



Combined Management Report

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Disclosures made in italics in the combined management report constitute other information for which the company's executive directors are responsible. Like the combined non-financial declaration published within this management report, the contents of the disclosures made in italics were not subject to any audit by the auditor. The combined non-financial declaration was subject to a limited assurance review pursuant to ISAE 3000 (revised) by KPMG AG Wirtschaftsprüfungsgesellschaft.

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 128 fully consolidated companies and 26 companies which are consolidated using the equity method (at-equity companies). Our group of companies has its largest locations in Mannheim, Kiel, Offenbach and Wörrstadt in Germany and in Plymouth and Dundee in the United Kingdom. An overview of all shareholdings, and thus of all countries in which we are present, can be found in the [MVV's Shareholdings](#) chapter.

Organisational structure

To account for disposals of shareholdings in recent financial years, which impacted in particular on the structure of our former Strategic Investments reporting segment, as well as for MVV's further development, we amended our reporting structure at the start of the 2024 financial year. The Strategic Investments reporting segment was removed.

Since 1 October 2023, we have based our reporting on our value chain and structured this in four reporting segments to which various business fields are allocated:

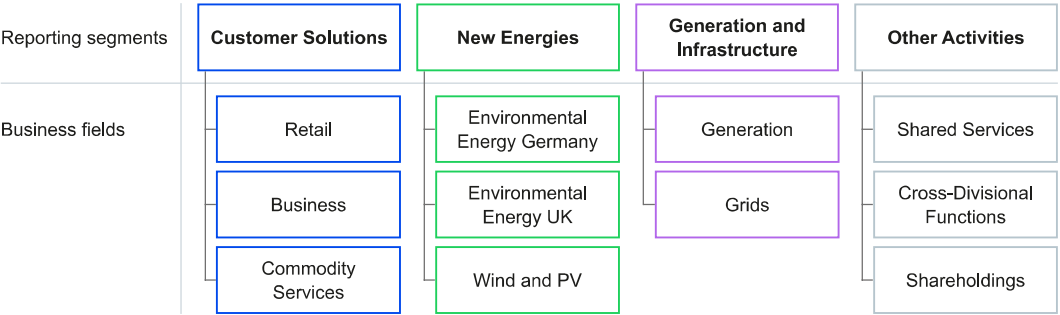
As well as the Commodity Services business field (previously the Commodities business field), the **Customer Solutions** reporting segment is unchanged and still includes the two business fields of Retail and Business.

In the **New Energies** reporting segment, the previous Environmental Energy business field has been subdivided into two business fields: Environmental Energy Germany and Environmental Energy UK. We have restructured the previous business fields of Wind/Biomethane and Project Development. Biomethane/Biogas is now allocated to our Environmental Energy Germany business field. The wind and photovoltaics units and the former Project Development business field are now pooled in our Wind and PV business field.

We have renamed the previous Supply Reliability reporting segment as **Generation and Infrastructure**. This segment is unchanged and still comprises the two business fields of Generation (previously the Combined Heat and Power business field) and Grids.

Our shared-service companies and cross-divisional functions are still pooled in the **Other Activities** reporting segment. The shared-service companies perform metering, billing and IT services, as well as customer services, within the MVV Group. Further shareholdings in companies that are not allocated to other business fields are presented in the Shareholdings business field.

Reporting segments and business fields



Business Model

We cover all key stages of the energy industry value chain. We generate and trade energy, distribute energy via proprietary grid companies and market energy solutions to various customer groups. We also have water production and distribution activities. One particular focus is on renewable energies, where we provide project development for wind turbines and photovoltaics systems and operations management for windfarms and solar parks, as well as for biomass and energy from waste plants. Furthermore, we also have these kinds of plants in our own generation portfolio. We market the electricity from these plants, as well as from third-party plants, via power purchase agreements (PPA) and power sale agreements (PSA).

Customer Solutions segment

The Customer Solutions reporting segment includes the retail and secondary distribution businesses for electricity, heat, gas and water. For retail and business customers, we have a broad range of products and services that meet ecological standards – from renewable energies through to environmentally friendly district heat. This also includes the portfolio of solutions we offer for self-generated photovoltaics electricity, heat pumps and 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, as well as suitable services to support them in decarbonising their activities. Our solutions for business customers focus on projects and measures to enhance efficiency and decarbonise operations at industrial, retail and real estate customers. Moreover, the Customer Solutions segment also includes the commodities, service and trading business at MVV Trading. Here, we pool energy procurement, energy product trading, marketing electricity from renewable generation, also via direct marketing and PPA/PSA models, and portfolio management for our group of companies. We also offer these services to third-party customers on the market.

New Energies segment

We pool our competence in generating renewable energies from wind and photovoltaics and in making ecological use of waste and biomass in the New Energies reporting segment. We draw on this expertise not only at our plants in Mannheim, Offenbach, Leuna, and Königs Wusterhausen, but also in the United Kingdom, where we operate an energy from waste plant with heat extraction in Plymouth, a biomass power plant with CHP capability at Ridham Dock and a further energy from waste plant in the Scottish city of Dundee. In Germany, we have biogas and biomethane plants, including bio-waste anaerobic digestion. Furthermore, the New Energies segment includes proprietary wind turbines and photovoltaics systems, as well as our national and international project development business. Here, we focus on onshore wind power in Germany and on photovoltaics. In addition, we act as operations managers for windfarms and solar parks and develop hybrid projects in which, depending on requirements, we supplement various energy generation systems with storage units and manage these using smart measurement and control technology.

Generation and Infrastructure segment

The Generation and Infrastructure reporting segment comprises our generation portfolio for conventional energies with CHP and parts of our green heat infrastructure. Our conventional energy generation plants include our coastal power 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 implement the energy transition. For this reason, this segment also includes the grid businesses at our distribution grid operators in Mannheim, Kiel and Offenbach. All in all, within the MVV Group we operate electricity, district heat, gas and water grids with a total length of around 19,000 kilometres.

Other Activities segment

We pool our shared-service companies, cross-divisional functions and further other shareholdings in the Other Activities segment. With our shared services, we provide metering, billing, and IT services to our customers and customer services on behalf of our group companies.

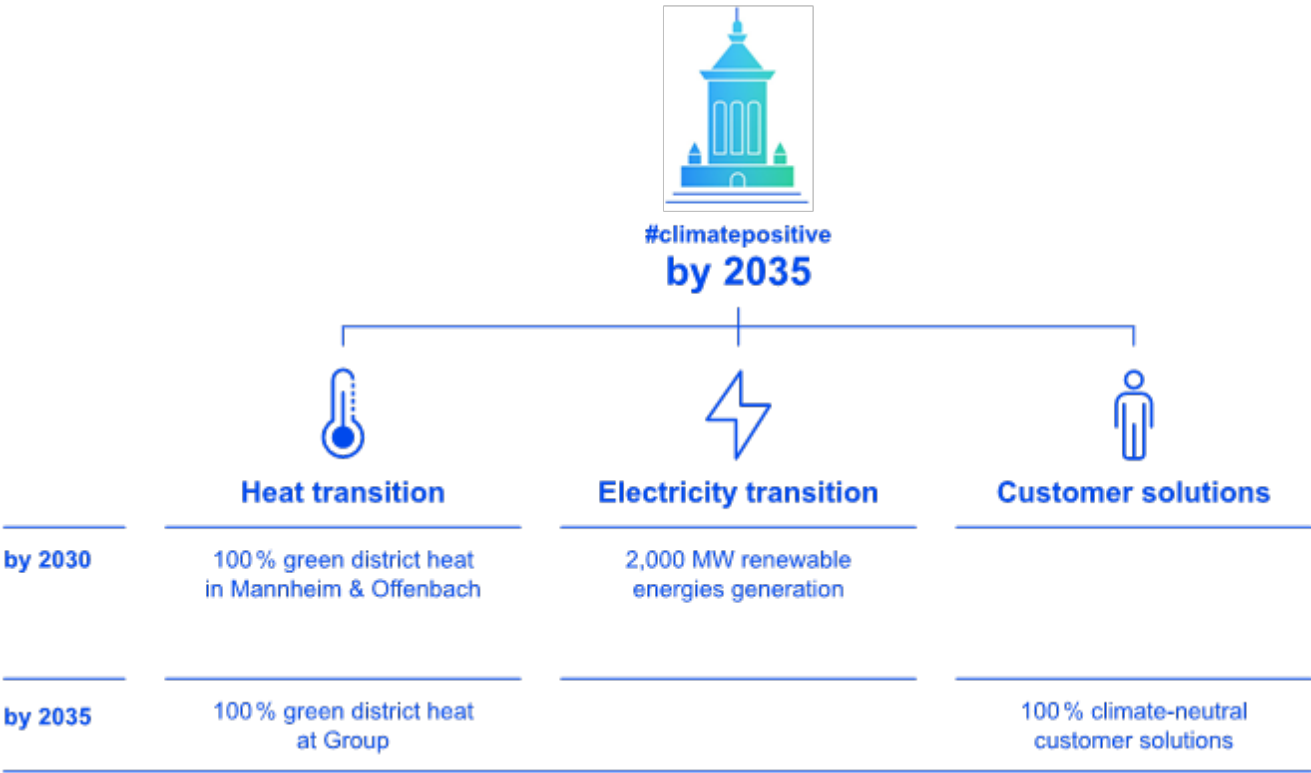
Corporate Strategy

We will shape the change

The energy system of the future will have to be more climate and environmentally friendly, while also being reliable and affordable. That will be made possible by completely phasing out the use of fossil fuels and switching to climate-friendly energies. With our corporate strategy, we will actively shape this transformation and will do so not only in our core business but also, to the extent that we are able, in the upstream and downstream sections of our value chain. Our climate protection strategy is an integral component of our corporate strategy and thus largely determines the allocation of our investments and service focuses, as well as MVV's further development.

Our course: #climatepositive by 2035

We intend to reduce our total CO₂ footprint to net zero and, as a company, become #climatepositive by 2035. To enable us to reach this target, we will fully convert our energy generation to renewable energies. Furthermore, by 2035 at the latest we aim to supply our customers exclusively with green heat, green electricity and green gases and to decarbonise our supply chains. In parallel, we are converting our products and services to 100 % climate-neutral solutions.

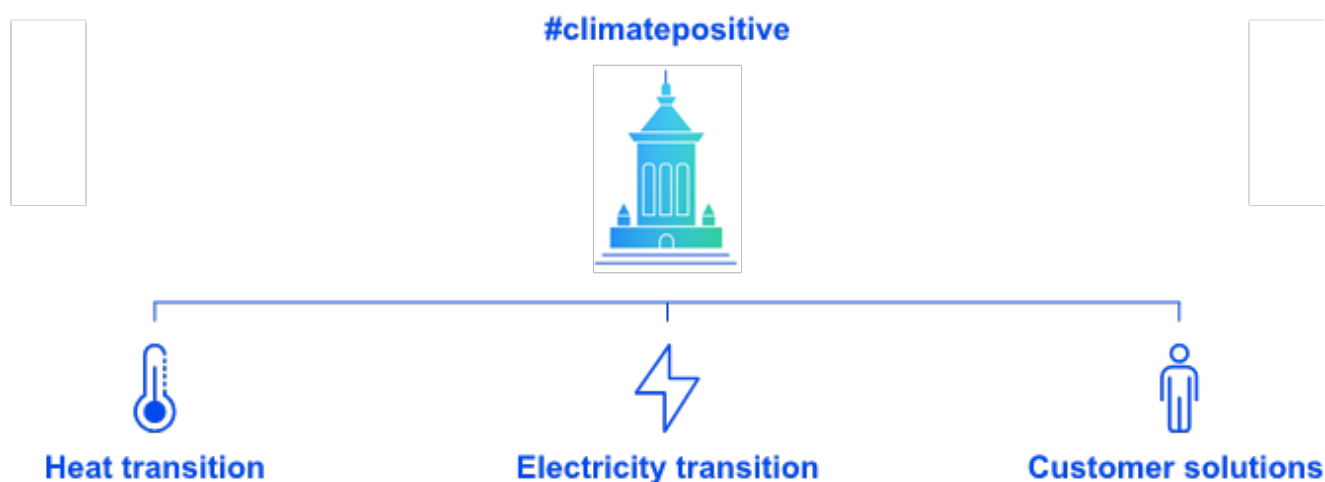


To achieve negative overall emissions and thus become #climatepositive, we will actively remove CO₂ from the atmosphere and then permanently capture, use or store this. To this end, we are consistently upholding our existing climate protection activities and will increasingly put BECCUS (Bioenergy Carbon Capture Usage and Storage) technology into practice.

Our BECCUS projects are progressing well. On the one hand, our first climate-positive plant has been in operation in Dresden since 2023 and is helping to withdraw CO₂ from the atmosphere. On the other hand, at our BECCUS pilot plant in Mannheim we have initiated trials with the processes needed to capture, liquefy and store CO₂. Based on this experience, we have already started the development stage for our first industrial-scale CO₂ capturing plant in Mannheim. Here, we are conducting preliminary planning for future deployment at the biomass power plant we have

converted into a combined heat and power plant. By 2035, we intend to upgrade the technology at our other bio-waste anaerobic digestion, biomethane, biomass and energy from waste plants to enable us, by deploying suitable technologies, to withdraw CO₂ permanently from the atmosphere and thus, as a company, become #climatepositive.

Including the measures planned, our climate protection strategy forms the centrepiece of our Mannheim Model, with its three aspects of heat transition, electricity transition and green customer solutions.



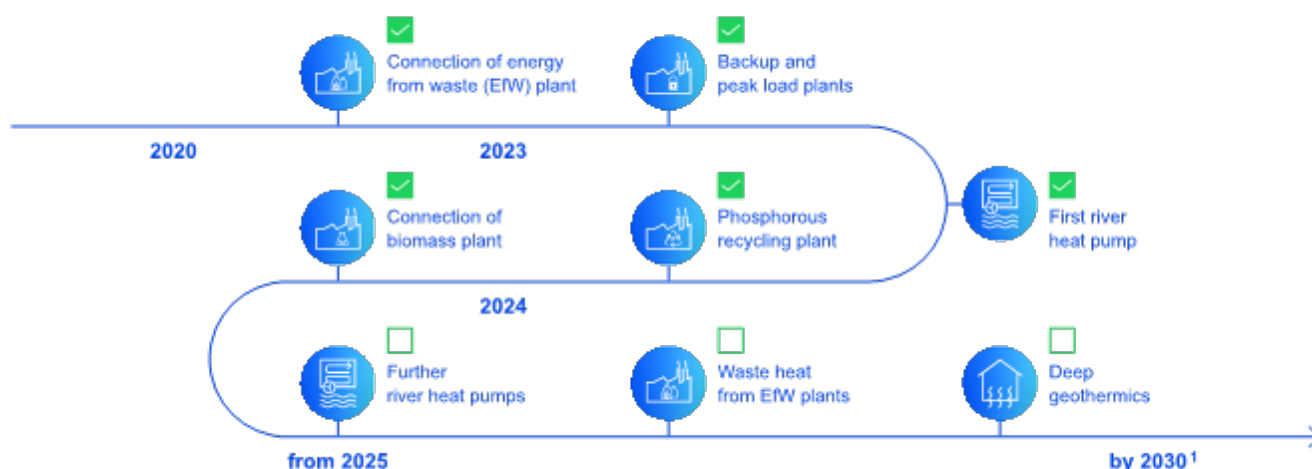
By implementing the Mannheim Model, we are consistently pressing ahead at all locations with our course of becoming #climatepositive and thus underpinning our claim to be shaping the energy transition.

We are promoting the heat transition

We have set ourselves clear targets for implementing the heat transition. In Mannheim and the region, as well as in Offenbach, we intend to convert our district heat in full, i.e. 100 %, to green energy sources before the end of this decade. By 2034, we intend to achieve 100 % green district heat generation at the whole of the Group, and thus also in Kiel. Furthermore, we aim to connect several thousand additional buildings in Mannheim, Offenbach and Kiel to our district heat grids by 2035. To achieve this, we are investing in increasing the density of our district heat grids and plan to expand these in select areas at all our locations. In regions not covered by the district heat supply, we are focusing on the heat pump business and positioning ourselves as a system provider in this area as well. By expanding centralised and decentralised green heat solutions, we are promoting the transition from fossil-based to climate-friendly heating and thus creating a basis to remove parallel grid structures for district heat and gas.

The process of converting our district heat generation to green energies is progressing on schedule. We converted our biomass power plant in Mannheim into a CHP plant and connected this to the district heat grid in autumn 2024. Linking up the biomass CHP plant marks the successful completion of the second expansion stage in Mannheim's heat transition. This means that, as soon as biomethane replaces the use of gas, we can cover around 60 % of the annual peak load with green heat. A further major step in completing this expansion stage involved launching operations with our first river heat pump in Mannheim at the site of the Grosskraftwerk Mannheim power plant at the beginning of the 2024 financial year. This has provided us with valuable insights for planning, building and operating future large-scale heat pumps. Our new phosphorous recycling plant constitutes a further component in making Mannheim's district heat green.

Heat transition at Mannheim location



1 Further potential components: district heat storage, industrial waste heat, CHP with green gases

Our Energieversorgung Offenbach subsidiary will replace its hard coal-fired CHP plant by drawing on alternative generation sources. These include using waste heat from data centres, biomass and biomethane, power-to-heat facilities and optimised use of its Energiewerk site. A phosphorous recycling plant has been in operation for several years already. By 2030, district heat generation should be converted to 100 % green sources in Offenbach as well. Our Stadtwerke Kiel subsidiary is pursuing its “Heading for Climate Neutrality” course, with a target date of 2035, and intends to draw on large-scale heat pumps and geothermal energy, as well as converting the Küstenkraftwerk power plant to 100 % hydrogen. In parallel, we are investing in further alternatives for all our locations, such as combined heat and power generation based on climate-neutral gases, further large-scale heat pumps and industrial waste heat.

Electricity transition with high-performance grids and renewable energies

If the energy transition and further decarbonisation are to succeed, it will also be necessary to adapt electricity grids to meet changing requirements. At our locations, we are further expanding the distribution grids to secure a sustainable energy supply as electricity demand rises. This increase in demand will be driven by factors including the construction of data centres, e-mobility, the integration of decentralised (large-scale) heat pumps and the rise in the overall electrification of industry and households. At the same time, we are accounting for the growth in the number of decentralised generation facilities which feed their surplus energy, which only arises at times, into the grids. These measures relate not only to low and medium-voltage grids, but also to upstream grid levels. Examples here include the expansion in the 110 kV grid in Offenbach, which has been underway since 2021, and the planned connections to the extra-high voltage grid in the Mannheim region.

We are continuing to pursue our targets in terms of electricity generation as well. By taking over domestic wind and photovoltaics projects, we intend to significantly expand our generation capacity. Here, we are relying in particular on our group-internal project development at Juwi. This way, we aim to increase our electricity generation capacity from renewable energies to 2,000 MW by 2030 and to reach 100 % green electricity generation at MVV by 2035. With these goals in mind, in the 2024 financial year we already decided to take over further wind power and photovoltaics projects that are due to be built in the coming years with total capacities of 74 MW and 13 MW respectively into our proprietary portfolio. In the 2024 financial year, we launched operations at the Group with a total of 27 MW of new wind capacities and 8 MW of new photovoltaics capacities.

The increasing conversion in electricity generation to renewable energies will be accompanied by a greater need for flexibility in the electricity market and in supply grids. This is increasing the relevance of the market for battery storage facilities, an area in which we are extending our alternatives. We are already active in developing projects and marketing large-scale battery storage

facilities, as is illustrated by our hybrid solar park in Seckach. There, a 3.6-MW battery storage facility enhances the efficiency of the 9.8-MW solar park. Alongside flexibility options, on the marketing front we are also evaluating investment-based business models for large-scale battery storage facilities outside the framework of innovation tenders.

Green customer solutions promote CO₂ reductions at our customers

As a system provider for solution packages tailored to specific customer groups, we support our customers with the various requirements they have in terms of their transformation. Our main aim here is to exclusively offer climate-neutral products and services by 2035. Optimally integrating centralised and decentralised solutions will be crucial to achieving this goal. To this end, we are making targeted efforts to promote growth initiatives in our services business.

Our goal is to optimally satisfy customer demand with our range of products and services and thus increase satisfaction among our customers. Measures here include the information we provide to our retail customers, for example in connection with municipal heat planning on district heat and heat pump solutions, as well as the combined solutions comprising solar, charging and battery components which we offer in our electricity business. For our business customers, we are extending the engineering services and the metering and consulting expertise at our MVV Enamic subsidiary. Furthermore, with our sustainable data centre projects we are servicing demand from business customers for digitalisation and artificial intelligence (AI). For municipal customers, we develop solutions and offerings consistent with the Mannheim Model, for example in the areas of smart heat and heat planning, as well as for local e-mobility applications. In our Commodity Solutions business, our “Green Solutions” enabled us to increase our renewables direct marketing portfolio to 5.9 gigawatts by the end of the year under report, while also further expanding our other energy-related services.

Transformation requires a strong foundation

We see the developments referred to above in the year under report as confirming our course of heading for a #climatepositive future for MVV by 2035. The transformation that lies ahead will require both extensive investments and further valuable core resources. For the decade from 2023 to 2033, we plan to invest a total of around Euro 7 billion in the energy system of the future. In this, we will take a diversified approach and, as we progress on this course, further develop our business and make it fit for the future. This also involves further product and process innovations, on which we report in the [Technology and Innovation](#) chapter. In our environmental energy business in the UK, we aim to exploit our growth options and are looking into corresponding opportunities.

Implementing our Mannheim Model can only succeed together with our employees and a corporate culture that promotes this transformation and creates a willingness to embrace this change. As an employer, we therefore aim to retain a sense of belonging, one in which unlimited respect for every person has top priority. We underline this approach with our diversity strategy, which is intended to safeguard equality of opportunity, avoid disadvantaging, prevent discrimination and promote inclusion and diversity.

Digitalisation is also a key component of our corporate strategy. We make targeted use of digitalisation instruments and are continually expanding these to optimise the efficiency and networking of our own business processes, plants and grids. At the same time, we are drawing on the opportunities provided by digitalisation, for example to analyse the energy situation for our customers and compile optimal individual solutions. In the long term, this will also enable us to reduce the environmental impact of energy consumption. Overall, the new decentralised energy world requires smart control and offsetting mechanisms; not least in view of this, digitalisation, and here in particular the processing of large quantities of data using AI, has an important role to play in making the energy industry, and thus MVV as well, fit for the future.

Technology and Innovation

Innovative research and development

We have set ourselves the goal of developing smart energy products and innovative solutions that meet our customers' needs. Our Customer Insights department at our shared-service company Soluvia Energy Services and our Innovation department make a major contribution towards achieving this goal. Here, innovation managers and market researchers work together with employees from our operating business fields on innovation projects, as well as on specific projects aimed at increasing customer satisfaction. Moreover, our operating units are also independently involved in forward-looking projects.

Current projects

We are actively promoting climate-friendly hydrogen technologies

With the regulations adopted by the Federal Government for the establishment of a core hydrogen grid and the adoption of the EU's gas single market package in May 2024, important requirements have now been agreed for hydrogen grids. Further information about this can be found in the [Business Framework](#) chapter.

Against this backdrop, we believe that we are well positioned with our strategic alignment as regards hydrogen. In the coming years, our focus will be on building expertise by implementing pilot projects. In our "Hydrogen Programme", we have established an interdisciplinary team within the Group. This ensures joint cross-departmental cooperation for hydrogen enquiries and secures the transfer of expertise to individual units.

We are further developing our heat grids along smart lines

Together with MVV Netze, our MVV Smart Cities business unit is drawing on its expertise in the areas of digitalisation and heat grids. Based on our MVV data platform, we are developing the "Smart Heat" solution, which provides a digital portrayal of heat grids. This solution not only serves as a basis for optimally using and extending grid capacities for local and district heat grids; It also facilitates forward-looking and interruption-free operations and helps to optimise customer stations. We will use Smart Heat within the Group and will also offer this to municipal utility companies and local authorities across Germany. Based on this digital solution, we are currently pressing ahead with developing further applications for the water supply and low-voltage electricity grid.

Alongside the core topic of heat, a further focus of our digital solutions involves the climate. On behalf of Smart City Mannheim GmbH, our joint venture with the City of Mannheim, we are installing monitoring networks to measure the microclimate in Mannheim. These will form the basis for AI-based microclimate analysis. Also in cooperation with Smart City Mannheim, as well as with Mannheim University, we are currently developing a traffic simulation tool that should be able to forecast the traffic situation and thus optimise traffic flows.

Innovation processes

Customer as key focus of ideas management

Our ideas management programme is intended to actively involve our employees in the continuous improvement process. This way, we not only promote continuous change but, in recurring campaigns, also raise awareness of this process among our workforce. In organisational terms, ideas management is allocated to the Personnel and Cultural Development department.

“Focus on Customers”, a one-off campaign jointly organised by ideas management and the Customer Experience Management department, provided us with numerous suggestions for solutions to optimise processes in the year under report. In the 2024 financial year, we assessed a total of 90 proposals implemented to determine their financial benefits for MVV. Thanks to these ideas, we were able to save Euro 258 thousand in the first year of implementation alone. We distributed bonuses of Euro 77 thousand to the relevant employees.

The multiyear benefit (over four years) of the proposals implemented in the 2024 financial year currently amounts to Euro 353 thousand.

Take-Off – our internal innovation process

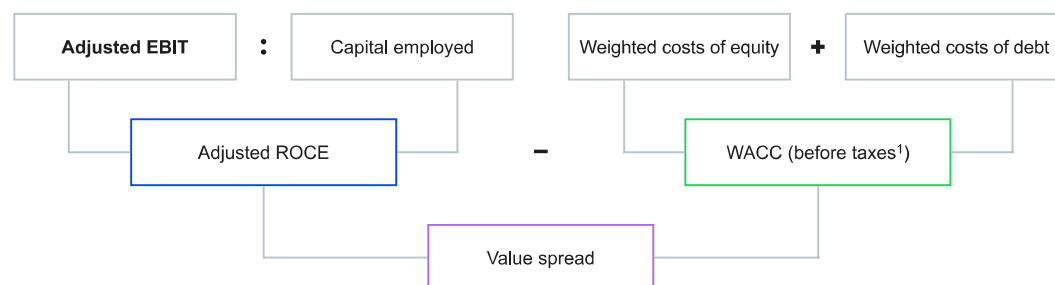
In “Take-Off”, our internal innovation process, all employees at our Mannheim location had the chance again at the beginning of the 2023 financial year to contribute their ideas for new business models related to our strategic alignment. From the ideas submitted, those of two teams were selected and subsequently developed further, intensified and tested. One idea prevailed in the 2024 financial year and is currently still being tested in the market by the remainder of the innovation team. These tests are expected to last until the end of the 2024 calendar year. Once the market trials have been completed, the Executive Board will reach a final decision concerning further implementation of the idea.

Value-Based Corporate Management

The objectives of our value-based corporate management are to sustainably increase MVV's value and to offer an attractive dividend to our shareholders. We achieve this by generating a positive value spread, i.e. by ensuring that the return on average capital employed (adjusted ROCE) is higher than our 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 figure to eliminate earnings items resulting from the measurement of financial derivatives pursuant to IFRS 9 as of the reporting date. We add interest income from finance leases, which is reported in the financing income line item in the income statement, to our adjusted EBIT. This income results from contracting projects and therefore forms part of our operating business.

Calculation of value spread

(simplified presentation)



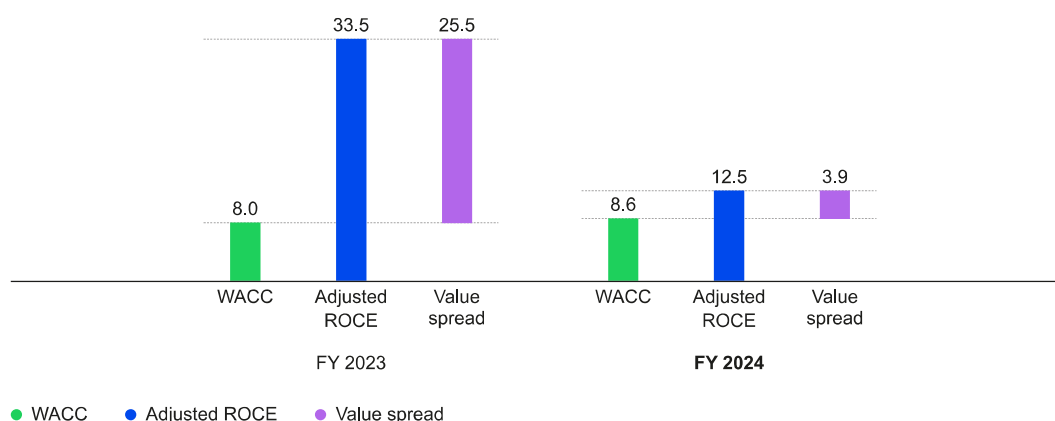
1 WACC before taxes = WACC after taxes/0.7

We reviewed the individual parameters used to calculate the WACC figure relevant to MVV for the year under report and partly updated these to account for market changes. This resulted in a Group WACC of 8.6 % before taxes for the 2024 financial year (previous year: 8.0 % before taxes).

The adjusted ROCE fell from 33.5 % to 12.5 % in the 2024 financial year. The principal driver for this reduction was adjusted EBIT which, consistent with our forecasts, fell significantly short of the previous year's figure in the 2024 financial year. This in turn was due to the previous year's adjusted EBIT being shaped by substantial additional revenues resulting from exceptional developments in the Commodities business field and by disposal gains generated from the sale of shareholdings ([Presentation of Earnings Performance](#) chapter). As expected, neither of these factors recurred in the year under report. Following the subtraction of WACC before taxes of 8.6 %, the lower level of adjusted ROCE led the value spread to fall to 3.9 % in the 2024 financial year. In the previous year, this key figure stood at 25.5 %.

Key value management figures

%



Group Business Performance

- Adjusted EBIT consistent with our expectations
- Investments strengthen our future operating capacity
- Second expansion stage completed for heat transition in Mannheim

Material Developments and Executive Summary

Material developments

Investments in a climate-neutral future

One firm component of our [Corporate Strategy](#) and the basis for achieving our target of becoming #climatepositive by 2035 is our investment programme, which is broad based and has a long-term perspective. With an investment volume of Euro 417 million in the year under report, we again invested more than in the previous year (Euro 344 million). To enable us to successfully implement our Mannheim Model, with its three aspects of heat transition, electricity transition and green customer solutions, we intend to significantly increase our pace of investment in the years ahead.

We made further progress in the year under report as we head towards becoming #climatepositive by 2035. We successfully completed some projects, while consistently pressing ahead with and newly initiating other projects. Our investments focused on expanding green heat in Mannheim and the region, building windfarms and taking these over into our proprietary portfolio, as well as expanding and modernising our distribution grids.

Heat transition for Mannheim

Our goal for Mannheim and the region is to fully convert our district heat to green energy sources by 2030. We reached a further milestone in this respect in the 2024 financial year: We converted our biomass power plant in Mannheim into a combined heat and power plant and connected this to the district heat grid in autumn 2024. Linking up the biomass CHP plant marks the successful completion of the second expansion stage in Mannheim's heat transition. This means that, as soon as biomethane replaces the use of gas, we can cover around 60 % of the annual peak load with green heat. A further major step in completing this expansion stage involved launching operations with our first river heat pump in Mannheim at the site of the Grosskraftwerk Mannheim power plant at the beginning of the 2024 financial year. This has provided us with valuable insights for planning, building and operating future large-scale heat pumps. Our new phosphorous recycling plant constitutes a further component in making Mannheim's district heat green.

As expected, earnings below high previous year's figure

Consistent with our expectations, our adjusted EBIT of Euro 426 million fell significantly short of the previous year's figure of Euro 880 million. When considering the previous year's earnings figure, however, it should be noted that this included substantial additional revenues resulting from positive one-off factors, such as disposal gains from the sale of shareholdings and an exceptional performance in the Commodity Services business field due to wholesale market prices.

