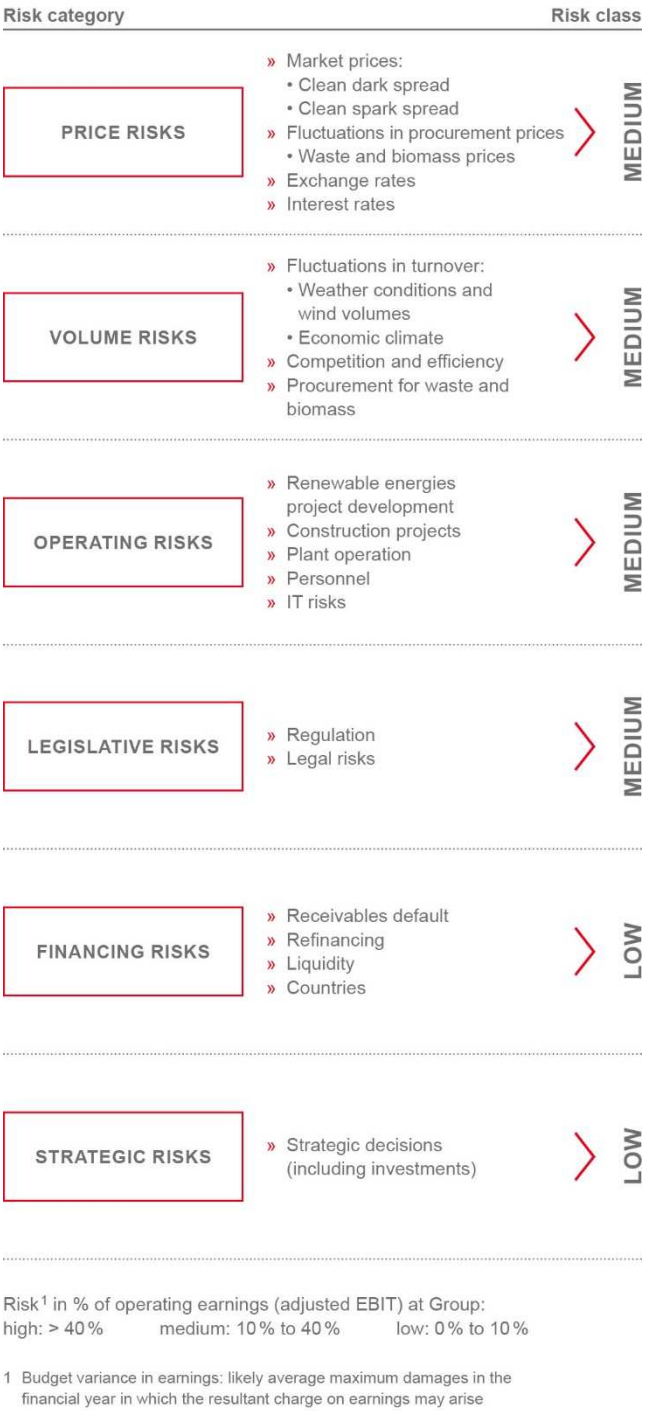
Both the IKS and the RMS systems are implemented, maintained and supervised by the executive boards and managing directors of consolidated subsidiaries. Our group internal audit department audits both systems regularly as part of its risk-based audit plan. This department identifies any weaknesses and monitors whether the improvements introduced are taking effect.

The Supervisory Board and the Audit Committee of MVV Energie AG monitor the appropriateness of the structure and functionality of these two systems.

Presentation of opportunity/risk situation

In what follows, we present the opportunity/risk situation of MVV. We allocate opportunities and risks in each case to one of our total of six categories. We subsequently quantify the opportunity/risk situation for each category and present the potential impact on earnings for each category in terms of the Group's adjusted EBIT. We categorise the respective opportunity/risk situation in three different risk classes: "low", "medium" and "high". These classifications show how high, as a percentage, the expected impact of the category is for the Group's budgeted adjusted EBIT. A detailed explanation of material opportunities and risks is provided within the various categories. Here, we present the potential implications for our reporting segments based on the reporting structure used to manage and report on the business.

EXPECTED RISK SITUATION IN FY 2021



Risk[1] in % of operating earnings (adjusted EBIT) at Group:
high: > 40 % medium: 10 % to 40 % low: 0 % to 10 %

1 Budget variance in earnings: likely average maximum damages in the financial year in which the resultant charge on earnings may arise

In addition to the opportunities and risks typical to its business, the Group's risk situation has also been significantly influenced by uncertainties resulting from the coronavirus pandemic. To counter the effects of the pandemic, we are drawing on numerous proactive measures which we review continually to assess their effectiveness. Our close links to the overall economy may nevertheless lead to numerous direct or merely indirect effects of the coronavirus pandemic which we can only influence to a limited extent. We provide more detailed information about the impact of the associated risks in the explanatory comments below.

