

# MVV Environmental Policy

## 1. Foreword

- 1.1 The natural resources of our planet are finite. Science has made it clear that we have already exceeded many of the planetary boundaries on a global scale. Therefore, we must handle the remaining resources with care to ensure that our livelihoods remain sustainable and livable for future generations.
- 1.2 The concept of planetary boundaries represents a framework of interconnected areas of action that must be addressed simultaneously and require a holistic perspective. The asserted transgression of long-term ecological carrying capacities is, on the one hand, linked to the significantly increased energy and resource consumption as well as greenhouse gas emissions, since economic growth and improvements in prosperity are still tied to the consumption of natural resources. On the other hand, the global population is continuing to grow, which means that only an integrated approach can lead to the necessary restoration within the planetary boundaries. These global ecological challenges demand a profound transformation in the way we manage our natural resources.
- 1.3 There are numerous interconnections between various ecological issues. Negative developments in one physical-biological category generally have adverse effects on other aspects.
- 1.4 For this reason, the EU has defined six different environmental areas to address these challenges. Four of them pertain to protected goods (climate, water, pollution prevention, biodiversity), while one focuses on what initially appears to be an economic area of action (circular economy). The EU has established clear long-term development goals for each of these areas, which have been translated into concrete policy measures through the EU Green Deal or will be in the coming years. These areas are a core component of the MVV sustainability strategy's areas of action and also play a central role in the context of CSRD reporting:

- 1. Climate Change and 2. Climate Adaptation: The EU's long-term climate goals aim to limit global warming to well below 2 degrees Celsius. In this regard, the complete phase-out of fossil fuels is a necessary condition, complemented using biogenic CO<sub>2</sub> sink potentials. Even if these goals are achieved, the frequency and intensity of weather and climate extremes are likely to increase, making corresponding adaptations necessary.

*References from MVV: The greenhouse gas emissions for which MVV is responsible are currently still too high, and the remaining CO<sub>2</sub> budget will only last for a few years. We aim to become #climatepositive by 2035 through CO<sub>2</sub> capture at our own facilities, thereby setting an example of how the energy sector can achieve a 1.5-degree pathway.*

- 3. Pollution: Air, soil, and water are polluted within the limits of legal thresholds. Absolute and specific pollutant inputs have negative effects on flora, fauna, and health. For this reason, the EU is pursuing a long-term "Zero Pollution Action Plan" to minimize emissions to the greatest extent possible or eliminate them entirely.

*References from MVV: The operation of our energy generation plants involving combustion processes is associated with pollutant emissions, particularly air pollution. Transitioning our production to renewable energy sources reduces these environmental impacts. Furthermore, we use substances of concern in our operations, which pose risks if mishandled. Through pollutant management, we aim to reduce our emissions wherever possible and make pollutant substitutions a standard practice.*

- 4. Water: The availability of drinking water as a human right is not only a significant challenge outlined in the 2030 Agenda (Sustainable Development Goal 6, SDG 6) for developing and emerging countries. Climate-induced water stress is also expected to increase in Europe and Germany, altering water availability. Moreover, there is a direct responsibility for global water usage through the water footprint of imported

goods and services. According to the United Nations' World Water Development Report 2023, water is predicted to become scarce in areas where it has been available in sufficient quantities until now. European companies are required, for instance, through the NFRD and CSRD, to increase transparency regarding how their business activities impact water and how water usage can be reduced to a minimum in the long term.

*References from MVV: As a supplier of drinking water, we fulfill the important task of providing essential public services. Additionally, water is used primarily for cooling purposes in energy generation. We aim to reduce our own water footprint while simultaneously maintaining the high standards of supply security.*

- 5. Biodiversity: The loss of biological diversity is considered one of the most severe ecological crises worldwide. Preserving biodiversity is essential for the survival of ecosystems and, therefore, must be protected without compromise. While climate protection can primarily be addressed through the management of greenhouse gas emissions, biodiversity remains strongly regionally anchored and is influenced by a variety of factors and levers. As it is still a "young" discipline in the political and economic context, the political focus is currently on land-use changes and the protection of existing biodiversity areas. Initial global biodiversity goals must soon be translated into actionable measures at the national and local levels.