Our year-on-year earnings performance ([Earnings Performance](#) chapter) is therefore attributable on the one hand to non-repeatable positive one-off factors in the previous year. Furthermore, we reported lower earnings in both our retail and our environmental energy businesses. On the other hand, the development in adjusted EBIT was shaped above all by higher earnings contributions from the generation and grids business fields and from our project development business. In addition, we generated disposal gains from the sale of shareholdings in Japan.

Earnings before taxes (adjusted EBT) fell year-on-year by Euro 427 million to Euro 402 million. This reduction is also reflected in adjusted annual net income after minority interests, which decreased by Euro 280 million and stood at Euro 233 million in the year under report.

Executive summary

We operated in a challenging market climate in the 2024 financial year, one characterised among other factors by declining energy prices on wholesale markets and widespread uncertainties ([Business Framework](#) chapter). As expected, our adjusted EBIT of Euro 426 million therefore fell significantly short of the previous year's figure of Euro 880 million. Based on longer-term comparisons and excluding the 2023 financial year, however, our earnings performance was good. Excluding the disposal gains generated from the sale of Japanese shareholdings in the year under report, our adjusted EBIT of Euro 416 million in the 2024 financial year was at the upper end of our forecast range of between Euro 390 million and Euro 420 million.

Despite difficult underlying conditions, we proved resilient with our broad-based business model and can look back on a successful financial year.

The projects completed and the investments we made in the year under report document our ability to consistently implement our corporate strategy, with its focus on climate protection. We intend to seize the opportunities presented by the transformation in the energy system to generate sustainable and profitable growth in future as well.

Comparison of Expected and Actual Business Performance and Outlook

Comparison of expected and actual business performance and outlook

	Forecast FY 2024	Results FY 2024	Outlook FY 2025
Key figures relevant to management			
Adjusted EBIT	Earnings corridor amended after end of first nine months of 2024 financial year: adjusted EBIT excluding disposal gains of between Euro 390 million and Euro 420 million; previously, the expected range for adjusted EBIT excluding disposal gains amounted to between Euro 360 million and Euro 440 million	Adjusted EBIT of Euro 426 million; excluding disposal gains, adjusted EBIT stood at Euro 416 million	Adjusted EBIT of between Euro 350 million and Euro 400 million; in general dependent on macroeconomic climate, weather and wind conditions, electricity and fuel prices and the availability of our plants; high volatility in renewable energies project development business
Adjusted ROCE	Significantly below previous year's level (33.5 %)	Adjusted ROCE of 12.5 %	Significantly below previous year's level (12.5 %)
Further major key figures			
Adjusted equity ratio	Target > 30 %	Adjusted equity ratio of 42.5 %	Target > 30 %
Investments	Significantly above previous year's level (Euro 344 million)	Total investments of Euro 417 million	Significantly above previous year's level (Euro 417 million)
Employees	Increase in personnel totals in growth fields; further efficiency measures in existing business	Increase in personnel totals to 6,649 employees at 30 September 2024 (previous year: 6,390) due to increase in personnel totals in organic growth fields	Increase in personnel totals in growth fields; further efficiency measures in existing business

Business Framework

Energy policy climate

Energy policy on both national and European levels was characterised once again in the 2024 financial year by numerous legislative amendments relating to the whole of the value chain. The core focus was on measures intended to safeguard future compliance with climate targets.

Subsidies for the energy transition are in short supply

The Federal Constitutional Court ruled in November 2023 that the financing for the government's Climate and Transformation Funds was partly null and void. As a result, in 2024 these funds were lacking around Euro 60 billion that had been earmarked to finance numerous federal programmes for the energy transition. In response, the Federal Government made corresponding cuts to these programmes. These also affect the Federal Funding for Efficient Heat Networks (BEW), a programme intended to create incentives for investments in decarbonising heat generation and heat grids. Based on the latest budget planning dated August 2024, BEW funds for the overall period through to 2029 will be cut to around Euro 3.2 billion, a reduction of around Euro 900 million compared with the 2023 budget. By contrast, the district heat industry still believes that subsidies of more than Euro 3 billion a year will be needed until beyond 2030. The sector associations AGFW and VKU underpinned this subsidy requirement in a study published in July 2024, which quantifies the total investment requirement for district heat in Germany by 2030 at Euro 43.5 billion.

MVV expects to receive subsidies from the BEW programme to decarbonise its district heat. We submitted an initial application in September 2024.

From our perspective, the financing situation is exacerbated by the expiry of the German Act on the Maintenance, Modernisation and Expansion of Combined Heat and Power Generation (KWKG) at the end of 2026 already, as investments in district heat grids and storage facilities are also supported under this legislation. These funds are financed by being charged on and therefore do not affect the budget. Like industry representatives, such as the BDEW and 8KU in May 2024, MVV is therefore calling for the KWKG to be promptly extended until at least the end of 2029.

Framework for heat transition

The heat transition was provided with a new legal framework in the first quarter of the year under report with the adoption of the amended German Buildings Energy Act (Act on Saving Energy and Using Renewable Energies for Heating and Cooling in Buildings – GEG), the German Act on Heat Planning and the Decarbonisation of Heating Networks (WPG) and the revised guidelines for the Federal Funding for Efficient Buildings (BEG). This legislation requires each local authority to develop a heat plan in the coming years, on which basis the investments required in infrastructure and heat generation can be pursued in a targeted manner. The Federal Government supports investments in building refurbishments and new heat systems with subsidy rates of between 30 % and 70 %. For new heat systems, at least 65 % of the energy used has to come from renewable sources. Building owners can also meet this requirement by having the building connected to a district heat grid.

The City of Mannheim adopted a municipal heat plan in 2024 already. On this basis, MVV has further developed its own planning to expand and decarbonise district heat and already started implementing these plans. We report on this in the [Environmental Concerns Aspect](#) chapter.

Geothermal energy to become a major component of the heat transition

In September 2024, the Federal Government adopted a ministerial draft for legislation intended to accelerate approval processes for geothermal energy plans, heat pumps and heat storage facilities, as well as further legal requirements for the climate-neutral expansion in the heat supply. This legislation, which is due to be adopted by the Federal Parliament before the end of the 2024 calendar year, should enable the heat potential offered by geothermal energy to be realised more quickly. Among other instruments, this is to be achieved by working with digital and standardised approval processes and setting fixed time limits for the relevant authorities. Implementation of these requirements would also support MVV's geothermal energy projects.

Federal Government presents key points for its power plant strategy

The Federal Government presented key points of its power plant strategy in February 2024 and further specified these at the beginning of July 2024. Based on new legislation governing power plant security, these proposals envisage tendering 5 GW in an initial pillar to new H2-ready gas power plants and 2 GW of extensive H2-ready modernisation measures. These plants should be fully operated with hydrogen from the eighth year after launching operations or being converted. These aspects are supplemented by 500 MW of purely hydrogen-fired power plants and 500 MW of long-term storage facilities. In a second pillar, a further 5 GW of newly built gas power plants will be tendered. According to the Federal Government, the initial tenders are planned to be made by spring 2025. In parallel, work should continue on the future electricity market design, particularly with regard to a capacity mechanism to be applied from 2028.

EU reforms electricity market design

The EU electricity market reform process was initiated in response to the implications of the war in Ukraine. The resolutions adopted in the first half of 2024 are intended to ensure more stable electricity prices and offer better protection to consumers in future crises. In this respect, the basically functional principles underpinning electricity markets are not to be changed. The levying of further windfall taxes on specific electricity generation technologies has been waived. Changes will arise for renewable energies. Here, member states have three years after the revised Directive takes effect to convert their subsidies to voluntary bilateral contracts for differences (CfDs) or mechanisms with the same effect. In periods in which electricity prices are very high, payments from subsidised plants to the state are foreseen in order to avoid excess subsidies. Direct contracts between electricity generators and consumers (power purchase agreements – PPAs) will remain possible. These EU requirements safeguard stable framework conditions for MVV in its generation of electricity from renewable energies and its electricity trading and sales activities.

Simplifying the expansion of renewable energies

At the end of April 2024, the Federal Parliament and Federal Council adopted Solar Package I aimed at further accelerating the expansion in renewable energies. This legislative package supports the expansion both in photovoltaics systems and in wind turbines. Existing wind power regions have been designated as "acceleration areas", where further wind power projects can be approved significantly faster. The introduction of a duty to tolerate the laying and operation of grid connection cables and transit rights for renewable energies should also have a positive impact on the speed at which projects planned on public sector land can be implemented.

Solar Package I contains numerous improvements for roof-top photovoltaics systems on buildings used for commercial purposes and apartment blocks. The "joint building supply model", for example, makes it easier to pass on solar power within apartment blocks. Furthermore, the use of electricity storage facilities will be simplified in cases of mixed use involving the storage of electricity from renewable energies and from the grid.

The amendments set out in Solar Package I will support MVV's activities to expand electricity generation from renewable energies and in our customer solutions.

Furthermore, in June 2024 lawmakers revised the German Federal Immission Control Act (BImSchG). Onshore wind turbines in particular are set to benefit from the requirements adopted, which are intended to accelerate and reduce the bureaucracy involved in the central approval process. The legislation provides, for example, for a significant expansion in the cases in which application is made of the simplified repowering processes governing the replacement of old wind turbines with newer, higher-performance models. Moreover, approval processes will also be streamlined by curtailing the ability of authorities to request subsequent document submissions and by promoting greater digitalisation.

Regulations for CO₂ capturing becoming more specific

In February 2024, the European Commission presented its Industrial Carbon Management Strategy. This highlights the importance of capturing and storing and/or using CO₂ in order to achieve the European climate protection targets.

On national level, at a meeting of the Federal Cabinet at the end of May 2024 the Federal Government approved the key points for its own Carbon Management Strategy. This envisages CO₂ capturing being deployed above all for process emissions in industry and waste management. Government subsidies should focus on these applications. One significant aspect for MVV is the classification by the Federal Government of CO₂ emissions from waste incineration as unavoidable, and thus eligible for subsidies.

To supplement the national Carbon Management Strategy, the Federal Government is working on a long-term strategy for negative emissions. This should include proposals for a legal framework for permanently removing CO₂ from the atmosphere (so-called negative emissions). For MVV, these considerations on negative emissions are an important component enabling us to draw on the potential available in our plant portfolio and thus become climate positive by 2035.

Future of gas and electricity grids: movement in the regulatory framework

The EU's gas single market package, which lays down the European framework for structuring the future of gas grids, came into effect at the beginning of August 2024. The regulations will enable gas distribution grid operators to operate hydrogen distribution grids as well in future. Furthermore, operators are obliged to compile decommissioning plans for sub-grids in which a decline in gas demand is foreseeable. MVV sees an urgent need for the Federal Government and lawmakers to adopt the gas single market package in national law before the end of the current legislative period. After all, a reliable framework is crucial for shaping the future of gas grids and thus successfully implementing the heat transition.

In parallel, the Federal Network Agency (BNetzA) has drawn on the significantly extended powers it received at the end of 2023 and initiated an extensive amendment to the regulatory framework for gas and electricity grids in order to align structures to the changing scenarios for the future. Gas distribution grid operators, for example, should in future have the possibility of shortening the regulatory depreciation period for most capital investments. Further topics of discussion include abolishing or further developing the efficiency comparison and recognising provisions stated for decommissioning sub-grids in the grid fee calculation method.

Many of the measures now initiated were recommended by MVV in a gas grid study that was published in 2023 already and is available online. This sets out the measures required to achieve a bespoke regulatory framework for the future of gas grids.

Federal Network Agency facilitates management of low-voltage consumers

With its stipulation on § 14a of the German Energy Industry Act (EnWG), at the end of November 2023 the Federal Network Agency (BNetzA) issued regulations for the management by distribution grid operators of controllable consumption facilities and grid connections at low voltages. If required to secure grid operations, distribution grid operators may now reduce the power consumed by all controllable consumption facilities entering operation from 1 January 2024 by up to 4.2 kW. Here, both direct control of individual consumption facilities and control via the customer's home energy management system (HEMS) are permitted. In return, operators of controllable facilities may choose between a fixed reduction in grid fees or a percentage reduction in the unit price. Moreover, operators of controllable consumption facilities are entitled to a connection irrespective of available grid capacity.

Federal Network Agency raises base rate for new investments

In addition, at the end of January 2024 the Federal Network Agency (BNetzA) published its stipulation concerning regulations for determining the imputed return on equity for new installations by way of a premium on costs of capital. For the 4th regulatory period (until 31 December 2027 for gas and until 31 December 2028 for electricity), the return on equity for new investments should comprise an annual variable base rate (current yield on public bonds) plus a risk premium currently amounting to around 3 %. By contrast, the return on equity for existing installations remains unchanged. With this stipulation, regulators have acknowledged the need to rescale grid investment conditions in the short term to account for the challenges presented by the energy transition and the current interest rate climate.

Core hydrogen grid takes shape

In the first half of 2024, the Federal Government and the Federal Network Agency (BNetzA) also created the framework for constructing the core hydrogen grid. This provides for the grid to be financed by way of "amortisation accounts" which limit the level of grid fees in the start-up phase and make it possible to collect such fees over an extended period in future. In October 2024, the Federal Network Agency approved major sections of the final submission by long-distance grid operators concerning the specific scope of the core grid.

Implementation of growth initiative

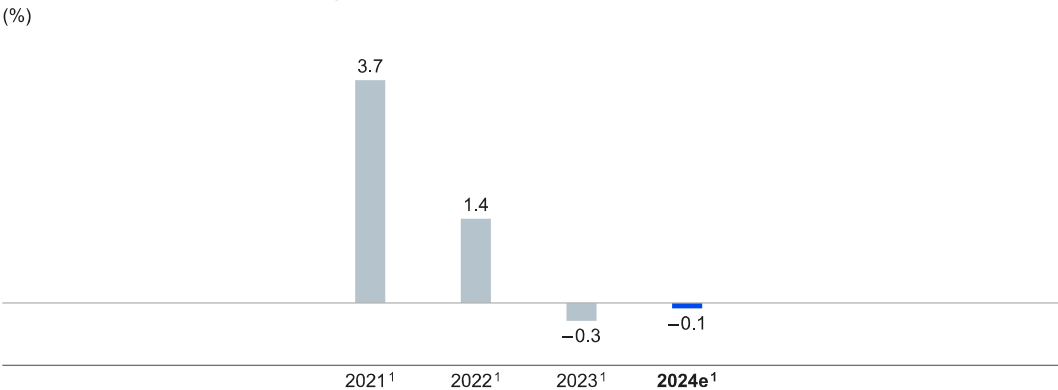
At the end of October 2024, the Federal Ministry for Economic Affairs and Climate Action (BMWK) presented a second ministerial draft addressing amendments to the German Energy Industry Act (EnWG) and German Renewable Energies Act (EEG) that have been supplemented to include an amendment to the German Metering Point Operation Act (MsbG) and measures to implement the growth initiative launched by the Federal Government in July 2024. The proposed amendments are chiefly intended to increase flexibility in the electricity system. They address the frequency and intensity of electricity generation peaks and support the universal installation of digital smart meters.

Market climate and competition

German economy held back by macroeconomic weakness and structural transformation

In their Joint Economic Forecast dated autumn 2024, Germany's leading economic research institutes predicted a 0.1 % contraction in the country's gross domestic product (GDP) for the 2024 calendar year. In spring 2024, they had still forecast growth of 0.1%. Alongside macroeconomic weakness, growth is also being adversely affected by the structural transformation in the German economy. The processes of structural adaptation which, according to experts, have been triggered by decarbonisation, digitalisation and demographic change, and likely also by greater competition from companies in China, are holding back growth prospects for the German economy. This situation has particularly impacted on industry, and here especially manufacturers of capital goods and energy-intensive products. Experts see the macroeconomic weakness as being due to the high level of interest rates and significant economic and geopolitical uncertainties. Both factors had left their mark on investment activity and consumer spending. The Federal Ministry for Economic Affairs and Climate Action (BMWK) presented its autumn forecast at the beginning of October 2024. The Federal Government expects GDP to decrease by 0.2 % in the 2024 calendar year. Alongside macroeconomic risks, the reasons stated for this development include structural problems within Germany accompanied by major geo-economic challenges.

GDP development in Germany



1 Calendar year

Source: Joint Economic Forecast Autumn 2024 by Germany's leading economic research institutes (September 2024)

Electricity generation in Germany falls

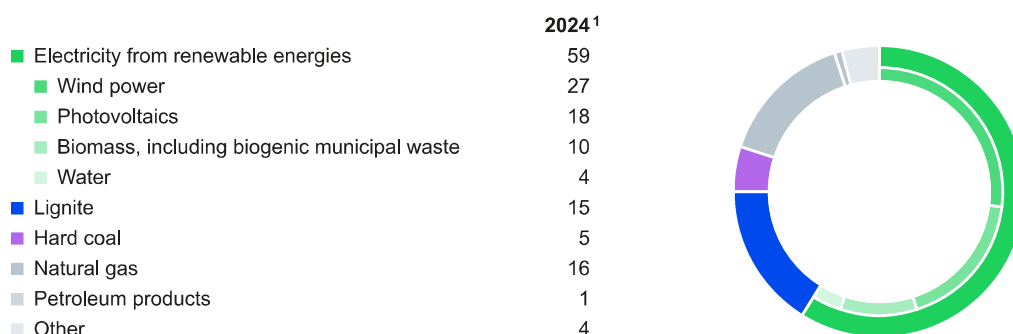
Based on current calculations compiled by the Association of the German Energy and Water Industries (BDEW), gross electricity generation volumes totalled 366 billion kWh in Germany in the first nine months of 2024 and were around 1 % lower than in the previous year (370 billion kWh).

Renewable share of German electricity generation rises to 59 %

According to BDEW estimates, the renewable share of gross electricity generation in Germany totalled 59 % in the first nine months of the 2024 calendar year, up from 54 % in the previous year's period. The increase in the share of renewables was driven in particular by photovoltaics systems, which generated around 20 % more electricity. Wind-based generation also rose, with onshore and offshore electricity production growing at different rates. Electricity generation volumes from onshore wind turbines were 7 % higher than in the previous year, while offshore wind turbines increased their electricity generation by nearly 20 %. Overall, wind-based electricity generation grew by around 9 %. The volume of electricity generated from biomass and biogenic municipal waste was virtually unchanged on the previous year. Overall, around 218 billion kWh of electricity was generated from renewable energies.

Gross electricity generation in Germany

Shares %



¹ January to September 2024

Further expansion in wind power

In January 2024, the German Wind Energy Association (BWE) published its “Status of Onshore Wind Energy Development in Germany” for the 2023 calendar year. Overall, gross onshore wind power capacity totalling 3,567 MW was newly installed in Germany. With growth of 48 % compared with the previous year's figure, the upward trend seen in the capacity newly added each year since 2019 has continued. However, the volume of new capacities still remains well short of the record years from 2014 to 2017. Total installed onshore wind power capacity stood at 61,010 MW and was thus around 5 % higher than the previous year's figure.

According to the BWE status report on onshore wind energy development published in July 2024, gross onshore wind power capacity totalling 1,308 MW was added in Germany in the first half of the 2024 calendar year. That corresponds to around 19 % less than in the first six months of the previous year. Total installed onshore wind power capacity rose by 1.5 % compared with 31 December 2023 and amounted to 61,917 MW.

Decrease in demand for electric vehicles, heat pumps and rooftop photovoltaics systems

Based on the statistics for “Vehicle Registrations and New Registrations of Vehicles with Alternative Powertrains” published by the Federal Motor Transport Authority (KBA) in August 2024, German sales volumes for fully electric cars fell by around one third (32 %) in the first eight months of 2024 compared with the previous year's period. Reasons for this included the discontinuation of subsidies for electric cars, continued political discussions on this topic and the ongoing poor economic climate. Sales volumes were expected to rise again in 2025, as the European carpool threshold values would generate sales momentum. Growing sales figures were also expected for electric trucks now that the first models, also for heavy-duty traffic, are available. Having grown by more than 50 % in both 2022 and 2023, turnover with heat pumps for decentralised heat generation fell sharply in the first half of 2024 according to the German Heat Pump Association (bwp) and was slightly higher than the 2021 figure. Experts believe that this reduction will lead turnover to fall significantly short of the political target of 500,000 new heat pumps per year in 2024. This was due both to a widespread reluctance to invest given the weak economic climate and the great uncertainty still surrounding municipal heat plans. The German Heat Pump Association (bwp) expects the market situation to improve in the second half of 2024, not least given the high subsidy rates available for heat pump installations. Based on data published by the Federal Network Agency (BNetzA) in October 2024, rooftop photovoltaics systems (smaller than 30 kWp) also witnessed a reduction in demand. Since May 2024, monthly figures for newly installed system capacities had undercut the previous year's figures, with the sharpest reduction seen in August, and had thus fallen significantly short of expectations in the sector.

Reduction in wholesale fuel and electricity prices

Wholesale prices both for fuels and CO₂ emission rights and for electricity fell in the year under report compared with the previous year's averages. Despite the widespread reductions seen on the two previous years, energy prices remained high compared with the average for 2017 to 2021.

Wholesale prices (average) from 1 October to 30 September

	FY 2024	FY 2023	+/- change	% change
Crude oil ¹ (US\$/barrel)	82.07	83.61	- 1.54	- 2
Natural gas ² (Euro/MWh)	38.04	68.25	- 30.21	- 44
Coal ³ (US\$/tonne)	113.59	150.29	- 36.70	- 24
CO ₂ rights ⁴ (Euro/tonne)	72.60	90.48	- 17.88	- 20
Electricity ⁵ (Euro/MWh)	92.97	172.13	- 79.16	- 46

1 Brent crude oil; front-month

2 Trading Hub Germany market region; front-year

3 Front-year

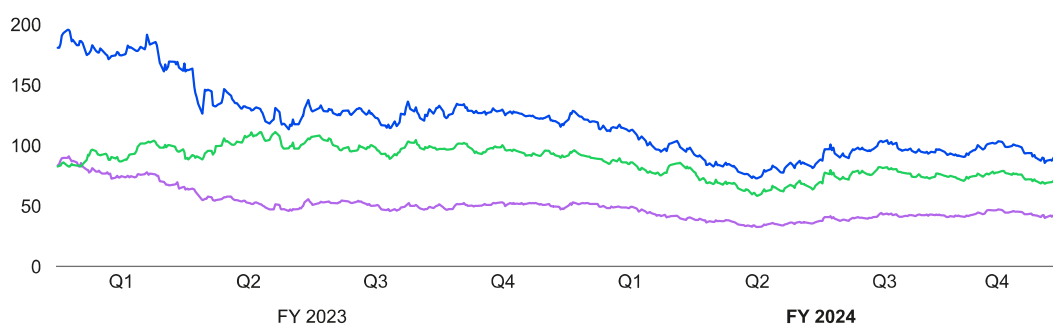
4 Front December contract

5 Front-year

The markets for electricity, gas, CO₂ emission rights, coal and in some cases oil as well were characterised, particularly in the first half of the year under report, by an overall reduction in prices, with lows of below Euro 70/MWh (electricity front-year contract) and below Euro 30/MWh (gas front-year contract) being reached at the end of February 2024. Compared with the highs seen in October 2023, and thus at the beginning of the 2024 financial year, this corresponded to reductions of 46 % and 43 % respectively for electricity and gas front-year contracts for 2025. Prices for coal and CO₂ emission rights fell by 36 % and 42 % respectively over the same period compared with their previous highs. This development was due to the combination of a strong supply situation and a mild heating period. Since March 2024, wholesale prices rose once again, with this resulting not least from geopolitical events such as the ongoing war in Ukraine and the conflict in the Middle East. Prices nevertheless remained below the highs seen in October 2023.

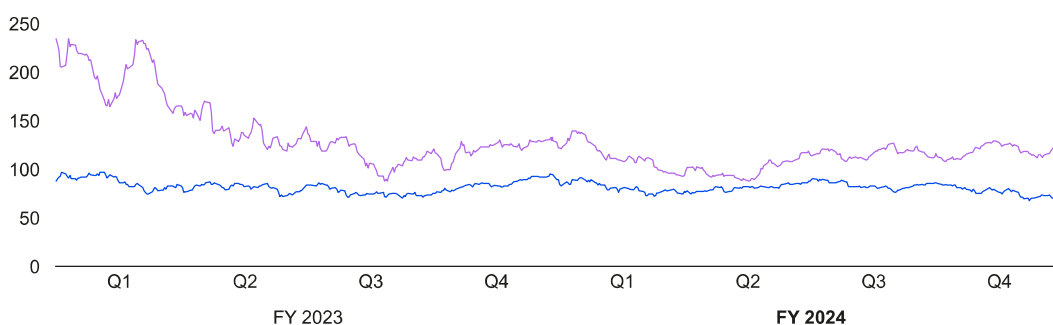
The margin for coal-based generation (clean dark spread, CDS) fell significantly compared with the 2023 financial year and, like the margin for gas-based generation (clean spark spread, CSS), was negatively priced. In the context of our hedging concept, changes in these spreads impact in particular on operating earnings in Generation and Infrastructure, the reporting segment to which the marketing of generation positions in our Generation business field is allocated.

Development in wholesale market prices for electricity, gas and CO₂ rights



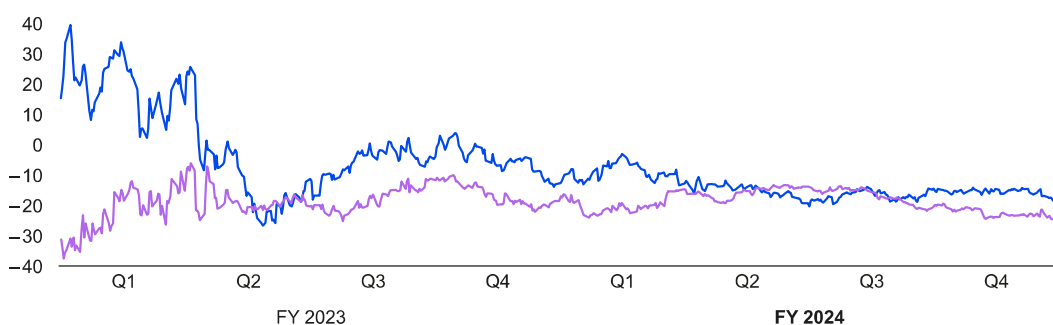
- EEX electricity base calendar year 2025 (Euro/MWh)
- EEX natural gas Trading Hub Germany calendar year 2025 (Euro/MWh)
- EUA December 2024 (Euro/tonne CO₂)

Development in wholesale prices for oil and coal



- Brent crude oil front-month (US\$/barrel)
- API2 coal front-year (US\$/metric tonne)

Development in clean dark spread and clean spark spread 2025



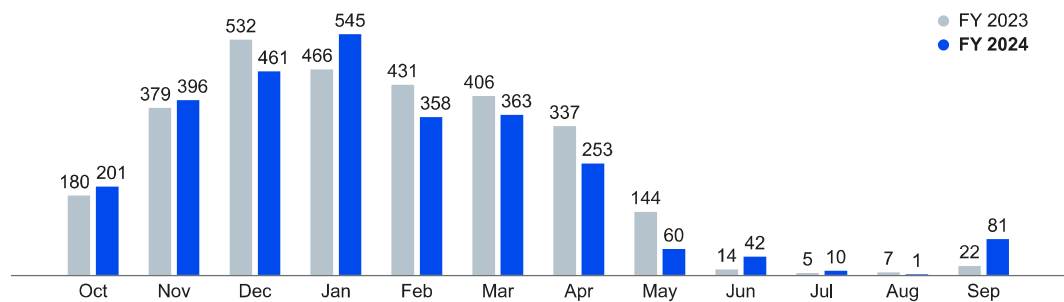
- Clean dark spread 2025 (Euro/MWh)
- Clean spark spread 2025 (Euro/MWh)

Impact of weather conditions

Milder weather leads to lower degree day figures

Higher outdoor temperatures lead to lower heat requirements at our customers. That is also reflected in lower degree day figures, which are used as an indicator of temperature-based heat consumption. Overall, it was milder in the year under report than in the previous year. Degree day figures were not only around 5 % lower than the figures for the previous year; they were also the lowest seen in the past ten years. Over a ten-year period, the 2024 financial year therefore had the highest average temperature.

Degree day figures



Wind volumes above previous year's level

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

In the regions relevant to us, the volume of usable wind in the 2024 financial year was around 15 % higher overall than the long-term average. Wind volumes were thus higher than the previous year's figure, which itself exceeded the long-term average at our wind power locations by around 4 %. For this comparison, we draw on the "EMD-ERA" wind index with a reference period (historic average).

Earnings, Asset and Financial Position

The period under report is the 2024 financial year, which started on 1 October 2023 and ended on 30 September 2024. Figures have been rounded up or down to the nearest million-euro amounts. Discrepancies may arise between the aggregate sums of individual items and the totals stated.

Presentation of earnings performance

MVV from 1 October to 30 September

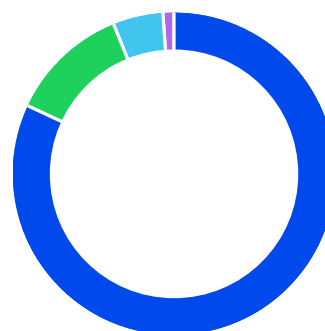
Euro million	FY 2024	FY 2023	+/- change	% change
Sales and earnings				
Adjusted sales excluding energy taxes	7,194	7,531	- 337	- 4
Adjusted EBIT	426	880	- 454	- 52
Adjusted EBIT excluding disposal gains	416	747	- 331	- 44
Turnover				
Electricity (kWh million)	19,904	18,941	+ 963	+ 5
Heat (kWh million)	5,476	5,489	- 13	0
Gas (kWh million)	16,869	16,840	+ 29	0
Water (m³ million)	38.1	38.4	- 0.3	- 1
Usable residual waste delivered (tonnes 000s)	2,326	2,371	- 45	- 2

In sales, we eliminate the difference between the hedge and reporting date prices as of the respective realisation date pursuant to IFRS 9. In the realisation period from 1 October to 30 September, the net total amounted to Euro – 864 million (previous year: Euro – 911 million). Overall, adjusted sales fell by Euro 0.3 billion to Euro 7.2 billion. The company's sales performance was influenced above all by the reduction in wholesale prices for electricity and gas. This negative price factor was partly offset by higher electricity trading volumes. MVV generated 94 % of its consolidated sales in Germany in the 2024 financial year (previous year: 95 %), while 6 % of sales were generated abroad (previous year: 5 %).

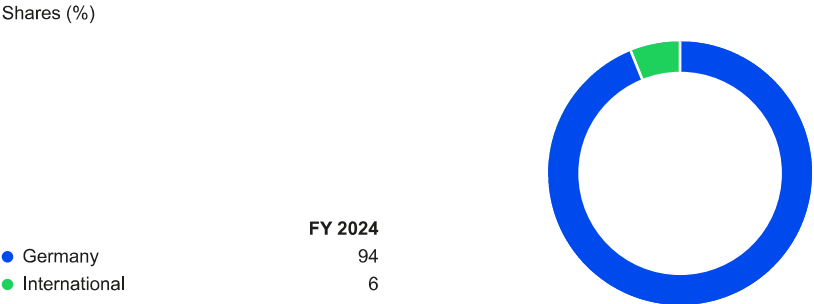
Adjusted sales excluding energy taxes by reporting segment

Shares (%)

	FY 2024
● Customer Solutions	82
● New Energies	12
● Generation and Infrastructure	5
● Other Activities	1



Adjusted sales excluding energy taxes by region

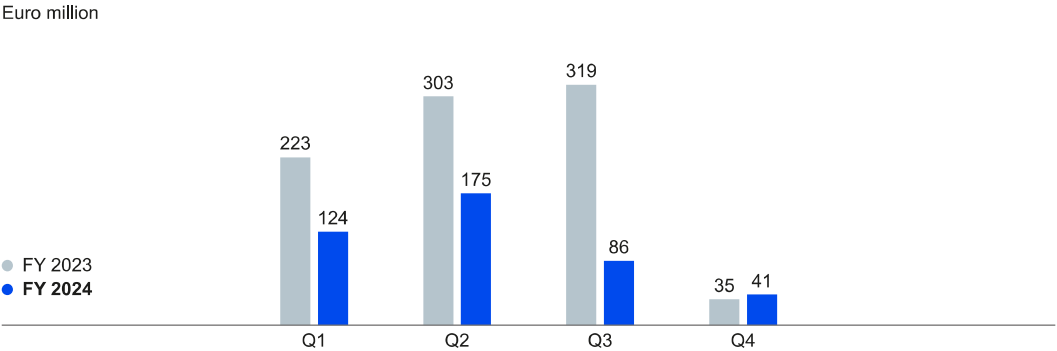


MVV's adjusted EBIT amounted to Euro 426 million in the year under report (previous year: Euro 880 million). In the 2023 financial year, adjusted EBIT was significantly influenced by disposal gains resulting from the sale of shareholdings. These gains amounted to Euro 133 million in the previous year, as against just Euro 10 million in the year under report. As these are non-recurring items, in our reporting we additionally present adjusted EBIT excluding disposal gains. In the 2024 financial year, this key figure amounted to Euro 416 million (previous year: Euro 747 million).