Price opportunities and risks

In the price opportunities and risks category we include price fluctuations in commodities on both procurement and sales markets, exchange rate movements and interest rate changes. To limit interest rate, exchange rate and commodity risks, we make use of financial instruments **Notes to Balance Sheet (Note 35), Page 135.**

Fluctuations from marketing our generation positions
The clean dark spread (CDS), the clean spark spread (CSS) and the result of marketing electricity generated at our environmental energy plants are each calculated as the difference between the electricity revenues on wholesale markets and the costs incurred to generate the electricity. Items included – in each case together with the costs of CO_2 emission rights – in the costs of electricity generation are: the costs of coal in the case of the CDS, the costs of gas (including transport costs and currency translation differences) for the CSS and the costs of substrates in the case of environmental energy plants. We work with suitable hedging strategies to limit potentially negative implications for our generation portfolio management.

Since the onset of the coronavirus pandemic, we have seen sharp fluctuations in wholesale market prices. These have also impacted on the CSS and CDS. Low electricity generation spreads impact negatively, albeit at a later point in time, on adjusted EBIT in Supply Reliability, the reporting segment to which the marketing of generation positions in our combined heat and power business field is allocated.

Fluctuations in waste and biomass procurement prices
We observe and assess potential opportunities and risks resulting from fluctuating waste prices, and that both in the German and in the British markets. Moreover, we track the development in biomass prices across Europe. Our material and substrate flow management enables us to identify potential risks in the New Energies reporting segment at an early stage and to mitigate these with suitable measures.

Fluctuations in market procurement prices
The energy volumes required by our sales department for customer supplies at various locations are mostly procured on the energy trading market. Here, our energy trading subsidiary MVV Trading concludes futures transactions, some of which several calendar years in advance, taking due account of our applicable hedging regulations. We thus increase the consistency of our earnings and act early to improve our planning reliability for subsequent financial years.

Changes in exchange rates
Exchange rate movements may create opportunities or harbour risks for us in connection with fuel procurement, our involvement in the UK and the Czech Republic and our international project development business. We limit these risks with natural hedges and futures transactions. Since the onset of the coronavirus pandemic, we have observed additional uncertainty in exchange rate movements.

Changes in interest rates
Our finance department continually monitors the interest rate risks relevant to our business. Where possible, we finance our investment projects with fixed interest rates for congruent terms. We already account in our company planning for the expected impact of rising interest rates when projects are refinanced. Changes in interest rates also impact on our project development business. Demand for renewable energies projects may fall, for example, if interest rates rise and other forms of investment become more attractive for investors.

Volume opportunities and risks

Our operating earnings may be positively or negatively influenced by fluctuations in volumes both on the procurement front and on the generation and sales front.

Fluctuations in turnover due to weather conditions and wind volumes
Two key factors influencing our business performance are weather conditions and wind volumes. Weather conditions have a major impact on our turnover with district heating and gas, particularly during the heating period from September to May. Electricity generation volumes at our wind turbines are dependent on wind volumes. Opportunities arise for our business performance should it be cooler than planned during the heating period and/or should wind volumes exceed our expectations.

Fluctuations in volumes due to changes in economic conditions
MVV is affected by macroeconomic developments mainly in indirect ways. If our major industrial and commercial customers cut back their production due to the economic situation, then this may lead them to procure lower volumes of energy from us. Conversely, we also face opportunities to generate higher sales volumes if our customers step up their production due to economic developments.

Due to the coronavirus pandemic, our electricity and gas turnover volumes could decrease due to lower demand or the loss of customers.

Fluctuations in turnover due to competition or efficiency measures
Competitive pressure in the energy market is unrelentingly high. Should customers decide to switch provider, then this reduces our sales volumes. Similarly, efficiency measures implemented by our customers, such as heat insulation, may also reduce our volumes. When customers switch to generating the energy they consume themselves, we support them with innovative, competitive products and develop services offering substantial customer benefits. We are thus exploiting the opportunities arising in the market due to climate protection requirements. We accord great value to working with local authorities on a basis of partnership. This way, we create a basis for extending existing concessions and raise our chances of acquiring new concessions.

Procurement of waste and biomass
With regard to incinerating commercial waste and biomass, our adjusted EBIT may be affected both by the total volumes available and by their quality. Both factors are in turn affected by the macroeconomic situation and legal requirements, as well as by plant capacities at competitors and weather-related events. We minimise volume risks for our plants by working with professional material and substrate flow management. We also pursue a substitute procurement strategy.

