Combined Management Report

Group Fundamentals

GROUP STRUCTURE

Company structure and shareholdings

As the publicly listed parent company of the MVV Group, MVV Energie AG, which has its legal domicile in Mannheim, directly or indirectly owns shares in the companies which form part of the Group and also has its own operations. Including MVV Energie AG, the MVV Group comprises 133 fully consolidated companies and 35 companies which are consolidated via the equity method (at-equity companies). Our group of companies has its largest locations in Mannheim, Kiel, Offenbach and Wörrstadt in Germany. We are also present in around 20 other countries, of which the United Kingdom and the Czech Republic are the most important.

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.

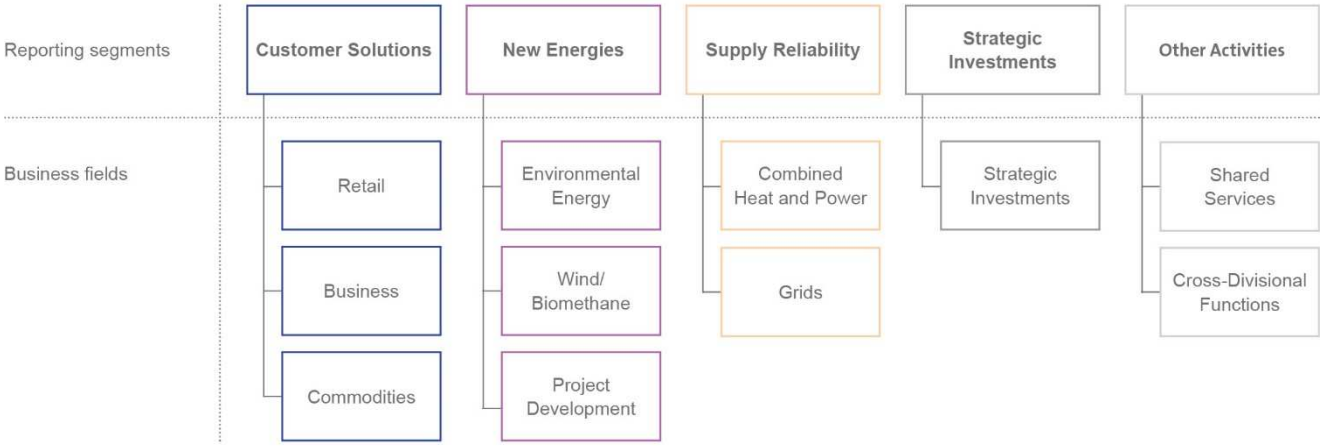
The Environmental Energy, Wind/Biomethane and Project Development business fields are allocated to the **New Energies** reporting segment.

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 and also includes 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

We cover all key stages of the energy industry value chain and, based on calculations compiled by the Association of the German Energy and Water Industries (BDEW), are one of Germany's leading energy companies. We generate and trade with energy, distribute energy via proprietary grid companies, market energy solutions to various customer groups and operate in the environmental energy business. We also have water production and distribution activities. We have a special focus on renewable energies. Here, we are active in the fields of project development and operations management for windfarms, solar parks and biomass power plants. Not only that, we also have these kinds of plant in our own generation portfolio and market electricity from these plants and on behalf of third parties, also via PPA/PSA models.

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. This also includes the portfolio of solutions we offer to enable customers to generate their own electricity from photovoltaics and power their own e-mobility. In addition, e-mobility is 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 pool energy procurement, energy product trading, marketing electricity from renewable generation, also in PPA/PSA models, and portfolio management for our group of companies. We also offer all 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 energy from waste plant three years ago and have built a new additional plant in the direct vicinity. Operations here were launched in the 2021 financial year. In Germany, we also have biogas and biomethane plants, including organic waste fermentation. 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. The focus in the international business is on photovoltaics, while in Germany onshore wind power is an additional focal point. Furthermore, we act as operations managers for windfarms and solar parks and develop hybrid projects in which, depending on requirements, we supplement various energy systems such as photovoltaics or wind turbines with storage units and manage these using smart measurement and control technology.

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 minority shareholding in the power plant Grosskraftwerk Mannheim AG. High-performing grids are crucial to guarantee a reliable supply of energy and water and to implement the energy turnaround. 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 around 19,300 kilometres.

CORPORATE STRATEGY

We intend to be one of the first climate-positive energy companies in Germany

Our goal is for our activities to make a positive contribution towards achieving the Paris Climate Agreement. We made intensive use of the 2021 financial year to further develop our existing **decarbonisation targets, Pages 51 to 55** and to significantly step up the pace at which we intend to achieve even greater climate protection:

We will

- Reduce our direct CO_2 emissions (Scope 1) by more than 80 % by 2030
- Become climate neutral by 2040, and
- Be climate positive from 2040 onwards.

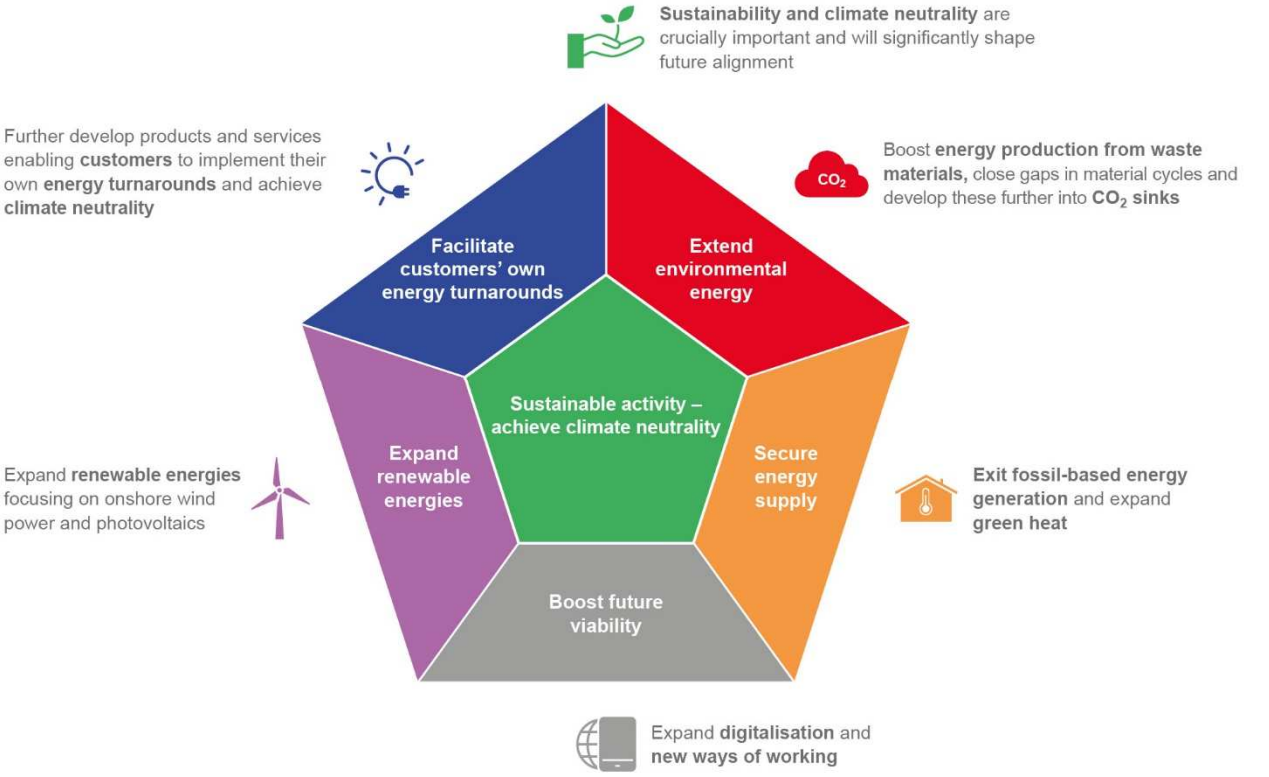
To achieve this, we will

- Maintain a high pace of expansion for renewable energies used to generate electricity and green heat
- Convert our district heating supply for Mannheim and the region to 100 % green energy sources by 2030 at the latest
- Facilitate climate neutrality for and at our customers by offering suitable products and services
- Create proprietary CO_2 sinks for unavoidable residual emissions or facilitate permanent and secure storage or use of the greenhouse gases (BECCUS)
- Press consistently ahead with the coal exit resolved by lawmakers
- Gradually reduce the emissions from our conventional generation capacities to zero, and
- Not build any new (CHP) power plants fired by fossil-based natural gas for the general public supply (electricity, district heating).

This way, we have supplemented the **sustainability targets, Page 58** which we set ourselves for a 10-year period in 2016 already, namely doubling our proprietary portfolio of renewable electricity generation capacity by 2026, installing 10,000 MW of generation capacity based on regenerative energies and saving one million tonnes of net CO_2 emissions a year by 2026. Thanks to investment initiatives at MVV, we met the last of these targets in the 2021 financial year already. This shows how seriously we take decarbonisation and that we have the expertise needed to actually meet our targets.

We are investing in sustainable growth

The key focus for the years ahead will be on consistent action, rather than further discussions about targets. That is why one major aspect of our strategy is a broad-based, long-term **investment programme, Page 45** that is aligned to our ambitious decarbonisation and sustainability targets. As we pursue this course, we will in future make even greater use of the opportunities arising as the energy turnaround progresses, and that both in Germany and beyond.



We offer customer-specific solutions

The wide range of solutions we offer includes suitable products and services for all customer groups. These enable us to structure the electricity turnaround, including mobility, and the heat turnaround together with our customers. Given the preliminary work performed in recent years, we believe that we are well positioned to meet the various requirements of decarbonisation. The solutions we offer to private customers include combined products comprising photovoltaics systems, storage facilities, charging points and an e-vehicle, as well as energy management solutions. We complement these products and services with proprietary installation services and heat and water products. For business customers, we are supplementing the range of e-mobility solutions we offer, such as charging infrastructure and smart charging management, by expanding the range of options we offer for electricity-based energy generation, such as contracting models for photovoltaics. As a partner to local authorities and municipal utility companies, we are developing and implementing holistic concepts for towns and cities of the future, as well as decentralised district solutions. In the past financial year, for example, we founded the joint venture "sMArt City Mannheim GmbH" together with the City of Mannheim. This is intended to promote decarbonisation and digitalisation in the municipal sector.

We are expanding our environmental energy activities

Our environmental energy activities also contribute to the common denominator of "decarbonisation". In the long term, we will add CO_2 capture facilities to our energy from waste plants and turn these into CO_2 sinks **Page 54.** At the same time, our plants are making an ever more important contribution to ensuring a reliable and sustainable supply of heat and electricity and are thus key pillars of a modern, resource-efficient circular economy. Based on analysis performed by the consultancy ecoprog, we are one of the three largest operators of energy from waste plants and biomass power plants in Germany. Furthermore, the plants we have operated in the United Kingdom for several years now, namely our energy from waste plants in Plymouth and Dundee and our biomass plant at Ridham Dock, mean that we also have an international presence in this field.

By making increasing use of organic waste fermentation and recycling phosphorous from sewage sludge, we are turning our locations into integrated resource management and energy hubs. This way, we are enhancing their future viability and competitiveness.

We are pressing further ahead with our growth initiatives in the field of waste treatment in other countries and focusing here on our technological and operating expertise. We also have plants that generate biomethane in environmentally compatible ways. This is one of the most versatile forms of green fuel and can be used to generate electricity and heat, as well as to fuel vehicles.

We are building on renewable energies

In expanding our portfolio of renewable generation plants, we are continuing to focus above all on onshore wind power and photovoltaics, also combined with battery storage facilities and based on long-term marketing contracts, known as PPAs. For existing plants, we are reviewing and implementing repowering options with higher performing turbines, and that both in our own portfolio and for third parties. Our two subsidiaries Juwi and Windwärts focus on developed markets offering potential for growth, both abroad and in Germany.

We provide our customers with a reliable supply of energy

The further expansion in renewables-based energy generation involves challenges, as the volume of electricity fed in by wind turbines and photovoltaics systems is significantly dependent on the time of day and weather conditions. We nevertheless intend to provide our customers with a secure and reliable supply of energy. The reliability, intelligence and performance capacity of our grids have a key role to play here. We are continually modernising and extending our grids to meet growing requirements. Moreover, we are drawing on our expertise as a distribution grid operator to further expand our grid services for third parties.

Alongside climate neutrality, supply reliability is also a key focus of our grid-bound heat supply. This is and will remain an indispensable component of a sustainable, forward-looking heat supply at all our locations. In large built-up areas, it is therefore set to gain further significance in competition with decentralised heat solutions. In Mannheim and the Rhine-Neckar metropolitan region, we will have converted district heating to 100 % green energy sources by 2030 at the latest. We took the first step in 2020 already by linking up our energy from waste plant to the regional district heating grid. Further steps will follow in the years ahead. We will build above all on scalable river heat pumps on the Rhine, biomass, geothermal energy, biomethane or waste industrial heat. Concepts to make the heat supply green are also being compiled at the other heat-supplying locations within the MVV Group. These are based on local conditions.

We are extending our fitness for the future

Together with innovations, an approach to **diversity management, Page 67** that is in line with the times will make MVV fit for the future. That is why we are committed to a corporate culture in which diversity is strengthened, and expertise actually lived and nurtured with groupwide training opportunities that meet current needs. We observe and repeatedly question the current status of the technologies, processes and procedures we use and which underpin our approach. In this, we take due account of the economic, ecological and political framework.

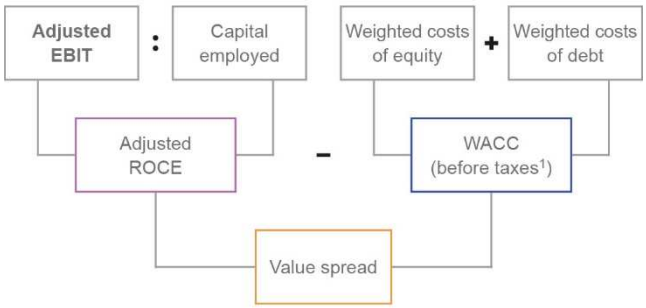
Digitalisation plays a key role in our efforts to innovate. As well as creating a modern hybrid world of work and cooperation, we make targeted use of digitalisation to continually improve our process efficiency. On an operating level, we use digital solutions in both our B2C and B2B segments. In our decentralised energy solutions and energy efficiency activities, digital solutions form the basis for monitoring, controlling and optimising customer plants. For our customers, we also offer apps that are easy to use, such as for e-mobility. 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 to minimise downtime.

We have designated our strategy the “Mannheimer Model”. Its three components combine the electricity and heat turnarounds with products and services for all customer groups to support these in meeting their own specific decarbonisation targets.

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 adjusted return on average capital employed (adjusted ROCE) is higher than the costs of capital (WACC). The most important parameter in this respect is adjusted operating earnings before interest and taxes (adjusted EBIT). We adjust this key earnings figure to 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, if applicable, restructuring expenses. We add interest income from finance leases, which is reported in financing income, to our adjusted EBIT. This income results from contracting projects and therefore forms part of our operating business.

CALCULATION OF VALUE SPREAD
(simplified presentation)

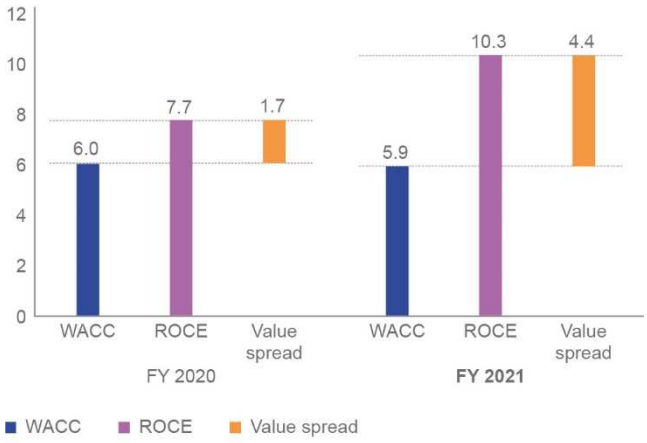


1 WACC before taxes = WACC after taxes/0.7

We reviewed the individual parameters used to calculate the WACC figure relevant to MVV for the year under report and partly updated these to account for market changes.

On this basis, we calculated equity costs after taxes of 6.3 % (previous year: 6.7 %) and debt costs after taxes of 1.2 % (previous year: 1.7 %). The capital structure of MVV's peer group amounts to 55.7 % for equity (previous year: 50.1 %) and to 44.3 % for debt (previous year: 49.9 %). The Group tax rate is unchanged at 30 % (previous year: 30 %). The WACC calculated on this basis for the 2021 financial year stands at 4.1 % after taxes (previous year: 4.2 %) and 5.9 % before taxes (previous year: 6.0 %).

KEY VALUE MANAGEMENT FIGURES
(%)



The ROCE rose from 7.7 % to 10.2 % in the 2021 financial year. One factor driving this increase was the significantly higher volume of adjusted EBIT. A further cause is the reduction in capital employed. The main reason for the lower volume of capital employed is the increase in cash and cash equivalents by Euro 843 million due to high inflows of funds for security deposits for counterparty default risk (margins). One half of this increase has been deducted for the purpose of calculating average capital employed.

Following the subtraction of WACC before taxes of 5.9 %, the increase in ROCE led the value spread to rise to 4.3 %. In the previous year, this key figure amounted to 1.7 %.

TECHNOLOGY AND INNOVATION

Innovative projects

We have set ourselves the goal of developing smart energy products and innovative solutions that meet our customers' needs. Our efforts to meet this objective are driven among other areas by our Customer Experience and Innovation department. Here, innovation managers and market researchers work on research and development projects, as well as on specific projects aimed at increasing customer satisfaction and in which colleagues from our operating business fields are also involved. Moreover, our operating units and our Digital City department 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 in accordance with IFRS **Notes to Balance Sheet (Note 14), Page 128.**

In what follows, we present some of the projects we continued to pursue or newly launched in the 2021 financial year.

Decentralised energy management system in FRANKLIN District and Spinelli

The FRANKLIN conversion space in Mannheim was one of nine cells participating in C/sells, a project which developed and demonstrated sample solutions for a digital, secure and environmentally compatible energy supply.

Starting in 2017, we simulated and tested the energy system of the future at FRANKLIN by interconnecting the sectors of electricity, heat and mobility. The energy system, which has been in the operating stage since the 2021 financial year, consists of:

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

One aim was to further develop the heat supply concept at FRANKLIN and to plan Spinelli, a CO_2-neutral district. This means that the generation of the heat, warm water and electricity used by residents should be 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 local electricity grid. Both grids will be linked to storage facilities and coupled via a district energy management system (sector coupling).

The district garage planned for Spinelli will be equipped with public charging infrastructure and integrated into the district energy management system.

Furthermore, it is planned to provide a mobility service for residents. Alongside a stationary range of e-cars and e-scooters, this should also make electronic delivery bikes available on site and bookable via an app. These vehicles too are integrated as "storage facilities" into the district energy management system.

Development of Smart City Mannheim

In December 2020, the City of Mannheim was awarded federal funding within the "Smart Cities made in Germany" programme. Here, digital solutions are to be deployed to improve the quality of life, enhance public space and make processes more "citizen-friendly" and efficient, particularly in the fields of energy, transport and resources.

MVV and Mannheimer Kommunalbeteiligungen GmbH (MKB), the holding company of the City of Mannheim, have founded a joint venture to further promote decarbonisation and digitalisation in the municipal sector.

One objective in this context is to ensure climate-neutral generation by 2027 for the electricity used at properties owned by the city, including schools and municipal undertakings. To this end, photovoltaics systems are to be installed and operated on the roofs of properties owned by the City of Mannheim and its shareholdings, as well as at suitable open-space sites.

On the other hand, Mannheim is to be developed further into a smart city. We aim to lay the foundations for this with our joint venture sMArt City Mannheim GmbH. The term "smart city" refers to a holistic, cross-sector development concept which, by using digital and interlinked applications, aims to improve the quality of life for the local population and increase resource efficiency. A smart mobility system should make it possible to combine different modes of transport effectively, for example, and thus reduce the environmental impact, time spent in queues and the hunt for parking spaces.

Smart networking at "SynergieQuartier Walldorf"

Launched on 1 July 2020, the "SynergieQuartier Walldorf" research project has the goal of optimising grid operations for additional loads resulting from decentralised electricity generators and consumers, such as photovoltaics systems, battery storage facilities, charging points and heat pumps. The three-year project is being supported by the Federal Ministry for Economic Affairs and Energy (BMWi) and carried out together with Karlsruhe Institute of Technology (KIT), the FZI Research Center for Information Technology, Stadtwerke Walldorf and our subsidiary Beegy.

From almost 60 applicants, a total of 27 private households with their own photovoltaics system and a private charging point to charge their electric cars were selected by the end of May 2021 as pilot customers for the project. These households were equipped by Stadtwerke Walldorf with smart meter gateways and Beegy's energy management system. Furthermore, they received a web portal, as well as the HERMINE charging app if they have a suitable wall box. Practical field trials to investigate the impact of the new loads and generation facilities on the distribution grid will start at the beginning of 2022. One key focus involves the grid loads that will be called up due to optimised charging processes that account for variable electricity prices. In a dialogue-based format, the pilot customers will then be able to report on their experience. This information will be fed back into the project, enabling it to better meet the needs of participants.

Hydrogen and green gases: a new market is arising

The adoption of hydrogen strategies for Europe and for Germany in 2020 gave rise to 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. The addition of up to 5 GW of electrolyser capacity for producing green hydrogen is planned for Germany by 2030; a further 5 GW will be added by 2040 at the latest. Decarbonised hydrogen will first be launched into the mobility and industry markets, with the energy industry then following suit.

The groupwide "Green Gases and Hydrogen" project was further developed as the "Hydrogen Programme" in the year under report. To this end, a core team was formed to deal with project enquiries. This team ensures joint cooperation across all units for hydrogen enquiries and safeguards the transfer of knowledge to the respective units. 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 heat supply.

EU project NUDGE: incentives for energy-efficient electric car charging

Within the EU project NUDGE, MVV is working together with nine other partners from universities, research institutes and companies to investigate the potential for non-monetary incentives to promote energy-efficient behaviour and the resultant benefits for consumers. By applying recognised methods from behavioural sciences, the project will look into which factors determine energy consumption behaviour and how behavioural changes can be triggered. To find out more, various test areas will be investigated in the next three years in Germany, Belgium, Greece, Croatia and Portugal.

For the German pilot trials, we are cooperating with our subsidiary Beegy and the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI) to promote the energy-efficient charging of electric cars in the context of the NUDGE project. In the field trials, around 100 pilot households from Mannheim and the region will gain access to a web portal that supplies information about their individual energy balance sheets. Moreover, smart charging control will be made available as a smartphone app to pilot households with charging points and electric cars. This enables the solar power which the households generate themselves with their photovoltaics systems to be put to preferential use for cost-optimised vehicle charging. The field trial has the aim of optimising energy consumption, and in particular home charging of the electric car.

The findings of the overall project are to be used as a basis for deriving suggestions to develop directives and formulate country-specific recommendations. The project has a three-year term and is being supported by the European research and innovation programme "Horizon 2020".

Progress in expanding e-mobility charging infrastructure 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. Within the "TENK Network", all our charging points are connected with further charging infrastructure in other towns in the Rhine-Neckar metropolitan region. Our own charging network is also being expanded further. By the end of 2022, it is planned to install more than 200 additional charging points. This expansion has two key focuses: On the one hand, by increasing the density of the existing alternating current (AC) infrastructure we aim to ensure that charging infrastructure is within walking distance in all districts of Mannheim. On the other hand, we are pressing ahead with expanding direct current (DC) rapid charging points. Here, we also plan to install high power charging (HPC) hubs. With high charging capacities of around 300 kW, these significantly reduce the time needed for charging processes while also making it possible to charge larger vehicle classes, such as e-trucks.

Making Mannheim's traffic smart

We are supplementing our e-mobility services with smart technologies. Most public charging points in Mannheim are now already equipped with modern parking space sensors working with long-range wireless technologies and linked up to MVV's data platform. These sensors can detect whether charging points are occupied regardless of whether a vehicle is actually connected to the point with a cable or the space is otherwise occupied. This makes it possible to drive directly to the infrastructure and lowers the volume of traffic on the lookout for vacant charging opportunities. Moreover, the measurement of traffic flows in the Mannheim area is being tested with the assistance of sophisticated sensors. We are working closely together with the City of Mannheim for these activities as well.

Innovative hybrid project about to be implemented

At the Schmölln II windfarm in Randowtal in the Uckermark region of Brandenburg, our subsidiary Juwi is for the first time building two wind turbines with a nominal capacity of 3.6 MW each together with a battery storage facility. Juwi was awarded the contract for this project in September 2020 in the first nationwide innovation tender organised by the Federal Network Agency (BNetzA). To date, it is the only "wind+storage" project of this kind in Germany. The infrastructure on site is currently being prepared for the construction of the two wind turbines. The turbine components are due to be delivered and assembled from mid-November, which means that operations can begin in January 2022 at the latest. A lithium-ion storage facility with a capacity of almost 3 MWh will then be installed together with the relevant measurement and control technology. This will make it possible to feed the electricity generated by the turbines into the electricity grid on a more constant basis than previously, particularly in periods of low wind volumes.

Innovation processes

Company ideas management

The company ideas management programme is based in the personnel department. Our ideas management is intended to involve our employees in MVV's continuous improvement process. By organising special topic-specific campaigns, we support our corporate strategy while calling on and rewarding the creativity of our staff.

In the 2021 financial year, we completed 210 proposed improvements. The ideas implemented enabled us to save Euro 197 thousand in the first year of implementation alone. We distributed bonuses of Euro 62 thousand to the relevant employees. The multiyear benefit (over 4 years) of the proposals implemented in the year under report currently amounts to Euro 317 thousand.