*References from MVV: The energy industry is subject to strict regulations regarding the protection of local ecosystems. Furthermore, the loss of biological diversity is driven, among other factors, by climate change, environmental pollution, and water loss. MVV has already developed individual positions and concepts for addressing these drivers. Other drivers, such as land-use changes, are currently being examined regarding potential negative effects.*

- 6. Circular Economy (CE): CE is supposedly an economic topic. Supposedly economic because largely closed resource cycles are the key to more than halving the demand for primary resources while simultaneously reducing CO<sub>2</sub> emissions. This is not just about pure resource efficiency but about holistic system efficiency: By using existing resources intelligently and according to the cascade principle, they can create the greatest possible benefit. Therefore, the focus is on optimizing the entire economic system toward a zero-waste society.

*References from MVV: As an energy company, we bear a significant responsibility regarding the use of fuels, raw materials, and chemicals, as well as the handling of resulting waste and by-products. This also includes the circularity of input materials in renewable energy systems. We aim to increase the application of circular economy principles in our processes. Additionally, we operate thermal waste treatment facilities for municipal and commercial waste, as well as facilities for waste wood recycling and phosphorus recovery.*

- 1.5 MVV Energie, as a responsible and leading energy company in Germany, strives to reduce the negative environmental impacts of its business activities and the associated risks, ideally aiming to avoid them entirely in the future.
- 1.6 The long-term environmental goal is to burden our planet as little as possible through our business activities. For this reason, we have set ambitious targets for the aforementioned topics, which are ensured through this environmental policy.
- 1.7 This environmental policy applies to the entire MVV Energie AG group, including all fully consolidated subsidiaries. The specification of measures within management systems is implemented independently at the operational level within the business units.

- 1.8 The policy is reviewed annually. Should significant changes occur within this period, they will be adjusted independently of the regular review cycle.

## 2. Climate protection

- 2.1 As an internationally active energy company, we set ourselves the goal of driving the energy transition forward many years ago and have since pursued this goal with effective measures. A core component of our corporate strategy—and thus crucial for the allocation of our investments and the further development of MVV—is our climate protection strategy.
- 2.2 We are the first German energy company and one of the first three energy companies worldwide whose targets have been verified as Net-Zero compatible by the Science Based Targets Initiative (SBTi).
- 2.3 We pursue a long-term, climate protection-oriented strategy. This includes providing our customers with the most environmentally friendly energy possible and supporting them with innovative solutions to achieve their own energy transition and climate neutrality. Our climate protection strategy is based on the following pillars:
- The climate protection strategy is an integral part of our corporate strategy and a key component for the allocation of our investments and service priorities. It thus shapes our further development.
  - Our sustainability and decarbonization targets, along with the associated measures, have been validated by the Science Based Targets Initiative (SBTi).
  - Specifically on the topic of climate, we consistently include all sources of greenhouse gas emissions in MVV's climate balance, including our associated companies and joint ventures.
- 2.4 MVV will become #climatepositive by 2035: We will be one of the first energy companies to achieve negative total emissions - without offset projects or compensation certificates. We will reduce our entire carbon footprint - that is, Scope 1, Scope 2, and Scope 3 emissions - to net zero ("Net Zero") and become #climatepositive by 2035 by technologically upgrading our own biowaste digestion, biomethane, biomass, and thermal waste treatment plants.
- 2.5 To become climate positive, we aim to create our own CO<sub>2</sub> sinks for unavoidable residual emissions or enable the permanent and safe storage or utilization of greenhouse gases (BECCUS).
- 2.6 The overall responsibility for our climate protection strategy lies with the Executive Board; climate protection management is carried out by our sustainability management team. The climate protection goals form the basis of our strategic corporate planning; we operationalize them internally through additional detailed and interim targets. Our business unit managers refine our corporate strategy in a decentralized manner, taking local conditions into account. We evaluate the major investments of all business units at the corporate level regarding their contribution to #climatepositive.

## 3. Pollution

- 3.1 Environmental pollution is the result of human actions in a limited ecosystem. Society and companies like MVV rely on the environment to absorb pollutants. We release non-natural substances into air, soil, or water. The precautionary principle must be applied to environmental pollution. For this reason, the long-term zero-pollution vision is being pursued, including by policymakers.
- 3.2 As an energy company, we see it as our responsibility to continuously reduce the environmental impact of our business activities, operate our facilities safely and efficiently, and use resources responsibly. In doing so, we accelerate our innovation processes and deepen collaboration with customers, suppliers, and other partners to develop even more efficient production processes that also result in lower environmental impact.
- 3.3 The issue of environmental pollution or impact has been firmly embedded in MVV's business processes for many decades. Com-

pliance with legal or facility-specific emission limits is continuously monitored for our infrastructure and generation facilities. In line with continuous improvement, technical measures are implemented to enhance the environmental performance of the facilities, and this is tracked transparently and systematically within the (environmental) management system.