Adjusted EBIT was thus within our forecast range. In our 2023 Annual Report, we communicated our expectation that adjusted EBIT excluding disposal gains would amount to between Euro 360 million and Euro 440 million in the 2024 financial year. In our 9-month reporting, we specified our forecast in greater detail and narrowed this corridor to Euro 390 million to Euro 420 million.

Alongside the disposal gains from the sale of shareholdings referred to above, the adjusted EBIT for the previous year was chiefly also influenced by an exceptional performance in the Commodity Services business field due to the development in wholesale prices. This factor resulted in substantial, non-repeatable additional revenues in the 2023 financial year.

Adjusted EBIT by quarter



Customer Solutions reporting segment

Customer Solutions from 1 October to 30 September

Euro million	FY 2024	FY 2023	+/- change	% change
Sales and earnings				
Adjusted sales excluding energy taxes	5,908	6,313	- 405	- 6
Adjusted EBIT	117	497	- 380	- 76
Turnover				
Electricity (kWh million)	19,603	18,681	+ 922	+ 5
Heat (kWh million)	4,192	4,150	+ 42	+ 1
Gas (kWh million)	16,449	16,449	0	0
Water (m³ million)	38.1	38.4	-0.3	- 1
Usable residual waste delivered (tonnes 000s)	145	150	- 5	- 3

Adjusted sales decreased compared with the previous year, with this being due above all to lower wholesale prices for electricity and gas. This negative price factor was partly offset by higher electricity trading volumes.

The sharp reduction in adjusted EBIT is chiefly due to the substantial additional revenues we generated in the Commodity Services business field in the previous year due to an exceptional performance driven by wholesale prices. In addition, earnings contributions in our Retail business field also fell short of the previous year's figure. Moreover, earnings were further reduced by milder weather conditions compared with the previous year.

The increase in electricity volumes was mainly attributable to higher trading volumes, particularly in the direct marketing business.

New Energies reporting segment

New energies from 1 October to 30 September

Euro million	FY 2024	FY 2023	+/- change	% change
Sales and earnings				
Adjusted sales excluding energy taxes	842	750	+ 92	+ 12
Adjusted EBIT	161	176	- 15	- 9
Turnover				
Electricity (kWh million)	257	230	+ 27	+ 12
Heat (kWh million)	1,262	1,316	- 54	- 4
Gas (kWh million)	281	246	+ 35	+ 14
Usable residual waste delivered (tonnes 000s)	2,181	2,221	- 40	- 2

The increase in adjusted sales was driven above all by our project development business.

The development in adjusted EBIT in the year under report was shaped by higher earnings contributions from our project development business, as well as by the sale of the shares held by our Juwi subsidiary in the at-equity companies Juwi Shizen Energy and Juwi Shizen Energy Operation in Japan. By contrast, our environmental energy business reported a reduction in earnings, with this being due above all to lower electricity and steam revenues and a lower level of plant availability compared with the previous year. Overall, this led to a reduction in adjusted EBIT in the New Energies reporting segment.

The development in electricity and heat sales volumes is largely determined by higher or lower demand from our industrial customers. The increase in gas turnover resulted from improved availability levels at our biomethane plants.

Generation and Infrastructure reporting segment

Generation and Infrastructure from 1 October to 30 September

Euro million	FY 2024	FY 2023	+/- change	% change
Sales and earnings				
Adjusted sales excluding energy taxes	404	405	- 1	0
Adjusted EBIT	140	58	+ 82	+ 141

Adjusted sales were at the same level as in the previous year.

The year-on-year development in adjusted EBIT was mainly influenced by two factors. Firstly, earnings benefited from good levels of plant availability and positive marketing results at one generation plant. Secondly, our grid companies reported higher revenues, with this largely resulting from an increase in grid fees due to regulatory factors and from higher consumption volumes on the part of customers.

Other Activities reporting segment

Other Activities ¹ from 1 October to 30 September

Euro million	FY 2024	FY 2023	+/- change	% change
Sales and earnings				
Adjusted sales excluding energy taxes ²	40	63	- 23	- 37
Adjusted EBIT ²	8	149	- 141	- 95
Turnover				
Electricity (kWh million)	44	30	+ 14	+ 47
Heat (kWh million)	22	23	- 1	- 4
Gas (kWh million)	139	145	- 6	- 4

¹ Information about the change in reporting segments can be found in the Group Structure chapter

² Previous year's figure adjusted

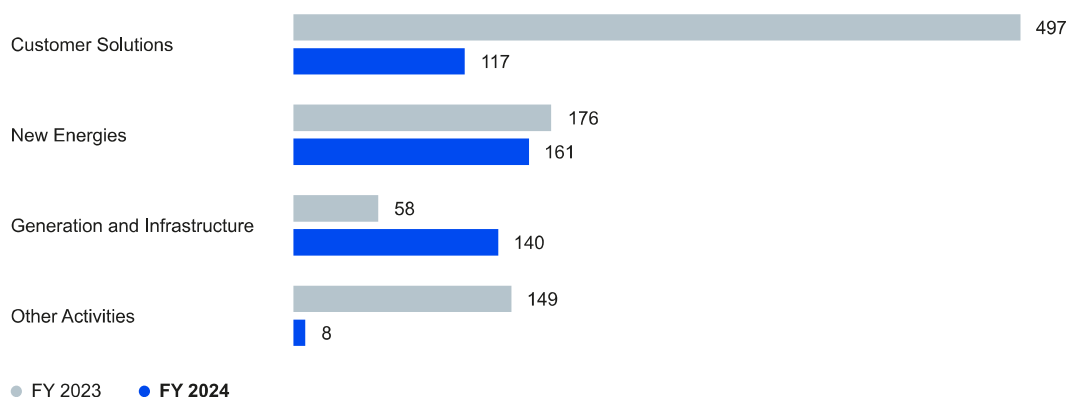
The development in adjusted sales is due above all to the fact that sales at the MVV Energie CZ Group were still included in the first quarter of the previous year. We sold the MVV Energie CZ Group in December 2022.

The reduction in adjusted EBIT was due to the presentation here in the previous year of the disposal gains from the sale of the MVV Energie CZ Group and our shares in Stadtwerke Ingolstadt.

The development in electricity turnover chiefly reflects the business with B2B customers. The lower volume of heat and gas turnover was mainly due to milder weather conditions compared with the previous year.

Adjusted EBIT by reporting segment

Euro million



Reconciliation of adjusted EBIT

In the following table, we show how we reconcile the EBIT reported in the income statement for the 2024 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 2024	FY 2023	+/- change
EBIT as reported in income statement	378	1,063	– 685
Measurement and realisation effects for derivatives	45	– 186	+ 231
EBIT before result of IFRS 9 derivative measurement and realisation	423	877	– 454
Interest income from finance leases	3	3	0
Adjusted EBIT	426	880	– 454

For our corporate management, we refer to adjusted EBIT. To calculate this key figure, we adjust operating earnings before interest and taxes in particular to eliminate the positive and negative earnings items resulting from fair value measurement as of the reporting date of derivatives recognised under IFRS 9. These items had net totals of Euro – 45 million as of 30 September 2024 and Euro + 186 million as of 30 September 2023. These measurement items reflect the development in prices on the commodities and energy markets. They have no impact on payments, neither do they affect our operating business or dividend.

Development in key income statement items

In cost of materials, we eliminate the difference between the hedge and reporting date prices pursuant to IFRS 9. In the realisation period from 1 October to 30 September, the net balance stood at Euro – 770 million (previous year: Euro – 424 million). **Adjusted cost of materials** decreased by Euro 42 million to Euro 5,877 million. The development in cost of materials on the one hand chiefly reflects the settlement of transactions still concluded at higher electricity and gas price levels and then settled in the year under report. On the other hand, this factor was countered by increased electricity volumes and higher materials procurement in our project development business.

Driven above all by workforce growth at several domestic group companies, as well as by collectively agreed pay rises and one-off payments, **employee benefit expenses** grew year-on-year by Euro 44 million to Euro 585 million.

The reduction in income from derivative financial instruments by Euro 3,762 million to Euro 813 million and in expenses from derivative financial instruments by Euro 3,140 million to Euro 752 million was mainly caused by measurement items for commodity electricity derivatives due to the

lower degree of volatility in wholesale prices. Excluding IFRS 9 measurements, **adjusted income from derivative financial instruments** fell by Euro 170 million to Euro 28 million, while **adjusted expenses for derivative financial instruments** decreased by Euro 173 million to Euro 16 million. The main reason for this reduction involved measurement items for cavern management activities.

The development in **other operating income** was chiefly shaped by the non-recurrence of the income generated from the sale of the MVV Energie CZ Group and our shares in Stadtwerke Ingolstadt in the previous year. Overall, other operating income fell year-on-year by Euro 128 million to Euro 130 million. **Other operating expenses** decreased by Euro 38 million compared with the previous year to Euro 269 million. In the previous year, this item particularly included expenses for the windfall tax and for the establishment of a charitable foundation.

The development in **income from companies recognised at equity** chiefly reflects the discontinued inclusion of the at-equity result from Stadtwerke Ingolstadt wider. We sold our shares in Stadtwerke Ingolstadt in the 3rd quarter of the previous year. Overall, income from companies recognised at equity fell by Euro 15 million to Euro 7 million.

At Euro 203 million, **depreciation and amortisation** were Euro 4 million lower than in the previous year.

Based on adjusted EBIT, the **adjusted financial result** (expense) improved by Euro 27 million to Euro – 24 million, with this development largely being due to higher interest income on cash investments and foreign currency translation items.

Net of the adjusted financial result, **adjusted EBT** declined by Euro 427 million compared with the previous year and amounted to Euro 402 million in the 2024 financial year (previous year: Euro: 829 million). Adjusted taxes on income stood at Euro 120 million (previous year: Euro 237 million).

Adjusted annual net income fell by Euro 311 million and amounted to Euro 281 million for the year under report.

At Euro 49 million, **adjusted non-controlling interests** were Euro 30 million lower than in the previous year. **Adjusted annual net income after minority interests** decreased by Euro 280 million to Euro 233 million (previous year: Euro 513 million). On this basis, **adjusted earnings per share** amounted to Euro 3.53 (previous year: Euro 7.78). The number of shares was unchanged at 65.9 million.

Key earnings figures as presented in the income statement are as follows: Net of the adjusted financial result (expense) of Euro 21 million (previous year: Euro 41 million), earnings before taxes (EBT) amounted to Euro 358 million in the year under report (previous year: Euro 1,022 million). This reduction in earnings is also reflected in annual net income, which stood at Euro 250 million in the 2024 financial year (previous year: Euro 753 million).

Presentation of asset position

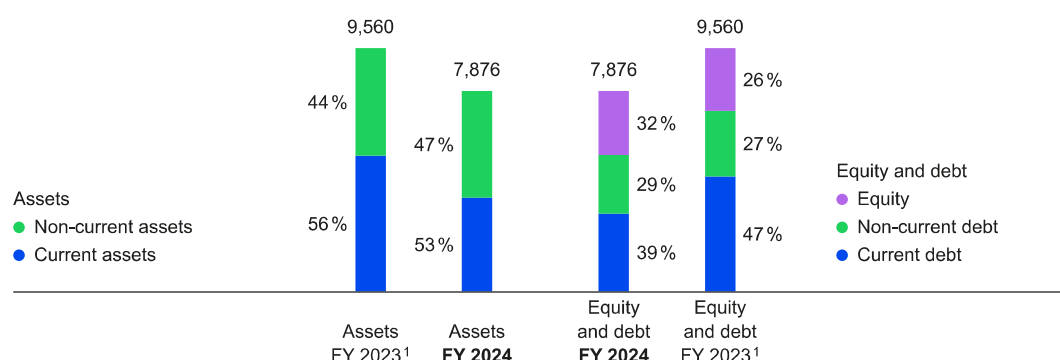
Balance sheet structure

Euro 000s	30 Sep 2024	30 Sep 2023 ¹	% change
Assets			
Non-current assets	4,213,098	4,198,034	0
Current assets	3,662,918	5,361,976	- 32
Total assets	7,876,016	9,560,010	- 18
Equity and debt			
Equity	2,514,523	2,479,172	+ 1
Non-current debt	2,310,125	2,551,000	- 9
Current debt	3,051,368	4,529,838	- 33
Total equity and debt	7,876,016	9,560,010	- 18

¹ Previous year's figures adjusted

Balance sheet structure

Euro million



Balance sheet development

Total assets decreased by Euro 1,684 million compared with 30 September 2023 to Euro 7,876 million. Among other factors, this was due to the changed level of market prices and resultant changes in the fair values of energy trading transactions recognised under IFRS 9. These changes are reflected in the development in asset-side and liability-side derivative financial instruments and the change in deferred tax assets and liabilities. Asset-side derivative financial instruments fell year-on-year by Euro 1,612 million to Euro 1,941 million, while liability-side derivative financial instruments decreased by Euro 1,476 million to Euro 1,946 million.

Non-current assets rose by Euro 15 million to Euro 4,213 million. Property, plant and equipment increased by Euro 221 million to Euro 3,145 million, with this mainly being driven by investments in green electricity and heat generation plants, measures to extend and modernise our distribution grids and the construction of a phosphorous recycling plant. The reduction in shareholdings in companies recognised at equity by Euro 31 million to Euro 123 million is chiefly attributable to the disposal of shareholdings in the year under report.

Current assets decreased by Euro 1,699 million to Euro 3,663 million. Due above all to increased stocks in our project development business, inventories rose by Euro 35 million to Euro 357 million. The reduction in trade receivables by Euro 58 million to Euro 457 million is primarily attributable to lower wholesale prices for electricity and gas. Moreover, in the previous year this line item still included amounts only settled in the course of the year for statutory price caps on electricity and gas. The main reason for the reduction in other financial receivables and assets by Euro 134 million

to Euro 187 million was the expiry of cash investments. The rise in other non-financial receivables and assets by Euro 44 million to Euro 230 million primarily resulted from the increase in other assets, subsequent claims in connection with the German Electricity Price Cap Act (StromPBG) and the acquisition of emission rights. Cash and cash equivalents fell by Euro 196 million to Euro 779 million. This reduction was chiefly attributable to outgoing payments for investments, as well as to outflows of security deposits for counterparty default risk (margins).

Our **equity** including non-controlling interests amounted to Euro 2,515 million at the balance sheet date and was thus Euro 36 million higher than the previous year's figure.

Non-current debt decreased by Euro 241 million to Euro 2,310 million.

Current debt fell by Euro 1,479 million to Euro 3,051 million. The reduction in other provisions by Euro 43 million to Euro 175 million mainly resulted from the utilisation of provisions for services not yet invoiced. The increase in trade payables by Euro 76 million to Euro 548 million was due above all to construction projects in our project development business, as well as to higher CO₂ accruals. The fall in current other financial liabilities by Euro 162 million to Euro 93 million primarily resulted from the reduction in liabilities for security deposits for counterparty default risk (margins).

For Group management purposes, we adjust our consolidated balance sheet at 30 September 2024 to eliminate cumulative IFRS 9 measurement items. On the asset side, we eliminate positive fair values of derivatives and allocable deferred taxes, which amounted to Euro 1,929 million (30 September 2023: Euro 3,543 million). On the equity and debt side, we eliminate negative fair values and allocable deferred taxes, which stood at Euro 1,940 million (30 September 2023: Euro 3,444 million). Within equity, we then eliminate the net balance of Euro – 11 million (30 September 2023: Euro +88 million). This results in adjusted equity of Euro 2,526 million at 30 September 2024 (30 September 2023: Euro 2,391 million). As a percentage of adjusted total assets of Euro 5,947 million (30 September 2023: Euro 6,028 million), the adjusted equity ratio amounted to 42.5 % at 30 September 2024, as against 39.7 % at 30 September 2023.

Investments

We invested a total of Euro 417 million in the 2024 financial year (previous year: Euro 344 million).

Investments from 1 October to 30 September

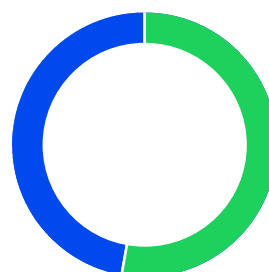
Euro million	FY 2024	FY 2023	+/- change	% change
Customer Solutions	26	29	- 3	- 10
New Energies	204	133	+ 71	+ 53
Generation and Infrastructure	165	160	+ 5	+ 3
Other Activities ¹	22	22	0	0
Total	417	344	+ 73	+ 21

¹ Previous year's figure adjusted

Investments

Shares (%)

	FY 2024
● Growth investments	53
● Investments in existing business	47



Our largest investment projects involved:

- Investing in green heat generation plants, including building plants to provide backup and peak load cover in our district heat supply, building our first river heat pump and the required grid connections
- Building windfarms and solar parks and taking these over into our proprietary portfolio
- Launching operations with a new plant technology to produce phosphorous from sewage sludge in Mannheim
- Maintaining and renewing our distribution grids to safeguard supply reliability
- Expanding charging infrastructure in Mannheim and the region.

Presentation of financial position

Current and non-current financial debt decreased by Euro 93 million to Euro 1,705 million. The taking up of new loans was countered by repayments of existing loans. At the same time, **cash and cash equivalents** fell by Euro 196 million to Euro 779 million. This was due above all to outgoing payments for investments and outflows of security margins for counterparty default risk (margins). Overall, **net financial debt** (current and non-current financial debt less cash and cash equivalents) increased by Euro 103 million to Euro 926 million.

The **cash flow before working capital and taxes** fell year-on-year by Euro 280 million to Euro 672 million. This was particularly due to the fact that, after elimination of non-cash-effective and non-operating income and expenses, the lower volume of earnings before taxes (EBT) compared with the previous year led to lower cash-effective operating earnings. The largest items in this elimination were the non-cash-effective measurement of derivatives pursuant to IFRS 9 and the reclassification to the cash flow from investing activities of non-operating income generated from the sale of the MVV Energie CZ Group and shares in Stadtwerke Ingolstadt in the previous year.

Year-on-year, the **cash flow from operating activities** fell by Euro 1,112 million to Euro 498 million. This chiefly resulted from lower outflows for repayments of security deposits for counterparty default risk (margins). This in turn was largely due to the fact that wholesale prices for electricity, gas and coal fell less sharply in the period under report than in the previous year. Adjusted to exclude the change in margins deposited, the cash flow from operating activities decreased by Euro 139 million to Euro 647 million. Furthermore, the year-on-year development in this key figure was affected by the expiry of short-term cash investments, which were reclassified to cash and cash equivalents. In addition, the year-on-year changes in trade receivables and trade payables also contributed to the improvement in the operating cash flow.

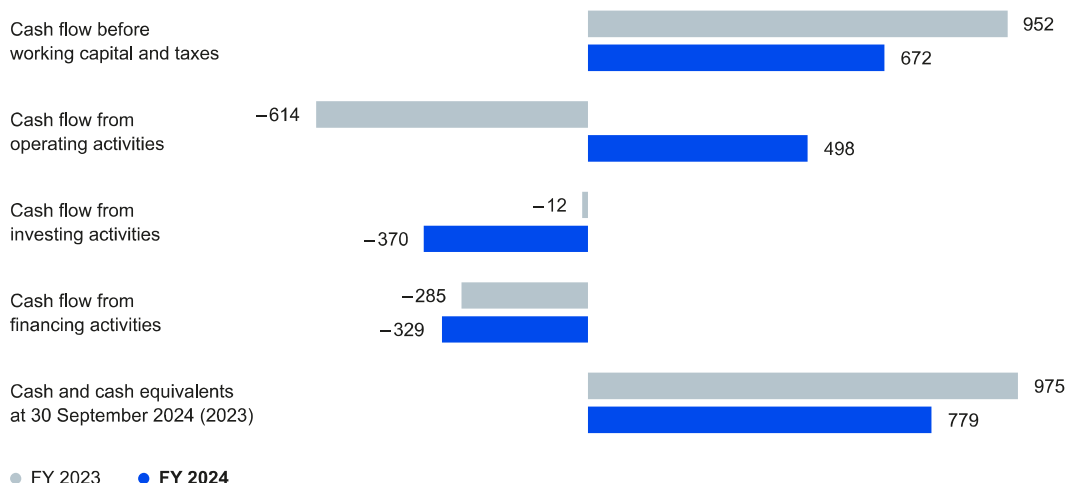
The year-on-year development in the **cash flow from investing activities** was chiefly shaped by the proceeds received in the previous year from the sale of the MVV Energie CZ Group and our shares in Stadtwerke Ingolstadt. One factor positively influencing the cash flow in the year under report was the sale of the shares held by our Juwi subsidiary in the at-equity companies Juwi Shizen Energy and Juwi Shizen Energy Operation in Japan. Furthermore, the increased volume of investment in the period under report led the cash flow from investing activities to show an overall year-on-year reduction of Euro 358 million to Euro – 370 million.

The **cash flow from financing activities** fell by Euro 44 million to Euro – 329 million, a change mainly resulting from higher dividend payments to shareholders and non-controlling interests.

MVV reported **cash and cash equivalents** of Euro 779 million at 30 September 2024 (30 September 2023: Euro 975 million).

Cash flow statement

Euro million



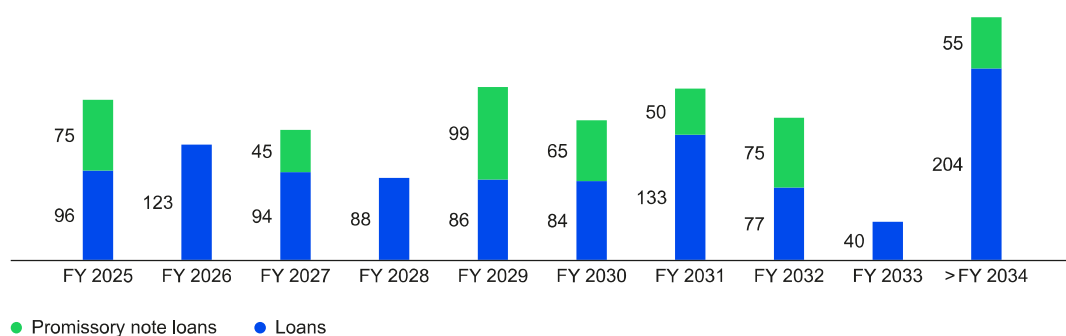
Financial management

Our access to the capital markets is as good as ever, meaning that we have no difficulty in covering MVV's financial and liquidity requirements. We benefit here from our strong creditworthiness, our diversified business portfolio and our corporate strategy, with its focus on sustainable and profitable growth. MVV has very strong liquidity in the form of cash funds and firmly committed bank credit lines.

Our repayment profile shows consistency over a horizon of several years.

Repayment profile

Euro million



Our adjusted equity ratio of 42.5 % enables us to continue making high volumes of investment. We finance our investments from depreciation, retained earnings and project-optimised financing facilities. We pool projects with similar structures and comparable terms before financing these via the capital market. Here, we work with the banking and borrower's note markets.

At the balance sheet date on 30 September 2024, MVV Energie managed a cash pool for itself and 36 companies in our Group. In this capacity, it manages, procures and secures both its own short-term liquidity and that of subsidiaries included in the pool. Long-term financing required for investments is provided to subsidiaries in the form of shareholder loans.

Credit rating

MVV does not have an external credit rating. 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. In this regard, we pay attention to ensuring that our key figures remain within corridors suitable for debt-financed growth.

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: There are no non-financial targets which would refer solely to MVV Energie AG. The NFD comprises this chapter and forms a constituent part of the combined management report. In connection with Regulation EU 2020/852, in the [EU Taxonomy](#) chapter, which forms a constituent part of this NFD, we publish the corresponding disclosures required by Article 8 of the EU Taxonomy and the associated Delegated Regulations and Acts.

The reporting in the NFD basically refers to MVV and thus, as in other sections of this Annual Report, to all subsidiaries fully consolidated in the consolidated financial statements. This also applies to disclosures on our employees, which also refer to our trainees, our students in dual work-study programmes and employees on parental or care leave. As we include all greenhouse gas emission sources, including those at our at-equity shareholdings, in our strategic sustainability and decarbonisation targets, we supplement the associated key figures in the environmental aspects section with the figures for companies recognised at equity. 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 KPMG AG Wirtschaftsprüfungsgesellschaft 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 in the [Other Disclosures](#) chapter.

We are working consistently to minimise any potentially negative impacts of our business activities and to make a measurable contribution to transforming the energy supply and protecting the climate and environment. In our Annual Report and on our website, we have for many years now provided information about the challenges we face and the progress we have made as a company that acts sustainably. Due to preparations for first-time reporting in accordance with the Corporate Sustainability Reporting Directive (CSRD) for the 2025 financial year, we will forego publishing a Sustainability Report for the 2024 financial year. We nevertheless plan to supplement the Sustainability Report published on our website for the 2023 financial year with an Excel-format update to the KPI data annex for the 2024 financial year. This update is expected to be published at the beginning of 2025.

The contents of the NFD are determined on the basis of our materiality analysis. To perform this, we continually monitor public discussions and the positions of our stakeholders. We regularly assess whether and how the relevance of our material topics has changed. This multistage process includes:

- Desk research and internal analysis
- Surveys of those specialist departments which have interfaces with our external stakeholder groups
- Workshops and interviews with select stakeholders and internal experts
- Use of external AI-based data providers

We review all aspects of the materiality process every three to four years and did so most recently in the 2021 financial year. Furthermore, we usually update the main characteristics and prioritisations on an annual basis in order to determine which sustainability topics are particularly significant to us. In terms of its contents, the materiality analysis also accounts for global challenges and megatrends, the Sustainable Development Goals, industry and technology-related trends and the expectations of our internal and external shareholders.

The materiality analysis for the 2024 financial year has been compiled in accordance with the applicable legal requirements. To this end, in the first stage we recorded and evaluated the material topics from the perspective of our stakeholders with regard to the impacts of our activities and factored in the business relevance dimension for the respective topics. In the second stage, we allocated the results of this analysis, where applicable to the aspects listed in § 289c HGB, namely environmental concerns, employee concerns, social concerns, respect for human rights and combating corruption and bribery. We reviewed which disclosures were needed for these aspects to provide an understanding of the course of business, business results and situation of MVV Energie AG and the MVV Group, as well as the impact of our business activities on these aspects. We report on this in detail in the following sections: climate neutrality, renewable energies and energy transition, supply reliability, resource efficiency (including the topic of water), local environmental protection (including the topic of extreme weather events), sustainable circular economy, employer attractiveness, corporate social responsibility, responsibility for the supply chain and human rights, and compliance. The [Table of Contents](#) provides an overview.

Business model and risk analysis

We are pursuing a long-term strategy focused on climate protection. 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 implement their own energy transformation and achieve climate neutrality. We cover all major stages of the energy industry value chain. Further information can be found in the [Business Model](#) and [Corporate Strategy](#) chapters.

Within our existing risk management system, which is described in the [Opportunity and Risk Report](#) chapter, we record and evaluate all material risks, including non-financial risks, that are associated with our business activities and business relationships. The review process performed on non-financial risks in the 2024 financial year concluded that there were no risks which satisfied the materiality criteria set out in § 289c (3) Nos. 3 and 4 HGB.

The political implementation of the energy transition and decarbonisation continues to impact on our operating business, whether due to shifting political priorities or changed fiscal scope. Further information can be found in the [Business Framework](#) chapter.

Sustainability management

Our sustainability management focuses on those topics, processes and measures that we view as forming part of our core business (please also see the [Business Model](#) chapter) and is based on our [Corporate Strategy](#). Our climate protection strategy and our strategic sustainability and decarbonisation targets (here we refer to the [Environmental Concerns Aspect](#) section) were adopted by the Executive Board and discussed by the Supervisory Board; they form an integral component of our corporate strategy and of the business field strategies adopted on this basis.

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 internal management and sustainability bodies on a regular basis and whenever required by specific events 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. For many years already, we have evaluated investment projects by reference to sustainability criteria and in terms of the contribution they make to our decarbonisation and sustainability targets. To promote sustainable investments even more effectively, we include a sustainability-related component in the economic viability requirements for investments. The business fields act under their own responsibility to implement the measures and management systems on an operative level.

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 transition Supply reliability Resource efficiency Local environmental protection Sustainable circular economy
Employee concerns	Environment and resources	
Social concerns	Social responsibility	Employer attractiveness
	Social responsibility	Corporate social responsibility
Respect for human rights and combating corruption and bribery	Social responsibility	Responsibility for supply chain and human rights Compliance

Environmental concerns aspect

Climate neutrality

Containing climate change is one of the greatest challenges of our time. The EU is endeavouring to become climate neutral by 2050 at the latest. In the German Climate Protection Act (KSG) adopted in 2021, Germany set itself the target of achieving climate neutrality by 2045 already. Reaching this goal will require not only significant reductions in greenhouse gas emissions but also measures to offset unavoidable emissions. To this end, it will be necessary to achieve negative emissions from the 2040s at the latest, for example by capturing CO₂. We describe the relevant developments in energy policy in the year under report in the [Business Framework](#) chapter. MVV has attached great importance to climate protection, decarbonisation and renewable energies for many years. We comment on our direct and indirect CO₂ emissions in Scopes 1, 2 and 3 in the [MVV's Climate Balance Sheet](#) section.

Energy industry has a key role to play

As one of the major emitters of CO₂, the energy industry has a key role to play in achieving climate neutrality. Here, it must reduce its direct and its indirect emissions to zero as rapidly as possible and do entirely without fossil fuels. This affects not only the core business of energy companies, i.e. their actual energy generation, but also their upstream and downstream value chains and their shareholdings. From our perspective, the great challenges for this decade involve rapidly exiting from coal-based generation and reducing energy consumption in absolute terms. At the same time, it is necessary to build or modernise the infrastructures needed to facilitate a fully climate-neutral energy supply. This involves accelerating the expansion in renewable energies (electricity and heat) and the infrastructures needed to generate, transport and use climate-neutral gases. These are the technical preconditions enabling the use of fossil-based natural gas to be gradually phased out.

Climate neutrality is only an interim stage

Companies often use the term "climate neutrality" to designate strategies in which CO₂ emissions are arithmetically neutralised by working with offsetting measures rather than reducing the use of fossil-based energy to virtually zero ("net zero"). The 2023 IPCC Synthesis Report made clear not only that the use of fossil-based energies will have to be phased out completely worldwide, but that the net balance sheet will have to be negative by the middle of the century. This means that CO₂ will have to be permanently captured by being removed from the atmosphere in order to offset unavoidable emissions, such as those arising from agriculture.

Our climate protection strategy

MVV aggregates the measures required for greater climate protection under the generic term #climatepositive. By 2035, we intend to be one of the first energy companies in Germany to achieve negative overall emissions, and that without drawing on offsetting certificates. We aim to act as pioneers showing how the energy industry can implement a 1.5-degree pathway. Our climate protection strategy and the associated sustainability and decarbonisation targets, including the measures planned, form the centrepiece of our Mannheim Model. Further information can be found in the [Corporate Strategy](#) chapter.