Tapping the entrepreneurial potential of our employees

Responding to the restrictions caused by the coronavirus pandemic, we launched the "Ready for Take-Off" initiative. Working with new virtual formats, this enables staff to develop new business ideas, also at a distance and in teams. Not only that: A variety of impulses were triggered for innovations consistent with our corporate strategy. The aim here is to further develop our culture of innovation and prepare employees for the next round of "Take-Off", our programme for developing new business models.

Fresh impulses from new companies

We have founded MVV Startup Challenge, our external innovation process, which enables us to absorb innovative impulses and anchor these at our company via networks and in cooperation with young companies. In the first MVV Startup Challenge, held in August 2020, our subsidiary Beegy opened the race with no less than three challenges. The winner was ultimately the young company logarithmo, which submitted a proposal as to how artificial intelligence could be used to optimise the calculation of own-use and autarchy ratios, improve generation and consumption forecasts and compile a feed-in forecast for direct marketing. Its joint cooperation project with MVV began in April 2021.

Group Business Performance

- Adjusted sales increase from Euro 3.5 billion to Euro 4.1 billion
- Adjusted EBIT improves from Euro 233 million to Euro 278 million
- Ongoing high volume of investments
- Expansion in renewables-based generation

MAJOR DEVELOPMENTS AND EXECUTIVE BOARD SUMMARY

Investments in a climate-neutral future

Our goal is climate neutrality. We aim to become climate positive from 2040 onwards. In view of this, our broad-based investment programme with its long-term horizon is an indispensable component of our strategy. We have invested for many years now in further expanding renewable energies, boosting energy efficiency and developing innovative products and services. In the 2021 financial year, we invested a total of Euro 306 million.

We have made further progress on this course. We have successfully completed, pressed ahead with and newly launched projects. This way, we have laid the foundations for further sustainable and profitable growth at MVV.

We connected our energy from waste plant in Leuna to the district heating grid at Stadtwerke Merseburg, enabling that municipal utility company to cover up to 50 % of its total district heating requirements with energy from climate-neutral generation. After more than three years of construction work, we launched operations with our new energy from waste plant in the Scottish city of Dundee. This is one of the most efficient plants of its kind in Europe. A further example of a modern and sustainable circular economy is being implemented in Saxony-Anhalt: Here, we are building our second plant to ferment and generate energy from organic waste. The bio-natural gas produced at the plant will be fed into the regional gas grid.

In Mannheim and Offenbach we are investing in a new technology. Phosphorous recycling plants are due to begin operating at both locations. These plants will recover the phosphorous contained in sewage sludge and make this available for fertiliser production.

Moreover, we have taken over several wind turbines and, for the first time, photovoltaics parks as well that were developed and built by Juwi and Windwärts into our own green generation portfolio.

Success in project development business

We promote the expansion in renewable energies particularly in our project development business. In the 2021 financial year, we connected renewable energies plants with a capacity of 610 MW to the grid in Germany and especially abroad. This represents an increase of 348 MW on the previous year.

Significant increase in sales and adjusted EBIT

Adjusted sales grew to Euro 4.1 billion in the 2021 financial year (previous year: Euro 3.5 billion). This significant growth was driven above all by volume and price factors for electricity and gas.

At Euro 278 million, adjusted EBIT was also significantly higher than in the previous year (Euro 233 million). This improvement was largely due to cooler weather conditions than in the previous year, the positive development in energy market prices and the remeasurement performed on the shares held in Fernwärme Rhein-Neckar GmbH due to the full takeover and subsequent full consolidation of this company in the year under report. Our project development business at Juwi and Windwärts performed positively. Not only that: Since launching operations at the end of November 2019, our gas-fired CHP power plant in Kiel now generated earnings for the entire period under report and thus contributed to the increase in adjusted EBIT. Earnings were adversely affected, on the other hand, by lower wind volumes compared with the previous year and by provisions stated for risks due to changes in market conditions.

Pre-tax earnings (adjusted EBT) increased year-on-year by Euro 53 million to Euro 234 million. Adjusted annual net income after minority interests improved by Euro 46 million and amounted to Euro 150 million in the year under report. Adjusted earnings per share amounted to Euro 2.28 (previous year: Euro 1.57).

Executive Board summary of business performance and economic position

The environment in which we operate remains challenging in terms of conditions in the energy industry and of energy policy. Moreover, energy and procurement markets have shown increased volatility with rapid movements in prices. Despite these conditions and the restrictions resulting from the coronavirus pandemic, we can look back on a very successful year.

We exceeded our target for adjusted sales: We had expected year-on-year sales growth of between 10 % and 15 %. At Euro 4.1 billion, adjusted sales were 18 % higher than in the previous year. Adjusted EBIT, for which we twice raised our forecast during the year under report, ultimately rose by 19 % to Euro 278 million.

Our operating performance in the 2021 financial year shows that financial success and business stability can go hand in hand with climate neutrality.

COMPARISON OF EXPECTED AND ACTUAL BUSINESS PERFORMANCE AND OUTLOOK

Comparison of expected and actual business performance and outlook

	Forecast FY 2021	Results FY 2021	Outlook FY 2022
Adjusted sales	Forecast adjusted after end of first nine months of FY 2021: around 10 % to 15 % higher than previous year's level (Euro 3.5 billion)	Sales of Euro 4.1 billion (+ 18 %)	Significantly higher than previous year; subject to uncertainties due to energy market developments and further course of coronavirus pandemic
Adjusted EBIT	Forecast adjusted after end of first nine months of FY 2021: around 20 % to 25 % higher than previous year's level (Euro 233 million)	Adjusted EBIT of Euro 278 million (+ 19 %)	Moderately higher than previous year; subject to uncertainties influenced above all by developments on energy markets and 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 28.6 % (33.3 % excluding security deposits for counterparty default risk (margins))	Target > 30 %
Adjusted ROCE	At around previous year's level (7.7 %)	Adjusted ROCE of 10.2 % (8.9 % excluding security deposits for counterparty default risk (margins))	At around previous year's level (excluding security deposits for counterparty default risk (margins))
Investments	Increase on previous year (Euro 322 million)	Total investments of Euro 306 million	Significant increase on previous year
Employees	Increase in personnel totals in growth fields; further efficiency measures in existing business	Increase in personnel totals to 6,470 employees at 30 September 2021 (previous year: 6,260)	Increase in personnel totals in growth fields; further efficiency measures in existing business

BUSINESS FRAMEWORK

Energy policy developments

EU adopts stricter climate target and EU Commission presents "Fit for 55" package

In April 2021, the European Parliament and the EU Council of Ministers agreed a new, more ambitious climate target. By 2030, the EU's greenhouse gas emissions are to be cut by 55 % compared with 1990. The EU intends to achieve climate neutrality by 2050.

In July 2021, the EU Commission published its "Fit for 55" package, which contains legislative proposals setting out how the climate target should be reached by 2030. These include new emissions reduction pathways for existing European emissions trading and a proposal to establish a second emissions trading system for the transport and buildings sectors from 2026. Further components of the package include raising targets for the share of renewable energies and decarbonised fuels, as well as increasing energy efficiency across all sectors.

In the next step, the EU Commission will negotiate the final resolutions with the EU Parliament and Council of Ministers within the trialogue procedure. Were the proposals made by the EU Commission to be implemented in their present form, this would be a major support for MVV's strategy.

Germany raises climate targets

A ruling passed by the Federal Constitutional Court in spring 2021 made it necessary to adopt retrospective improvements to the German Climate Protection Act (KSG) from 2019. Lawmakers responded by amending the KSG legislation in June 2021 and raising the existing greenhouse gas reduction target to be achieved by 2030 compared with 1990 from – 55 % to – 65 %. Germany is to achieve climate neutrality by 2045. For the energy industry, these new targets and the allocation of additional savings to individual sectors will significantly increase the previously envisaged pace of decarbonisation, particularly in the years to 2030.

The new German Climate Protection Act does not yet provide for any specific measures. These will have to be specified by the country's new Federal Government.

After state elections in Baden-Württemberg: new government aims to reach climate neutrality by 2040

The outcome of the state elections in March 2021 allowed the previous coalition to continue in government. One focus of the current legislative period will be climate protection: Baden-Württemberg is to become climate neutral by 2040 already. This new climate protection target was adopted with further measures in the Baden-Württemberg Climate Protection Act in October 2021. Here, the state government is building on faster expansion in renewable energies than previously planned. At least 2 % of the surface area is to be set aside for the addition of renewable energies plants. New wind turbines are planned on forest and state land, while the expansion in photovoltaics is to be boosted with a mandatory photovoltaics requirement that already applies for new non-residential buildings and is to be extended to new housing as well. Furthermore, the coalition agreement underlines the importance of municipal heat planning as an instrument to implement a climate-friendlier heat supply. We expect the measures aimed at by the state government to create extra potential for our various project developments.

Reforms to German Renewable Energies Act

The amendment to the German Renewable Energies Act (EEG) in December 2020 included setting the binding target for Germany that 65 % of electricity consumption should be covered by renewable sources by 2030. Furthermore, it was resolved that all electricity in Germany should come from greenhouse gas-neutral generation before 2050 already. The amendments took effect as of 1 January 2021.

To enable these targets to be reached, the tender volumes for new plants through to 2030 were increased; in a minor legislative amendment adopted in spring 2021, the targets for onshore wind and photovoltaics for 2022 were increased further. Moreover, additional improvements were adopted for the conditions governing onshore wind power and photovoltaics subsidies, such as those applicable to tenant electricity. Some of these amendments are currently still subject to state aid approval by the EU Commission.

Launch of national emissions trading for heat and transport

A national CO_2 emissions trading model for the heat and transport sectors was introduced in Germany at the beginning of 2021. Since then, fossil-based greenhouse gas emissions in these sectors have been subject to a price of Euro 25 per tonne. This will gradually be raised each year. The German Fuel Emissions Trading Act (BEHG), which governs the pricing of these emissions, formed part of the Climate Package announced by the Federal Government in 2019. Part of the proceeds from national emissions trading is to be used to further reduce the EEG allocation in future. The government aims to promote the efficient use of energy and enhance the competitiveness of climate-friendly heat and mobility solutions compared with fossil-based technologies.

BGH confirms general sectoral productivity factor for gas grid operators

At the end of January 2021, the Federal Supreme Court (BGH) confirmed the stipulation of the general sectoral productivity factor for gas (Xgen) at 0.49 % in the third regulatory period. In appeal proceedings in summer 2019, the Higher Regional Court in Düsseldorf had previously repealed this factor set by the Federal Network Agency (BNetzA). The gas Xgen is important in determining the level of grid fees, and thus also earnings at grid operators. The Xgen reduces the permissible revenue cap. Its calculation is based on the assumed level of progress in grid productivity compared with the overall economy. This factor is countered by inflation.

ECJ criticises inadequate independence of regulatory authority

On 2 September 2021, the European Court of Justice (ECJ) announced its ruling in the treaty infringement proceedings filed by the EU Commission against the Federal Republic of Germany. According to the ECJ ruling, Germany infringes the independence of the regulatory authority required by EU Single Market directives. Due to the requirements of the relevant ordinances, the regulatory authority is not fully independent in setting grid access rates. Further aspects of the ruling related to specific unbundling rules that are nevertheless of minor significance for MVV Energie AG. The Federal Republic of Germany is now obliged to amend the relevant laws and ordinances and bring these in line with the respective directives. Until the requirements are implemented or amended, the existing domestic regulations will continue to apply. This ruling will have implications for the mode of operation at regulatory authorities, particularly the Federal Network Agency (BNetzA), and, further down the line, on grid operators as well. These implications are not yet foreseeable.

Expansion in climate-friendly mobility boosted

In May 2021, the Federal Parliament adopted the German Fast Charging Act and the German Act on the Further Development of the Greenhouse Gas Reduction Quota. This legislation is intended on the one hand to safeguard the expansion of 1,000 fast-charging hubs by way of tenders and on the other hand to reduce the greenhouse gas intensity of fuels. Both provisions have the potential to boost our e-mobility business models. Alongside traction current, biofuels are an important means to reduce greenhouse gases. We therefore expect to see a further rise in demand for biomethane from the transport sector.

Lawmakers pave the way for legally secure smart meter rollout

At the end of June 2021, the Federal Parliament and Federal Council adopted amendments to the German Metering Point Operation Act (MsbG) that are intended to provide legal security and planning reliability for companies implementing the further rollout of smart meter systems (iMSys). A ruling passed by the Higher Administrative Court (OVG) in Münster on 4 March 2021 had criticised a general ruling issued by the Federal Office for Information Security (BSI) and thus the establishment of the technical possibility of installing smart meter systems under the MsbG legislation. This created uncertainty in the wider industry beyond the parties involved in the legal dispute. Lawmakers have now clarified the points criticised in the MsbG legislation and taken the amendment as an opportunity to adjust the scope of tasks performed by the smart meter gateways in terms of plausibility checks, replacement value creation and data transfer in line with actual possibilities.

Federal Funding for Efficient Heating Networks (BEW) and Federal Funding for Efficient Buildings (BEG)

The German Federal Ministry for Economic Affairs and Energy (BMWi) has submitted draft legislation for Federal Funding for Efficient Heating Networks (BEW). This programme is intended to promote both the construction of new heating networks with a high share of renewable energies and the decarbonisation of existing networks. In the case of existing networks, the funding will be based on a transformation plan showing the way to a climate-neutral heat supply. Assuming that it is suitably financed, this funding programme provides opportunities for the industry to decarbonise district heating. The new Federal Government is therefore called on to develop the funding framework further and ensure a secure investment climate.

The Federal Funding for Efficient Buildings (BEG) took effect as of 1 July 2021. This pools all state funding programmes that property owners can draw on when renovating their buildings in energy terms and for new buildings. In the original version of the BEG, the criteria for funding a district heating connection were formulated very restrictively. In an amendment introduced in October 2021, these criteria have now been adjusted to the extent that connecting any existing building to any of MVV's district heating grids is now eligible for funding. As soon as a transformation plan pursuant to BEW is available for our district heating grids, a district heating connection for new and existing buildings will be deemed equivalent to a decentralised renewable heating system.

Federal Network Agency publishes equity return stipulations

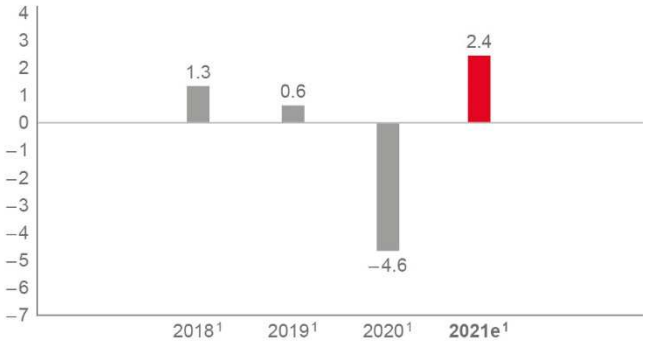
On 20 October 2021, the Federal Network Agency (BNetzA) published the stipulations for future rates of equity return for electricity and gas grid operators. In these, the BNetzA set a uniform equity return for electricity and gas grid operators amounting to 5.07 % before corporate income tax for new systems (previously 6.91 %). For existing systems, a return of 3.51 % before corporate income tax was stipulated (previously 5.12 %). The new rates of return apply from the 4th regulatory period, which begins in 2023 for gas grid operators and 2024 for electricity grid operators. From the perspective of grid operators, this level of return will threaten the performance and investment capacity of grid operators, and thus the success of the energy turnaround. In particular, the market risk premium proposed by the BNetzA is very low in comparison with other European countries.

Market climate and competition

German economy shows slight recovery

In their autumn survey, Germany's leading economic research institutes reduced their growth forecast for the German economy in the 2021 calendar year. Having still forecast GDP growth of 3.7 % in the spring, the experts now expect gross domestic product to rise by 2.4 %. In the previous year, economic output fell sharply 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 2021)

Increase in electricity generation in Germany

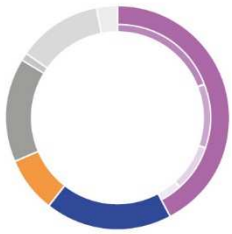
Based on current calculations compiled by the Association of the German Energy and Water Industries (BDEW), gross electricity generation volumes totalled 426 billion kWh in the first nine months of 2021 and were thus around 4 % higher than the previous year's figure (411 billion kWh).

Renewables share of German electricity generation falls to 42 %

According to BDEW estimates, the share of gross electricity generation in Germany attributable to renewable energies totalled 42 % in the first nine months of the 2021 calendar year, down from 47 % in the previous year's period. A major portion of this relative reduction is due to the higher volume of electricity consumption, which rose year-on year by around 4 % to 395 billion kWh in the first three quarters of 2021. The decrease in the renewables share was due in particular to wind-based generation. Offshore wind turbines reported a reduction of 15 %. Electricity generation volumes from onshore wind turbines were 17 % lower than in the previous year. Biomass and biogenic municipal waste generated around 1 % less electricity than one year earlier. By contrast, photovoltaics systems produced around 2 % more electricity. Overall, around 177 billion kWh of electricity was generated from renewable energies.

GROSS ELECTRICITY GENERATION IN GERMANY
Shares (%)

	2021[1]
Electricity from renewable energies	42
Wind power	19
Photovoltaics	11
Biomass, including biogenic municipal waste	8
Water	4
Lignite	18
Hard coal	9
Natural gas	15
Petroleum products	1
Nuclear energy	12
Other	3



1 January to September 2021

Wind power expansion remains at low level

In January 2021, the German Wind Energy Association (BWE) published its "Wind Energy Fact Sheet Germany" for the 2020 calendar year. Overall, gross wind power capacity totalling 1,650 MW, of which 1,431 MW onshore, was newly installed in Germany. Total installed wind power capacities amounted to 62,708 MW, which was around 2 % higher than the previous year's figure.

Gross onshore wind power capacity totalling 971 MW was added in Germany in the 1st half of the 2021 calendar year. This figure therefore still remained low compared with the record years between 2014 and 2017. The gross volume of wind power capacity newly added was nevertheless 62 % higher than in the first six months of the previous year. For the first time in more than ten years, no offshore wind capacity was newly added in Germany. At 63,542 MW, total installed wind power capacities were around 2 % higher than the previous year's figure.

Rising requirements in market climate and climate protection confirm our strategic alignment

The EU has adopted more ambitious climate targets for 2030 and resolved to achieve climate neutrality by 2050. Germany has adopted a stricter emissions target for 2030 and committed to becoming climate neutral by 2045. Current studies show that these goals are achievable if countries act quickly and lay the right foundations in the years ahead.

In its energy system analysis published in 2021, the Fraunhofer Cluster of Excellence Integrated Energy Systems (CINES) recommends a series of measures to reach the targets: a balance between not stipulating which technologies should be used and relevant requirements, promoting sector coupling by reducing the energy price components attributable to state levies, rapidly accelerating the expansion of wind and solar power, promoting the heat turnaround, subsidising investments in CO_2-neutral production technology, extending the transport turnaround and planning reliability for expanding energy infrastructures.

The "Climate-Neutral Germany 2045" study published by Agora Energiewende in June 2021 shows that Germany can achieve climate neutrality. This will require a significant acceleration in the use of climate-friendly technologies. Examples cited are the hydrogen economy, renewable energies expansion, transport and agriculture turnarounds, as well as the use of CO_2 capturing and removal of CO_2 from the atmosphere. With net negative emissions, Ger many can even make an additional contribution to international climate protection in the period from 2045 onwards.

The new lead study "The Road to Climate Neutrality" published by the German Energy Agency (dena) at the beginning of October 2021 also concludes that CO_2 capturing will be necessary in future. By reference to a central "climate neutrality 100" scenario, this study shows how sector targets can be reached in 2030 and climate neutrality achieved by 2045. The study makes it clear that this will require extreme efforts. Decarbonisation is based here on four pillars: a high level of ambition for energy efficiency, comprehensive direct use of renewable energies, widespread deployment of renewable fuels in gaseous and liquid forms and accessing natural and technical CO_2 sinks. Even if they are all implemented, these measures to reduce greenhouse gases will not be enough without using natural CO_2 sinks and deploying CO_2 capturing plants and active CO_2 withdrawal. Only this way will it be possible to offset unavoidable process and residual emissions, such as those arising in agriculture.

District heating represents a fast and comparatively inexpensive option when it comes to decarbonising the heat supply in urban areas. The Fraunhofer Institute for Energy Economics and Energy System Technology published a detailed analysis of the heat turnaround in July 2021. The "Transformation Pathways for District Heating in Liaison with the Energy System and Necessary Conditions" study looks into the specific potential and challenges involved in decarbonising district heating in Germany. Technologies such as heat pumps, waste heat, geothermal energy and energy from waste can act as the core of decarbonisation. However, this will require effective subsidy incentives.

Our strategic alignment means that we will benefit from the implementation of climate targets in the long term: in our energy generation from renewable energies, our project development and operations management for renewable energies plants and our marketing of the energy produced, our decentralised energy and heat supply and our energy efficiency solutions and service offerings.

Wholesale prices for fuels, emission rights and electricity show significant upward trend

Wholesale prices (average) from 1 October to 30 September

	FY 2021	FY 2020	+/– change	% change
Crude oil [1] (US$/barrel)	62.20	47.52	+ 14.68	+ 31
Natural gas [2] (Euro/MWh)	21.56	14.77	+ 6.79	+ 46
Coal [3] (US$/tonne)	79.52	59.75	+ 19.77	+ 33
CO_2 rights [4] (Euro/tonne)	43.52	24.45	+ 19.07	+ 78
Electricity [5] (Euro/MWh)	61.62	41.65	+ 19.97	+ 48

1 Brent crude oil; front-month

2 NetConnect 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$ 62.20 per barrel in the period under report and were thus US$ 14.68 higher than in the previous year's period. Due to the renewed rise in coronavirus cases in autumn 2020, the crude oil price – as the clearest indicator of global economic developments within the energy complex – initially fell sharply in October 2020. This was followed by significant price growth from November, which took the oil price to its highest level since autumn 2018. Overall, by the end of the 2021 financial year the oil price had risen by more than 100 % compared with its low at the end of October 2020.

Coal prices also rose significantly in the past financial year, almost trebling in value by the end of the year compared with their low at the beginning of November 2020. On average, listed front-year prices for hard coal in the ARA region (Amsterdam, Rotterdam, Antwerp) were 33 % higher in the period under report than in the previous year. Despite this substantial rise, the relative price increase in the coal market fell short of the other energy markets.

Average natural gas price listings for the front-year product in the NetConnect Germany (NCG) market region came to Euro 21.56/MWh in the period under report, Euro 6.79/MWh higher than in the previous year. Gas prices were affected not only by the economic recovery, but also by increased demand for gas due to cooler weather conditions compared with the winters in previous years. The heating period was exceptionally long, lasting into what was one of the three coldest months of May in the past 30 years. As a result, stocks available in gas storage facilities fell to comparatively low levels. In this respect, the increase in demand for gas was exacerbated by a tense global market with higher price settings in Asia. In summer 2021, front-year gas prices ultimately topped the peak price dating back to 2018 and thus exceeded a seven-year high. Most recently, reduced gas imports created a tense outlook for the winter ahead. The sharp increase corresponds to a quadrupling in gas prices over the financial year.

Alongside the gas market, the market for CO_2 emission rights (EUA) showed the sharpest rise in prices within the energy complex for large stretches of the financial year. Average prices in the period under report were 78 % higher than in the previous year, with numerous new price records set from December 2020 onwards. As well as the corresponding upward trend on financial markets, one key driver of this price increase of up to 171 % (October minimum to September maximum) was the expectation that emissions trading would be reformed in connection with more ambitious EU climate targets.

Prices of base load electricity for supply in the following year averaged Euro 61.62/MWh in the year under report and thus rose by Euro 19.97/MWh compared with the previous year. Alongside developments on the emissions market and in fuel prices, key drivers of this price increase in the electricity market also included the significantly lower volume of electricity generated by wind turbines, particularly in winter 2020/21 and in the months of June and September 2021.

On average for the 2021 financial year, the margins achieved from generating electricity from coal and gas – the clean dark spread (CDS) and the clean spark spread (CSS) – fell compared with the previous year. More specifically, however, the final quarter of the financial year witnessed sharply opposing movements in the CSS and CDS in conjunction with the fuel-driven rally in energy prices. While the CSS fell sharply, reaching its lowest level for several years at the end of the financial year, the CDS showed a marked increase.

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 2022

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 non-recyclable waste and refuse-derived fuels for incineration in the 2021 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 around 4,000 MW under contract in Germany. According to Energie & Management, the energy market journal, this makes us Germany's largest direct marketer.
- 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 6.2 billion kWh in Germany. According to the report compiled by the AGFW industry association, this makes us Germany's third-largest provider of district heating. Including industrial steam, we are even the second-largest provider in Germany.
- 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

Relatively cool weather conditions

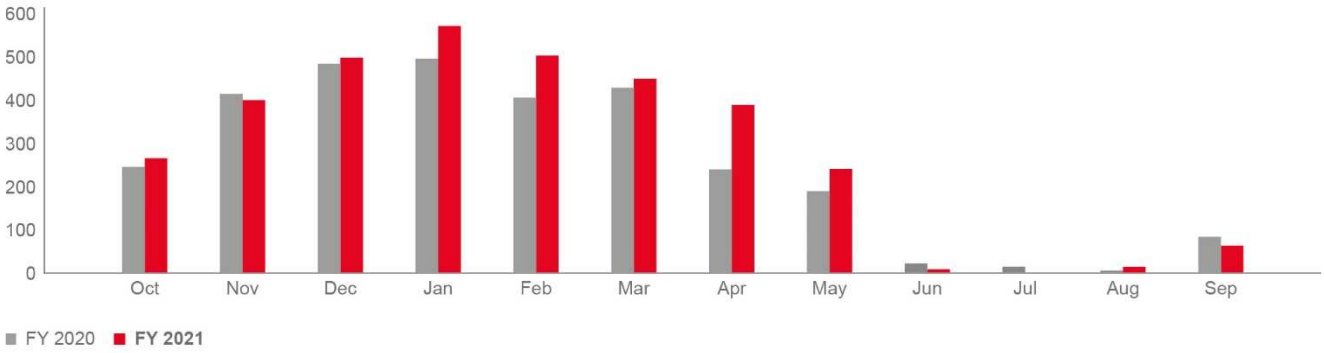
Lower outdoor temperatures lead to higher heat requirements at our customers. That is also reflected in higher degree day figures, which are used as an indicator of temperature-based heat consumption. The weather was relatively cool in the year under report. Overall, degree day figures were around 12 % higher than the previous year's figures, which had nevertheless been low.