The spread of the coronavirus and associated reduction in industrial and commercial production and turnover volumes could impact on waste prices and volumes.

In respect of the UK's decision to leave the European Union (Brexit), there is currently increased uncertainty concerning the future development in volumes and prices for waste and waste timber in the UK and EU market regions.

Operating opportunities and risks

MVV's operating opportunities and risks chiefly arise in connection with the construction and operation of energy generation plants and grids, with its renewable energies project development business, as well as at customers with energy-related services for industrial parks and with data centre services.

We have extensive experience in building and operating energy from waste and biomass plants and see opportunities for our group of companies in this area. In our assessment, the German market offers potential both to expand organic waste fermentation and to recover resources when incinerating sewage.

Uncertainties in renewable energies project development business
Projects in our project development business field generally have shorter planning and construction stages than large-scale generation plants. Having said that, these projects also involve uncertainties: In general, the development of relevant markets depends both on the further development in political regulation and on levels of public acceptance. We see key opportunity and risk factors in the onshore wind turbine project development business in Germany as relating to the scope and structure of future project tenders and the development in market interest rates. When implementing projects, the progress made with the respective projects may be negatively influenced by factors such as any delay in obtaining building or operating permits, or failure to obtain such permits, as well as ever higher approval requirements and related issues.

Especially in the project development business, we monitor any potential delays to operations launches or projects, and this is also and particularly the case during the coronavirus pandemic. We have taken measures to counter potential supply bottlenecks at upstream suppliers and delays to processes.

Our financial success in the international business is increasingly determined by political and macroeconomic developments in our target markets. Major sources of uncertainty affecting our success abroad include potential disruptions in international trade relationships, which may impact on market access (punitive tariffs) and competitiveness, and the possibility of further interventions in subsidy regimes. We also have opportunities in our renewable energies business given our extensive expertise and great competence in project development and operations management for renewable energies plants.

Risks from progress with construction projects
Large-scale generation plants have long planning and construction stages and harbour corresponding risks. Negative implications for our expected adjusted EBIT could arise, for example, in the event of any delay in the completion and launch of operations at our major projects or if we incur unplanned costs to procure substitute electricity and heating energy or if new developments increase the costs of the projects. We therefore accord great value to ensuring that projects are robustly designed and budgeted in the planning stage already and to detecting and evaluating the material opportunities and risks involved in projects at an early stage of developments.

We are paying particular attention to the impact of the coronavirus pandemic on supply chains and upstream suppliers for construction projects. Any delays to supplies of materials or in the completion of modules or sections could lead to construction delays.

We counter these risks, to the extent that they are within our control, with professional project organisation and by commissioning suppliers with experience in the sector. Where contractually possible, we pass on the implications of project risks, especially those involving higher costs and deadline overruns, to the contractual partners responsible for such.

Uncertainties resulting from plant operations
In our New Energies, Supply Reliability and Strategic Investments reporting segments, the operation of energy generation plants and grid facilities to supply our customers with energy and utilities involves substantial operating uncertainties for our Group. Unscheduled downtime at plants may lead to a loss of production or interruptions to supplies. In this context, additional financial outlays may also be incurred to repair the plant, for substitute supplies to our customers or for contractual penalties.

The coronavirus pandemic presents additional challenges in terms of organising operations. We have taken a variety of precautionary measures to safeguard plant availability even if the impact of the pandemic intensifies further.

By performing regular maintenance and monitoring measures, we make every effort to minimise downtime at our plants and the potential resultant risks. This way, we also do justice to our claim to act as a reliable supplier and to avoid any risks to our reputation. Despite this, we cannot entirely exclude the possibility of downtime. To counter this risk in general, we optimise scheduled inspection times within our maintenance strategy. We thus work towards using capacity at our plants over and above the planned hours of use or to increase efficiency rates. This assists us both in realising opportunities due to higher generation volumes and in avoiding grid operation risks. To limit the

financial implications of any potential damages, we have agreed insurance policies. Moreover, we assess the risk and environmental protection aspects of potential clean-up projects on derelict land formerly occupied by our plants.

Personnel developments
Our well-qualified and committed employees form the foundation for our company's success. We work with numerous measures to attract the right employees to us and retain them in the long term. Risks may nevertheless also arise with regard to our personnel. The companies within our Group may also face capacity risks and risks resulting from ageing workforces due to pending demographic changes. The extent of these risks depends on the attractiveness of the company and location. To enable us to continue filling key positions with internal candidates, where possible, we will keep providing our staff with targeted training.