- 3.4 The types of infrastructure and facilities operated by MVV are primarily associated with air emissions. Our focus is on emissions as defined by the Industrial Emissions Directive, specifically the reduction of air emissions from the operation of large facilities requiring permits.
- 3.5 Since the use of fossil fuels involves combustion processes, pollutant emissions are generated in addition to CO<sub>2</sub> emissions. With the gradual decline of these combustion processes, absolute local pollutant loads are also decreasing. Replacing fossil energy generation at MVV entirely with green energy by 2035 will still not result in zero emissions. Furthermore, in addition to reducing pollutant emissions into the air associated with our business processes, achieving transparency regarding existing emissions into soil and water will also represent a future challenge.
- 3.6 Beyond the regulatory standards for pollutant emissions in Germany, our overarching goal is to reduce the negative environmental impacts related to our business areas in the long term. To achieve this, we plan to repurpose up to 95% of the phosphorus ash we generate operationally by 2030.
- 3.7 Even today, we comply with the legal or permit-specific emission limits. These values represent only the upper threshold. Our goal is to significantly fall below the legal limits wherever technically feasible and economically viable, thereby gradually reducing MVV's ecological footprint to a minimum. In the meantime, we also plan to reduce our air emissions of sulfur oxides (SO<sub>x</sub>), dust, and nitrogen oxides (NO<sub>x</sub>) to the levels of the new limits set by the Industrial Emissions Directive (IED) before the end of the transition periods.
- 3.8 For the operation of our facilities, we procure (particularly) substances of very high concern. Starting in 2025, we will exclusively commission SF<sub>6</sub>-free facilities. This will reduce our use of (particularly) substances of very high concern.
- 3.9 We have initiated the development of a comprehensive pollutant register. Through a central database, we record pollutants there. With this, we aim to increase our transparency, particularly for nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), fine particulate emissions, phosphorus ash, and (particularly) substances of very high concern. The pollutant register is intended to serve as a basis for future target development processes and substitution assessments.
- 3.10 MVV aims to increase its engagement along the value chain. For example, our procurement staff are encouraged to consider potential alternatives during the ordering process to prevent the introduction of (particularly) substances of very high concern into our accounting cycle, working collaboratively with safety specialists in their evaluations. Starting from the 2026 fiscal year, we plan to assess whether substances of concern and substances of very high concern in MVV's upstream and downstream value chain can be replaced with less or non-environmentally harmful substances.
- 3.11 With our trained employees, we keep environmental risks in focus and utilize recognized management systems for this purpose. Our energy management, environmental management, hazardous goods management, and hazardous substances management officers are integrated into all processes aimed at reducing negative impacts and are responsible for implementing the measures within the business areas.

## 4. Water

- 4.1 According to the Federal Statistical Office (Destatis) and the German Environment Agency, the energy and public water supply sectors are among the largest water users in Germany. They have a direct impact on the quality and availability of water, for example, through power plant cooling for energy production.