Our climate protection strategy forms an integral component of our corporate strategy and determines the allocation of our investments and service focuses, as well as our further development. It is based on the following key principles:

- Our sustainability and decarbonisation targets have been certified by the Science Based Target initiative (SBTi).
- We consistently include all sources of greenhouse gas emissions, including those at our at-equity shareholdings, in MVV's climate balance sheet.
- Our CO₂ reduction strategy is intended to reduce Scope 1, 2 and 3 emissions in absolute terms; offsetting and compensation measures do not form part of the strategy.

The Executive Board bears overall responsibility for our climate protection strategy. Climate protection management is performed by our sustainability management department.

Our strategic sustainability and decarbonisation targets

In the 2023 financial year, we further raised the long-term sustainability and decarbonisation targets we had already set ourselves in the 2016 and 2020 financial years.

**We are reducing our total CO₂ footprint to net zero
and will be #climatepositive by 2035.**

To achieve our Scope 1 target, we will decommission our remaining fossil-based energy generation and fully convert our energy generation to renewable energies. Until then, we will if necessary reduce condensation-based electricity generation at our coal power plants and take additional energy efficiency measures. The steps required to discontinue fossil-based generation on the one hand include decommissioning the CHP plant in Offenbach. On the other hand, we assume that the nationwide exit from coal-based electricity generation envisaged by lawmakers will be completed by 2030 and that the remaining blocks at the Grosskraftwerk Mannheim power plant, in which we own a minority shareholding, will no longer be operated in the market. The precise dates of the exit will largely be determined by federal policy. To achieve our net zero target for indirect emissions in Scopes 2 and 3 as well, by 2035 at the latest we will supply our customers exclusively with green heat, green electricity, green gases and climate-neutral products and services, as well as decarbonising our supply chains. For MVV, net zero is achieved when we have reduced our absolute direct and indirect emissions on portfolio level by at least 95 % compared with 2018 and have offset any residual emissions potentially unavoidable due to technical reasons with our own permanent CO₂ sinks. Unavoidable greenhouse gas emissions are those for which no technical alternatives are currently available for the same application. Examples of unavoidable emissions at MVV include direct emissions resulting from waste incineration or indirect emissions arising from agricultural soil tillage for the generation of regenerative resources.

Working with BECCUS (Bioenergy Carbon Capture Usage and Storage) will enable us not only to offset our own unavoidable residual emissions but also to become #climatepositive as a company thanks to the additional volumes thereby captured. To this end, by 2035 we will upgrade our bio-waste anaerobic digestion, biomethane, biomass and energy from waste plants with suitable technologies enabling them to permanently remove CO₂ from the atmosphere.

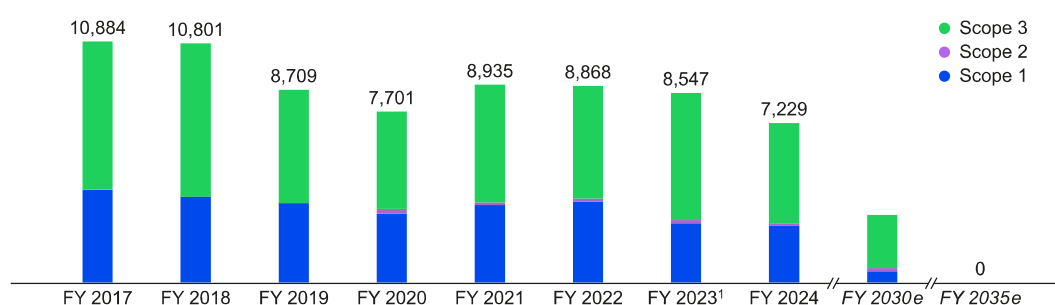
This way, our biomass and energy from waste plants will in the long-term become large, industrial-scale CO₂ sinks. That is because around half of the non-recyclable waste incinerated at energy from waste plants comprises biological, i.e. climate-neutral components. The other half involves waste that leads to unavoidable residual emissions. Working with BECCUS, the aim is to turn the share of biogenic emissions thereby captured into “negative emissions”. The share of non-biogenic emissions captured becomes CO₂ neutral. Biogenic CO₂, which is generated by plants and other biological processes, can be bound and stored with natural or artificial methods, thus creating a CO₂ sink. This leads to negative emissions, as more CO₂ is removed from the atmosphere than is released by human activities. Examples of such methods include reforestation and carbon capture and storage. At our first #climatepositive bio-waste anaerobic digestion plant, which we implemented in Dresden in 2023, we permanently remove CO₂ from the atmosphere, use part of the CO₂ captured during biomethane production for internal company processes and permanently store the excess volume of liquefied CO₂ in demolition concrete. In Mannheim, we performed one-year trials with BECCUS pilot equipment on capturing, liquefying and loading CO₂ from our flue gases at the energy from waste and biomass CHP plants. During these trials, we gained valuable experience in the secure and efficient application of a CO₂ capturing process. We are currently assessing the results and will factor these into our first industrial-scale BECCUS plant. Furthermore, based on the experience gained with the two plants we have initiated preliminary planning for the first industrial-scale capturing facility at the biomass CHP plant in Mannheim. We intend to implement further BECCUS plants before the end of the current decade.

We report the total waste-related emissions at our waste incineration and refuse-derived fuel plants in our [Climate Balance Sheet](#). The chart below presents the historic development in our total emissions, as well as the emissions we expect until 2035. Due to transparency considerations, in this chart we report total emissions including those at our at-equity shareholdings, such as our minority shareholding in the power plant Grosskraftwerk Mannheim AG.

Development in total emissions

Fully consolidated and at-equity companies

1,000 tonnes CO_{2eq}



1 Previous year's figure adjusted

If we are to meet our ambitious target of becoming net zero by 2035, we will have to achieve further targets and milestones as we head towards becoming #climatepositive:

We will convert our district heat generation in Mannheim and Offenbach to 100 % green energy sources by 2030.

In Germany, climate neutrality can only be achieved by way of the heat transition, which means fully converting all heat generation from fossil-based to renewable energy sources. As one of the largest district heat suppliers in Germany and a supplier of natural gas, we therefore bear a particular responsibility. The Federal Government has set the target that, by 2030, on average half of Germany's district heat supply should result from green fuels. We are aiming for a significantly higher pace of decarbonisation. In Mannheim and the surrounding region and in Offenbach, we intend to generate 100 % green district heat by 2030, while Kiel is set to follow by 2035. To this end, we are continually extending our district heat grid, increasing the density of the grid in areas already covered by adding connections to the existing grid and supporting customers, for example in converting their natural gas house connections. We offer climate-neutral decentralised heat solutions, such as heat pumps, to all households in our supply regions that cannot be connected to the district heat grid.

At the beginning of the year under report, we reached a further major milestone on our way to making district heat green in Mannheim and the region with our first river heat pump, located on the site of the Grosskraftwerk Mannheim power plant. With a thermal capacity of 20 MW, this innovative river heat pump is one of the largest plants of its kind in Europe. By incinerating waste timber and non-recyclable timber, the biomass plant which has been in operation since 2003, now converted to CHP generation and linked up to the district heat grid in autumn 2024, contributes a further total of around 270 gigawatt hours a year to further decarbonising district heat. Our new phosphorous recycling plant in Mannheim represents a further component. By successfully implementing these projects, we have completed the second expansion stage to make district heat green in Mannheim. As soon as biomethane is used rather than gas, we could then cover around 60 % of annual peak requirements with green heat.

We will offer 100 % climate-neutral customers solutions by 2035 at the latest.

Most of our indirect CO₂ emissions result from supplying electricity and natural gas to our customers. By 2035, we intend to gradually convert our products and services to 100 % climate-neutral solutions and supply our customers exclusively with green energy. By discontinuing sales of fossil-based fuels by 2035, we intend to effectively reduce our greenhouse gas emissions. Furthermore, we aim no longer to provide any fossil-based gas via our grids to households and businesses in Mannheim and surrounding areas from 2035 onwards. As we head for decarbonisation, we support and advise our customers with products and services for sustainable heat solutions.

We will triple our electricity generation from renewable energies compared with 2022 to around 2,000 megawatts by 2030.

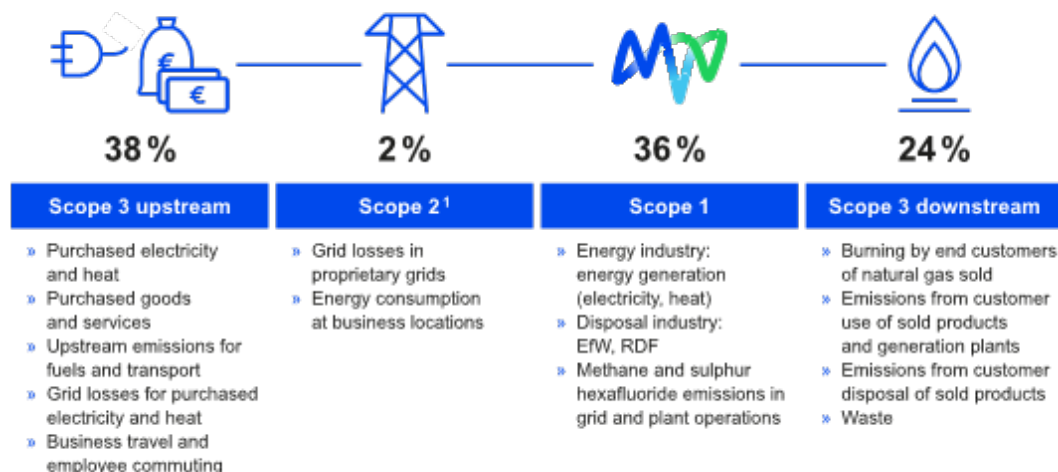
Renewable energies have been the focus of our strategic alignment for many years already. The increased use of renewable energies is necessary to achieve national climate protection targets. Not only that, for MVV they also offer opportunities to generate further growth. We will step up the pace of expansion for our own renewable energies generation portfolio. By 2030, we intend to increase our capacities to around 2,000 MW_e (basis 2022: 614 MW_e). In this, we are focusing on onshore wind power and photovoltaics. Further information about our renewable energies generation portfolio can be found in the [Renewable Energies and Energy Transition](#) section.

MVV's 2024 climate balance sheet

In our climate balance sheet, we distinguish between direct and indirect CO₂ emissions.

Structural composition of our climate balance sheet

Fully consolidated and at-equity companies



¹ Location-based

Energy generation at our own plants or at plants from which we procure contingents gives rise to direct CO₂ emissions. These are designated as Scope 1 under the Greenhouse Gas Protocol.

On the one hand, our Scope 1 emissions are influenced by weather-based demand for heat and by developments in wholesale electricity prices. These factors cannot be influenced by MVV but are reflected in capacity utilisation rates at our generation plants. On the other hand, the medium to long-term development in our direct emissions largely depends on the dates when our existing plants using fossil-based fuels are decommissioned and on new plants needed to secure the supply.

Our Scope 1 emissions in the 2024 financial year were at the same level as in the previous year. On the one hand, we reported a reduction in generation volumes at our conventional combined heat and power generation plants. This development was countered to a minor extent by a slight increase in generation at our energy from waste plants. Including the companies we recognise at equity, Scope 1 emissions fell year-on-year by 4 %.

Indirect CO₂ 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. In the year under report, they fell by 2 % compared with the previous year's figure, and that both from a fully consolidated perspective and including our at-equity companies.

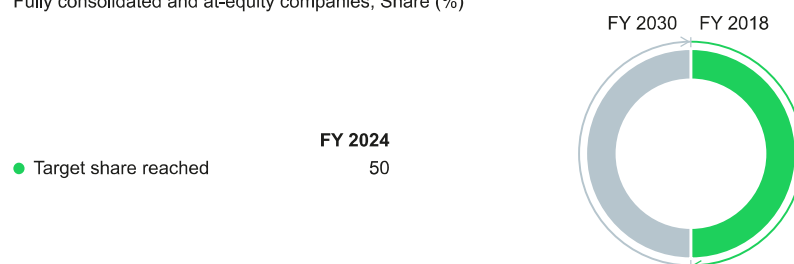
Indirect CO₂ emissions, Scope 3, comprise greenhouse gases arising in upstream and downstream stages of the value chain. CO₂ emissions in upstream value chain stages arise at suppliers manufacturing products and services purchased by MVV. These relate, for example, to the production of photovoltaics systems and wind turbines or 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 mainly determined by sales volumes for electricity, gas and heat, as well as by volumes in the renewable energies project development business. This key figure also includes emissions from non-commodities procurement activities.

The 21 % reduction in Scope 3 emissions largely reflects the fact that the number of wind and solar projects implemented returned to a normal level in the year under report following the sharp rise in the previous year. Furthermore, the improvement in the calculation methods and basis of data in the central and commodity procurement activities led overall to a slight reduction in the level of our indirect emissions. Including the companies we recognise at equity, Scope 3 emissions also fell by 21 % in the year under report.

We continue to assume that this trend in total direct and indirect emissions will continue in future and that we will be able to meet our decarbonisation targets.

Reduction in energy industry CO₂ (Scope 1)

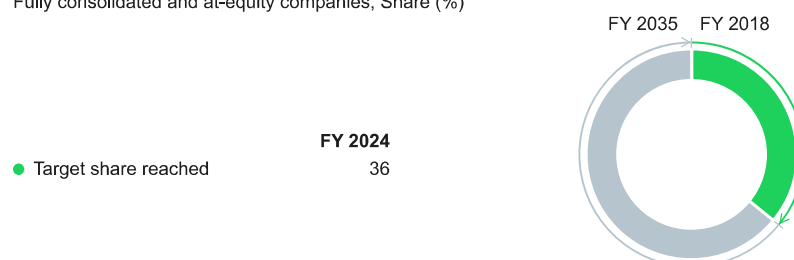
Fully consolidated and at-equity companies, Share (%)



The target share reached reflects the percentage share achieved between the base year in 2018 (2.9 million tonnes of CO₂) and the target year in 2030 (0.5 million tonnes of CO₂).

#climatepositive by 2035 (energy industry Scope 1 as well as Scope 2 and 3 = zero)

Fully consolidated and at-equity companies, Share (%)



The target share reached reflects the percentage share achieved between the base year in 2018 (9.9 million tonnes of CO₂) and the target year in 2035 (0 million tonnes of CO₂). The figures for Scope 1 emissions exclusively include emissions from energy industry activities. In the year under report, emissions amounted to 6.4 million tonnes, corresponding to a reduction and target share reached of 36 %.

Lower specific CO₂ emissions

Specific CO₂ emissions for our generation portfolio decreased compared with the previous year, with this being due to the lower volume of conventional electricity generation.

Specific CO₂ emissions in the groupwide generation portfolio

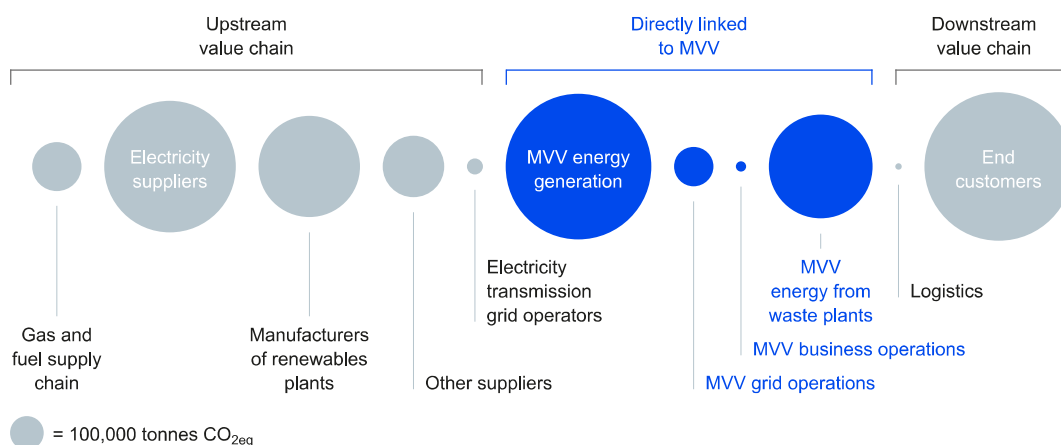
g CO ₂ /kWh	FY 2024	FY 2023
Electricity generation ¹	366	364
Heat generation ¹	115	116
Energy generation in the generation portfolio	207	212

¹ Previous year's figure adjusted

Our plants were operated in accordance with the approvals granted and relevant legal requirements in the 2024 financial year. Compliance with applicable threshold values was reported to the authorities in accordance with legal requirements.

Direct and indirect CO₂ sources at MVV

Fully consolidated companies and companies recognised at equity



Climate balance sheet

1,000 tonnes CO _{2eq}	FY 2024	FY 2023	+/- change	% change
Direct CO₂ emissions (Scope 1)¹	1,533	1,538	- 5	0
Energy industry activities ²	669	706	- 37	- 5
of which CH ₄ emissions ^{2, 3}	26	42	- 16	- 38
of which SF ₆ emissions	2	2	0	0
Disposal activities (EfW) ⁴	864	832	+ 32	+ 4
Indirect CO₂ emissions (Scope 2)⁵	124	127	- 3	- 2
of which energy procured for proprietary plants	5	6	- 1	- 17
of which energy used for grid operations	119	121	- 2	- 2
Indirect CO₂ emissions (Scope 3)	4,838	6,091	- 1,253	- 21
of which purchased goods and services (GHG category 1) ^{2, 6}	1,032	2,140	- 1,108	- 52
of which fuel and energy-related activities (GHG category 3) ²	1,932	2,141	- 209	- 10
of which waste generated in operations (GHG category 5)	2	2	0	0
of which business travel (GHG category 6)	0	0	0	0
of which employee commuting (GHG category 7)	6	6	0	0
of which use of sold products (GHG category 11)	1,769	1,709	+ 60	+ 4
of which end-of-life treatment of sold products (GHG category 12)	1	3	- 2	- 67
of which downstream leased assets (GHG category 13)	2	2	0	0
of which investments in company shareholdings (GHG category 15)	94	88	+ 6	+ 7
For information: indirect emissions from gas grid use by third-party sales operations⁷	267	545	- 278	- 51
For information: climate-neutral biogenic emissions⁸	1,567	1,593	- 26	- 2
For information: biogenic emissions captured at MVV plants (BECCUS)	< 1	< 1	-	-

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

² Previous year's figure adjusted

³ Emissions from gas motor combustion

⁴ Including RDF plants

⁵ 2024 financial year: estimates based on data for 2023 calendar year; 2023 financial year: estimates based on 2022 calendar year

⁶ GHG Protocol methodology used: spend-based and average data method

⁷ Due to the SBTi certification, MVV is required to publish regular reports. This involves natural gas volumes channelled by other energy companies through our gas grids.

⁸ Direct CO₂ emissions from solid and gaseous biomasses, especially timber, biogenic waste and biomethane

Climate balance sheet

Fully consolidated companies and companies recognised at equity

1,000 tonnes CO _{2eq}	FY 2024	FY 2023	+/- change	% change
Direct CO ₂ emissions (Scope 1) ¹	2,588	2,684	– 96	– 4
Energy industry activities	1,724	1,852	– 128	– 7
of which CH ₄ emissions ³	26	42	– 16	– 38
of which SF ₆ emissions	2	2	0	0
Disposal activities (EfW) ⁴	864	832	+ 32	+ 4
Indirect CO ₂ emissions (Scope 2) ⁵	124	127	– 3	– 2
of which energy procured for proprietary plants	5	6	– 1	– 17
of which energy used for grid operations	119	121	– 2	– 2
Indirect CO ₂ emissions (Scope 3)	4,517	5,736	– 1,219	– 21
of which purchased goods and services (GHG category 1) ^{2, 6}	1,032	2,140	– 1,108	– 52
of which fuel and energy-related activities (GHG category 3) ²	1,607	1,785	– 178	– 10
of which waste generated in operations (GHG category 5)	2	3	– 1	– 33
of which business travel (GHG category 6)	0	0	0	0
of which employee commuting (GHG category 7)	6	6	0	0
of which use of sold products (GHG category 11) ²	1,773	1,709	+ 64	+ 4
of which end-of-life treatment of sold products (GHG category 12)	1	3	– 2	– 67
of which downstream leased assets (GHG category 13)	2	2	0	0
of which investments in company shareholdings (GHG category 15)	94	88	+ 6	+ 7
For information: indirect emissions from gas grid use by third-party sales operations ⁷	267	545	– 278	– 51
For information: climate-neutral biogenic emissions ⁸	1,592	1,653	– 61	– 4
For information: biogenic emissions captured at MVV plants (BECCUS)	< 1	< 1	–	–

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

² Previous year's figure adjusted

³ Emissions from gas motor combustion

⁴ Including RDF plants

⁵ 2024 financial year: estimates based on data for 2023 calendar year; 2023 financial year: estimates based on 2022 calendar year

⁶ GHG Protocol methodology used: spend-based and average data method

⁷ Due to the SBTi certification, MVV is required to publish regular reports. This involves natural gas volumes channelled by other energy companies through our gas grids.

⁸ Direct CO₂ emissions from solid and gaseous biomasses, especially timber, biogenic waste and biomethane

We further enhanced the methods used to compile our climate balance for the 2024 financial year. On the one hand, we calculate our indirect emissions (Scope 3) in greater detail and subdivide our electricity turnover into green electricity and grey electricity. On the other hand, the indirect emissions (Scope 3) stated for the year for the first time also include GHG Category 15 (investments in company shareholdings).

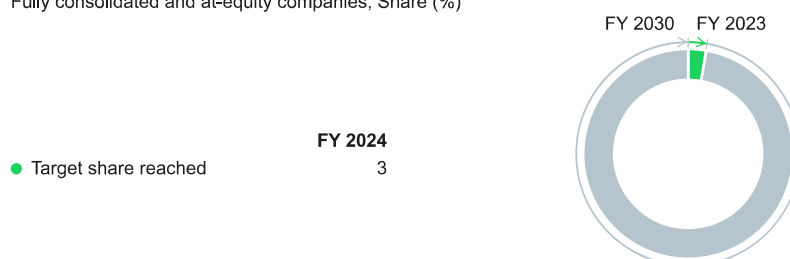
Renewable energies and energy transition

By expanding renewable energies, we are not only laying a foundation enabling us to achieve our own targets, but also making a measurable contribution to achieving the national climate protection targets on behalf of society as a whole. We set out our climate protection strategy in the [Corporate Strategy](#) chapter.

In the year under report, we came slightly closer to meeting our target of expanding our electricity generation from renewable energies to around 2,000 MW by 2030.

Renewable energies electricity generation capacity

Fully consolidated and at-equity companies, Share (%)



Developments in year under report

Green generation portfolio extended

At the end of the 2024 financial year, our electricity generation capacity from renewable energies amounted to 642 MW and was thus 29 MW higher than in the previous year. Including the companies we recognise at equity, we increased our electricity generation capacity from renewable energies by 26 MW. As of the balance sheet date, this amounted in total to 661 MW.

At the end of the year under report, electricity generation at renewable energies plants (including biomass/biogas plants and EfW/RDF) accounted for 69 % of our total electricity generation capacity (previous year: 68 %). In the 2024 financial year, the prorated share of installed conventional generation capacity was unchanged on the previous year. Including the companies we recognise at equity, renewable energies plants (including biomass/biogas plants and EfW/RDF) accounted for a 54 % share (previous year: 49 %). Here, the prorated share of installed conventional generation capacity fell by 15 % in the year under report.

Electricity generation capacity

MW _e	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants ¹	104	108	- 4	- 4
EfW ²	172	172	0	0
Wind power	296	271	+ 25	+ 9
Photovoltaics ³	68	60	+ 8	+ 13
Hydroelectricity	2	2	0	0
Renewable energies and EfW	642	613	+ 29	+ 5
Conventional CHP and other activities ⁴	282	282	0	0
Total	924	895	+ 29	+ 3

¹ Including biomethane plants

² Including RDF plants and sewage sludge treatment

³ Previous year's figure adjusted

⁴ Other activities include CHP plants powered by fossil fuels and various small energy generation plants

Electricity generation capacity

Fully consolidated companies and companies recognised at equity

MW _e	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants ¹	111	120	- 9	- 8
EfW ²	172	172	0	0
Wind power	307	280	+ 27	+ 10
Photovoltaics ³	69	61	+ 8	+ 13
Hydroelectricity	2	2	0	0
Renewable energies and EfW	661	635	+ 26	+ 4
Conventional CHP and other activities ⁴	557	655	- 98	- 15
Total	1,218	1,290	- 72	- 6

1 Including biomethane plants

2 Including RDF plants and sewage sludge treatment

3 Previous year's figure adjusted

4 Other activities include CHP plants powered by fossil fuels and various small energy generation plants

The generation capacity at our biomethane plants stood at 34 MW at the end of the 2024 financial year and was thus unchanged on the previous year. Biomethane can be used both to generate electricity and heat and as a fuel for vehicles. In the medium term, we plan to further expand our biomethane generation capacities from anaerobic waste digestion.

At the end of the year under report, green heat accounted for a 36 % share of our total heat generation capacity at our fully consolidated companies (previous year: 43 %). Our green heat generation capacity was therefore unchanged on the previous year. By contrast, conventional capacity increased due to operations launches at our district heat backup plants in Mannheim, which have capacities of more than 300 MW, are operated with conventional gas and are reported under other heat capacity. By the end of the decade, these plants are to be operated with biomethane rather than fossil-based natural gas.

Including the companies we recognise at equity, green heat accounted for a 25 % share of our total heat generation capacity (previous year: 24 %). The reduction in our conventional capacity from CHP resulted from the discontinuation of commercial operations at Block 8 of the GKM power plant and from the prorated impact on MVV.

Heat generation capacity

MW _t	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	88	88	0	0
EfW ¹	724	724	0	0
Green heat capacity	812	812	0	0
Conventional CHP and other activities ²	1,449	1,075	374	+ 35
Total	2,261	1,887	374	+ 20

1 Including RDF plants and sewage sludge treatment

2 Other activities include CHP plants powered by fossil fuels and various small energy generation plants

Heat generation capacity

Fully consolidated companies and companies recognised at equity

MW _t	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	88	88	0	0
EfW ¹	724	724	0	0
Green heat capacity	812	812	0	0
Conventional CHP and other activities ²	2,446	2,573	- 127	- 5
Total	3,258	3,385	- 127	- 4

1 Including RDF plants and sewage sludge treatment

2 Other activities include CHP plants powered by fossil fuels and various small energy generation plants

Project development and operations management for renewable energies plants

We have all-round expertise in developing, building, launching operations with and operating renewable energies plants. Here, we focus on onshore wind turbines and photovoltaics systems both in Germany and abroad. Smaller contributions are made by biomass and photovoltaics systems at customer locations.

With our Juwi subsidiary, we offer end-to-end project development and services both in Germany and abroad for planning, building and managing operations at onshore wind turbines and ground-mounted photovoltaics plants, as well as for hybrid projects, i.e. systems combined with battery storage facilities. As previously, we will expand our proprietary generation portfolio with domestic wind and photovoltaics projects developed by Juwi. In September 2024, we launched operations with a 24-MW windfarm built by Juwi in Hochsauerland District. Juwi is currently building a further windfarm nearby; we will launch operations here in 2025. Our Avantag subsidiary supplements our project development business with rooftop photovoltaics in the B2B business, while our Beegy subsidiary offers decentralised renewable energies solutions in the retail customer business.

Completed development of new renewable energies plants

MW _e	FY 2024	FY 2023	+/- change	% change
Wind power	111	218	- 107	- 49
Photovoltaics (rooftop) ¹	63	83	- 20	- 24
Photovoltaics (ground-mounted)	487	1,218	- 731	- 60
Total	661	1,519	- 858	- 56

1 Reported for first time

The project development business is inherently volatile and cyclical, both in Germany and in our international markets. 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 and specific implementation dates for individual projects. Volumes may therefore vary widely from year to year. Moreover, changes in underlying conditions, such as in national subsidy mechanisms for renewable energies, and in project handling modalities, including the respective grid connection, may have a notable impact on the implementation of projects. The reduction in the volume of projects completed in the year under report compared with the previous year is chiefly attributable to the marketing of projects abroad.

Operations management for renewable energies plants

MW _e	FY 2024	FY 2023	+/- change	% change
Wind power	1,082	1,159	- 77	- 7
Photovoltaics	2,796	2,549	247	+ 10
Total	3,878	3,708	170	+ 5

Supply reliability

Together with other energy companies, MVV has a key role to play in transforming the German energy system towards climate neutrality by ensuring that we too invest in the regenerative energy infrastructure to prepare this for the energy transition and make it fit for the future. At the same time, we perform what is for society the important task of ensuring that the supply of electricity, gas, heat and water remains reliable and stable. As the volume of electricity fed in from wind turbines or photovoltaics systems fluctuates in line with weather conditions and the time of day, it is first necessary to smartly combine renewable energies with highly efficient, flexible and controllable power plants. This enables us to provide our customers at all times with a secure and reliable supply of energy.

Supply reliability is a core topic for MVV. In this context and with a view to our district heat supply, for example, we have implemented two backup plants at the Mannheim location that we have been able to deploy since the 2024 financial year. These plants mean that, for our district heat generation, we are now already able to do entirely without two coal-fired boilers at the Grosskraftwerk Mannheim AG (GKM) power plant.

The reliability, smartness and performance capacity of our grids also have a key role to play in this respect. That is why we continually invest in digitalising, maintaining, expanding and optimising our grids and plants, increasingly also against the backdrop of an acceleration in the electricity and heat transitions.

Diversified generation portfolio

More than half of our electricity generation comes from renewable energies

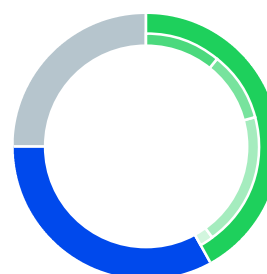
As a general rule, we intend to work to an increasing extent with renewables and to a decreasing extent with conventional energies. In this, we are drawing on a variety of energy sources and technologies. By building a diversified generation portfolio, we are helping to ensure a secure energy supply for our customers. That is particularly true for the supply of heat to those retail, business and industrial customers connected to our district heat and industrial steam grids in Mannheim, Offenbach and Kiel.

At the end of the 2024 financial year, the electricity generated at renewable energies plants (including biomass/biogas and the biogenic share of waste/refuse-derived fuels) accounted for a 55 % share of our total electricity generation (previous year: 56 %). Including the companies we recognise at equity, this share amounted to 42 % (previous year: 41 %).

Electricity generation

Fully consolidated companies and companies recognised at equity, Shares (%)

	FY 2024
● Electricity from renewable energies ¹	42
● Electricity from biomass and biogas plants	11
● Electricity from biogenic energy from waste ²	10
● Electricity from wind power	19
● Electricity from photovoltaic	2
● Electricity from CHP	33
● Other electricity generation	25



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

² Including RDF plants

Electricity generation volumes

kWh million	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	316	447	- 131	- 29
Biogenic share of EfW ¹	294	322	- 28	- 9
Wind power	566	519	+ 47	+ 9
Hydroelectricity	6	3	+ 3	+ 100
Photovoltaics	48	42	+ 6	+ 14
Renewable energies and EfW	1,230	1,333	- 103	- 8
Electricity from CHP	808	853	- 45	- 5
Other electricity generation ²	183	210	- 27	- 13
Total	2,221	2,396	- 175	- 7

¹ Including RDF plants and sewage sludge treatment

² Other electricity generation includes CHP plants powered by fossil fuels and various small energy generation plants

Electricity generation volumes

Fully consolidated companies and companies recognised at equity

kWh million	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	331	482	- 151	- 31
Biogenic share of EfW ¹	294	322	- 28	- 9
Wind power	590	548	+ 42	+ 8
Hydroelectricity	6	3	+ 3	+ 100
Photovoltaic	48	43	+ 5	+ 12
Renewable energies and EfW	1,269	1,398	- 129	- 9
Electricity from CHP	1,024	1,117	- 93	- 8
Other electricity generation ²	754	861	- 107	- 12
Total	3,047	3,376	- 329	- 10

¹ Including RDF plants and sewage sludge treatment

² Other electricity generation includes CHP plants powered by fossil fuels and various small energy generation plants

The reduction in volumes at our biomass and biogas plants is due above all to a lower level of plant availability compared with the previous year. The increased generation volumes from wind power result on the one hand from wind volumes exceeding the previous year's levels and on the other from the takeover of wind turbines into our generation portfolio. The increase in photovoltaics generation volumes also reflects the growth in our portfolio. If we include the companies we recognise at equity in this analysis, then the same developments as those outlined above are apparent.