Lower wind volumes than in previous year

By analogy with our customers' heat requirements, electri city generation volumes at our renewable energies plants are also influenced by weather conditions. Wind volumes, on which the amount of electricity generated by our wind turbines significantly depends, are particularly significant in this respect.

In the regions relevant to us, the volume of usable wind power in the 2021 financial year was around 4 % lower overall than the long-term average. Wind volumes fell short of the previous year's high figure, which over the same period exceeded the long-term average by around 11 %. 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 2021 financial year, which started on 1 October 2020 and ended on 30 September 2021. 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.

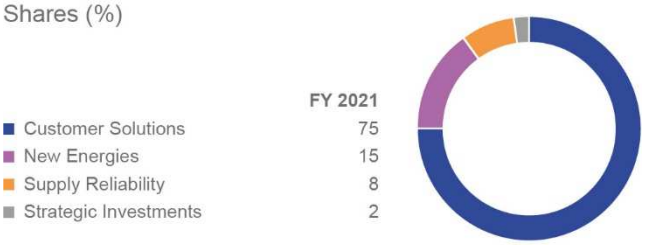
MVV from 1 October to 30 September

Euro million	**FY 2021**	FY 2020	+/– change	% change
Development in turnover				
Electricity (kWh million)	24,380	20,147	+ 4,233	+ 21
Heat (kWh million)	6,940	6,249	+ 691	+ 11
Gas (kWh million)	27,094	24,974	+ 2,120	+ 8
Water (m³ million)	40.3	41.4	– 1.1	– 3
Usable residual waste delivered (tonnes 000s)	2,432	2,388	+ 44	+ 2
Adjusted sales excluding energy taxes	4,131	3,515	+ 616	+ 18
of which electricity revenues	1,989	1,629	+ 360	+ 22
of which heat revenues	391	375	+ 16	+ 4
of which gas revenues	776	635	+ 141	+ 22
of which water revenues	90	89	+ 1	+ 1
Adjusted EBIT	278	233	+ 45	+ 19

In sales, we eliminate the difference between the hedge and reporting date prices as of the respective realisation date pursuant to IFRS 9. This resulted in net totals of Euro 102 million at 30 September 2021 and Euro – 83 million at 30 September 2020. Adjusted sales increased year-on-year by 18 % to Euro 4.1 billion. This means that we slightly exceeded our forecast that sales would be around 10 % to 15 % higher than the previous year's figure. This sales growth was due above all to volume and price factors for electricity and gas. Of consolidated sales in the 2021 financial year, a total of 92 % were generated in Germany (previous year: 92 %) while, as in the previous year, MVV generated 8 % of its sales abroad.

ADJUSTED SALES EXCLUDING ENERGY TAXES BY REPORTING SEGMENT

Shares (%)

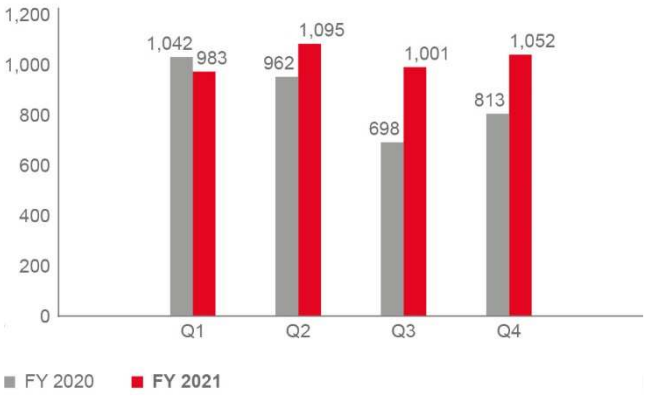


ADJUSTED SALES EXCLUDING ENERGY TAXES BY REGION

Shares (%)

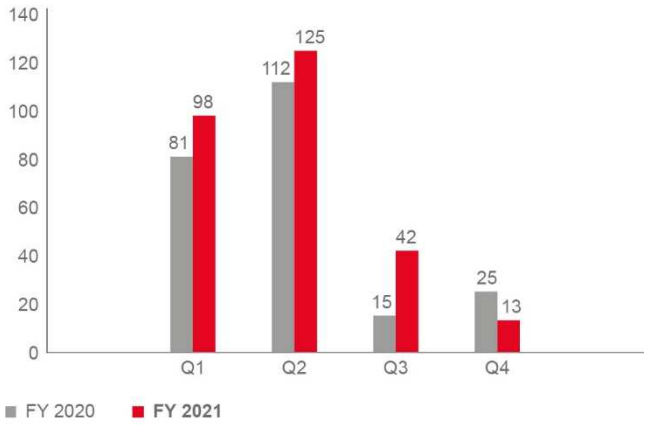
ADJUSTED SALES EXCLUDING ENERGY TAXES BY QUARTER

Euro million



At Euro 278 million, adjusted EBIT was 19 % higher than in the previous year. This improvement, which was driven by all operating reporting segments, was mainly due to cooler weather conditions compared with the previous year, positive developments in prices on energy markets and the remeasurement of the shares held in Fernwärme Rhein-Neckar GmbH due to the full takeover of this company and its subsequent full consolidation in the year under report. Furthermore, having launched operations at the end of November 2019 our gas-fired CHP plant in Kiel now generated earnings for the entire reporting period and thus contributed to the increase in adjusted EBIT. By contrast, our earnings were negatively influenced by lower wind volumes compared with the previous year and provisions for risks resulting from changes in market conditions.

ADJUSTED EBIT BY QUARTER
Euro million



Customer Solutions reporting segment

Customer solutions from 1 October to 30 September				
Euro million	**FY 2021**	FY 2020	+/– change	% change
Development in turnover				
Electricity (kWh million)	23,832	19,496	+ 4,336	+ 22
Heat (kWh million)	4,948	4,466	+ 482	+ 11
Gas (kWh million)	26,714	24,661	+ 2,053	+ 8
Wasser (m^3 million)	39.3	40.5	– 1.2	– 3
Usable residual waste delivered (tonnes 000s)	156	152	+ 4	+ 3
Adjusted sales excluding energy taxes	3,101	2,553	+ 548	+ 21
Adjusted EBIT	47	21	+ 26	>+ 100

The rise in electricity volumes chiefly resulted from higher trading volumes and our new customer business. Largely as a result of cooler weather conditions, our heat turnover was above the previous year's figure. The higher volume of gas turnover was also mainly due to increased trading volumes; gas turnover additionally benefited from the cooler weather and the build-up in volumes, as well as from the new customer business.

The sales growth was driven by higher electricity and gas trading volumes, as well as by a weather-related rise in acceptance volumes and our new customer business.

The increase in adjusted EBIT was due above all to the cooler weather conditions and the remeasurement of the shares held in Fernwärme Rhein-Neckar GmbH resulting from the full takeover and subsequent full consolidation of this company in the year under report.

New Energies reporting segment

New Energies from 1 October to 30 September

Euro million	**FY 2021**	FY 2020	+/– change	% change
Development in turnover				
Electricity (kWh million)	350	469	– 119	– 25
Heat (kWh million)	1,271	1,115	+ 156	+ 14
Gas (kWh million)	258	211	+ 47	+ 22
Usable residual waste delivered (tonnes 000s)	2,152	2,126	+ 26	+ 1
Adjusted sales excluding energy taxes	622	591	+ 31	+ 5
Adjusted EBIT	120	113	+ 7	+ 6

The reduction in electricity turnover and increase in heat volumes resulted, among other factors, from the connection in 2020 of our energy from waste plants in Mannheim and Leuna to their regional heat grids. This led to both plants generating less electricity to enable them to increase their district heating production. Moreover, lower wind volumes meant that our wind turbines generated less electricity than in the previous year. The increase in gas turnover was due above all to improved availability at our plants.

The sales growth was primarily driven by our project development business.

Adjusted EBIT benefited in the year under report from the development in prices on the energy markets and the positive performance of our project development business. Earnings were adversely affected by factors including the lower volume of wind compared with the previous year.

Supply Reliability reporting segment

Supply Reliability from 1 October to 30 September

Euro million	**FY 2021**	FY 2020	+/– change	% change
Adjusted sales excluding energy taxes	310	278	+ 32	+ 12
Adjusted EBIT	78	67	+ 11	+ 16

The growth in sales was attributable to the launch of operations at our gas-fired CHP plant in Kiel, as well as to price and volume effects for grid fees.

Year on year, adjusted EBIT benefited in particular from the launch of operations at the gas-fired CHP plant in Kiel, which was available for the first full heating period in 2021. This factor was countered by lower revenues from the non-regulated divisions.

Strategic Investments reporting segment

Strategic Investments from 1 October to 30 September

Euro million	**FY 2021**	FY 2020	+/– change	% change
Development in turnover				
Electricity (kWh million)	198	182	+ 16	+ 9
Heat (kWh million)	721	668	+ 53	+ 8
Gas (kWh million)	122	102	+ 20	+ 20
Water (m^3 million)	1.0	0.9	0.1	+ 11
Usable residual waste delivered (tonnes 000s)	124	110	+ 14	+ 13
Adjusted sales excluding energy taxes	97	91	+ 6	+ 7
Adjusted EBIT	22	24	– 2	– 8

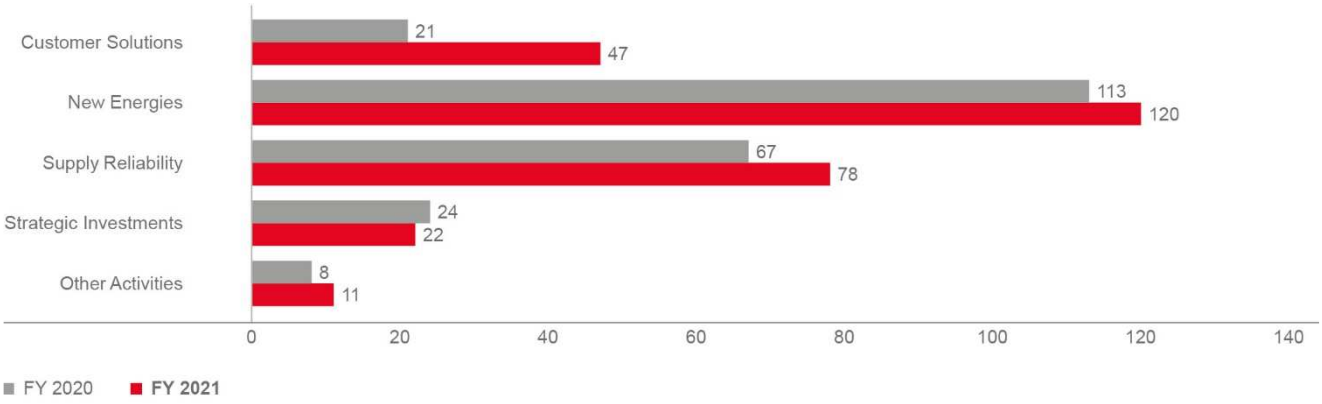
The increase in electricity turnover was due among other factors to the new customer business, while heat and gas turnover benefited from cooler weather conditions. The development in turnover is also reflected in the sales performance. Adjusted EBIT was at around the previous year's level.

Other Activities reporting segment

Other Activities from 1 October to 30 September				
Euro million	**FY 2021**	FY 2020	+/– change	% change
Adjusted sales excluding energy taxes	1	2	– 1	– 50
Adjusted EBIT	11	8	+ 3	+ 38

The main reasons for the increase in adjusted EBIT were one-off items in other operating income and cost savings.

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 2021 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 2021**	FY 2020	+/– change
EBIT as reported in income statement	530	209	+ 321
Financial derivative measurement items	– 256	20	– 276
Structural adjustment for part-time early retirement	<1	<1	0
Interest income from finance leases	4	4	0
Adjusted EBIT	**278**	**233**	**+ 45**

For our value-based management, we refer to adjusted EBIT and calculate this key operating earnings figure by chiefly adjusting our operating earnings before interest and taxes to eliminate 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 net totals of Euro 256 million at 30 September 2021 and of Euro – 20 million at 30 September 2020. The 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

In cost of materials, we eliminate the difference between the hedge and reporting date prices pursuant to IFRS 9. Adjusted cost of materials rose by Euro 566 million to Euro 3,148 million. Above all, this increase reflects volume and price factors for electricity and gas, as well as the expenses incurred to build a data centre in Offenbach. Moreover, the cost of materials also increased in our project development business.

At Euro 487 million, adjusted employee benefit expenses were Euro 31 million higher than in the previous year. The main reasons for this were the increase in the number of staff in our growth fields, one-off payments and collectively agreed items.

Within other operating income, IFRS 9 measurement items amounted to Euro 1,224 million (previous year: Euro 111 million). Adjusted to exclude these items, the development in other operating income **Notes to Income Statement (Note 4), Page 125** was affected by factors including the refund of energy taxes in the year under report. Overall, adjusted other operating income increased year-on-year by Euro 14 million to Euro 110 million.

Within other operating expenses, IFRS 9 measurement items amounted to Euro 899 million (previous year: Euro 123 million). Adjusted to exclude these measurement items, other operating expenses **Notes to Income Statement (Note 7), Page 126** rose by Euro 36 million to Euro 204 million. Key reasons for this development included expenses for energy taxes and advisory services.

IFRS 9 measurement items are included in the **Income Statement** **Page 109** under other operating income and other operating expenses. Their net balance resulted in a positive item of Euro 325 million in the 2021 financial year, as against a negative measurement item of Euro 12 million in the previous year.

The increase of Euro 15 million in income from companies recognised at equity was chiefly due to the remeasurement of the shares in Fernwärme Rhein-Neckar GmbH given the subsequent full consolidation of this company, as well as to the retirement of Naunhofer Transport GmbH.

Depreciation and amortisation **Notes to Income Statement (Note 9), Page 126** decreased by Euro 3 million to Euro 204 million. This reduction was attributable above all to goodwill write-downs recognised in the previous year. This factor was countered by investments in and the launch of operations with property, plant and equipment in the period under report.

Chiefly as a result of foreign-currency financing measures, the adjusted financial result improved by Euro 8 million to Euro – 44 million.

Net of the adjusted financial result, the adjusted EBIT of Euro 234 million in the 2021 financial year was higher than the previous year's figure (Euro 181 million). Adjusted taxes on income came to Euro 58 million (previous year: Euro 54 million). Accounting for deferred tax income resulting from the remeasurement of tax loss carryovers, tax-exempt income from write-ups of shareholdings and tax-exempt disposal gains and dividend income, adjusted income tax expenses only rose to an immaterial extent.

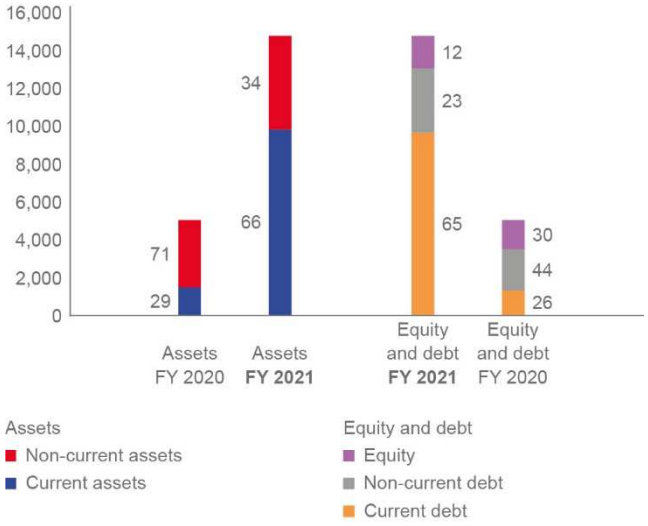
Adjusted annual net income rose by Euro 49 million and amounted to Euro 177 million for the year under report.

Adjusted minority interests came to Euro 27 million and were thus Euro 3 million higher than in the previous year. Adjusted annual net income after minority interests rose to Euro 150 million (previous year: Euro 104 million). Calculated on this basis, adjusted earnings per share amounted to Euro 2.28 (previous year: Euro 1.57). The number of shares was unchanged at 65.9 million.

PRESENTATION OF ASSET POSITION

Balance sheet structure			
Euro 000s	**30 Sep 2021**	30 Sep 2020	% change
Assets			
Non-current assets	4,968,905	3,564,401	+ 39
Current assets	9,840,753	1,466,921	>+ 100
Total assets	**14,809,658**	**5,031,322**	**>+ 100**
Equity and debt			
Equity	1,758,624	1,534,300	+ 15
Non-current debt	3,373,131	2,191,933	+ 54
Current debt	9,677,903	1,305,089	>+ 100
Total equity and debt	**14,809,658**	**5,031,322**	**>+ 100**

BALANCE SHEET STRUCTURE
Euro million, shares (%)



Balance sheet development

Total assets amounted to Euro 14,810 million at the balance sheet date and were thus Euro 9,778 million higher than at 30 September 2020 **Balance Sheet, Page 110.**

Non-current assets increased by Euro 1,405 million to Euro 4,969 million. Property, plant and equipment rose by Euro 161 million to Euro 2,888 million, a development chiefly due to investments in our grids, the addition of Fernwärme Rhein-Neckar GmbH and the construction of windfarms, energy from waste and biogas plants. Further changes related above all to non-current other receivables and assets **Notes to Balance Sheet (Note 22), Page 137.** This line item increased by Euro 1,158 million to Euro 1,260 million, which was predominantly attributable to the year-on-year rise in the value of derivative financial instruments. This in turn was particularly due to the greater changes in market prices and resultant increase in the fair values of energy trading transactions recognised under IFRS 9. This item stood at Euro 1,240 million at the balance sheet date (30 September 2020: Euro 81 million). The increase in deferred tax assets by Euro 74 million to Euro 103 million was primarily due to the change in negative fair values pursuant to IFRS 9.

Current assets rose by Euro 8,374 million to Euro 9,841 million. On the one hand, current other receivables and assets **Notes to Balance Sheet (Note 22), Page 137** grew by Euro 7,402 million to Euro 7,966 million, a development chiefly due to more marked changes in market prices and the resultant rise in the positive fair values of energy trading transactions recognised under IFRS 9. This item stood at Euro 7,757 million at the balance sheet date (30 September 2020: Euro 367 million). Moreover, the development in current other receivables and assets was also influenced by higher contract assets in our project development business and lower receivables for security deposits for counterparty default risk (margins). In addition, mainly due to higher price levels on energy markets and the expansion in our electricity and gas trading business current other trade receivables **Notes to Balance Sheet (Note 24), Page 139** rose by Euro 43 million to Euro 376 million. Cash and cash equivalents **Notes to Balance Sheet (Note 26), Page 139** increased to Euro 1,258 million, up Euro 915 million on the previous year's balance sheet date. This increase was chiefly due to the high inflows of funds for security deposits for counterparty default risk (margins), which amounted to Euro 843 million in the period under report (previous year: outflow of Euro 8 million), as well as to net new borrowing to finance major projects currently underway. These factors were opposed by payments made for investments in our current major projects, as well as by payment of the dividend for the 2020 financial year.

Our equity including non-controlling interests amounted to Euro 1,759 million at the balance sheet date and was thus Euro 224 million higher than in the previous year **Notes to Balance Sheet (Note 27), Page 140.**

Non-current debt increased to Euro 3,373 million, up by Euro 1,181 million compared with the previous year's balance sheet date. Within this item, non-current other liabilities **Notes to Balance Sheet (Note 31), Page 147** rose by Euro 997 million to Euro 1,287 million. This increase was primarily due to more marked changes in market prices and the resultant rise in the negative fair values of energy trading transactions recognised under IFRS 9. This item amounted to Euro 1,125 million at the balance sheet date (30 September 2020: Euro 129 million). The increase in deferred tax liabilities by Euro 134 million to Euro 274 million was due above all to the change in the positive fair values of derivatives recognised under IFRS 9.

Current debt increased by Euro 8,373 million and amounted to Euro 9,678 million in total. This development was notably influenced by current other liabilities **Notes to Balance Sheet (Note 31), Page 147,** which rose by Euro 8,156 million to Euro 8,805 million. This increase was chiefly due to significant movements in market prices and the resultant rise in fair values of energy trading transactions recognised under IFRS 9. This item amounted to Euro 7,733 million (30 September 2020: Euro 369 million). Furthermore, the development in current liabilities was also influenced by the high inflows of funds for security deposits for counterparty default risk (margins) in the period under report. As a result, liabilities for security deposits for counterparty default risk (margins) increased by Euro 822 million. Due above all to a higher volume of services not yet invoiced, current other provisions **Notes to Balance Sheet (Note 28), Page 141** rose by Euro 46 million to Euro 174 million. The main reason for this increase was the provision of CO_2 rights for the power plant Grosskraftwerk Mannheim due to the sharp rise in prices in the 2021 financial year. This increase was countered by factors which included a lower volume of warranty provisions. The rise in trade payables **Notes to Balance Sheet (Note 32), Page 149** by Euro 46 million to Euro 383 million largely reflected higher price levels on the energy markets and the growth in our electricity and gas trading business.

For Group management purposes, we adjust our consolidated balance sheet at 30 September 2021 to eliminate cumulative IFRS 9 measurement items. On the asset side, we eliminate positive fair values of derivatives, which amounted to Euro 8,994 million (30 September 2020: Euro 450 million). On the equity and debt side, we eliminate negative fair values and allocable deferred taxes, which stood at Euro 8,897 million, from liabilities (30 September 2020: Euro 486 million). Within equity, we then eliminate the net balance of Euro 97 million (30 September 2020: Euro – 36 million). This resulted in adjusted equity of Euro 1,662 million at 30 September 2021 (30 September 2020: Euro 1,571 million). As a percentage of adjusted total assets of Euro 5,815 million (30 September 2020: Euro 4,582 million), the adjusted equity ratio came to 28.6 % at 30 September 2021, compared with 34.3 % at 30 September 2020. This reduction is due above all to the substantial growth in total assets due to the unusually high inflows of security deposits for counterparty default risk (margins). Excluding these margins, the adjusted equity ratio would amount to 33.3 % at 30 September 2021 (30 September 2020: 34.3 %).

Investments

We invested a total of Euro 306 million in the 2021 financial year (previous year: Euro 322 million).

Investments from 1 October to 30 September

Euro million	FY 2021	FY 2020	+/– change	% change
Customer Solutions	34	39	– 5	– 13
New Energies	124	104	+ 20	+ 19
Supply Reliability	125	149	– 24	– 16
Strategic Investments	8	19	– 11	– 58
Other Activities	15	11	+ 4	+ 36
Total	**306**	**322**	**– 16**	**– 5**

INVESTMENTS
Shares (%)

Our largest investment projects included:

- Plants to generate green heat and backup capacities in district heating business
- Taking over several photovoltaics systems and wind turbines developed by Juwi and Windwärts, some of which still under construction, into our proprietary portfolio
- A new plant technology to produce phosphorous from sewage sludge
- Building a new energy from waste plant in Dundee/ Scotland
- Financial assets, mainly for the acquisition of share-holdings
- Building an organic waste fermentation plant in Bernburg
- Maintaining and renewing our distribution grids
- Expanding and increasing the density of our district heating grids.

PRESENTATION OF FINANCIAL POSITION

Current and non-current financial debt increased by Euro 169 million to Euro 1,886 million. New loans taken up to finance investments and working capital were countered by repayments of existing loans. At the same time, cash and cash equivalents rose by Euro 915 million to Euro 1,258 million, a development due above all to high inflows of security deposits for counterparty default risk (margins), which amounted to Euro 843 million (previous year: outflow of Euro 8 million). Mainly for this reason, net financial debt (current and non-current financial debt less cash and cash equivalents) fell by Euro 746 million to Euro 628 million.

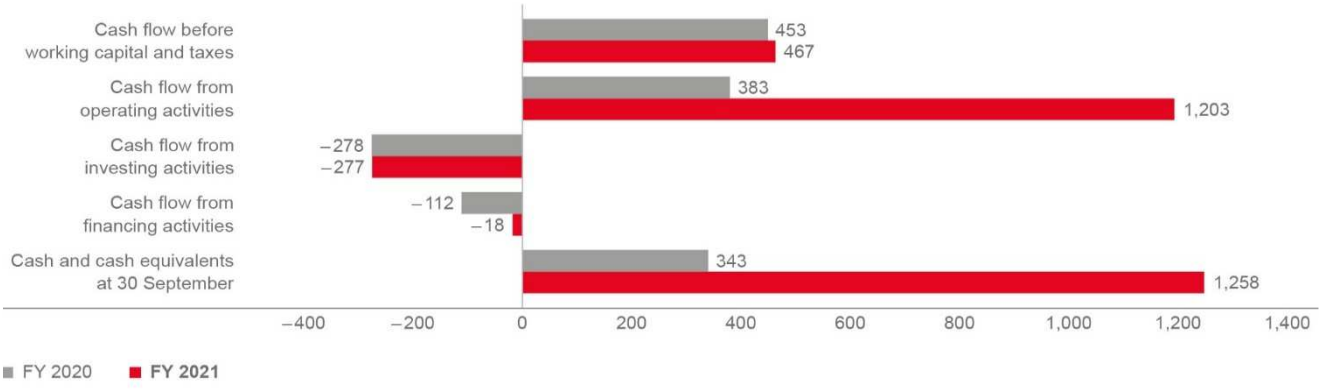
After the elimination of non-cash income and expenses, the improvement in earnings before taxes (EBT) compared with the previous year led the cash flow before working capital and taxes to improve by Euro 14 million. The largest item in this elimination related to non-cash IFRS 9 measurement.

