



# Stadtwerke München

Sustainability Report 2022



The pulse of Munich



muenchen.de

SWM Infrastruktur

A Company of  
Stadtwerke München / SWM

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# Our commitment to the climate

From 2025 onwards, we intend to generate sufficient green electricity in our own plants to cover all of Munich's consumption.

By 2040 at the latest, we will ensure CO<sub>2</sub>-neutral coverage of Munich's demand for district heating, largely relying on deep geothermal energy.

By 2035, we will convert the MVG bus fleet to battery-electric drives.



By 2040, we will achieve CO<sub>2</sub>-neutral operation of all public pools in Munich.

By 2030, we will convert 75 % of our vehicle fleet (passenger cars and light commercial vehicles) to electromobility.

We will support the City of Munich in compliance with its climate targets for mobility and energy.

Along the value chain, we will set the stage for an economically viable, long-term transformation to decarbonised gases such as hydrogen.







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## **Dear readers,**

Stadtwerke München stands for regionality, supply reliability, and increasing sustainability of the energy supply. Our expansion of renewable energies, which we started at an early date, is the right thing to do and important from both an environmental and a political and economic perspective. At the same time, we will be facing extensive reporting obligations, especially in climate protection. We made some progress last year.

First, mention should be made of the expansion of our greenhouse gas inventory in 2022: in addition to the SWM core Group, we will also examine our major shareholdings going forward. This will lead to considerably more transparency. More than anything else, we are, of course, consistently driving forward the energy and heating transition. In 2022, we prepared for the construction of our seventh geothermal plant, which will supply heat to more than 75,000 Munich citizens. After all, our goal is to provide CO<sub>2</sub>-neutral coverage of all of Munich's district heating requirements no later than 2040. In the area of mobility, we are likewise setting everything in motion: alongside trams and underground trains, we will also fully electrify our buses by 2035. In 2022, we laid one important foundation for this when we inaugurated our new electric-bus depot in Munich's Moosach neighbourhood. In the year under review, we also began to convert the Georgenschwaige outdoor pool into Munich's first CO<sub>2</sub>-neutral pool. Our goal is to make all our public pools CO<sub>2</sub>-neutral by 2040.

We implemented these measures in a very challenging year. On the one hand, the situation in Mobility and Public Pools did return to normal, because Covid-19 became more and more endemic. On the other, Russia's war of aggression against Ukraine and its manifold consequences shook up the energy sector. To reduce natural gas consumption and, above all, ensure supply reliability, we unfortunately had to postpone our planned exit from coal. Simultaneously, energy costs and, by extension, our prices surged tremendously. We introduced numerous measures to help our customers deal with the energy prices and save energy: we expanded our energy counselling services, handed out bonuses for pronounced energy conservation, and made a EUR 20 million heating fund available to low-income Munich citizens. In addition, we have used any emerging opportunities to once again lower prices as quickly as possible. Even before 2023 has run its course, further reductions are planned to bring our prices back down to bearable levels.





From left to right:  
Dr Florian Bieberbach, Werner Albrecht, Ingo Wortmann, Helge-Uve Braun, Dr Karin Thelen (Management Board member since 1 July 2023)

Although supply reliability was our focus in 2022, we also continued to consistently pursue our sustainability goals. And the expansion of renewable energies, especially the tapping of local renewable energy sources, ultimately goes hand in hand with an improvement in supply reliability. On the demand side, too, we help our customers become more self-sufficient while simultaneously making a contribution to climate protection by offering them various options, including photovoltaic plants, electricity solutions for tenants, and heat pumps.

In our local efforts, we closely cooperate with the City of Munich. For example, our plans for the heating transition are also part of the City's municipal heating plan. The latter will give Munich's citizens guidance on the forms of sustainable heating supply most suitable in particular situations. In addition, we support the City of Munich in its efforts to achieve its photovoltaics expansion goal. Starting in July 2023, we have now a managing director heading SWM's fifth division to accelerate the regional energy transition. The guiding principle for our actions continues to be our goal to ensure a reliable energy supply that is affordable for our customers and becomes increasingly sustainable. We would be delighted if you read the information on our progress in this report.

Sincerely yours

| <b>Dr Florian Bieberbach</b> | <b>Werner Albrecht</b>                       | <b>Ingo Wortmann</b>  | <b>Helge-Uve Braun</b>  | <b>Dr Karin Thelen</b>                     |
|------------------------------|--|-----------------------|-------------------------|--|
| Chief Executive Officer      | Director,<br>Real Estate and<br>Public Pools | Director,<br>Mobility | Director,<br>Technology | Director,<br>Regional Energy<br>Transition |



# Stadtwerke München – a portrait

As one of Germany's largest municipal companies (2022 revenues: approximately EUR 10.6 billion), we are a major contributor to the quality of life of the people in Munich and the metropolitan region. From reliable energy and water supply to state-of-the-art urban mobility and fast Internet to Munich's public swimming pools, we offer award-winning services at fair prices.

We are committed to satisfying our customers with high-quality services and active relationship management. We embrace economic success while protecting natural resources and the environment. We make ambitious investments in supply and

infrastructure facilities while ensuring sustainability at the same time. We are fair-minded and seek to achieve mutual benefits in our relationships with customers, suppliers, and other business partners. We keep an eye on our independence and exercise due diligence in all of our ventures.

## Our business segments

We manage our business across all segments of the value chain: Energy – subdivided into Generation, Networks, Sales, and Trade –, Water, Mobility, Telecommunications, and Public Pools.

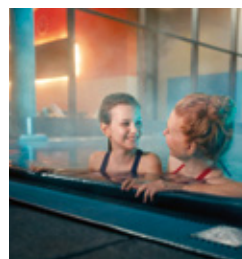
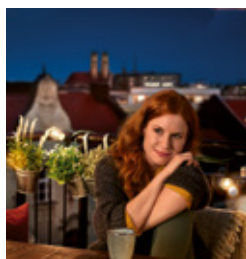
Energy

Water

Mobility

Telecommunications

Public Pools





## Energy

### Generation

We generate electricity and heat in Munich and the metropolitan region in more than 70 plants, including wind, hydroelectric, and solar energy plants, energy-efficient combined heat and power (CHP) plants, and geothermal plants.

In addition, we operate wind parks and solar energy plants throughout Germany and Europe at sites with lots of wind and sunshine. Since 2004, we have also provided district cooling. Here, we use the natural cold temperature of ground water and Munich's underground streams.

Via our shareholding in Spirit Energy Limited (Spirit Energy), we also engage in gas production in Northwestern Europe. In line with our decarbonisation strategy, we have already noticeably reduced our gas production ([see the chapter "Essential services and product responsibility", page 17 et seq.](#)). On our journey towards a climate-neutral Munich, we intend to gradually replace natural gas with decarbonised gases such as hydrogen. Spirit Energy will also be aligned with the requirements of the energy transition: natural gas production is to gradually dwindle away, and the existing infrastructure is to be used for sustainable activities such as CO<sub>2</sub> storage or the production of hydrogen.

### Networks

Our essential public services for the Munich metropolitan region include the operation of distribution networks for electricity, gas, district heating and cooling, and water. All in all, we operate energy and water grids with a total length of more than 22,000 kilometres. In this task, our goal is to ensure above-average supply quality and reliability despite increasing cost pressure.

### Sales

We are the clear market leader in the Munich energy market, which is characterised by keen competition. To maintain our position, we bank on customer relationships that are based on a spirit of partnership: a positive image, a high level of customer orientation, sustainability, and reliability. In these efforts, our tried-and-proven high service quality is a prerequisite for our customers' loyalty.

### Trade

Trade is a key driver of our management and business model for the energy sector. It helps us optimise our energy business and hedge against risks. In Trade, we are engaged in market-driven energy procurement and marketing as well as managing our aggregated market price risks, especially for electricity, natural gas, coal, and energy-specific certificates. Trade also plans the deployment of our generation plants and the expansion

and operation of our virtual power station. Furthermore, Trade gives Energy Generation, Sales, and individual SWM majority shareholdings access to the energy markets.

### Water

Our additive-free M-Wasser drinking water is extracted naturally and delivered from the foothills of the Bavarian Alps to Bavaria's capital. It boasts excellent analytical results that are significantly better than the statutory limits. In fact, M-Wasser ranks among the best drinking waters in Europe. We satisfy the water demand of approximately 1.6 million people.

### Mobility

Together with our subsidiary, Münchner Verkehrsgesellschaft (MVG), we provide state-of-the-art and environmentally benign mobility in Munich. Before the decline in passenger numbers caused by the Covid-19 pandemic, up to 2 million people per day used our underground trains, buses, and trams, which travel on a transport network that is more than 700 kilometres long. These traditional local public transport services are interlinked with personalised solutions such as the MVG Rad bike and our partners' e-scooter rental services. In addition, we are driving forward the use of electromobility and continue to expand our fleet.

### Telecommunications

We offer a broad range of Internet, voice, and bandwidth services for residential and business customers for both fixed-network services and mobile communications to large sections of Bavaria, the greater Ulm area, and the Main-Kinzig district in Hesse. Our product portfolio is continuously developed further in order to maintain our competitiveness. The services are performed jointly by M-net Telekommunikations GmbH (M-net), SWM Services GmbH (SWM Services), and Stadtwerke München GmbH.

### Public Pools

With 18 indoor and outdoor pools and ten sauna facilities, SWM offers some of the most modern pool landscapes in Germany, and we also operate two fitness centres and one ice-skating stadium. Before Covid-19 and the temporary pool closures that became necessary because of the pandemic, slightly more than 3.7 million people visited our M-Bäder public pools every year. Despite the pandemic-related restrictions in spring and the energy-saving measures introduced towards the end of the year, some 3 million guests visited our M-Bäder public pools in 2022.

[An overview of SWM's affiliated companies and major equity participations can be found in our 2022 Annual Report from page 76 onwards.](#)

## Committed to citizens' well-being

As a company wholly owned by the City of Munich, we are ultimately owned by Munich's citizens. We are committed to their long-term and sustainable well-being, and we strive to achieve economic success. Our goal is to distribute a profit of EUR 100 million to our shareholder, the City of Munich, every year.

However, Stadtwerke München is not merely seeking profit maximisation, but is also committed to creating the best possible outcome for the people in the Munich metropolitan region. We want to preserve and improve the quality of life for the people in Munich, maintain the city's attractiveness as a business location, and provide support to the metropolitan region. In these efforts, we assume responsibility for both the environment and society, and cooperative and partnership-oriented action is a key element of our approach. In addition, we see ourselves as a socially responsible company. This is reflected in many areas: not only are we one of the largest workplace training organisations in the region, we also sponsor education, sports, cultural events, and social projects, as well as build company flats, develop digital service offerings, and champion a lively and diverse urban community.

We create added value not only for our customers and our shareholder, but also for society: we offer attractive jobs to approximately 11,000 employees in the entire SWM Group, most of whom live in the Munich region.



**For the 2023–2027 period, we are currently planning to make investments of approximately EUR 6 billion – mostly in the Munich metropolitan region. This amount will be allocated as follows:**

- ▶ **approximately EUR 2,350 million** to local public transport
- ▶ **approximately EUR 850 million** to the expansion and modernisation of the network and grid infrastructure (electricity, gas, district heating, and water)
- ▶ **approximately EUR 1,150 million** to the renewable energies expansion campaign
- ▶ **approximately EUR 100 million** to the expansion and maintenance of conventional generation plants
- ▶ **approximately EUR 350 million** to geothermal energy for our district heating vision
- ▶ **approximately EUR 350 million** to the company-flat expansion campaign
- ▶ **approximately EUR 100 million** to the expansion of fibre optics for a future-proof Internet
- ▶ **approximately EUR 50 million** to maintenance and modernisation of public pools

In education, we likewise contribute to making Munich an attractive location. In 2022 – the year under review –, LHM Services GmbH (LHM Services) was still part of the SWM core Group (since 1 January 2023, it has been owned by the City of Munich). This company provides important information and communication technology services for Munich's educational institutions and invests in the expansion and digital transformation of the IT infrastructures of schools, day care centres, and sports facilities. In 2022, LHM Services continued its efforts to equip schools and educational facilities with state-of-the-art technology. The number of schools with full WLAN (WiFi) coverage was successfully increased from 145 to 240. This project involved the installation of 70 to 100 access points per school to ensure WLAN access in all rooms. At schools where no comprehensive WLAN service has been installed to date, 2,000 LTE routers are in use. Last year, all municipal secondary schools (Realschulen) were equipped with a tool that can now be used for online enrolment. In addition, new school organisation software has been installed at more than 150 middle, elementary, and special-education schools. Furthermore, LHM Services successfully completed 10 projects focusing on initial IT setup at schools. More than 70 service engineers have been deployed to provide customised on-site support. This infrastructure will facilitate the realisation of various mobile working and virtual teaching scenarios.

We operate muenchen.de, the official online portal for the City of Munich. With its broad coverage and many contacts, muenchen.de is one of the most frequently visited service websites in Munich. The muenchen.de central address is the gateway to information and services revolving around Munich's urban life.





## Our commitment to the community

Our mission to provide essential public services also includes our commitment to a liveable and future-proof urban community.

Since 2007, our SWM Education Foundation has supported numerous projects aimed at improving the educational opportunities of disadvantaged children and adolescents. With basic foundation assets totalling EUR 20 million, the foundation ranks among the largest organisations of its kind in Germany's educational sector. Every year, it invests approximately EUR 500,000 in the sponsoring of a wide variety of projects. Annually since 2013, it has moreover awarded a sponsorship prize for outstanding commitment to education. In 2022, the foundation paid out a total of approximately EUR 423,000 – to recipients that include a welcoming class for Ukrainians that is part of a project initiated by Munich's Ludwig Maximilian University, Condrops e.V. for a project that accompanies adolescents with a refugee background during their traineeships, and HORIZONT e.V. for its "Education Is the Key" project that supports disadvantaged school children. In the year under review, a total of approximately 2,000 children and adolescents benefited from funding provided by the SWM Education Foundation.

With our "Stadtwerkeprojekt" initiative, we also help socially or individually disadvantaged young adults. The project aims to help them get their careers off the ground by offering them high-quality training opportunities.

We support schools with curriculum-related materials revolving around the topics of energy, water, and communication. In addition, we offer them free career orientation, guided tours, and events.

Low-income households receive free energy counselling from us. Our customer service employees analyse the consumption behaviour of residential customers and give them advice regarding tariffs and all personal concerns. Thanks to the easing of the Covid-19 measures, we were able to return to in-person counselling in the year under review. In addition, the monthly energy consultation hour on the premises of the Munich Senior Citizens Advisory Council has been reinstalled after its pandemic-induced hiatus.

"Krisendienst Psychiatrie Oberbayern" offers individual counselling for people in mental distress. We have regularly supported this psychiatric crisis hotline for Upper Bavaria since it was established in 2017, for instance with poster campaigns displayed in the local public transport system.



The SWM Education Foundation provided EUR 100,000 of funding to a welcoming class for Ukrainians.

We support Munich's cultural landscape through initiatives such as a cooperation with the operators of the "Muffatwerk" art and concert venue, an advertising cooperation with the "Tollwood" festival, and support for Tierpark Hellabrunn, the first geo-zoo.

In addition, we support recreational and professional sports in Munich. Among other things, we are the namesake of the track-and-field club "Leichtathletikgemeinschaft Stadtwerke München" and the swimming club "Schwimmstartgemeinschaft Stadtwerke München". Furthermore, we are partners in various sports offerings such as "Münchner Freizeitsport" for recreational sports and the Munich Marathon.

## HELP FOR THOSE AFFECTED BY THE WAR IN UKRAINE

SWM stands for a peaceful and diverse community. In 2022, we made manifold contributions to support the people in Ukraine and their relatives in Germany. In cooperation with the City of Munich, we provided living space for refugees. In addition, we assisted in the installation of network connections and WLAN (WiFi) in refugee shelters. LHM Services provided technical support at Luisengymnasium, a Munich grammar school that was briefly turned into an emergency shelter, and prepared resources to assist Ukrainian school children (e.g. in the form of language learning software). The Mobility division made drivers and buses available to take refugees to their temporary accommodations after their arrival in Munich. In addition, refugees could use all public transport in the MVV territory for free, and the same goes for the sanitary facilities of the M-Bäder public pools. In addition, M-net is offering free phone calls and text messages to Ukraine. What is more, M-net mobile communication customers staying in Ukraine are not incurring any roaming charges. Together with "Münchner Freiwillige – Wir helfen", an association of Munich volunteers who want to help, we handed out SIM cards to volunteers assisting refugees. Numerous SWM employees have also found many different ways to participate in relief campaigns.



# Sustainability management





As a company owned by the City of Munich, our activities are guided by the interests of the city and its inhabitants. Our organisation reflects the diversity of this city – and our sustainability management reflects the standards of our stakeholders, products, and services. Our energy services thus cover essential needs and are based on sustainable and low-emission operations. Drinking water supply, product quality, and nature conservation have always gone hand in hand in the regions where we source the water. In our mobility services, we strive for zero emissions and are committed to enhancing accessibility for all passenger groups and harmonious integration into the urban landscape. And our public pools are intended to be gathering places with near-natural greenspaces.

The overall responsibility for the topic of sustainability lies with the top executives of our Group, the Management Board of SWM München GmbH. In our central organisation, sustainability management has been assigned to the Strategy & Group Management staff unit, which is also responsible for our group strategy. In addition, we have set up decentralised sustainability management in our subsidiaries. The Management Board delegates this task to specialists where this makes sense, e.g. in energy or environmental management. Group executives develop our strategic orientation in terms of energy consumption, emissions, and other environmental issues; the business segments then implement the associated measures, [see the chapter "Operational environmental protection", page 31](#). Our guideposts in these efforts are external and internal quality standards that also cover the areas of occupational health and safety.

In January 2023, the EU's Corporate Sustainability Reporting Directive (CSRD) entered into force. It aims at enhancing non-financial reporting and elevating it to the same level as financial reporting. Under the CSRD, many companies – including SWM – will have to fulfil extensive reporting obligations regarding their sustainability activities in the coming years. Based on the current information, 2025 will be the first financial year on which we will have to report in compliance with CSRD rules in 2026. To prepare for this, we have already launched an internal cross-divisional project. Among other things, we are adjusting our ESG due-diligence processes and are planning to update our materiality analysis according to the mandatory European Sustainability Reporting Standards (ESRS), the final version of which will, in all

likelihood, be adopted in summer 2023. Regarding environmental protection, the CSRD will also impose far-reaching reporting obligations, especially in the area of climate change. We have already begun to address these obligations.

## Materiality analysis

SWM's sustainability reporting is based on a materiality analysis, which we carried out as follows during the preparation of our first report in 2019. First, we developed the list of topics based on an analysis of pertinent expert information. The sources we used included national and international frameworks such as the "National Action Plan for Business and Human Rights" (NAP) and the United Nations' "Sustainable Development Goals" (SDGs) as well as the recognised Global Reporting Initiative Standards (GRI Standards), the German Sustainability Code (DNK), and ISO 26000.

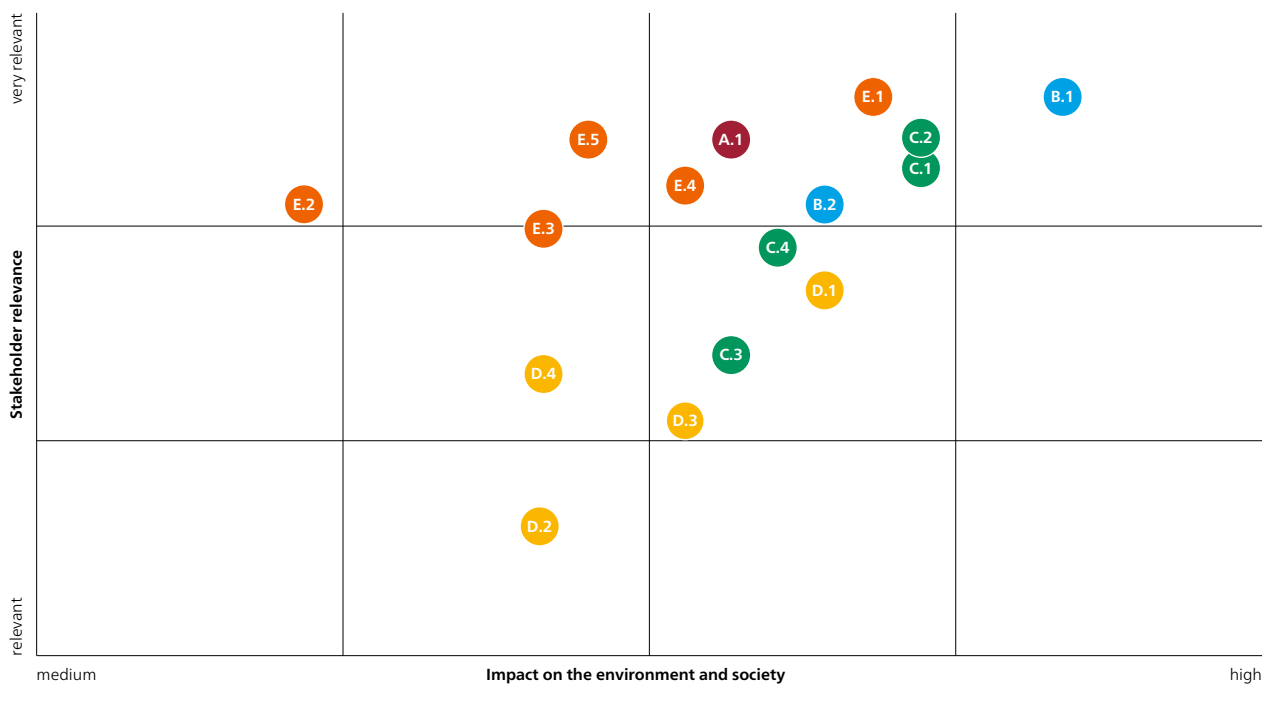
This resulted in slightly under 200 topics that we pooled into 28 clusters. Next, our specialist departments assessed these clusters on the basis of two dimensions: impact on the environment and society, and significance for stakeholder decisions. Lastly, the SWM Management Board assessed the topics in terms of their business relevance.

Based on this materiality analysis, we derived 16 material topics, which we have grouped into five action areas:

- ▶ Society
- ▶ Products and services
- ▶ Environment
- ▶ Employees
- ▶ Corporate governance

Every year, we check the material topics to determine whether there is any need for adjustment, and we also did so in 2022. No adjustments were necessary in the year under review. The identified material topics thus remain the focus of our Sustainability Report.

## Materiality matrix



### A SOCIETY

A.1 Social responsibility

### B PRODUCTS AND SERVICES

B.1 Provision of essential services

B.2 Product responsibility

### C ENVIRONMENT

C.1 Energy

C.2 Emissions

C.3 Raw materials and supplies

C.4 Water

### D EMPLOYEES

D.1 Working conditions

D.2 Training and education

D.3 Occupational health and safety

D.4 Diversity and equal opportunities

### E CORPORATE GOVERNANCE

E.1 Value creation

E.2 Compliance

E.3 Data protection

E.4 Competition

E.5 Political engagement

## Stakeholder management

Numerous stakeholder groups shape our actions, and our operations impact many people. These interactions are relevant for us; after all, we wish to do the best possible justice to all our stakeholders. To this end, our efforts are based on target-group-aligned, transparent, and regular exchanges.

Our customers are crucial stakeholders. In the chapter “Essential services and product responsibility”, we describe how we fulfil the expectations they place on us, [see the chapter “Essential services and product responsibility”, page 14 et seqq.](#) The City of Munich, in its capacity of shareholder, and the citizens of Munich are also important stakeholders. We make a broad range of contributions to urban life – not just as a relevant employer, but also in the form of sponsorships and cooperations, [see the chapter “SWM – a portrait”, page 6 et seqq.](#)



Our employees are also a top priority. They are, of course, essential contributors to the provision of SWM's services; in addition, they themselves are customers for our offerings and usually live in the Munich region, which means they are part of the (urban) society we address. Our business success strongly depends on our ability to find highly qualified, motivated, and loyal people – they are the ones that make SWM the company we are today.

As a utility offering essential public services, we operate in a highly regulated environment and are subject to particularly strict accountability. As legislation can have a significant impact on our business activities, we also engage in political debates at various levels, [see the chapter "Corporate governance", page 66 et seq.](#)

| Stakeholder                   | Topics  | Dialogue platforms  |
|-------------------------------|---|---|
| Lenders and development banks | <ul style="list-style-type: none"> <li>– Promotional loans and sustainable finance</li> <li>– Risk management</li> <li>– Compliance</li> <li>– Targets and target achievement</li> <li>– Product innovations</li> </ul>   | <ul style="list-style-type: none"> <li>– Personal conversations</li> <li>– Conferences</li> </ul>   |
| Customers                     | <ul style="list-style-type: none"> <li>– Services (energy, mobility, telecommunications, drinking water, public pools)</li> <li>– Product quality and safety</li> <li>– Environmental protection</li> <li>– Innovation and technologies</li> </ul>  | <ul style="list-style-type: none"> <li>– Personal conversations (Customer Centre, visits at customer locations)</li> <li>– Direct dialogue by phone, by e-mail, letter, and through social media</li> <li>– Customer magazine and newsletter</li> <li>– Fairs and events</li> <li>– Customer surveys</li> </ul> |
| Suppliers                     | <ul style="list-style-type: none"> <li>– Product quality and safety</li> <li>– Environmental protection</li> <li>– Compliance</li> </ul>  | <ul style="list-style-type: none"> <li>– Supplier portal</li> <li>– Personal conversations (by phone and on site)</li> <li>– Audits</li> </ul>  |
| Local stakeholders            | <ul style="list-style-type: none"> <li>– Infrastructure quality</li> <li>– Economic strength</li> <li>– Environmental protection</li> <li>– Location development</li> <li>– SWM, the employer</li> <li>– Social engagement</li> <li>– Innovation and technologies</li> </ul>  | <ul style="list-style-type: none"> <li>– Personal conversations</li> <li>– Information events</li> <li>– On-site visits and facility tours</li> <li>– Construction site communications (information sheets, construction site map, press)</li> </ul>  |
| Media                         | <ul style="list-style-type: none"> <li>– Innovation and technologies</li> <li>– Location development</li> <li>– Finances</li> <li>– SWM, the employer</li> <li>– Social engagement</li> <li>– Services (energy, mobility, telecommunications, drinking water, public pools)</li> </ul>  | <ul style="list-style-type: none"> <li>– Press releases</li> <li>– Facility tours</li> <li>– Information events</li> <li>– Interviews</li> </ul>  |
| Employees                     | <ul style="list-style-type: none"> <li>– Health and safety</li> <li>– Career and professional development</li> <li>– Diversity and equal opportunities</li> <li>– Co-determination</li> <li>– Work/life balance</li> <li>– Corporate development and corporate strategy</li> <li>– Company and task-relevant information</li> <li>– Improvement and change processes</li> </ul> | <ul style="list-style-type: none"> <li>– Internal media (intranet, employee magazine, etc.)</li> <li>– Employee surveys</li> <li>– Idea management</li> <li>– Internal events</li> <li>– On-site visits</li> <li>– Staff meetings</li> </ul>  |
| Networks and associations     | <ul style="list-style-type: none"> <li>– Energy and transport policy targets</li> <li>– Environmental protection</li> <li>– Political framework conditions and regulations</li> <li>– Technology development and promotion</li> </ul>   | <ul style="list-style-type: none"> <li>– Attendance of conferences and meetings</li> </ul>  |
| Policy-makers and authorities | <ul style="list-style-type: none"> <li>– Energy and transport policy targets</li> <li>– Environmental protection</li> <li>– Political framework conditions and regulations</li> <li>– Location development</li> <li>– Technology development and promotion</li> </ul>   | <ul style="list-style-type: none"> <li>– Personal conversations</li> <li>– On-site visits and facility tours</li> <li>– Information events</li> <li>– City council newsletter</li> </ul>  |

## Sustainable development: SWM supports the United Nations' Sustainable Development Goals

As a future-oriented company that feels committed to the public wellbeing, we want to make relevant contributions to sustainable development. For us, this also means playing an active role in achieving the Sustainable Development Goals (SDGs).