To date, we have successfully managed the particular challenges presented by the coronavirus pandemic. To protect our employees while simultaneously safeguarding our operating processes, we adopted additional rules governing conduct, contact and absence and adapted the forms of cooperation and communication to work requirements, not least by drawing on digital solutions.

In the pension surveys we have compiled, we have also accounted for those factors involving risks from pension obligations. We have included these factors in our budgets **Notes to Balance Sheet (Note 29), Page 127.**

IT risks
Two crucial factors for nearly all our business processes are secure data storage and interruption-free information technology. We therefore accord great priority to systematically protecting our IT infrastructure and IT systems against any potential attacks by third parties.

We continually reduce our IT risks by implementing an extensive range of technical and organisational measures. We make use of security systems and only grant access authorisations to systems and information on a restrictive basis. We have redundant copies for all our key hardware components and permanently reflect data between production systems and geographically separate backup systems. We also have a backup computer centre.

Legislative risks

In this category, we aggregate those uncertainties existing in connection with regulation or with other changes in the legal foundations for our business operations.

Regulatory risks
Companies operating in the energy industry face the basic risk (and opportunity) that federal and state lawmakers and authorities – such as the Federal Network Agency (BNetzA) or cartel offices – may amend the regulatory framework. In the past, this related, for example, to the grid fees set by the BNetzA. Energy or climate policy decisions may also have implications for our business performance. Examples here include the regulations governing the expansion in renewable energies, subsidies for CHP plants or political considerations on potential new requirements to enable national climate protection targets to be met. We counter these risks actively: We participate in the political opinion-forming process, adapt our processes and business models and, where possible, also develop suitable products. This way, we are able to exploit any opportunities arising.

Legal risks
MVV may be exposed to legal risks in connection with court cases, product liability, or unenforceable contracts or contractual terms. We therefore check, negotiate and draft contracts with the aim of limiting these risks. Our compliance management system **Page 69** helps us to avoid any infringements of the law.

The current legislation governing the coal exit harbours both risks and challenges for MVV. There are risks in connection with potential statutory restrictions on or interventions in our plant decommissioning plans. We see the transition to sustainable energy generation as posing challenges. We are actively addressing these by offering innovative products, such as by using waste process heating energy to move towards sustainable district heating generation.

MVV's business performance is also exposed to risks and opportunities which result from legal pronouncements on energy industry-related matters or other topics. These could, for example, limit or enhance our ability to structure contracts.

Financing opportunities and risks

In this category, we mainly report on receivables default risks and on refinancing and liquidity opportunities and risks.

Receivables default risks
There is the risk that customers or business partners may fail to settle our invoices, or settle them only in part. This risk may arise in our OTC trading activities in the Customer Solutions reporting segment, for example, or in our long-term supply relationships. To limit this kind of receivables default risk in all reporting segments, we select our business partners with due commercial prudence, check their creditworthiness and, where necessary, agree deposits of securities, and in particular guarantees. Moreover, we are also diversifying our portfolio, thus enabling us to avoid clusters of default risks.

Due to the coronavirus pandemic, delays and defaults may arise in the settlement of outstanding receivables by customers. We are proactively countering this risk with our receivables management.

Refinancing and liquidity risks
We refer to the possibility of being unable to obtain necessary liquid funds in future as refinancing and liquidity risk. To cover our capital requirements, we have a variety of financing instruments at our disposal. These include promissory note loans, bilateral loans and syndicated loans. We continually monitor the financial markets, regularly share information with our lenders and carefully monitor our liquidity. This enables us to counter any refinancing and liquidity risks and, where possible, to seize related opportunities. Furthermore, our group-internal cash pool also serves to reduce this risk. We are monitoring our liquidity even more closely with regard to those effects which could arise due to the coronavirus pandemic.

Country risks
For MVV, country risks take the form of transfer risks and the possibility that states may become unable or unwilling to meet their payment obligations. Due to our international activities in the field of renewable energies project development, country risks may impact on our adjusted EBIT. We continually monitor any uncertainties relating to the terms of access of our target markets that may arise due to potential disruptions in international trade relationships. Before entering international markets that are new to us, we perform detailed analyses of potential risks. For our existing activities, we observe the political and economic situation on location and continually monitor alternative courses of action. In the event of any deterioration in the situation and our risk position, we may decide to leave the given market. We are thus monitoring the current development in the UK economy very closely in respect of our future activities.