This positive development is significantly amplified in the cash flow from operating activities, which improved year-on-year by Euro 820 million. This exceptional development was due above all to the high inflow of security deposits for counterparty default risk (margins), which amounted to Euro 843 million (previous year: outflow of Euro 8 million). From an operating perspective, the cash flow was positively influenced compared with the previous year above all by the elimination of the significantly higher volume of provisions recognised. The greatest impact was attributable to the provision of CO_2 rights for the power plant Grosskraftwerk Mannheim, as prices rose sharply in the 2021 financial year, and to provisions for risks resulting from changes in market conditions. These factors were mainly countered by a greater increase in receivables due to higher price levels and the expansion in our electricity and gas trading business. The cash flow was also reduced by changes in VAT liabilities; these mainly resulted from pandemic-related deferments in VAT payments due in the 2020 calendar year. By contrast, no deferments were granted for the VAT due for payment in the 2021 financial year.

The development in the cash flow from investing activities was mainly shaped by a lower volume of payments for other financial assets. As well as a lower volume of payments for finance lease projects, the volume of capital increases at joint ventures recognised using the equity method was also lower in the 2021 financial year. An opposing and thus negative effect resulted above all from divestments, which were lower in the period under report than in the previous year. Payments for the acquisition of fully consolidated companies and other business units remained at around the previous year's level. In the 2021 financial year, these related to the acquisition of the remaining shares in Fernwärme Rhein-Neckar GmbH and in Zschau GmbH, as well as to the acquisition of assets and takeover of staff at IRK DCI GmbH in the context of an asset deal. Overall, the cash flow from investing activities was at the previous year's level.

The cash flow from financing activities increased year-on-year by Euro 94 million, a development mainly due to higher net new borrowing.

CASH FLOW STATEMENT
Euro million



REPAYMENT PROFILE
Euro million

Professional financial management

Our access to the capital markets remains as strong as ever and this means that have no difficulty in covering MVV's liquidity requirements. We benefit here from our strong creditworthiness, our diversified business portfolio and our corporate strategy, which focuses on sustainable and profitable growth. MVV has very strong liquidity resources in the form of cash funds and bank credit lines.

Our repayment profile still does not show any notable spikes.

As of the balance sheet date, MVV Energie managed a cash pool for itself and 31 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.

Credit rating

MVV is not assessed by any rating agencies. In the rating talks we hold with our core banks, however, we receive regular feedback on our creditworthiness. Based on this information, we can 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). We submit the NFD 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. For select key figures in the environmental aspects section, we additionally provide information on shareholdings recognised at equity. If, for select reporting topics, we focus on our main locations in Mannheim, Offenbach, Kiel and Wörrstadt, 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 PricewaterhouseCoopers 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 202.**

From 1 January 2023, MVV will be subject to the scope of application of the German Act on Corporate Due Diligence Obligations for the Prevention of Human Right Violations in Supply Chains (LkSG), which was adopted in summer 2021 and lays down new requirements for processes and reporting on aspects relevant to human rights. We have reviewed the statutory requirements in connection with our existing supply chain-related processes and will ensure that these are complied with at the MVV Group **Page 74.**

We are consistently working to minimise any potentially negative implications of our business activities and to make measurable contributions to the transformation in the energy supply and to protecting the climate and the environment. In connection with 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. Moreover, we will publish our Sustainability Report for the 2021 financial year on our website in the first quarter of 2022. 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 have in customary form satisfied the transparency requirements of our stakeholders and have gone beyond our statutory reporting obligations.

The contents of the NFD and our Sustainability Report are based on our materiality analysis. To perform this, we continually monitor public discussions and the positions of our stakeholders. We regularly assess whether and how these have altered the relevance of our material topics. This multistage process involves desk-based research, internal analysis and surveys of those specialist departments which have interfaces with our external stakeholder groups. In addition, in the year under report we also held workshops and interviews with select stakeholders. We review all aspects of the materiality process every three to four years, most recently in the 2021 financial year. Moreover, we also update the main characteristics and prioritisations on an annual basis. In term of its contents, the materiality analysis also accounts for global challenges and megatrends, Sustainable Development Goals, industry and technology-related trends and the expectations of our internal and external stakeholders. In this, we account for the two perspectives relevant to GRI, namely “importance to stakeholders” and “impact of our business activities”. These perspectives result in the topics that we then identify as material pursuant to GRI. Furthermore, on an internal level we also consider further topics that are of relevance to our company. In determining the GRI-based material topics, we proceed in accordance with the approach recommended by the GRI.

To identify which sustainability topics are particularly significant to us, in 2021 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 of the MVV 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; in this respect we refer to our Sustainability Report.

Business model and risk analysis

We have pursued a sustainability-driven strategy for many years now. This involves providing our customers with a supply of energy that is generated in ways that are as environmentally friendly as possible and supporting them with innovative solutions enabling them to meet their own climate protection targets. 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 23.**

Within our existing risk management system, we record and evaluate all material risks associated with our business activities and business relationships **Page 98.** The review process performed on non-financial risks in the 2021 financial year concluded that there were no risks which satisfied the materiality criteria set out in § 289c (3) Nos. 3 and 4 HGB.

We are carefully monitoring the coronavirus pandemic and its implications. Its impact on our own business processes and activities is not only direct. As well as our employees, our business 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 levels, and should this be accompanied by a reduction in the momentum 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 trend of this nature to a limited extent, as our business depends to a significant extent on the political and regulatory framework. To date, however, there are no signs of this kind of development. Quite the reverse: In recent months, the European Commission and the German Federal Government have taken further steps aimed at transforming the economy and society with a view to climate neutrality. And the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), released in August 2021, also shows that accelerated implementation is required. In particular, the resources used to combat the coronavirus pandemic should also serve to speed up 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 is based on our **Corporate Strategy, Page 21**. Our strategic decarbonisation and sustainability targets **Pages 51 to 58** were adopted by the Executive Board and discussed by the Supervisory Board and are an integral component of our corporate strategy. We developed these targets further in the year under report and stepped up their timescale and contents. We are pleased that, thanks to the increased efforts made in recent years, we have already reached our target for net CO_2 savings earlier than planned.

Our sustainability management is anchored on various levels of the Group. The Executive Board bears overall strategic responsibility. The sustainability department, which is located in organisational terms in our group strategy and energy industry department, coordinates the sustainability strategy, reports to the Executive Board and relevant bodies and manages the groupwide sustainability programme. This department shares information across business fields and is also where projects and measures are planned and implemented. Moreover, sustainability management is also responsible for major aspects of MVV's stakeholder management. The specialist departments continually review, evaluate and manage MVV's performance based on sustainability indicators and medium-term targets. We evaluate investment projects by reference to sustainability criteria. The relevant measures are implemented on an operative level, also by the business fields acting under their own responsibility.

Disclosures on contents of combined non-financial declaration

Contents of combined non-financial declaration		
Aspects pursuant to § 289c 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	Energy system transformation	Climate neutrality Renewable energies and energy turnaround Supply reliability
	Environment and resources	Resource efficiency and local environmental protection Sustainable circular economy
Employee concerns	Social responsibility	Employer attractiveness
Social concerns	Social responsibility	Corporate social responsibility
Respect for human rights and combating corruption and bribery	Social responsibility	Responsibility for supply chain and human rights Compliance and respect for human rights

Environmental concerns aspect

Climate neutrality

The initial findings of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), published in August 2021, show the increased urgency of a faster and more ambitious approach to climate protection. According to the IPCC report, there is no doubt that climate change is man-made. The report underlines the need to limit the rise in global temperatures to 1.5 degrees, as the overall ecosystem otherwise risks passing irreversible tipping points. As temperatures rise, the frequency and intensity of extreme weather events will significantly increase, also in Germany. Even today, however, it will already only be possible to achieve the necessary limitation in global warming to 1.5 degrees by implementing significantly faster climate protection measures than those aimed for to date.

Politicians, economic players and society as a whole all agree that achieving climate neutrality is the global task for the decades ahead. In the EU, climate neutrality is to be achieved by 2050. In the German Climate Protection Act (KSG), the Federal Government stipulated in 2021 that Germany should become climate neutral by 2045 already. We have described the associated developments in energy policy in the chapter **Business Framework, Page 30.** MVV has accorded great importance to climate protection, decarbonisation and renewable energies for many years already.

Energy industry has a key role to play

To achieve climate neutrality, the energy industry has to reduce its direct emissions to zero. This means doing entirely without fossil fuels. The great challenges for the 2020s involve rapidly exiting from coal-based power generation and the use of heating oil, and that in parallel with the exit from nuclear energy. At the same time, it will be necessary to build or modernise the infrastructures needed to safeguard a fully climate-neutral energy supply by 2040 at the latest. This involves the accelerated expansion in renewable energies and the infrastructures needed for the generation, transport and use of climate-neutral gases. These are the technical preconditions enabling the use of fossil-based natural gas to be gradually phased out in the 2030s while simultaneously upholding supply reliability. Due to the complexity involved and the pace required, the installation of a new energy infrastructure in less than one generation also represents a challenge for society as a whole.

Like all other sectors, the energy industry will also have to reduce its indirect emissions to zero. These are emissions arising at its upstream suppliers and its end customers. In this regard, full climate neutrality will only be achieved when other economic sectors also succeed in protecting the climate. Our climate balance sheet, in which we also explain our direct and indirect CO_2 emissions in Scopes 1, 2 and 3, can be found on **Page 56.**

Going beyond climate neutrality

The German Climate Protection Act states that, by 2045, greenhouse gas emissions have to be reduced far enough for the country to achieve “net greenhouse gas neutrality”. The target hereby formulated is consistent with the terms agreed in the Paris Climate Agreement and means that all greenhouse gas emissions caused by people will have to be removed from the atmosphere in other areas to enable the climate balance sheet to reach zero and global temperatures to stabilise. Climate neutrality is the term used to summarise this process for political and communication purposes. As the 2021 IPCC Report makes clear, in the second half of the century the net balance will have to become negative, meaning that more CO_2 will have to be permanently captured than additionally emitted.

MVV will be one of the first climate-positive energy companies

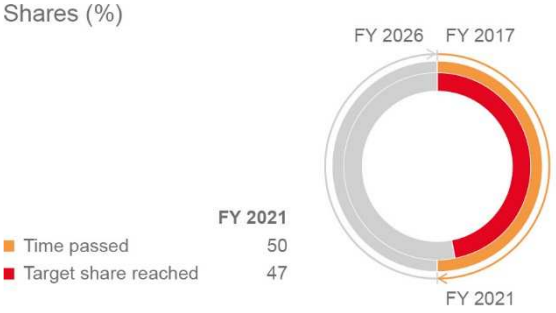
At MVV, we define climate neutrality as follows: We include all direct and indirect sources of emissions at our fully consolidated companies and the prorated share of emissions at our at-equity shareholdings. This way, we also assume responsibility for the products we sell, such as natural gas, as well as for indirect greenhouse gases at our upstream suppliers, such as those emitted in the production of wind turbines and photovoltaics systems. For MVV, climate neutral means that, on portfolio level, we will reduce our emissions by at least 95 % in absolute terms and offset potentially unavoidable residual emissions with our own permanent CO_2 sinks. We will reach this target by 2040. We will not use any offsetting certificates or projects to achieve net climate neutrality. We understand residual emissions as involving those unavoidable greenhouse gas emissions which we cannot reduce any further in technical terms by drawing on other alternatives for the same application case. Examples here are the incineration of waste or upstream emissions resulting from ground movements in agriculture. To achieve full climate neutrality here as well, we will offset these unavoidable residual emissions in the long term with our own CO_2 sinks in MVV’s portfolio or ensure permanent and secure storage of the greenhouse gases.

To meet our targets, we are investing in sustainable growth. We have aligned our investment programme, which is broad-based and has a long-term focus, to our ambitious decarbonisation and sustainability targets. In future, we will be drawing even more closely on the opportunities arising in the course of the energy turnaround. For the 10-year period from 2016 to 2026, we set ourselves the following target:

We are investing Euro 3 billion in the energy system of the future.

INVESTMENTS

Shares (%)

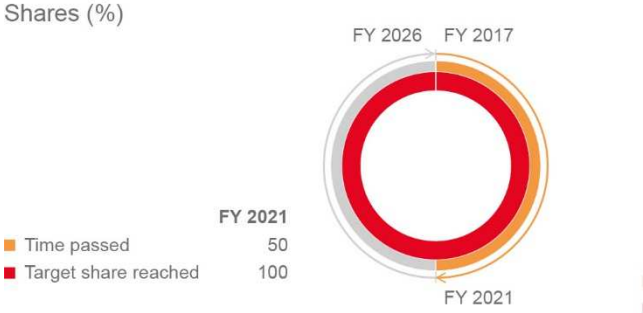


Decarbonisation target for net CO_2 savings met ahead of schedule

In 2016, we set ourselves the target of tripling our annual CO_2 savings in the overall system to 1 million tonnes a year by 2026. Thanks to investment initiatives at MVV, we met this target in the 2021 financial year already. The fact that we achieved this half-way through the timeframe originally planned shows how seriously we take decarbonisation and the extent to which we have stepped up the pace of our decarbonisation in recent years.

NET CO_2 SAVING PER YEAR

Shares (%)



Together with Öko-Institut e.V., Freiburg, we developed a method of calculating net CO_2 savings in 2013 already. This covers the emissions saved along the whole of the value chain and reflects genuine effective savings in the climate system. Here, we assess the extent to which all new strategic activities, projects and investments at our group of companies impact on greenhouse gas emissions. This involves netting all additional emissions (debit) and CO_2 reductions (savings) within and outside our reporting entity, i.e. the calculation accounts not just for electricity, but also for heat, services and efficiency measures for third parties. We record all CO_2 savings for a maximum period of ten years from the beginning of the measure. We do not include historic reduction projects or financial transactions in the calculation.

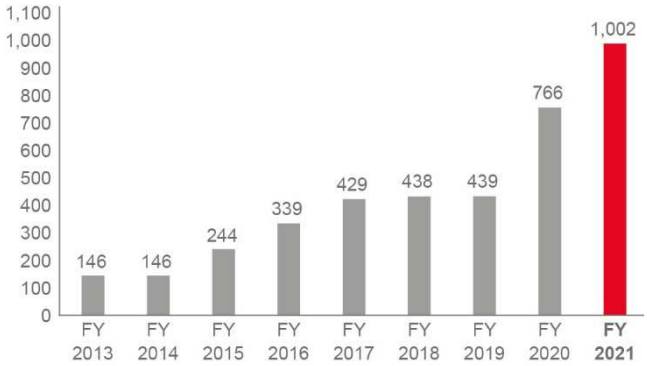
The significant rise in net CO_2 savings in the 2021 financial year was mainly due to the successful launch of operations with renewable energies plants, especially wind turbines and open-space photovoltaics systems, the connection of our energy from waste plant on Friesenheimer Insel to the district heating grid in Mannheim and further energy efficiency projects.

Further development of our decarbonisation targets

Having reached our net CO_2 savings target ahead of schedule, in the 2021 financial year we further developed our existing decarbonisation targets and reviewed them in the light of a 1.5-degree trajectory. We will step up our efforts to save CO_2 in our own energy generation (Scope 1) by 2030. The existing interim target for emissions from district heating generation has become obsolete, as it is included in our overall target for Scope 1 emissions. The target paths adopted by lawmakers in the year under report confirmed our climate protection strategy.

NET CO_2 SAVING

1,000 tonnes $CO_{2\,eq}$



When it comes to reducing our direct emissions, we are guided by the decarbonisation trajectory for the overall energy sector in Germany, and that despite our young power plant portfolio. The reduction trajectory set out in the 2021 German Climate Protection Act (KSG) represents a potential approximation to a 1.5-degree trajectory. For our company-specific CO_2 reduction targets, we have for several years now taken 2018 as our base and reference year and set milestone year-based targets to document our progress. At the same time, on a company-internal basis we are also guided by budget-based analyses even though neither the European nor the national climate legislation include cumulative emission budgets for the energy industry sector. From an analytical scientific perspective, a budget-based approach of this nature would be more precise. However, planning exact volumes for energy generation and sales volumes over such long periods would be subject to great uncertainties and therefore often unpractical.

For indirect greenhouse gas emissions (Scopes 2 and 3), existing norms do not permit the derivation of any suitable decarbonisation trajectory, not least due to the highly heterogenous structure of our international value chain. For Scopes 2 and 3, we therefore refer to the 1.5-degree decarbonisation trajectory recommended by the Science Based Target initiative for the energy industry sector.

We made intense use of the 2021 financial year to further develop our sustainability strategy and plan medium-term and long-term measures. In terms of our decarbonisation targets, we now go well beyond the decarbonisation trajectory set out in the KSG legislation: Whereas the KSG provides for a 64 % reduction in CO_2 emissions in the energy industry between 2018 and 2030 and calls for climate neutrality by 2045, we aim to be notably more ambitious in implementing climate protection and to reduce our CO_2 emissions faster than the sector. To achieve this, we are pressing ahead with the electricity turnaround and associated expansion in renewable energies, as well as supporting our customers in their own decarbonisation; above all, we are promoting the heat turnaround.

We aim to be one of the first climate-positive energy companies in Germany.

From 2040 at the latest, we will not only be climate neutral in terms of all our direct and indirect emissions sources; we will actually be climate positive. We aim to achieve this on the one hand by deploying suitable technologies to remove greenhouse gases from the atmosphere on a permanent basis. On the other hand, with our services and green products we will support our customers, whether they be private households, companies or local authorities, to become climate neutral themselves. To this end, we are further expanding our portfolio of climate-neutral products and services.

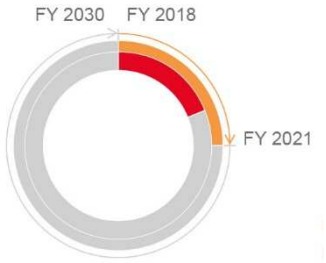
In autumn 2021, our decarbonisation targets were verified by the Science Based Target initiative as being compatible with the 1.5-degree trajectory. These targets form the basis for our strategic group planning, which we operationalise within the company with further detailed and interim targets. Our corporate strategy is specified in greater detail on a decentralised basis by our business fields, which take due account of local conditions. On group level, the investments made by all business fields are assessed in terms of their contribution to climate neutrality.

In what follows, we present our targets, areas of action and activities:

By 2030, we will reduce our energy industry Scope 1 emissions by more than 80 % compared with 2018.

REDUCTION IN ENERGY INDUSTRY CO_2 (SCOPE 1)

Shares (%)



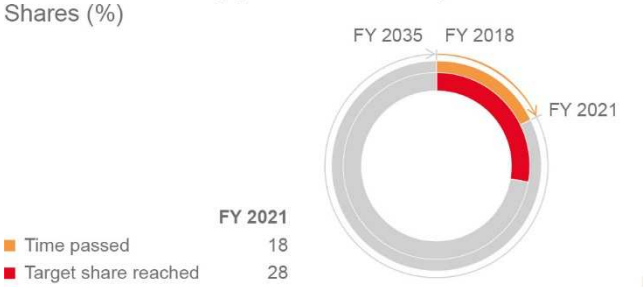
	FY 2021
Time passed	25
Target share reached	19

This corresponds to emissions of less than 0.5 million tonnes in 2030 (Scope 1). Key decarbonisation measures for direct emissions (Scope 1) are:

- We will maintain a high pace of expansion for renewable energies to generate electricity and green heat with the aim of offering our customers a fully climate-neutral, failsafe and affordable energy supply.
- We will convert our district heating supply for Mannheim and the region to 100 % green energy sources by 2030 at the latest.
- We will consistently press ahead with the coal exit decided by lawmakers.
- We are reducing the use of fossil-based natural gas at existing plants by adding renewable energies and using green gases.
- We will not build any new (CHP) power plants fired by fossil-based natural gas for the general public supply, i.e. electricity and district heating.

By 2035, we will reduce indirect greenhouse gases (Scopes 2 and 3) by more than 80 % compared with 2018.

REDUCTION IN CO_2 (SCOPES 2 AND 3)
Shares (%)



This corresponds to emissions of less than 1.5 million tonnes (Scope 3) by 2035. Key decarbonisation measures for indirect emissions (Scopes 2 and 3) are:

- We support our customers in achieving their own climate neutrality by promoting the procurement and supply of green energy and offering services and solutions for their own energy turnarounds and energy efficiency.
- We are gradually making our products and services 100 % climate neutral. When it comes to supplying green energy to our customers, we are already able to offer all necessary products and services.
- In our procurement of goods and services right through to power plants, we ensure that our suppliers aim for ambitious reductions in their CO_2 footprints.
- We are enhancing our own energy efficiency and using green energies in our own buildings and to operate our grids.

Handling unavoidable residual emissions
In our climate balance sheet, we have reported the waste-related emissions at our power plants fired by waste and refuse-derived fuels as a separate line item for many years now. As a basic public service, waste incineration forms part of the disposal mandate for non-recyclable municipal and commercial waste. Due to the general ban on landfilling in Germany, there is a statutory obligation to incinerate untreated municipal waste at waste incineration plants (energy from waste plants/EfW plants).

Around half of the non-recyclable waste incinerated at energy from waste plants comprises biological components, such as organic waste, paper residues and cellulose components. Where no better technical alternatives are available for the same application, the other half of the non-recyclable waste generates unavoidable greenhouse gases. These are attributed to the products thereby incinerated and the disposal process, rather than to the energy products derived in the form of waste heat.

The energy acquired from the waste heat makes a material contribution towards protecting the climate as it reduces the use of fossil-based fuels harmful to the climate. For this reason, the law states that district heating from energy from waste plants, for example, counts as CO_2 neutral and is on a par with renewable energies when it comes to building energy assessments. Compared with other players in the sector, our energy from waste plants also have very high energy efficiency levels. The plant in Mannheim is one of the most energy-efficient plants in the world.

By adding CO_2 capture facilities and storing or using CO_2 on a long-term basis, energy from waste plants can also achieve physical climate neutrality. When biogenic emission sources are used, end-to-end concepts of this nature are referred to as Bio-Energy Carbon Capture Utilisation and Storage (BECCUS) solutions. If the CO_2 thereby captured is permanently stored, the biogenic share of emissions can be viewed as “negative emissions”. This way, energy from waste plants not only become climate neutral in the long term, they even turn climate positive, i.e. become large-scale industrial CO_2 sinks. Thanks to BECCUS, the CO_2 previously bound in the biomass is no longer returned to the atmosphere. This helps to reduce the global concentration of CO_2. The technology used to capture CO_2 is already mature, yet options for sustainable implementation are still limited by a lack of political regulation, inadequate acceptance within society, downstream value chains and economic viability. Widespread application is not expected before the 2030s.

We are closely reviewing the technical, economic and ecological feasibility of fitting our own energy from waste plants with CO_2 capture and downstream CO_2 storage paths. We will deploy this technology on a permanent basis as soon as long-term, sustainable and secure storage or long-term recirculation of the CO_2 can be ensured and the political and social framework permits its use. BECCUS will play a key role in turning MVV into a climate-positive company. We currently expect this to be the case in 2040. Should it be technically, politically and economically viable to capture and store CO_2 at an earlier date, then we will accelerate the implementation of our activities in this area.

Key decarbonisation measures for unavoidable residual emissions are:

- We are extending our own expertise in the field of BECCUS for energy from waste and biomass plants and seeking to exchange views and experience with relevant players in business and science, within society and in the political arena.
- We are planning to build a first CO_2 capture pilot plant at the Mannheim location in the medium term.
- We are pressing ahead with feasibility analyses and plans through to preparing plant technology at our energy from waste and biomass power plants with the aim of making it possible to implement BECCUS from the 2030s.
- We aim to create proprietary CO_2 sinks for unavoidable residual emissions or facilitate the permanent and secure storage/use of greenhouse gases (BECCUS).