To analyse our business activities from the perspective of the SDGs, we held a workshop with sustainability experts from different business segments. The various goals and targets were discussed in this workshop. Subsequently, we assessed our positive, and also our negative impact on the achievement of these goals. The evaluation of the workshop showed that we have a particular impact on the following eight SDGs:



### SDG 4: Quality Education

As one of Munich's largest employers, we are committed to contributing to inclusive and equitable quality education.

This is why we train young people and help them start their professional careers, [see the chapter "Employees", page 49 et seq.](#) With SWM Education Foundation, we help improve the opportunities of disadvantaged children and adolescents. In addition, we provide important information and communication technology services for Munich's educational institutions, [see the chapter "SWM – a portrait", page 6 et seq.](#)



### SDG 5: Gender Equality

Active support of women's equality is important to us. We have set ourselves the goal of increasing the share of women in both our workforce and

leadership positions to at least 25 % by 2025. To achieve this goal, we initiated quite a number of measures in the last few years, such as cross-mentoring for female managers or the "Female Empowerment" seminar series, as well as offers to enable our employees to achieve the best possible balance between their professional and family lives. We have received external feedback on our commitment, e.g. within the framework of the Women Career Index (Frauen-Karriere-Index) under the auspices of the German Federal Ministry for Family Affairs, Senior Citizens, Women, and Youth, [see the chapter "Employees", page 57.](#)



### SDG 6: Clean Water and Sanitation

As drinking water supplier of the City of Munich, we provide high-quality water to a large number of people every day.

With this, we contribute to ensuring the availability of water and sanitation for all, [see the chapter "Essential services and product responsibility", page 20.](#) In addition, we conserve this vital resource by fostering sustainable cultivation of the land around our extraction sites, [see the chapter "Operational environmental protection", page 44.](#)



### SDG 7: Affordable and Clean Energy

According to Ban Ki-moon (former UN Secretary-General), climate change is the greatest challenge facing humanity. With

its renewable energies expansion campaign and its district heating vision, SWM makes important contributions to mastering this challenge. We ensure that the people in Munich have reliable access to affordable and sustainable energy, heating, and cooling, of which a steadily increasing share is generated from renewable sources, [see the chapter "Operational environmental protection", page 35 et seqq.](#)



### SDG 9: Industry, Innovation, and Infrastructure

Using five megatrends as our guideposts, we are developing new service areas to safeguard the high

quality of life in the region and turn Munich into a sustainably smart city in every respect. The changes in the energy and transport sectors, in particular, as well as digitalisation and interconnected networks, and the desire for sustainable and local production processes expressed by many customers provide us numerous opportunities for new business models. We have established a dedicated unit for this that exclusively focuses on innovations, [see the chapter "Essential services and product responsibility", page 26 et seqq.](#)



### SDG 11: Sustainable Cities and Communities

Our entrepreneurial vision is to turn Munich into a trail blazer among sustainable cities. All citizens are to

benefit from this – irrespective of their age, gender, ethnic background, or other characteristics. In addition to a sustainable supply of essential services – electricity, heating, cooling, and water – we see it as our task to ensure affordable high-quality mobility for all people in Munich, [see the chapter "Essential services and product responsibility", page 21 et seqq.](#) Our public pools as places





## THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

The Sustainable Development Goals were adopted in 2015 by the General Assembly of the United Nations as part of its Agenda 2030. They comprise a total of 17 goals and 169 specific targets. The ambition linking all goals is to achieve a better and more sustainable future for all. This requires the participation of nations, regions, cities, as well as enterprises.

where people can gather and do something for their health, [see the chapter "Essential services and product responsibility", page 25 et seq.](#), and our diverse social engagement, [see the chapter "SWM – a portrait", page 7](#), likewise contribute to this goal.



### SDG 12: Responsible Consumption and Production

With attractive green electricity and green natural gas offers, [see the chapter "Essential services and product responsibility", page 16 et seqq.](#), diverse and intermodal mobility services, [see the chapter "Essential services and product responsibility", page 21 et seqq.](#), and renewable energies solutions for residential customers (e.g. photovoltaic plants and charging solutions), [see the chapter "Operational environmental protection", page 38](#), we support the people in Munich in leading a sustainable lifestyle. We also set high standards in our daily business with respect to SDG 12 – cases in point are our virtually loss-free transport of water, environmentally benign strategies within the framework of our numerous construction projects, or the use of renewable energy sources for our own business premises, [see the chapter "Operational environmental protection", pages 39 et seqq.](#)



### SDG 13: Climate Action

SWM is addressing the challenges posed by climate change and the energy transition. Within the framework of our renewable energies expansion campaign, we have been building a powerful generation portfolio for green electricity since 2008, [see the chapter "Operational environmental protection", page 37](#). With the help of geothermal energy, we provide CO<sub>2</sub>-neutral heating and cooling, [see the chapter "Operational environmental protection", page 39 et seq.](#) As the last major pillar of our local public transport system after underground trains and trams, we are now electrifying our bus fleet, too, [see the chapter "Operational environmental protection", page 41](#); in addition, we are continuously expanding the charging infrastructure for electric vehicles. By 2040, we moreover want to achieve climate-neutral operation of our public pool landscape. At present, our operation of a coal-fired power plant still has a negative impact on SDG 13 – we intend to take this plant off the grid as soon as possible, [see the chapter "Operational environmental protection", page 40](#).

# Essential services and product responsibility





From energy and drinking water supply to eco-friendly city mobility, fast Internet, and recreational offerings such as Munich's public pools: our services are an essential basis for everyday life. They contribute to both the economic strength and quality of life in Munich and its metropolitan region. As a utility providing essential public services, it is our unique responsibility to offer all citizens affordable services for basic needs and ensure reliable availability of our services. In these efforts, we place great emphasis on transparency and the provision of product quality information to our customers.

## Energy and water supply

The essential public services we provide to the City of Munich include the energy and drinking water supply for the city and some parts of the metropolitan region. As such, this means that we provide the "critical services" necessary for society to function. Accordingly, we are subject to special statutory requirements, including those stipulated in the German Energy Industry Act (EnWG) as the key legal basis for secure and macroeconomically efficient energy supply and the German Ordinance for Defining Critical Infrastructures in Accordance with the BSI Act (BSI-KritisV) with its focus on the IT security of operators of critical infrastructures.

The responsibility for the supply reliability of electricity, gas, water, district heating, and district cooling grids is assigned to the management team of the SWM Infrastruktur GmbH & Co. KG grid operator. The technical manager responsible for water extraction reports to SWM's Director, Technology.

Our goal is to safeguard essential services in all divisions at all times, i.e. with as few outage occurrences as possible. This is why we protect our critical infrastructures against any physical and digital attacks, e.g. through strict access management, video surveillance, redundant design of essential building services, and isolated networks. For institutions requiring particular protection, e.g. nursing homes and hospitals, we have made and agreed suitable arrangements and plans. In addition, we have drawn up high-level policies for the prevention of and response to crisis situations, including a Group policy on general principles, and rules of procedures for the Technology division on additional systematic structures as well as emergency and crisis manuals.

Since we are a "KRITIS" company – an operator of critical infrastructures that provides important, and in some cases even vital, essential services for the citizens of Munich – crisis management including preparation for a worst-case scenario is a key element of our corporate identity. A crisis is defined as a situation in which significant corporate values, such as a reliable supply to our customers, and core processes are at risk and the incident and emergency management procedures established in our day-to-day business do not suffice to adequately address these hazards. At SWM, crisis management is decentralised across the divisions and business segments in order to achieve clearly targeted alignment with the different areas of activities and challenges. Some of our business segments that operate critical infrastructures (energy generation, energy distribution, water extraction and distribution) have their own dedicated crisis management, which is also audited and certified. When a cross-divisional event occurs, several crisis teams may act simultaneously, with high-level topics such as communications or human resources being pooled centrally if required.

The outbreak of the Covid-19 pandemic created such a situation. In the 2022 financial year, we were able to wind down the measures taken to contain the spread of the coronavirus after two years as the pandemic turned into an endemic. When Germany's far-reaching nationwide Covid-19 measures ended on 1 March 2023, the work of our central task force for the pandemic ("Pandemic Task Force") was also discontinued until further notice. From February 2022 onwards, we concurrently turned our attention to the gas supply situation and the associated energy crisis prompted by Russia's war of aggression against Ukraine. The new situation is complex and characterised by a wide range of regulations by the German federal government, rapid and massive price movements, a large number of customer inquiries, and completely new situations in energy procurement.

Given the war situation in Ukraine, we analysed the existing structures and processes both internally and together with the higher-level crisis management of the City of Munich (e.g. its professional fire brigade and police force) and coordinated our approaches. In April 2022, we set up a task force for a gas deficit situation to ensure the best possible technical, economic, and political preparation for various scenarios. In this task



force, our experts and decision-makers regularly align their efforts to deal with this problem. In addition, we are represented in the task force of the German Federal Network Agency (Bundesnetzagentur; BNetzA) where all topics associated with supply reliability are discussed and coordinated. We have drawn up flowcharts and action plans for the potential scenario of a coordinated supply shutdown at our key accounts and we continuously update these plans.

To reduce the risk of a gas deficit situation and make ourselves more independent of natural gas, we began to diversify the use of energy in our energy generation plants in spring 2022. With the approval of the Munich City Council, we postponed the conversion of the coal-fired block in our "Nord" cogeneration plant to natural gas to the summer of 2024. Furthermore, we reactivated two oil burners that had already been decommissioned in heating plants and accumulated oil reserves. So far, our measures have been successful: the energy supply was safeguarded at all times.

Over the medium and long term, the expansion of renewable energies is the best way to become more independent of fossil energies and raw materials from difficult sourcing countries. This is why we are strongly committed to continuing our renewable energies expansion campaign and our heating transition. To make it easier for customers to switch to district heating that will be CO<sub>2</sub>-neutral over a medium-term horizon, we launched an additional 10-million-euro package for the promotion of district heating in 2022.

## WEATHERING TIMES OF EXPENSIVE AND SCARCE ENERGY TOGETHER

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During the energy crisis, we introduced various energy-saving measures ([see, for example, page 26](#)). We also want to help our customers save both energy and real money. This is why we expanded our energy counselling considerably last year. Our offer has contributed to lowering private households' electricity consumption by an average of approximately 10%. For low-income households, such counselling is free. During our Energy Saving Campaign in autumn 2022, residential customers moreover had the opportunity to receive bonuses if they achieved particularly pronounced electricity and gas savings. In addition, we made a EUR 20 million heating fund available to support low-income Munich citizen. This fund is financed from our wind park revenues, as the increased energy prices gave rise to high revenues in this segment. The implementation and pay-out of this fund is handled by the Social Services Department of the City of Munich and the Munich welfare organisations. Furthermore, we are paying an amount running into the triple-digit million euro range to the German federal government for the financing of the energy price caps. Additionally, we were able to lower the prices of district heating and electricity with effect from 1 April 2023. We intend to also use any further scope to reduce the costs for our customers.

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### Energy for the future

Energy is one of our core business segments. From our facilities, we supply electricity, natural gas, district heating, and district cooling to our customers. We focus on providing a secure, affordable, consumer-friendly, resource-saving, and efficient energy supply. In the Energy segment, we differentiate between residential, commercial, and business customers. Within the business customer segment, the housing sector is of special significance, as it is the primary target group of our district heating supply.

Independent surveys regularly confirm our excellent reputation and our customers' high level of satisfaction, even though the scores – as was the case throughout the industry – went down slightly in 2022 because of the strong price movements. This notwithstanding, in 2022, the "Top Lokalversorger 2022" quality hallmark assigned to local electricity and gas utility companies by the Energy Consumer Portal for Electricity and Gas bore testimony to our good value for money, our environmental management, and our service quality.



Furthermore, FOCUS MONEY magazine selected us as “fairest electricity supplier” for the eleventh time in a row in 2022. Similarly, we received the award for the fairest value for money from FOCUS-MONEY. We are making further efforts to maintain or restore our high trust and competence scores.



In Munich and the metropolitan region, we generate renewable energy – electricity, heating, and cooling – in more than 70 energy-efficient combined heat and power (CHP) plants, wind, hydroelectric, solar, biomass, and geothermal plants. In addition, we operate wind parks and solar energy systems throughout Germany and Europe at sites where the wind blows more strongly and the sun shines more often than in our region. The “Isar 2” nuclear power station near the city of Landshut, in which SWM holds a stake of 25 %, was to go off the grid by 31 December 2022 at the latest as stipulated by the amended German Nuclear Power Act. Because of Russia’s war of aggression against Ukraine, the operating life of the plant was extended until 15 April 2023; on this date, it was taken off the grid as scheduled. The project aimed at decommissioning and phasing-out this nuclear power station has already been underway for several years; the application for the initial decommissioning and phasing-out permit was filed in mid-2019. Dismantling will start once we receive the appropriate approval (presumably in early 2024). We expect the dismantling work to be fully completed by 2039.

With our partner, the UK energy company Centrica, we also engage in the production of natural gas. Our Spirit Energy joint venture produces natural gas in the North Sea. This shareholding allows us to directly influence the origin and type of natural gas production: in the UK and the Netherlands, the production of natural gas is subject to particularly stringent environmental and safety standards and CO<sub>2</sub> emissions are low compared to other countries.

The progressing transformation to a CO<sub>2</sub>-neutral heating supply for Munich ([see the chapter “Operational environmental protection”, page 39 et seq.](#)) will lead to a gradual reduction in

our share of natural gas production. As an initial major step in this direction, Spirit Energy completed the sale of the Norwegian gas and oil fields and one British field in 2022. In the future, the company’s focus will be on secure and economically viable production of the remaining gas reserves, which is to gradually dwindle away within the next five to ten years. In addition, we intend to use the existing infrastructure for sustainable and climate-friendly activities such as hydrogen production with subsequent CO<sub>2</sub> storage (blue hydrogen) or hydrogen storage in depleted gas deposits (green hydrogen). Spirit Energy’s first licence to feed CO<sub>2</sub> into a depleted natural gas field was recently approved.

Alongside geothermal energy, CO<sub>2</sub>-neutral, i.e. decarbonised hydrogen can become an important building block for a climate-friendly future. We are already examining various production methods and are analysing how our gas infrastructure can be used for hydrogen – even though sufficient quantities of hydrogen will, in all likelihood, not be available in Munich until the 2030s at the earliest. As long as there are no adequate solutions to hydrogen storage or technology, the use of natural gas as a “bridge technology” will ensure a smooth transition to renewable energies. We use natural gas in the environmentally benign combined heat and power process with reduced CO<sub>2</sub> emissions.



Furthermore, energy storage is a fundamental prerequisite of the energy transition as the decoupling of generation and consumption will make gradual replacement of conventional energy sources possible. At the same time, every additional kilowatt-hour of storage capacity will also increase the general supply reliability for our customers. This is why we are taking a correspondingly close look at this issue. In 2021, we commissioned our second large-volume battery storage system at our Freimann combined heat and power plant. It offsets short-term deviations between electricity supply and demand and thus contributes greatly towards ensuring stable electricity grid operation. The battery storage system at our Uppenborn 1 hydroelectric power plant likewise successfully commenced operations in late 2022. The plans for the "Süd" energy location in Munich moreover include the construction of a large-scale heat storage reservoir. In addition, we have commissioned a study on deep heat storage that is to provide us with important insights into ways to realise such systems from a technical, environmental, and economic perspective.

#### Energy generation and renewable energies ratio (in GWh and %, respectively)

|   | 2020            | 2021            | 2022            |
|---|-----------------|-----------------|-----------------|
| Gas volume produced                           | 16,300.0        | 13,710.0        | 10,520.0        |
| Electricity volume generated                  | 7,633.3         | 9,315.5         | 8,736.3         |
| RE ratio <sup>1)</sup>                        | 60 %            | 76 %            | 75 %            |
| Crude oil volume produced                     | 7,200.0         | 5,550.0         | 1,920.0         |
| District heating volume generated             | 4,888.2         | 5,276.6         | 4,670.1         |
| RE ratio <sup>1)</sup>                        | 14 %            | 17 %            | 23 %            |
| District cooling volume generated             | 54.2            | 53.2            | 61.4            |
| RE ratio <sup>1)</sup>                        | 77 %            | 75 %            | 67 %            |
| <b>Energy generation (total)<sup>2)</sup></b> | <b>36,075.8</b> | <b>33,905.3</b> | <b>25,907.7</b> |

<sup>1)</sup> RE = renewable energies

<sup>2)</sup> Sums may differ due to rounding differences.

#### Energy supply to final/end consumers (in GWh)

|                           | 2020            | 2021            | 2022            |
|---------------------------|-----------------|-----------------|-----------------|
| Gas supply                | 19,665.1        | 19,665.1        | 15,241.7        |
| Electricity supply        | 6,817.4         | 6,822.5         | 6,707.3         |
| District heating supply   | 4,157.3         | 4,688.5         | 4,351.1         |
| District cooling supply   | 54.2            | 53.2            | 61.3            |
| <b>Total<sup>1)</sup></b> | <b>30,694.0</b> | <b>31,229.3</b> | <b>26,361.4</b> |

<sup>1)</sup> Sums may differ due to rounding differences.



**When it comes to the topic of energy, there are three aspects of particular importance to us – they are known as the magic triangle of the energy sector:**

#### 1. Supply reliability

Munich's electricity supply is extremely reliable; we have one of the lowest outage rates in Germany: in 2022, the supply was interrupted for only 10.25 minutes per consumer (previous year: 8.88 minutes) in the grid operated by SWM Infrastruktur GmbH & Co. KG. The increase versus the previous year was caused by severe storms that damaged numerous components of the electricity grid in part of our supply region. Nevertheless, our outage rates are still below the German national average, which was 12.70 minutes per consumer in 2021). Our customers benefit from our excellent infrastructure, our M-Sicherheitsservice security service, and our tried-and-proven processes and communication structures.

#### 2. Environmental suitability

We are increasingly relying on regenerative energy sources and, as a basic principle, take care to ensure economical, efficient, and environmentally friendly use of energy and resources. Our energy offerings are becoming more and more sustainable and are thus making an increasing contribution to the achievement of the EU's ambitious targets for the decarbonisation of the electricity and heating supply. With M-Ökostrom electricity, we enable all Munich citizens to opt in favour of a particularly environmentally friendly green energy supply. Customers buying M-Ökostrom Regional are supplied with green electricity generated in Munich or within a radius not exceeding 50 kilometres around the city. From this tariff, for every kilowatt-hour sold we invest one cent in the construction of new photovoltaic and hydroelectric power

<sup>1)</sup> At the time of writing, the 2022 national average outage rate for Germany was not yet available.



plants in the region. Our M-Ökostrom KlimaAktiv product likewise goes beyond mere green characteristics and includes an additional amount that is invested in the expansion of renewable energies. On a nation-wide level, approximately one fourth of our residential and business customers have already opted in favour of green electricity products. Furthermore, our M-Kompensation Plus product offers companies the possibility to make a regional contribution to the expansion of renewable energies in addition to compensating their residual emissions ([see also page 28](#)).

In our heating supply, we offer the possibility to compensate greenhouse gas emissions as an optional add-on to our supply contracts, either as an integral part of the product (e.g. green gas) or as a stand-alone add-on component, depending on the customer segment. M-Fernwärme district heating is sustainability-oriented thanks to its use of efficient combined heat and power (CHP) plants. What is more, the consistent expansion of geothermal energy is, of course, gradually reducing the CO<sub>2</sub> load of our district heating. Our natural gas filling stations supply M-Erdgas – a fuel based entirely on renewable biomethane. The latter is fully derived from domestic organic waste, which means that no potential food crops are used in production.

The origin of our green electricity products from renewable energies is guaranteed through certificates of origin; in addition, they have been awarded the TÜV SÜD eco certificate. What is more, we inform our customers about the electricity labelling that is required by law and list all relevant sustainability aspects on our website.

### 3. Cost efficiency

We want to offer fair value for money when it comes to the costs for electricity, natural gas, and drinking water. To diversify our raw material sources and produce as cost-efficiently and environmentally friendly as possible, we use a wide array of technologies for electricity and heat generation in our own plants. In addition, we have secured our “key factors”: we have our own agricultural fields and plots of land for biogenic materials, mining rights for geothermal energy, as well as storage facilities. This makes us a little less dependent on the international energy markets.

For a long time, our procurement strategy resulted in relatively moderate prices for our customers. In 2022, however, we, too, were forced to increase our prices. The reason was the very strong and rapid global surge in energy prices, which directly affected our procurement costs: to safeguard a reliable supply for our customers, we also purchased electricity during high-price periods in

2022. Following the price increase as of 1 January 2023, we unfortunately ranked among Germany’s most expensive providers for the first time. Since then, we have made great efforts and accepted a decline in revenues in Sales to return to lower prices as quickly as possible. As of 1 April 2023, our efforts proved successful when we were able to bring down the electricity prices for residential customers by approximately 15 % and district heating prices by some 23 %. We plan to reduce energy prices further before the 2023 financial year has run its course. In addition, we are providing assistance to low-income Munich citizens via a heating fund that has been set up explicitly for this purpose ([see the box on page 16](#)).

Detailed information on the composition of the electricity price, state levies and taxes, price-relevant regulations, and the currently applicable prices is available for inspection at all times on our website, where we also explain the structure of our bills and the calculation of the advance instalments.

Alongside the three “traditional” goals of the energy sector, the “magical quadrangle” of SWM’s energy management also includes social acceptance of the plants and infrastructure required for the energy supply and the way in which they are communicated.



### Two key strategic goals drive our actions in the Energy segment:

- **Our renewable energies expansion campaign:** From 2025 onwards, we intend to generate sufficient green electricity in our own plants to cover all of Munich’s consumption. In 2022, we generated approximately 5.6 billion kilowatt-hours of green electricity in our own plants. Given the rising number of inhabitants, increasing electromobility, and intensified use of heat pumps, Munich’s demand for electricity will continue to grow – to approximately 8.4 billion kilowatt-hours by 2035 according to forecasts. We intend to cover this additional electricity demand, too, with green electricity.
- **Our district heating vision:** By 2040 at the latest, we intend to achieve CO<sub>2</sub>-neutral coverage of Munich’s district heating requirements. In these efforts, we will mainly rely on deep geothermal energy. We are already operating six geothermal plants in Munich and the surrounding region, which includes Germany’s largest geothermal plant, and are planning the construction of a seventh geothermal plant on the periphery of the grounds housing the Michaelibad public pool.

# 90 % green electricity for Munich

Our green electricity generation arithmetically already corresponds to some 90 % of Munich's power consumption.

We also see high growth potential for district cooling. Here, we use cold ground water and Munich's underground streams in central cooling facilities. Detailed explanations about our approach to generating climate-friendly or climate-neutral electricity, heating, and cooling can be found in the chapter ["Operational environmental protection"](#), from page 35 of this report.

In the area of decentralised energy solutions, we would like to give citizens access to ways in which they themselves can actively support the energy transition – with offers that are attractive from both an economic and environmental perspective. With M-Solar, SWM offers state-of-the-art photovoltaic solutions, covering all stages from counselling and planning to assembly to grid connection and service. An electricity storage device and a wall-mounted EV home charging station for charging electric cars with self-generated solar power can be added to the package. Apart from solutions for private homeowners and tenants living in apartment buildings (M-Mieterstrom, [see page 27](#)), we also offer solutions for commercial and public buildings. We sold more than 1,000 photovoltaic plants between 2016 and 2022. These plants are generating 10.7 million kilowatt-hours of solar energy per annum in Munich and the surrounding region (previous year: 6.9 million kilowatt-hours). This corresponds to the consumption of 3,064 households.

Via our Hanse Windkraft subsidiary, we are also working towards a sustainable energy transition. Through the acquisition of legacy wind parks, their upgrading for the future, and their continued operation after expiry of subsidisation under the German Renewable Energy Act (EEG), we ensure that renewable energies capacities remain in the market despite the prevailing difficult environment. In 2022, Hanse Windkraft's portfolio generated approximately 103 million kilowatt-hours of green electricity. We intend to continue on this path by fostering consistent growth and the development of innovative approaches for long-term continued operation of wind energy turbines.

## Water – the most important resource for all life

We regard access to clean drinking water as a fundamental right. At present, we are covering the water needs of approximately 1.6 million people. Three drinking water catchment areas supply the city of Munich: the Mangfall valley (75 %), the Loisach valley (20 %), and, to cover demand peaks, an area of moraine deposits east of Munich known as the "Schotterebene" (5 %).