- 4.2 In line with our responsibility for the environment and considering global water scarcity, MVV is committed to minimizing water consumption in all areas of energy production while simultaneously maintaining or improving water quality.
- 4.3 As part of our corporate water balance, we have been publishing all water extraction, usage, and discharge volumes annually since 2020, broken down by sources and purposes.
- 4.4 For many years, MVV has had a published Water Policy. This policy addresses the operating companies of our drinking water divisions (MVV Netze and Stadtwerke Kiel) regarding our strategic approach to drinking water extraction and supply. Through our public service mandate, we fulfill the task of public service provision, ensuring compliance with strict quality standards and often even falling below the legally prescribed limits. In doing so, we actively engage in groundwater and water protection. However, our responsibility extends beyond the use of water resources within our own operations. To identify potential risks early in the entire drinking water value chain, we are also driving the implementation of a risk-based approach to drinking water protection.
- 4.5 With the development of the corporate water strategy, we build on the Water Policy and consider not only the drinking water business but also our non-drinking water sector. Our long-term goal is to systematically reduce our water footprint. Our corporate water strategy encompasses the strategic areas of action "Water Management" and "Resource Efficiency" in both the drinking water and non-drinking water sectors.
- 4.6 In the area of action "Water Management," we have set the goal that our operational management processes address the significance of water-related challenges appropriately.
- 4.7 In the non-drinking water sector, we aim to minimize water losses and increase the proportion of recycled water or water of varying qualities used in our energy generation facilities. This will help us reduce our primary water demand and, consequently, the overall amount of water used in the future. For our sites that source water from water-stressed areas, we plan to conduct an analysis by 2027 to assess the feasibility and necessity of increasing the proportion of recycled water and utilizing different water qualities on a facility-specific basis. Additionally, we will evaluate the possibility of extending this ambition to our office locations and waterworks.
- 4.8 In the area of action "Resource Efficiency," we focus on the responsible extraction, use, and forwarding of water. This also includes reducing our water losses to prevent or mitigate resource waste and negative environmental impacts.
- 4.9 With this area of action, we primarily address the improvement of our water supply networks in the drinking water sector. We aim to reduce our water losses and work on enhancing the network structure. To achieve this, we align ourselves with the threshold values for the Infrastructure Leakage Index (ILI) specified by the EU taxonomy. By 2030, we aim to achieve a threshold value of less than 1.5 in Kiel. In Mannheim, we also strive to fall below this value in the long term and plan to develop an interim target through corresponding measures by 2030.
- 4.10 Our water consumption is not limited to our direct activities. It also includes the amount of water used for the production and provision of the goods and services we purchase. To reduce this, we are currently working on a solution to integrate water criteria into supplier and material selection in procurement, as well as on initial approaches to calculating our indirect "blue" water footprint, which stems from groundwater and surface water. In this way, we aim to create the conditions for the responsible use of the water resource along the upstream value chain as well.
- 4.11 To implement the Group Water Strategy and address the specific characteristics and challenges of individual business areas, we are currently working on deriving additional business-specific water strategies for the relevant segments from our Group Water Strategy. The detailed planning and operational implementation are the responsibility of the decentralized units, while the overall strategic responsibility lies with the executive board. We will continuously engage with new approaches, methods, water consumption, and

our contribution to targets. We aim to use new insights to further reduce our footprint along the value chain.

## 5. Biodiversity

- 5.1 Biodiversity is essential for the preservation of ecosystems and our natural resources and is therefore indispensable and worth protecting.
- 5.2 Drivers of biodiversity loss include the overexploitation of natural resources, climate change, environmental pollution, and the introduction of invasive species into other ecosystems. Another driver of terrestrial biodiversity loss is land-use change in areas with low biological diversity. This driver is currently under review for further potentially negative effects by MVV.
- 5.3 MVV is actively committed to the protection and improvement of ecosystems. For example, when constructing new renewable energy facilities, we conduct site-specific assessments to examine the impact on water, flora, and fauna – including birds, bats, and rodents. As part of environmental impact assessments, potential negative effects are evaluated, restrictions are adhered to, or compensatory measures are implemented.
- 5.4 When constructing photovoltaic (PV) parks and wind energy facilities, we often go beyond the requirements of environmental impact assessments and exceed the strict legal standards for species protection. We achieve this by minimizing land use from the outset as much as possible, thereby reducing the impact on biodiversity.
- 5.5 For MVV, the issue of land-use change is the central area of action. Other topics relevant to MVV include environmental pollution and the impact on protected species. These are incorporated into a strategic approach that aligns with the classic triad of "Reduce – Avoid – Restore."
- 5.6 Political agreements, such as the Kunming-Montreal Agreement or the EU Biodiversity Strategy 2030, can serve as key guiding frameworks for MVV's future goals and measures to protect biodiversity.
- 5.7 To create a positive impact on forest protection, MVV already avoids energy generation from roundwood combustion as well as the import of woody renewable raw material (NaWaRo) fuels. Additionally, we are examining the reduction or, if necessary, the elimination of the energetic use of other biomass sources.
- 5.8 In the future, we will continue to utilize areas with low biological value, such as already sealed surfaces. Since restoring biodiversity locally, for example in urban environments, may not be feasible, renaturation measures in other locations could be a meaningful alternative. We will examine whether, and if so to what extent, our own renaturation and species protection projects can be developed and implemented.