Heat generation volumes

kWh million	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	137	107	+ 30	+ 28
EfW ¹	2,284	2,358	- 74	- 3
Green heat generation	2,421	2,465	- 44	- 2
Other heat generation ²	1,562	1,381	181	+ 13
Total	3,983	3,846	+ 137	+ 4

¹ Including RDF plants

² Other heat generation includes CHP plants powered by fossil fuels and various small energy generation plants

Heat generation volumes

Fully consolidated companies and companies recognised at equity

kWh million	FY 2024	FY 2023	+/- change	% change
Biomass and biogas plants	137	107	+ 30	+ 28
EfW ¹	2,284	2,358	- 74	- 3
Green heat generation	2,421	2,465	- 44	- 2
Other heat generation ²	2,874	2,915	- 41	- 1
Total	5,295	5,380	- 85	- 2

1 Including RDF plants

2 Other heat generation includes CHP plants powered by fossil fuels and various small energy generation plants

At the end of the 2024 financial year, green heat generation accounted for a 61 % share of our total heat generation volumes (previous year: 64 %). The increase at our biomass and biogas plants was chiefly due to a higher volume of heat extracted at our biomass CHP plant in Mannheim, which came at the cost of electricity production. Including our at-equity shareholdings, the share of green heat generation stood at 46 % (previous year: 46 %).

Biomethane generation volumes

kWh million	FY 2024	FY 2023	+/- change	% change
Biomethane generation	281	246	+ 35	+ 14

Biomethane generation volumes

Fully consolidated companies and companies recognised at equity

kWh million	FY 2024	FY 2023	+/- change	% change
Biomethane generation	293	259	+ 34	+ 13

The principal reason for the year-on-year increase in biomethane generation volumes was a higher level of plant availability.

Grid losses

Grid losses occur when electrical energy is transported in electricity grids. They particularly arise due to electrical resistance in the transmission cables and transformation losses between various voltage levels. Grid losses in heat energy grids are due to technical factors and mainly relate to the transport route between the source of the heat and the heat sink. The scale of grid losses depends on how well insulated the transport pipes are. The most important factors determining the scale of losses nevertheless involve natural circumstances, such as temperatures and weather conditions.

Grid losses

kWh million	FY 2024 ¹	FY 2023 ²	+/- change	% change
Electricity	117	126	- 9	- 7
Heat	409	435	- 26	- 6

1 Estimates based on data for 2023 calendar year

2 Estimates based on data for 2022 calendar year

Grid losses can be reduced with long-term infrastructure measures, such as improved pipe insulation, temperature reduction and other technical methods. Due to technical reasons, however, grid losses are unfortunately unavoidable.

Grid stability

Secure grid stability even with growing loads

One way to assess the reliability of the energy supply involves measuring the frequency and duration of grid downtime. One key performance indicator which shows the security of the energy supply is the system average interruption duration index (SAIDI), which presents the average interruption to the supply in minutes per year and customer. The SAIDI figure only accounts for unplanned downtimes lasting longer than three minutes and not due to force majeure. Our three large grid companies MVV Netze, Energienetze Offenbach and SWKiel Netz are pursuing the goal of ensuring a secure supply free of interruptions and of avoiding grid downtime and remedying any downtime as swiftly as possible.

We aim to minimise any interruption-induced non-availability of our grids.

In the 2024 financial year, we invested Euro 156 million, equivalent to 37 % of our total investments, in maintaining, modernising and expanding our grids. The cumulative SAIDI figure for our grid regions rose to 12.9 minutes per year in the 2023 calendar year. Overall, we were able to provide our customers with an electricity supply that was largely free of interruptions.

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

Electricity supply interruptions (SAIDI)

Minutes/year	FY 2024 ¹	FY 2023 ²	+/- change	% change
Electricity at MVV ³	12.9	12.1	+ 0.8	+ 7

1 Estimates based on data for 2023 calendar year

2 Estimates based on data for 2022 calendar year

3 Previous year's figure adjusted

Resource efficiency

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 attach great importance to efficiency. We minimise the energy losses arising when the fuels are converted into end energy, such as electricity or heat, and consistently invest both in enhancing the energy efficiency of our generation plants and in expanding green heat in conjunction with highly efficient combined heat and power generation (CHP). Wherever technically possible, we are also increasingly relying on recycled products and input materials. One key indicator of very high resource efficiency involves the high fuel efficiency rates resulting from optimised use of the energy contained in fuels.

Energy and resource use at MVV

High generation efficiency due to combined heat and power generation

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 yield. By increasing the fuel efficiency rates of our plants, we reduce the volume of fuels used and cut emissions. In the year under report, our plants had an average fuel efficiency rate of 63 % (previous year: 66 %). Alongside numerous more minor factors, this reduction mainly resulted from a lower volume of generation in CHP operations.

The principal reason for our high level of generation efficiency is the fact that we operate our major generation plants almost exclusively with 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.

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. Another factor that may have a significant influence is the geopolitical situation. By-products, primarily ash and slag, arise in our energy from waste and CHP plants. The relevant data can be found in the [Local Environmental Protection](#) section. The volume of this ash and slag is determined by technical factors or by the fuels used and does not lie within MVV's 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 and waste used at power plants and energy from waste plants

	FY 2024	FY 2023	+/- change	% change
Biomass (tonnes 000s)	410	501	- 91	- 18
Waste/RDF (tonnes 000s)	2,050	2,015	35	+ 2
Sewage sludge (tonnes 000s)	91	72	+ 19	+ 26
Natural gas (kWh million)	2,236	1,982	254	+ 13
Hard coal (tonnes 000s)	48	76	- 28	- 37
Other fossil fuels ¹ (kWh million)	44	57	- 13	- 23

¹ Mainly light heating oil (HEL)

**Fuels and waste used at power plants and energy from waste plants
Fully consolidated companies and companies recognised at equity**

	FY 2024	FY 2023	+/- change	% change
Biomass (tonnes 000s)	425	539	- 114	- 21
Waste/RDF (tonnes 000s)	2,050	2,015	35	+ 2
Sewage sludge (tonnes 000s)	91	72	+ 19	+ 26
Natural gas (kWh million)	2,236	1,982	254	+ 13
Hard coal (tonnes 000s)	495	568	- 73	- 13
Other fossil fuels ¹ (kWh million)	44	58	- 14	- 24

¹ Mainly light heating oil (HEL)

Low volume of coal use at MVV

In its Coalition Agreement from 2021, the Federal Government agreed that Germany would “ideally” exit from coal-based energy generation by 2030. We are basing our plans and measures on coal-based electricity generation being discontinued by the end of this decade.

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 two hard-coal-fired CHP blocks in the market. Block 9 at GKM is one of the newest and most efficient hard-coal-fired power plants in Germany. The setting of specific decommissioning dates for individual power plant blocks is subject to the proviso of supply reliability, as well as to the legal framework and agreements reached with GKM and its shareholders. We report on the measures with which we will convert district heat generation for Mannheim and the region to 100 % green energy sources by 2030 and then forego procuring heat from the GKM plant in the [Corporate Strategy](#) chapter.

With its capacity of 60 MW_e, the power plant in Offenbach is now the only hard-coal-fired power plant in our majority-owned conventional generation portfolio. As outlined in the [Corporate Strategy](#) chapter and the [Climate Neutrality](#) section, we will also convert generation in Offenbach to renewable energies by 2030.

The increasingly limited availability of drinking water calls for more efficient use

Due to the increasing overuse of groundwater and surface water and as a result of climate change, the availability of clean fresh water and drinking water is an increasingly important topic. Our subsidiaries MVV Netze and Stadtwerke Kiel play an active role in protecting ground water and water surfaces. As they are responsible for the supply of drinking water in their regions, they regularly analyse and check their supply systems. Here, the production, treatment and distribution of drinking water are not only of economic significance; the public supply mandate serves the common good. As a crucial source of life, drinking water is governed by strict quality standards. The most important objective for the water supply is to comply with these quality standards and minimise relevant contents. We have formulated these and our additional targets for our drinking

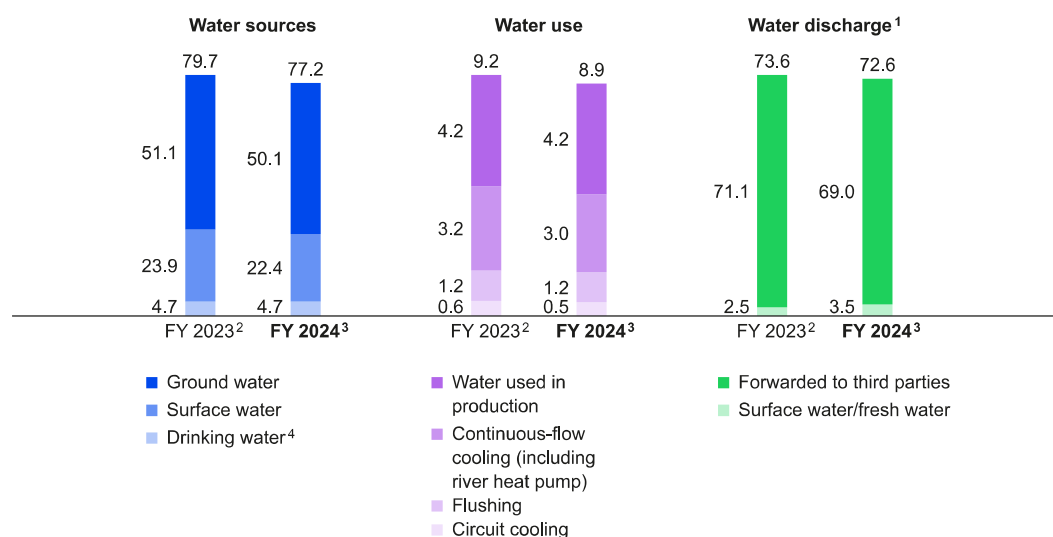
water supply in detail in our Water Policy [mvv.de/water-policy](https://www.mvv.de/water-policy). For the years ahead, we plan to make substantial investments in our existing drinking water grid at our Mannheim location in order to do justice to our expectations in a drinking water supply that is fit for the future. These investments will meet and enhance the technical and quality-related requirements on a long-term basis.

MVV's water balance sheet shows that the majority of our water use relates to production and circuit cooling at power plants. To this end, we chiefly take water from rivers and channel it back following cooling. The challenge here involves minimising water use while reducing the volume of water lost to evaporation. Most of the water we ourselves produce nevertheless comes from groundwater that we acquire to prepare drinking water and forward to our customers.

We are pursuing the objective of systematically reducing our ecological footprint on the level of water as well and intend to back this up with more far-reaching activities. In view of this, we are working to continually further develop our position and strategy for water. Alongside the question as to the Group's strategic approach towards water, we are also working to continually improve our water balance sheet and extend our reporting. We thus regularly review extending our water balance sheet and the inclusion of further assets or locations. We intend to expand our reporting on this in the medium term and, with this aim in mind, have conducted suitable detailed analyses. On an internal basis, for example, we now distinguish between drinking water that we have produced ourselves and that procured from third parties. In our analysis of water use, in the year under report we accounted for the water used for circuit cooling and for the first time also for the water used for flushing at the plant locations.

Water volumes

m³ million



¹ Due to the low shares involved, water discharged to sewage plants has been omitted from this overview.

² Estimates based on data for 2022 calendar year

³ Estimates based on data for 2023 calendar year

⁴ Includes drinking water produced internally and procured from third parties.

As of the 2024 financial year, we have converted our external reporting on water volumes to fully consolidated assets. In the past, this presentation also included our assets recognised at equity. The reduction in our water footprint in the year under report was due above all to customary fluctuations in production.

Local environmental protection

Local environmental protection is a fixed component of our management systems. We base our environmental protection on both national and local levels closely on legal requirements. The approvals granted and legal requirements form the basis for our activities, 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 are responsible for the operative management of environmental concerns on a decentralised basis. As they work with 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 endeavour to 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. As the use of non-fossil and fossil fuels is associated with oxidation processes, such use gives rise not only to CO₂ emissions, but also to air pollutant emissions. The medium-term decline in these incineration processes will be accompanied by a reduction in local emissions in absolute terms. The complete replacement of fossil-based energy generation with renewable energies by 2035 will not result in complete avoidance of air pollutant emissions at MVV. Renewable energies also involve oxidation processes, such as those occurring at timber-fired biomass plants, energy from waste plants or when biomethane is used. Moreover, for business processes both the reduction in air emissions and the reduction in soil and water emissions will remain an ongoing task. We treat any pollutants, hazardous substances and micro-plastics arising with due care. We base our standards here on applicable laws and regulations, go beyond these in some areas and take due account of internationally recognised principles. We have established suitable management systems to control and continually improve these aspects. 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 are making a crucial contribution towards a sustainable circular economy with the ecological disposal of municipal sewage sludge. At our Offenbach location, we have since 2021 used a single-purpose sewage sludge incineration plant with an annual capacity of 80,000 tonnes of sewage sludge. At our Mannheim location, we have launched operations with a phosphorous recycling plant with capacity for up to 180,000 tonnes of sewage sludge a year. Here, we can in future recover phosphorous on location from the sewage sludge for use in fertiliser production.

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.

Other emissions and by-products

Tonnes	FY 2024 ¹	FY 2023 ²	+/- change	% change
NO _x	2,026	2,088	- 62	- 3
SO ₂	289	338	- 49	- 14
Dust	15	17	- 2	- 12
Fly ash	31,537	37,442	- 5,905	- 16
Ash and slag	513,747	511,757	+ 1,990	0

1 Estimates based on data for 2023 calendar year

2 Estimates based on data for 2022 calendar year

Other emissions and by-products

Fully consolidated companies and companies recognised at equity

Tonnes	FY 2024 ¹	FY 2023 ²	+/- change	% change
NO _x	2,454	2,726	- 272	- 10
SO ₂	565	715	- 150	- 21
Dust	25	27	- 2	- 7
Fly ash	82,502	134,538	- 52,036	- 39
Ash and slag	515,865	514,136	+ 1,729	0

1 Estimates based on data for 2023 calendar year

2 Estimates based on data for 2022 calendar year

Further environmental protection aspects form part of the environmental management systems organised on a decentralised basis at our subsidiaries and at-equity shareholdings.

Biodiversity

The environmental topic of biodiversity is increasingly important for MVV. On an international level, this topic is discussed at the regular UN Biodiversity Conference. The Kunming-Montreal Agreement, which is intended to intensify worldwide efforts to maintain and re-establish biodiversity, was signed in 2022. The EU has also included the topic of biodiversity as one of its five strategic environmental objectives. Under the EU's new Nature Restoration Regulation, at least 20 % of the EU's land and sea areas should be restored by 2030 and all ecosystems returned to good ecological condition by 2050. Moreover, no further loss of biodiversity should be caused outside the EU. The efforts made by the EU in this area have resulted in specific legal requirements for companies, such as the obligation to integrate biodiversity as a focus topic in the EU Taxonomy for sustainable investments and in future reporting obligations under the Corporate Sustainability Reporting Directive (CSRD).

When it comes to improving biodiversity, energy companies have both indirect levers, such as via the procurement of agricultural substrates, and direct levers, such as when building windfarms and photovoltaics systems. MVV is actively committed to protecting and improving ecosystems. With our own properties, we can exercise direct influence, particularly on local biodiversity, when building new energy infrastructure or upgrading existing assets. This responsibility nevertheless also indirectly extends to land use in the upstream value chain. When we build our renewable energies plants, for example, we commission surveys to investigate the location-specific impact on water, flora and fauna. Impact assessments evaluate potential negative impacts, impose restrictions or call for offsetting measures. This can create tensions between local animal protection, regional species conservation and climate protection measures. To date, these have to be resolved on an individual case level.

Looking ahead, the protection of biodiversity will be accorded even greater priority at MVV. We are currently specifying our biodiversity strategy, in which the topic of land use in particular will be assigned particular importance for MVV. Within the framework provided by the Federal Government's National Biodiversity Strategy (NBS) and applicable regulatory requirements, we will further develop our strategy and measures and report on biodiversity in greater detail in future.

However, biodiversity is also relevant to MVV in areas other than infrastructure projects. We use various types of biomass to generate energy, whether these be biogenic non-recyclable waste, regenerative resources, landscaping material or waste timber. We are aware that the use of fresh wood to generate energy, for example, only makes a limited contribution to protecting the climate and may also impact negatively on forests. In view of this, we attach value both to sustainable forestry and to avoiding the use of fresh wood at our biomass CHP plants. The waste timber we dispose of at our plants in pollutant categories III and IV includes contaminated timber, such as railway sleepers, that would otherwise introduce pollutants and hazardous substances into the natural world. We are currently reviewing whether MVV can completely avoid negative environmental impacts resulting from the use of biomass in future.

Extreme weather events

As climate change advances, the number of extreme weather events, such as torrential rain, severe wind, flooding or extended periods of heat, is expected to increase in future. These may also impact on MVV, for example in the form of damage to buildings, hazards for employees or interruptions to energy generation or distribution. Based on climate scenarios, we can assess the potential risks at our company's various locations with the assistance of climate risk analysis. In the [EU Taxonomy](#) section we report on the details of this analysis, which found that none of the assets that we deploy to perform economic activities is vulnerable to the risks identified and that we have already implemented suitable measures to minimise such risks.

Sustainable circular economy

The circular economy is one of the core elements of the EU's Green Deal. The EU Circular Economy Action Plan is intended to achieve massive reductions in the volume of resources and materials used in order to counter the shortage of resources and increase the EU's independence of imports of critical resources. From the perspective of the EU, if the volume of natural resources used is not substantially reduced it will not be possible to meet the other environmental objectives and their protected goods, such as climate protection. In this regard, a functioning circular economy is a prerequisite for achieving the targets relating to the climate, water, biodiversity and pollution. A sustainable circular economy places the focus on closing cycles of materials and making effective use of waste, preferably in ways that make it available to the economy again as secondary resources or, where this is not possible or expedient, to generate energy. This means that we view household waste and commercial waste, even when it has been correctly separated, by no means as "rubbish". We make effective use of these valuable commodities in order to protect natural resources.

At MVV, the circular economy mainly plays a major role in the environmental energy business, and here in particular in treating waste at the end of the waste hierarchy. However, in our business customer business field we also make major contributions to saving resources and the circular economy. Our targets and measures for further developing these business fields therefore directly help to promote a sustainable circular economy.

Whether we use waste to recover resources or generate energy, our goal is to achieve an economic cycle that is as closed 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 non-recyclable waste. Until that aim is achievable in terms of the underlying technology and regulation, and in cases where it is not possible, the next-best solution is to use unavoidable waste to generate energy. As well as generating energy, our plants already separate specific materials, such as metals and minerals, and return these to the economic cycle.

Treating unavoidable 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 businesses and households and electricity. Put simply, households deliver their non-recyclable 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, the emissions that would arise from landfilling are avoided. Incineration thus makes an active contribution to climate protection.

We incinerated around 2.0 million tonnes of non-recyclable waste and refuse-derived fuels in the 2024 financial year. We currently operate seven energy from waste plants in Germany and the UK. In Offenbach, we have operated an incineration plant to treat municipal sewage since 2021 already. A further such plant at which we will in future simultaneously recover phosphorous has been built at our Mannheim location. Phosphorous is used as a valuable resource in fertiliser production.

Employee concerns aspect

We are part of society at the locations and in the regions where we operate and thus bear a responsibility. For our employees, our aim is to make a positive difference: We offer attractive and secure jobs to our employees, who number more than 6,600, in an environment in which we can together actively contribute to promoting decarbonisation and supply reliability.

Employer attractiveness

Our employees are our future

High-performing, healthy and well-qualified employees are crucial to MVV's success. Viewed in the long term, demographic trends and changes in the population structure mean that we will face additional challenges in successfully attracting and retaining suitable employees.

This being so, in our groupwide personnel strategy we are focusing on the following areas:

- **Leadership:** We are continually and systematically taking measures to improve the quality of management at the company and adapting this in line with changing market and employee requirements.
- **Securing specialist staff:** We aim to remain an attractive employer. That is why we offer performance-based remuneration packages and are committed to helping our employees combine their work and private commitments. In our recruitment, we are focusing on expanding diversity at the company and here in particular on equal opportunities.
- **New working worlds:** 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, promoting its willingness to embrace change, and in various aspects of digitalisation. After all, we need highly trained, flexible and innovative specialists and managers who are keen to make their contribution to the new energy system. We are actively continuing to shape our company. Mobile work, for example, has become a fixed aspect of our work organisation.
- **Talent management:** We deliberately identify, support and cultivate upcoming talent – within the company from among our trainees and new recruits through to employees who have the potential to take on management positions, and externally with great personnel recruitment efforts on the market.
- **Diversity management:** Specialist and talented staff of all genders, age groups, backgrounds and situations should feel they have found the right workplace at MVV. With "Energy for Diversity", our diversity management programme, we are working consistently and with specific measures to meet this objective and create a suitable environment, structures, and support services for all our employees. [mvv.de/vielfalt](https://www.mvv.de/vielfalt)

The Executive Board Personnel Director is responsible for all personnel-related activities. Reporting on relevant personnel topics is regularly provided to the full Executive Board and whenever necessary due to individual events or topics. The specific structure and implementation of personnel-related topics is organised on a decentralised basis. Our subgroups have their own personnel departments, as do various other companies within our Group. This way, targeted focuses can be set in line with the relevant business and circumstances on location. As part of our preparations to report in accordance with the Corporate Sustainability Reporting Directive (CSRD) from the 2025 financial year, we are currently developing groupwide targets, strategies and measures for our employees.

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 [mvv.de/aufsichtsrat](https://www.mvv.de/aufsichtsrat) includes equal numbers of shareholder and employee representatives, with half of the members thus being elected by the Group's employees. This means that employee concerns are also central to any important company decisions.

Key figures for year under report

Personnel figures (headcount) at balance sheet date

	30 Sep 2024	30 Sep 2023	+/- change	% change
MVV ¹	6,649	6,390	+ 259	+ 4
of which in Germany	6,081	5,833	+ 248	+ 4
of which abroad	568	557	+ 11	+ 2

¹ Including 343 trainees (previous year:: 331)

We employed a groupwide total of 6,649 individuals as of 30 September 2024. This increase was due above all to higher employee totals in our growth fields, with the expansion in renewable energies and the heat transition playing the greatest role in this respect.

Our international workforce includes 354 employees at Juwi's shareholdings and 166 at the British subsidiaries of MVV Umwelt.

Training and development

Training with promising prospects for the future

With our broad range of training options – in Mannheim alone, we offer training in 17 different commercial and technical vocations and combined training and study programmes – we provide those interested with numerous opportunities to start their careers. In Mannheim, Offenbach, Kiel and Gersthofen close to Augsburg, we are among the largest trainers in the respective regions and also have our own training workshops at these locations.

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

We employed a total of 343 trainees at 30 September 2024. We regularly receive large numbers of applications for the training positions we offer, enabling us to fill these with suitable candidates. To be attractive and visible to young people in particular and enter directly into contact with school pupils, we play an active role at jobs fairs, offer internships, cultivate partnerships with various schools, place advertisements, use digital media and take part in further initiatives and events.

Targeted personnel development: training concepts implemented on location

We have devised numerous measures and instruments for targeted personnel development at our locations. These are based on the experience we have gained in the rapidly changing economic and technological environment in which we operate.

We aim to develop the potential of our employees.

We are consistently upholding our further training concepts, which are organised on a decentralised basis, and offer numerous virtual or in-person seminars on various topics on all levels of the hierarchy. By offering further development measures and various knowledge platforms, we ensure that our workforce has a shared basis of knowledge about strategically overriding topics. Alongside in-house training on various topics, we also offer team development and individual measures, such as coaching and mentoring. At our Mannheim location, our MVV-specific competency model forms the basis for personnel development meetings and individual development programmes for all employees.

We also hold appraisals and surveys at our main locations in Germany. This way, our employees have the opportunity to provide honest feedback and we can work on further developing our company.

Energie for Diversity

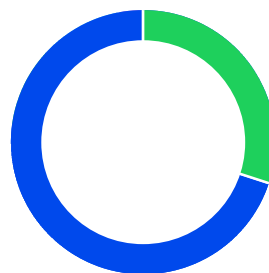
Employees by gender¹

Shares (%)

	FY 2024
● Women	30
● Men	70

¹ Due to its low percentage, the "diverse" gender category cannot be meaningfully presented in the chart.

Status: 30 September 2024



We promote equal opportunities and diversity

We are convinced that diversity makes us better at what we do. One example: Diverse teams are better able to understand customers' needs and work more creatively on innovative ideas. In the 2023 financial year, our Diversity and Prevention central department defined which further aspects of the diversity topic are particularly relevant both to our workforce and to our business success. Alongside our focus on raising the share of women, we are currently focusing across the Group on the dimensions of social and cultural background, the ability to combine work and personal commitments, and age. We will review these topics in 2026 and once every two years thereafter.

To reach the targets we have set ourselves, we are developing and implementing measures relating to our image as an employer, inclusion, equal treatment, recruitment and employer branding, as well as in the fields of employee and cultural development. Working in close cooperation with the specialist departments, we also plan campaigns that benefit our diversity dimensions and thus promote achievement of our targets. To raise awareness of diversity on management level at the company, we offer training sessions which address MVV's diversity focuses, unconscious prejudice, judgemental habits and the handling of discrimination or unequal treatment. We have several inclusion officers and antidiscrimination advice centres across the Group.

We are promoting the exchange of information and experiences between employees in dialogue formats such as "Diversity Talk", for example, in which we look at a variety of diversity-related topics. In addition to our internal mentoring scheme for upcoming managers, we also take part in mentoring programmes for women that are organised in cooperation with other well-known companies in the region. This provides us with valuable ideas from outside the company and enables us to create further offerings. One example is "Spitzenfrauen BW", a regional project for women in Baden-Württemberg which enables us to provide interested women employees with an external network, bespoke seminars and access to areas of knowledge specially tailored to women.

Share of women: promoting equality of opportunity irrespective of gender

We are convinced that the company can achieve sustainable business success only if responsibility is assigned to women and men on an equal basis. Not least with a view to 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. We believe that raising the share of women working at our group of companies in the long term is one key to the company's successful further development.

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

We have set ourselves the target of raising women's share of our Group's workforce to 35 % by 30 September 2026, up from 28 % at 30 September 2021. Women accounted for 30 % of the Group's employees at the end of the 2024 financial year. Among our management staff, we aim to increase the share of women to 25 %. At the balance sheet date on 30 September 2024, this share stood at 21 %. To achieve our targets by 2026, we are consistently implementing and further expanding our promotional measures and programmes. That is particularly true for our targeted personnel development activities for women with the potential to take on management positions.

We are supplementing existing activities to increase the share of women by implementing measures aimed at raising women's visibility at MVV both within and outside the company. One key aspect is the establishment of "wom:energy", our groupwide network of women that holds regular networking meetings and organises its own formats. Moreover, we have also taken measures to increase the number of applications we receive from promising external and internal women candidates.

For MVV Energie AG as well, we have set ourselves targets for the share of women in the first and second management tiers below the Executive Board. In September 2021, 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 met by 30 September 2026. In the first management tier, we reached our target prematurely: At 30 September 2024, the share of women amounted to 33 % and was thus already well ahead of the 25 % target. In the second management tier, the share of women stood at 25 % and has thus continually risen since the 2022 financial year. We see these increases as confirming the effectiveness of the measures we have drawn on, particularly to further enhance the skills of internal management staff.

Social and cultural background: opportunities for everyone

Employees from different social and cultural backgrounds are a valuable resource when it comes to building a competitive and vibrant workforce and maintaining our performance capacity. We make targeted efforts to locate undiscovered potential and look into how we can activate this for MVV. Alongside the challenge of recruiting specialist staff from other countries and cultural backgrounds, educational outcomes and career opportunities in Germany are also heavily dependent on social backgrounds. With its diversity management, MVV can access more people from a variety of backgrounds and integrate them into our workforce. We therefore make targeted efforts to encourage people from different cultural and social backgrounds to seize the development and career opportunities available to them at MVV. That already begins during the application process. We take due account, for example, of language barriers and associated grades.

Work and private life can be combined at MVV

Our aim is for our employees to be able to successfully combine the requirements of their family, private life and work on an ongoing basis. Over their working lives, employees pass through many different stages of life. By offering a range of organisational measures identified and managed on a decentralised basis, 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. These are explicitly available for our managers as well.

Digitalisation and the use of modern communications technology also facilitate mobile work in line with specific needs. Company agreements governing mobile and hybrid work are in place at our locations in Mannheim, Kiel, Offenbach and Wörrstadt. Our 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 therefore makes it easier for them to return to work more quickly. On the other hand, the concept is intended to encourage employees to directly assume part-time management positions.

We offer a variety of family services to employees at our locations in Mannheim, Kiel, Offenbach and Wörrstadt, as well as at other smaller locations. Here, we work together with experienced service providers who can provide advice on work-related, family or financial issues, naturally on a strictly confidential basis. At several locations, we also provide access to vacation programmes for the children of staff members.

Another area in which our employees face growing challenges involves caring for relatives. Here too, we are providing them with support. Employees caring for relatives can be granted leave from work. We also inform our staff about nursing care options by holding information events, providing emergency folders with information about work and care and, as is the case at our subsidiary Energieversorgung Offenbach, by cooperating with a nursing care service.

Age: We are actively tackling demographic management

In our fourth pillar of “Energy for Diversity”, we are addressing demographic challenges and also aligning our personnel policies to the various stages of life. As well as offering extensive services via our company health management service to help employees preserve their health and further develop their personal skillset, we also draw on a modern knowledge transfer method for employees leaving the company. The expertise they have gained over many years should be retained at the company after their departure. We organise a well-structured and moderated transition and coordinate which knowledge should be transferred, as well as the timeframe and manner in which this should take place. At our Mannheim location, a workgroup focusing on tailoring work to the different stages of life is working continually to compile bespoke offerings for our staff and, to this end, is surveying and directly involving company employees. We share and discuss the findings of this workgroup with the personnel departments at other locations.

Occupational health and safety

Lived Safety still a focus

We accord the utmost priority to protecting the safety and the physical and mental wellbeing of our 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 enhance 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 relevant to the individual location.

Our vision: zero accidents.

Our accident statistics and the prevention measures taken are evaluated on Executive Board and group level on a monthly basis, with further measures also being discussed and planned. The work safety committees required by § 11 of the German Occupational Safety Act (ASiG) are formed by companies on location and comprise both employer and employee representatives. The great importance our company attaches to work safety is also reflected, for example, in the fact that this 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.

Every accident is one too many

We are making continuous efforts to improve work safety at the Group and have formulated a clear target: For us, 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.

Structured programmes and measures form a key foundation in this respect. Examples here include an electronic instruction system with occupational safety training tailored to the respective workplace, an inspection concept and "Safety Moments", i.e. regular safety briefings aimed at raising safety awareness and firmly establishing this on all levels.

In line with the German Industrial Safety Act (ArbSchG), we perform risk assessments in all areas of the company. This way, we identify any work-related hazards, assess associated risks and lay down suitable technical, organisational and personal measures. Together with safety specialists, managers compile 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 the great majority our domestic company departments, these risk assessments are performed and documented digitally. 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 at particular risk. Once we have implemented protective measures and conclusively checked their effectiveness, we reassess the remaining residual risk. Furthermore, implementation of various work safety ordinances is also factored into our analyses. We perform a review at least once a year to ascertain whether new findings or new legal or operating requirements mean that we have to amend the risk assessments.