Our main areas of success with decarbonisation in the 2021 financial year

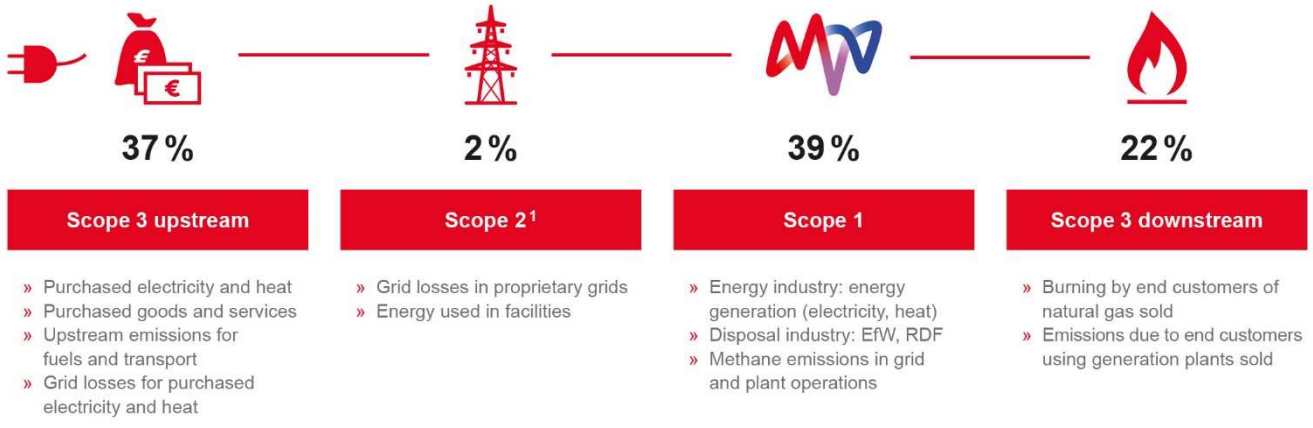
We pressed ahead once again in the 2021 financial year with numerous projects and activities that will ease our CO_2 balance sheet in the short to medium term. Examples include:

- Go-ahead for implementing further green generators in Mannheim, and in particular for river heat pump, waste heat and geothermal heat technologies.
- Extending our proprietary renewable generation portfolio by 33 MW_e.
- Extending our range of solutions: expanding advisory services, including climate protection management, planning and building photovoltaics systems and electric charging infrastructure, implementing sustainable solutions for our customers' own energy turnarounds. By drawing on a sustainable steam supply solution, for example, our customer Olam alone will reduce its CO_2 emissions by 8,100 tonnes a year.
- Converting all own-use operations at MVV Netze (grid business) to renewable energies.
- Improving the basis of data at central procurement for our CO_2 footprint for our product groups and strategic suppliers.
- Active involvement in municipal climate protection activities at our locations, such as the publication of the Integrated Energy Framework Concept Mannheim and the 2030 Climate Protection Action Plan Mannheim.

Our climate balance sheet

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

STRUCTURAL COMPOSITION OF OUR CLIMATE BALANCE SHEET



1 Market-based

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 heat, 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.

Our direct Scope 1 emissions showed a slight year-on-year increase in the 2021 financial. This was due in particular to higher heat requirements at our customers as a result of weather conditions.

Indirect CO_2 emissions, **Scope 2**, mainly result from the energy we use for our business operations outside energy generation. These emissions are only of subordinate significance at MVV and were slightly lower in the year under report than in the previous year.

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. Emission activities in downstream stages of the value chain chiefly involve the use of natural gas supplied by MVV to its customers. The annual development in Scope 3 emissions is chiefly determined by sales volumes for electricity, gas and heat, as well as by volumes in the renewable energies project development business. In the 2021 financial year, this key figure also for the first time includes emissions from non-commodities procurement activities.

The increase in Scope 3 emissions in the 2021 financial year largely reflects the increase in commodities sales volumes and in the renewable energy capacities installed by our project development business.

Climate balance sheet Fully consolidated companies and companies recognised at equity				
1,000 tonnes CO_{2eq}	**FY 2021**	FY 2020	+/– change	% change
Direct CO_2 emissions (Scope 1) [1]	3,440	3,315	+ 125	+ 4
Energy industry activities	2,491	2,386	+ 105	+ 4
Disposal activities (EfW/RDF)	949	929	+ 20	+ 2
Indirect CO_2 emissions (Scope 2) [2, 3]	200	219	– 19	– 9
of which energy procured for proprietary plants	196	214	– 18	– 8
of which energy used for grid operations	4	5	– 1	– 20
Indirect CO_2 emissions (Scope 3)	5,232	4,367	+ 865	+ 20
of which for purchased goods and services (GHG Category 1)	986	471	+ 515	+ 109
of which for fuel and energy-related activities (GHG Category 3)	2,270	2,198	+ 72	+ 3
of which for use of sold products (GHG Category 11)	1,976	1,698	+ 278	+ 16
Net CO_2 savings	1,002	766	+ 236	+ 31

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 emission 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 and, from the 2021 financial year, also include grid losses.
3 The emissions for energy losses in grid operations, which were recognised in Scope 3.9 through to the 2020 Annual Report, have been reported pursuant to the GHG Protocol in Scope 2.

Specific CO_2 emissions

The specific CO_2 emissions for our generation portfolio showed only marginal changes compared with the previous year.

Specific CO_2 emissions in the groupwide generation portfolio		
g CO_2/kWh	**FY 2021**	FY 2020
Electricity generation	422	416
Heat generation	124	125
Energy generation in the generation portfolio	231	232

All our plants were again operated in accordance with the approvals granted and relevant legal requirements in the 2021 financial year; we continually monitored compliance with the threshold values applicable to the plants.

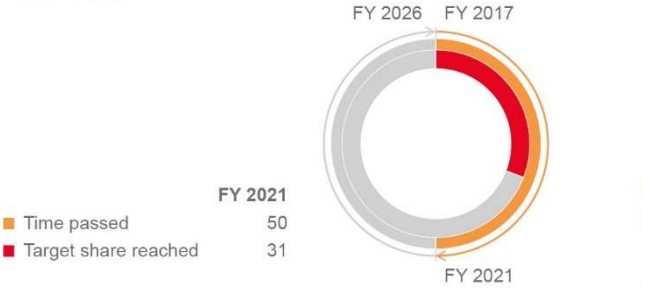
Renewable energies and energy turnaround

Renewable energies contribute to achievement of climate protection targets

By 2045 at the latest, 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 achieving climate protection targets on behalf of society as a whole. In this area as well, 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.

RENEWABLE ENERGIES ELECTRICITY GENERATION CAPACITY
Shares (%)

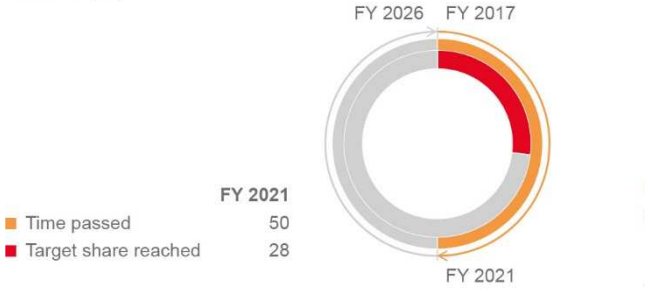


To make it possible for us to meet our target of doubling our electricity generation capacities from renewable energies from 400 MW to more than 800 MW, we are consistently investing in expanding our proprietary renewable energies generation portfolio. Our key focus here is on onshore wind turbines, to which we recently also added photovoltaics as a further focus.

In the 2021 financial year, we made further progress on the way to reaching our target. Including our shareholdings recognised at equity, our electricity generation capacity from renewable energies stood at 564 MW at the end of the 2021 financial year, 33 MW higher than one year earlier. This growth was largely due to the expansion in our wind power portfolio and the fact that we also strengthened the portfolio by repowering older turbines. A further contribution resulted from the launch of operations at our new energy from waste plant in Dundee.

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

COMPLETED DEVELOPMENT OF NEW RENEWABLE ENERGIES PLANTS
Shares (%)



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

Since the beginning of the 2017 financial year, we have connected renewable energies plants with capacities of 2,755 MW to the grid. In the 2021 financial year, we added new capacities of 610 MW **Page 59.**

Forward-looking generation portfolio

At the end of the 2021 financial year, electricity generation at renewable energies plants (including biomass/biogas plants and EfW/RDF) accounted for 32 % of our total electricity generation capacity (previous year: 34 %).

Electricity generation capacity
Fully consolidated companies and companies recognised at equity

MW_e	**FY 2021**	FY 2020	+/– change	% change
Biomass and biogas plants [1, 2]	117	117	0	0
EfW/RDF	176	165	+ 11	+ 7
Wind power	265	243	+ 22	+ 9
Photovoltaics	4	4	0	0
Hydroelectricity	2	2	0	0
Renewables and EfW/RDF	**564**	**531**	**+ 33**	**+ 6**
Conventional CHP and other	702	712	– 10	– 1
Total	**1,266**	**1,243**	**+ 23**	**+ 2**

1 Including biomethane plants

2 Previous year's figure adjusted

Our biomethane plants had capacities of 30 MW in the year under report. The biomethane produced at our plants in an environmentally compatible manner is one of the most versatile green fuels. It is used both to generate electricity and heat and as a fuel for vehicles.

At the end of the financial year, green heat accounted for a 20 % share of our total heat generation capacities (previous year 18 %).

Heat generation capacity
Fully consolidated companies and companies recognised at equity

MW_t	**FY 2021**	FY 2020	+/– change	% change
Biomass and biogas plants [1]	34	33	+ 1	+ 3
EfW/RDF	759	719	+ 40	+ 6
Green heat capacity	**793**	**752**	**+ 41**	**+ 5**
Conventional CHP and other	3,292	3,445	– 153	– 4
Total	**4,085**	**4,197**	**– 112**	**– 3**

1 Previous year's figure adjusted

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, as well as for hybrid projects, i.e. systems combined with battery storage facilities.

Completed development of new renewable energies plants

MW_e	**FY 2021**	FY 2020	+/– change	% change
Wind power	92	74	+ 18	+ 24
Photovoltaics	518	188	+ 330	+ 176
Total	**610**	**262**	**+ 348**	**>+ 100**

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. Moreover, changes in underlying conditions, such as those due to the coronavirus pandemic, may have a notable impact on the implementation of projects.

Operations management for renewable energies plants

MW_e	**FY 2021**	FY 2020	+/– change	% change
Wind power	1,282	1,343	– 61	– 5
Photovoltaics	2,529	2,386	+ 143	+ 6
Total	**3,811**	**3,729**	**+ 82**	**+ 2**

Resource efficiency and local environmental protection

Due to population growth and increasing prosperity, the volume of resources we consume has risen more than ten times in just over a century. Less than half of our current volume of resource consumption would be just about sustainable. The consequences of this situation are apparent in much-discussed issues such as biodiversity, resource scarcity, or emissions of pollutants. Climate change offers the most striking example of these effects.

We use natural resources to generate energy. Our conventional generation plants also use finite resources such as natural gas and hard coal as fuels. We accord great importance to very high resource efficiency. One key indicator of efficient use involves the highest fuel efficiency rates resulting from optimised use of the energy contained in the fuel. This means that we minimise the energy losses arising when the fuels are converted into end energy, such as electricity or heat. It also means that we consistently invest in enhancing the energy efficiency of our generation plants and in expanding green heat in conjunction with highly efficient combined heat and power generation
Page 45.

Local environmental protection is a fixed component of our management systems, into which quality and compliance aspects are also integrated. For us, environmental protection on both national and local levels is closely based on legal requirements. The approvals granted and legal requirements form the basis for our activities, and that both when we build or modernise plants and in our day-to-day operations. Compliance, particularly with the prescribed threshold values, is monitored by the relevant authorities. Certain aspects of our operations, such as plant-specific emissions at large combustion plants, are subject to reporting requirements. Our subsidiaries and shareholdings are responsible for the operative management of environmental concerns on a decentralised basis. As they use different technologies and our stakeholders in the regions have different concerns, these companies set their own relevant focuses within the framework provided by our groupwide guidelines. We work with decentralised environmental and energy management systems for the control and operative implementation of environmental protection measures. Where possible, we avoid other harmful environmental effects resulting from the generation and provision of our products and services or reduce these to a minimum. We pay attention, for example, to reducing other air pollutants. We treat the pollutants incurred very carefully. In the interests of a circular economy, unavoidable waste from energy generation and waste incineration, such as ash, metals and slag – so-called by-products – is turned wherever possible into products for other companies. Where this is not possible, the waste is disposed of correctly.

We will make a crucial contribution towards a sustainable circular economy with the ecological disposal of municipal sewage sludge. We are building innovative phosphorous recycling plants at our locations in Mannheim and Offenbach that will enable us to recover phosphorous from the sewage sludge; this can then be used to produce manure.

At our conventional power plants, we generate electricity and heat by using fossil fuels, here especially natural gas and hard coal, as well as regenerative fuels. The latter fuels include both solid biomass and refuse-derived fuels (RDF), which are produced from waste and have a biogenic share of around one half.

Including at-equity shareholdings, our generation plants emitted around 1.7 million tonnes of climate-neutral biogenic CO_2 in the year under report. This results from the direct use of timber, other biogenic waste and other regenerative resources used as fuels at our plants.

Other emissions and by-products
Fully consolidated companies and companies recognised at equity

Tonnes	**2020**[1]	2019[1]	+/– change	% change
NO_x	2,924	3,135	– 211	– 7
SO_2	885	1,048	– 163	– 16
Dust	18	38	– 20	– 53
Fly ash[2]	90,470	135,991	– 45,521	– 33
Ash and slag	529,882	524,313	+ 5,569	+ 1

1 Calendar year

2 Previous year's figure adjusted

Further environmental protection aspects form part of the environmental management systems at our companies, which are responsible for these on a decentralised basis. MVV Netze and Stadtwerke Kiel, for example, play an active role in protecting ground water and water surfaces. As they are responsible for the supply of drinking water in their regions, their supply systems have to be regularly analysed and checked. Here, the production, treatment and distribution of drinking water are not only of economic significance; the public supply mandates serve the common good. As the most important source of life, drinking water is governed by strict quality standards. The most important objective for the water supply involves complying with these quality standards and minimising relevant contents. We have formulated our targets for our drinking water supply in detail in our Water Policy **mvv.de/water-policy.**

The fuel efficiency rate key figure shows the efficiency of generation by presenting the volume of end energy generated (electricity and heat) as a ratio of the energy input (primary energy). If the fuel efficiency rate increases, the generation portfolio has a higher energy yield. By continually increasing the fuel efficiency rates of our plants, we reduce the volume of fuels used and cut our emissions. In the year under report, our plants had an average fuel efficiency rate of 67 %. Our energy yield is thus ahead of the German average for generation activities. The Working Group on Energy Balances (AG Energiebilanzen) published an average efficiency rate of 52.7 % for electricity generation in Germany in 2020.

We operate our major generation plants almost exclusively using highly efficient combined heat and power (CHP) generation. After all, the fuel efficiency rate for CHP is significantly higher than when electricity and heat are generated separately. In the 2020 financial year, Stadtwerke Kiel launched operations at its new gas-fired power plant in Kiel, which generates electricity and heat using CHP. In the year under report, this plant was therefore included in our key figures for the first full-year reporting period.

The volume of fuel used in individual financial years largely depends on developments in weather conditions and market prices, as well as on the properties of the fuel in question. By-products, primarily ash and slag, arise in our energy from waste and CHP plants **Page 60.** The volume of this ash and slag is determined by technical factors or by the fuels used and does not lie within our control. Wherever technologically possible and economically viable, we put these by-products to further use. After suitable treatment, they are returned to the economic cycle, for example as products for the construction industry.

Fuels used at power plants
Fully consolidated companies and companies recognised at equity

	FY 2021	FY 2020	+/– change	% change
Biomass [1] (1,000 tonnes)	566	540	+ 26	+ 5
Biogenic share of waste/RDF (1,000 tonnes)	2,014	1,939	+ 75	+ 4
Natural gas (kWh million)	3,501	3,342	+ 159	+ 5
Hard coal (tonnes 000s)	688	664	+ 24	+ 4
Other fossil fuels (kWh million)	307	278	+ 29	+ 10

1 Previous year's figure adjusted

Average fuel efficiency rate
Fully consolidated companies and companies recognised at equity

%	FY 2021	FY 2020	+/– change	% change
	67	66	+ 1	+ 2

Coal-based generation decreasing at MVV

In the 2020 financial year, the decommissioning in 2019 of Gemeinschaftskraftwerk Kiel, a hard coal-fired power plant which we owned with Uniper, also became clearly visible in our non-financial figures. This means that the 60 MW_e plant in Offenbach is now the only hard coal-fired power plant in our conventional portfolio in Germany. Due to the lead time needed to build new low-CO_2 heat generation capacity, which amounts to several years, we expect this plant to be decommissioned during the 2020s.

In the Czech Republic, we operate several small coal-based plants to generate and secure the supply of heat. There too, we will be discontinuing the use of coal and decarbonising the heat supply in the years ahead.

We are a minority shareholder in Grosskraftwerk Mannheim AG (GKM), with a 28 % stake, and do not operate this plant ourselves. GKM currently still operates three hard coal-fired CHP blocks. In the past financial year, GKM registered Block 7 for decommissioning, i.e. it is no longer available for regular operations. Given the latest developments, we our basing our plans and measures on the assumption that coal-based electricity generation will be phased out by the end of the 2020s. The setting of specific decommissioning dates for the individual power plant blocks is subject to the proviso of supply reliability, as well as to the legal framework and the agreements reached between GKM and its shareholders. The speed at which substitute green technologies and backup capacities for district heating generation become available in the years ahead also plays a role in this respect. Block 9 at GKM is one of the newest and most efficient hard coal-fired power plants in Germany. The German Coal Exit Act (KAG) does not stipulate the precise modalities and decommissioning dates.

To decarbonise the district heating supply, we are compiling various concepts which account for all significant forward-looking technologies. We took one first step to reduce heat generation from GKM in February 2020 by linking up our waste-fired CHP plant in Mannheim to the regional district heating grid. This means that up to 30 % of annual district heating volumes for Mannheim and the region are already generated on a CO_2-neutral basis.

The next specific steps we will take to decarbonise district heating are:

- GKM is building a first river heat pump on our behalf in Mannheim-Rheinau. With a heat generation capacity of 20 MW_t, this plant will draw on the environmental heat in the Rhine from 2023 onwards.
- By 2023, we will launch operations with a plant to recycle phosphorous from sewage sludge at our Mannheim energy park on Friesenheimer Insel.
- We are extending our biomass power plant (waste timber) in Mannheim to include a heat extraction facility. With a heat extraction capacity of 45 MW_t, this CHP plant will make a major contribution to the district heating supply from 2024 onwards.
- We are gradually tapping the potential for waste industrial heat at the plants at our energy park on Friesenheimer Insel.

Further options are currently being examined closely. Examples include solutions such as geothermal energy, further river heat pumps, the use of biomass, biomethane CHP plants and the use of further waste industrial heat potential. We are also working on green heat concepts at MVV's other locations with heat activities.

Sustainable circular economy

Even when it has been correctly separated, household and commercial waste is by no means "rubbish", but can rather be "recycled" as energy. Treating the waste in strictly controlled conditions at an energy from waste plant offers threefold benefits. Firstly, the waste is sanitised, meaning that materials harmful to people's health or the environment are destroyed. Secondly, the energy contained in the waste is used to produce steam for industry, heat 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. Thirdly, incineration in this way makes an active contribution to climate protection. The alternative – landfilling – would lead to the emission of large volumes of methane, which is harmful to the climate. Thermal treatment of the waste avoids this.

Using the materials and energy contained in waste makes a major contribution towards reaching the target of building an economy that is as circular as possible. 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 Green Deal of the European Commission. Until that aim is met, and in cases where that is not possible, the next-best solution is to use unavoidable 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 circular economy. We operate a total of eight energy from waste plants in Germany, the UK and the Czech Republic. At these plants, we incinerated around 2.5 million tonnes of non-recyclable waste and refuse-derived fuels in the 2021 financial year. In the Scottish city of Dundee, we have built a new energy from waste plant at which operations were successfully launched in the year under report.

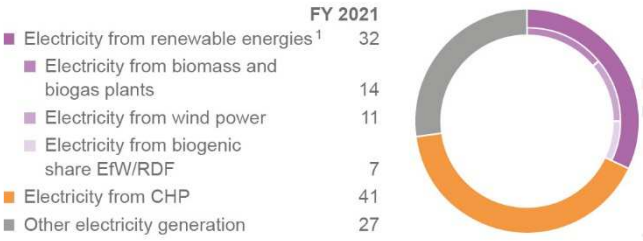
Supply reliability

Energy companies play a key role in the energy system transformation 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 that the supply of electricity, gas, heat and water remains reliable and stable. The advancing energy turnaround raises new questions, as the volume of electricity fed in from wind turbines or photovoltaics systems fluctuates in line with weather conditions and the time of day. As an energy company and distribution grid operator, we ensure that we at all times provide our customers with a secure and reliable supply of energy. That makes it necessary at first 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 continually invest in maintaining, expanding and optimising our grids and plants and thus help to maintain supply reliability.

Gradual conversion of our generation portfolio

To shape the energy system transformation 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 **Page 58** 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 heat 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.

At the end of the 2021 financial year, the electricity generated at renewable energies plants (including biomass/biogas and the biogenic share of waste/refuse-derived fuels) accounted for a 32 % share of our total electricity generation (previous year: 34 %).

Electricity generation volumes
Fully consolidated companies and companies recognised at equity

kWh million	FY 2021	FY 2020	+/– change	% change
Biomass and biogas plants [1]	522	511	+ 11	+ 2
Biogenic share of EfW/RDF	268	314	– 46	– 15
Wind power [1]	421	440	– 19	– 4
Hydroelectricity	3	5	– 2	– 40
Photovoltaics	3	4	– 1	– 25
	1,217	**1,274**	**– 57**	**– 4**
Electricity from CHP	1,594	1,417	+ 177	+ 12
Other electricity generation [1]	1,028	1,083	– 55	– 5
Total	**3,839**	**3,774**	**+ 65**	**+ 2**

1 Previous year's figure adjusted

The electricity we generated at renewable energies plants (including biomass/biogas and the biogenic share of waste /refuse-derived fuels) showed a slight year-on-year reduction. On the one hand, this was because the energy from waste plants in Mannheim and Leuna produced lower volumes of electricity in order to increase their heat volumes. On the other hand, as wind volumes fell short of the previous year's figure our wind turbines generated less electricity, and that despite the addition of new capacities to our wind power portfolio. The increase in electricity generation volumes from combined heat and power generation (CHP) was driven above all by the launch of operations at our gas-fired CHP plant in Kiel in November 2019. This new plant generates electricity and heat using combined heat and power generation and made its first full-year contribution to our electricity generation in the 2021 year under report.

At the end of the 2021 financial year, green heat generation accounted for a 36 % share of our total heat generation volumes (previous year: 31 %).

Heat generation volumes
Fully consolidated companies and companies recognised at equity

kWh million	FY 2021	FY 2020	+/– change	% change
Biomass and biogas plants [1]	77	84	– 7	– 8
EfW/RDF	2,464	1,906	+ 558	+ 29
Green heat generation	**2,541**	**1,990**	**+ 551**	**+ 28**
Other heat generation	4,466	4,517	– 51	– 1
Total	**7,007**	**6,507**	**+ 500**	**+ 8**

1 Previous year's figure adjusted

The increase in our green heat generation volumes was largely driven by our energy from waste plants in Mannheim and Leuna, which we connected to their regional district heating grids in February and December 2020 respectively.

Biomethane generation volumes
Fully consolidated companies and companies recognised at equity

kWh million	FY 2021	FY 2020	+/– change	% change
Biomethane generation	269	222	+ 47	+ 21

The increase in biomethane generation volumes was due to a higher level of plant availability compared with the previous year.

Safeguarding grid stability despite growing 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. In the 2021 financial year, we invested Euro 115 million in maintaining and expanding our grids.

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 long than three minutes and not due to force majeure.

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

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

We were able to improve the cumulative SAIDI figure for our grid regions in the 2020 calendar year. We provided our customers with an electricity supply that was largely free of interruptions and once again ahead of the national average.

Electricity supply interruptions (SAIDI)

Minutes/year	2020 [1]	2019 [1]	+/– change	% change
Electricity at MVV	9	10	– 1	– 10
Electricity in Germany [2]	11	12	– 1	– 8

1 Calendar year

2 Source: Federal Network Agency (BNetzA)

Employee concerns aspect

As an energy company with regional roots, we are part of society at the locations and in the regions in which we operate. In view of this, our goal is to make positive contributions for our employees and for local populations.

We offer attractive and secure jobs to 6,400 employees in an environment in which everyone can make his or her contribution to promoting decarbonisation. That is also a great responsibility, one that we are aware of and factor into our strategic decisions.

The ongoing coronavirus pandemic has presented us with particular challenges since the 2020 financial year. Working together, however, the Executive Board, managers, employees and employee representatives have managed these challenges successfully. The decisions we have taken to handle the crisis have enabled us to live the values underpinning our corporate culture – Community, Responsibility, Appreciation and Courage – in our daily work. To protect our employees and safeguard operating processes, we have agreed new rules and implemented solutions. We have changed previous forms of working together, communicating with each other and entering into dialogue and adapted these in line with new requirements.

We have noticed that these new forms of cooperation are influencing our activities, management and communication. We are observing and evaluating these changes. We will draw on the positive aspects at MVV in future as well.

Employer attractiveness

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 in future as well. 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: We aim to remain an attractive employer. That is why we offer attractive remuneration packages and are committed to helping our employees combine their work with family or nursing care commitments. In our recruitment, we particularly focus on expanding diversity at the company and especially on promoting women.

- 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 who are keen to make their contribution to the new energy system.

- Talent management: We deliberately identify, support and cultivate upcoming talent – within the company from among our trainees and new recruits through to managers, and externally with strong personnel recruitment efforts on the market.

MVV is strengthening the company's forward-looking development with an approach to diversity management that is in line with the times: "Energy for Diversity". This is because we see diversity as a foundation for success. The programme is based on the three pillars: promoting women, work and family and demographic management **Page 67.**

Furthermore, with our broad range of training options we aim to offer young people a wide variety of vocational opportunities at the company. We have upheld our high training rates during the coronavirus pandemic as well.

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 who work on our behalf. To this end, we are making ongoing efforts to improve work safety at the Group. Consistent with this objective, we have established groupwide programmes to increase safety at work. These programmes are taken up by the work safety officers on a decentralised basis and then backed up and supplemented with suitable measures. The current status is reported on Group level and discussed by the Executive Board on a quarterly basis.