Together, these areas supply one of Europe's best drinking waters. Each individual litre comes to our customers fresh from the source; we do not add any treatment substances to Munich's drinking water. Our M-Wasser thus satisfies top quality standards and boasts analytical results that are significantly below the strict limits permissible under the German Drinking Water Ordinance (TrinkwV) of 2001. In addition, M-Wasser is a low-cost and environmentally friendly refreshment.

The quality of M-Wasser is regularly tested all along the supply chain. We analyse 1,200 samples a month. To protect Munich's future drinking water supply and sustainably safeguard its high quality, we encourage organic farming in the catchment areas and make sure that soil and water are protected in the cultivation of the areas in the vicinity of our extraction plants. In addition, we invest in our extraction plants, overhead reservoirs, and pipework system.

Extreme weather events such as torrential rainfall or flooding may impact water quality in the three catchment areas. Even in such difficult situations, two plants using ultraviolet light guarantee impeccable drinking water. UV light has a much broader spectrum of effectiveness than chlorine; in addition, the use of this method avoids the formation of organochlorinated by-products. This purely physical process ensures secure and reliable drinking water disinfection. No foreign substances are dispensed into the water, and the taste remains unchanged, too.

## Water extraction (in million cubic metres)

|   | 2020  | 2021  | 2022          |
|---|-------|-------|---------------|
| Pipework system/<br>drinking water inflow     | 111.3 | 110.2 | 111.0         |
| Pipework system/<br>drinking water<br>outflow | 100.0 | 97.1  | <sup>1)</sup> |
| Thereof supply to<br>customers                | 97.9  | 95.3  | <sup>1)</sup> |
| Water loss<br>(3-year average) <sup>2)</sup>  | 0.37  | 0.36  | <sup>1)</sup> |

<sup>1)</sup> At the time of writing, the 2022 figures were not yet available because the volume supplied to customers is recorded on a rolling monthly basis until the end of 2023.

<sup>2)</sup> Loss calculation based on 3-year averages. This indicator has been calculated in cubic metres/(h x km) based on the guidelines issued by the German Technical and Scientific Association for Gas and Water (DVGW). The reported water losses are based on the requirements of the applicable standard, DVGW W 392. This loss score indicates the technical water losses between the inflow into the pipe system and building water meters.



## Mobile in Munich

People's mobility behaviour is subject to continuous dynamic change. Various modes of transport are combined in what is called multimodal mobility. Our Münchner Verkehrsgesellschaft (MVG) subsidiary is responsible for most of the mobility in Munich. It is Germany's second-largest municipal transport company and offers its passengers state-of-the-art and environmentally friendly vehicles, highly qualified employees, and extensive information and services. In addition to the "traditional" local public transport system with underground, bus, and tram service, its offerings also include individual mobility services such as the MVG Rad bike rental service and digital services such as the "MVGO" and "MVG Fahrinfo München" apps. We link our services at mobility stations, facilitating smooth transition from public transport to individually usable offers. The goal: individual mobility without a car of your own – reliable solutions that are available at any time and everywhere and fulfil our customers' respective mobility needs.



### MVG has set itself the following goals:

- ▶ **By 2030**, we will convert 75 % of SWM's vehicle fleet (passenger cars, vans, and light commercial vehicles up to 3.5 tonnes) to electromobility.
- ▶ **By 2035**, we intend to electrify our entire operating bus fleet.
- ▶ **Continually**, we will – to the extent to which our financial resources permit – expand our service offerings through higher service frequencies and new lines and connections to keep pace with the growth of Munich and the metropolitan region and proactively support the mobility transition.
- ▶ **Continually**, we will improve barrier-free access in our vehicles and stops/stations.



The year 2022 was characterised by a steady increase in passenger numbers after the “Covid-19 dent” recorded in 2020 and 2021. Although passenger numbers have not yet returned to their 2019 levels, the trend is clearly visible and pleasing. Accordingly, in 2022, MVG removed most of the service restrictions it had introduced during the pandemic, which had been few to begin with. Since last year, all trams, for instance, once again run every 10 minutes until 10 p.m. One disappointing aspect remains: at MVG, too, the staff shortage discernible throughout the industry made full service temporarily impossible on certain lines. At the same time, however, MVG adopted innovative approaches to recruit new employees, especially drivers. After the success of the job application tram, the first job application underground train was unveiled in 2022, offering prospective candidates an easily accessible possibility of obtaining information on the profession of driver and, in a best-case scenario, immediately signing an employment contract.

The customer satisfaction survey conducted by MVG in 2022 once again provided important insights into customers’ expectations and satisfaction: many passengers consider high service frequency of MVG means of transport, a dense route network, and short travel times to be key and decisive factors for the use of public transport. Equally important factors are staff members’ customer orientation and on-time passenger information that fulfils customers’ information need – especially in the event of service disruptions. The eco-friendliness of the MVG means of transport is also a high priority for customers: 89 % of them considered this aspect to be (very) important in 2022; by using the MVG system, they want to make a contribution to climate protection. MVG’s investments in this area were rewarded by customers in their satisfaction scores: 95 % of the survey participants who considered “eco-friendliness” to be important, were (very) satisfied with MVG.



We are modernising and expanding our underground train fleet: at the end of 2022, 50 new Type C2 underground trains were in service.



By 2035, we want to completely convert the MVG bus fleet to electric buses.

Electric buses are one of the elements ranking high on our list of priorities, the goal being to make fleet operation independent of fossil fuels and, hence, even more eco-friendly. In 2022, we reached a milestone in the electrification of our bus fleet when we opened our new electric bus depot in the Hybrid.M compound. For more information, please read the chapter [“Operational environmental protection”](#) on page 41. In addition, we are modernising and expanding our underground train and tram fleets. At the end of 2022, 50 new Type C2 underground trains were in use, and another 35 will follow in the period until 2025. Some of the new trains will replace older vehicles, while the rest will expand our fleet. For Munich’s tram system, another seven of what will be a total of 73 new Avenio trams were delivered in 2022. Once they have been approved by the regulatory authority, they will gradually expand service capacities, facilitating both increases in service frequency in the existing network and coverage of planned new routes.

One of the new routes is the western tangential tram route. The approximately 8.3-kilometre-long new tram route between Romanplatz square and the Aidenbachstraße underground stop is a key component of the municipal local public transport expansion campaign. We plan to start construction in 2023 and intend to commence tram service section by section from 2025 onwards. Concurrently, we are planning two further tram routes (the northern tangential and the Munich North tram routes), and the Munich City Council has asked us to conduct feasibility studies for another eight projects. In the underground system, the focus is on infrastructure expansion. An advanced planning stage has already been reached for the underground routes to the Martinsried and Pasing destinations. The U9 underground route from the Implerstraße stop to the Schwabing neighbourhood is in the preplanning stage. Concurrently, operational facilities are also cornerstones of the mobility transition. After all, parking areas, depots, and workshops are particularly important prerequisites for an expansion of our services. SWM and MVG are already planning and/or constructing various sites. In this respect, we cooperate closely with municipal and state authorities and attach great importance to early and transparent involvement of

polymakers and local residents. In the year under review, we took an initial major step in the direction of modernising the tram infrastructure by opening the interim workshop at Ständlerstraße. In the new few years, this site will be expanded and turned into a full-fledged depot in order to create the capacities needed for the mobility transition.

The modernisation of the Sendlinger Tor underground hub continued in 2022 and is scheduled to be completed in 2023. In the period until autumn 2026, a further 125 escalators throughout the system will be exchanged. Furthermore, numerous refurbishment measures in the underground system, which is now more than 50 years old, are on our agenda, the goal being to maintain and enhance the system's performance capabilities.

After the recent upgrading of a number of underground stops with ramps raising their platform levels, the focus of our modernisation measures is now turning to tram stops. In late 2022, the first fully barrier-free stops were completed along the route of tram line 25. These are the Theodolindenplatz, Klinikum Harlaching, and Menter-schwaige stops. In future track construction projects, SWM and MVG will always check whether the stops concerned are suitable for installing barrier-free means of access. The goal is to make it as easy as possible for people with mobility constraints to board the trams at the respective stops. Whether or not a stop can be equipped for barrier-free access along its entire length very much depends on the site conditions. In all these cases, we weigh the trade-offs that are necessary to bring the requirement to remove barriers to accessibility to the greatest possible extent in line with the structural conditions.

Numerous digitalisation projects are also contributing to making mobility in Munich easier to access. Among other things, we had set ourselves the goal of creating an inter-modal and multimodal mobility platform that combines

traditional and new mobility options. Against this background, we merged our two apps "MVG more" and "MVGO" in February 2022. The new "MVGO" app has been developed further to turn it into Munich's mobility platform. It offers multimodal options for individual mobility in the city. The app supports fast and easy booking of the bikes of the MVG Rad bicycle rental service and the electric scooters and bikes provided by the TIER and Voi sharing services. Since autumn 2022, users have also had access to the public transport ticket shop and trip planning feature. Additional mobility services will gradually be included. The long-term plans provide for users to rely on their local app for the booking and payment of traditional public transport tickets, rental bikes, carsharing vehicles, electric scooters, electric mopeds, etc., throughout Germany. With more than 10 million tickets sold, the "HandyParken München" app – Germany's best rated car parking app – has exceeded even our ambitious expectations.

## MOBILE THROUGHOUT GERMANY WITH A SINGLE TICKET



In the months from June through August 2022, MVG also benefited from the tremendous interest the 9-Euro Ticket attracted throughout Germany. A total of 1.6 million of these special monthly public transport tickets were sold through MVG's sales channels. Although the policymakers had informed transport companies with very short notice about the imminent implementation of the 9-Euro Ticket, MVG quickly and reliably made great efforts to turn this scheme into a success. Approximately one out of five persons buying this ticket had not used local public transport before. The scheme gave them an opportunity to experience the performance and service quality of local public transport. In late 2022, MVG started to lay the groundwork for the distribution of the follow-up scheme, the "Deutschlandticket", and for making this ticket, which is valid in local and regional transport throughout Germany, available in the MVGO app.



Local public transport is the backbone of the mobility transition – traffic in Munich is to be climate-neutral by 2035.

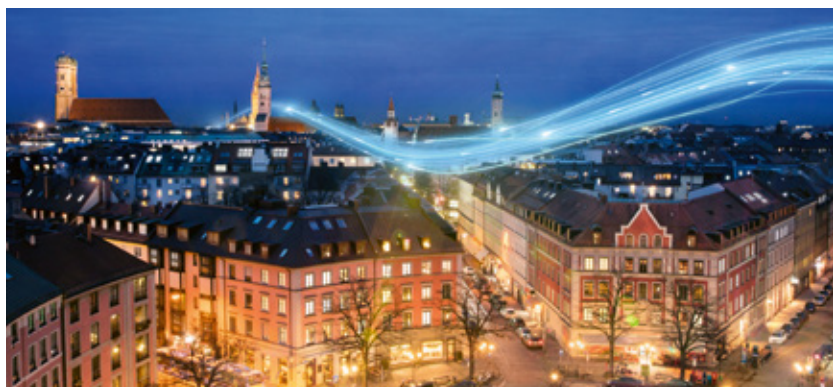
## We also create digital networks for Munich

The Covid-19 pandemic was the latest in a series of events that have clearly illustrated the important role played by high-performance data networks in keeping businesses and private life running. Together with our M-net subsidiary, we began to roll out one of Europe's largest continuous fibre-optic networks in 2010. The entire downtown area has already been developed, and we are connecting additional neighbourhoods to the network of the future on an ongoing basis. At present, approximately 630,000 private households and commercial businesses in Munich have direct access to high-speed Internet solutions. This number will grow to almost 650,000 by the end of 2023.

Through wholesale agreements, SWM and M-net are opening their high-performance fibre-optic network to other telecommunications providers such as Deutsche Telekom. There are several reasons why open access is a sustainable approach. First, it avoids the expensive – and unnecessary – construction of parallel infrastructures in addition to existing fibre-optic networks. Second, use by several providers leads to better utilisation of the capacities offered by fibre-optic technology. And third, the cost-intensive further expansion of the network can reasonably be focused on areas that have not yet been hooked up.

### SECOND PLACE IN THE SMART CITY INDEX

In the nation-wide 2022 Smart City Index, the City of Munich ranked second among 81 large German cities with a score of 85.3 out of a possible total of 100 points. This index is compiled by Bitkom, the German information and telecommunications industry association. Our infrastructure services contributed to this ranking: in the "IT and Communication" category, Munich earned second place in the comparison of cities, reaching 87.5 points. The areas carrying particular weight in this score were the projects aimed at providing public WLAN (WiFi), the roll-out of Munich's fibre-optic network, and the LoRaWAN long-range radio network. In the "Mobility" category, Munich reached 91.4 points. According to Bitkom's assessment, Munich's strong points are its smart traffic and transport management, its multimodal approach, and its digital parking solution ([see page 23](#)). Thanks to its innovative projects for digital involvement of the general public and networking with the digital scene, as well as the "Digital Twin" project, Munich moreover earned 90.7 points in the "Society" category. We have already implemented several digital twins, e.g. for the MVG electric bus fleet and the drinking-water grid ([see page 29](#)).



In addition, we are also banking on mobile Internet offerings: the City of Munich has commissioned us and M-net to set up free WLAN (WiFi) hot spots throughout the city. In March 2023, more than 700 public access points were already available. These hot spots thus cover some 161 public squares and more than 420 public buildings, schools, etc. In addition, many other hot spots have been and will be installed within the framework of cooperations, e.g. with municipal hospitals and MÜNCHENSTIFT, an organisation that provides care and age-friendly accommodation for the elderly. In total, we recorded more than 35 million logins in the M-WLAN in 2022.

For applications in the "Internet of Things" (IoT), in particular, we are also installing a city-wide long-range radio network: LoRaWAN. Such a network allows machines to communicate when sensor systems, smart meters, or even household appliances are incorporated. The cost-efficient and energy-saving network is an important milestone on Munich's path towards becoming a smart city.

M-Login already has 1.4 million users in the Munich metropolitan region. Via their M-Login access data, users can securely and conveniently access various web and app offers provided by many service partners from the areas of mobility, supply, leisure, and culture. Users can manage their personal data in a time-saving manner at a single location: their M-Login account. A payment function for SEPA (Single Euro Payments Area) direct debits and credit card options moreover allows users to handle payments quickly. The latest partner to join M-Login is "Muenchen" app, which was commissioned by the Munich City Council and allows users to buy tickets for leisure attractions in Munich such as Tierpark Hellabrunn (Munich's zoo), museums, and theatres. The app is still in the start-up phase, but the incorporated offers are continuously being expanded. In a further step, we will cooperate with the City of Munich and the municipal IT department in order to support the digitalisation of Munich's services for its citizens with the app where this makes sense – for example for appointment booking, new registrations, and notifications of change of address, etc.

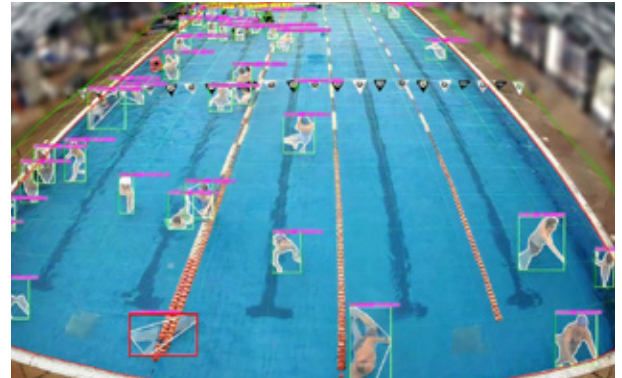


## We transform Munich into a city of swimming pools

Munich's public pools are good for people's wellbeing. The municipal essential public services comprise 18 modern indoor and outdoor pools, ten attractive sauna facilities, the Prinzregenten ice stadium, and two modern fitness centres. These facilities enable many people to exercise, relax, and spend time with family and friends at acceptable prices. What is more, a large number of children learn to swim in our classes every year.

Since 2019, the positive contribution of Munich's public pools to the public wellbeing has been confirmed by their public wellbeing inventory, which is audited by an external party. Not only were Munich's public pools successfully recertified in May 2022, they even improved their already good score of 391 points to a remarkable 426 points. For more information, please see the Public Wellbeing Report at [www.swm.de/gemeinwohlbericht](http://www.swm.de/gemeinwohlbericht)

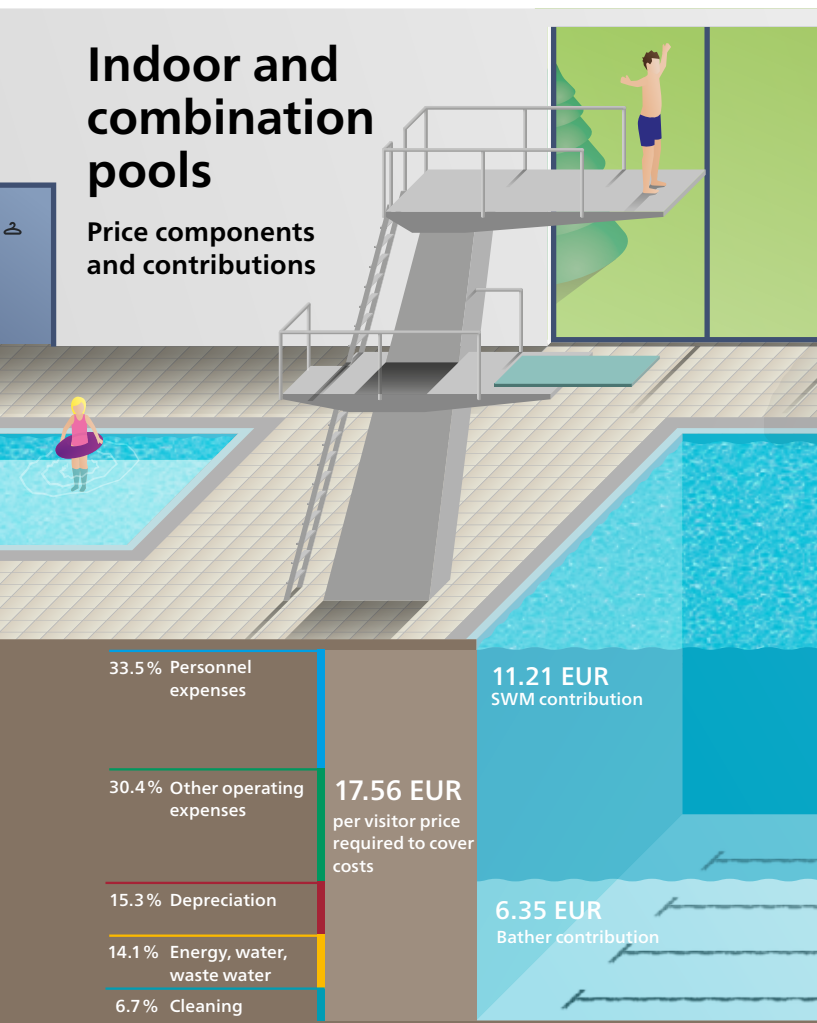
## A SMART SWIMMING POOL



At the Südbad public pool, M-Bäder is testing digital pool monitoring to support the staff and make swimming safer: artificial intelligence is being tasked with identifying potentially dangerous situations in the water and alert the lifeguards. The system has two components: video cameras in the pool area and smartwatches for the professional staff. The cameras capture the movements in the water and derive patterns. When unusual movements are recognised, the data is transmitted to the smartwatches of the supervising staff. The watches show an alert with information on the location of the bather that might be experiencing an emergency. Camera recordings are converted into data in real time and deleted immediately after the analysis. Nobody needs to worry about being surveilled while swimming. What is more, numerous posters draw attention to the fact that this project is being realised at Südbad. In a pilot project that will run for about two years, we want to discuss whether this technology may be beneficial for M-Bäder.

Statutory regulations and guidelines must be followed in pool operation. They include the German Infection Protection Act (IfSG), the DIN 19643 standard for pool water treatment, technical regulations and guidelines issued by the German Association for the Recreational and Medicinal Bath Industry (Deutsche Gesellschaft für das Badewesen). To keep up with these requirements, M-Bäder employees regularly attend training workshops.

Public pool operation is cost-efficient, but not profit-oriented. Financial losses incurred in this business segment are borne by Stadtwerke München Group. Given the significant increase in material, energy, and operating costs, future price trends, and upcoming investments in pool refurbishments, we unfortunately had no other option but to raise the ticket prices for our public pools as of 1 January 2022 – the first such increase



The data refers to the 2022 financial year and reflects regular operation. Large investments (pool refurbishments, new construction projects) have not been taken into account.



The Georgenschwaige outdoor pool will be transformed into a CO<sub>2</sub>-neutral natural pool by 2024.

since 2018. At the same time, however, we made changes in the structure of the ticket system to address features our customers had requested for many years – introducing more favourable conditions for various customer groups such as families, swimmers who want to stay for shorter periods, and senior citizens. The new ticket prices do not fully cover the actual costs incurred either. As a contribution to weathering the energy crisis, we lowered the temperatures in our swimming pools in 2022 and temporarily closed our saunas. When the summer outdoor swimming season ended, our Dantebad pool moreover did not switch to winter operation with a heated outdoor pool.

From October 2022 onwards, we were able to gradually return to regular operation of our pools and saunas. Only at the Michaelibad public pool, which uses natural gas for pool heating, were temperatures kept at their lower levels. And the Dantebad heated outdoor pool remained closed throughout the winter months. With these energy-saving measures, the public pools contributed to reaching the energy-saving targets of Stadtwerke München and the City of Munich.

To drive forward the sustainability of our public pools, we have defined two climate-relevant goals:

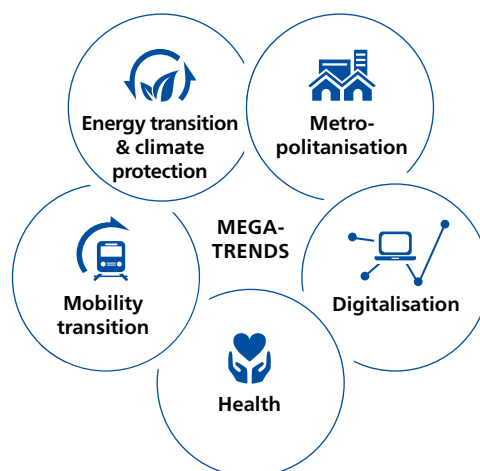
- ▶ **The Georgenschwaige pool** is to be transformed into Munich's first CO<sub>2</sub>-neutral swimming pool from 2024 onwards, reducing total emissions by approximately 100 tonnes CO<sub>2</sub>e (cf. page 42).
- ▶ **By 2040**, we intend to switch all M-Bäder public pools to CO<sub>2</sub>-neutral operation.

Within the framework of our sustainability strategy, we are moreover driving numerous other topics forward such as sustainable construction, sustainability in the supply chain, waste avoidance, and biodiversity. For further information, please see the chapter "Operational environmental protection".

## Innovation safeguards continued high quality of life

The world is in a state of flux, and the population on earth continues to grow rapidly. Among the numerous economic, technical, and social developments, five megatrends will have a particular impact on our future business.

- ▶ The energy transition is being driven by the need and willingness to protect the climate. We need alternatives to fossil fuels, not least because energy demand continues to increase worldwide. Renewable energies are already omnipresent today – but the future of energy generation belongs solely to them.
- ▶ Large cities are growing. According to the Bavarian State Office for Statistics, the Munich metropolitan region will have a population of around 3.16 million by 2041 – an increase of more than 200,000 compared to the current number of inhabitants. In the period until 2041, the population of the city of Munich will grow by about 7.3 %, to approximately 1.6 million inhabitants.
- ▶ People will want both get a reliable supply of essential services and also be mobile. For this, we need a mobility transition trending to innovative and environmentally benign solutions.
- ▶ Everything is becoming more digital. The range of IT solutions is expanded every day, and digital tools are used in virtually all spheres of life. This is changing customer relationships, business models, and workflows.
- ▶ Health ranks among the most important personal values. To ensure participation in society and an active life for all, people must also be given opportunities to maintain their physical fitness.



We believe these five megatrends offer opportunities for our company. Alongside our traditional businesses, we therefore intend to develop new service areas that help safeguard the high quality of life in the region and turn Munich into a sustainably smart city in every respect.

### New business models

According to a study conducted by Capital und Statista, SWM is one of Germany's most innovative energy utilities. In our Group, we have therefore established a unit that explicitly focuses on innovation. We continuously validate our solutions and products together with our customers and, if they prove successful, we lead them to profitability. Our innovation process aims to minimise the associated business risks. If a business idea does not fulfil the criteria for long-term profitability, it is discarded during this process.

In the development of innovations, we pursue a clear financial goal: by 2025, new products and services shall account for an EBIT share of at least 3 %. To optimise our portfolio and make processes more efficient, we are moreover driving SWM's digital transformation forward.

Changes in the energy and transport sectors, digitalisation and interconnected networks, and the desire for sustainable and local production processes expressed by many customers open up numerous opportunities for new business models for us. We have therefore expanded our product and service range in the last few years and are

increasingly supplementing the traditional supply services with personalised and decentralised energy solutions such as photovoltaic plants for homeowners.

In 2022, we expanded our photovoltaics portfolio to include the tenant-gear M-Mieterstrom product. With this model, we also offer people living in apartment buildings an opportunity to benefit from reasonably priced solar electricity generated on their own roofs. We lease roof space from building owners, on which we install solar plants. Residents can directly use the electricity generated, and any excess electricity is fed into the grid. And when the sun does not shine, we supply green electricity.







M-Ladelösung is a charging-as-a-service approach for charging electric vehicles with M-Ökostrom green electricity – for both business and residential customers. One of the services we provide in this context is dynamic load management, which prevents overloading and subsequent removal of house connections. SWM can also equip duplex parking spaces or open parking spaces without walls (e.g. in an underground car park) with a “wallbox” station for safe charging of electric cars. This also applies to parking spaces for customers. For example, we recently made it possible for bathers visiting the Cosimabad public pool to charge their cars with green electricity. With the introduction of M-Ladestrom Pur, we expanded our electromobility offerings even further. This green charging tariff for electric vehicles enables electromobilists who do not currently use any SWM charging solution to charge their vehicles at more favourably priced conditions than the ones offered by regular household electricity.