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

Employees who find themselves in a work situation where there is an acute risk of injury or sickness must stop work and immediately consult their managers. We have laid this down in corresponding operating instructions that we communicate to our employees, for example in training sessions. We systematically investigate any accidents, near-accidents, unsafe conditions and unsafe actions reported and derive measures where necessary. For all incidents, we consider whether we have to make any amendments to our risk assessments.

We evaluate accident frequency on a systematic basis for the overall Group and also include the situations reported in which an accident almost occurred. 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 most frequent types of accident include people stumbling, slipping or falling over, as well as handling-related accidents. The assessment and evaluation are performed on a gender-neutral basis and in line with data protection requirements. We also assess the expediency of further preventative measures.

Accident statistics

	FY 2024	FY 2023	+/- change	% change
Lost time injury frequency rate (LTIF) ^{1, 2, 3}	3.9	4.3	- 0.4	- 9
Work-related accidents with severe consequences ⁴	0	2	- 2	- 100
Fatal accidents	1	0	+ 1	+ 100

1 Includes all fully consolidated companies in Germany, including trade firms (new fully consolidated companies only included in accident statistics at the earliest in the second financial year after acquisition).

2 Calculation based on work-related accidents from first day of absence per 1,000,000 working hours.

3 Basis for 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 (corresponds to 1 FTE)

4 Non-recuperation after six months

With an LTIF of 3.9, the accident frequency rate was lower than the previous year's figure of 4.3. One traffic accident with fatal consequences in which the victim was not at fault occurred in the year under report.

Active health protection

We aim to preserve and promote the health of our workforce by offering a range of targeted services and preventative medical care that is organised on a decentralised basis. We also attach great value to raising awareness for our employees' mental and physical wellbeing. With the wide variety of measures offered by our company health management services, such as information, events and fitness formats provided online, and the extensive offerings available at company medical services at our larger locations, we provide our employees with numerous targeted health promotion options.

Social concerns aspect

Corporate social responsibility

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 therefore 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, preferably to local or regional businesses, safeguard 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. Our "Foundation for the Future", which we established in 2023, is committed to developing and promoting win-win solutions which show that the energy supply transformation can go hand in hand with other social goals. The Foundation supports innovative ideas and sustainable projects. It focuses this support on environmental and climate protection, science and research, art and culture, democratic governance and education.

In dialogue with our stakeholders

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

We operate at various locations and in diverse business fields and therefore account for the interests of numerous, often heterogeneous groups of stakeholders. These include our customers, employees, shareholders, government and political representatives, as well as non-government organisations (NGOs), the media, analysts, local residents at our locations, 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 stakeholder groups, 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' or 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. We focus here on the energy system transformation.

Via our membership in industry associations and stakeholder groups, we participate in energy policy and energy industry discussions. In some cases, experts from MVV participate in the specialist and management boards, and thus in the respective opinion-forming processes, at these organisations. In the Association of the German Energy and Water Industries (BDEW), our CEO Dr. Georg Müller is a member of the Association's Board. Moreover, senior MVV employees are involved in the BDEW Steering Committees for Communications, Legal Affairs, Energy and Environmental Policy, Sales, Mobility, Energy Grids, Energy Trading and Heat. Our Executive Board member Dr. Hansjörg Roll is the President of the German Energy Efficiency Association for Heating, Cooling and CHP (AGFW). Examples of further associations and stakeholder groups of which we were members in the 2024 financial year are: the Federation of the German Waste, Water and Raw Materials Management Industry (BDE), the German Energy Storage Systems Association (BVES), the German Geothermal Association (BVG), the German Association of Energy Market Innovators (bne), the German Wind Energy Association (BWE), the German Association for Negative Emissions (DVNE), the German Association of Waste-to-Energy Plants (ITAD), the German Association for Electrical, Electronic and Information Technologies (VDE), the

Baden-Württemberg Association of the Energy and Water Industries (VfEW) and the Technical Association for the Generation and Storage of Electricity and Heat (vgbe). Furthermore, MVV is a member of the 8KU Group, in which eight large municipal utility companies in Germany have joined forces to communicate their specific concerns in the political arena. Dr. Georg Müller was entrusted with coordinating the activities of 8KU in 2023.

Local communities

Our resources and activities are advancing the transformation in the energy system towards a more sustainable and efficient energy supply. We understand that this goal of building a sustainable energy supply can only be achieved together. The infrastructure changes involved in this transformation, such as the expansion in onshore wind turbines, mean that sharing information openly with affected stakeholders is an important aspect of our social responsibility. We were committed once again in the 2024 financial year to gaining acceptance from people on location.

To involve stakeholders and their representatives on location, for our projects we make efforts from the very outset to identify all stakeholder positions and where possible to achieve a reconciliation of interests. By maintaining an open dialogue and closely exchanging information with approval authorities and the bearers of public concerns, we also promote acceptance for projects and thus reach decisions that would convince third parties. Consistent with regulatory requirements, we make our planning documents available for discussion and hold dialogues and events. We adopt a project-specific approach which is handled on a decentralised basis by our subsidiaries and shareholdings. This way, we ensure that the individual concerns of stakeholders on location are handled appropriately and on a basis of trust.

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 not only in our own business processes, but also along our upstream and downstream supply chains. 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 anti-corruption 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 and the environment.

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 significantly lower share of our total procurement volumes relates to suppliers who provide us with goods or perform services for us.

Key factor: commodities

Most of our procurement volumes involve energy carriers such as electricity and natural gas (commodities). In recent years, there has been increasing public interest in the greenhouse gas emissions resulting from the production and transport of natural gas. This particularly relates to imported liquefied natural gas (LNG).

We occasionally receive enquiries as to the origin of the hard coal used at our 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 18 thousand tonnes of hard coal in the year under report. This hard coal mainly comes from Latin and North America. We do not have any direct contractual relationships to mine operators but, given the low volumes involved, procure the fuels via intermediaries. The power plant Grosskraftwerk Mannheim AG (GKM), where we are minority shareholders, also makes use of hard coal. As we ourselves do not operate the plant, we have no direct influence on its fuel procurement. We are nevertheless aware of our responsibility. By discussing sustainability topics closely with GKM and requesting information, we endeavour to ensure that the coal industry respects human rights and makes a positive contribution to the social and economic livelihoods of workers, producers and communities. GKM has been a member of the RECOSI Initiative (formerly the Better Coal Initiative) since March 2021.

Lower procurement volumes attributable to non-commodities

Apart from energy procurement our other procurement volumes are comparatively low, corresponding to only around one fifth of our commodity procurement. They mostly involve procuring goods, construction services 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 further upstream in our supply chain. Here, we also perform a detailed analysis of the CO₂ footprint of the products and solutions we procure and account for these in our climate balance sheet. The cross-location team of experts we have established for this purpose acts early to assess legal requirements, discusses these and the latest developments in central procurement and implements measures to shape further developments. This team of experts includes procurement staff, lawyers, our Human Rights Officer and our sustainability management. In a process managed by this expert team, our suppliers are subject to an automated risk review which compiles individual profiles of human rights and environmental-related risks.

We participate in the sector dialogue of the German energy industry concerning respect for human rights along global supply and value chains. Supported by the Federal Government, this forum for sharing information enables industry representatives and members of society to investigate relevant potential violations of human rights along global supply chains and to analyse how the human rights-related situation could be improved. One topic that was again relevant in the year under report involved potential human rights violations in the production of photovoltaics modules in China. This risk is not specific to MVV's photovoltaics supply chains but rather constitutes a cross-industry risk involved in trading with China. We have longstanding supply relationships with module manufacturers, particularly via our Juwi subsidiary. We are in close contact with our suppliers with regard to these topics, although we have yet to gain awareness of any specific violations within our direct supply chains. We have nevertheless also contractually agreed more far-reaching precautions with the suppliers. Irrespective of this, we are closely looking into which alternative procurement options may be available for photovoltaics modules in the medium term.

Procurement and business terms for suppliers

We see long-term, strategic partnerships as key to maintaining stable supply relationships, meeting the highest quality standards and promoting our business success. We attach great value to fostering ethical business practices in the supply chain and consistently respecting human rights. We deploy supplier management systems and expect our suppliers to commit to our MVV Business Code of Conduct, and in particular to those aspects relating to anticorruption measures, environmental protection, respect for human and workers' rights in the supply chain and the acceptance of responsibility towards society. The basis for our cooperation with suppliers and service providers in Germany and the European Union is provided by applicable laws and regulations, including the German Act on Corporate Due Diligence Obligations in the Supply Chain (LkSG), as well as those compliance regulations, forms of conduct and work practices relevant to us. Among others, these comprise 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. MVV's Business Code of Conduct is published on our website at [mvv.de/compliance](https://www.mvv.de/compliance). If the obligations set out in the code are breached, then contractual sanctions, including contractual penalties, termination and damages payments, are provided for. To implement the risk analysis called for by the German Act on Corporate Due Diligence Obligations in the Supply Chain (LkSG), we have introduced an AI-assisted process and established supplier risk management connected to this. This enables us to detect, terminate or minimise any violations by our suppliers of human rights and/or human rights-related environmental protection requirements. Our report on the LkSG [mvv.de/lksg](https://www.mvv.de/lksg) and our policy statement on respect for environmental and human rights [mvv.de/compliance](https://www.mvv.de/compliance) are also published on our website.

Within our supplier management system, suppliers to MVV Energie AG, Energieversorgung Offenbach, Juwi and Stadtwerke Kiel are assessed in terms of their sustainability, risks and compliance, as are the subcontractors we approve. In this context, 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.

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 ourselves, but rather draw on external sources of information.

The overwhelming share of our business activities takes place in Germany and the UK, 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 in which human and employee rights are as a general rule legally protected, work on behalf of MVV. We accord great significance to high safety standards at our subcontractors as well. 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 keep comprehensive records of working conditions at our subcontractors, especially at their production locations, but draw here too on external sources of information.

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 these guidelines and standards. To achieve this, we provide them with a detailed company-internal Compliance Handbook and accompanying policies which are aimed at embedding our values and ethical principles in all areas of the company. In this handbook and accompanying policies, we have summarised the most important requirements and regulations, as well as the organisational structures and processes required to comply with these. We have also listed the names of those employees responsible and described the relevant processes in detail. Our compliance requirements are binding for all companies at the Mannheim subgroup of MVV Energie and are permanently available to all employees at this subgroup. The other subgroups have introduced equivalent compliance management systems. Furthermore, with the CMS we monitor all significant business activities and processes within our Group.

Our Compliance Officer is responsible for the CMS with regard to its contents, organisation and processes. She compiles the relevant compliance requirements, updates these and exchanges information about them with the various organisational units. Moreover, she is responsible for ensuring that employee training measures are implemented and that adherence to the compliance requirements is monitored. Furthermore, she 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 regularly and whenever otherwise required by specific developments, as well as to the Audit Committee in the context of the annual financial statements.

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

We have structured our CMS in such a way that any infringements should be avoided on a preventative basis, particularly by implementing preventative measures in the respective business processes (systemic compliance) and by providing training. We consider and perform advance checks on relevant and sensitive processes and matters and, where necessary, act early to take corrective measures. Donations and payments to parties and political organisations are strictly prohibited. We have also published a separate policy setting out our internal requirements for donations and sponsorship payments. Payments to equity providers exclusively take the form of dividends.

By embedding active prevention measures within business processes, we are committed to averting any criminal or grossly improper violations of the law. In particular, we maintain a zero-tolerance policy towards bribery and all other forms of corruption. With regard to corruption prevention, we provide extensive training to our employees. We show them, for example, how to deal with gratuities and invitations and thus minimise the risk of bribery and the granting of advantages.

We take all measures necessary to prevent money laundering and terrorism financing. Given its products, customer base and geographical scope of activity, MVV is only exposed to a low potential risk in this respect. When business relationships are established, our requirements for identifying contract partners and their economic beneficiaries must be met. To ensure that we do not maintain any business relationships with individuals who are subject to sanctions, we regularly screen our business partners against the relevant sanctions lists with the assistance of an IT tool.

In representing our interests in the political arena, our aim is to gain a hearing for our concerns among politicians and members of the administration. In this, we work on a basis of openness, transparency, honesty and integrity. In connection with our representations to boards, bodies, members, parliamentary or other groups in the German Federal Parliament or the Federal Government, it is important to us that our political activities should be transparent to society as a whole. Our representations can be viewed at any time in the lobby register of the German Federal Parliament.

Our employees and third parties can contact the Compliance Officer or an external confidence lawyer directly via "whistleblower" hotlines and provide tip-offs, also anonymously, of any potential misconduct. We have published all necessary information and the relevant contact details, also on our website at mvv.de/whistleblower-hotline. The confidence lawyer is also available as a point of contact to clarify questions concerning correct behaviour in accordance with the relevant rules. Protecting informants is a key priority for us. We are committed to protecting informants against any disadvantaging, reprisals or sanctions and make every effort to uphold their anonymity and confidentiality.

Our compliance training programmes serve to communicate our company values and the forms of conduct we expect from our employees on an extensive and continuous basis. Furthermore, they assist in detecting compliance risks and addressing the correct handling of such based on our compliance culture and our CMS. Consistent with our training concept all new employees receive one-off compliance training, while all managers, employees with contact to customers, service providers or suppliers, as well as employees with any other latent compliance-related risk exposure, receive regular compliance training. This way, we ensure that they are extensively informed of general compliance requirements and that they are also familiar with the legal requirements relevant to their respective company units.

Examples of the topics covered by this training are combating corruption and money laundering, the requirements of capital market, stock market, competition and cartel law, handling sanction lists, respect for human rights and the relevant requirements of energy industry law. In the 2024 financial year, 700 employees at the Mannheim subgroup and 363 employees at the other subgroups took part in this training. The majority of these training sessions were held as in-person events. In parallel, 3,335 individuals completed e-learning training offered by our subsidiaries Stadtwerke Kiel and Energieversorgung Offenbach.

Managers in the first management tier are required to submit a Compliance Management Declaration (CMD) at the end of each financial year. The same requirement applies to the managing directors of our subsidiaries and select other shareholdings. In this, they must state whether all relevant compliance regulations and legal requirements have been complied with. Among others, 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. Moreover, 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 the [Opportunity and Risk Report](#) chapter.

Respect for human rights

Respect for human rights is also integrated into our compliance management system. In our Policy Statement on Respect for the Environment and Human Rights [mvv.de/lksg](#), we underline our commitment to internationally recognised principles of human rights and take due account of the German Act on Corporate Due Diligence Obligations in the Supply Chain (LkSG). The Policy Statement was adopted by our Executive Board, while the management at our companies and locations is responsible for compliance with the resultant requirements. We meet our obligation to publish a regular report on fulfilment of the due diligence obligations set out in the LkSG with the greatest possible care. The annual reports on the LkSG are publicly available at all times at [mvv.de/bericht-zum-lksg](#).

MVV's Human Rights Officer, who reports directly to the Executive Board, is responsible for implementing and monitoring the risk management activities required to meet the due diligence obligations imposed by the LkSG legislation. Examples of her tasks include performing event-specific and annual human rights-related risk analyses on the company's own business activities, defining measures to prevent infringements of human rights in the supply chain and our own activities and meeting statutory reporting obligations. As the central point of contact, the Human Rights Officer is the first person to turn to for employees. Not only that: In the event of potential violations, she ensures that these are remedied and investigated. It is important to us 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 whistleblower hotline.

Employee training on the topic of human rights forms part of the compliance training.

Within our groupwide sustainable procurement project, in the year under report we further developed our strategies and measures to implement human rights-related and environmental-related due diligence obligations. This groupwide project is specifying the existing supply chain management requirements in greater detail and structuring them in such a way as to strengthen compliance with human rights and raise awareness within the organisation for potential human rights-related risks.

EU Taxonomy

The Sustainable Finance Action Plan (SFAP) plays a key role within the EU's Green Deal. It is intended to direct capital flows towards environmentally sustainable technologies and companies. The framework for this plan is provided by Regulation EU 2020/852 (EU Taxonomy), which serves as a system of classification and, in supplementing Delegated Regulations, lays down the technical criteria governing whether economic activities may be classified as "environmentally sustainable". Environmentally sustainable economic activities have to make a substantial contribution to one of the six following environmental objectives (pursuant to Article 9 of the EU Taxonomy):

- 1. Climate change mitigation (CCM)
- 2. Climate change adaptation (CCA)
- 3. Sustainable use and protection of water and marine resources (WTR)
- 4. Transition to a circular economy (CE)
- 5. Pollution prevention and control (PPC)
- 6. Protection and restoration of biodiversity and ecosystems (BIO)

In assessing economic activities, the EU Taxonomy makes a distinction between taxonomy-eligible and taxonomy-aligned economic activities:

Taxonomy-eligible economic activities are those economic activities of a company for which final technical screening criteria are stated in the annexes to Delegated Regulations EU 2021/2139, EU 2022/1214, EU 2023/2485 and EU 2023/2486. This classification is irrespective of whether or not the activities meet the technical screening criteria that have to be reviewed in the next stage.

Pursuant to Articles 10 to 18 of the EU Taxonomy, **taxonomy-aligned** and thus environmentally sustainable economic activities only include those activities that are described in the annexes to Delegated Regulations EU 2021/2139, EU 2022/1214, EU 2023/2485 and EU 2023/2486 and which make a substantial contribution to achieving one or several of the six environmental objectives and do no significant harm ("DNSH") to achievement of the other five environmental objectives. These two latter conditions are deemed to have been met if the economic activities satisfy the currently valid version of the technical screening criteria. Moreover, compliance with minimum safeguards has to be ensured for all environmentally sustainable economic activities.

At first, the classification criteria for the first two environmental objectives, namely "climate change mitigation" and "climate change adaptation" were laid down in Delegated Regulation EU 2021/2139. This took effect as of 1 January 2022. In early March 2022, the European Commission published a complementary Delegated Regulation EU 2022/1214 on the environmental objectives of "climate change mitigation" and "climate change adaptation". This defines the criteria which, if met, sales ("turnover"), investment expenses ("CapEx") and operating expenses ("OpEx") in gas and nuclear energy activities may be classified as environmentally sustainable, as these activities have the potential to assist in accelerating the transition to a climate-neutral future with predominantly renewable energies. This complementary Regulation has required mandatory application since 1 January 2023. In Delegated Regulation EU 2023/2486 (Environmental Delegated Regulation), adopted at the end of June 2023, the EU Commission also approved the classification criteria for the four other environmental objectives of "sustainable use and protection of marine resources", "transition to a circular economy", "pollution prevention and control" and "protection and restoration

of biodiversity and ecosystems". Furthermore, Delegated Regulation EU 2023/2485 (Amended Climate Delegated Regulation) extended the range of economic activities making a substantial contribution to the "climate change mitigation" and "climate change adaptation" objectives and clarified detailed issues relating to the regulation. These Delegated Regulations were published in the Official Journal of the European Union in November 2023 and, once the deadline for the EU Parliament and EU Council to raise objections expired, formally adopted. Accordingly, for the period from 1 January to 31 December 2024 affected companies should report on the taxonomy eligibility of the economic activities newly introduced on account of the Environmental Delegated Regulation and the amendments to the Climate Delegated Regulation, while the amendments to the Disclosure Delegated Regulation (EU 2021/2178) and amendments to existing economic activities with regard to the first two environmental objectives must already be fully implemented for periods beginning on 1 January 2024.

Pursuant to the Taxonomy Regulation, the EU Commission will review and update the technical screening criteria at regular intervals in future as well. It is therefore a dynamic set of regulations. This process is intended to integrate technical advances, new scientific findings and EU policy developments.

Implementation of EU Taxonomy at MVV

For the 2024 financial year, MVV is obliged to report on its taxonomy-eligible and taxonomy-aligned economic activities in the six environmental objectives, as well as on their respective shares of its turnover, CapEx and OpEx. We have implemented a control process to review our disclosures.

The EU Taxonomy and the supplementary Delegated Regulations only record select economic activities. This means that we are unable to classify some activities as taxonomy-eligible which we believe make a key contribution to the environmental objectives, and in particular to climate change mitigation. We report on these activities in various sections of this report, including in the [Environmental Concerns Aspect](#) section of this Non-Financial Declaration.

Identification and classification of our economic activities

We began by analysing all MVV's economic activities on the basis of the descriptions provided in the Delegated Regulations and their annexes and then identifying our taxonomy-eligible activities (eligibility review).

On this basis, as well as of our assessment concerning the achievement of significant contributions, we concluded with regard to taxonomy eligibility for the 2024 financial year that the economic activities thereby identified contributed to the "climate change mitigation", "climate change adaptation", "sustainable use and protection of water and marine resources", "transition to a circular economy" and "pollution prevention and control" environmental objectives. Due not least to the limited range of economic activities described to date, we have not identified any taxonomy-eligible economic activities for the "protection and restoration of biodiversity and ecosystems" environmental objective.

In the next step, all economic activities identified were subject to a taxonomy alignment review:

Review step 1: substantial contribution to the environmental objectives

In an annual review process, we individually assess each of our taxonomy-eligible economic activities by reference to the technical screening criteria pursuant to the relevant articles of the Delegated Regulations to the EU Taxonomy in conjunction with the associated annexes to ascertain whether they make a substantial contribution to the environmental objectives. The initial recording and review of economic activities in terms of their taxonomy alignment is performed with the assistance of uniform assessment forms across the Group. We devised these on the basis of the Delegated Regulations and the relevant annexes. They serve as worksheets and documentary evidence.

We accompany the subsequent process for the annual specialist current status review with our EUT management system. Here, we review the disclosures and documentary evidence from the past financial year to ascertain whether they are still up to date, add new documentary evidence and certifications, examine new activities added as a result of initial assessments performed during the year and supplement any topics outstanding from the previous year. We manage the review process centrally, while the review of the respective economic activity takes place on a decentralised basis at the organisational unit responsible for the activity.

Review step 2: do no significant harm

A review is performed for each economic activity to ascertain whether it does any significant harm to the environmental objectives. For the six environmental objectives, the DNSH criteria set out in the annexes and appendices to Delegated Regulations EU 2021/2139 and EU 2023/2486 chiefly relate to compliance with European and/or German legal requirements. For MVV's taxonomy-eligible activities, the Delegated Regulations do not define any requirements concerning the avoidance of significant harm for the "climate change mitigation" environmental objective.

Due to our energy industry activities, the review of DNSH conformity concerning the avoidance of significant harm to the "climate change adaptation" environmental objective formed the key focus of our DNSH review process. To determine conformity pursuant to the annexes and appendices to Delegated Regulations EU 2021/2139 and EU 2023/2486, it is necessary to assess the physical climate risks. This is based on the findings of a climate risk model and climate risk analysis we performed with external climate risk experts. In this, the risk for a location or region in which we perform an economic activity was assessed for 15 climate risks based on various climate scenarios. This conformity assessment also involved performing climate projections relating to the scope of the activity and to the expected lifetime of such activity. Based on our basic assumption of a 30-year lifecycle, we flexed the assessment to factor in high-resolution and state-of-the-art climate projections for the existing series of future scenarios.

We performed a separate assessment for each risk. Depending on the individual data situation, the RCP scenarios (2.6, 4.5, 6.0 and 8.5 – explained below) are converted from climatological forecasts, such as precipitation or global radiation, into physical risks. In Germany, risks result in particular from strong winds, extreme heat, aridity, heavy precipitation and the resultant flooding. The calculation of climate risks due to extreme weather events covers the period until 2053. Implementation is aligned to the individual steps stated in the EU Taxonomy and is based on the following logic:

- Based on the data sources suggested by the EU, in a first step we identified those risks that are basically possible for the locations or regions stated due to extreme weather events. The primary data source we referred to was the database of the Copernicus Climate Change Service listed in Delegated Regulations EU 2021/2139 and EU 2023/2486.
- We subsequently used the four representative concentration pathways (RCP) for the scenario projection in order to identify possible future changes on a location-specific basis and to derive the resultant climate risks.
- To enhance the comparability of various studies, the International Panel on Climate Change (IPCC) developed the RCP scenarios to provide the scientific community with a shared set of assumptions concerning possible climate change developments. The term “concentration pathway” is intended to underline that the scenarios are aligned to select chronological sequences in greenhouse gas concentrations and the underlying socio-economic models. We refer to four scenarios defined by the IPCC, namely 2.6, 4.5, 6.0 and 8.5, which are applied in the annexes and appendices to Delegated Regulations EU 2021/2139 and EU 2023/2486 of the EU Taxonomy. These four scenarios are described as follows: In each scenario, the projection reflects the scope of global mitigation strategies in respect of climate change. Scenario RCP 2.6, for example, presupposes significant efforts in this area, while Scenario RCP 8.5 assumes that CO₂ emissions will triple by the end of the century due to the absence of any mitigation measures. Scenario RCP 4.5 sets out a medium scenario in which fossil fuels are used until the middle of the century while also accounting for mitigation strategies. In Scenario RCP 4.5, emissions peak around 2040 and then decline. Scenario RCP 6.0 outlines a pathway similar to Scenario RCP 4.5, but here emissions only peak in 2080. The figures do not outline the expected rise in temperature; the increase in temperature is rather the consequence of the radiative forcing expressed by the figures due to increased concentrations of greenhouse gases in the atmosphere. The figures refer to the cumulative total volume by 2100 and the resultant radiative forcing. In addition, a rise in global mean temperatures can be allocated to each RCP Scenario. Scenario RCP 8.5 corresponds to an increase of around 4.8°C compared with preindustrial levels. In Scenario RCP 6.0, mean temperatures rise by between 3 °C and 4 °C by 2100. In the medium Scenario RCP 4.5, global warming reaches 2.6 °C compared with preindustrial levels. In Scenario RCP 2.6, by contrast, the average rise in global temperatures forecast by the model remains below the 2-degree Paris target.
- Due to circumstances at the locations and the specific features of the assets used to perform the economic activity, despite the risks identified for the respective location the assets may possibly not be vulnerable to such risks. We investigated this aspect in a second stage. For the locations thereby affected, we assessed the findings in cooperation with the directors of the respective location to ascertain whether any vulnerability to the identified risks that could negatively affect the economic activity actually applies. Where this is the case, in a third stage we evaluated whether any suitable risk-minimising measure is already in place. Depending on the risk, this may take a variety of forms and may involve structural or non-structural measures.

Overall, it was established that, for all assets we deploy to perform our economic activities, there is either no vulnerability to the risks identified or suitable risk-minimising measures (adaptation solutions) are already in place.

With regard to the avoidance of significant harm to the “sustainable use and protection of water and marine resources” environmental objective, the Delegated Regulations require those economic activities whose construction or operation may impact on existing water to meet specific criteria. We document that these criteria are met on the level of individual projects and plants, for example by liaising with the relevant authorities to allow inspection of approval applications, environmental reviews and approval conditions relating to water. We document, also on individual project and plant level, that we have met the criteria governing the avoidance of significant harm to the “transition to a circular economy” environmental objective by setting out our specific measures relating to the circular economy. To show the avoidance of any significant harm to the “pollution prevention and control” environmental objective, we document that we have met the criteria by presenting application approvals, environmental reviews and approval conditions for individual projects and plants. With regard to the “protection and restoration of biodiversity and ecosystems” environmental objective, the Delegated Regulations require criteria to be met for all our activities. We demonstrate that we satisfy these criteria by documenting our compliance with the approval process requirements, for example by granting access to the findings of environmental reviews.

Review step 3: compliance with minimum safeguards for the topics of human rights (including employee and consumer rights), corruption and bribery, taxation and fair competition (“minimum safeguards”)

We have adopted a groupwide approach to determine compliance with the minimum safeguards pursuant to Article 18 of the EU Taxonomy. With this approach, we ensure that due diligence obligations in respect of human rights are complied with on the level of individual economic activities. The same applies for our efforts to combat corruption and bribery. A key role is played in this respect by our compliance management system (CMS), which we report on in the [Compliance](#) section of this Non-Financial Declaration. This assists us in ensuring that all applicable laws are complied with, as are internal company guidelines and the ethical standards to which we are committed. Respect for human rights is also integrated into our CMS. With our Policy Statement on Respect for the Environment and Human Rights and our Human Rights Policy, we underline our commitment to internationally recognised human rights norms, conventions, principles and policies. Among others, these include the International Bill of Human Rights of the United Nations (UN), the OECD Guidelines for Multinational Enterprises, the Ten Principles of the UN Global Compact, the Guiding Principles on Business and Human Rights of the United Nations and the Core Labour Standards of the International Labour Organization (ILO). These also form part of our MVV Business Code of Conduct for our suppliers and business partners. Furthermore, we published a report for the first time on the German Act on Corporate Due Diligence Obligations in the Supply Chain (LkSG), which can be viewed on our website. Our risk analysis process and other supply chain-related processes were developed further in our “Sustainable Supply Chain” workgroup, which covers activities in our business fields and our locations, and are being continuously improved. “Potential violations of human rights in the photovoltaics supply chain”, which was a relevant topic in the year under report, was also subject to close risk monitoring, with suitable precautionary measures taken. We report on this in the [Respect for Human Rights and Combating Corruption and Bribery Aspect](#) section of this Non-Financial Declaration.

We promote employee awareness of the importance of compliance with all applicable human rights and anticorruption requirements, as well as with competition laws and regulations. There were no final convictions of the company or its senior management for violating legislation to combat corruption, tax law or competition law, neither were there any final convictions of the company in connection with violations of human rights.

On this basis, we concluded overall that MVV complies with the requirements of the minimum safeguards.

Where the respective economic activity cumulatively meets all points of the three review steps outlined above, we classify this activity as “taxonomy-aligned”. For the 2024 financial year, we identified the following economic activities as being taxonomy-aligned:

Overview of all taxonomy-aligned economic activities FY 2024

Economic activity pursuant to EU Taxonomy	Environmental objective	MVV's activity ¹
4.1. Electricity generation using solar photovoltaic technology	Climate change mitigation (CCM)	Projecting and construction of photovoltaics parks and generation of electricity from photovoltaics systems
4.3. Electricity generation from wind power	Climate change mitigation (CCM)	Projecting, construction and generation of electricity from onshore wind turbines
4.5. Electricity generation from hydropower	Climate change mitigation (CCM)	Generation of electricity from hydropower plants
4.8. Electricity generation from bioenergy	Climate change mitigation (CCM)	Generation of electricity from biomethane and biogas plants
4.9. Transmission and distribution of electricity	Climate change mitigation (CCM)	Distribution grid operator for electricity
4.11. Storage of thermal energy	Climate change mitigation (CCM)	Use of heat storage facilities
4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids	Climate change mitigation (CCM)	Biomethane production
4.14. Transmission and distribution networks for renewable and low-carbon gases	Climate change mitigation (CCM)	Distribution grid operator for green gases
4.15. District heating/cooling distribution	Climate change mitigation (CCM)	District heat supply
4.16. Installation and operation of electric heat pumps	Climate change mitigation (CCM)	Construction and operation of a river heat pump
4.20. Cogeneration of heat/cool and power from bioenergy	Climate change mitigation (CCM)	Electricity generation using CHP at biomass plants
4.24. Production of heat/cool from bioenergy	Climate change mitigation (CCM)	Heat generation at biomass plants
4.25. Production of heat/cool using waste heat	Climate change mitigation (CCM)	Use of waste heat for district heat supply
4.30. High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	Climate change mitigation (CCM)	Coastal power plant in Kiel (Küstenkraftwerk Kiel)
4.31. Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	Climate change mitigation (CCM)	Gas-based backup facilities for district heat supply at Mannheim location
5.7. Anaerobic digestion of bio-waste	Climate change mitigation (CCM)	Biomethane production from bio-waste
6.15. Infrastructure enabling low-carbon road transport and public transport	Climate change mitigation (CCM)	Public charging infrastructure activities
7.3. Installation, maintenance and repair of energy efficiency equipment	Climate change mitigation (CCM)	LED contracting
7.4. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	Climate change mitigation (CCM)	Charging infrastructure activities for business and commercial customers
7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	Climate change mitigation (CCM)	Meter operations
7.6. Installation, maintenance and repair of renewable energy technologies	Climate change mitigation (CCM)	Installation of photovoltaics systems for business, commercial and retail customers
9.3. Professional services related to energy performance of buildings	Climate change mitigation (CCM)	Energy efficiency consulting for business, commercial and industrial customers
2.1. Water supply	Sustainable use and protection of water and marine resources (WTR)	Water production and supply
2.1. Phosphorous recovery from waste water	Transition to a circular economy (CE)	Phosphorous recycling plants
2.7. Sorting and material recovery of non-hazardous waste	Transition to a circular economy (CE)	Recovery of secondary raw materials at energy from waste plants
2.2. Treatment of hazardous waste	Pollution prevention and control (PPC)	Treatment of hazardous waste timber

1 Our plants are subject, among other legislation, to the strict requirements of the German Federal Immission Control Ordinances (BImSchV) enabling us to safeguard compliance with the relevant DNSH criteria.