Personnel figures (headcount) at balance sheet date

	30 Sep 2021	30 Sep 2020	+/– change	% change
MVV [1]	6,470	6,260	+ 210	+ 3
of which in Germany	5,520	5,351	+ 169	+ 3
of which abroad	950	909	+ 41	+ 5

1 Including 340 trainees (previous year: 341)

We employed a groupwide total of 6,470 individuals as of 30 September 2021. This increase compared with the previous year was due above all to higher employee totals in our growth fields, as well as to the full consolidation of a company.

Our international workforce includes 498 employees at our Czech subgroup, 292 at Juwi's shareholdings and 152 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 17 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 2021, a total of 340 young women and men were in training at MVV. Since March 2020, our trainees in combined training and study programmes and our commercial trainees have mostly worked from home. This enabled us to maintain the high quality of training despite the restrictions resulting from the coronavirus pandemic. As a result, we were able to avoid any trainees leaving the company for this reason.

MVV's training scheme was awarded support by the National Agency at the Federal Institute for Vocational Education and Training to implement European Union mobility projects in Plymouth, UK, for the 4th time now. Given Brexit and the coronavirus pandemic, this could not be taken for granted. In view of the pandemic, we drew on the option of extending the ERASMUS+ programme to June 2023. This means that 18 trainees from technical and commercial divisions will once again have the opportunity to participate in an exchange in the next three years. This is organised between our cooperation partner, City College Plymouth, and MVV Environment. In recent years, we enabled 44 trainees to take part in this project and thus promote their intercultural development. Given the pandemic, the specific timing of the new exchange is still unclear.

Targeted personnel development: training concept implemented

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.

In the 2021 financial year, we pressed consistently ahead with our training concept and held numerous virtual seminars on various topics on all levels of the hierarchy. Our employees and managers made intensive use of the seminars on offer.

Our further training measures and our knowledge database 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 digitalisation. In the 2021 financial year, the focus was on IT training accompanying the conversion to a new software, which provided users with good access to the new tools, as well as on training for our new "MVV Connect" intranet. The aim was to network our large organisation even more closely in its day-to-day work and its (partly virtual) cooperation, share knowledge, accept mutual impulses and integrate information and new topics into our own work processes. Moreover, we offered training on topics such as time and self-management, agile work, communications, presentation and virtual management. Our seminar evaluation showed a high level of acceptance for the seminars among participants, who confirmed that they had good possibilities to transfer the skills gained in the training to their daily work.

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, third-party assessment, internal management review conferences and concluding feedback talks between employees and managers. 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. Our understanding of talent also extends to specialist and upcoming staff, such as trainees and career starters.

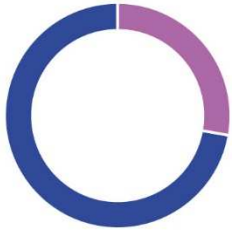
MVV's specific competency model forms the basis for personnel-development meetings and individual support programmes. We also regularly hold appraisals and surveys at our main locations in Germany. This way, our employees have the opportunity to provide honest feedback and we can enhance the quality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

"Energy for Diversity"

WOMEN AND MEN
Shares (%)

	FY 2021
Women	28
Men	72

Status: 30 September 2021



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 deliberately offer 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.

We therefore set ourselves the target of raising women's share of our Group's workforce to 35 % by 30 September 2021, up from 27 % at 30 June 2015. With a 28 % share of women employees at 30 September 2021, we only managed to come slightly closer to reaching this target. Among our management staff, we also aimed to increase the share of women up to 25 %, up from 14 % at 30 June 2015. At 14 % at the balance sheet date on 30 September 2021, this figure was still at its 2015 level. As the efforts made so far have not yet enabled us to reach the targeted shares, the Executive Board decided in September 2021 to retain the existing targets of 35 % and 25 % respectively and to reach these by 30 September 2026.

By 30 September 2026, we aim to raise women's share of our workforce to 35 % and of our total management staff to 25 %.

To achieve our targets by 2026, we will consistently implement our promotional measures and programmes and further expand these in the years ahead. That is particularly true for our active personnel development activities for women who have the potential to take on management positions and for our targeted recruiting of suitable women candidates for vacant management positions, also on a part-time basis. The two other pillars of our diversity management will also assist us in meeting this target: These are enabling employees to combine their work and family commitments and active demographic management, in which we accompany the transfer of knowledge between employees.

For MVV Energie AG, we report on the share of women in the first and second management tiers below the Executive Board. In August 2017, the Executive Board set targets for the share of women at 25 % for the first and 30 % for the second management tiers, with both targets to be reached by 30 September 2021. The share of women in the first management tier amounted to 14 % at 30 September 2021 and was thus ahead of the previous year (30 September 2020: 10 %). In the second management tier, the share of women amounted to 31 % (30 September 2020: 27 %) and thus exceeded the target level set. We see this as providing a stable basis and as offering an opportunity to fill positions becoming vacant in the next higher management tier with internal candidates in future. In September 2021, the Executive Board adopted a resolution to retain the existing targets of 25 % and 30 % and to achieve and uphold these respectively by 30 September 2026. In addition to those measures that are already in place to promote women, we are taking steps to increase the number of applications we receive from promising external and internal women candidates.

Targeted promotion of women
We have established a new central department, Prevention and Diversity, to promote these topics and associated measures, with an initial priority on promoting women. Activities at this department focus above all on developing and implementing measures in the areas of employer image, recruitment, personnel and cultural development and raising awareness of diversity in specialist departments.

To reach our targets, we are drawing on a variety of promotional measures and programmes and expanding these further. To increase diversity at the company, we offer corresponding training to all managers. This addresses MVV's diversity standards, unconscious prejudice, judgemental habits and the handling of discrimination. We also agree binding measures. Furthermore, we attach great importance to 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 women 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. Moreover, we have introduced an internal mentoring programme in which women managers advise and support select experts and next-generation talent. Thanks to our corporate membership in "European Women's Management Development", an association for professional women, we offer free membership for interested women employees. This way, they benefit, for example, from free contingents of places in presentations and seminars.

Making it easier to combine work and family commitments
Our aim is for our employees to be able to successfully combine their family and work commitments, and that on an ongoing basis. Over their working lives, our employees pass through many different stages of their private lives. We aim to support them in mastering the daily requirements of their work and private lives. To this end, we offer a variety of worktime models with flexible working hours. Digitalisation and the use of modern communications appliances also facilitate mobile work in line with specific needs.

To assist our employees in dealing with the challenges presented by the coronavirus pandemic, in cooperation with the Works Council we have significantly extended the regular working hours to facilitate a more flexible approach.

Our new part-time management concept is intended to retain high-performing employees at the company through various stages of their lives. This concept is targeted on the one hand at management staff in specific situations, such as parental or nursing care leave. It is also intended to help employees to return to work more quickly after parental leave. On the other hand, the concept is intended to encourage employees to directly assume part-time management positions. This way, we aim to increase the diversity of staff in management roles.

Since the 2021 financial year, we have offered a family service, initially restricted to more than 2,000 employees mostly at the Mannheim location, as well as at other smaller locations. Here, we work together with an experienced service provider who can offer strictly confidential advice to employees who are confronted with work-related, family or financial difficulties.

Another area in which our employees will have greater needs in future relates to caring for relatives. We are supporting them here as well. Employees caring for relatives can be granted leave from work. We also inform our staff about care options by holding information events, providing emergency folders with information about work and care and – like at Energieversorgung Offenbach – by cooperating with a nursing care service.

Actively tackling demographic management
The third pillar of "Energy for Diversity" addresses the demographic challenges we face. When employees who have built up extensive and in-depth expertise leave the company, it is important that this knowledge should be retained at the company after their departure. We therefore organise a well-structured and moderated transfer of knowledge by having the retiring employee, the relevant manager and the colleagues due to take on these tasks in future coordinate which knowledge should be transferred, as well as the timeframe and manner in which this should take place. To this end, a transfer plan is compiled. In select departments in Mannheim, for example, we perform so-called "parallel runs", in which employees due to retire from the company help to train their new colleagues over an extended period of time.

Occupational health and safety

Lived Safety
We accord the utmost priority to protecting the health and safety of our employees and those who work on our behalf.

The following points form the core of our “Lived Safety” programme:

- 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. Furthermore, the topic of work safety is a fixed agenda item at the meetings of our Supervisory Board. 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
We are making continuous efforts to improve work safety at the Group and are clear that every accident is one too 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.

We perform risk assessments in all areas of the company in accordance with the German Industrial Safety Act (ArbSchG). This way, we identify any work-related hazards, assess associated risks and lay down suitable technical, organisational and personnel measures. Together with the safety specialists, managers compile the risk assessments and, where necessary, consult the company doctor and the Works Council. This cooperation enables us to ensure that we account for all relevant requirements and information.

In around 80 % of our company departments, these risk assessments are performed and documented with a software tool. Here, we analyse the workplaces used, the activities performed, the work equipment used and any hazardous materials deployed. Where necessary, account is also taken of groups of persons who are particularly at risk. Once we have implemented protective measures and conclusively checked their effectiveness, we reassess the remaining residual risk. We also factor implementation of the various work safety ordinances into our analyses. We perform a review at least once a year to ascertain whether new findings, new legal standards, or company requirements mean that we have to amend the risk assessments.

All employees are called on to report any work-related risks and dangerous situations to their managers. If necessary, we can then add these to the risk assessment and lay down suitable measures. Employees who find themselves in a work situation in which there is an acute risk of injury or sickness must stop work and immediately consult their managers. We have laid this down in corresponding instructions. We systematically investigate any accidents and near-accidents reported. Here too, we consider whether we have to make any amendments to our risk assessments.

In our instructions, we explain the interrelationships involved and lay down work safety requirements. We supplement personal training by offering work safety training using an electronic instruction system. This is based on the results of the risk assessment and is tailored to individual workplaces. This way, our employees can flexibly and individually address a variety of basic topics relating to work safety.

We evaluate accident statistics on a systematic basis for the overall Group. In this, we consider all accidents at or on the way to or from work, including more minor injuries. We only perform a statistical evaluation of accidents with particularly severe injuries and of accident types on an incident-related basis. The assessment and evaluation are performed on a gender-neutral basis and in line with the requirements of data protection. We also assess which further preventative measures might be expedient.

Accident statistics

	FY 2021	FY 2020	+/– change	% change
Lost time injury frequency rate (LTIF) [1, 2, 3]	4.1	6.7	– 2.6	– 39
Fatal accidents	0	0	0	0

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)

With an LTIF of 4.1, we were able to reduce the frequency of accidents by nearly 40 % compared with the previous year. This convinces us that we are on the right course. There were no accidents with fatal consequences in the year under report.

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 in 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.

In the year under report, the company doctors at our major locations offered coronavirus vaccinations to our employees to help accelerate the pace of vaccination. At the Mannheim location, for example, up to 60 employees a day voluntarily received their vaccination. This way, more than 2,000 doses (first and second vaccinations) were injected within two months.

Social concerns aspect

Corporate social responsibility

A further important aspect of our responsibility towards society relates to our dealings with local communities. We have the responsibility to use our resources to promote the conversion in the energy system so as to provide a more sustainable and efficient energy supply and, to this end, to maintain an open dialogue with our stakeholders. For many of the projects involved in expanding renewable energies and the necessary infrastructure, acceptance by people on location is absolutely crucial. We are therefore committed to 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 have adopted a project-specific approach which is handled on a decentralised basis by the individual companies.

We contribute to the common good in those regions in which we operate. The way we deal with and exchange information with all relevant groups within society shapes the relationship between us as a company and local populations. As a general rule, our social commitment is project-based and supports the fields of social welfare, education, culture and sports. We set our focuses here in line with the specific context. Responsibility for our social commitment lies with the management of the respective companies.

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 invest, 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.

Social commitment – 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. In view of the coronavirus pandemic, our companies also offered greater support to social welfare initiatives and projects in the past year. Based on shared values, our companies are responsible for determining the structure and scope of their regional social commitment. Staff on location are familiar with local needs, have contacts to local organisations and facilities and set the priorities they would like to address and the projects they intend to support with their activities. In most cases, the support is financial, taking the form of donations. This means that we provide support for clearly defined countermeasures and with corresponding benefits.

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

At MVV Energie, the Sponsorship Fund represents one key example of its regional commitment. This provides financial support to innovative and creative projects at clubs, organisations and institutions in Mannheim and the Rhine-Neckar metropolitan region. Moreover, in 2020 MVV Energie launched the MVV Green Sponsorship Fund, which supports clubs in installing photovoltaics systems. The company's largest sponsorship partners in the Rhine-Neckar metropolitan region are the art gallery Kunsthalle Mannheim, which holds MVV Art Evenings with free entry every first Wednesday in the month, the technology museum Technoseum, 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.

In dialogue with stakeholders

We are open to the concerns of all our stakeholders and seek ongoing dialogue with them. This makes it possible to assess a variety of perspectives and concerns more closely and to factor these into our company's activities.

We take regular talks and interviews with stakeholders as an opportunity to review our material sustainability topics. Together with MVV's specialist departments and companies, we assess the extent and form in which specific concerns can be accounted for. Our experts then discuss the findings and implement these in our sustainability programme.

We operate at various locations and in diverse business fields and therefore touch on 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. Further stakeholders are 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 energy system transformation. 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 suitable indicated.

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 2021 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

Responsibility for supply chain and human rights

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.

MVV's procurement

The energy industry supply chain is greatly influenced by fuel trading, which is handled on energy exchanges or in bilateral agreements. A far lower share of our total procurement volumes relates to suppliers who provide us with goods or perform services for us. These suppliers have often been known to us for many years.

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.

We occasionally receive enquiries as to 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-fired plant we operate ourselves is the CHP plant in Offenbach. For this, we directly procured around 79,000 tonnes of hard coal in the 2021 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 power plant Grosskraftwerk Mannheim, where we are minority shareholders. Here, we have no direct influence on business activities and fuel procurement, as we ourselves are not the operators of the plant. We are nevertheless aware of our responsibility and show our commitment by, for example, raising sustainability topics with GKM AG and requesting information. GKM AG has been a member of the Better Coal Initiative since March 2021.

Apart from commodity procurement, our other procurement volumes are comparatively low. They mostly involve procuring goods and highly qualified services from contract partners often known to us for many years. Based on separate analysis, we also address the major potential risks in our upstream supply chain. In the year under report, infringements of human rights in the photovoltaics supply chain were raised in public. Attention is drawn to potential infringements of human rights in select Chinese provinces where most of the global production of the silicon used in photovoltaics modules is located. Via our subsidiary Juwi, we are in close contact with our suppliers, although we have yet to receive reports of any specific infringements within our supply chains. We have nevertheless agreed more far-reaching precautions with our suppliers.

Procurement and business terms for suppliers

Our cooperation with suppliers and service providers in Germany and the European Union is based on applicable laws and regulations, including the German Act on Corporate Due Diligence Obligations for the Prevention of Human Right Violations in Supply Chains (LkSG), which will apply from 1 January 2023, as well as on those compliance regulations, forms of conduct and work practices relevant to us. Among others, these include 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. These are published on our website **www.mvv.de/zentraleinkauf.** Our suppliers undertake to comply with legal requirements and internationally recognised standards governing anti-corruption measures, the protection of human and workers' rights and environmental protection. If these obligations are breached, then contractual sanctions, including contractual penalties, termination and damages payments, are provided for.

Suppliers to MVV Energie, Energieversorgung Offenbach, Juwi and Stadtwerke Kiel are regularly assessed in terms of their 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. For the most important of our strategic suppliers, we perform additional in-depth analyses of their strategy and of the climate protection and sustainability measures they have in place. 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. Acquisitions of companies or shareholdings are subject to painstaking due diligence 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 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 and respect for human rights

Compliance

Our compliance management system (CMS) supports us in safeguarding compliance with applicable laws, as well as with in-company guidelines and the ethical standards to which we are committed. The CMS is intended on the one hand to ensure that our managers and employees understand and adhere to those guidelines and standards and on the other hand to monitor all relevant business activities and processes within our Group.

Our Compliance Management Handbook summarises the most important requirements and necessary organisational structures and processes. It also lists the names of those employees who are responsible for our reporting system and describes the relevant processes in detail. The handbook is binding for all companies at the Mannheim subgroup of MVV Energie AG and is permanently available for downloading to all employees at this subgroup. The other subgroups have introduced equivalent compliance management systems. Our Compliance Management Handbook is available both in German and in English for our British and Czech subgroups.

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

We have structured our CMS in such a way that any breaches of compliance are avoided on a preventative basis, particularly by implementing preventative measures in the respective business processes ("systemic compliance"). 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 exclusively take the form of dividends.

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

By actively implementing preventative measures within business processes, we are committed to averting criminal or grossly improper violations of the law. In this respect, we have a zero-tolerance policy towards bribery and all other forms of corruption. With regard to corruption prevention, we provide extensive training to our employees, particularly those working in sales, related areas and procurement. We show them, for example, how to deal with gratuities and invitations, which we record and check. These measures enable us to minimise the risk of so-called soft bribery. Furthermore, we continually monitor all business fields, specialist divisions, group departments and subsidiaries to ascertain whether compliance requirements have been adhered to. Moreover, employees and third parties can contact the Compliance Officer or an external confidence lawyer directly via anonymous "whistle-blower hotlines" and thus provide tip-offs on potential misconduct. We have published details including the telephone number of the confidence lawyer, also on our website at **www.mvv.de.**

Apart from a low number of minor incidents, no compliance-related infringements were detected in the period under report.

All of MVV's managers and employees who have contact to customers, service providers or suppliers receive regular training to ensure that they are extensively informed of general compliance requirements and also familiar with the legal requirements relevant to their respective business units. Examples of the topics covered by this training are combating corruption and money laundering, capital market, stock market, competition and cartel law, handling sanction lists and the relevant requirements of energy industry law. In the 2021 financial year, 318 employees at the Mannheim subgroup and 175 employees at the other subgroups took part in this training.

Due to the coronavirus pandemic, training sessions often could not take place in person, but were rather held online. In parallel, a total of 2,087 individuals completed an e-learning programme in the same period that was offered by our Stadtwerke Kiel and Energieversorgung Offenbach subsidiaries and the Juwi subgroup. At the end of each financial year, all managers from a specific management level upwards are required to submit a Compliance Management Declaration (CMD). The same requirement applies to the managing directors of our subsidiaries and specific other shareholdings. In this, they must state whether all relevant compliance regulations and legal requirements have been complied with. The questions in the CMD include asking whether the employees of the individual manager have received the required instruction and suitable training for the CMS. Furthermore, in the context of the CMD the managers also provide detailed responses to questions specifically tailored to circumstances at their respective business unit.

Legal responsibility and liability

Questions relating to legal responsibility and liability arise in the environment in which the energy industry operates. We report on MVV's legal risks in our Opportunity and risk Report **Page 98.**

Respect for human rights

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) and the German Act on Corporate Due Diligence Obligations for the Prevention of Human Right Violations in Supply Chains (LkSG). Our human rights policy was adopted by our Executive Board, while the management at our companies and locations is responsible for compliance with the resultant requirements.

In future, an MVV Human Rights Officer reporting directly to the Executive Board will be responsible for ensuring that the requirements of the LkSG legislation are met. He will be responsible for risk management relevant to human rights issues and make sure that statutory due diligence obligations are adhered to in business processes. Among other aspects, this will involve performing a human rights law risk analysis each year and on specific occasions, implementing processes to prevent any infringements of human rights in the supply chain and our own activities and meeting statutory reporting obligations. As the central point of contact, he is the first person to turn to for employees working in procurement. Not only that: In the event of potential infringements, he will ensure that these are remedied and investigated. It is important to MVV that all suspected cases should be recorded and reviewed. To this end, employees and third parties can either contact MVV's Human Rights Officer directly or use the anonymous whistle-blower hotline. We have published the relevant information in German and English on our homepage.

In the year under report, we further developed the due diligence process and other processes relating to the supply chain in our “Supply Chain” workgroup, which operates across business units and locations. The workgroup promotes the further development and harmonisation of existing processes in the field of supply chain management; it therefore also addresses compliance with human rights and raises awareness within the organisation for potential human rights risks. Moreover, in the Group’s most important procurement units we successfully implemented projects intended to further develop existing risk management processes relating to human rights and ecology. 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, such as the human rights situation at upstream suppliers in China.

Other aspects

Digital transformation

Digitalisation is a key future trend for us. We make targeted use of digitalisation instruments to create modern hybrid ways of working and cooperating with each other and to continually enhance the efficiency and networking of our own business processes. Furthermore, we identify and use digital applications to increase our efficiency by optimising our own plants and grids with data-driven technologies and control systems. At the same time, we draw on the possibilities offered by digitalisation to analyse the energy situation for our customers, for example, and to structure individual optimal solutions. This way, we can also reduce the long-term environmental impact of energy consumption. Smart cities are another field of application now emerging for digital products. Digital solutions not only offer economic benefits, they also provide opportunities to reach ecological and social objectives. Viewed as a whole, the decentralised new energy world needs smart control and offsetting mechanisms. This being so, digitalisation, and here in particular the processing of large volumes of data using artificial intelligence (AI), is an important building block to make the energy industry, and thus also MVV, fit for the future. Adaptable IT and a well-structured approach to data handling form the foundation enabling us to permanently secure a strong competitive position and to deploy AI in other applications too. At MVV, the overriding topic of digitalisation is being implemented in all business fields. We coordinate key aspects of this in our overall digitalisation programme.

Information security and data protection

We are committed to protecting sensitive information and data with a wide range of technical and organisational measures. One key guarantor of this approach is the high level of awareness we have cultivated among our employees for this important topic. This applies in particular to personal data, which we collect in connection with the solutions and service products we offer to our customers and for employment and other contractual relationships with employees and suppliers. We process this in accordance with data protection requirements. Working with an information security management system based on the international norm DIN ISO 27001 and a continually growing data protection management system, the employees entrusted with this task manage and monitor the security of business processes in terms of IT and data protection law both centrally and on a decentralised basis and ensure that the information is protected against unauthorised viewing, loss or manipulation. All measures we implement in terms of information security and data protection are intended to detect and manage any potential risks. Our goal here is to maintain existing relationships of trust with our customers, shareholders, suppliers, service providers and employees and, where possible, to extend this trust even further. In the year under report, we met our objective of sustainably protecting information and personal data by drawing on numerous technical and organisational measures and also further raised awareness levels for this topic among our employees.

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 based on 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 line with International Financial Reporting Standards (IFRS) as adopted by 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, the consolidated financial statements of MVV and the combined management report for the 2021 financial year are published in the Federal Gazette (Bundesanzeiger). The complete 2021 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 power plant Grosskraftwerk Mannheim. 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 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 2020 to 30 Sep 2021**	1 Oct 2019 to 30 Sep 2020
Sales	1,631,755	1,404,404
Less electricity and natural gas taxes	**– 125,782**	**– 110,981**
Sales less electricity and natural gas taxes	1,505,973	1,293,423
Increase or reduction in finished and unfinished products	–	– 173
Other own work capitalised	41	198
Other operating income	28,586	27,252
Cost of materials	1,302,656	1,104,497
Employee benefit expenses	83,890	79,106
Depreciation and amortisation	20,480	18,811
Other operating expenses	96,112	85,662
Financial result	108,714	94,162
Taxes on income	29,292	27,627
Earnings after taxes	110,884	99,159
Other taxes	368	435
Annual net income	110,516	98,724
Profit carried forward from previous year	–	–
Allocation to other revenue reserves	41,314	36,112
Unappropriated net profit	**69,202**	**62,612**

Sales less energy taxes at MVV Energie AG increased year-on-year by Euro 213 million to Euro 1,506 million. MVV Energie AG thus exceeded its forecast of generating sales at around the previous year's level. Sales were generated exclusively in Germany. The electricity business accounted for 61.3 % of total sales (previous year: 58.6 %) and thus remains the strongest division in terms of sales at MVV Energie AG.

At Euro 1,302 million, cost of materials was Euro 198 million higher than in the previous year. The change in this line item largely reflects the development in sales.

Other operating income rose by Euro 1 million to Euro 29 million. This increase was primarily due to higher exchange rate gains and other income. These factors were countered by lower reversals of provisions and disposals of assets.

MVV Energie AG had 890 employees at 30 September 2021, 2 fewer than at the previous year's balance sheet date. At Euro 84 million, employee benefit expenses were Euro 5 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 additions of assets, particularly in connection with the linking of our energy from waste plant in Mannheim to the district heating grid and investments in transmission and supply grids, depreciation and amortisation rose by Euro 2 million to Euro 21 million. No impairment losses were recognised on non-current assets in the year under report or the previous year.

Other operating expenses increased by Euro 10 million to Euro 96 million. This change was chiefly due to higher consulting services, e.g. for IT projects.

The financial result improved year-on-year by Euro 15 million to Euro 109 million. This development was due above all to higher income from profit transfer agreements and lower write-downs of financial assets.

At Euro 111 million, earnings after taxes were Euro 12 million higher than in the previous year. Following the deduction of other taxes, MVV Energie AG generated annual net income of Euro 111 million in the 2021 financial year and thus exceeded its forecast of approximately matching the previous year's figure. Based on the profit utilisation resolution adopted by the Annual General Meeting on 12 March 2021, the unappropriated net profit of Euro 62.6 million was fully distributed to the shareholders of MVV Energie AG. The dividend amounted to Euro 0.95 per share.

Revenue reserves of Euro 41,314 thousand were formed from the annual net income for the year under report. MVV Energie AG reported unappropriated net profit of Euro 69 million at 30 September 2021. The Annual General Meeting to be held on 11 March 2022 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 raised to Euro 1.05 per share (previous year: Euro 0.95 per share); the Supervisory Board will decide on its proposal in December 2021.