In 2022, our M-Ladelösung charging solution won the eMove360° Award in the “Mobility Concepts & Services” category. M-Ladelösung fulfils customers’ individual requirements with end-to-end personalisation, from counselling to planning to implementation, and was thus singled out as a particularly future-proof solution. Going forward, we will continue to drive the expansion of the charging infrastructure forward. In 2023, we will focus on a targeted roll-out of HPC (high power charging) stations and continue to merge our public and private/commercial charging solutions.

We want to join forces with our customers on our path towards a climate-neutral Munich. Since autumn 2021, we have offered our business customers an opportunity to offset greenhouse gas emissions that are unavoidable in the near term (e.g. emissions associated with their vehicle fleets or travel activities) via our M-Kompensation Plus product. In this product, we combine CO<sub>2</sub> compensation through investments in high-quality international climate-protection projects with additional regional commitment. We use the amount allocated to regional climate protection for both lifetime extensions of existing wind turbines and the construction of new generation plants based on renewable energies.



### New technologies and research projects

SWM uses the Internet of Things (IoT for short) for the organisational implementation of data-driven digitalisation solutions. The IoT combines physical objects and the digital world. Devices or machines are equipped with sensors and linked to the Internet. A visualisation provides users with information on the status and condition of the interconnected objects. Since 2019, SWM has successfully implemented more than 30 internal use cases. For MVG buses, for example, we have created a digital twin that gives us access to live technical data and historical readings of a bus at all times. This helps us optimise the deployment and charging of our electric bus fleet or improve maintenance processes. At the same time, the information can be used to reduce staff deployment, driving times, and consumption and optimise processes. Further application examples are measuring and capturing of environmental data, coordination of parking spaces, and preventative maintenance measures in buildings. In the future, we want to make our IoT offerings also available to business customers.

In addition, SWM is involved in various research projects. One example is the unIT-e<sup>2</sup> project, where SWM has been a partner since August 2021. This "Real Lab for Networked E-mobility" is striving for intelligent and safe integration of electromobility into existing and future infrastructures with a view to satisfying the demands of the transformation of the energy system. Over a period of three years, project partners from a variety of industries – from car manufacturers to grid operators – will jointly develop and test solutions. unIT-e<sup>2</sup> will thus make a major contribution to a sustainable renewal of the mobility sector that is accepted by society. At the same time, the project will address the challenges of increasing systems integration, i.e. of electric individual mobility and heat generation.

Supraconductor cables are trail blazers for the power supply of the future: they transmit electrical power virtually without any losses, are compact, and can be installed with comparatively little effort. This is efficient and reduces the burden on the environment. Together with partners, we want to realise a supraconductor cable in Munich and test it for six months in the SWM grid. The trial setup with the requisite cooling system is currently in the planning stage. Key components such as the cable and the control hardware have already been developed. The goal of the project is the installation of a

twelve-kilometre-long high-voltage transmission line between the main substation in Menzing and the "Süd" energy location in the form of a "high-temperature supraconductor". This would make Munich the location of the world's longest supraconductor connection.

We will implement all this and many more projects in the coming years and decades. This will bring us closer to our vision: Munich as a shining example of a networked city with a high quality of life.

### PRACTICAL USE OF ARTIFICIAL INTELLIGENCE AND AUGMENTED REALITY



Last year, we professionalised the innovative strength of SWM's IT even further. A broad and decentralised set-up in the areas of IT innovations facilitates tailor-made solutions for the challenges of tomorrow. We are testing innovative technologies and are developing initial prototypes. Among other things, we are working on AI applications for voice recognition, speech synthesis, image recognition, and multilingual translation. All are done on the basis of existing AI components in a cloud – this saves resources and costs. In addition, we are experimenting with augmented reality and virtual reality applications. Over time, it will become possible to use this approach to plan and inspect buildings without being physically on site. This will minimise expenses and save time and emissions by not travelling. New and interesting applications are also emerging for employee training. One case in point is the simulation of dangerous situations or remote plants.



# Operational environmental protection





Our environmental policy is based on the conviction that we must protect soil, water, and air as natural resources and conserve energy and water. We act responsibly towards the environment and society and keep an eye on the needs of future generations. This is why we drive the energy transition forward and are committed to investing in business areas with long-term perspectives – as outlined in our chapter on essential services. We align internal processes and value chains with high-quality ecological standards and continuously improve them.

## Environmental management

At SWM, the Management Board is responsible for environmental protection and management. Its members appoint the designated corporate representatives responsible for waste, water protection, emission control, and hazardous substances required by law. Organisationally, these representatives and officers are assigned to the Quality and Environmental Management staff unit. Radiation protection officers, by contrast, are appointed by the specific organisational units impacted because optimum performance of their relevant duties can only be ensured if they have the necessary connection to the operations in question.

The Quality and Environmental Management staff unit addresses issues pertaining to operational environmental protection in the core Group and is the central contact for the various specialists and managers from all SWM business segments. The Management

Representative, Environmental Protection is also assigned to this staff unit. This officer is appointed by the Director, Technology and takes actions aimed at preventive environmental protection. In addition, environmental management representatives have been appointed in the individual business segments of SWM Group. Within the framework of the management systems, they inter alia ensure timely preparation of documentation required by the regulatory standards, coordination of internal and external audit programmes, collection of evidence of continuous improvements, and implementation of high-level environmental processes and procedures.

Waste, water protection, and emission control specialists have been appointed in all organisational units where such appointments are deemed necessary by the precautionary principle in environmental protection. They support the executives of the respective organisational units in the implementation and execution of the requirements and regulations under environmental law within their area of responsibility and work closely with the Environmental Protection Officer of the core Group on technical issues.

The Management Board is also responsible for SWM's energy policy. Its members have appointed a high-level Energy Management Representative who ensures the introduction, maintenance, and improvement of our energy management system in accordance with DIN EN ISO 50001. At the segment level, further management representatives and specialists help perform the tasks of the Energy Management Representative.

## Environmental and energy management representatives

### REQUIRED BY LAW (GROUP):

Emission Control Officer<sup>1)</sup>  
Water Protection Officer<sup>1)</sup>  
Waste Inspector<sup>1)</sup>  
Hazardous Substances Officer  
Radiation Protection Officer

### INTERNALLY APPOINTED (GROUP):

Management Representative,  
Environmental Protection<sup>2)</sup>  
Energy Management Representative

### (DIVISION / BUSINESS SEGMENT):

Environmental Management Officer  
Management System Specialists  
Waste / Water Protection /  
Emission Control Specialists<sup>3)</sup>

<sup>1)</sup> When the same person is responsible for various legally prescribed representative functions – as is the case at SWM – “environmental protection representative” is also used as a general term.

<sup>2)</sup> The Management Representative, Environmental Protection has similar duties and authorisations in business segments in which assignment of these tasks to an environmental protection officer is not required by law – adjusted to the environmental relevance of the respective segments.

<sup>3)</sup> At the engineer / foreman level in the individual organisational units

We operate a quality management system in accordance with DIN EN ISO 9001 as well as environmental management systems in accordance with DIN EN ISO 14001 and EMAS (Eco Management and Audit Scheme in accordance with the European Union's EMAS III Eco-Audit Regulation). Individual risky technical units are certified in accordance with ISO 45001 (occupational health and safety). To comply with the requirements of the German Act on Energy Services and Other Energy Efficiency Improvement Measures (EDL-G), we have implemented an energy audit pursuant to DIN EN 16247-1 in those units that neither have an energy management system nor EMAS.

All subsidiaries in which environmental, quality, energy, and occupational health and safety management systems are applied set annual or multi-year targets for themselves. Within the framework of our energy management, we perform energy efficiency evaluations pursuant to DIN EN ISO 50001 at least once a year. They provide us with important data for the comparison of past and current energy consumption levels, influencing factors, and early identification of deviations. As a basic principle, all processes and activities involved are audited internally within the three-year certification

period, and on-site walkthroughs are performed at all technical facilities. Compliance with methodologies is reviewed and audited externally on an annual basis.

In the first quarter of 2023, internal training workshops were held for environmental auditors. The target group of these workshops are all employees performing audit tasks in those areas certified in accordance with EMAS and ISO 14001. Workshop participants learn how to check via on-site walkthroughs and through audits whether the relevant applicable environmental regulations are actually complied with in practice. Based on SWM-specific practical examples, they acquire the knowledge they need for implementing the rules and regulations in everyday operations. For the first time, training sessions are offered on operational environmental protection that are specifically geared to process and plant managers. These training sessions are held online via Teams and are mainly directed at employees with operational responsibility in units handling materials that are hazardous for the environment. The training module provides a quick overview of the pertinent rules and regulations and duties, as well as tips for their practical implementation.

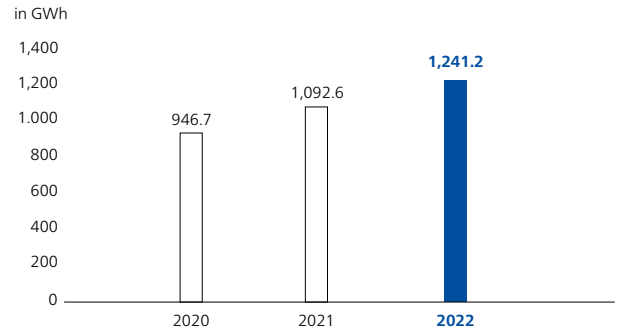


## Climate protection

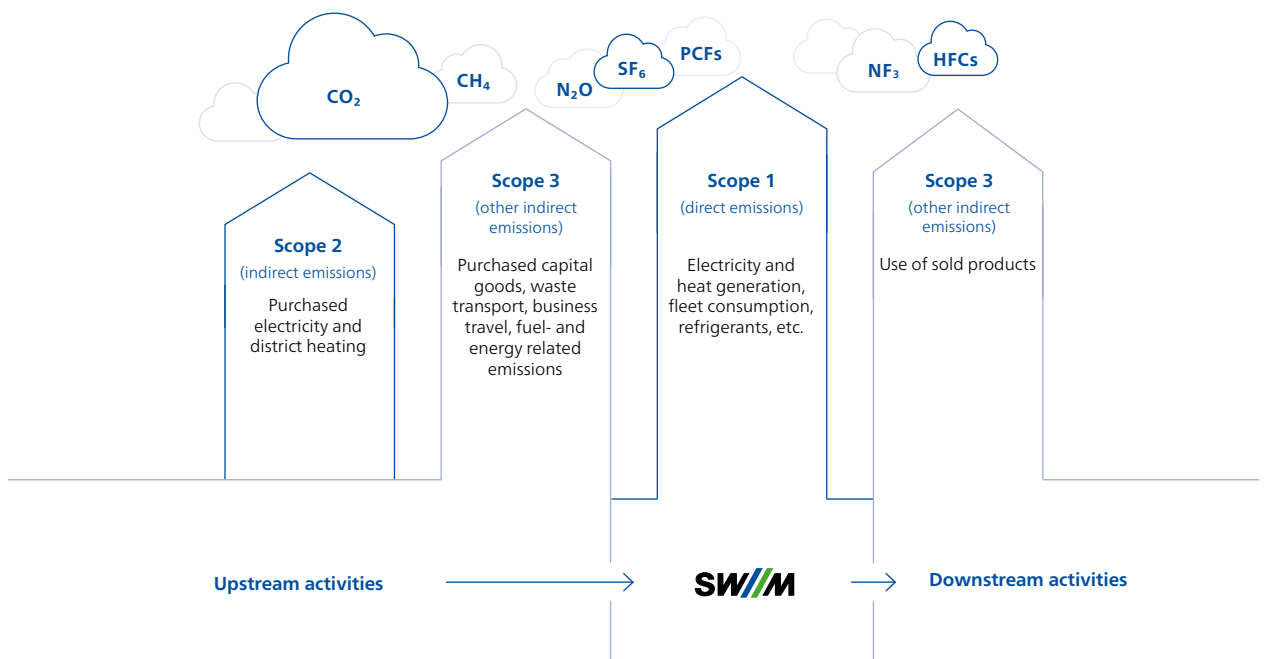
Our business activities result in significant amounts of greenhouse gas emissions. Given the current state of the art and existing economic restrictions, completely climate-neutral provision will not yet be possible for many of our offerings over a short to medium-term horizon. Nevertheless, we will continue to steadily improve the carbon footprint of our services. After all, in our corporate strategy we have set the long-term goal of making a key contribution to Munich's climate neutrality. Ambitious targets in the individual business segments already serve the purpose of achieving this high-level goal. In addition, we started in 2022 to develop a sustainability strategy that will define more concrete goals, taking account of our greenhouse gas inventory.

Developments regarding the milestones set for 2022 vary. On the one hand, the sale of gas and oil fields in Norway was completed in the year under review, allowing us to report that we had exited from the fossil fuel markets in Norway and Denmark. On the other, the conversion of the coal-fired block in our "Nord" cogeneration plant to natural gas had to be postponed by two years for reasons of supply reliability.

### Energy consumption within the organisation<sup>1)</sup>



<sup>1)</sup> Energy consumption of the following companies: Stadtwerke München GmbH/ SWM Services GmbH/SWM Infrastruktur GmbH & Co. KG/SWM Infrastruktur Verwaltungs GmbH/SWM Kundenservice GmbH/SWM Versorgungs GmbH/ major SWM shareholdings in energy generation from regenerative sources.





## Emissions Scope 1, Scope 2, and Scope 3 (in tonnes)<sup>1)</sup>

|   | 2020       | 2021       | 2022       |              |
|---|------------|------------|------------|--------------|
|   | Core Group | Core Group | Core Group | Entire Group |
| <b>Scope 1</b>  |            |            |            |              |
| CO <sub>2</sub> equivalents (global warming potential)                    | 2,878,577  | 2,579,178  | 2,356,701  | 2,561,692    |
| Thereof   |            |            |            |              |
| Gas (in tonnes)   | 1,723,855  | 1,383,818  | 929,760    | 1,113,626    |
| Coal (in tonnes)  | 859,325    | 907,232    | 1,161,614  | 1,161,614    |
| Waste (in tonnes)   | 253,931    | 245,842    | 224,129    | 224,129      |
| <b>Scope 2</b>  |            |            |            |              |
| CO <sub>2</sub> equivalents (global warming potential)                    | 8,990      | 7,675      | 9,249      | 24,868       |
| consisting of third-party consumption of electricity and district heating |            |            |            |              |
| <b>Scope 3</b>  |            |            |            |              |
| CO <sub>2</sub> equivalents (global warming potential)                    | 2,926,318  | 2,966,213  | 2,914,714  | 10,704,923   |
| Thereof   |            |            |            |              |
| Fuel- and energy-related emissions of electricity                         | 813,770    | 741,952    | 908,299    | 908,299      |
| Use of sold products (natural gas)  | 1,558,575  | 1,695,828  | 1,494,259  | 7,747,487    |
| Fuel- and energy-related emissions of natural gas                         | 388,138    | 364,809    | 336,139    | 1,225,408    |
| <b>Biogenic emissions</b>   |            |            |            |              |
| CO <sub>2</sub>   | 404        | 319        | 642        | 7,856        |

<sup>1)</sup> Compared to the previous year, we have increased our data quality through various improvements in our data collection methodology. We have also adjusted the figures of the previous year's Sustainability Report accordingly.

### Preparation of a greenhouse gas inventory

In 2022, we compiled our first greenhouse gas inventory for the years 2019 through 2021. We follow the market-based approach of the internationally recognised standard of the Greenhouse Gas Protocol and include both direct emissions (Scope 1) and indirect emissions (Scope 2 und Scope 3) of SWM. For the year 2022, we expanded the consolidation group of the greenhouse gas inventory. With immediate effect, we will not only examine the SWM core Group ([see page 70](#)) but also all major shareholdings<sup>1)</sup> ([see the SWM Annual Report, page 76 et seqq.](#)).

Since we are an energy utility, our direct emissions mainly result from electricity and heat generation. Regarding the indirect emissions from the upstream and downstream value chain, the focus is on emissions from use of sold products, purchased capital goods, waste transport, and business travel, as well as fuel- and energy-related emissions. Furthermore, biogenic emissions are generated, which come from the combustion of biological materials (e.g. biomass).

<sup>1)</sup> Shareholdings are considered to be "major" when they are of material importance for SWM Group from a financial perspective or due to their impact on the environment. Therefore, all fully consolidated shareholdings as well as all shareholdings in the areas of energy supply and mobility have been included in the greenhouse gas inventory.

The Ukraine crisis and the gas deficit situation also affected our 2022 greenhouse gas inventory. Overall, we succeeded in reducing Scope 1 emissions slightly compared to the previous year. The reasons were, first, a mild winter and, second, crisis-induced general energy conservation efforts.

Scope 1 emissions from natural-gas-based electricity and heat generation decreased noticeably, which, however, was largely outweighed by higher emissions from increased coal combustion. The latter was necessary because the gas deficit situation made the planned fuel switch from coal to gas impossible for reasons of supply reliability.

In 2022, energy conservation efforts also made themselves felt in indirect emissions, notably Scope 3 emissions. Lower quantities of natural gas sold also led to lower emissions from gas consumption at our customers and lower fuel and energy-related emissions of electricity and gas. By contrast, the fuel and energy-related emissions from electricity were higher than in the previous year because – as described above – coal had to be used as a fuel to a greater extent to ensure a reliable supply.

In the emission levels of the major shareholdings of SWM Group as a whole, which were captured for the first time, the indirect emissions of our gas shareholdings play a key role. In particular, they result from the purchase and sale of natural gas (Scope 3).

Going forward, we will compile annual greenhouse gas inventories for the entire Group including all major shareholdings. With this, we lay the foundation for more transparency on Munich's path to climate neutrality.

### Expansion of green electricity generation

We launched our renewable energies expansion campaign as far back as in 2008 – and thus earlier than many other energy utilities. At the time, we set ourselves the ambitious goal to generate sufficient green electricity in our own plants from 2025 onwards to cover all of Munich's requirements. This equates to a target of around 7 billion kilowatt-hours (kWh) of electricity, which we continue to pursue. Given the prospect of a significant increase in

electricity demand in the years that follow due to Munich's growing number of inhabitants as well as the expansion of electromobility, in 2020 we adjusted the time horizon and generation target of our expansion campaign: by 2035, we intend to generate up to 8.4 billion kWh of green electricity. To achieve this goal, we will tap the potential of a diverse range of sustainable energy sources, attaching a strong priority to projects in the Munich region. By 2035, we intend to cover 35% of the electricity consumption of Munich's households with regionally generated electricity from renewable energies. To further accelerate our activities for the energy transition in Munich, the metropolitan region, and Bavaria, as well as strengthen the local expansion campaign, we moreover plan to once again appoint a managing director for SWM's fifth division in the course of 2023, focusing this division on the regional energy transition. As we are currently not yet able to generate as much green electricity as needed regionally, we make use of shareholdings to engage in activities in Germany and Europe that go beyond the Munich metropolitan region.





Wind energy is still the most productive as well as the most profitable technology for the generation of green electricity from renewable sources. Accordingly, wind parks in Germany and Europe are a focal point of our investments. The largest generators are the two German offshore wind parks of DanTysk Sandbank Offshore Wind GmbH & Co. KG (SWM stake: 49 %) and the Norwegian onshore wind parks of Midgard Vind Holding AS (SWM stake: 70 %). Their generation capacity exceeds the mark of 1 billion kWh (SWM share) each. The capacity of the wind parks held by our wpd europe GmbH shareholding (SWM stake: 33 %) in its own portfolio stood at 795 megawatts in the year under review. Since 2022, we have also expanded our activities to the servicing of wind turbines: a dedicated in-house service team is responsible for the maintenance of the 81 turbines run by SWM Windpark Havelland in the German State of Brandenburg.

In our regional projects, we mainly use solar power, hydro-electric power, and biomass as energy sources for green electricity generation. We are putting particular emphasis on driving the expansion of photovoltaics forward. The City of Munich has set itself the goal of covering shares of approximately 10 % and 20–25 % of municipal electricity consumption by 2035 and 2050, respectively, with green electricity generated within the Munich city limits. To

achieve this goal, a photovoltaics expansion plan has been drawn up, which will lead to PV electricity generation capacities of ca. 800 million kWh by 2035 and ca. 2 billion kilowatt-hours by 2050. This corresponds to 11 % (2035) and 24 % (2050) of the projected direct electricity consumption in Munich.

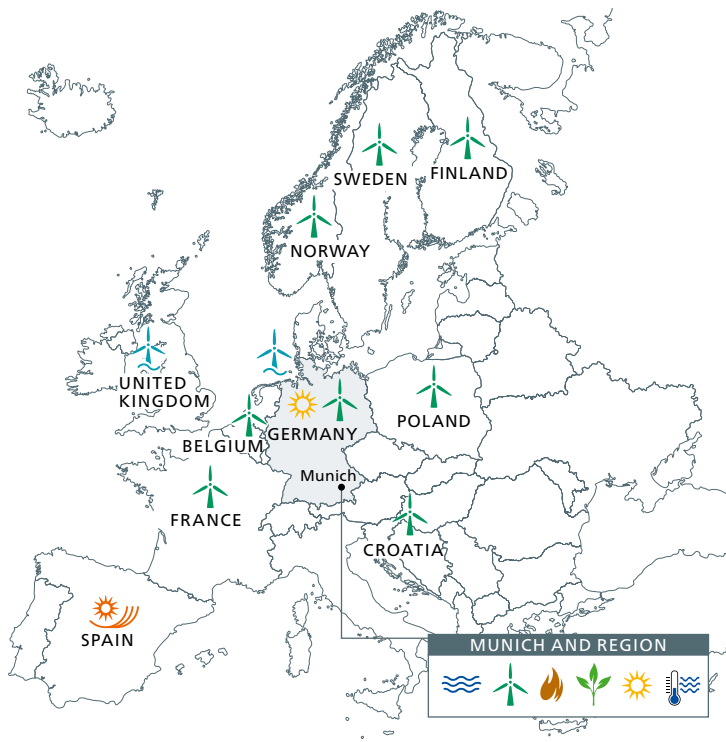
### EUROPE'S "POWER LAKE"

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Electricity is generated at various sites in Europe and fed into what is known as the "integrated European electrical grid". From a physical point of view, this electricity is a combination of the output from all nuclear, coal-fired, and gas-fired power stations as well as green electricity generation plants and is thereby made available to customers in this blended form. The image of a huge lake can be used to describe the integrated European electrical grid. All electricity generators feed this "power lake", and all electricity consumers take something out of it. Every kilowatt-hour of electricity generated from renewable energies makes this European lake cleaner. Participations in climate-friendly energy generation plants outside Munich thus make just as much sense as our regional efforts.

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Including shares; as of 09/2022

## MUNICH AND REGION

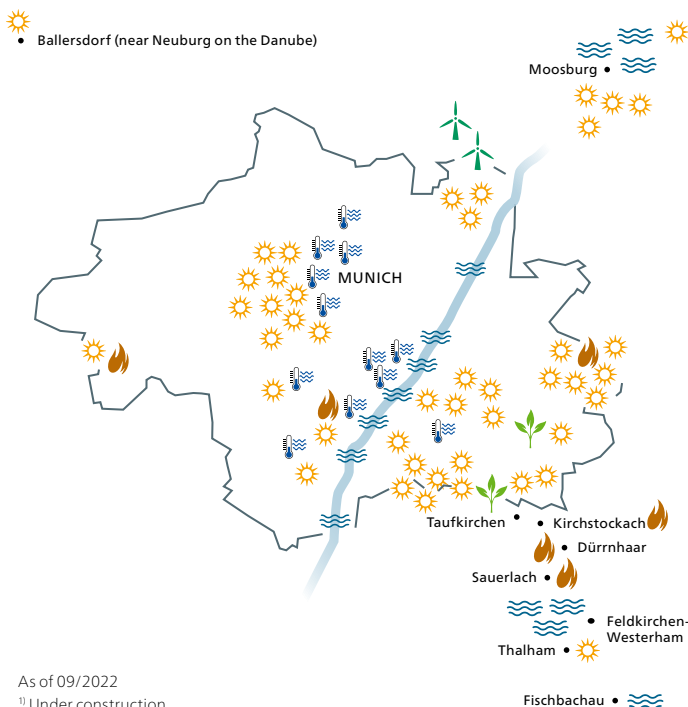
- 14 hydropower plants
- 2 wind power plants
- 6 geothermal power plants
- 1 biogas CHP plant
- 1 biomass power plant
- 45 photovoltaic plants and solar thermal systems
- 12 district cooling systems from ground water/underground streams

## GERMANY

- 3 offshore wind parks (North Sea)
- Onshore wind parks (Brandenburg, North Rhine-Westphalia, Rhineland-Palatinate, and Saxony-Anhalt)
- 2 solar power plants (Bavaria and Saxony)

## EUROPE

- 1 offshore wind park (United Kingdom)
- Onshore wind parks (Belgium, Croatia, Finland, France, Norway, Poland, Sweden)
- parabolic trough power plant (Spain)



As of 09/2022

<sup>1)</sup> Under construction

## MUNICH AND REGION

- 14 hydropower plants  
Isarwerke 1, 2 and 3, Maxwerk, Stadtbachstufe, Floriansmühle, Praterkraftwerk (Munich); Leitzachwerke 1, 2 and 3 (Feldkirchen-Westerham); Uppenbornwerk 1 and 2, Sempt and Wang (near Moosburg); Hammer (near Fischbachau)
- 2 wind power plants  
Fröttmaning, Freimann (Munich)
- 6 geothermal plants  
Riem, Freiham, Schäftlarnstraße (heat); Kirchstockach, Sauerlach (cogeneration heat and power), Dürrnhaar (power)
- Biogas and biomass power plants  
1 Biogas CHP plant Michaelbad (Munich),  
1 Biomass power plant BioEnergie Taufkirchen
- 45 photovoltaic plants and solar thermal systems  
Munich, Moosburg, Unterhaching, Thalham and Ballersdorf (near Neuburg on the Danube)
- 12 district cooling systems from ground water/underground streams  
Odeonsplatz, Stachus, Herzogspitalstraße, SWM headquarters, Moosach, Dessauer Straße, Oberwiesenfeld, BMW FIZ, Laim, Schäftlarnstraße<sup>1)</sup>, Sendling-Westpark, Balanstraße



SWM is supporting the City of Munich on its journey towards climate neutrality: our goal is to add photovoltaic plants in Munich with an output of at least 33 megawatts peak (MWp) by 2025 – this corresponds to the electricity demand of approximately 13,200 Munich households and roughly half of the expansion goals of the City of Munich. To reach these goals, we are active on many different fronts. For one thing, we are installing PV plants on the roofs of SWM's own properties wherever possible – for example on the buildings housing our company flats in Hanauer Str. and Postillonstraße as well as on some of the buildings of our new Hybrid.M. compound. For another, we offer various photovoltaic solutions to the people in Munich and the region. Under our M-Solar Plus product for homeowners, we are installing an average of twelve PV plants per week. And with M-Solar Sonnenbausteine, we also have a product for people who do not have a suitable roof for the installation of a solar plant, but

want to support the expansion of photovoltaics in Munich: interested individuals can buy "solar building blocks" in the form of what is known as a qualified subordinate loan, thereby ensuring that more PV plants are installed on Munich's roofs, and they receive annual interest payments for their investment. In addition, we introduced the tenant-gated M-Mieterstrom product in 2022. In this model, we lease roof space from building owners, on which we then install solar plants. Tenants can thus benefit from reasonably priced and locally generated electricity. Several projects are already being realised in cooperation with partners, including projects with the municipal housing company GWG München and with Stadibau, the housing company of the Free State of Bavaria. Further cooperations are in the planning stage.