## 6. Circular Economy (CE)

- 6.1 The substantial reduction in the use of natural resources is closely linked to achieving other environmental goals and their protected assets, such as climate protection. In this context, a functioning circular economy is an important building block for achieving goals related to climate, water, biodiversity, and environmental pollution.
- 6.2 For managing our resource use and circular economy, MVV has defined four areas of action: recycling, recovery, and reintegration of raw materials; assets and buildings based on circular economy principles; circular economy-oriented procurement and business practices; and the design of business ecosystems. These areas of action form our group-wide positioning and the foundation for deriving individual action options in the business units, which are independently implemented.
- 6.3 MVV is committed to the long-term vision of a circular economy and "Zero Waste to Landfill" by 2050, if possible. We aim to reduce the use of primary raw materials and consequently increase the use of secondary (recycled) resources.

- 6.4 In doing so, we align ourselves with the goals of the EU Green Deal and the EU's Circular Economy Action Plan (CEAP), as well as the draft of the National Circular Economy Strategy (NKWS) by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUKN).
- 6.5 As an energy company, we see ourselves not only as an energy provider but also as a waste manager and - for example, through the recovery of phosphorus from sewage sludge - as a (re-)mineralizer. In this way, we are evolving into a raw material supplier in the sense of the circular economy and the Sustainable Development Goals (SDGs). This understanding of our role is crucial to avoiding long-term economy-wide resource scarcity as a limiting factor for the energy transition.
- 6.6 To realize our vision of a holistic circular economy, we have defined various goals. Due to limited data availability and quality, we currently describe these goals qualitatively, but we intend to quantify them in the short to medium term.
- 6.7 Since energy generation has so far been associated with the greatest resource use at MVV, we aim to end the use of non-renewable resources in our own, already existing energy generation plants — except for waste treatment — by 2035.
- 6.8 In the medium term, we are evaluating the suitability of additional goals or operational measures for MVV in the following areas: the use of circular economy criteria in the development of infrastructure projects, particularly concerning critical raw materials, as well as increasing the total raw material input by mass from circular resources in the construction of new plants and buildings.

- 8.3 We are maintaining a high pace in the expansion of renewable energy for the generation of electricity and green heat, with the goal of fully and reliably supplying our customers with climate-neutral and affordable energy. Our goal is to stop offering fossil fuels commercially by 2035, so that we can provide our customers with exclusively green energy.
- 8.3 MVV is an important partner for all our customers – from private and commercial customers to businesses and industries – in their decarbonization efforts. In both the B2C and B2B sectors, we are fully committed to energy efficiency and climate neutrality, supplying data centers with green energy and offering comprehensive solution concepts to reduce greenhouse gas emissions for companies of all sizes. Private customers can access combination products and services from us to support their personal energy transition at home.
- 8.4 We are also actively involved in the "Industrial Location Mannheim" initiative. Among other things, we provide the charging infrastructure for the continued rapid expansion of electromobility – locally and regionally, for company fleets and private individuals, often in combination with PV systems. Step by step, we are making all our products and solutions green for our customers.

Status: August 2025

## 7. Energy

### Heat

- 7.1 About one-third of CO<sub>2</sub> emissions in Germany today come from hot water and heating in homes and apartments — making the heating transition the key lever for the energy transition. That's why we are advancing new, green energy and heating technologies. We are creating state-of-the-art energy infrastructure that can serve as a blueprint for smart cities across Europe. And we are re-inventing district heating for the second time, leveraging the most diverse green electricity and heating portfolio of any German energy company: from residual heat from thermal waste treatment to renewable energy sources such as biomass, biomethane, or river heat, and even new opportunities in geothermal energy, biogenic sewage sludge utilization, and industrial waste heat.
- 7.2 To reduce our energy-related greenhouse gas emissions, we will expand heat generation from renewable energy sources. By 2030 at the latest, we will convert our district heating supply for Mannheim to 100% green energy sources.

### Electricity

- 7.3 To achieve completely CO<sub>2</sub>-free electricity across Germany, we need more renewable energies. That's why we are consistently expanding them. With our subsidiary JUWI, we are advancing wind and solar energy worldwide. We are consciously refraining from transitional solutions such as building new natural gas power plants.
- 7.4 Our clear goal is to generate 100% of our electricity from renewable energies in the future.

## 8. Environmental services, green products, and environmental advocacy

- 8.1 In particular, through the activities of the business segment MVV Environment, MVV provides environmental services and actively contributes to environmental protection.
- 8.2 We aim to align our business activities with the principles of sustainability.