Presentation of asset and financial position of MVV Energie AG

Balance sheet

Euro 000s	**30 Sep 2021**	30 Sep 2020
Assets		
Non-current assets		
Intangible assets	389	454
Property, plant and equipment	507,588	469,136
Financial assets	1,521,040	1,454,302
	2,029,017	**1,923,892**
Current assets		
Inventories	280	4,201
Receivables and other assets	420,094	321,444
Cash and cash equivalents	744,056	102,259
	1,164,430	**427,904**
Deferred expenses and accrued income	653	559
	3,194,100	2,352,355
Equity and liabilities		
Equity		
Share capital	168,721	168,721
Capital reserve	458,946	458,946
Revenue reserves	551,857	510,543
Unappropriated net profit	69,202	62,612
	1,248,726	**1,200,822**
Income grants received	38,336	40,442
Provisions	89,738	76,775
Liabilities	1,815,942	1,034,316
Deferred tax liabilities	1,358	–
	3,194,100	**2,352,355**

Total assets increased year-on-year by Euro 842 million to Euro 3,194 million.

The asset side of the balance sheet is largely shaped by financial assets. At 30 September 2021, these totalled Euro 1,521 million, equivalent to a 48 % share of total assets. The figures for the previous year were Euro 1,454 million and 62% respectively. The addition of Euro 67 million to financial assets was chiefly due an increase in loans to associates. Property, plant and equipment increased year-on-year by Euro 39 million to Euro 508 million. This was mainly due to investments in connection with linking our energy from waste plant in Mannheim to the district heating grid and investments in transmission and supply grids.

Current assets rose to Euro 1,164 million, up Euro 737 million compared with 30 September 2020. This increase mainly resulted from the rise in liquid funds received from the exchange in connection with margin credits at MVV Trading. These funds flow to MVV Energie AG via the cash pool. Another reason for the increase in current assets was the taking up of liabilities to banks for loans to subsidiaries, only part of which have so far been passed on.

Furthermore, other receivables from associates also increased. The reduction in inventories for CO_2 rights had an opposing effect on current assets.

Equity increased by Euro 48 million in the year under report and amounted to Euro 1,249 million at the balance sheet date. At 39 %, the equity ratio at 30 September 2021 fell short of the previous year's figure of 51.1 %, a development attributable to the sharp increase in total assets due to the rise in liquid funds and cash pool liabilities to MVV Trading.

Provisions rose by Euro 13 million in total to Euro 90 million, with this being due above all to higher other provisions as a result of the German Fuel Emissions Trading Act (BEHG). Liabilities rose by Euro 782 million to Euro 1,816 million. The increase in liabilities primarily resulted from higher liabilities to associates. These related to margin credits at MVV Trading, which were passed on to MVV Energie AG via the cash pool.

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.

2021 activity statements

With its 2021 activity statements, MVV Energie AG has satisfied its reporting 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 45 million). The gross performance for the 2021 financial year was thus at the previous year's level. In terms of total electricity sector sales of Euro 678 million (previous year: Euro 629 million), sales in the electricity distribution activity are of subordinate significance.

Alongside income from the leasing of its electricity grids 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 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 until 30 September 2021 was opposed by corresponding other operating expenses. The electricity distribution activity field generated annual net income of Euro 9 million in the 2021 financial year (previous year: Euro 1 million).

At 30 September 2021, total assets in the electricity distribution activity field came to Euro 153 million (previous year: Euro 142 million). This corresponds to a 50 % share of total assets in the electricity sector at MVV Energie AG (previous year: 49 %). Property, plant and equipment relating to electricity distribution increased compared with the previous year's balance sheet date. At Euro 142 million (previous year: Euro 131 million), this item accounted for a 93 % share of total electricity distribution assets (previous year: 92 %). On the equity and liabilities side of the balance sheet, electricity distribution liabilities rose from Euro 49 million to Euro 73 million. Liabilities to associates 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 0.6 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 2021 financial year therefore amounted to Euro 0.6 million. Measured in terms of total electricity sector sales of Euro 678 million (previous year: Euro 629 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 its electricity meters (mME/iMSys). These meters were leased to Soluvia Energy Services GmbH until 31 March 2021 and have been directly leased to the grid operator MVV Netze GmbH since 1 April 2021. As a shared services company, Soluvia Energy Services GmbH nevertheless remains the metering point operator and smart meter gateway administrator and, as such, performs all metering services for MVV Netze GmbH and other grid companies within the Group.

Earnings were countered by depreciation of Euro 0.4 million on the electricity meters (mME/iMSys) recognised under non-current assets at MVV Energie AG (previous year: Euro 0.2 million). In the 2021 financial year, mME/iMSys metering operations posted annual net income of Euro 41 thousand (previous year: Euro 58 thousand).

At 30 September 2021, total assets in the mME/iMSys metering operations activity field amounted to Euro 2.8 million (previous year: Euro 1.8 million), corresponding to a 0.9 % share of total assets in the electricity sector at MVV Energie AG (previous year: 0.6 %). At the balance sheet date, property, plant and equipment relating to mME/iMSys metering operations amounted to Euro 2.8 million (previous year: Euro 1.8 million) and thus accounted for a 99 % share of total assets in mME/iMSys metering operations (previous year: 99%). On the equity and liabilities side, liabilities of Euro 1.6 million were reported for mME/iMSys metering operations (previous year: Euro 0.8 million). These mainly involve liabilities due to other activity fields.

Gas distribution

In the year under report, the gas distribution activity field reported sales of Euro 27 million (previous year: Euro 27 million). Gross performance was thus at the previous year's level. Compared with total gas sector sales of Euro 90 million (previous year: Euro 65 million), the gas distribution activity field is of subordinate significance. By analogy with electricity distribution, as well as income from leasing its grids to MVV Netze GmbH earnings in the gas distribution activity field also include income from concession duties. The other operating income resulting from charging on the concession duty to MVV Netze GmbH until 30 September 2021 was opposed by corresponding other operating expenses. The gas distribution activity field generated annual net income of Euro 4 million in the year under report (previous year: Euro 3 million).

Total assets in the gas distribution activity field amounted to Euro 125 million (previous year: Euro 112 million) at the balance sheet date on 30 September 2021 and accounted for some 80 % of total assets in the gas sector at MVV Energie AG (previous year: 85 %). At Euro 119 million, property, plant and equipment in gas distribution was Euro 14 million higher than in the previous year and accounted for 95 % of total assets in this activity field (previous year: 94 %). On the equity and liabilities side of the balance sheet, gas distribution liabilities rose from Euro 41 million to Euro 63 million. Liabilities to associates involve liabilities due to MVV Netze GmbH.

Corporate Governance Declaration (§ 289f, § 315d 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 Compliance 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 Compliance on **Page 82** was published together with our Annual Report on 14 December 2021 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 2021 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 2021 financial year, which has been jointly compiled for MVV Energie AG and the MVV Energie Group (“MVV”), has been published as a combined non-financial declaration within the combined management report in this Annual Report on **Page 48.**

Corporate Governance Declaration

High-quality and transparent corporate governance means acting in accordance with the principles of responsible company management aimed at sustainable value creation: For MVV, that is a standard we aim to meet in all aspects and all areas of our company. That is why we promote close cooperation based on trust between the Executive and Supervisory Boards and employees, account for the interests of our shareholders and all other stakeholders in our decisions, comply with applicable laws and structure our reporting and corporate communications transparently and openly. We are convinced that high-quality corporate governance provides a crucial foundation for promoting a relationship of trust with our shareholders, customers, business partners, employees and the general public.

The following Corporate Governance Declaration pursuant to § 289f and § 315d of the German Commercial Code (HGB) includes both the Declaration of Compliance 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 which require inclusion pursuant to § 289f and § 315d HGB.

MVV's Executive and Supervisory Boards dealt extensively with the company's corporate governance in the 2021 financial year. The following Declaration of Compliance shows: MVV Energie complies with the recommendations made in the Code with just one exception. We have set ourselves the objective of following the recommendations and suggestions made by the Code as completely as possible in future as well.

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

The Executive and Supervisory Boards adopted the following Declaration of Compliance with the German Corporate Governance Code in September 2021:

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 in the version dated 16 December 2019 and published in the Federal Gazette on 20 March 2020.

The following recommendation of the Code in its version dated 16 December 2019 has not been applied:

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's remuneration system, which was approved by a broad majority of shareholders at the Annual General Meeting on 12 March 2021 **www.mvv.de/investors** does not provide for any remuneration by way of shares in the company, share ownership obligations or corresponding share-based remuneration models. Variable remuneration for the Executive Board is exclusively disbursed by way of cash payments. MVV's remuneration system nevertheless takes account of the interest of the company and its stakeholders in long-term, value-based and sustainable growth. The bonuses presented in greater detail in the Remuneration Report on **Page 91** are based on the company's operating performance (adjusted EBIT) in the respective financial year and its 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 between variable remuneration and ROCE, and the development in this key figure over a three-year period, enables account to be taken of MVV's capital-intensive business and of the company's long-term performance. The ROCE measures how efficiently a company uses its capital and is, in our opinion, the most suitable key figure for assessing whether MVV has performed 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 and low share trading volumes, 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 requirements governing participation in the meeting and the exercising of voting rights. Shareholders may make statements on all agenda items at the meeting and submit relevant questions and motions. At the 2021 Annual General Meeting, which was held on an exclusively virtual basis due to the pandemic, due account had to be taken of the specific measures set out in greater detail below. For voting purposes, each share entitles its holder to one vote and voting is possible before or during the Annual General Meeting. Moreover, shareholders can cast their vote in a variety of ways: in person or via a proxy of their choice, by being represented by a voting proxy appointed by MVV Energie AG to act in line with their instructions, or by a bank or shareholders' association. Furthermore, shareholders can submit their votes by post in advance of the Annual General Meeting provided that they register within the relevant deadlines. Alternatively, they can communicate all declarations electronically using our password-protected shareholder portal at MVV's website.

Due to the coronavirus pandemic, we held the 2021 Annual General Meeting on a virtual basis. The Annual General Meeting was broadcast live and in full length on our website and the web-based shareholder portal. Moreover, through to the end of voting shareholders were able to cast their votes via the web-based shareholder portal. Shareholders were thus able to decide at very short notice as to how to cast their vote. Large numbers of our shareholders drew on the option of submitting questions about the agenda via the shareholder portal up to one day ahead of the Annual General Meeting. The questions thereby submitted were answered by the Executive and Supervisory Boards at the Annual General Meeting. This way, we were able to ensure a high-quality exchange of views with our shareholders in the virtual format as well.

The Covid-19 Act (Act Mitigating the Consequences of the Covid-19 Pandemic), which governs the admissibility and requirements for holding virtual annual general meetings, expires upon the conclusion of the 2021 calendar year. It remains to be seen how lawmakers will react to any potential continuation in the pandemic. We have taken precautions enabling us to hold either a physical annual general meeting or another purely virtual annual general meeting if the restrictions on large-scale events should remain in force until March 2022 and the legal requirements governing virtual annual general meetings as set out in the Covid-19 Act are extended beyond 31 December 2021.

We publish all relevant documents for our Annual General Meeting on our website at **www.mvv.de/investors** 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 a high degree of 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. Our websites, and here especially **www.mvv.de** and **www.mvv.de/investors,** serve as prompt sources of information. The information we publish on these sites includes our financial reports, analysts' conference presentations, press releases, ad-hoc announcements and our financial calendar.

Disclosures on auditor

The Annual General Meeting on 12 March 2021 elected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, (PwC), Essen, as auditor for the financial year. Ahead of 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: from 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

The annual financial statements of MVV Energie AG are prepared 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 prepared by the Executive Board. Once the Audit Committee has discussed the financial statements, they are examined, approved and thus adopted by the Supervisory Board. The consolidated financial statements are also prepared by the Executive Board, audited by the auditor and discussed in detail by the Audit Committee before being 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 Committee 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

We attach great value to making sure that our dealings with all of our stakeholders are characterised by trust, fairness and integrity. Our compliance management system (CMS) supports us in safeguarding compliance with applicable laws, as well as with in-company guidelines and the ethical standards to which we are committed. The CMS is intended on the one hand to ensure that our managers and employees understand and adhere to these guidelines and standards and on the other hand to monitor all relevant business activities and processes within our Group.

Our Compliance Management Handbook summarises the most important requirements and necessary organisational structures and processes. It also lists the names of those employees who are responsible for our reporting system and describes the relevant processes in detail. The handbook is binding for all companies at the Mannheim subgroup of MVV Energie AG and is permanently available for downloading to all employees at this subgroup. The other subgroups have introduced equivalent compliance management systems. Our Compliance Management Handbook is available both in German and in English for our British and Czech subgroups.

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

We have structured our CMS in such a way that any breaches of compliance are avoided on a preventative basis, particularly by implementing preventative measures in the respective business processes ("systemic compliance"). 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 exclusively take the form of dividends.

By actively implementing preventative measures within business processes, we are committed to averting criminal or grossly improper violations of the law. In this respect, we have a zero-tolerance policy towards bribery and all other forms of corruption. With regard to corruption prevention, we provide extensive training to our employees, particularly those working in sales, related areas and procurement. We show them, for example, how to deal with gratuities and invitations, which we record and check. These measures enable us to minimise the risk of so-called soft bribery. Furthermore, we continually monitor all business fields, specialist divisions, group departments and subsidiaries to ascertain whether compliance requirements have been adhered to. Moreover, employees and third parties can contact the Compliance Officer or an external confidence lawyer directly via anonymous "whistle-blower hotlines" and thus provide tip-offs on potential misconduct. We have published details including the telephone number of the confidence lawyer, also on our website at **www.mvv.de.**

Apart from a low number of minor incidents, no compliance-related infringements were detected in the period under report.

All of MVV's managers and employees who have contact to customers, service providers or suppliers receive regular training to ensure that they are extensively informed of general compliance requirements and also familiar with the legal requirements relevant to their respective business units. Examples of the topics covered by this training are combating corruption and money laundering, capital market, stock market, competition and cartel law, handling sanction lists and the relevant requirements of energy industry law. In the 2021 financial year, 318 employees at the Mannheim subgroup and 175 employees at the other subgroups took part in this training.

Due to the coronavirus pandemic, training sessions often could not take place in person, but were rather held online. In parallel, a total of 2,087 individuals completed an e-learning programme in the same period that was offered by our Stadtwerke Kiel and Energieversorgung Offenbach subsidiaries and the Juwi subgroup. At the end of each financial year, all managers from a specific management level upwards are required to submit a Compliance Management Declaration (CMD). The same requirement applies to the managing directors of our subsidiaries and select other shareholdings. In this, they must state whether all relevant compliance regulations and legal requirements have been complied with. The questions in the CMD include asking whether the employees of the individual manager have received the required instruction and suitable training for the CMS. Furthermore, in the context of the CMD the managers also provide detailed responses to questions specifically tailored to circumstances at their respective business unit.

Upon any changes to the legislation governing money laundering, our compliance requirements relating to the prevention of money laundering and terrorism financing are immediately updated. Given its products, customer base and geographical areas of activity, MVV is only exposed to a low potential risk in this respect. To eliminate the risk of participating in money laundering and terrorism financing entirely, cash transactions are prohibited without exception. Moreover, when business relationships are established requirements have to be met in terms of identifying the contract partners and their economic beneficiaries.

The energy industry supply chain is greatly influenced by fuel trading, which is handled on energy exchanges or in bilateral agreements. A far lower share of our total procurement volumes relates to suppliers who provide us with goods or perform 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 require all suppliers to commit to our compliance regulations, particularly those relating to anti-corruption measures, environmental protection, respect for human rights in the supply chain and social responsibility. Our cooperation with suppliers and service providers in Germany and the European Union is based on applicable laws and regulations, including the German Act on Corporate Due Diligence Obligations for the Prevention of Human Right Violations in Supply Chains (LkSG), which will apply to us from 1 January 2023, as well as on those compliance regulations, forms of conduct and work practices relevant to us. Among others, these include 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 have published on our website **www.mvv.de/zentraleinkauf.** Our suppliers undertake to comply with legal requirements and internationally recognised standards governing anti-corruption measures, the protection of human and workers' rights and environmental protection. If these obligations are breached, then contractual sanctions, including contractual penalties, termination and damages payments, are provided for.

Our risk management system and internal control system in respect of the financial reporting process (IKS) represent further key components of our corporate management. Our IKS 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, 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 are regularly analysed.

Dual management system

MVV Energie AG is a listed stock corporation and has its legal domicile in Mannheim. As such, it is governed by the requirements of German stock corporation law. One basic principle set out therein is the dual management system, which requires 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 with the objective of generating sustainable and profitable growth. It lays down the company's strategic alignment and determines it financial, investment and personnel planning. It reviews the strategic alignment and the appropriateness of the risk management system. Moreover, 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. In its decisions, it takes due account of the interests of the company's stakeholders.

The Supervisory Board has issued a Code of Procedure which governs the activities of the Executive Board. This lays down 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 the transactions requiring Supervisory Board approval. Pursuant to the Articles of Incorporation, the Executive Board must have at least two members. It currently comprises four positions: CEO/ Commercial Affairs, Personnel, Technology and Sales.

The CEO coordinates the work within the Executive Board and represents the Executive Board externally. Apart from this, Executive Board members enjoy 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 the division to the overriding interests of the company.

Diversity concept for composition of Executive Board

The diversity concept adopted by the Supervisory Board in 2020 for the composition of the Executive Board is based on 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 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 complement each other in such a way that the Executive Board as a whole has the necessary expertise and a suitable breadth of experience. Executive Board members bear joint responsibility for managing the company and the Group. In view of this, they must 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. Furthermore, the Supervisory Board and the Executive Board should work together to find long-term succession solutions.

In 2017, the Supervisory Board set itself the objective of raising the share of women on the Executive Board and laid down 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 and thus two years earlier than planned.

The CVs of Executive Board members have been published 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 is charged with advising the Executive Board in its management of the company and with supervising its activities. Its responsibilities also include appointing and dismissing members of the Executive Board. The Executive Board must involve the Supervisory Board in all decisions that are of fundamental significance for the company. The Executive Board provides the Supervisory Board with regular, prompt and comprehensive information about its strategy and other fundamental matters of corporate planning. Furthermore, the Executive Board regularly reports to the Supervisory Board on the business performance, major transactions and situation of the company, as well as on its risk situation and risk management.

The Supervisory Board of MVV Energie AG comprises 20 members, of which ten shareholder representatives and ten employee representatives. Their terms in office are identical. 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 provision applies for as long as the City of Mannheim is a shareholder and, directly or indirectly, holds shares corresponding to more than half of the company's share capital. Pursuant to the German Codetermination Act (MitbestG), employee representatives are elected by the company's employees. The Chairman of the Supervisory Board, who is the Lord High Mayor of the City of Mannheim, 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 structure its activities efficiently, the Supervisory Board of MVV Energie AG has formed five specialist committees. 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. The Personnel, Nomination, Mediation and New Authorised Capital Creation Committees are only convened when necessary.

The **Audit Committee** is entrusted with addressing the 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 include preparing the selection of the auditor, reviewing and discussing the annual and consolidated financial statements in advance and preparing corresponding resolutions for the full Supervisory Board and discussing the interim consolidated financial statements for the first half and the interim financial statements for the first three and first nine months with the Executive Board. Furthermore, it 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 (compliance). Further tasks incumbent on the Audit Committee include determining key audit focuses and setting thresholds for the commissioning of non-audit services. The Audit Committee consists of three shareholder representatives and three employee representatives. At 30 September 2021, the committee had the following members: Dr. Lorenz Näger (Chairman), Heike Kamradt (Deputy Chair), Angelo Bonelli, Detlef Falk, Martin F. Hermann and Gregor Kurth. The Audit Committee members meet the requirements of § 100 (5) and § 107 (4) AktG in effect since 1 July 2021, which state that at least one member of the committee should have accounting expertise, at least one further member should have auditing expertise, and that the members as a whole should be familiar with the sector in which the company operates. The Committee Chairman Dr. Lorenz Näger therefore also meets the qualification requirement set out in D.4 of the German Corporate Governance Code in its version dated 16 December 2019. All members of the committee are independent pursuant to the definition in C.10 of the Code. The Supervisory Board Chairman, Dr. Peter Kurz, the First Mayor of the City of Mannheim, Christian Specht, and the Supervisory Board member Dr. Stefan Seipl attend Audit Committee meetings as permanent guests.

The activities of the **Personnel Committee** particularly involve preparing any Supervisory Board resolutions which relate to the conclusion, amendment or rescission of employment contracts with Executive Board members. It proposes suitable candidates to the Supervisory Board for appointments to the Executive Board. In this, it takes due account of legal requirements, the diversity concept adopted by the Supervisory Board for the Executive Board and the recommendations made by the German Corporate Governance Code. The Supervisory Board as a whole is responsible for appointing new members to the Executive Board subsequent to preparation of the decisions by the Personnel Committee, as well as 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 2021: Dr. Peter Kurz (Chairman), Heike Kamradt (Deputy Chair), Angelo Bonelli, Barbara Hoffmann, Gregor Kurth and Jürgen Wiesner.

The responsibilities of the **Nomination Committee** involve determining targets for the composition of the Supervisory Board and recommending suitable candidates to the Supervisory Board for its own proposals to the Annual General Meeting. When selecting candidates, the committee takes particular account of legal requirements, the diversity concept and the recommendations of the German Corporate Governance Code. The six committee members include the Supervisory Board Chairman, who also chairs the committee, and five further shareholder representatives. The Nomination Committee had the following members at 30 September 2021: Dr. Peter Kurz (Chairman), Barbara Hoffmann, Gregor Kurth, Dr. Lorenz Näger, Tatjana Ratzel and Thorsten Riehle. Christian Specht attends the meetings of the Nomination Committee as a permanent guest.

The **Mediation Committee** submits further personnel proposals to the Supervisory Board pursuant to § 27 (3) of the German Codetermination Act (MitbestG) 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 2021: Dr. Peter Kurz (Chairman), Heike Kamradt, Gregor Kurth and Jürgen Wiesner.

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. The New Authorised Capital Creation Committee had the following members at 30 September 2021: Dr. Peter Kurz (Chairman), Heike Kamradt, Gregor Kurth, Dr. Lorenz Näger, Tatjana Ratzel, Thorsten Riehle, Christian Specht and Jürgen Wiesner.

Diversity concept for composition of Supervisory Board

The diversity concept adopted by the Supervisory Board in 2020 and the specialist and personal requirements it sets out 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 must have the ability to correctly assess the economic situation and technical context of a listed energy supplier with municipal roots and successfully accompany its sustainable development. It is not expected that individual Supervisory Board members should 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.

Moreover, the Supervisory Board must include an adequate number of members who have the qualifications called for by the German Stock Corporation Act (AktG) and the German Corporate Governance Code. The Supervisory Board should also include an adequate number of independent members.

Proposals for candidates should take due account of an upper age limit of 70 years. As a rule, this limit should also not be exceeded during the term in office.

Pursuant to § 96 (2) Sentence 1 AktG, the Supervisory Board of a listed company should comprise at least 30 % women and at least 30 % men. According to § 96 (2) Sentence 2 AktG, 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 exercised the option 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 responsibility on the part of the Nomination Committee is to implement the diversity concept for the composition of the Supervisory Board. It proposes suitable shareholder representative candidates to the Supervisory Board for its election proposals to the Annual General Meeting. In this, it also 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 checks 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 for the positions on the Supervisory Board is governed by the provisions of codetermination law.

The composition of the Supervisory Board changed in the 2021 financial year. Of the shareholder representatives, Prof. Dr. Heidrun Kämper, Brigitte Kemmer and Steffen Ratzel stood down from their positions upon the conclusion of the 2020 financial year. By ruling of Mannheim District Court dated 21 September 2020, Sabine U. Dietrich, Tatjana Ratzel and Dr. Stefan Seipl were appointed as members of the Supervisory Board of MVV Energie AG as of 1 October 2020 and elected to the Supervisory Board by the Annual General Meeting on 12 March 2021. Martin F. Herrmann and Thorsten Riehle were also elected by the Annual General Meeting on 12 March 2021. They have succeeded Prof. Heinz-Werner Ufer and Ralf Eisenhauer, who retired from the Supervisory Board upon the conclusion of the Annual General Meeting on 12 March 2021. By ruling of Mannheim District Court, Gregor Kurth had already been appointed as a Supervisory Board member as of 3 July 2020. He too was elected to the Supervisory Board by the Annual General Meeting on 12 March 2021.

These changes in the Supervisory Board were partly due to the changes in the company's shareholder structure. The election proposals are based on recommendations made by the Supervisory Board Nomination Committee and take due account of the diversity concept adopted by the Supervisory Board for its composition.

Of the employee representatives on the Supervisory Board, Peter Erni and Gabriele Gröschl-Bahr stood down from their positions as of 12 March 2021. Angelo Bonelli and Susanne Schöttke were elected by employees as their successors in the Supervisory Board.

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

With regard to the evaluation of the effectiveness of its own work and that performed by its committees, the Supervisory Board most recently conducted a self-assessment in the 2019 financial year. Building on the findings of this assessment, ideas and recommendations were 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

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

In respect of Points C.1 and C.6 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. A Supervisory Board member is considered 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. In view of this, it is logical that the City of Mannheim, as the majority shareholder in MVV Energie AG, should be represented on the company's Supervisory Board. When determining independence, the decisive factor is whether there are any material conflicts of interest that are not only of a temporary

nature. This is particularly not the case for 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 2021 financial year.

Even if the independence of those Supervisory Board members who are simultaneously members of the city administration or city council of the City of Mannheim is viewed differently, the Supervisory Board nevertheless includes what is, according to C.9 of the German Corporate Governance Code, an appropriate number of independent members, namely Sabine U. Dietrich, Martin F. Herrmann, Barbara Hoffmann, Gregor Kurth, Dr. Lorenz Näger, Tatjana Ratzel and Dr. Stefan Seipl.