We are also expanding the use of photovoltaics in the metropolitan region: on the grounds around our Uppenborn 1 hydroelectric power plant, we built a large ground-mounted photovoltaic plant in 2021. This solar plant can generate electricity for more than 1,600 households. In the summer, two further ground-mounted plants commenced operations in Upper Bavaria (Ballersdorf and Niederhummel). Together, they produce green electricity for more than 4,000 households. Another new addition in 2022 was a photovoltaic plant on the roof of Uppenbornwerk 2, which was funded from revenues generated with our M-Ökostrom Regional green electricity tariff. For every kilowatt-hour sold under this tariff, we invest one cent in the construction and expansion of renewable energy plants in Munich and the region. Alongside our own land, we are also searching for leased land suitable for the set-up of photovoltaic plants. In addition, we are developing a photovoltaic plant on the German island of Rügen in cooperation with Stadtwerke Augsburg und Hessing Foundation and are looking into the potential installation of agri-photovoltaic plants on land owned or leased by us and into the construction of floating photovoltaic plants.

In 2022, we generated a total of approximately 5.6 billion kWh of green electricity, of which slightly under 2.3 billion kWh came from Germany. This means that SWM is already generating much more green electricity than all of Munich's private households and its tram and underground systems need. By way of comparison: the average Munich household consumes some 2,500 kWh of electricity per year. With the projects of the renewable energies expansion campaign that have already been realised or initiated, SWM has increased its green electricity generation potential within around twelve years from approx. 0.35 to 6.4 billion kWh and, in 2022, already reached 90% of its ambitious goal of approximately 7 billion kWh.



### **CO<sub>2</sub>-neutral generation of district heating and cooling**

As the heating transition is a key component of the energy transition, we set an additional goal in 2012: by 2040 at the latest, we intend to achieve CO<sub>2</sub>-neutral coverage of all of Munich's district heating requirements. Thereby, we can tap large natural hot-water reserves located directly underneath Munich's surface. At present, we are already operating six geothermal plants in the city and nearby municipalities, and we are promoting the expansion of this very successful technology with investments running in the high triple-digit million euro range. On the site of our "Süd" energy location, we operate Germany's largest geothermal plant. It can supply sustainably produced heating to more than 80,000 Munich citizens. In 2022, we moreover reached a further milestone in the heating transition with successful heat extraction in Kirchstockach: in addition to green electricity, this plant is now also generating environmentally friendly heat.

The plans for the construction of our seventh geothermal plant are already being prepared. From 2024 onwards, we will build this plant on the grounds housing the Michaelibad public pool, and after its completion, it will supply sufficient heating for more than 75,000 Munich citizens. For the outside design, the public was already asked to provide their input in the year under review. However, the achievement of our ambitious goals presupposes further projects, including projects together with partners. In addition, we want to enhance cross-connections between our geothermal plants and make the use of thermal water even more sustainable through implementation of a reservoir management system.

The increasing use of deep geothermal energy also has an impact on our district heating grid that is approximately 900 kilometres long – specifically on the section that we are still running as a steam-operated grid. The reason: the water supplied by geothermal energy, which has temperatures of up to 120°C, cannot be fed into the existing steam-operated grid for technical reasons. This means that some 90 kilometres of piping and associated technical plants will gradually have to be converted to hot-water operation. We started the conversion process in 2022 and will presumably complete it in 2033.

### **FROM REGIONAL PROJECT TO INTERNATIONAL BEST PRACTICE**

Our district heating vision is a cornerstone for the success of Munich's heating transition, as illustrated by a study entitled "Climate-neutral Heating for Munich in 2035", which was prepared in close cooperation with the City of Munich. SWM's heating transition has also received international recognition and was mentioned in the European Commission's presentation of its "Fit for 55" package, the EU's key bundle of measures within the framework of its Green Deal. In its revised Renewable Energy Directive, for instance, the European Commission mentioned our ambitious project as a good example of long-term planning. What is more, our commitment to geothermal energy was one of 36 projects selected to showcase Germany at the Expo World Exhibition, which was hosted by Dubai from October 2021 to March 2022.



A further component of our climate management is the expansion of district cooling as a more efficient and environmentally benign alternative to conventional air conditioning systems. Compared to individual cooling, the district cooling process reduces electricity consumption by 50 % to 70 %. In this process, we use the subterranean urban stream in downtown Munich, for example, for chilling central cooling facilities. Cold water is then transported from these stations to buildings to cool them. Since district cooling is a closed system, there is no far-reaching intervention in the natural water resources.

At several locations in Munich, we moreover use cold ground water to cool buildings, including at our new Hybrid.M electric-bus depot, which commenced operations in 2022. Here, district cooling from ground water is used for cooling the charging infrastructure for the electric buses and the server rooms. We use the resulting heat for a multitude of applications. First, we power an open-space heating system that will keep the entrance and exit driveways of the depot's bus hangars free of ice in winter. This allows us to save large quantities of electricity and/or de-icing salt. Second, the residual energy is fed into the return pipe of the district cooling grid and can then be used elsewhere. For example, the 114 new company flats at Postillonstraße are heated with a heat pump that uses ground water for heating and achieves high efficiency through the warm return water. The latter is then cooled to an extent that makes it possible to return it to the aquifer at a temperature that is very close to its original one. This energy circuit with a water-cooled charging infrastructure and waste heat recovery makes SWM a trail blazer in Europe.



District cooling is the more environmentally benign and energy-efficient alternative to conventional cooling systems.

Demand for our M-Fernkälte district cooling service is growing. At our "Süd" energy location, we are therefore constructing a large district cooling centre. Alongside cold water from the Isarwerkkanal conduit, we will also be able to use the energy from the geothermal and combined heat and power (CHP) plants located at this site for the operation of the cooling facility in the future. The cooling facility will be connected to downtown Munich via a 6-kilometre-long pipe. After its completion (which is envisaged for 2029), the "Süd" energy location will have a cooling capacity of approximately 36 megawatts. This means that the plant will cover the district cooling customer demand that is forecast for downtown Munich for the coming years. Given the growing importance of district cooling for sustainable urban development, we are furthermore pursuing the target of expanding the grid to a capacity of at least 130 megawatts of energy-efficient district cooling by 2030.

#### **Near-term exit from coal-based and nuclear power delayed by the Ukraine crisis**

Successful expansion of geothermal energy is one prerequisite for driving Munich's exit from coal forward. SWM is also supporting this goal with its own coal exit strategy. Its focus is on the hard-coal-fired block of our "Nord" power station, which is considered to be systemically important and is, like all SWM cogeneration plants, based on the principle of combined heat and power (CHP) generation. Under this strategy, the coal-fired block of our "Nord" CHP plant is primarily used for heat generation.

Our original plans provided for a switch to natural gas in time for the 2022/2023 heating season, which would have resulted in a significant reduction in the greenhouse gas emissions generated by the operation of this block. Against the background of the Ukraine crisis, however, we want to avoid a significant increase in our gas demand in a period characterised by great uncertainties. After careful consideration of the aspects of supply reliability, environmental impact, and economic efficiency, we therefore proposed to the Munich City Council to defer the envisaged conversion from coal to gas to the summer of 2024. The City Council approved this. However, this does not change our goal to exit from coal as quickly as possible.

Russia's war of aggression against Ukraine also slowed down the exit from nuclear energy that had been scheduled for 2022. To ensure a reliable supply and diversify energy procurement, the operating life of the Isar 2 nuclear power plant (SWM stake: 25 %) was extended until mid-April 2023.

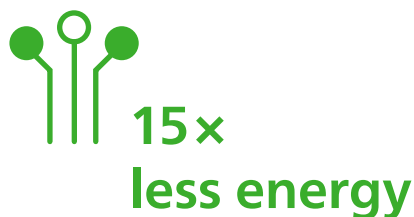
### Emission-free mobility

Electromobility has been used in Munich for more than 125 years. It all began with Munich's first electrically operated tram route. Today, MVG trams and underground trains already run completely CO<sub>2</sub>-free thanks to the use of green electricity. As a third key pillar of local public transport, we intend to also fully electrify bus traffic in Munich by 2035. At the end of 2022, 25 fully electrically driven MVG buses were out and about on Munich's streets. Thanks to 36 new vehicles, this number will roughly double in the coming year. Consequently, electric buses will be deployed on more and more lines. One important foundation for the electrification of our bus fleet was laid in November 2022 when we inaugurated our new electric-bus depot in Munich's Moosach neighbourhood. It is integrated in the approximately 40,000 square metre Hybrid.M compound of Stadtwerke München (SWM), offers charging stations that can simultaneously serve 56 buses in its first expansion phase, and is geared to a growing fleet of electric buses. The new bus depot is equipped with a proprietary charging management system (CMS) that we have developed specifically for this purpose. This system is a key component for the electrification and digitalisation of our bus operation. Among other things, it provides real-time charging information on the buses for ongoing operations. This means that we can always see which buses are being charged, where they are charging, what the charging performance is, and what charging level the batteries have.

Our hybrid buses also help reduce fuel consumption and emissions. They store energy while braking, which can then be used again for acceleration. Since 2022, we have moreover pursued a pilot project that involves deployment of a special MVG bus with trailer in regular operations. The trailer has a PV plant manufactured by the Sono Motors start-up on its roof, which generates electricity for the operation of the air conditioning system. In addition, MVG and the City of Munich are also jointly rolling out environmentally friendly and interlinked shared-mobility offers throughout the city. In the now completed "Smarter Together" and "City2Share" sponsorship projects, we did real pioneering work and gained valuable insights. The focus of these projects was on innovative mobility stations in the Neuaubing-Westkreuz/Freiham and Untersending/Isarvorstadt project districts. These stations combined various offers, ranging from the popular MVG Rad rental bike to electrically powered car-sharing vehicles, and facilitated easy access to our traditional modes of transport. Independently of mobility stations, the MVGO mobility app brings together a wide variety of transport modes, laying the groundwork for genuine multimodal mobility: local public transport and sharing offers are pooled in this app and incrementally expanded further.



The Hybrid.M compound combines our new electric bus depot with office space.



Energy consumption of end-to-end fibre-optic networks compared to copper-based transmission technologies.

Beyond local public transport, we are also committed to promoting electromobility in a clearly targeted manner. In the Munich metropolitan area, the City of Munich and SWM are now operating more than 1,200 public charging stations for users of electric cars – making Munich a trail blazer in Germany. We are also operating a steadily growing number of charging points in the private and commercial segments – currently approximately 1,900. All charging points – whether public, commercial, or private – are powered with 100% CO<sub>2</sub>-free M-Ökostrom green electricity. A total of 14.5 million kilowatt-hours were charged in 2022.

### Realisation of further energy saving and emission reduction potentials

We deliberately reduce and limit the emission of greenhouse gases in our other business activities, too. For our fleet of company cars, for example, we now select only models emitting less than 160 grams of CO<sub>2</sub> per kilometre. What is more, we intend to convert 75 % of our entire vehicle fleet to electromobility by 2030. For vehicles used for company purposes, we will presumably reach an electrification rate of 90 % as early as 2025. For business trips, we check whether the use of local and long-distance public transport is cost-effective before we consider flights as an alternative. Short-haul flights are to be avoided wherever possible. In addition, e-bikes and electric vehicles are increasingly used for work-related trips between technical facilities where possible and compliant with occupational safety regulations. The electricity supplied to our real estate properties is already largely generated from renewable energies.

We intend to switch all our public pools to completely CO<sub>2</sub>-neutral operation by 2040, focusing on measures that are necessary from an economic and technical perspective. In the year under review, we updated our greenhouse gas reduction plan and defined further target-achievement measures. Our strategy relies not only on step-by-step modernisation of the structures, but also on changes in the energy supply, for example the use of geothermal energy or heat pumps. The power supply of all M-Bäder public pools is based on green electricity and local power generation in photovoltaic plants. In addition, we plan to use electric vehicles for

groundskeeping in all public pools. In 2022, a PV plant with a capacity of 90 kilowatts peak was installed on the roof of the Giesing-Harlaching public pool. Since its commissioning, this plant has covered slightly over 20 % of the pool's electricity consumption – in addition to the hitherto practiced use of M-Ökostrom green electricity from SWM. By 2024, we will also replace a drinking water heater in the Schyrenbad public pool with a heat pump. This will help us avoid approximately 19 tonnes of CO<sub>2</sub>e.

### MUNICH'S FIRST CO<sub>2</sub>-NEUTRAL PUBLIC POOL

In late 2022, we began to convert the Georgenschwaige outdoor pool into a CO<sub>2</sub>-neutral natural pool. In this project, our main focus is on energetic refurbishment. A dedicated photovoltaic plant is to generate electricity for the circulation pumps and the heat pump and keep the water temperature in the pool at a constant 22 °C. Going forward, water treatment is to be handled biologically by large ground filters. We are using only wood as a construction material. And the modular design makes the materials used recyclable. The reason: a modular design makes it easier to dismantle structures back into their individual components. Furthermore, the pool will get a new ramp for wheelchairs and a "beach entry" to make it more barrier-free. The conversion project is to be completed in 2024.

We have also ushered in the energy transition in our fibre-optic network: the expansion strategy of our M-net telecommunications subsidiary provides for routing fibre-optic lines directly into users' living rooms in the future. Electricity-intensive components such as amplifiers and converters will then no longer be necessary. As fibre-optic technology transmits data via light impulses and there is no conversion into electrical impulses, electricity-intensive components such as amplifiers and converters will no longer be required. This means that end-to-end fibre-optic networks need up to 15 times less energy than copper-based transmission technologies. A further positive effect: when the entire city is equipped with fibre-optic cables, conventional mobile communications rooftop antennas with high radiation output could be replaced by much smaller 5G antennas with an output of less than 10 watts, which would significantly reduce local residents' radiation exposure. We are gathering initial practical experiences in handling such microcells and innovative Open RAN technology through a pilot project with O<sub>2</sub>/Telefónica. At particularly highly frequented sites in downtown Munich, our partner is installing 4G or 5G radio cells that are linked to the M-net fibre-optic network.



We also involve our employees in the efforts to enhance energy efficiency and reduce emissions. Among other things, we publish our Technology division's Environmental Statement, prepare relevant intranet messages, and regularly address the issue of energy in divisional meetings and training workshops. All employees of Stadtwerke München GmbH, SWM Versorgungs GmbH, and SWM Infrastruktur GmbH & Co. KG are required to complete a mandatory training session entitled "Tips for efficient energy use". In this session, participants are familiarised with basic information on the energy management system pursuant to DIN EN IS 50001 and learn what statutory obligations must be fulfilled by German companies and what contribution SWM makes to the conservation of energy and resources. In addition, they receive advice on how they themselves can contribute to an efficient use of energy. The training session must be repeated every three years and is also open for attendance by interested colleagues from other group companies. In addition, we offer financial incentives for the submission of energy saving ideas. All employees, as well as SWM's external service providers, can make suggestions for improvements and submit ideas through the established company suggestion scheme.

Since late 2020, the so-called "CO<sub>2</sub> Expert Panel" has been SWM's permanent information and exchange platform for decarbonisation approaches. The activities of the approximately 30 panellists ensure a group-wide

uniform understanding and coordinate procedures. The goals of the Expert Panel include the development of group-wide assumptions, realisation of synergies in the processing and preparation of inquiries, requirements, and positions, and improvements in emissions-related data collection.

## A CLIMATE-NEUTRAL TELECOMMUNICATIONS PROVIDER

In the year under review, M-net received the "Climate Neutral" label for the second time in a row and thus remains Germany's first CO<sub>2</sub>-neutral telecommunications provider. Climate neutrality in accordance with Scopes 1 und 2 of the Greenhouse Gas Protocol means that the company, on balance, no longer produces any direct or indirect greenhouse gas emissions. M-net has succeeded in reducing its emissions by approximately 90 % compared to 2019. The company compensated still unavoidable CO<sub>2</sub> emissions of 828 tonnes of CO<sub>2</sub>e in 2022 via a climate protection project certified under the "Gold Standard". Compliance with the stringent requirements of the "Climate Neutral" label is verified annually by TÜV Rheinland. Extensions of existing measures are envisaged; for example, the entire vehicle fleet is to be converted to electromobility. M-net intends to reduce greenhouse gas emissions as much as possible, hopefully to zero, and also reduce its Scope 3 emissions.

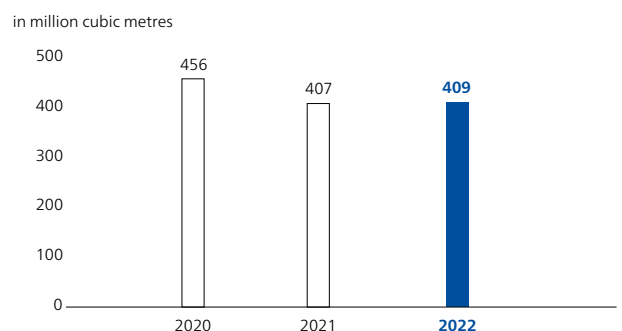
## Environmental protection

### Own water consumption

| in cubic metres   | 2020               | 2021               | 2022               |
|---|--------------------|--------------------|--------------------|
| Water consumption – SWM headquarters <sup>1)</sup>          | 30,499             | 19,902             | 23,753             |
| Process water (drinking water) – regional energy generation | 1,354,502          | 1,411,484          | 1,443,074          |
| Cooling water – regional energy generation                  | 455,025,889        | 405,570,293        | 407,798,358        |
| <b>Total</b>  | <b>456,410,890</b> | <b>407,001,679</b> | <b>409,265,185</b> |

<sup>1)</sup> Water consumption of the following companies: Stadtwerke München GmbH/  
SWM Services GmbH/SWM Infrastruktur GmbH & Co. KG/  
SWM Kundenservice GmbH/SWM Versorgungs GmbH

### Water consumption – SWM core Group<sup>1)</sup>



<sup>1)</sup> Water consumed at the SWM headquarters and in the energy generation of the SWM core Group/regional energy generation units (process and cooling water)



### Protection of water as a valuable resource

Munich's drinking water, which we extract from our three catchment areas – the Mangfall valley, the Loisach valley, and an area of moraine deposits east of Munich known as the "Schotterebene" – is left in its natural state and already has such a high quality that no complex treatment is necessary. Our "ecoFarmer" initiative, which was launched in 1992, has been making an extraordinary contribution here: it has placed a focus on nature conservation and drinking-water protection for 30 years. More than 180 farmers in the Mangfall valley and five farmers in the "Schotterebene" area have converted their farms to agricultural methods that protect soil and water as well as organic livestock husbandry. This has allowed us to reliably reach our self-imposed quality target of an average of less than 10 milligrams of nitrate per litre, which is significantly stricter than the statutory limits laid down in the German Drinking Water Ordinance (TrinkwV). Together, the organic farmers are cultivating an area of approximately 4,650 hectares, with the Mangfall valley being one of the largest contiguous organically farmed regions in Germany. Today, the former pilot project has become a role model for the whole of Germany: SWM is closely collaborating with associations promoting organic farming such as Naturland, Bioland, Biokreis, and Demeter in order to further support farmers in their switch from conventional to organic farming. Recently, the "Drinking Water Protection Through Organic Farming" project received an award from the Bavarian state government within the framework of its "30 for 30" initiative, which is promoting 30 beacon projects that are providing a boost to organic, regional food in Bavaria. The goal of this



initiative is organic farming on 30 % of the agricultural land in Bavaria by 2030.

Another element ensuring high-quality drinking water in the Munich metropolitan region is the water protection forest totalling more than 1,800 hectares, which is owned by SWM. This structurally rich mixed forest helps regulate the water balance. Its humus-creating soil provides a particularly good filtration function for precipitated air pollutants, with active organisms in the soil decomposing organic contaminants. Thanks to this natural rejuvenation, the soil remains moist and is an ideal water reservoir. The forest manager is a member of Naturland-Verband and complies with this organic association's ecological guidelines. In addition, the water protection forest has already held a Forest Stewardship Council (FSC) certification since 2001.

Because the foothills of the Bavarian Alps are a region with above-average rainfall, drought periods have not yet had any noteworthy effect on drinking water extraction to date. Irrespective thereof, we continuously monitor the water levels at numerous ground water monitoring wells. So far, the data collected has not indicated any changes in ground water levels.

We moreover devote great attention to minimising pipe-induced water losses. For this purpose, we use intelligent solutions that enable us to quickly identify and repair leaks in the pipe system. For example, the use of LoRa transmitters (long-range radio transmitters) in the water supply system facilitates early detection of such water losses.

## HUMMING AND BUZZING

The honeybee is the third most important farm animal in Germany – not because of its honey production, but because it pollinates the majority of agricultural and wild plants. This is why we strongly support bees in many ways. The number of bee colonies that have found a home at Taubenberg hill in our Mangfall valley water catchment area has now grown to approximately 30. The forest manager makes sure that every bee colony has its own territory and finds sufficient food for itself and its own hive. At the Deisenhofen overhead reservoir and the Deisenhofen and Gleissental ecological compensation areas, we have also put up hives for honey and wild bees.

### Preservation of biodiversity

In all business segments, we consider the potential impact of our business activities on biodiversity. In many instances, our activities even have positive effects. For instance, our water protection areas are simultaneously important retreats for numerous endangered animal species such as bats. Our large-scale photovoltaic plants also offer sanctuaries for ground-nesting birds. When we plan new plants, we use the requirements referenced in the “Good practices in the planning of ground-mounted photovoltaic plants” guidelines as our yardstick.

In the greenspace of our public pools, we can also help promote biodiversity. In the years 2020 to 2022 alone, we converted more than 21,000 square metres into flower meadows, which are showing a promising development when it comes to biodiversity. Over a medium-term horizon, we pursue the goal of converting 20% of the greenspace of our public pools – corresponding to approximately 80,000 square metres – into flower meadows. In addition, we are planting more trees on the grounds of our public pools. In 2022, we commissioned the design of a biodiversity strategy. In an initial step, a comprehensive analysis of all available data on biological biodiversity was carried out at the public pool locations and in their immediate surroundings with the help of a geographic information system. From this, an assessment of the current and potential biodiversity position has now been derived for nearly every site. The last step will follow in 2023: a strategy for the conservation and

promotion of biodiversity on the public pool grounds will be designed and suitable measures derived.

In a regional carbon dioxide removal (CDR) project, in which M-net has cooperated with the German Federal Forest Protection Society (Schutzgemeinschaft Deutscher Wald Bundesverband e.V.) since December 2021 to work towards the development and preservation of a natural CO<sub>2</sub> reservoir, some 1,800 trees and shrubs were planted on a piece of woodland near Munich. The reforestation with native plants helps absorb approximately 15 tonnes of CO<sub>2</sub> per annum, while simultaneously improving biodiversity in the region.

### Use of environmentally benign supplies

We have also set our sights on protecting the environment in the use of operating supplies and building materials. For example, a project launched in 2020 focuses on the substitution of sulphur hexafluoride, an insulating gas that is extremely harmful to the climate, with climate-neutral gases in electric distributions systems. Use of the latter gases at the high-voltage level will presumably be feasible from 2023 onwards. Through modernisation efforts, we have already noticeably reduced the consumption of resources and the usage of environmentally problematic substances in our public pools. For example, we have analysed the environmental impact of the substances used for bathing water treatment in a life cycle assessment. For cleaning, we use environmentally benign procedures and cleaning agents as much as possible. In drinking water extraction, plants using ultraviolet light for disinfection help us avoid the use of chlorine gas.

## ECO-FRIENDLY CONSTRUCTION

As one of the largest property developers in the region, we bank on sustainable and climate-friendly construction. In our “Eco-friendly Construction” project, we have developed concrete guidelines and measures for limiting the environmental impact of our construction measures. For example, we apply the EH 40 energy efficiency standard, analyse PV-fed heat pumps as an alternative to district-heating connections, voluntarily dispense with gas heating systems, and try to avoid complex building technology such as air conditioning systems. At an overarching level, we have embedded a life cycle perspective – i.e. a look at the construction, operation, and demolition of buildings – more firmly into our planning processes and harmonised planning requirements. In 2022, we joined the German Sustainable Building Council (Deutsche Gesellschaft für Nachhaltiges Bauen; DGNB). Our intention is to obtain sustainability certifications in accordance with the DGNB system for all our new construction projects.

About  
**80.000 m<sup>2</sup>**

The greenspace area we want to convert into flower meadows – this corresponds to 20% of all greenspace of our public pools.



# Employees



For our employees, we are a reliable and socially oriented employer with a forward-looking strategy, diverse and ambitious tasks, and a value-based corporate culture. In a nutshell: an employer worth working for.