For the 2024 financial year, we also classified the following economic activities as being taxonomy-eligible but not yet taxonomy-aligned:

Overview of all taxonomy-eligible but not taxonomy-aligned economic activities FY 2024

Economic activity pursuant to EU Taxonomy		Environmental objective	MVV's activity
4.29.	Electricity generation from gaseous fossil fuels	Climate change mitigation (CCM)	Gas power plants
4.30.	High-efficiency co-generation of heat/cool and power from fossil gaseous fuels	Climate change mitigation (CCM)	Generation of electricity and heat using gas-based CHP (except coastal power plant in Kiel)
4.31.	Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system	Climate change mitigation (CCM)	Gas-based backup facilities for district heat supply at Kiel location
8.2.	Data-driven solutions for GHG emissions reductions	Climate change mitigation (CCM)	Energy data collection and management systems

Calculation and definition of EU Taxonomy KPIs

We based our calculation of taxonomy-eligible and taxonomy-aligned shares on the following approach: Key performance figures (KPIs) have been calculated based on the accounting policies applied in the consolidated financial statements that, pursuant to § 315e (1) HGB, we prepare in accordance with International Financial Reporting Standards (IFRS).

KPIs have basically been determined on the basis of the data in our consolidated financial statements. Where the calculation of EU Taxonomy KPIs and relevant components of such requires reference to local IT systems or the use of calculation keys, we safeguard process conformity with suitable internal checks both in terms of processes (dual control principle) and of system assistance (validation), thus also avoiding duplicate inclusion.

Sales (turnover) correspond to adjusted sales excluding energy taxes. To determine this KPI, we adjust sales after electricity and natural gas taxes as stated in the [Income Statement](#) as of the balance sheet date to eliminate the difference between the hedge and reporting date prices as of the respective realisation date pursuant to IFRS 9 (further details can be found in the [Presentation of Earnings Performance](#) section of the Group Business Performance chapter). The taxonomy-eligible and taxonomy-aligned shares of our sales are determined by presenting total adjusted sales in our taxonomy-eligible and taxonomy-aligned economic activities (numerator) as a percentage of the MVV Group's adjusted sales (denominator). Further details can be found in the [EU Taxonomy Tables](#).

Pursuant to EU Taxonomy requirements, **investment expenses** correspond to additions to intangible assets and property, plant and equipment. These are determined without including depreciation and amortisation, remeasurements or fair value changes. Furthermore, the investment concept used in the EU Taxonomy requires inclusion of the following additions:

- Additions to property, plant and equipment pursuant to IAS 16.73 (e) (i) and (iii)
- Additions to intangible assets pursuant to IAS 38.118 (e) (i)
- Additions to investment properties pursuant to IAS 40.79 (d) (i) and (ii)
- Additions to right-of-use assets pursuant to IFRS 16.53 (h)

The definition of investment expenses in the EU Taxonomy thus diverges from our definition of the investments KPI. In the following table, we show how we reconcile investment expenses as defined in the EU Taxonomy with our investments in the 2024 financial year. Further information about MVV's investments can be found in the [Presentation of Asset Position](#) section.

Reconciliation of investment expenses

Euro million	FY 2024	FY 2023	+/- change
Investment expenses pursuant to EU Taxonomy	463	344	+ 118
+ Unfinished products in connection with finance leases	+ 4	+ 12	– 8
+ Financial assets	+ 1	+ 11	– 10
– Dismantling obligations	– 7	– (- 1)	– 8
– Right-of-use assets	– 40	– 19	– 21
– Company acquisitions	– 3	– 5	+ 2
Investments pursuant to MVV definition	417	344	+ 73

The taxonomy-eligible and taxonomy-aligned shares of our investment expenses are determined by presenting our total taxonomy-eligible and taxonomy-aligned investment expenses (numerator) as a percentage of the MVV Group's investments pursuant to the EU Taxonomy Regulation (denominator). Further details can be found in the [EU Taxonomy Tables](#). In the 2024 financial year, virtually all our taxonomy-eligible investment expenses were also taxonomy-aligned. The numerator thus represents "CapEx Category a" as defined in Delegated Regulation EU 2021/2178.

According to Delegated Regulation EU 2021/2178, the numerator for investment expenses also includes investment expenses in "CapEx Category b" and "CapEx Category c". Investment expenses that contribute to extending taxonomy-eligible economic activities, or to converting taxonomy-eligible economic activities into taxonomy-aligned economic activities within a CapEx plan require report in "CapEx Category b". The review of investments to assess their taxonomy eligibility or alignment is performed on the basis of individual investment projects and programmes. This process covers all current investment measures at MVV. In this respect, investments that extend beyond the current financial year and form part of our long-term investment programme are also included. No investment expenses requiring allocation to "CapEx Category b" were identified in the year under report.

Individual investments that relate to the acquisition of production for taxonomy-aligned economic activities and individual measures by means of which the target activities can be executed on a low-carbon basis or emissions of greenhouse gases reduced require report in "CapEx Category c". At MVV, these relate above all to investments involving cross-departmental activities, particularly at office buildings or in our vehicle pool. MVV only has material investments in Category a. Investments in Category c involve marginal and non-strategic investments and are also negligible in terms of their volume. We therefore do not include any CapEx in Category c in the numerator.

The numerator and denominator used to calculate the **operating expenses** KPI are defined in Delegated Regulation EU 2021/2178. Pursuant to the EU Taxonomy, the denominator comprises direct non-capitalised operating expenses for research and development, building refurbishment, short-term leases, maintenance and repairs, and all other direct expenses relating to the day-to-day maintenance of items of property, plant and equipment that are required to safeguard the ongoing effective functionality of these assets. At MVV, this item chiefly comprises employee benefit expenses, cost of materials and other operating expenses, including prorated IT expenses for maintaining, repairing and cleaning energy generation and distribution facilities, and short-term lease expenses. Expenses for research and development and for building refurbishment currently only play a subordinate role at MVV.

According to the EU Taxonomy, the numerator comprises the share of those operating expenses included in the denominator that relate to assets or processes involved in taxonomy-aligned and taxonomy-eligible economic activities respectively (OpEx Category a). At MVV, the numerator simultaneously constitutes “OpEx Category a”.

Pursuant to Delegated Regulation EU 2021/2178, the numerator also includes the share of those operating expenses included in the denominator for “OpEx Category b” and “OpEx Category c”. We refer in this respect to the comments made above for investment expenses in “CapEx Category b” and “CapEx Category c”. Accordingly, no material operating expenses requiring allocation to “OpEx Category b” or “OpEx Category c” were identified in the year under report. The amounts stated for OpEx were in some cases determined with the assistance of suitable value-based calculation keys.

Overview of EU Taxonomy KPIs

The complete disclosures of key performance indicators (KPIs) relating to taxonomy-eligible and taxonomy-aligned economic activities are presented in the [Other Disclosures](#) chapter.

EU Taxonomy KPIs: sales (turnover), investment expenses (CapEx) and operating expenses (OpEx)

	FY 2024 Euro million	FY 2023 Euro million	+/- change	FY 2024 Share %	FY 2023 share %
Total sales (turnover)	7,194	7,531	- 337	100.0	100.0
of which taxonomy-eligible	1,468	1,290	+ 177	20.4	17.1
of which taxonomy-aligned	1,416	1,238	+ 178	19.7	16.4
Total investment expenses (CapEx)	463	344	+ 118	100.0	100.0
of which taxonomy-eligible	375	271	+ 105	81.1	78.6
of which taxonomy-aligned	375	268	+ 107	80.9	77.7
Total operating expenses (OpEx)	506	682	- 176	100.0	100.0
of which taxonomy-eligible	158	177	- 19	31.3	26.0
of which taxonomy-aligned	154	173	- 19	30.5	25.4

Sales (turnover)

We generate the overwhelming share of our sales by selling electricity and gas to our business, commercial, industrial and retail customers and, linked to these activities, with commodities trading (please see the comments provided in the [Presentation of Earnings Performance](#) section). These business activities are not recorded as economic activities in the EU Taxonomy. As in the previous year, it is still the case that only a minor share of our sales is within the scope of the EU Taxonomy and thus taxonomy-eligible.

Our taxonomy-aligned sales rose year-on-year by Euro 178 million, equivalent to an increase of 14 %. This was mainly attributable to the transmission and distribution of electricity (EA CCM 4.9), as well as to the installation, maintenance and repair of renewable energy technologies (EA CCM 7.6). Furthermore, our activities in the distribution of electricity and district heat (EA CCM 4.9, CCM 4.15) and the recovery of secondary resources at our energy from waste plants (EA CE 2.7) made the largest contributions to sales.

Overall, the volume of sales in the numerator of the calculation (total of adjusted sales with taxonomy-eligible and taxonomy-aligned economic activities) increased compared with the previous year.

Taxonomy-eligible economic activities accounted for a 20 % share of sales in the 2024 financial year (previous year: 17 %). Of these, 96 % are also taxonomy-aligned and thus environmentally sustainable (previous year: 96 %).

For individual economic activities, such as the operation of our natural gas distribution grids (EA CCM 4.14), the taxonomy requirements merely permit the recognition of investments and do not allow any sales to be stated.

Sales (turnover)

Shares (%)

	FY 2024
● of which taxonomy-aligned	20
● of which taxonomy-eligible	20
● of which non-taxonomy-eligible/ not classified by EU Taxonomy	80



Investment expenses (CapEx)

We have had a broad-based investment programme with a long-term horizon for many years. This programme is geared to our decarbonisation and sustainability targets (please also see the comments provided in the [Environmental Concerns Aspect](#) section of this Non-Financial Declaration). However, not all of these investments are covered by the EU Taxonomy.

We made taxonomy-aligned investments of Euro 375 million in the 2024 financial year (previous year: Euro 268 million). Most of these investments involve projects which contribute to climate change mitigation. These include investments in supply reliability, a factor that has been shown to reduce CO₂ emissions, and here above all the transmission and distribution of electricity (EA CCM 4.9), the supply of district heat (EA CCM 4.14, CCM 4.15, CCM 4.25 and CCM 4.31) and in particular the installation, maintenance and repair of renewable energy technologies (EA CCM 7.6). Of our taxonomy-aligned investments, 8 % relate to right-of-use assets while the remaining share predominantly involves property, plant and equipment.

Overall, the volume of investment expenses in the numerator of the calculation (total investment expenses for taxonomy-eligible and taxonomy-aligned economic activities) increased compared with the previous year.

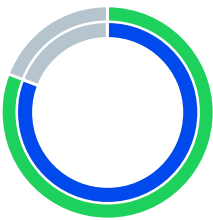
In the 2024 financial year, 81 % of our investments were within the scope of the EU Taxonomy and thus taxonomy-eligible (previous year: 79 %). Virtually all taxonomy-eligible investment expenses were also taxonomy-aligned. These therefore count as environmentally sustainable investments.

To date, the EU Taxonomy only covers a fraction of business activities in industry and the services sector, including the energy industry. Our high ratio thus confirms that we are investing in the right, i.e. sustainable areas. We expect investment contributions from individual economic activities to fluctuate sharply between individual years. That is because they depend on the implementation of larger-scale projects and the EU Taxonomy assesses CapEx solely on the basis of additions in the year under report.

Investments (CapEx)

Shares (%)

	FY 2024
● of which taxonomy-aligned	81
● of which taxonomy-eligible	81
● of which non-taxonomy-eligible/ not classified by EU Taxonomy	19



Operating expenses

The overwhelming share of our taxonomy-aligned and taxonomy-classified operating expenses involves maintenance and repair expenses. At Euro 154 million, our taxonomy-aligned operating expenses in the 2024 financial year were Euro 19 million lower than in the previous year. The largest items involve sorting and material recovery of non-hazardous waste at energy from waste plants (EA CE 2.7), the installation, maintenance and repair of renewable energy technologies (EA CCM 7.6) and maintenance and repairs on our distribution grids (EA CCM 4.9, CCM 4.15 and WT WTR 2.1).

Overall, the volume of operating expenses in the numerator of the calculation (total operating expenses for taxonomy-eligible and taxonomy-aligned economic activities) decreased compared with the previous year.

Of operating expenses in the year under report, 31 % were within the scope of the EU Taxonomy (previous year: 26 %). Of the taxonomy-eligible operating expenses, 98 % were also taxonomy-aligned (previous year: 98 %). As the definition of operating expenses in the EU Taxonomy differs significantly from the definition usually applied in a commercial context, the key figures reported for the EU Taxonomy do not allow any robust conclusions to be drawn or analyses compiled with regard to the amount or structure of such expenses.

Operating expenses (OpEx)

Shares (%)

	FY 2024
● of which taxonomy-aligned	31
● of which taxonomy-eligible	31
● of which non-taxonomy-eligible/ not classified by EU Taxonomy	69



Takeover-Related Disclosures

The combined management report includes takeover-related disclosures pursuant to § 289a and § 315a of the German Commercial Code (HGB). The Executive Board has examined these disclosures and offers the following explanatory comments:

Composition of share capital

The company's share capital totalled Euro 168,721,397.76 at the balance sheet date on 30 September 2024 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 are aware, the City of Mannheim as the majority shareholder and its subsidiaries MKB Mannheimer Kommunalbeteiligungen GmbH, Mannheim, Germany, and MV Mannheimer Verkehr GmbH, Mannheim, Germany, on the one hand, and FS DE Energy GmbH, Frankfurt am Main, Germany, its material shareholder FS Energy TopCo S.à r.l., Luxembourg, Luxembourg, and First Sentier Investments International IM Limited, Edinburgh, UK, on the other hand concluded a shareholders' agreement on 2 April 2020. This includes understandings concerning proposals for the composition of the Supervisory Board; apart from this, it excludes any other voting pacts and acknowledges that MVV Energie AG should continue to be a company controlled by the City of Mannheim. The shareholders' agreement also includes understandings concerning the transfer of shares. In particular, 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 held 50.1 % of the share capital and voting rights in MVV Energie AG, predominantly indirectly, at the balance sheet date; FS DE Energy GmbH, Frankfurt am Main, Germany, directly held 45.08 % of the share capital and voting rights. The sole shareholder in FS DE Energy GmbH is FS Energy Holdco S.à r.l., Luxembourg, Luxembourg. The shareholders of FS Energy Holdco S.à r.l. are FS Energy TopCo S.à r.l., Luxembourg, Luxembourg, which holds a shareholding of 84.9%, and Square Beteiligungs GmbH & Co. KG, Frankfurt am Main, Germany (Square), which holds a 15.1 % stake. FS Energy TopCo S.à r.l. is an indirect subsidiary of a fund managed by First Sentier Investments International IM Limited, Edinburgh, UK. The shareholders (limited shareholders) in Square Beteiligungs GmbH & Co. KG are various individual companies of Versicherungskammer Bayern, Versicherungsanstalt des öffentlichen Rechts (VKB), Munich, Germany. This indirect shareholding is also managed by First Sentier Investments International IM Limited; Square and VKB do not have any rights of control or management over the indirect shareholding in MVV.

These disclosures are based on voting right notifications provided to us by shareholders, entries in the Share Register and publicly available information.

Control of voting rights

There is no control of voting rights as defined in § 289a No. 5 and § 315a 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 here especially § 84 AktG, and on § 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 § 20 of the company's Articles of Incorporation. Pursuant to § 20 (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 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 2024, the Annual General Meeting also authorised the Executive Board until 8 March 2029, 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 clauses). The company also has not concluded any compensation agreements with Executive Board members or employees for the event of a takeover bid.

Business Performance of MVV Energie AG

Executive summary

The earnings performance of the MVV Group is also reflected in earnings at MVV Energie AG. The year-on-year reduction in earnings is due above all to the previous year's earnings being positively influenced by disposal gains from the sale of shareholdings, as well as by exceptionally high earnings contributions from the energy trading business in connection with the marketing of renewable energies and portfolio management activities.

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). MVV's consolidated financial statements are prepared in accordance 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 2024 financial year are published in the Companies Register. The complete 2024 annual financial statements of MVV Energie AG can be downloaded at [mvv.de/investors](https://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 stipulations. 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. Due to cost allocations resulting from the acceptance of electricity and district heat, this led to additional expenses in a medium single-digit million amount at MVV in the year under report. These 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

	1 Oct 2023 to 30 Sep 2024	1 Oct 2022 to 30 Sep 2023
Euro 000s		
Sales	2,496,484	2,842,203
Less electricity and natural gas taxes	– 121,696	– 122,068
Sales less electricity and natural gas taxes	2,374,788	2,720,135
Increase or reduction in finished and unfinished products	–48	–125
Other own work capitalised	46	94
Other operating income	40,119	224,863
Cost of materials	2,123,006	2,460,419
Employee benefit expenses	96,156	97,460
Depreciation and amortisation	24,678	23,253
Other operating expenses	126,332	162,224
Financial result and income from shareholdings	190,496	127,089
Taxes on income	70,109	137,415
Earnings after taxes	165,120	191,285
Other taxes	393	665
Annual net income	164,727	190,620
Allocations to other revenue reserves	82,344	95,055
Unappropriated net profit	82,383	95,565

Sales less energy taxes at MVV Energie AG decreased year-on-year by Euro 345 million to Euro 2,375 million. This reduction was chiefly the result of lower wholesale prices for electricity and gas, as well as of a lower volume of other sales for the provision of CO₂ emission rights. The company generated its sales exclusively in Germany. The electricity business accounted for 57.8 % of total sales (previous year: 63.3 %) and thus remains the largest division in terms of sales at MVV Energie AG.

At Euro 2,123 million, the cost of materials was Euro 337 million lower than in the previous year. The change in this line item largely reflects the development in sales. Furthermore, electricity procurement in particular showed a more marked reduction than electricity revenues.

Other operating income decreased by Euro 185 million to Euro 40 million. This reduction was due above all to the non-recurrence of the disposal gains generated in the previous year from the sale of the MVV Energie CZ Group and the shareholding in Stadtwerke Ingolstadt.

MVV Energie AG had 932 employees at 30 September 2024, 20 more than at the previous year's balance sheet date. Employee benefit expenses fell by Euro 1 million to Euro 96 million.

At Euro 25 million, depreciation and amortisation were Euro 2 million higher than in the previous year. No impairment losses were recognised on intangible assets or property, plant and equipment in the year under report or the previous year.

Other operating expenses decreased by Euro 36 million to Euro 126 million. This change was chiefly due to the higher expenses incurred in the previous year for billing services, as well as for the establishment of a charitable foundation to mark the 150th anniversary of MVV and its predecessor companies.

The financial result and income from shareholdings rose year-on-year by Euro 63 million to Euro 190 million. This development was due in part to profit transfers and earnings retention.

At Euro 165 million, earnings after taxes were Euro 26 million lower than in the previous year. After the deduction of other taxes, MVV Energie AG generated annual net income of Euro 165 million in the 2024 financial year. In its forecast for the 2024 financial year, the company had already predicted a significant year-on-year reduction in annual net income. This expectation was confirmed. Based on the profit utilisation resolution adopted by the Annual General Meeting on 8 March 2024, the unappropriated net profit of Euro 96 million for the 2023 financial year was fully distributed to the shareholders of MVV Energie AG. The dividend amounted to Euro 1.15 per share, plus a one-off special dividend of Euro 0.30 per share to mark the 150th anniversary of MVV and its predecessor companies and the company's exceptional earnings performance in the previous year.

Revenue reserves of Euro 82 million were formed from the annual net income for the year under report. MVV Energie AG reported unappropriated net profit of Euro 82 million at 30 September 2024. The Annual General Meeting to be held on 14 March 2025 will decide on the dividend proposal adopted by the Executive and Supervisory Boards. The proposal to be submitted by the Executive Board for approval by the Annual General Meeting provides for the distribution of a dividend of Euro 1.25 per share (previous year: Euro 1.15 per share). The Supervisory Board will decide on its dividend proposal in December 2024.

Presentation of asset and financial position of MVV Energie AG

Balance sheet

Euro 000s	30 Sep 2024	30 Sep 2023
Assets		
Non-current assets		
Intangible assets	1,218	561
Property, plant and equipment	630,661	586,587
Financial assets	1,773,020	1,617,803
	2,404,899	2,204,951
Current assets		
Inventories	116	221
Receivables and other assets	676,772	880,514
Cash and cash equivalents	450,110	518,993
	1,126,998	1,399,728
Deferred expenses and accrued income	75	131
	3,531,972	3,604,810
Equity and liabilities		
Equity		
Share capital	168,721	168,721
Capital reserve	458,946	458,946
Revenue reserves	777,283	694,939
Unappropriated net profit	82,383	95,565
	1,487,333	1,418,171
Income grants received	33,046	34,728
Provisions	160,333	154,586
Liabilities	1,844,329	1,990,116
Deferred income and accrued expenses	9	–
Deferred tax liabilities	6,922	7,209
	3,531,972	3,604,810

Total assets decreased year-on-year by Euro 73 million to Euro 3,532 million, a development driven above all by lower wholesale prices for electricity and gas compared with the previous year.

The asset side of the balance sheet is largely shaped by financial assets. At 30 September 2024, these totalled Euro 1,773 million, equivalent to a 50 % share of total assets. The figures for the previous year were Euro 1,618 million and 45 % respectively. The increase in financial assets by Euro 155 million is chiefly attributable to higher loans to subsidiaries. Property, plant and equipment rose year-on-year by Euro 44 million to Euro 631 million. This was primarily due to investments in transmission and supply grids for all utilities.

Current assets decreased by Euro 273 million compared with 30 September 2023 to Euro 1,127 million. This reduction mainly resulted from the decrease in liquid funds on account of outflows of security deposits for counterparty default risk (margins), lower receivables from associates and a reduction in other assets.

Equity grew by Euro 69 million in the year under report and stood at Euro 1,487 million at the balance sheet date. At 42 %, the equity ratio at 30 September 2024 was higher than the previous year's figure of 39 %.

Provisions rose by Euro 5 million to Euro 160 million, with this increase being due above all to higher tax provisions. These mainly resulted from lower tax prepayments in the year under report, as well as from higher earnings at companies included in the fiscal unity.

Liabilities decreased by Euro 146 million to Euro 1,844 million. This reduction was principally due to the lower volume of liabilities to associates, as well as to lower liabilities to banks on account of repayments.

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.

2024 activity statements

With its 2024 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, metering operations, other activities within the electricity and gas sectors and 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 44 million for the year under report (previous year: Euro 44 million). The gross performance for the 2024 financial year was thus at the previous year's level. In terms of total electricity sector sales of Euro 926 million (previous year: Euro 1,072 million), sales in the electricity distribution activity are of subordinate significance.

Alongside income from leasing 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 2024 was opposed by corresponding other operating expenses. The electricity distribution activity field generated an annual net deficit of Euro 0.3 million in the 2024 financial year (previous year: annual net deficit of Euro 2 million).

At 30 September 2024, total assets in the electricity distribution activity field came to Euro 181 million (previous year: Euro 168 million), corresponding to a 52 % share of total assets in the electricity sector at MVV Energie AG (previous year: 39 %). Property, plant and equipment relating to electricity distribution increased compared with the previous year's balance sheet date. At Euro 171 million (previous year: Euro 158 million), this item accounted for a 94 % share of total electricity distribution assets (previous year: 94 %). On the equity and liabilities side of the balance sheet, electricity distribution liabilities increased from Euro 83 million to Euro 87 million. These mainly involve liabilities to banks.

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 1.1 million were reported for metering operations using modern measuring equipment and intelligent measuring systems in the year under report (previous year: Euro 0.9 million). Gross performance for the 2024 financial year therefore amounted to Euro 1.1 million. Measured in terms of total electricity sector sales of Euro 926 million (previous year: Euro 1,072 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 leasing its electricity meters (mME/iMSys).

Earnings were countered by depreciation of Euro 0.8 million on the electricity meters (mME/iMSys) recognised under non-current assets at MVV Energie AG (previous year: Euro 0.7 million). In the 2024 financial year, mME/iMSys metering operations posted an annual net deficit of Euro 202 thousand (previous year: annual net deficit of Euro 118 thousand).

At 30 September 2024, total assets in the mME/iMSys metering operations activity field stood at Euro 4.1 million (previous year: Euro 3.9 million), corresponding to a 1.2 % share of total assets in the electricity sector at MVV Energie AG (previous year: 0.9 %). At the balance sheet date, property, plant and equipment relating to mME/iMSys metering operations amounted to Euro 4.1 million (previous year: Euro 3.9 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 2.3 million were reported for mME/iMSys metering operations (previous year: Euro 2.3 million). These mainly involve liabilities 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 26 million). Gross performance was thus at the previous year's level. Compared with total gas sector sales of Euro 117 million (previous year: Euro 142 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 2024 was opposed by corresponding other operating expenses. The gas distribution activity field generated annual net income of Euro 3 million in the year under report (previous year: Euro 4 million).

Total assets in the gas distribution activity field amounted to Euro 146 million at the balance sheet date on 30 September 2024 (previous year: Euro 141 million) and accounted for some 73 % of total assets in the gas sector at MVV Energie AG (previous year: 62 %). At Euro 140 million, property, plant and equipment in gas distribution was Euro 5 million higher than in the previous year and made up 96 % of total assets in this activity field (previous year: 96 %). On the equity and liabilities side of the balance sheet, gas distribution liabilities decreased from Euro 72 million to Euro 71 million. These primarily involve liabilities to banks.

Corporate Governance Statement (§ 289f, § 315d HGB)

Publicly listed companies are obliged under § 289f of the German Commercial Code (HGB) to submit a Corporate Governance Statement. 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 Supervisory Board committees and on the equal participation of women and men in management positions.

The Corporate Governance Statement with the Declaration of Compliance was published on our website at mvv.de/corporate-governance on 7 November 2024.

Declaration pursuant to § 312 Aktiengesetz (AktG)

The Executive Board has compiled a report on relationships with associates for the 2024 financial year (dependent company report) pursuant to § 312 AktG, in which 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.

No measures as defined in § 312 AktG were executed or waived in the 2024 financial year at the instigation of or in the interests of the City of Mannheim or its associates.”

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

The non-financial declaration for the 2024 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.

Outlook, Opportunity and Risk Report

- Adjusted EBIT expected at between Euro 350 million and Euro 400 million
- Investments set to rise significantly

Outlook

Macroeconomic developments

In their "Autumn Joint Forecast" for the 2025 calendar year, Germany's leading economic research institutes expect the country's gross domestic product (GDP) to grow by 0.8 %. This minor recovery is expected to be driven by growing consumer spending, which will be stimulated by the rise in real-term disposable incomes. Furthermore, the experts expect the German export sector to receive support from the economic upturn in major sales markets. In conjunction with improved financing conditions, this factor should benefit capital investment. Also based on these expectations, in its autumn forecast dated October 2024 the Federal Government expects to see an upturn in the economy in the 2025 calendar year and has predicted GDP growth of 1.1 %.

Business framework

Alongside macroeconomic developments, MVV's future business performance will be shaped above all by changes in energy and climate policy on national and European levels, as well as by regulatory interventions. We report on the changes in energy policy in the year under report in the [Business Framework](#) chapter.

Executive summary

All in all, we expect the energy industry, and thus MVV as well, to continue to face far-reaching changes in the medium to long term. With our [Corporate Strategy](#) and its focus on climate protection and decarbonisation, we have been preparing for these changes for years now.

National and international climate protection efforts and legislative initiatives encourage us that our target of becoming #climatepositive by 2035 is right and important. To achieve this target, we will maintain an unrelentingly high pace for our activities to make a reality of the heat transition, implement the electricity transition and expand our climate neutrality solutions for customers. To this end, we intend to significantly increase our investments in the years ahead and thus create a basis for sustainable and profitable growth. In working towards our ambitious targets, we are also continually reviewing our investment portfolio.

Overall, we assume that our broad-based business model will continue to provide stability once again in the 2025 financial year.

Group earnings performance

Alongside weather conditions, the earnings performance of our Customer Solutions reporting segment is particularly dependent on the market and competitive climate. Now that wholesale prices on the energy markets have declined, we also expect to generate lower earnings in our energy trading business and from marketing renewable energies. For the 2025 financial year, we therefore expect adjusted EBIT in this segment to fall significantly short of the previous year's figure.

In the New Energies reporting segment, by contrast, we expect to see a significant rise in adjusted EBIT. Here, we expect stable earnings from our environmental energies plants and higher earnings contributions from project development. In general, earnings in the New Energies reporting segment are influenced by the development in waste and biomass prices and volumes, wholesale prices on energy markets and availability levels at our plants, as well as by weather conditions and wind volumes. In addition, the development of wind and photovoltaics projects is by its very nature highly volatile.

We expect adjusted EBIT in the Generation and Infrastructure reporting segment to be at the previous year's level. Earnings in the Generation and Infrastructure reporting segment are affected above all by the development in procurement costs for fuels and CO₂ emission rights, as well as by weather conditions and availability levels at our plants.

In addition to the factors listed above, our expectations concerning adjusted EBIT also depend on further macroeconomic developments and conditions on the energy markets. Furthermore, our forecast assumes that no geopolitical situation will arise that leads to restrictions in the availability of commodities, compromises supply chains or results in any other crisis scenario.

We are currently not aware of any factors that could have any exceptional influence on our earnings for the 2025 financial year. Based on the assumptions for our reporting segments, from an operating perspective we therefore currently expect adjusted EBIT at the Group to amount to between Euro 350 million and Euro 400 million in the 2025 financial year.

Earnings performance of MVV Energie AG in separate financial statements

For the 2025 financial year, we expect annual net income after taxes at MVV Energie AG to be at approximately the same level as in the previous year (Euro 165 million). Earnings in the separate financial statements are particularly influenced by weather conditions, grid operations, the sales business and income from group shareholdings.

Dividend

We aim to pay a dividend to our shareholders that is aligned to MVV's earnings performance. In view of this, the Executive Board has decided to raise the regular dividend by Euro 0.10 per share compared with the previous year and to propose a dividend of Euro 1.25 per share for approval by the Annual General Meeting on 14 March 2025. The Supervisory Board will decide in December 2024 on its dividend proposal to the Annual General Meeting.

Investments

From a current perspective, we will significantly increase our investments in the 2025 financial year compared with the previous year (Euro 417 million).

Development in Group's return

The objectives of our [Value-Based Corporate Management](#) are to sustainably increase MVV's value as a company and to offer an attractive dividend to our shareholders. To this end, we aim to achieve a return (adjusted ROCE) on the average capital employed that is higher than the cost of capital (WACC). In view of the expected level of earnings and high volume of planned investments, we expect adjusted ROCE to exceed the cost of capital in the 2025 financial year, but nevertheless to fall significantly short of the previous year's figure.

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 to the best of its knowledge 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 is in a process of transformation. Numerous national and international actors are stepping up their efforts to protect the climate and make their businesses sustainable. MVV is actively helping to shape this transformation. With our “Mannheim Model”, we intend to be one of the first energy companies in Germany to become #climatepositive.

Due to geopolitical and macroeconomic developments, however, the uncertainties facing our industry have increased. Based on our assessment, these uncertainties will continue to apply in the near future as well.

Uncertainties, i.e. opportunities and risks, form part of our entrepreneurial activity. Our corporate management is responsible for identifying these at an early stage. In this, it exploits opportunities and counters risks with suitable measures. To this end, we draw on the one hand on our risk management system (RMS), with which we record relevant developments at an early stage, and on the other hand on our internal control system (IKS) in respect of the financial reporting process, which serves to ensure correct and uniform financial reporting.