Some of our Supervisory Board members 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, based on their work to date the Supervisory Board does not have 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 set ourselves the target of raising women's share of our Group's workforce to 35 % by 30 September 2021, up from 27 % at 30 June 2015. With a 28 % share of women employees at 30 September 2021, we only managed to come slightly closer to reaching this target. Among our management staff, we also aimed to increase the share of women to 25 %, up from 14 % at 30 June 2015. At 14 % at the balance sheet date on 30 September 2021, this figure was still at its 2015 level. As the efforts made so far have not yet enabled us to reach the targeted shares, the Executive Board decided in September 2021 to retain the existing targets of 35 % and 25 % respectively and to reach these by 30 September 2026. To achieve our targets by 2026, we will consistently implement our promotional measures and programmes and further expand these in the years ahead. That is particularly true for our targeted personnel development activities for women who have the potential to take on management positions.

For MVV Energie AG, we report on the share of women in the first and second management tiers below the Executive Board. In August 2017, the Executive Board set targets for the share of women at 25 % for the first and 30 % for the second management tiers, with both targets to be reached by 30 September 2021. The share of women in the first management tier amounted to 14 % at 30 September 2021 and was thus ahead of the previous year (30 September 2020: 10 %). In the second management tier, the share of women amounted to 31 % (30 September 2020: 27 %) and thus exceeded the target level set. We see this as providing a stable basis and as offering an opportunity to fill positions becoming vacant in the next higher management tier with internal candidates in future. In September 2021, the Executive Board adopted a resolution to retain the existing targets of 25 % and 30 % and to achieve and uphold these respectively by 30 September 2026. In addition to those measures that are already in place to promote women, we are taking steps to increase the number of applications we receive from promising external and internal women candidates.

Remuneration Report

In what follows, we describe the principles underlying our remuneration system for the Executive and Supervisory Boards, which was approved by the Annual General Meeting in March 2021. Furthermore, we also provide information on the structure and amount of remuneration paid to members of the Executive and Supervisory Boards of MVV Energie AG in the year under report.

EXECUTIVE BOARD REMUNERATION

Remuneration system

Our remuneration system is structured to incentivise the sustainable, 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 of the recommendations set out in the German Corporate Governance Code. The Supervisory Board reviews the system and amount of remuneration for our Executive Board members at regular intervals and determines both aspects. The Personnel Committee of the Supervisory Board prepares the resolutions thereby required.

Executive Board remuneration comprises non-performance-related and performance-related components. The composition and determination of these components is described below.

No other 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 Executive Board members comprise 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. These 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.

In addition, all members of the Executive Board at MVV Energie AG have been granted defined contribution pension commitments, the volume of which corresponds to 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 cover benefits for permanent inability to work and provision for surviving dependants.

Performance-related remuneration

The variable remuneration of our Executive Board members comprises two components, each of which is furnished with appropriate minimum thresholds and caps. The first is the annual bonus, which is measured based on the adjusted EBIT generated by MVV in the past financial year. The second is the sustainability bonus, which is linked to the long-term increase in the company's value.

The latter bonus is determined by reference to MVV's average ROCE (return on capital employed) before IFRS 9 items. This calculation includes the figures both for the past financial year and for the two preceding financial years. The ROCE key figure measures how effectively the company has used its capital employed. Since the capital required for operations is influenced in particular by long-term strategic decisions, this figure is well suited to assess the long-term performance in the company's value. The sustainability bonus is only paid out when the three-year ROCE exceeds a minimum threshold stipulated by the Supervisory Board.

Compared with the annual bonus, the sustainability bonus made up the predominant share of variable remuneration paid to the members of MVV's Executive Board in the 2021 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

Remuneration totalling Euro 3,109 thousand was paid to the Executive Board of MVV Energie AG in the year under report (previous year: Euro 2,812 thousand).

In the following tables, we provide information both about the benefits granted and about the actual incomes paid in the year under report, as well as about total remuneration. The methodology underlying our remuneration system means that the benefits granted and actual incomes paid are identical.

Former members of the Executive Board received benefits of Euro 725 thousand in the year under report (previous year: Euro 630 thousand). As of the balance sheet date, the company had provisions totalling Euro 18,310 thousand for pension obligations to former Executive Board members and their surviving dependants (previous year: Euro 20,288 thousand). Of this total, an amount of Euro 122 thousand was added in the year under report (previous year: Euro 64 thousand).

Provisions governing premature departure of an Executive Board member

Should a member of the Executive Board prematurely depart from his or her role, the potential severance pay agreement is governed by the following provisions: Payments made to a departing Executive Board member may not exceed the value of two annual remuneration packages. Payments may not exceed the maximum remuneration payable for the remaining term of the employment contract. No transitional allowances are paid upon the premature termination or non-extension of the employment contract.

Remuneration of related parties

Management staff performing key functions count as related parties pursuant to IAS 24. As well as Executive Board members, we include active division heads and authorised representatives of MVV Energie AG in this category. Our division heads and authorised representatives receive their remuneration solely from MVV Energie AG. The relevant remuneration amounted to Euro 3,353 thousand in the year under report (previous year: Euro 2,955 thousand), of which Euro 3,247 thousand involved payments with current maturities (previous year: Euro 2,845 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 basic remuneration. The total expenses incurred for this remuneration amounted to Euro 106 thousand in the 2021 financial year (previous year: Euro 110 thousand).

Benefits granted and income paid

	Dr. Georg Müller Chief Executive Officer				Verena Amann Personnel Director			
Euro 000s	**FY 2021**	Min FY 2021	Max FY 2021	FY 2020	**FY 2021**	Min FY 2021	Max FY 2021	FY 2020
Fixed remuneration [1]	547	547	547	524	327	327	327	313
Fringe benefits [2]	27	27	27	31	40	40	40	41
Other activities [3]	11	11	11	11	9	9	9	6
Total	**585**	**585**	**585**	**566**	**376**	**376**	**376**	**360**
Variable remuneration	474	–	1,094	394	314	–	654	264
Total pay	**1,059**	**585**	**1,679**	**960**	**690**	**376**	**1,030**	**624**
Pension expenses [4]	1.193[5]	1,193	1,193	349	306	306	306	331
Total remuneration	**2,252**	**1,778**	**2,872**	**1,309**	**996**	**682**	**1,336**	**955**

	Ralf Klöpfer Sales Director				Dr. Hansjörg Roll Technology Director			
Euro 000s	**FY 2021**	Min FY 2021	Max FY 2021	FY 2020	**FY 2021**	Min FY 2021	Max FY 2021	FY 2020
Fixed remuneration [1]	327	327	327	313	327	327	327	313
Fringe benefits [2]	38	38	38	39	20	20	20	23
Other activities [3]	11	11	11	11	6	6	6	6
Total	**376**	**376**	**376**	**363**	**353**	**353**	**353**	**342**
Variable remuneration	313	–	654	259	318	–	654	264
Total pay	**689**	**376**	**1,030**	**622**	**671**	**353**	**1,007**	**606**
Pension expenses [4]	397	397	397	302	456	456	456	316
Total remuneration	**1,086**	**773**	**1,427**	**924**	**1,127**	**809**	**1,463**	**922**

1 Annual fixed remuneration including CEO allowance of Euro 220 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

5 The amount stated comprises the current service cost and retrospective service cost.

Pension obligations

		Development in virtual pension accounts		Pension provisions	Allocation to pension provisions	
Euro 000s	Balance at 1 Oct 2020	Pension contribution	**Balance at 30 Sep 2021** [1]	**Balance at 30 Sep 2021** [2]	Service cost	Interest expenses
Dr. Georg Müller	3,369	394	3,914	6,986	1,193	37
Verena Amann	120	105	230	702	306	3
Ralf Klöpfer	995	186	1,221	2,338	397	13
Dr. Hansjörg Roll	940	219	1,196	2,252	456	12
Total	**5,424**	**904**	**6,561**	**12,278**	**2,352**	**65**

1 Including interest

2 Equivalent to present value of vested claims

SUPERVISORY BOARD REMUNERATION

Remuneration system

The remuneration of Supervisory Board members is laid down in the Articles of Incorporation of MVV Energie AG, on which the company's Annual General Meeting adopted a resolution pursuant to § 113 (3) AktG most recently in March 2021.

Supervisory Board members accordingly receive fixed annual remuneration payable after the conclusion of the respective financial year, as well as a meeting allowance, the amount of which is determined by the Annual General Meeting. The level of remuneration was most recently adjusted in the 2020 financial year.

The remuneration paid to our Supervisory Board members is commensurate to the responsibility they bear and to the scope of their activities.

In the 2021 financial year, each Supervisory Board member received annual remuneration of Euro 15 thousand. The Supervisory Board Chairman received annual remuneration of Euro 30 thousand and his deputy was paid Euro 22.5 thousand. Prorated remuneration is paid to members joining or leaving the Supervisory Board during the financial year. The Audit Committee Chairman received additional annual remuneration of Euro 10 thousand, while other members of this committee each received Euro 5 thousand.

Moreover, Supervisory Board members 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 541 thousand was paid to Supervisory Board members in the year under report (previous year: Euro 525 thousand).

Supervisory Board remuneration FY 2021

Euro	Annual remuneration	Meeting allowances
Dr. Peter Kurz, Chairman	30,000	19,000
Johannes Böttcher	15,000	6,000
Angelo Bonelli (since 12 March 2021)	11,055	8,000
Timo Carstensen	15,000	6,000
Sabine U. Dietrich	15,000	5,000
Ralf Eisenhauer (until 12 March 2021)	6,750	5,000
Peter Erni (until 12 March 2021)	9,000	–
Detlef Falk	20,000	11,000
Gabriele Gröschl-Bahr (until 12 March 2021)	6,750	2,000
Martin F. Herrmann (since 12 March 2021)	11,055	6,000
Barbara Hoffmann	15,000	9,000
Heike Kamradt	27,500	14,000
Gregor Kurth	20,000	12,000
Thoralf Lingnau	15,000	6,000
Dr. Lorenz Näger	22,764	14,000
Tatjana Ratzel	15,000	7,000
Thorsten Riehle (since 12 March 2021)	8,292	3,000
Susanne Schöttke (since 12 March 2021)	8,292	2,000
Bernhard Schumacher	15,000	6,000
Dr. Stefan Seipl	15,000	11,000
Christian Specht	15,000	11,000
Prof. Heinz-Werner Ufer (until 12 March 2021)	11,250	8,000
Susanne Wenz	15,000	4,000
Jürgen Wiesner	15,000	8,000
Total	**357,708**	**183,000**

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 2021, 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 a fund managed by First Sentier Investors (previously: First State Investments), directly held 45.08 % 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 either 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 due to 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

- Changes foreseeable in energy and climate policy framework
- Increased volatility on energy and procurement markets
- Significant sales growth and moderate rise in earnings expected for 2022 financial year
- Investments set to remain high

OUTLOOK

Macroeconomic developments

The impact of the coronavirus pandemic on society and the economy, and in particular its indirect implications, can still only be forecast to a limited extent. In their autumn survey for the 2021 calendar year, Germany's leading economic research institutes expect gross domestic product to rise by 2.4 %. They note that the economic situation is still being adversely affected by the coronavirus pandemic, with manufacturing output additionally held back by supply bottlenecks for upstream products. The German economy is only expected to regain normal capacity levels during 2022. The researchers expect economic growth of 4.8 % in the 2022 calendar year.

Business framework

Alongside macroeconomic developments, MVV's future business performance will particularly be determined by the regulatory and competitive framework in Europe and Germany. One key factor on European level will be the fleshing out of the "Fit for 55" package. In Germany, the further amendment to the Climate Protection Act (KSG), reforms to the Renewable Energies act (EEG), the implementation of the Coal Exit Act (KAG) and programmes to promote green heat options will play an important role. Further information about these can also be found in the chapter **Business Framework** **Page 30.**

The energy and procurement markets have become increasingly volatile and witnessed rapid movements in prices in recent months **Pages 35 and 36.** This will create uncertainties for MVV in the 2022 financial year as well. Moreover, competitive pressure remains unrelentingly high.

Executive Board summary of expected business performance

Overall, we expect our operating environment to remain challenging in the 2022 financial year. Key uncertainties relate above all to the direct and indirect impact of the coronavirus pandemic and the energy industry framework within which MVV operates. The national and international climate protection efforts and accompanying legislation, which are largely coherent, nevertheless affirm us in our strategic alignment, which is based on implementing the electricity and heat turnarounds and offering suitable solutions to our customers. This being so, we will invest in further expanding renewable energies, boosting energy efficiency and developing innovative products and services to accelerate decarbonisation. At the same time, we are pursuing measures to enhance our processes and reduce our costs, and that in all areas of our company. This way, we are providing MVV with a foundation for sustainable and profitable growth.

Sales performance

From a current perspective, we expect adjusted sales (excluding energy taxes) in the 2022 financial year to increase significantly compared with the previous year (Euro 4.1 billion). The sales performance will depend above all on developments in prices on the energy markets, on the implementation of photovoltaics and wind projects and on weather conditions and demand from our customers.

Earnings performance

In the Customer Solutions reporting segment, we expect adjusted EBIT at around the previous year's level. Alongside weather conditions, the earnings performance here is particularly dependent on market and competitive conditions, as well as on the start-up costs incurred for new business models.

Operating earnings in the New Energies reporting segment are influenced by the development in waste and biomass prices and volumes, wholesale prices on energy markets, availability levels at our plants and weather conditions, including wind volumes. Due to the nature of the business, volatility is also high in the development and marketing of photovoltaics and wind projects. On this basis, we expect to achieve a significant increase in adjusted EBIT in the New Energies reporting segment in the 2022 financial year.

Earnings in the Supply Reliability reporting segment are determined above all by the development in procurement costs for fuels and CO_2 emission rights, weather conditions and availability levels at our plants. Overall, we expect adjusted EBIT in the Supply Reliability reporting segment to slightly exceed the previous year's figure.

Based on the developments outlined above for the reporting segments, from an operating perspective we expect MVV's adjusted EBIT in the 2022 financial year to show a further moderate increase compared with the previous year's excellent earnings (Euro 278 million). Alongside the factors stated for individual reporting segments, this expectation chiefly depends on the further development in the energy markets and the assumption that neither market conditions nor the effects of the coronavirus pandemic limit the availability of commodities or supply chain integrity.

Performance of MVV Energie AG in separate financial statements

For the 2022 financial year, we expect sales (excluding energy taxes) at MVV Energie AG to significantly exceed the previous year's figure (Euro 1.5 billion). Annual net income after taxes is expected to slightly surpass the previous year's level (Euro 111 million). Weather conditions have a significant influence on sales and sales volumes in the heat business. Earnings in the separate financial statements are also notably 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 our earnings performance in future as well. In view of the significant earnings growth in the 2021 financial year, the Executive Board has therefore decided to propose a dividend of Euro 1.05 per share, corresponding to an increase of Euro 0.10 per share, for approval by the Annual General Meeting on 11 March 2022. The Supervisory Board will decide in December 2021 on its dividend proposal to be submitted to the Annual General Meeting.

Investments

We will significantly increase our investments in the 2022 financial year while maintaining largely unchanged focuses. MVV will therefore be upholding its transformation course.

Capital resources and financing structure

Thanks to our ongoing very good access to the capital markets, we are able to cover our financing and liquidity needs at all times. Our adjusted equity ratio of around 29 %, or around 33 % excluding security deposits for counterparty default risk (margins), enables us to continue making high volumes of investment. We finance our investments in the existing business primarily from depreciation. For growth projects, we draw on retained earnings and on optimised project-based financing facilities. We pool projects with structural similarities and comparable terms and then finance these via the capital market. We draw here on the bank and promissory note loan markets. By adhering to key figures as guidelines for debt-financed growth, we ensure an implicit investment grade rating 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.

OPPORTUNITY AND RISK REPORT

The energy industry has been undergoing a process of fundamental change for years now – and the industry as a whole 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. Systematically managing opportunities and risks enables us 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 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 also helps us to avoid material misstatements resulting from errors or irregularities.

The IKS is a fixed component of our accounting and financial reporting processes at all our major locations. We regularly analyse all processes and interfaces relevant to the preparation of MVV's consolidated financial statements and combined management report, as well as of the annual financial statements of MVV Energie AG. 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 such risks, 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, combined management report and the annual financial statements of MVV Energie AG.

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

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 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 prepared by the Executive Board and 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 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 for the purposes of annual and interim financial statements on uniform guidelines. These lay down the accounting policies requiring application under IFRS and 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 this purpose. 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 potential 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 is subject to uniform standards applicable throughout the Group. We ensure that our IKS is documented and effective in terms of its structure and functionality.

Our IKS managers at all major 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 for the information of 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 intra-year reporting process, the group controlling department monitors whether and to what extent the targets set by the Executive Board in the business plan and approved by the Supervisory Board are actually met. Variances, whether to planned developments or to the previous year's figures, are documented and included in the quarterly 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 manageable and offset by suitable opportunities.

Basic principles and organisation of RMS

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 who are incorporated into the chain of responsibility for operating earnings at their respective 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 avoided, 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 that are already factored into the measurement of the risk. Existing opportunity and risks are aggregated using probability methods.

RISK MANAGEMENT SYSTEM

In our risk report, we comment on 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. Any significant new risks arising at short notice or material changes in existing risks are reported immediately to the Executive Board, which in turn informs the Supervisory Board as appropriate.

Supervision of IKS and RMS

Both the IKS and the RMS 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 weak points and reviews whether the improvements introduced are having their intended 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 2022

Risk category		Risk class
PRICE RISKS	» Market prices: • Clean dark spread • Clean spark spread » Fluctuations in procurement prices • Waste and biomass prices » Exchange rates » Interest rates	MEDIUM
VOLUME RISKS	» Fluctuations in turnover: • Weather conditions and wind volumes • Economic climate » Competition and efficiency » Procurement for waste and biomass	MEDIUM
OPERATING RISKS	» Renewable energies project development » Construction projects » Plant operation » Personnel » IT risks	MEDIUM
LEGISLATIVE RISKS	» Regulation » Legal risks	MEDIUM
FINANCING RISKS	» Receivables default » Refinancing » Liquidity » Countries	LOW
STRATEGIC RISKS	» Strategic decisions (including investments)	LOW

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 is also influenced by uncertainties resulting from the coronavirus pandemic. As from the very start, we are drawing on numerous proactive measures to counter the effects of the pandemic and review these continually to assess their effectiveness. Our close links to the overall economy may nevertheless lead to numerous direct or merely indirect pandemic-related effects 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 summarise commodity price fluctuations on both procurement and sales markets, as well as exchange rate and interest rate movements. We deploy financial instruments to limit interest rate, exchange rate and commodity risks **Notes to Balance Sheet (Note 35), Page 151.**

Fluctuations from marketing our generation positions
The clean dark spread (CDS), 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. The costs of electricity generation include – in each case together with the costs of CO_2 emission rights – the costs of coal in the case of the CDS, the costs of gas (for the CSS, in each case including transport costs and currency translation differences) 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.

Since the beginning of the coronavirus pandemic, and especially since summer 2021, we have witnessed sharp fluctuations in wholesale market prices, which 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 account of our applicable hedging regulations. We thus raise the consistency of our earnings and act early to improve our planning reliability for future financial years.

The scale of increases recently observed in procurement prices and the speed at which these changes have taken place could create economic difficulties for individual market players and, as a result, threaten the performance of contracts with us. Despite our active management of trading limits with our training and contract partners, a price risk may arise in connection with the potential procurement of replacement resources.

As well as fluctuations in the procurement prices of our energy supply projects, potential supply bottlenecks and delays may give rise to price risks for commodities, materials or supplier products (for example in the fields of photovoltaics systems, batteries, wall boxes, transformers, smart meters, cables). We are also observing a noticeably lower level of availability among plant construction and installation service providers.

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. The weather has 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 if temperatures are cooler than planned during the heating period and/or should wind volumes exceed our expectations. Reverse developments in these respective factors result in corresponding risks to our business performance.

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 or due to supply bottlenecks, 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 or their strong competitive positions.

In view of 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 just as high as ever. 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 customers benefits. We are thus also 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 improve 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 volumes available and by their quality. Both aspects are in turn influenced 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 further development in the coronavirus pandemic and potential resultant reduction in industrial and commercial production and turnover volumes could impact on waste prices and volumes.

The UK's exit from the European Union (Brexit) has led to greater 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, in its renewable energies project development business, as well as at customers with energy-related services for industrial parks and data centre services.

We have considerable 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. Based on our assessment, key opportunities and risks in the onshore wind turbine project development business in Germany involve 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. Further factors that cannot be excluded are the downstream impact of supply delays or bottlenecks with supplier products (e.g. for photovoltaics systems batteries, wall boxes, transformers, smart meters, cables) and price increases at upstream suppliers that we cannot pass on to our customers.

We monitor any potential delays to operations launches or projects, especially in the project development business, and this is 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 also 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 experience and great competence in project development and operations management for renewable energies plants.

Risks from progress with construction projects
Large-scale generation plants and grid infrastructure installation measures have long planning and construction stages and harbour corresponding risks. Any delays in the completion and launch of operations at our major projects could impact negatively on our expected adjusted EBIT, as could any unplanned costs to procure substitute electricity and heat or additional costs due to new developments or potential price increases at upstream suppliers. 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 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. Our group of companies 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 respective company and location. To enable us to continue filling key positions where possible with internal candidates, we will keep providing our staff with targeted training. Furthermore, in the 2021 financial year we founded a recruiting unit to enable us to be active in the market and thus reduce this risk.

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. These necessary solutions and requirements are implemented and complied with by our staff.

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 143.**

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 reduce our IT risks as far as possible 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. To counter the constantly rising IT threats due to blackmail and malware, we are continually developing additional measures to enhance our IT security.

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 and 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. This risk applies not only to our activities in Germany, but also by analogy to our international business. We counter these risks actively by participating in the political opinion-forming process, adapting our processes and business models and, where possible, also developing suitable products. This way, we are able to exploit any opportunities that arise.

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 84** 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 tackling these by offering innovative products, such as with our extensive efforts to develop green heat supply structures.

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. Moreover, the sharp increases recently seen in energy product prices, which arose at short notice, have increased the risk that individual trading partners may encounter financial difficulties, threatening the fulfilment of their contractual obligations to us. 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. Should any deterioration arise 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. We take these decisions 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 **Page 45**. To enable us to achieve our budgeted level of adjusted EBIT, strategically important investments have to deliver 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 generated in future financial years.

Given the transformation in the German energy system and wide-ranging political regulation, our company still has to operate in an environment characterised by a low degree of planning certainty. We are tracking the decision taken by the Federal Government to exit from coal and head for climate neutrality with an ambitious decarbonisation strategy **Pages 51 to 55.** We are pursuing the associated targets by reducing the fossil-based share of our generation activities, as well as with efficiency enhancement measures, with the continued expansion in renewable energies and with CO_2 reduction measures in all the Group's business fields. The framework for withdrawing from our conventional generation capacities will largely be determined by the coal exit legislation. This creates uncertainties for our company.

Furthermore, it is not clear how the UK's exit from the European Union (Brexit) will impact on our business in the UK in the medium and long term. 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 relevant are Brexit-related impacts on interest rates, commodities, demand and the regulatory framework.

The energy turnaround and changing or newly emerging markets offer opportunities for innovations, new jobs and profitable growth, particularly in the fields of renewable energies, decentralised energy supply, energy efficiency, digitalisation, building refurbishment and sustainable mobility. By consistently implementing our corporate strategy **Page 21,** we are drawing on 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 is also making district heating more environmentally friendly, as the link-up will lead to a lower primary energy factor. We will press further ahead with this course of decarbonising heat at all our locations.

For renewable energies, we still see sustainably attractive market potential. We are monitoring current developments in the onshore wind power project development business particularly closely. Most recently, the competitive situation in Germany and the addition of new wind turbines has been significantly influenced by the increased challenges presented by approval processes, particularly 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 in view of the ever stricter requirements governing the disposal of organic waste. We see further growth potential abroad and in photovoltaics. However, these areas are subject to dependencies on local subsidy regimes and local clients. Not only that, there is tough competition, particularly in high-growth Asian markets.

We are extending our decentralised energy management business model by offering innovative new solutions and products. We are active in the fields of energy-related services, where we offer energy-saving solutions, data centre services, individually customised photovoltaics solutions for retail and business customers, innovative energy products from renewable sources, and e-mobility products and services, as well as developing an e-mobility charging infrastructure.

Executive Board summary

Current developments in the energy and procurement markets have increased the degree of uncertainty in the energy sector as a whole and thus also for MVV. The company's opportunity/risk profile has therefore changed since the previous year.

At the same time, competitive pressure remains high and changes in energy and climate policy will continue to have significant implications for our business performance, as well as on that of other companies in the energy industry. The Federal Government newly formed after the election can be expected to become active in this area, while implementation of the "Fit for 55" package is expected to involve new requirements. This remains a key source of uncertainty. There is therefore great planning uncertainty, particularly for long-term investments in electricity and heat generation plants and the renewable energies project development business. In Germany, further developments will particularly depend on sufficient space being made available and on processes being accelerated. In our international target markets for renewable energies, we see local subsidy regimes and macroeconomic developments as the key risk factors. Other major factors include the development in political frameworks and market access terms. Moreover, depending on their specific nature the downstream effects of Brexit could influence our business.

One aspect that is still uncertain is how the challenges and risks relating to the coronavirus pandemic will develop in the medium and long term, and that in all business fields. Among other factors, this will depend on the success of vaccination programmes and the scope and duration of any restrictions on public life and the economy. The pandemic also has both direct and indirect impacts on supply chains and the development in material prices and availability levels.

Overall, we expect our industry to be exposed to further fundamental changes and underlying conditions to remain unstable.

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 could do so in future.