Strategic opportunities and risks

Good strategic decisions form the basis for any company's success. The energy policy and industry framework have been changing dynamically for years now. This transformation harbours strategic risks, but also gives rise to new opportunities. We review our investment projects in great detail and decide in which markets, technologies, companies and projects we intend to invest, as well as the timing and scope of such investments. These decisions are taken on the basis of in-depth market and competitive analyses and painstaking viability calculations for investments and projects. Our group strategy department liaises closely with the Executive Board to monitor our strategic alignment on an ongoing basis and adjust it to changes in circumstances.

One major component of our corporate strategy **Page 21** is an extensive investment programme. To enable us to achieve our budgeted level of adjusted EBIT, strategically important investments have to generate the expected level of earnings contributions. Even though we review and plan such investments with great care, erroneous assessments or unexpected changes in the macroeconomic framework may reduce the level of adjusted EBIT achieved in future financial years.

Given the transformation in the German energy system, our company still faces a high level of planning uncertainty. We are tracking the decision taken by the Federal Government to exit from coal and head for climate neutrality by gradually implementing our decarbonisation strategy **Page 48.** We are pursuing the associated targets by reducing the fossil-based share of our generation activities. The steps we are taking here include replacement investments, efficiency enhancement measures, continuing to expand renewable energies and introducing CO_2 reduction measures. The framework for gradually reducing our conventional generation capacities will largely be set by the coal exit legislation **Page 28**. This results in uncertainties for our company.

Furthermore, it is not clear how the UK's decision to leave the European Union (Brexit) will ultimately impact on our business in the UK. We are closely watching all developments in this regard. A weaker British pound, for example, would reduce our earnings in euros. Other factors that may be affected include interest rates, commodities, demand levels and the regulatory framework. Further developments will depend on the specific structure of the country's exit from the EU.

The energy turnaround and changing market in Germany offer opportunities for innovations, new jobs and profitable growth, particularly in terms of renewable energies, decentralised energy supply, energy efficiency, digitalisation, building refurbishment and sustainable mobility concepts. By consistently implementing our corporate strategy **Page 21,** we are seizing these opportunities. We are raising the energy efficiency of our CHP plant in Mannheim, for example, by connecting it to the existing district heating grid. Not only that, this will also make district heating more environmentally friendly, as the link-up measure will lead to a lower primary energy factor.

For renewable energies, we still see sustainably attractive market potential. The competitive situation in Germany has nevertheless changed in the windfarm project development business. The addition of new wind turbines is highly dependent on the increased challenges presented by approval procedures in respect of conservation, the interests of local residents and the duration of the processes needed to obtain a basis for planning. Based on our assessment, the German biomass market still offers expansion potential and investment opportunities in the field of organic waste fermentation, not least given the ever stricter requirements governing the disposal of organic waste. We see further growth potential abroad in areas such as photovoltaics. Having said that, dependencies on local subsidy regimes and local clients apply here. Not only that, competition is tough, particularly in high-growth Asian markets.

We are extending our decentralised energy management business model by offering innovative new solutions and products. We are thus active in the fields of energy-related services, where we offer energy-saving solutions, data centre services, individual renewable photovoltaics products for retail and business customers including tradesperson services from a single source, e-mobility solutions and projects to develop the e-mobility infrastructure. Furthermore, since the end of November 2019 a new gas-fired CHP plant has helped to ensure supply reliability in Kiel.

Executive Board summary

MVV's opportunity/risk profile has changed compared with the previous year. The onset of the coronavirus pandemic means that the known uncertainties directly related to our business have been joined by new challenges and risks affecting all business fields. These will depend on the extent and duration of any restrictions on public life and economic activity. Furthermore, competitive pressure is unrelentingly high. Changes in energy and climate policy also still have the potential to impact substantially on our business performance, as is the case at all other companies in the energy industry. This remains a key source of uncertainty. There is great planning uncertainty, particularly for long-term investments in electricity and heating energy generation plants and the renewable energies project development business. In Germany, further developments will depend on the support provided by lawmakers to overcome current hurdles to project development. In our international target markets for renewable energies, we see key risk factors in local subsidy regimes and macroeconomic developments. Other major factors include the development in political frameworks, market access terms and public acceptance of projects. Moreover, depending on the specific structure of the exit from the EU, Brexit may impact on our business. We expect our industry to be exposed to further fundamental change and underlying conditions to remain unstable. Energy markets are set to remain highly volatile, particularly in view of the current climate debate.

We are monitoring all relevant developments very closely and ensuring that our opportunity/risk profile remains well balanced.

From the perspective of MVV's Executive Board, there were and are no indications that any risks, whether individual or aggregate, could have endangered the continued existence of the overall company, or of any material subgroup, in the period under report, or which could do so in future.