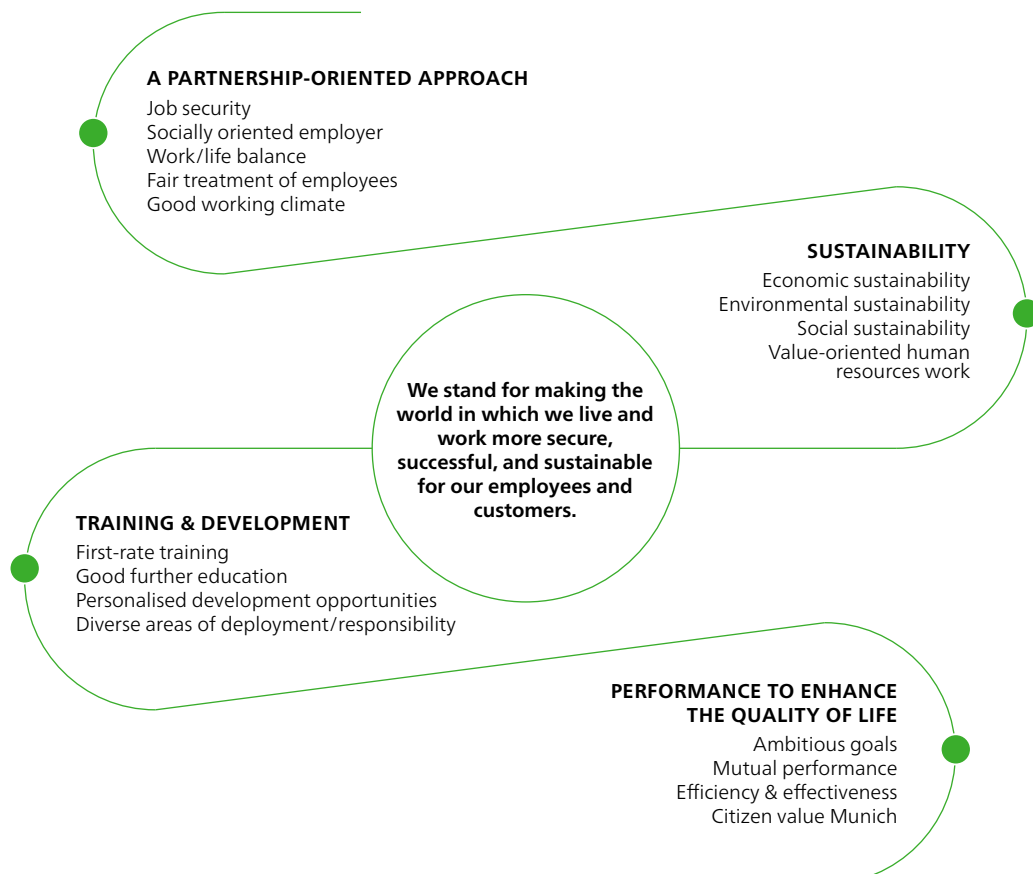
## Stadtwerke München as an attractive employer

Most of our employees work in Munich. We are in keen competition for the best minds in the local labour market: DAX-listed corporations, innovative medium-sized enterprises, start-ups, and other entities also offer enticing jobs. To position ourselves visibly and credibly as an

attractive employer in this environment, we have put together a comprehensive package for employees and applicants. It includes:

- ▶ Ambitious tasks in a successful company
- ▶ Meaningful work content and value orientation
- ▶ Opportunities for further development and performance enhancement
- ▶ Demanding and encouraging leadership
- ▶ Fair and appreciative treatment
- ▶ Work/life balance
- ▶ Flexible work options
- ▶ Attractive remuneration and employee benefits
- ▶ Reliability and security

## SWM employer brand



Retention of our current employees and recruitment of new talent each have a high priority in our human resources strategy. The Human Resources department is responsible for all programmes and processes relating to the employment relationships of our staff members. Four units work jointly on the implementation of the SWM human resources strategy: Personnel Divisional Management, HR Management and Service, HR Recruitment and Development, and Health. The goal of the SWM human resources strategy is to become one of the five most attractive employers in Munich – a region characterised by keen competition for employees – by 2025. We measure the result annually via the employer ranking compiled by the Trendence agency, which is based on a survey of three labour market groups: students, academic professionals, and non-academic professionals. In the survey conducted in late 2020, we were in 6th place and thus improved our ranking by one notch compared to 2016. In the year under review, we redefined the focal points of our strategic HR topics and subdivided them into four action areas:

#### Action areas and topics in HR for the period until 2025

##### **Attractive Employer**

- Diversity & Equal Opportunities
- New Way of Working
- Healthy Company
- Strategic Recruiting & Employer Branding
- Benefits

##### **Development & Perspectives**

- Talent Management
- Advancement & Development
- "Fortbildung 4.0" Initiative
- Knowledge Exchange & Networking

##### **Excellent Leadership**

- Adjustment of leadership development offers and further development for Work Environment 4.0

##### **Change & Reputation HR**

- Automation & Digitalisation
- (Digital) Transformation
- Position Management
- Strategic HR Planning



Our aspiration is to become one of the

**top 5  
employers**

in the region.

We regularly conduct employee surveys. In 2022, the survey's focus was on remote working ("home office") and other working conditions after the pandemic phase. The overall results of the survey, in which 4,361 employees participated in the year under review (response rate: 42 %) show a high degree of satisfaction with the current working conditions, with an average score of 1.92 (on a scale from 1 = completely satisfied to 5 = not at all satisfied). In addition, the survey showed clearly that our employees are not only in favour, but even demand modernisation and change. This holds true for the expectation of prospective employees as well. Although we were able to bring people back to the office as the restrictions imposed during the pandemic were lifted, the new company agreement on mobile working offers the possibility of autonomously choosing the place of work and relying on hybrid cooperation if necessary. At the same time, we must also bring on board those segments of the workforce that work in more traditional ways and/or engage in activities that do not permit hybrid ways of working.

#### Recruiting staff members

To win new employees, we already participate in the stage when young people gather information about future career choices. In 2022, after a Covid-19-induced hiatus, we were able to once again attend numerous job fairs and career guidance days and also resume the "Azubis machen Schule" format, where young people actually attending training programmes for various professions in our organisation go to schools to inform the class about their everyday work. In addition, we have created a dedicated TikTok video for SWM in which we provide information on our current traineeship opportunities and job profiles. Some 130 pupils got to know our company through internships in 2022. Our Go4MINT@SWM project, which aims to attract girls and young women to professions in the fields of mathematics, information technology, natural sciences, and technology/engineering (MINT), attracted a total of 20 participants.





Join us as tram, underground train, or bus driver: simply board our job application tram.

Universities also play an important role in our personnel recruitment strategy. Through lectures, excursions, and recruiting days, we establish contacts to graduates. Students made ample use of these personal contacts. We are pleased to report that numerous student deployments ultimately resulted in permanent employment or inclusion in our trainee programme.

In our new "SWM on Site" event series, we hosted "recruiting afternoons" with easily accessible application opportunities at various SWM sites (e.g. at the tram workshop, in a combined-heat-and-power plant, and in our corporate headquarters). The success was remarkable: we were able to recruit quite a number of new colleagues for various target groups (e.g. specialist workers). Our job application tram was once again out and about in 2022 and resumed the recruiting success it had before the pandemic: we were able to hire numerous drivers for underground trains, buses, and trams. An adaptation of this approach introduced in 2022 enabled us to successfully recruit even more underground drivers thanks to our new job application underground train. In 2023, the lateral-entrant strategy is to be expanded to further target groups (e.g. technical specialists).

In our personnel recruitment, we also assume our social responsibility. For example, we have been engaged in "Stadtwerkeprojekt" for more than 30 years. This project makes it possible for young adults who find it difficult to get their careers off the ground to go through professional training including associated off-the-job support and assistance by qualified social education workers. In 2022, a total of 21 individuals were supported by social education workers within the framework of "Stadtwerkeprojekt", and five successfully completed their final exams.

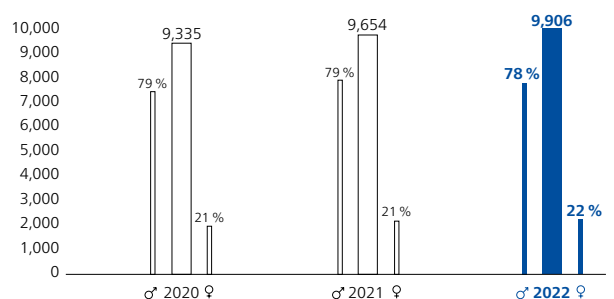
## Training and professional development

On average, at any given time some 400 young people go through commercial or vocational/technical traineeships or dual study programmes combining academic studies with vocational training in a company setting. We are thus one of the largest workplace training organisations in Munich. We are continuously expanding the range of vocational professions for which we offer traineeships and dual study programmes. We now offer 17 different vocational professions and four dual study programmes. In 2022, 135 (previous year: 134) young people started their professional career in our organisation, of which 23 were women. In 2022, we offered 83 % of our trainees employment after completion of their training programme (previous year: 91 %). In addition, 31 dual study programme participants (22 male and nine female) worked for us at the end of 2022, of which eleven students (seven male and four female) commenced their studies in autumn 2022.

The Covid-19 pandemic also had an impact on our traineeships. In 2022, we successfully continued the hygiene protocols we had established in 2020, with much smaller trainee groups and intensified remote or mobile working. Together with our IT department, we also implemented a digitalisation project with a view to optimising the work and learning environment for our trainees under the given framework conditions in a clearly targeted manner. To ensure the best possible learning environment for our young talent in the future, too, we are currently building a new training centre on the campus of the SWM headquarters in Moosach. It is scheduled to be ready for trainees to move in by autumn 2024.

### Number of employees

(breakdown by gender)



## Total number of employees, subdivided by age and gender

|                                  | 2020         |              | 2021         |              | 2022         |              |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                  | Female       | Male         | Female       | Male         | Female       | Male         |
| <b>Total number of employees</b> | <b>1,958</b> | <b>7,377</b> | <b>2,064</b> | <b>7,590</b> | <b>2,196</b> | <b>7,710</b> |
| Thereof under 30 in %            | 22.6         | 14.6         | 22.4         | 14.8         | 22.6         | 15.4         |
| Thereof 30 to 50 in %            | 44.6         | 45.2         | 46.1         | 45.9         | 46.6         | 45.6         |
| Thereof over 50 in %             | 32.7         | 40.2         | 31.5         | 39.2         | 30.8         | 38.9         |

## Employees by type of contract

|                         | 2020                              |                  |                | 2021                              |                  |                | 2022                              |                  |                |
|-------------------------|-----------------------------------|------------------|----------------|-----------------------------------|------------------|----------------|-----------------------------------|------------------|----------------|
|                         | Total<br>(number of<br>employees) | Female<br>(in %) | Male<br>(in %) | Total<br>(number of<br>employees) | Female<br>(in %) | Male<br>(in %) | Total<br>(number of<br>employees) | Female<br>(in %) | Male<br>(in %) |
| Full-time <sup>1)</sup> | 8,313                             | 17.3             | 82.7           | 8,588                             | 17.4             | 82.6           | 8,745                             | 17.9             | 82.1           |
| Part-time               | 1,022                             | 51.2             | 48.8           | 1,066                             | 53.8             | 46.2           | 1,161                             | 54.6             | 45.4           |
| Permanent               | 9,020                             | 20.5             | 79.5           | 9,293                             | 21.0             | 79.0           | 9,526                             | 21.6             | 78.4           |
| Temporary <sup>2)</sup> | 315                               | 34.0             | 66.0           | 361                               | 32.4             | 67.6           | 380                               | 37.6             | 62.4           |

<sup>1)</sup> Full-time employment contracts are defined as all those providing for a number of working hours that corresponds to at least 80 % of the total number of hours per week laid down in the collective agreement.

<sup>2)</sup> Most of the temporary employment contracts have been concluded with university students. In this group, women account for a much higher share than men.



We want to open up exciting prospects for all SWM employees. Digitalisation and technological change require them to develop the ability to identify new possibilities, understand them, and use them to the best of their abilities. In our annual "SWM Dialogue", employees can discuss and agree to their individual development opportunities with their managers. In 2022, this format was expanded to drivers, too. Options we promote include leadership, technical, and methodological training, development counselling, as well as coaching and training workshops to strengthen personal and social competencies. The focus is on enhancing employees' ability to learn, strengthen their willingness to learn (lifelong learning), and ensure the knowledge transfer to our daily business. At the same time, we encourage mutual networking through various forums, events, or learning workshops.

In the year under review, we continued to roll out and expand our "Ready2Grow!" talent management programme that we had started in selected areas in 2021. With this initiative, we want to support and bring together employees who have the potential for horizontal or vertical development in leadership, expert, or project management positions. Currently, the programme supports approximately 150 employees. In addition, there are specific advancement programmes, e.g. in mobility, electrical installation, or the energy sector, which help our specialists acquire additional professional qualifications. In 2022, we launched Technik@SWM – a special offer for employees interested in renewable energies. In the year under review, our employees attended a total of 11,698 professional development days (previous year: 13,956 days).

In leadership development, too, we greatly value the importance of a high level of practical relevance. With "Excellent Leadership", we have set up a holistic framework that describes what we expect of our leaders and is the foundation of our various development offers. In addition to technical and methodological content, the focus is on reflexion and feedback. Furthermore, the programmes provide managers with an opportunity to build networks across business segments. In 2022, two major debuts were on our leadership development agenda. Under the heading "lifelong learning", we set up a qualification programme for all experienced managers. Within the

framework of our “M/Up” programme, we intend to strengthen all leaders in their roles over the next two to three years. By contrast, the aim of the “Kundenfokus@swm” project is to further enhance customer-focused attitudes in our organisation. It attracted 329 participants in its first year. Managers who have been newly appointed to their first leadership role attend our Management Development Programme (MEP). This programme teaches them, among other things, leadership in critical situations, the overall impact of leadership, critical discussion techniques, conflict management, and change management. When managers take on new positions, they always undergo “Leadership Onboarding”, which consists of consulting and information offers as well as mentoring and team development processes. Specific qualification programmes are offered to executives managing other managers and executives without disciplinary management. In 2022, our managers completed 1,508 professional development days (previous year: 1,709 days).



#### Number of different seminars by type of training and number of participants in 2021

|                    | 2021                                     |                         | 2022                                     |                         |
|--------------------|--|-------------------------|--|-------------------------|
|                    | Number of seminars<br>(type of training) | Participants<br>(heads) | Number of seminars<br>(type of training) | Participants<br>(heads) |
| Classroom training | 103                                      | 1,582                   | 188                                      | 3,476                   |
| Virtual training   | 267                                      | 9,929                   | 154                                      | 4,344                   |
| E-learning         | 56                                       | 24,341                  | 97                                       | 51,642                  |
| <b>Total</b>       | <b>426</b>                               | <b>35,852</b>           | <b>438</b>                               | <b>59,450</b>           |

After the pandemic-induced lockdowns in the previous years, the demand for classroom training once again increased in 2022. Nevertheless, virtual training formats remained at a high level with 538 units (previous year: 817 units). e-learning modules, in particular, are increasingly used in what are known as “mandatory training sessions” (e.g. in compliance and data protection training). With 56 %, the lion’s share of our training sessions focuses on technical and methodological skills. However, offers for the development of personal and social skills also recorded a strong increase, from 21 % to 27 %, especially in the areas of health and communications.

In addition to the M/Up and Kundenfokus@swm programmes, our agenda for 2023 includes further training measures, especially for strengthening project management. Furthermore, we intend to establish a company-wide process for e-learning design. The

so-called user-generated content process enables business units to convert their own content into online modules and then make these modules available to a certain group of participants.

With our “SWM connect” intranet, which we introduced in late 2022, we have created an information platform for all employees that is not only available on desktop computers, but also as an app for private and company smartphones. This makes it easier for us to reach and involve our approximately 5,000 non-desktop workers, e.g. employees in our power plants, public pools, and workshops, employees on construction sites, and our drivers. Whereas nearly half of our staff members did not have their own intranet access in the past, SWM connect has helped us reach a registration rate of more than 80 % within only a few months after the introduction of this programme.





We encourage all our employees to cast unbiased and critical eyes on their own work environment and play an active role in its continuous improvement. Our “SWM.ISI” idea management programme allows them to suggest improvements for the processes and procedures in the organisation. Following an internal evaluation process, some of these ideas are selected for financial rewards. At an annual celebration of ideas, the company executives thank all people who have submitted suggestions. In 2022, 249 ideas were submitted. Topics spanned the gamut from the programming of a proprietary software for wind turbine maintenance to the reuse of a mobile rack system in a new assembly shop to the manufacture of marking caps for water pipes with 3D printing. In 2022, we evaluated a total of 216 of the ideas submitted and realised 48 of them. They resulted in an economic benefit of slightly under EUR 300,000 (previous year: approximately EUR 200,000).

Beyond traditional idea management, we are also striving to inspire our employees’ passion for innovation and motivate them to play active roles in change processes. For example, we have already carried out several idea campaigns, each dedicated to a specific topic, where the best proposals and ideas gathered were developed further in collaborative sessions. In addition, two interdisciplinary employee communities dedicated to innovation and continuous improvements have been established: ImPulsGeber (pulse generators) and PulsMacher (pulse makers). The aim of the ImPulsGeber community is to support employees in the development of process improvements via a collegial adviser network, while simultaneously enhancing their methodological skills.

PulsMacher is a network for people interested in innovations that provides inspirations for innovative topics, methods, and technologies and fosters the development of innovative expertise at SWM.

### Responsibility as an employer

As an employer, we stand for a partnership-oriented approach, sustainability, education and development aimed at ensuring a high quality of life ([see the chart on page 47](#)). Our employees’ working conditions must also reflect these values.

Even before the Covid-19 pandemic, we offered our employees numerous variations of working time arrangements, including flexible time accounts, various part-time models, personalised deployment and work scheduling, and mobile work options from home. During the pandemic, we widely used our leeway to design work models, especially with respect to combinations of working time and work location. Since then, mobile working from what is called the “home office” has been used to a much greater extent than before. In areas in which remote working from home and mobile working are not possible, we are also striving for high flexibility, especially with respect to working time arrangements.

To ensure that our offerings address our employees’ needs, we conduct a pertinent survey every two years. Aspects covered by this survey also include leadership and corporate culture. In 2022, our employees were given the opportunity to express their opinions on how they felt about the switch from the remote-working phase to hybrid collaboration and on their expectations regarding the work formats of the future.



The results of the survey were incorporated in new works agreements that integrate home office and mobile working into our daily company life to an even greater degree. Through such works agreements, two new shift models that offer more flexibility were established in the Mobility business segment. In addition, we finalised a sabbatical agreement for the central units and the Supply segment. Negotiations on this issue are still underway in the Mobility business segment.

Our employees regularly give anonymous feedback to their respective managers. The results are discussed in a joint workshop and specific agreements are made. As an alternative to such "single-track" feedback in the direction of managers, 360° feedback exercises are also possible. In addition, various colleagues are available as

contacts to address specific topics, e.g. the Equal Opportunities Officers for all questions revolving around diversity. In addition, multipliers and networks document employees' sentiments, opinions, and attitudes and play a liaison role between staff members and management.

### Hires and exits

|                                    | 2020       |            | 2021       |            | 2022       |            |
|------------------------------------|------------|------------|------------|------------|------------|------------|
|                                    | Hires      | Exits      | Hires      | Exits      | Hires      | Exits      |
| <b>Total (number of employees)</b> | <b>874</b> | <b>455</b> | <b>689</b> | <b>439</b> | <b>730</b> | <b>543</b> |
| Female                             | 209        | 95         | 159        | 85         | 225        | 118        |
| Male                               | 665        | 360        | 530        | 354        | 505        | 425        |
| Under 30                           | 314        | 80         | 228        | 91         | 281        | 128        |
| 30 to 50                           | 450        | 150        | 370        | 131        | 365        | 211        |
| Over 50                            | 110        | 225        | 91         | 217        | 84         | 204        |
| Thereof retirement                 | –          | 150        | –          | 131        | –          | 122        |

We are continuously striving to further improve working conditions in an effort to win new talent and retain qualified employees. The average employee tenure is 15 years. At 3.1 % of total staff, the share of employees handing in their own resignations in 2022 was higher than in the previous year (1.9 %). Employee turnover also went up in the year under review and came to 5.7 % (previous year: 4.8 %). After a decline during the pandemic, we are thus back to the pre-Covid-19 level. On the other hand, we welcomed 730 new employees in 2022 (previous year: 689).

### Balancing private and working life

Enabling our employees to balance their professional career with their private life is very important to us. We therefore offer a variety of working time models and time accounts, enable personalised work and deployment scheduling, promote mobile and remote working, and support our employees in finding childcare options. In addition to parent/child offices and the "SWM Kindervilla" crèche with space for 36 children, which was again completely booked out in 2022, we hand out 15 grant vouchers for enrollment in municipal day-care centres for pre-schoolers and an equal number of such vouchers for after-school care facilities. In cooperation with the "awo lifebalance" organisation, we moreover offer counselling regarding regular day-care options, offers for leisure activities, and the search for au pairs.





Together with the Amiravita online care portal, we help our employees find solutions for care-dependent relatives. In the year under review, we started to offer two online information events per year to care-giving relatives, covering a variety of care topics. The first event under the heading "Nursing care required – what now?" attracted approximately 60 participants and was thus well attended. Since 2008, we have been awarded the "berufundfamilie" (work and family) certificate given by the non-profit Hertie Foundation, which involves audits that are performed every three years using a dialogue procedure.

#### Use of parental leave by gender

|                                    | 2020       | 2021       | 2022       |
|------------------------------------|------------|------------|------------|
| <b>Total (number of employees)</b> | <b>400</b> | <b>367</b> | <b>374</b> |
| Female                             | 166        | 118        | 128        |
| Male                               | 234        | 249        | 246        |

With remote working from home, an increased need for childcare, and home-schooling, the Covid-19 pandemic placed (additional) multiple burdens on working parents. To be able to support and assist these employees with children in the best possible way, we have established exchange forums and various events on balancing private and working life. With an information event on the topic of parental leave and the associated Elterngeld/ ElterngeldPlus parental benefits, we explicitly addressed all colleagues at SWM in order to raise their awareness of the existing opportunities to help make family and working life more compatible. After all, it is still primarily woman who account for the majority of parental leaves. Accordingly, we are also encouraging our male employees to practice more gender equality in this respect. In the future, this event is to be held twice a year.

#### Remuneration and financial benefits

In 2022, collective work agreements covered 90.3 % of our employees (previous year: 90.2 %). As a Group committed to such agreements, we use a number of collective agreements that fit the framework conditions of our various business segments as guideposts for employee remuneration: TV-V (utilities), TV-N (local public transport), and our in-house collective agreement TV-MVG (Münchner Verkehrsgesellschaft). In addition, we have a bonus system for both employees covered and not covered by collective agreements, which gives them a share in the company's profit; this system uses the jointly achieved result as its yardstick. Part-time employees receive the same additional remuneration, fringe benefits, etc., as their full-time colleagues, with the relevant percentage being prorated based on their part-time factor.

In addition, we offer various financial benefits, especially for pension schemes. For example, both employees covered or not covered by collective agreements have access to employer-supported pension schemes such as company pensions or direct insurance policies. Further offers are a collectively agreed semi-retirement scheme, and the possibility to take additional vacation days against a pay reduction. Individual employees not covered by collective agreements as well as senior executives have agreed monetary bonuses within the framework of their goal-setting reviews. Our remuneration packages also include benefits in kind: at the MVG Rad bike rental service, all SWM employees have free use of standard bikes and e-bikes for 30 and 15 minutes per day, respectively. After this time slot, they are eligible for a reduced price per minute. Those who prefer to ride a bike geared to their individual wishes can lease a bike or pedelec through our cooperation with the JobRad bike-leasing company. For employees who only occasionally need to get to work by car, we made our parking space management more flexible in 2021. Alongside the traditional permanent assignment, parking spaces can also be used by the day. Meanwhile, our trainees and dual study students can enjoy low-cost mobility thanks to our 365 Euro Ticket.

In addition to mobility, we offer our employees a wide range of supplementary benefits such as gym membership cooperations, discounted electricity and gas supplies, a contingent of company flats, and many other fringe benefits. Information thereon can be found on the intranet, in particular, and is regularly communicated to make sure that, if possible, all employees are aware of the large number of offers.



Munich's high cost of living is a great challenge for employees in the lower pay brackets. At the same time, it has made it harder for us as a company to recruit new skilled employees, e.g. drivers for MVG. Since 1 January 2020, we have therefore given our employees some additional financial leeway by paying a dedicated Munich allowance. This supplementary payment has been introduced for the low and medium pay grades and ranges between EUR 180 and EUR 270 a month, depending on the specific pay bracket. These amounts are offset against collective-bargaining and performance bonuses.

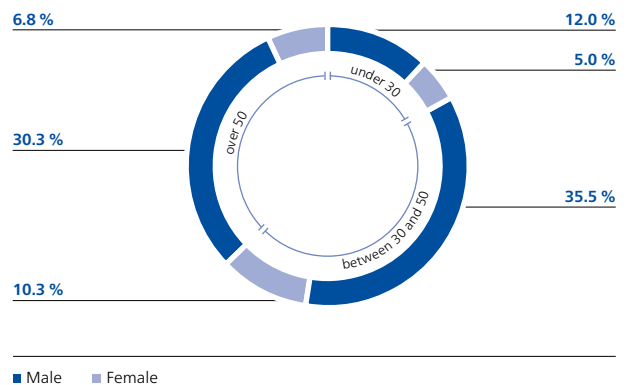
In addition, Munich is known for being a city where the number of available flats is much lower than the demand for housing. This is the reason why we launched our company-flat expansion campaign. To date, we have already made more than 1,300 company flats available to our employees. In 2022, we completed an additional 118 company flats. The next construction project will be completed in 2023, and another 85 new flats will then be handed over to our employees and one additional integrated day-care centre will be opened. In the future, we intend to continue to make sizeable investments and, by 2030, increase the portfolio of SWM-owned flats to approximately 3,000, located throughout the city of Munich. In the construction of flats for our employees, we pay a great deal of attention to the energy efficiency of the buildings, resource-saving use of sustainable construction materials, a sustainable approach to energy, and connections to various mobility offers, from public sector transport to the MVG Rad rental bike service to carsharing.

In addition, we have recently begun to explore possibilities of cooperating with municipal enterprises in company-flat construction. In March 2022, we organised the first think tank with representatives of municipal enterprises. And with the allotment of our new company flats in 2022, a successful pilot project was launched with MÜNCHENSSTIFT, an institution that provides care and age-friendly accommodation for the elderly, and the Munich Municipal Hospital Group: a total of ten flats were allotted to these two cooperation partners via occupancy rights. We intend to continue to organise such offers and exchange forums in 2023, too.