Explanation of internal control system (IKS)

Financial reporting IKS

General provisions

Our internal control system (IKS) in respect of the financial reporting process comprises all principles, processes and measures introduced by the company's management, executives and other parties that are primarily aimed at ensuring reliable and prompt financial reporting with an adequate degree of security. We base the structure and processes of our IKS on the globally recognised and widespread reference model of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) reference model. We have adopted a risk-based approach in which those organisational units, processes and systems with greater risk exposure are safeguarded more closely by control activities than those with lesser risk exposure.

The financial reporting covered by our IKS comprises the quarterly statements, interim consolidated financial statements, half-year financial report, consolidated financial statements and combined management report of the MVV Group, as well as the separate financial statements of MVV Energie AG.

IKS management

Our IKS management experts ensure that our IKS functions reliably and is continually developed further. The central IKS manager ensures that MVV has an effective IKS with uniform groupwide requirements. To this end, he develops the principles for the structure, processes and documentation of our IKS, including necessary IT solutions. Furthermore, he supports and monitors implementation of these requirements at the group companies included in the IKS. On the level of group companies and cross-departmental functions, IKS officers bear decentralised responsibility for the functionality of the IKS. These officers are appointed by managers with legal responsibility for the respective area and, in this capacity, also report to the central IKS manager.

Control environment

The foundation for our IKS is provided by a well-functioning control environment. This provides the framework for implementing the principles, processes and measures of our IKS and has the following key features:

- “Lived Energy”, the programme jointly developed by our Executive Board, managers and employees, sets out the values guiding our company and governs the way all staff members behave both towards each other and towards third parties.
- We have regulated the allocation of competencies and responsibilities within the company (organisational structure) in the form of organisational structure charts and job descriptions.
- For all company processes relevant to the IKS (process structure), there are up-to-date process diagrams, manuals and implementation guides. Control activities are documented in risk and control matrices together with the requirements for performing such activities.
- We safeguard the required specialist and personal skills of our employees with the assistance of job descriptions; these set out the relevant requirements in holders of the respective positions.
- We permanently raise awareness of the need for and benefits of the IKS by providing presentations and training, as well as by sharing information and experience within the company.

Risk assessment

Our overriding IKS objective of ensuring reliable and prompt financial reporting is adversely affected by risks arising above all due to amended or incorrectly functioning internal processes, amended or malfunctioning IT systems, erroneous conduct on the part of persons (whether unintended or intended) and internal and external events (such as company acquisitions or new accounting standards).

At MVV, the systematic assessment of risks relating to the company's financial reporting is performed on several levels. Our IKS management each year reviews all group companies based on suitable criteria to assess their materiality and thus determine whether they are to be included in the groupwide IKS and, if so, on the basis of which requirements. Furthermore, our IKS management holds workshops with representatives of group companies that have been newly included. At these, it identifies and evaluates operative IKS objectives and those risks which counter compliance with such for all IKS-relevant processes. Moreover, managers responsible for processes directly or indirectly involved in financial reporting perform a review at least once a year to ascertain whether their operative IKS objectives and existing risks are up to date and complete. They are supported in this by their respective IKS officers.

Control activities

The control activities we have introduced include all principles and processes intended to ensure that we suitably address the risks identified and meet our IKS objectives. These control activities affect all levels of the company and processes and can basically be subdivided into written requirements in which, among other content, the IKS objectives are formulated and into measures and processes intended to ensure implementation of these requirements.

The control activities for all IKS-related processes at MVV are based on defined policies, manuals, work instructions and the like. We draw on suitable internal checks to safeguard correct implementation of the requirements, which are stipulated with due consideration of the risks identified. Each year, we review our policies and manuals to ensure that they are up to date and our control activities to check their suitability to reduce identified risks as intended.

At all group companies and cross-departmental functions relevant to the IKS, irrespective of their size, application is made of a uniform minimum level of operative IKS objectives. This has to be backed up with suitable internal checks. Among others, these include strict separation of critical functions in all IKS-related processes, as well as the regular review of access authorisations to the IT systems relevant to financial reporting.

Over and above this minimum level, group companies and cross-departmental functions have further internal checks in place depending on relevant risk factors, such as their materiality to the Group or the complexity of their business models. These checks safeguard those processes that harbour risks for financial reporting, such as the placing of orders with and payment of suppliers, hiring and payment of employees, metering and billing of services performed, management of liquidity, ongoing recording of business transactions, inventories of non-current and/or current assets, preparation of the separate and consolidated financial statements, preparation and publication of the combined management report or the preparation and submission of tax returns. Internal checks take a variety of forms, such as the dual control principle, approval limits, signing powers, review and approval by managers, data reconciliation, plausibility checks, or checks to ascertain completeness and correctness.

Alongside the checks we have anchored in the financial reporting and other operative processes, we have also secured our IT systems and the processes required for them to operate reliably with suitable general IT checks. Examples here include role-based authorisation management governing access to our accounting systems, the prevention of critical combinations of authorisations, separate responsibilities for systems used for development, tests and productive use and measures to prevent the loss of data, system downtime or malware attacks.

Communication and information

The IKS is intended to ensure that the relevant company departments always have all the information they need at the right time and in the necessary quality. To this end, we generate relevant information internally or procure it externally and subsequently communicate it as appropriate within the company.

Our employees receive or themselves compile information about their tasks and responsibilities relating to the IKS in the form of organisational manuals, company manuals and the like. We supplement this information with policies, manuals and work instructions for all relevant processes. We present the processes and embedded internal checks in visual form in process charts; risk and control matrices contain all details on internal checks. We use IT solutions to support and document the execution of control activities. The IKS management also performs training and offers advice and support.

If they suspect potential misconduct, our employees can also use an anonymous whistle-blower hotline operated by an external confidence lawyer commissioned by MVV.

By regularly sharing information between IKS management and group internal audit, we ensure that these two key players are at all times informed about all current developments in connection with our IKS.

The IKS manager reports on the status of Group IKS to the relevant head of department on a quarterly basis and to the Executive and Supervisory Boards of MVV Energie AG on an annual basis. The status reports submitted by the IKS manager are based, among other aspects, on information from the decentralised IKS officers, data from the central IKS management IT solution and feedback received from the IKS audits performed by the group internal audit department.

Supervision and improvement

The IKS in place at MVV is continually supervised and improved on several levels.

With support from IKS management, our managers perform a self-assessment on the effectiveness of the IKS in their area of responsibility at least once a year. To this end, they assess the appropriateness of the existing IKS structure and assure themselves that control activities have been performed as envisaged. The findings of these self-assessments are drawn on to further improve the IKS.

The effectiveness of the IKS is safeguarded in all IKS-relevant processes IKS by the staff responsible for the respective processes and by IKS experts. Together, they ensure that the IKS documentation appropriately presents the actual structure and processes of the IKS and that the regulations on the structure and processes of the IKS presented in the IKS documentation are fundamentally suitable to achieve IKS targets. Furthermore, the staff responsible for processes and IKS experts continually monitor whether the regulations on the structure and processes of the IKS are complied with as envisaged. Together with managers, the central IKS management also supervises our IKS by managing and supervising the implementation of control activities with the assistance of IT tools and by initiating an escalation process in the event of non-compliance with the requirements.

As the managers with legal responsibility, the managing directors and board members of the group companies included in the IKS and the heads of cross-departmental functions included in the IKS submit an annual formal declaration of compliance in which they confirm that the IKS in their area of responsibility is effective and also meets MVV's requirements.

As an independent body, the group internal audit department at MVV Energie AG regularly audits all group companies and cross-departmental functions included in the IKS to assess the appropriateness and effectiveness of the respective measures. Any deficiencies are reported and promptly remedied by the managers responsible.

The Executive and Supervisory Boards of MVV Energie AG fulfil their duty to supervise the IKS in respect of the financial reporting process by being informed by the IKS management each year about the status of the financial reporting IKS. From the perspective of MVV's Executive Board, the financial reporting IKS is fundamentally appropriate and effective.

Sustainability-related IKS

To avoid potentially erroneous disclosures in our sustainability-related reporting, we have put processes in place to collect, process, check the plausibility of and review non-financial data. In addition to the checks performed in our specialist departments, in our report compilation process we also apply the dual control principle. In the context of preparing to report in accordance with the Corporate Sustainability Reporting Directive (CSRD) from the 2025 financial year, we will further expand our sustainability-related internal control system (IKS) on this basis in order to raise it in the medium term to the level of our internal control system (IKS) for the financial reporting process.

From the perspective of the Executive Board, there are no indications that material aspects of the sustainability-related IKS are impaired in terms of their appropriateness and effectiveness.

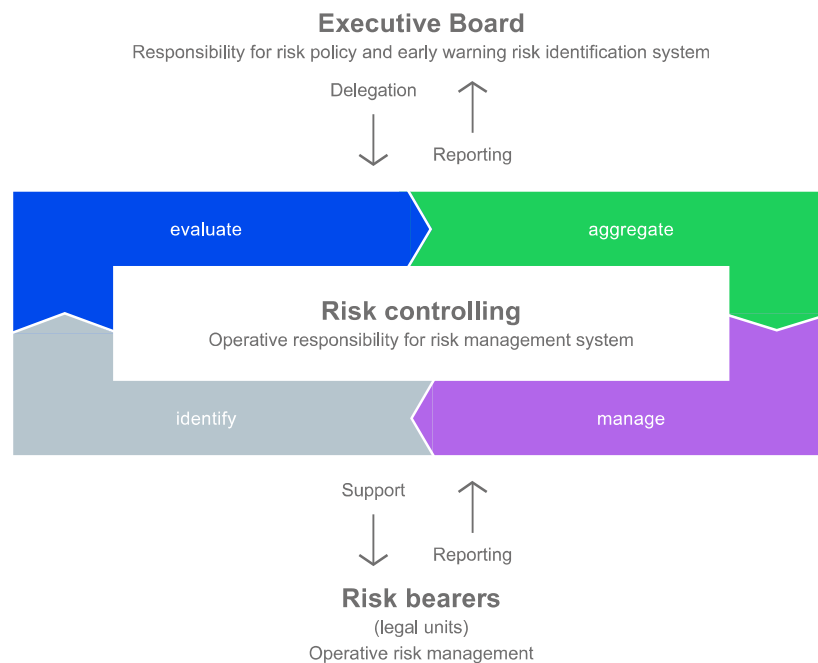
Explanation of risk management system (RMS)

Our RMS aims to detect opportunities and risks that may lead to a positive or negative financial variance in our company earnings compared with our planning or forecast at an early stage of developments. We reduce risks wherever possible or pass them on to third parties. To this end, we devise suitable measures and monitor their implementation. By its nature, however, an entrepreneurial climate also involves deliberately accepting risks or uncertainties if these are countered by suitable opportunities.

Risk management in context of MVV's strategy

The strategy pursued by MVV has direct implications for our financial risk management, as do the projects we are implementing and the whole of our operating business. The opportunities and risks therefore reflect the potential and challenges presented by the transformation towards greater sustainability and climate-positive business activity. We operate here on the one hand against a backdrop of great market uncertainty and complexity and on the other hand in a context shaped by growing sustainability requirements, for example due to the EU Taxonomy and implementation of the Corporate Sustainability Reporting Directive (CSRD).

Risk management system



Basic principles and organisation of RMS

The Executive Board determines the risk policy and lays down all processes and responsibilities. Operative risk management is incumbent on the “risk bearers” in the operating business units. These are the employees who are included in the chain of responsibility for operating earnings at their respective business units. They regularly review the business situation, identify opportunities and risks and assess the implications of these for adjusted EBIT. They report their assessments in standardised form to the central risk controlling function. The risk bearers also implement measures to avoid, manage or reduce risks and to exploit opportunities. Our central risk controlling function monitors the risk situation at the Group. It observes relevant opportunities and risks and compiles an opportunity/risk profile. This aggregation is performed using probability calculation methods. The profile accounts for all countermeasures to reduce risks and therefore represents a net analysis.

The Executive and Supervisory Boards are provided with a quarterly risk report presenting the Group's opportunity/risk profile. We immediately report any significant new risks or material changes to the Executive Board, which in turn informs the Supervisory Board as appropriate.

Supervision

The RMS is implemented, maintained and supervised by the executive boards and managing directors of the group companies. Our group internal audit department audits the system regularly as part of its risk-based audit plan and identifies any potential weak points. The Executive Board is informed about the risk management status regularly and whenever specific events require report.

The Supervisory Board and Audit Committee monitor the appropriateness and functionality of the RMS.

Presentation of opportunity/risk situation

In the following section we describe MVV's current opportunity/risk situation. We assess this with the assistance of probability distributions. To this end, we use both constant distribution functions (as a general rule beta distribution) and discrete event-dependent distributions. We also use historic data as input to make assessments for the future. The bandwidths and probabilities of occurrence are determined by reference to expert surveys and assessments by specialist units. For long-term risks, the increasing degree of uncertainty over time is accounted for with larger bandwidths in the respective budget years. The totals for all opportunities and risks are aggregated into an opportunity/risk profile using a Monte Carlo simulation. As we allocate opportunities and risks in each case to one of our six categories, we compile an opportunity/risk profile for each category and present the potential impact on earnings as a proportion of the Group's budgeted adjusted EBIT. The risk key figure we refer to is conditional value at risk. This presents the probable average maximum damages in the given financial year. We consider the potential earnings impact in three risk levels, stated as a percentage of MVV's planned adjusted EBIT: low (0 % to 10 %), medium (10 % to 40 %) and high (> 40 %). We report on our adjusted EBIT forecast in the [Outlook](#) chapter.

Expected risk situation

In addition to the opportunities and risks typical to its business, the Group's risk situation currently continues to be determined by the development in interest rates, crisis-related market price and financing risks, ongoing geopolitical uncertainties and the development in the political and legal framework. Our business is increasingly being influenced by risks resulting from macroeconomic developments and the pace of decarbonisation. Furthermore, we see operating risks, such as cyber risks, credit risks, risks relating to the availability of critical raw materials and operating resources and risks relating to the availability of specialist staff. MVV is responding to these uncertainties with numerous operating measures and initiatives. We present detailed comments on the principal opportunities and risks in the six categories presented in the chart below.

Expected risk situation in FY 2025

Risk category		Risk class
PRICE RISKS	» Market prices: • Clean dark spread • Clean spark spread » Procurement prices: • Energy, waste and biomass • Supplies and operating resources, components and hardware » Exchange rates and interest rates	Medium
VOLUME RISKS	» Sales volumes: • Weather conditions and wind volumes • Economic climate » New orders in the renewables, services and customer solutions businesses » Competition and efficiency » Procurement for waste and biomass	Medium
OPERATING RISKS	» Renewable energies project development » Construction projects » Plant operation » Supply chains » Personnel capacities » IT risks	Medium
LEGISLATIVE RISKS	» Regulation » Legal risks » Legal interventions in operating business	Medium
FINANCING RISKS	» Receivables default » Refinancing » Liquidity » Countries	Medium
STRATEGIC RISKS	» Strategic decisions (including investments)	Low

Risk¹ 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

Price opportunities and risks

In the price opportunities and risks category, we summarise commodity price fluctuations on the procurement and sales markets, as well as exchange rate and interest movements. We deploy financial instruments, including commodity, currency and interest derivatives, to limit these risks. In the context of hedge accounting, these economic hedging relationships are recognised on a proportionate basis as hedges in the balance sheet.

Level of procurement prices and volatility continue to present challenges

We procure the predominant share of the energy volumes required by our sales department for customer supplies on the energy trading market. To mitigate the risks resulting from fluctuating energy procurement prices, our energy trading subsidiary MVV Trading concludes futures transactions, taking due account of our applicable hedging regulations. We thus raise the consistency of our earnings, obtain a higher degree of planning reliability and reduce the impact of fluctuating market prices on our procurement costs and customer sales prices.

Furthermore, against the geopolitical backdrop potential supply bottlenecks and delays may give rise to price risks for commodities, materials or supplier products. Particularly worth mentioning in this respect are raw materials and supplies for power plant operations, as well as components such as photovoltaics systems, batteries, wall boxes, transformers, smart meters and cables. We are also noticing risks to the availability of service providers for plant construction and installation.

Fluctuating procurement and sales prices may result in significant opportunities and risks. Such situations may create economic difficulties for individual market players and threaten the performance of contracts. In particular, insolvencies among competitors may mean that customers return to the basic supply at short notice. For these customers, early hedging is not possible, thus leading to a margin risk for MVV as a basic supplier. Moreover, the potential procurement of replacement resources due to defaults among trading partners may result in a price risk, one that MVV controls by actively managing trading limits. The energy trading activities at our MVV Trading subsidiary have their own risk management function. This monitors and manages the opportunities and risks involved in energy trading on an operating level and is integrated into the group risk management.

Dynamic recent changes in interest rates

Our finance department continually monitors interest rate risks. Where possible, we finance our investment projects with fixed interest rates. In our company planning, we have accounted for the expected impact of interest rates when projects are refinanced. Changes in interest rates also impact on our project development business. If interest rates rise, for example, demand for renewable energies projects may fall as other forms of investment become more attractive for investors.

Fluctuating procurement prices for waste and biomass

We observe and assess potential opportunities and risks from fluctuating waste prices in the German and British markets. We also track the development in biomass prices across Europe. Our material and substrate flow management enables us to identify potential risks at an early stage and mitigate these with suitable measures.

Price risk from the upstream grid

In our supply grid regions, the volumes of electricity procured from the upstream transmission grid may fluctuate. The variances in these volumes are associated with fluctuating procurement prices.

Lower level of energy prices on wholesale markets

Against the backdrop of geopolitical and macroeconomic developments, we continue to observe volatile prices on the wholesale markets, a factor which impacts on our electricity generation margins such as the CSS and CDS. The clean dark spread (CDS), the clean spark spread (CSS) and the result achieved from marketing electricity from the generation plants in our environmental energy business are calculated as the difference between electricity revenues on the wholesale markets and the costs incurred to generate the electricity. These costs include the costs of CO₂ emission rights, of coal for the CDS, gas for the CSS and substrates for the generation plants in our environmental energy business. Where appropriate, we also include transport costs and currency translation differences. We work with suitable hedging strategies to limit the potentially negative implications of these price fluctuations on our generation portfolio.

Risks countering marketing opportunities may arise due to restrictions in the technical availability of our generation capacities. No interventions by lawmakers in the plant management and operator strategy are currently discernible. However, such interventions may change our opportunity/risk profile in future.

In the event of a renewed rise in energy price levels, the uncertainty resulting from fluctuating spreads and energy prices when marketing our existing generation capacities in the Generation, Environmental Energy Germany and Environmental Energy UK business fields may be countered by growth opportunities in our renewable energies business fields. Marketing renewable energy generation sources together with partners, for example, enables us to exploit market price opportunities, supply our customers with energy products resulting from sustainable generation and promote our goal of becoming #climatepositive.

Volume opportunities and risks

Our operating earnings may be positively or negatively influenced by fluctuations in volumes on the procurement, generation and sales fronts. The associated fluctuations in the volumes of energy transported also create opportunities and risks for our grid operations.

Fluctuations in turnover due to weather conditions and wind volumes

Two key factors influencing our business performance are weather conditions and wind volumes. Opportunities and risks arise for our business performance if temperatures during the heating period and/or annual wind volumes deviate from our expectations. In combination with relevant price movements, these factors produce opportunities or risks for our business performance.

Macroeconomic developments impact on generation and sales volumes

Due to its close links to developments in the overall economy, and in particular to those arising due to changes in the energy market, MVV is directly affected by macroeconomic developments. Any variance in the production volumes at our generation plants from planned marketing volumes may therefore result in financial risks.

Furthermore, economic developments and the energy markets are particularly significant factors if major industrial and commercial customers that we supply with energy cut back their production due to the economic situation or supply bottlenecks and therefore procure lower volumes of energy from us. Conversely, our commodity sales volumes increase if such customers step up their production due to economic developments or their strong competitive positions.

Availability and quality of waste and biomass are highly significant factors

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

Further macroeconomic developments and potential reductions in industrial and commercial production and waste volumes may impact negatively on waste prices and procurement volumes. Due to changes in availability or to price and regulatory factors, the production volumes at our generation plants may fluctuate.

Changes in sales volumes also impact on grid fees and sustainability-related opportunities

Any changes in sales volumes also affect the volume of grid fees we collect. This also applies to customers that we do not supply but who procure their energy in our grid region. Lower volumes reduce grid fees, while higher volumes lead to rising grid fees.

Non-commodity solutions

Alongside the businesses of supplying our customers with energy and marketing our generation capacities, the non-commodity business is a further significant factor for our business performance. Against a backdrop of growing climate protection requirements, we act as partners to our customers and support them with innovative, sustainable and competitive products or services offering great customer benefits. Their implementation involves both the potential to create value and volume risks.

Factors particularly worth mentioning in this regard are the numbers of projects realised for photovoltaics, wind power, heat pumps, data centres and the scope of services and individual customer solutions for decarbonisation. In terms of demand, the volume of sales achievable in the non-commodity business increasingly fluctuates in line with political and legal requirements and changes in financing incentives, as well as with macroeconomic developments and geopolitical uncertainties.

Operating opportunities and risks

MVV's operating opportunities and risks chiefly arise in connection with its renewable energies project development business and with the construction and operation of energy generation plants and grids. More recently, digitalisation and IT security in particular have presented additional uncertainties.

Uncertainties in project development business

Decentralised renewable projects generally have shorter planning and construction stages than large-scale generation plants. These projects nevertheless also involve uncertainties. The development in the relevant markets depends both on political regulation and on levels of public acceptance. Key opportunities and risks in the wind turbine and photovoltaics system project development business result above all from the regulatory climate, the scope and structure of future project tenders and the development in market interest rates. We also face opportunities in our renewable energies business given our extensive expertise and great competence in project development and operations management. Progress with projects may be adversely affected by delays in obtaining building or operating permits, or failure to obtain such, as well as by ever higher approval requirements.

The performance of our services and projects for data centres and individual customer solutions for decarbonisation also depends on developments in the market climate.

Further risks result from potential supply delays or bottlenecks and price increases at upstream suppliers and for supplier products. These may affect photovoltaics systems, batteries, wall boxes, transformers, smart meters and cables that we then cannot factor into our sales planning in the short term. This in turn may create delays in project stages, operations launches and projects. We have taken measures to counter these risks within our procurement management.

Alongside project implementation risks, we also face risks resulting from the potentially limited availability of specialist personnel and tradesperson capacities at our partners. We therefore focus on securing adequate available installation and tradesperson capacities.

In the international business, our financial success is determined by political and macroeconomic developments in our target markets. Major uncertainties arise from potential disruptions in international trade relationships, which may impact on market access and competitiveness, as well as from potential further interventions in subsidy regimes. At the same time, we also face opportunities here given our extensive expertise and great competence in project development and operations management in the renewable energies business.

Risks from progress with construction projects unchanged

Large-scale generation plants and grid infrastructure have long planning and construction stages and harbour corresponding risks. Delays in the delivery of materials, delayed completion and operations launches for major projects, unplanned costs to procure substitute electricity and heat, additional unplanned material expenses due to new developments, price rises arising at short notice at upstream suppliers or shortages of installation capacities may result in construction and project delays and margin risks and thus impact negatively on our expected adjusted EBIT.

We counter these risks 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 unchanged

The operation of energy generation plants and grid facilities to supply our customers involves substantial operating uncertainties. Unscheduled downtime at plants may lead to a loss of production or interruptions to supplies. These may also require additional financial outlays, for example to repair the plant, for substitute supplies to our customers or for contractual penalties.

To safeguard supply reliability and reduce plant operation risks, for our existing generation capacities we rely on regular maintenance and monitoring measures. This way, we aim to minimise downtime at our plants and potential resultant risks while also doing justice to our claim to be a partnership-driven supplier. Due to the nature of the issues involved, we nevertheless cannot wholly exclude the possibility of downtime. To counter this risk, we optimise scheduled inspection times within our maintenance strategy. This assists us both in realising opportunities due to higher generation volumes and in avoiding operating risks. To limit the financial implications of any potential damages, we have agreed suitable insurance policies. However, these only partly cover the effects of unscheduled downtime.

Personnel developments noticeable

Our employees form the foundation for our company's success. We work with numerous measures to attract the right employees and retain them in the long term. We see our target of becoming #climatepositive as providing an opportunity for us to be viewed as an attractive employer. Risks may nevertheless also arise with regard to our personnel. Demographic change and the overall availability of qualified personnel in the market may lead to capacity risks for specialist staff, both in MVV's business fields and at our cooperation partners for installing and servicing new energy solutions. The extent of these risks also depends on the attractiveness of the company and the individual location. To enable us to fill key positions as efficiently as possible, we provide our staff with targeted training and adapt our recruitment activities accordingly.

Digitalisation and IT security as highly significant factors

Digitalisation is associated with growing risks, particular with regard to IT security. To assess the consequences of any interventions in our IT systems, we evaluate the risks resulting from any interruption to our operating processes, recovery costs for data, systems and customer confidence and from any material damage to our facilities and systems. Secure data storage and interruption-free information technology are crucial for our business processes. In this regard, our staff receive regular training on information and data protection and our information security systems are permanently monitored, continually updated and if necessary extended.

We reduce our IT risks by implementing extensive technical and organisational measures and by drawing on insurance solutions where these are available. We make use of security systems and are restrictive in granting access authorisations to systems and information. To counter the growing IT threats due to blackmail and malware and the intensification in the cyber-IT risk situation for critical infrastructure, we are continually optimising and developing additional measures to enhance our IT security. Together with external consultants, we regularly review and enhance our cyber-IT security.

Legislative risks

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

Regulatory uncertainties continue to apply, while innovative products and sustainable energy generation harbour opportunities

Companies operating in the energy industry face the risk and the opportunity that lawmakers and authorities may amend the regulatory framework. Energy and climate policy decisions have significant implications for our future business performance. Examples here include regulations governing the expansion in renewable energies and requirements to achieve national sustainability and climate protection targets.

One consequence of the geopolitical crises involves the increased efforts to rapidly convert electricity and heat generation and their distribution to a sustainable approach.

The legislation underpinning the coal exit harbours both risks and opportunities for MVV. Risks result from potential legal restrictions or interventions in our planned plant operations to generate district heat and electricity. There is also uncertainty as to the economic viability of short-term replacement and renewable investments for plants that have already been decommissioned in line with government plans.

We see the legal framework for transitioning to sustainable energy generation as presenting challenges but also potential. We are actively and consistently seizing this potential with innovative products, such as the measures to establish green heat supply structures, individual customer solutions and new components of a circular economy within our Mannheim Model. We are currently observing a high degree of uncertainty in the market given the discussions surrounding the German Building Heating Energy Act (GEG), associated subsidy measures and municipal heat planning.

These challenges apply not only to our activities in Germany, but also to our international business. We counter these risks actively by participating in the political opinion-forming process, adapting our processes and business models and developing suitable products. This way, we are also able to exploit opportunities.

Focus on managing legal risks

Our [Compliance Management System \(CMS\)](#) helps us to minimise any infringements of the law. We manage any compliance risks with our CMS while simultaneously recording these in the risk management system (RMS).

MVV's business performance is also exposed to risks and opportunities which result from legal pronouncements on energy industry matters or other topics. These could, for example, limit or also extend our ability to structure contracts or, due to legal requirements, restrict our ability to include potential additional costs in our sales prices.

Financing opportunities and risks

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

Monitoring and actively managing refinancing and liquidity

The possibility of being unable to obtain liquid funds, or not to the full extent required, is referred to as refinancing and liquidity risk.

Given fluctuations in market prices, we continue to monitor our liquidity management closely on our relevant markets. We work with automated assessments to analyse potential future developments and factors influencing the liquidity positions in our wholesale activities at an early stage.

The analysis focuses above all on the cash-effective security deposits required for wholesale trading as a result of market price fluctuations. Referred to as margins, these involve requirements customary to the industry in terms of depositing cash-effective financial collateral to open trading positions (initial margins) and cover subsequent fluctuations in market prices (variation margins). The initial margin, which always results in a deposit obligation, depends on the current level and volatility of market prices. To ensure that we always have sufficient liquid funds even in the event of larger-scale fluctuations, our margin and liquidity management and forecasts are integrated into our control processes. We also maintain cash lines. If need be, we can identify any need for action at an early stage, take countermeasures and conclude off-market transactions. In this, we account for potential receivable default risks.

Limiting uncertainties with active receivables management

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, for example, or in long-term supply relationships with business customers. Moreover, significant increases in energy product prices arising at short notice create the risk that individual wholesale partners may encounter financial difficulties, thus threatening fulfilment of the contractual obligations. To limit this kind of receivables default risk, we select our business partners systematically and with due commercial prudence, check their creditworthiness and, where necessary, agree securities, such as guarantees. Moreover, we diversify our portfolio to avoid clusters of default risks as far as possible.

In times of growing macroeconomic uncertainties, delays and defaults may arise in the settlement of outstanding receivables, also to an increasing extent among end customers. We proactively counter this risk with our active receivables management and have also established assistance programmes for particularly vulnerable retail customers.

Ongoing focus on 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 New Energies reporting segment, country risks may impact on our adjusted EBIT. Before entering new international markets, we perform analyses of the 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 risk position, we may decide to leave the given market.

Strategic opportunities and risks

The energy policy and industry framework is changing dynamically. This transformation harbours strategic risks, but also creates new opportunities. Against this backdrop, 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.

Given the transformation in the German energy system and the scope of the political framework, our company has only limited planning certainty. We are tracking the decision by the Federal Government to exit from coal and head for climate neutrality with our own ambitious decarbonisation strategy. The framework for withdrawing from our conventional generation capacities is largely determined by the coal exit legislation and potential geopolitical factors, as well as by the respective local circumstances. This situation, and in particular the changes arising at short notice in the legal framework, creates significant opportunities and risks for our company that cannot be planned in advance.

We currently still see challenges and uncertainties surrounding the addition of onshore wind turbines, where implementation risks result from tough hurdles in approval processes, particularly in respect of aligning the interests of conservation, local residents and the duration of the processes needed to obtain a basis for planning.

Executive summary

Developments on the energy and procurement markets, and particularly those arising due to ongoing geopolitical crises, mean that the degree of uncertainty involved in entrepreneurial activity in the energy sector as a whole, and thus also for MVV, remains high.

Alongside the high level of competitive pressure, volatility on the energy trading markets, changes in energy and climate policy and regulatory interventions, with their impact on customer behaviour, have substantial implications for our business performance. The resultant planning uncertainty for MVV remains substantial, particularly with regard to long-term sustainable investments in electricity or heat generation plants or the development and expansion of service business models for our customers. In the renewable energies project development business, further developments in Germany will particularly depend on the provision of sufficient space, on processes being speeded up and simplified and on state subsidy initiatives. In our international target markets for renewable energies, key risk factors alongside the development in political frameworks and market access terms include local subsidy and market regimes and local macroeconomic developments.

One aspect that remains uncertain is how the opportunities, risks and challenges triggered by the ongoing geopolitical crises will develop in the medium and long terms. Key foreground issues are our supply chains, the availability of commodities and materials, the development in their prices, demand for qualified specialists, the ability to secure installation and tradesperson capacities and, to a growing extent, the cumulative impact of these individual factors on macroeconomic developments, including the availability of subsidies. Various government bodies on both international and national levels are attempting to counter these developments with numerous measures and thus limit the impact on societies and economies. On this basis, our expectation is that our industry will continue to face fundamental changes in the medium and long terms as well and that this will create an additional high degree of planning uncertainty with regard to relevant underlying conditions.

We are monitoring all relevant developments and, despite these limiting conditions, are working to ensure that our opportunity/risk profile remains as well balanced as possible.

From the perspective of MVV's Executive Board, there were and are no indications that any risks, whether individual or in their aggregated entirety, 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. *From the perspective of the Executive Board, there are no indications that material aspects of the risk management system or compliance management system might be impaired in terms of their appropriateness or effectiveness.*