## Diversity and equal opportunities

### Employees by age structure and gender, 2022



As a company with employees from more than 80 nations, we are virtually as diverse as the urban society of the city of Munich. And this diversity is the source of our strength. We signed the Diversity Charter as far back as in 2007. We want to offer a working environment in which all employees are appreciated, accepted, and integrated, irrespective of their gender, nationality, ethnic background, religion or worldview, disability, age, sexual orientation, and identity. Among other things, we contribute to this with the Group-wide LGBTI\* network, "Proud@SWM", and the in-house women's network, "Die Expertisen".

Our in-house diversity management aligns SWM's structure and processes to ensure that all employees are appreciated and motivated to engage their full potential to the benefit of the organisation. We operate at two levels here. At the personal level, it is important that we identify, benefit from, and appreciate the different potentials of each individual. At the organisational level, we see diversity management as a cross-sectional task that impacts all (HR) processes and structures of SWM. For this reason, diversity is firmly embedded in our HR strategy. It pays off in many respects, especially given the challenges that arise from the shortage of specialists. Great potential can, for instance, be unleashed by

intensifying our recruitment of women and new employees from abroad and purposefully integrating older colleagues.

In addition, each Director has appointed a divisional equal opportunities officer. These appointees perform this function – as direct reports to the respective Director – in addition to their main activities. In accordance with the “Partnership-Oriented Conduct” group works agreement, which protects employees against discrimination and unequal treatment at the workplace, the equal opportunity officers are contacts for all questions revolving around equal treatment as well as any complaints. In addition, our equality policy expert is available for any questions about this issue. The equality policy expert also manages SWM’s internal complaint process, which has been aligned with the recommendations of the German Federal Anti-Discrimination Agency. Our strategic approach for these matters refers to the following seven core dimensions:

- ▶ Sexual orientation and identity
- ▶ Equal opportunities for all genders
- ▶ Age and generational diversity
- ▶ Ethnic background and nationality
- ▶ People with disabilities
- ▶ Religion and worldview
- ▶ Social background

By adopting a holistic approach, we develop and implement suitable activities, measures, and instruments. All employees are to be apprised of the seven core dimensions. To achieve this, we already present the topic of diversity and the associated internal networks within the framework of our onboarding programme for new employees. Our Management Development Programme

(MEP) likewise addresses not only topics such as “work/life balance”, but also diversity, raising executives’ awareness of this issue. In addition, we are making progress in the group-wide implementation of gender-sensitive language. In German texts, we use the gender asterisk for this purpose. In 2022, the German news magazine Stern again rewarded us for our high commitment to the various aspects of diversity by selecting us for the “Top Employer – Diversity” award.

In 2022, we placed a special focus on the topic of “unconscious bias” or thought patterns and prejudices we are not aware of. For example, this included the incorporation of content aimed at recognising and avoiding stereotypes into our MEP and M/Up leadership programmes. In addition, a wide variety of communication measures on the individual core dimensions is on our agenda. To highlight the demand for equal pay for women, for example, we, in cooperation with the City of Munich, put the EqualPay Tram on the tracks for one month in March 2022.

Women’s advancement is a special focus of our commitment to diversity. One of the ways in which we demonstrate this commitment is the fact that we have signed the Munich “Frauen in Führung” (Women in Leadership) memorandum. Specifically, we have set ourselves the goal of increasing the share of women in our workforce to 25 % by 2025. In 2022, this percentage increased only slightly, to 22.2 % (previous year: 21.4 %). In leadership positions, the share of women is also to increase to 25 % by 2025. However, this percentage also edged up only slightly in 2022 to 19.9 % (previous year: 19.8 %). We take this somewhat sluggish development as an incentive for further improvements.



In addition, we have launched the #25for25 initiative. It comprises all measures aimed at helping us achieve our strategic goals. After all, we definitely need the potential of more excellently qualified women, especially in times in which there is a shortage of skilled professionals. On top of that, the initiative helps make SWM more creative, more innovative, and more customer-oriented and enhances SWM's ability to handle change. The measures of #25for25 such as cross-mentoring for female managers or the "Female Empowerment" seminar series advance women and analyse the status quo of gender diversity and our equal opportunities reporting.

Our offers to enable our employees to achieve the best possible balance between their professional and family lives are continuously developed further and not only open to women, but to all our employees. After all, we are convinced that sustainable diversity and true equal opportunities can only be achieved if we take a holistic look at the system rather than specifically homing in on individual persons, irrespective of their gender.

#### Total number of employees by hierarchical level

|                  | 2021   |       | 2022   |       |
|------------------|--------|-------|--------|-------|
|                  | Female | Male  | Female | Male  |
| Management Board | 0      | 4     | 0      | 4     |
| Managerial staff | 104    | 416   | 107    | 426   |
| Employees        | 1,960  | 7,170 | 2,089  | 7,280 |

Participation in the Women Career Index (Frauen-Karriere- Index – FKİ) is also helpful for our goal to make women's advancement quantifiable. Under the auspices of the German Federal Ministry for Family Affairs, Senior Citizens, Women, and Youth (BMFSFJ), companies promoting the advancement of women and a culture of change and innovation receive annual awards. Based on an elaborate process, the participating companies, inter alia, document their activities in the areas of new leadership, diversity, and digital transformation. After directly entering the top 10 when we reached 7th place in our first try in 2019, we succeeded in moving up to 5th place in the 2021 ranking. In the future, we will continue to act upon the stimuli received from the FKİ to achieve continuous improvements and participate in comparisons with other progressive companies.



In 2021, 636 employees with physical disabilities worked at SWM (previous year: 639). We make manifold efforts to ensure that the work environment at SWM is as barrier-free as possible. For instance, we closely cooperate with the Disabilities Officer of the Works Council and examined the topic of barrier-free digital access in 2022 together with key stakeholders such as Internal and External Communications. In particular, we take particular care that newly developed apps are barrier-free.

In our view, diversity is not only relevant to our staff, but also to our customers, business partners, and the general public. This is why we are committed to promoting equal opportunities and raising awareness of any form of exclusion and intolerance outside our organisation, too. For example, we are a dedicated partner of the Munich CSD (Christopher Street Day), participate in the pride parade, and are represented in the street festival with an information booth. During the two weeks leading up to the 2022 Pride Week, we already put rainbow flags on our buses and trams and some of our public pools. During Pride Week itself, we hosted a Pride Pool Party and a Trans\*Inter\*Bathing Day at the Müller'sche Volksbad public pool and sponsored an art project at the Nordbad public pool. For the latter, the stairs leading up to the entrance were painted in the colours of the rainbow, supplemented by explanations of the meaning of the colours.



## Occupational safety and health

Our employees' safety and health are of paramount importance for us – and relevant to our success. We make every effort already to strengthen their health through preventive measures. In addition, we regularly raise all employees' and managers' awareness of the issue of occupational safety. It goes without saying that our top priority is prevention of (work) accidents.

The Management Board has the overall responsibility for occupational safety and health. In many areas, it has delegated this responsibility to subordinate executives by means of transfer of duties. In each organisational unit, responsibility for occupational safety and health within the framework of operational activities has been assigned to the top-ranking executive but may also be delegated to lower levels and functions. All our four directors are counselled by dedicated occupational safety specialists.

The regulatory framework for occupational safety and health issued by the German government and the corresponding rules and regulations of the German Social Accident Insurance (Deutsche Gesetzliche Unfallversicherung – DGUV) only define the minimum requirements. In some organisational units of the Technology division, we have additionally introduced the technical safety management framework of the utilities sector or ISO 45001. Alongside the Occupational Safety Committee (OSC) that is required by law, SWM has also established further contact points for employees who have questions about occupational safety and health: the professional employees of the Occupational Safety and Health staff units and the safety officers in the respective organisational units. The various safety officers, for their part, present relevant issues to the Chief Safety Officers or the OSC. The OSC meetings of the respective senior organisational unit usually take place quarterly and are chaired by the top executive responsible.

Risk assessment is the basis for identifying and implementing requisite measures. Only when the necessary safety measures have been taken may the manager give the green light for an activity, permit the use of tools and equipment, or release a hazardous substance for use. For special dangers to life and limb or the environment, the organisational units responsible draw up specific emergency preparedness plans and communicate them to the employees in the operational units.

A central task force ("Pandemic Task Force") was responsible for dealing with risks and organisational matters resulting from the Covid-19 pandemic. The work of this task force already allowed us to identify existing hazards with a structured approach from February 2020 onwards and define and implement suitable measures. During the Covid-19 pandemic, we were thus able to flexibly adjust to the continually changing circumstances. The Pandemic Task Force gave particular attention to our colleagues working for critical infrastructures.

### Safety instructions and training

The executives heading the individual organisational units have prepared their own instruction schedules for their respective areas of responsibility. These schedules show the topics in which employees must be instructed and the intervals required for such instructions. These safety instructions are normally presented in face-to-face training sessions or directly on site by the relevant managers, or work supervisors, if applicable. Since the outbreak of the Covid-19 pandemic, we have, however, also used virtual formats here. Managers are aided in this task by approximately 100 e-learning modules on the topic of occupational safety. Additionally, these modules can be completed for personalised instructions. They are allocated directly to the respective employees and tracked via the LearningManagementSystem.

In addition, our training programme offers a wide range of safety training courses: a total of 491 participants were trained in 55 courses in 2022 (previous year: 61 courses with 538 participants), ranging from fire protection assistance to occupational safety for managers. Most occupational safety trainings take place on site, where they can specifically be geared to the prevailing circumstances and necessary requirements. For the large number of first aid training courses, we can rely on the support of external providers.

If an accident happens despite all precautionary measures, it is reported and analysed centrally based on a specific flow chart. Subsequently, measures are implemented to prevent comparable accidents.

Our company doctors are responsible for counselling SWM across all segments in all issues of occupational safety and health and accident prevention. They are not subject to any instructions, and the Chief Medical Officer reports directly to the Management Board. Available occupational healthcare resources and examinations are presented and explained in detail to our employees on the intranet.

### Accident statistics for the core Group, excluding Mobility and MVG

| Work accidents                       | 2020      | 2021<br>(update) | 2022      |
|--------------------------------------|-----------|------------------|-----------|
| <b>Total</b>                         | <b>88</b> | <b>63</b>        | <b>56</b> |
| Subject to reporting obligations     | 46        | 44               | 37        |
| Not subject to reporting obligations | 42        | 19               | 19        |
| Fatal                                | 0         | 0                | 0         |
| Subsequent absence days              | 1,093     | 1,457            | 1,128     |
| Accident frequency in %              | 0.98      | 1.15             | 0.98      |

| Commuting accidents                  | 2020      | 2021<br>(update) | 2022      |
|--------------------------------------|-----------|------------------|-----------|
| <b>Total</b>                         | <b>25</b> | <b>28</b>        | <b>14</b> |
| Subject to reporting obligations     | 13        | 21               | 10        |
| Not subject to reporting obligations | 12        | 7                | 4         |
| Fatal                                | 0         | 0                | 0         |
| Subsequent absence days              | 273       | 708              | 510       |
| Accident frequency in %              | 0.28      | 0.51             | 0.25      |

### Accident statistics for Mobility and MVG

| Work accidents                       | 2020       | 2021       | 2022       |
|--------------------------------------|------------|------------|------------|
| <b>Total</b>                         | <b>166</b> | <b>187</b> | <b>208</b> |
| Subject to reporting obligations     | 120        | 143        | 155        |
| Not subject to reporting obligations | 46         | 44         | 53         |
| Fatal                                | 0          | 0          | 0          |
| Subsequent absence days              | 3,780      | 4,813      | 7,183      |
| Accident frequency in %              | 2.65       | 4.09       | 4.60       |

| Commuting accidents                  | 2020      | 2021      | 2022      |
|--------------------------------------|-----------|-----------|-----------|
| <b>Total</b>                         | <b>40</b> | <b>67</b> | <b>60</b> |
| Subject to reporting obligations     | 33        | 52        | 47        |
| Not subject to reporting obligations | 13        | 15        | 13        |
| Fatal                                | 0         | 0         | 0         |
| Subsequent absence days              | 962       | 1,608     | 2,800     |
| Accident frequency in %              | 0.73      | 1.46      | 1.33      |



### Health protection: focus on prevention

The Health staff unit comprises the following departments: Occupational Healthcare, Corporate Health Management, and Integration Management and Rehabilitation. Our Chief Medical Officer heads the staff unit; she reports directly to the Management Board. Occupational Healthcare is responsible for traditional corporate medical services and tasks stipulated by occupational safety and health legislation and also offers preventive medical services such as nutritional counselling, flu vaccination, or Health Days. In addition, department representatives are involved in the advisory committee for the staff restaurant, the goal being to support healthy staff meals. Corporate Health Management offers a broad range of workplace health promotion services, including the "SWM aktiv" corporate sports programme, and operates our in-house gym. In the area of mental health, the focus is on individual and collective psychosocial counselling and a support policy for the Mobility division, in some instances in cooperation with external trauma therapists. Integration Management and Rehabilitation supports the company in the execution of operational integration management pursuant to Section 167 of the German Social Code IX (Sozialgesetzbuch – SGB). To ensure our continued ability to provide interesting health services, our employees in the Health staff unit are continuously given opportunities to attend professional development workshops and qualification courses.

At the beginning of 2022, the implementation of Covid-19 measures still dominated the work of the Health staff unit. In these efforts, it could build on the effective hygiene and protection protocols that we had introduced at the outbreak of the pandemic in early 2020. These measures were continually adjusted to the respective legal requirements, taking account of our operational needs. One important task of the Health staff unit was the provision of personalised advice to employees and managers.

When employees tested positively for the SARS-CoV-2 virus, the Health staff unit supported the departments affected in contact tracing and the resultant measures. An internal reporting system that complied with data protection regulations enabled us to quickly identify infection clusters in specific units and immediately initiate suitable countermeasures.

# Corporate governance





Good corporate governance is also reflected in responsible behaviour. As we are a company providing important infrastructure services and owned by the City of Munich – and thus ultimately by Munich’s citizens – corporate governance is an important topic for us. This is embedded in the mission statement of our organisation.



### Mission Statement

1. We are committed to the citizens of Munich.
2. We work towards enhancing the quality of life in Munich and the region.
3. We engage in sound and long-term relationships with our customers.
4. We act in a responsible manner towards the environment and society.
5. Our business success is the basis of everything.
6. We demand and encourage performance and reliability.
7. Our actions are based on cooperation and partnership.

SWM Group is made up of the core Group and its (direct and indirect) shareholdings. In the year under review, the core Group comprised Stadtwerke München GmbH as parent company and the following subsidiaries: SWM Services GmbH, SWM Kundenservice GmbH, SWM Versorgungs GmbH, SWM Infrastruktur GmbH & Co. KG, SWM Infrastruktur Verwaltungs GmbH, Münchner Verkehrsgesellschaft mbH (MVG), and LHM Services GmbH, [see also the chart on page 70.](#)<sup>1)</sup>

The parent company is the operational holding company for the subsidiaries and responsible for uniform management. Group regulations define the internal (legal and factual) governance framework for the company. In particular, this framework covers the following important aspects: binding descriptions of duties, clear regulation of responsibilities, transparent delegation of tasks, a clear operational chain of command, effective control mechanisms and functional delineation, compliance with the business judgement rule, approval requirements for major decisions, and compliance with the requirements arising from corporate law.

The articles of association are the foundation of the companies of the SWM core Group. With the exception of SWM Infrastruktur GmbH & Co. KG, all companies in the core Group are organised as German limited liability companies (Gesellschaft mit beschränkter Haftung – GmbH). The corporate bodies of a GmbH are always the shareholder meeting (Gesellschafterversammlung) and the managing directors (Geschäftsführung). A mandatory supervisory board has been established at Stadtwerke München GmbH, SWM Services GmbH, and MVG. LHM Services GmbH has an optional supervisory board. SWM recognises co-determination of employees. Trust-based and close cooperation with the employee representatives, characterised by an open and constructive dialogue and mutual respect, is a key element of our corporate policy.

We attach importance to clear responsibilities, transparent delegation of tasks, an operational chain of command, effective control mechanisms and functional delineation, and compliance with the business judgement rule, which stipulates that all decisions must be taken with due diligence. According to our Code of Conduct, this above all means that decisions must be prepared properly, taking account of all relevant decision-making options and their implications. They may not be determined by inappropriate influences and special interests. Another principle that applies is that key decisions require the approval of senior management. It goes without saying that we adhere to the legal requirements in all corporate governance issues, especially those arising from corporate law.

At SWM, internal policies provide guideposts for action. The major elements are our corporate policy, the regulations on decision-making authorities, our delegation guidelines, the articles of association and by-laws, the business distribution plan, the guideline for the organisation of management board resolutions, and our policies for financial transactions and the management of shareholdings.

In the core Group, the Group Governance & Compliance staff unit – hereinafter also called “Compliance function” – addresses the topic of corporate governance from an overarching perspective. The Management Board’s corporate office supports them in this task.

<sup>1)</sup> Since 1 January 2023, LHM Services GmbH has been a subsidiary of the City of Munich (LHM München) and no longer part of SWM Group.

Various management systems exist for risk, shareholdings, compliance, and information security management. The guideline on the Compliance Management System (CMS) at SWM Group defines the organisation and operation of the CMS. Our CMS has been aligned with the Principles of Proper Audit of Compliance Management Systems promulgated by the Institute of Public Auditors in Germany (IDW) and covers three levels of action: prevent, identify, and react. Compliance and data protection audits are carried out approximately once or twice per year. In addition, Group Internal Audit regularly performs audits. In 2021, an independent accounting firm audited the design, adequacy, implementation, and effectiveness of our CMS for the risk areas of data protection, money laundering, and fraud in accordance with the requirements of the IDW PS 980 standard. The audit resulted in an unqualified positive assessment and is to be repeated in 2026.

While the topic of corporate governance has been organisationally centralised in the core Group, decentralised management has been implemented in most of our shareholdings. Centralised policies also exist for relevant units that serve the purpose of shareholding support, management, and controlling by SWM.

## **Fairness and compliance at Stadtwerke München**

It goes without saying that we comply with all legal regulations. The entire Group and especially the SWM Management Board see this as their responsibility vis-à-vis customers, employees, citizens, the City of Munich in its capacity of our shareholder, and the expert authorities.

When it comes to responsibilities, we pursue a top-down approach. The responsibility for compliance has been assigned to the Management Board of Stadtwerke München GmbH and/or the top executives of SWM Group. According to the business distribution plan, the Chief Executive Officer holds the departmental responsibility for compliance.

On behalf of the CEO, the senior executives heading the Group Governance & Compliance staff unit are responsible for the CMS. The Compliance Officer compiles annual activity reports to inform the Management Board of Stadtwerke München GmbH, the top executives of SWM Group, and the supervisory board bodies of SWM. The Compliance Officer also performs the function of Human Rights Officer.

In our organisation, compliance covers the following areas of activity: data protection law, anti-trust law, prohibition of insider trading and market manipulation, prevention of money laundering and terrorist financing, sanctions against individuals, the German Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz; LkSG), prevention of corruption and property offences, and prevention of collusive tendering. We do not tolerate corruption or other unfair competitive practices, we pursue a transparent approach to donations and sponsoring that complies with our internal policies, and we are careful in our handling of personal data. In 2020/2021, we conducted a fraud compliance risk analysis. Apart from the identification of traditional fraud risks (corruption, fraud, breach of trust, and embezzlement), this analysis also included risks in the areas of money laundering and terrorism financing. Based on the results of this analysis, recommendations for the optimisation of our CMS were defined and corresponding measures were implemented. For example, we have improved our internal control system for cost centre monitoring and for the overarching invoice approval process. In 2022, no internal corruption incidents were reported at SWM.

The focus of our compliance activities is on preventative measures aimed to ensure that violations do not occur in the first place. For example, training workshops or an e-learning module, which was revised in 2021, are offered to increase all employees' awareness of compliance issues. Face-to-face workshops focus on employees who may typically encounter compliance issues in the performance of their tasks (e.g. those dealing with external contractors). Internal preventive measures and remedial actions have also been established with respect to the LkSG. Our current compliance training sessions and the compliance e-learning module are progressively being expanded to include human-rights and environment-related issues. Awareness-raising measures such as the Compliance Newsletter and dedicated training sessions serve the purpose of familiarising employees in relevant organisational units with our human-rights strategy, the LkSG rules and regulations, and the associated processes to allow them to subsequently put these concepts into practice. Furthermore, we offer training to relevant units on occupational safety and various environmental issues such as waste management or water protection.

We publish all relevant policies, rules of procedure, and application guides on our intranet, along with additional information on training options, newsletters, and guidelines. In addition to pertinent newsletter articles published in 2022, we issued practical application guides

on the LkSG on 1 January 2022. Employees can use these documents to read up on the specific requirements resulting from the new law and the way they are being implemented at SWM.

Our Code of Conduct assigns responsibility to all employees and makes it clear that we respect the law, draw attention to violations of laws and rules, and assume responsibility for compliance with rules and regulations. In addition, we act in the interest and for the benefit of SWM, adopt a cooperative and partnership-oriented approach, take decisions with due diligence, and acknowledge our responsibility for the environment and society. This includes our clear commitment to both the energy transition and sustainability in the supply chain. Moreover, the Code of Conduct regulates confidentiality obligations, the handling of conflicts of interest, and dealing with customers, business partners, and other third parties.

Employees are directed by the Code of Conduct to report potential suspicions of compliance violations they note. Apart from speaking to their manager, the Group Governance & Compliance staff unit is available to them as an internal whistle-blower contact. Alternatively, an attorney who has been appointed as an external ombudsperson can be contacted. Compliance violation tips may also be submitted anonymously. In addition, both whistle-blowers and individuals affected by such information are protected and their rights are safeguarded. Since 1 January 2023, our whistle-blower system has also included the complaint procedure stipulated under the LkSG. The individuals responsible, the contact data of the internal whistle-blower contact unit and the ombudsperson, as well as the rules of procedure including information on responsibilities and reporting procedures are available in German and English on the websites of Stadtwerke München GmbH, SWM Infrastruktur GmbH & Co. KG, and Münchner Verkehrsgesellschaft mbH (MVG). We pursue all suspicions of which we gain knowledge consistently and without any exceptions. If a conclusiveness check and subsequent compliance analysis or compliance investigation find that internal rules and regulations and/or statutory requirements have indeed been violated, suitable actions will be recommended and are then implemented by the business units affected. Where there is reasonable suspicion that a criminal offence has been committed, we will additionally file an official complaint with the police.

Because changes may occur in the legal environment, case law, and authorities' specific decisions as well as SWM's risk position and structure, we continuously update our CMS. Our agenda for 2023 includes the further development of the processes for the implementation of the German Supply Chain Due Diligence Act (LkSG). Furthermore, our plans for 2023 provide for the procurement of a software solution that is to be used additionally within the framework of the whistle-blower system in order to overcome potential language barriers on the part of potential whistle-blowers.

Our implementation of the LkSG is dependent on the existing management systems, with the CMS playing a key role. While the methodological responsibility is embedded centrally in the Compliance function and most requirements have been integrated into the existing CMS, implementation is the responsibility of the Compliance Officers in the respective business segments. From 2023 onwards, the effectiveness of the preventive measures, the remedial actions, and the complaint procedure will be reviewed as part of the annual compliance audits.

Another key element is company-wide LkSG risk management, which essentially comprises overarching risk controlling, central compliance management, decentralised compliance management, and the LkSG-specific risk management of the Central Purchasing department. An initial LkSG risk analysis performed in the own business area of the SWM core Group in 2022 identified medium abstract gross risks, the majority of which had a very low probability of occurrence thanks to existing measures. These risks concerned the following topics: abuse of power by public or private security staff, environmental changes leading to human-rights violations, safety and health risks through working hour regulations, and occupational safety.

In 2022, the Management Board of Stadtwerke München GmbH and top executives of SWM Group drew up a policy statement on the human-rights strategy of Stadtwerke München GmbH, SWM Services GmbH, and Münchner Verkehrsgesellschaft mbH (MVG). This document was published on 1 January 2023. In this policy statement, we describe the procedures by which we ensure end-to-end respect of human rights in our own business area and at our suppliers.



The more extensive risk analysis that will be performed from 2023 onwards, also with respect to shareholdings in which the parent company exercises a decisive influence, will yield deeper insights into priority human-rights and environment-related risks in the company's own area of business. The policy statement will subsequently be updated accordingly.

## Sustainability in the supply chain

Alongside our customers, our suppliers are a second important stakeholder group. We are aware of our associated responsibility for human rights and sustainability in the supply chain and are increasingly focusing on the topic of sustainability in our cooperation with suppliers. This not least complies with a resolution in principle on the implementation of the climate targets adopted by the Department for Climate and Environmental Protection of the City of Munich. This resolution demands increasing consideration of sustainability aspects in procurement. In investment projects, for instance, the costs attributed to climate change are to be considered and included in the contract-award criteria by preparing a life cycle cost calculation. Similarly, our own procurement activities shall also set incentives for climate protection as well as a general sustainability orientation for small and medium-sized enterprises.

For purchasing and logistics, we are designing a dedicated sustainability strategy based on a comprehensive materiality analysis. From this, we are deriving concrete measures for the major input requirements (material groups/categories) such as sustainable contract-award criteria or sustainability requirements for future business partners and KPIs. The measures cover aspects of economic, environmental, and social sustainability. Independently of these strategic considerations, pilot projects are being prepared for which we are in dialogue with suppliers to jointly develop effective measures and verify their practicality. These discussions will also place a focus on our material flows. Cooperation with our suppliers is very important to us because we are convinced that this is an essential prerequisite for making our external value added more sustainable.

## Business partner compliance

Not only are the members of our organisation expected to adhere to all applicable laws, but the same holds true for our suppliers and other external business partners. Business partner compliance is an integral part of our CMS and comprises our Business Partner Code of Conduct and the business partner compliance review.

The Business Partner Code of Conduct, which went into effect in 2020, spells out the most important principles for legally correct, responsible, and ethical behaviour that we require of business partners and see as an essential basis of our cooperation as partners. The Business Partner Code of Conduct contains principles on human rights, child and forced labour, employee rights, environmental protection, raw material procurement, anti-corruption, money laundering and terrorist financing, export and import controls, sanctions, conduct in competition, and business ethics, as well as data protection and handling of information. In the event of violations of these principles by business partners, we reserve the right to critically review the business relationship. Existing and new direct suppliers are informed about our Business Partner Code of Conduct. Depending on the identified human-rights and environment-related risks according to the German Supply Chain Due Diligence Act (LkSG), the contribution to these risks, and SWM's ability to influence the party directly responsible for these risks in its role of purchaser, our Business Partner Code of Conduct – or an equivalent code of conduct prepared by the supplier – will be incorporated as a mandatory element in our contracts and supplemented by LkSG-specific, more concrete contractual obligations such as agreements on passing on these codes. In this context, we demand that direct suppliers comply with the human-rights and environment-related requirements in their own area of business and also duly communicate them to their respective upstream suppliers.

The introduction of a high-level business partner compliance review has established a risk-oriented, software-based business partner assessment process at both the Central Purchasing department and all other relevant business units (e.g. Trade, Sales). The assessments cover both new and already existing contractual and business relationships. In the business partner compliance review, we also check all active

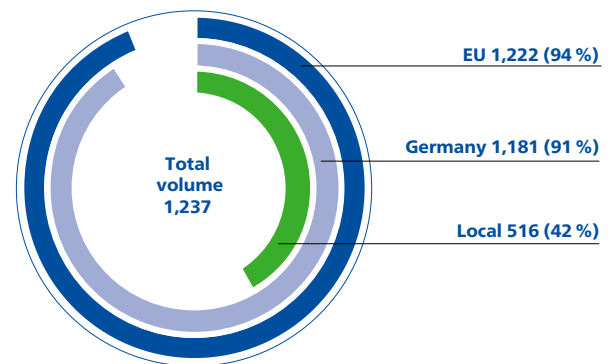
## SWM AS A PURCHASER

In the 2022 financial year, we purchased goods and services with a total value of slightly under EUR 1,237 billion from 5,662 active suppliers.<sup>1)</sup> This procurement volume can be broken down as follows: construction and engineering services (approximately 24.19%), vehicles and delivered goods (44.55%), and IT and services (33.26%). One important aspect of sustainability in the supply chain is our defined goal to foster the local economy and small and medium-sized enterprises. Local sourcing, which SWM defines as sourcing in the southern Bavarian region where postal codes start with the number 8, accounts for a volume of EUR 516 million (41.72%), distributed among 2,696 suppliers.

<sup>1)</sup> Indirect purchasing, excluding energy providers

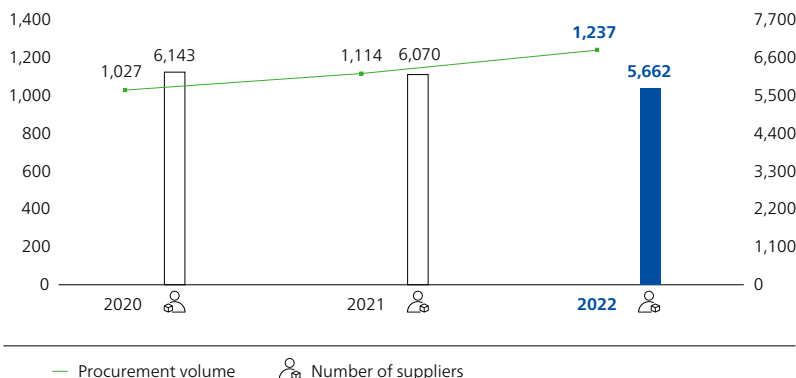
### Procurement volume by regions in 2022

in EUR million



### Procurement volume<sup>1)</sup>

in EUR million



<sup>1)</sup> The procurement volume shown refers to the purchasing-related invoice volume disbursed within one year. It includes only the contracts concluded by Central Purchasing and no trading transactions. This means that this procurement volume is only a subset of the cost of materials shown in the balance sheet.

suppliers for violations of the sustainability aspects defined in our Business Partner Code of Conduct. If we identify any violations, we will launch a clearly targeted examination and define remedial actions. Private end/residential customers are exempt from the business partner review. The entire business partner review process and the assessment of findings are automatically stored in the due diligence software in accordance with the applicable data protection requirements. Details on tasks, processes, and responsibilities are governed by

our Business Partner Compliance Policy and our Anti-Money Laundering and Terrorist Financing Policy.

The LkSG risk analysis of our suppliers has been integrated into our existing business partner compliance review. This means that SWM's business segments perform risk analyses for direct suppliers in accordance with the requirements of the policies for business partner compliance and for money-laundering and terrorism-financing prevention. Prior to entering into

business relationships, we conduct a specific, risk-based LkSG audit for potential business partners based on the audit software used for the business partners compliance audit. In the case of permanent business relations, another LkSG audit must be performed for these suppliers after a period not exceeding 12 months. The following risk factors determine the assessment of a supplier's overall risk (low, medium, or high): country (registered office), industry, and order volume. Indices are used for the classification in the "country" and "industry" categories.

As far as direct suppliers are concerned, the LkSG risk analysis, conducted by the Central Purchasing department in 2022 for the first time, revealed that the majority of our suppliers are exposed to low abstract country risks, which is due to their regional character. More detailed results of this risk analysis can be found in the policy statement.

Further steps of the audit include the use and assessment of a risk-oriented media check (adverse media) and compliance questionnaires. Depending on the individual case, we will instigate further preventive measures or define remedial protocols. If, for example, an (imminent) violation of human-rights or environment-related obligations is identified, we will urge the supplier to ensure that the breach of duty is prevented, terminated, or at least minimised in the near future. If a breach of duty cannot be stopped in the foreseeable future, we will immediately draw up and implement what is known as a "remedial protocol" (including a timeline) for its termination or minimisation. This staged approach ensures that we enter into a solution-finding dialogue on a (potential) breach of duty with the affected supplier and are forced to terminate the business relationship only in exceptional cases.

### Competition

We also rely on preventive measures with respect to anti-trust legislation. Specific requirements in our Code of Conduct, the compliance training workshops, and continuous legal counsel – e.g. for contract design – aim at possibly avoiding violations even before they occur. Even though we ourselves do not violate anti-trust legislation, collusion by third parties may cause us harm. In tight markets, in particular, the risk of collusion among third parties exists in tendering. In the event of anti-trust-induced damage, we examine whether we should file damage claims. The requirements for the German Competition Register have been implemented as stipulated.

### Political engagement

Our business is subject to strong regulatory influences. EU legislation (or its transposition at the national level) is relevant here, as are laws and measures adopted at the federal, state, and local levels.

In 2022, Russia's war of aggression against Ukraine and its repercussions dominated the energy-policy and economic agenda. In an initial response, the European Commission adopted the REPower package, which raised the EU climate targets further with a view to ensuring greater independence from individual fossil-fuel imports and achieving a more resilient positioning overall. In addition, an amendment to the EU Gas Storage Regulation was adopted in a fast-track legislative procedure, which stipulates binding filling rates for 2022 and subsequent years. In the further course of the year, the European Commission moreover presented several additional emergency regulations, which merely required member states' consent and promised immediate assistance. Among other things, agreements were reached on a binding reduction in electricity and gas demand, EU-wide solidarity rules in the event of a gas deficit situation, and the possibility of EU-wide joint gas procurement for the next gas storage filling season. Similarly, a mandatory absorption of excess profits generated by operators of what are known as "inframarginal power plants" (including those relying on renewable energies, nuclear energy, and lignite) was adopted to fund the state's support measures for private households and industry.

To avert the looming supply crisis, the German federal government put together an extensive bundle of measures at the national level: the short-term focus was on safeguarding the energy supply, also with the help of fossil energy sources, while simultaneously reducing dependence on fossil energy imports from Russia. This was implemented through various amendments to the German Energy Security Act (Energiesicherungsgesetz; EnSiG), which established the basis for empowering the German Federal Network Agency (Bundesnetzagentur; BNetzA), in its capacity of "federal load balancer", to take action in the event of a gas deficit situation. To ease the financial burdens for customers that resulted from the high energy prices, a EUR 200 billion stabilisation fund was set up at the federal level. Together with the revenues collected by absorbing profits of inframarginal electricity generators, this fund will be used for financing the German energy price caps.



From a long-term perspective, the German federal government continues to work on full decarbonisation of the energy supply through conversion to clean energy generated from water, wind, sun, biomass, and geothermal sources.

Given the crucial importance of legislation for our business, we engage in a supporting role in the political discussions on planned legislation at the EU, the German federal, and state levels. We publish public statements on particularly important issues or decisions. Our positions and approaches in this dialogue are solely based on principles that are sound from an energy-sector and macroeconomic perspective. Proprietary fundamental models for the energy sector provide an objective data basis for our reasoning. Of course, we adhere to all requirements of our Code of Conduct and all applicable compliance rules in the political sphere, too. With our political engagement, we intend to generate greater awareness of our interests and concerns, especially with respect to the implementation of our renewable energies expansion campaign, geothermal energy, and the importance of local public transport for the mobility transition. In addition, our political engagement enables us to communicate developments in the Group and prepare ourselves for the relevant changes early on.

### Data protection and information security

Our business activities regularly involve personal data. We handle these data responsibly and in compliance with the EU General Data Protection Regulation. We actively provide transparent and comprehensible information to our customers on the processing of their data and their rights. Our Data Protection Notice is available to the public for inspection at [www.swm.de/datenschutz](http://www.swm.de/datenschutz). If we wish to process personal data for any purpose not listed in this Data Protection Notice, we notify our customer(s) thereon separately in accordance with the statutory requirements. Internally, we address the issue in our Code of Conduct. Similarly, data protection is the topic of an e-learning module for our employees that is used throughout the Group.

The topic of data protection is organisationally integrated in our Compliance function. In addition, there are decentralised contacts in the form of data protection coordinators and data protection specialists, who support the central Compliance function. Data protection coordinators process and coordinate inquiries by affected parties from the various business segments. Data protection specialists update the

processing register, report any data protection incidents, and are the first responders for the business units when it comes to initial data protection reviews.

Our Data Protection unit prioritises the support of internal projects in which data protection plays a major role. One recent example is the development of digital business models such as M-Login. In addition, Data Protection addresses the implementation of data protection requirements in our organisation, e.g. the projects implementing the EU General Data Protection Regulation, the project aimed at developing Group-wide data deletion and blocking strategies, or the purchase of data protection management software. In this context, the large number of Group projects with data protection relevance is a challenge. This also applies to documentation requirements under the EU General Data Protection Regulation.

Various audits regularly verify whether data protection regulations have been implemented properly in the company. The Information Security Officer carries out security audits, while the Compliance function is responsible for data protection audits. In addition, the Management Board of Stadtwerke München GmbH tasks Group Internal Audit with data protection and IT security audits in its annual internal audit plan. We handled data protection violations recorded during 2022 as stipulated in the rules and regulations and reported them to the competent data protection agency in all cases that were subject to reporting obligations.



# About this report

This is the fourth Sustainability Report published by Stadtwerke München (SWM). It is built on the internationally accepted reporting framework defined by the “Global Reporting Initiative Standards”, which we used as a guideline for the materiality analysis we conducted, the description of the management approaches, and the underlying classification of information into general or specific. In addition, we adhered to general reporting principles: accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and auditability. This report has been prepared with reference to the current GRI Standards of 2021.

The reporting period matches the financial year, which ran from 1 January 2022 to 31 December 2022. The editorial deadline for this report was 30 June 2023. The report is updated annually. As a basic principle, all information refers to SWM in its entirety with all its business segments. Individual chapters deviate from this reporting period in the sections indicated. Any information and presentations of strategies and approaches in the individual chapters that refer to different units are moreover indicated accordingly.

## Impact inside/outside the organisation

| Key topic                       | Relevance               |                          | Relevant GRI standard  |
|---------------------------------|-------------------------|--------------------------|--|
|                                 | Inside the organisation | Outside the organisation |  |
| Society                         |                         |                          |  |
| Social responsibility           |                         | x                        | GRI 201 – Economic Performance 2016<br>GRI 203 – Indirect Economic Impacts 2016<br>GRI 413 – Local Communities 2016  |
| Products and services           |                         |                          |  |
| Provision of essential services |                         | x                        | GRI 203 – Indirect Economic Impacts 2016<br>GRI 301 – Materials 2016<br>GRI 302 – Energy 2016<br>GRI 303 – Water and Effluents 2018                                    |
| Product responsibility          |                         | x                        | GRI 203 – Indirect Economic Impacts 2016<br>GRI 301 – Materials 2016<br>GRI 302 – Energy 2016<br>GRI 305 – Emissions 2016<br>GRI 416 – Customer Health and Safety 2016 |
| Environment                     |                         |                          |  |
| Energy                          | x                       | x                        | GRI 302 – Energy 2016  |
| Emissions                       | x                       | x                        | GRI 305 – Emissions 2016   |
| Raw materials and supplies      | x                       |                          | GRI 301 – Materials 2016   |
| Water                           | x                       | x                        | GRI 303 – Water and Effluents 2018   |

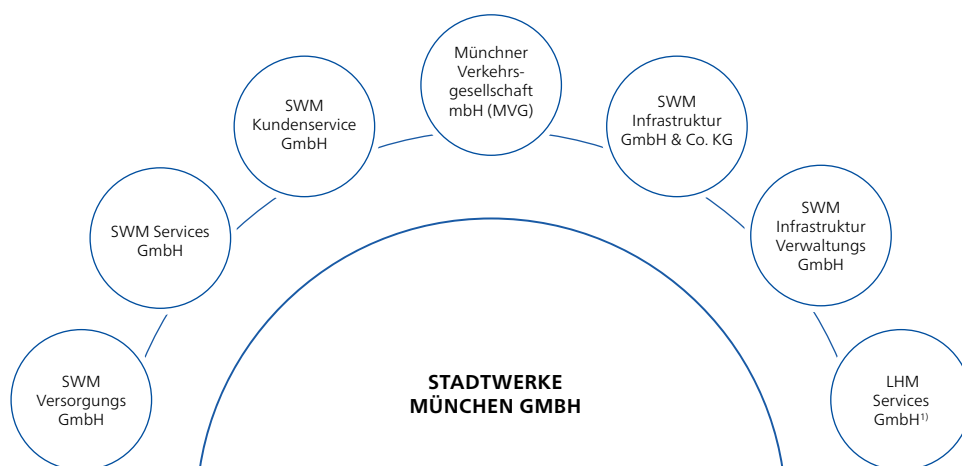
| Key topic                       | Relevance               |                          | Relevant GRI standard   |
|---------------------------------|-------------------------|--------------------------|---|
|                                 | Inside the organisation | Outside the organisation |   |
| Employees                       |                         |                          |   |
| Working conditions              | x                       |                          | GRI 401 – Employment 2016<br>GRI 402 – Labour/Management Relations 2016<br>GRI 405 – Diversity and Equal Opportunity 2016<br>GRI 406 – Non-discrimination 2016<br>GRI 407 – Freedom of Association and Collective Bargaining 2016<br>GRI 408 – Child Labor 2016<br>GRI 409 – Forced or Compulsory Labour 2016 |
| Training and education          | x                       | x                        | GRI 404 – Training and Education 2016   |
| Occupational health and safety  | x                       |                          | GRI 403 – Occupational Health and Safety 2018   |
| Diversity and equal opportunity | x                       | x                        | GRI 202 – Market Presence 2016<br>GRI 405 – Diversity and Equal Opportunity 2016  |
| Corporate Governance            |                         |                          |   |
| Value creation                  | x                       | x                        | GRI 201 – Economic Performance 2016<br>GRI 204 – Procurement Practices 2016<br>GRI 308 – Supplier Environmental Assessment 2016<br>GRI 408 – Child Labour 2016<br>GRI 409 – Forced or Compulsory Labour 2016<br>GRI 414 – Supplier Social Assessment 2016   |
| Compliance                      | x                       | x                        | GRI 205 – Anti-corruption 2016<br>GRI 307 – Environmental Compliance 2016<br>GRI 419 – Socioeconomic Compliance 2016  |
| Data protection                 | x                       | x                        | GRI 418 – Customer Privacy 2016   |
| Competition                     |                         | x                        | GRI 206 – Anti-competitive Behaviour 2016   |
| Political contributions         | x                       | x                        | GRI 415 – Public Policy 2016  |



### Data collection and compilation

Unless otherwise indicated, the following principles apply to all key performance indicators and data points throughout the entire report. This Sustainability Report covers all companies that were part of the SWM core Group in the year under review: Stadtwerke München GmbH, Münchner Verkehrsgesellschaft mbH, SWM Versorgungs GmbH, SWM Services GmbH, SWM Kundenservice GmbH, SWM Infrastruktur GmbH & Co. KG, SWM Infrastruktur Verwaltungs GmbH, and LHM Services GmbH.<sup>1)</sup>

In addition, reference is made to shareholdings in sections as is applicable. The collection period for the data published is 1 January 2022 to 31 December 2022. Accordingly, the basis of the previous year's data is shifted by one year each. The content is based on a materiality analysis that was performed within the context of initial report preparation in 2019 and has been checked annually since then to determine whether there is any need for adjustment. The material topics identified are presented extensively in the report. All data has been collected carefully, but transmission errors cannot be ruled out.



The persons covered by the term "employees" in this report do not include trainees, interns, seasonal workers, and staff members whose contracts are dormant. Information on the workforce is provided on a per-capita basis.

### Editorial note

Apart from carbon dioxide (CO<sub>2</sub>), the list of climate-damaging greenhouse gases that must be included in a greenhouse gas inventory as carbon dioxide equivalents (CO<sub>2</sub>e) under the internationally recognised standard of the Greenhouse Gas Protocol also includes gases such as methane (CH<sub>4</sub>) and sulphur hexafluoride (SF<sub>6</sub>). In this report, we also consider CO<sub>2</sub> equivalents in most cases. In general terms such as "CO<sub>2</sub> neutral", "CO<sub>2</sub> compensation",

or "CO<sub>2</sub> offsetting", we use the abbreviation CO<sub>2</sub> for the sake of simplicity, even though we mean CO<sub>2</sub>e. For the capture or storage of carbon dioxide in forestry projects, by contrast, we correctly refer specifically to CO<sub>2</sub>.

Rounding of amounts or percentages to the nearest whole number may lead to differences from the actual figures. Forward-looking statements made in this report are based on internal assessments of future developments, which are subject to uncertainties and may not be under the control of Stadtwerke München. This report is published in German and English. In the event of deviations, the German version prevails.

<sup>1)</sup> Since 1 January 2023, LHM Services GmbH has been a subsidiary of the City of Munich (LHM München) and no longer part of the SWM Group.

## GRI content index

### Statement of use

Stadtwerke München GmbH has reported the information cited in this GRI content index for the period 1 January 2022 to 31 December 2022 with reference to the GRI Standards.

### GRI Standard used

GRI 1: Foundation 2021

| GRI Standard   | Disclosure  | Page number(s)                      | Comments/omissions  |
|--|---|-------------------------------------|---|
| <b>General Disclosures</b>                           |   |                                     |   |
| <b>GRI 2: General Disclosures 2021</b>               |   |                                     |   |
| <b>Organisational Profile and Reporting Practice</b> |   |                                     |   |
| GRI 2-1  | Organisational details  | p. 6                                | Stadtwerke München GmbH<br>Emmy-Noether-Strasse 2<br>80992 Munich<br>Germany  |
| GRI 2-2  | Entities included in the organisation's sustainability reporting            | p. 70                               |   |
| GRI 2-3  | Reporting period, frequency, and contact point                              | pp. 68, 71                          | The reporting period is January 2022 to December 2022. Reports are prepared annually.<br><br>Contact point for questions regarding the report: Natascha Lung, Marketing and Communication |
| GRI 2-4  | Restatements of information   |                                     | New definitions, calculation methods, or scopes considered are, if necessary, described in footnotes to the respective indicators or in the text of this report.                          |
| GRI 2-5  | External assurance  |                                     | No external review has been performed.  |
| <b>Activities and Employees</b>                      |   |                                     |   |
| GRI 2-6  | Activities, value chain, and other business relationships                   | p. 4 et seqq., pp. 15–29            | See Annual Report, p. 27 et seq., pp. 37–40, 56–61  |
| GRI 2-7  | Employees   | pp. 47–58                           |   |
| GRI 2-8  | Workers who are not employees   | p. 48 et seqq., pp. 54, 64 et seqq. |   |
| <b>Governance</b>                                    |   |                                     |   |
| GRI 2-9  | Governance structure and composition  | p. 9                                | See Annual Report, pp. 72–73  |
| GRI 2-11   | Chair of the highest governance body  |                                     | See Annual Report, p. 72  |
| GRI 2-12   | Role of the highest governance body in overseeing the management of impacts | pp. 61–62                           |   |
| GRI 2-13   | Delegation of responsibility for managing impacts                           | pp. 61–62                           |   |
| GRI 2-19   | Remuneration policies   |                                     | See Annual Report, p. 71  |

| GRI Standard                             | Disclosure   | Page number(s)   | Comments/omissions   |
|--|--|--|--|
| <b>Strategy, Policies, and Practices</b> |  |  |  |
| GRI 2-24                                 | Embedding policy commitments   | pp. 16, 66   |  |
| GRI 2-25                                 | Processes to remediate negative impacts  | p. 56,<br>pp. 61–67  |  |
| GRI 2-26                                 | Mechanisms for seeking advice and raising concerns   | p. 56,<br>pp. 61–67  |  |
| GRI 2-27                                 | Compliance with laws and regulations   |  | There has been no incidence of non-compliance with environmental laws and/or regulations. Similarly, there has been no incidence of non-compliance of laws and regulations in the social or economic realm either.   |
| GRI 2-28                                 | Membership associations  |  | Selection:<br>– Arbeitsgemeinschaft Offshore-Windenergie e. V.<br>– Bundesverband der Energie- und Wasserwirtschaft e. V.<br>– Bundesverband Geothermie e. V.<br>– Bundesverband Glasfaseranschluss e. V.<br>– UITP Internationaler Verband für öffentliches Verkehrswesen<br>– Verband Deutscher Verkehrsunternehmen e. V.<br>– Verband kommunaler Unternehmen e. V.<br>– Wirtschaftsbeirat der Union e. V.<br>– Wirtschaftsforum der SPD e. V. |
| <b>Stakeholder Engagement</b>            |  |  |  |
| GRI 2-29                                 | Approach to stakeholder engagement   | pp. 10–11  |  |
| GRI 2-30                                 | Collective bargaining agreements   | p. 54  |  |
| <b>GRI 3: Material Topics 2021</b>       |  |  |  |
| GRI 3-1                                  | Process to determine material topics   | pp. 9–10   |  |
| GRI 3-2                                  | <b>List of material topics</b><br><br><b>Society</b><br>Social responsibility<br><br><b>Products and services</b><br>Provision of essential services<br>Product responsibility<br><br><b>Environment</b><br>Energy<br>Emissions<br>Raw materials and supplies<br>Water | <b>Employees</b><br>Working conditions<br>Training and education<br>Occupational health and safety<br>Diversity and equal opportunities<br><br><b>Corporate governance</b><br>Value creation<br>Compliance<br>Data protection<br>Competition<br>Political engagement |  |
| <b>Economic Performance</b>              |  |  |  |
| GRI 3: Material Topics 2021              | 3-3 Management of material topics  | pp. 15–29  | See Annual Report, pp. 28–32   |
| GRI 201: Economic Performance 2016       | GRI 201-1 Direct economic value generated and distributed  |  | See Annual Report, p. 37 et seq.   |
|  | GRI 201-2 Financial implications and other risks and opportunities due to climate change   | p. 27 et seq.  |  |
|  | GRI 201-3 Defined benefit plan obligations and other retirement plans  |  | See Annual Report, p. 51 et seqq.  |



| GRI Standard                            | Disclosure   | Page number(s)            | Comments/omissions   |
|---|--|---------------------------|--|
| <b>Market Presence</b>                  |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 52–57                 |  |
| GRI 202: Market Presence 2016           | GRI 202-1 Ratios of standard entry level wage by gender compared to local minimum wage |                           | We pay our employees in accordance with various collective bargaining agreements – and they receive at least the statutory minimum wage. |
| <b>Indirect Economic Impacts</b>        |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 12, 15 et seq.        |  |
| GRI 203: Indirect Economic Impacts 2016 | 203-1 Infrastructure investments and services supported                                | pp. 4–6, 12, 15–29, 34–42 |  |
| <b>Procurement Practices</b>            |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | p. 64                     |  |
| GRI 204: Procurement Practices 2016     | 204-1 Proportion of spending on local suppliers  | p. 65 et seq.             |  |
| <b>Anti-corruption</b>                  |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 61–63                 |  |
| GRI 205: Anti-corruption 2016           | 205-1 Operations assessed for risks related to corruption                              | pp. 62–63                 |  |
|   | 205-2 Communication and training about anti-corruption policies and procedures         |                           |  |
|   | 205-3 Confirmed incidents of corruption and actions taken                              | pp. 62–63                 | No incidents of corruption were reported at SWM in 2022.   |
| <b>Anti-competitive Behavior</b>        |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 62–66                 |  |
| GRI 206: Anti-competitive Behavior 2016 | 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices  |                           | SWM was not involved as a party in any legal actions for anti-competitive behaviour, anti-trust, and monopoly practices.                 |
| <b>Materials</b>                        |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 19, 65                |  |
| GRI 301: Materials 2016                 | 301-1 Materials used by weight or volume   |                           | For information on this matter, please see the Consolidated Environmental Statement of the Technology division of Stadtwerke München.    |
| <b>Energy</b>                           |  |                           |  |
| GRI 3: Material Topics 2021             | 3-3 Management of material topics  | pp. 12, 31 et seq.        |  |
| GRI 302: Energy 2016                    | 301-1 Materials used by weight or volume   | p. 34                     |  |
|   | 301-2 Recycled input materials used  | p. 18                     |  |

| GRI Standard                                    | Disclosure   | Page number(s)   | Comments/omissions  |
|---|--|--|---|
| <b>Water and Effluents</b>                      |  |  |   |
| GRI 3: Material Topics 2021                     | 3-3 Management of material topics  | pp. 9, 12 et seq., 15, 20, 31                                      |   |
| GRI 303: Water and Effluents 2018               | 303-1 Interactions with water as a shared resource   | p. 4 et seq., pp. 12–13, 15, 20, 24–25, 31, pp. 37 and 42 et seqq. |   |
|   | 303-2 Management of water discharge-related impacts  |  | Sewage management is not handled by SWM, but by Münchner Stadtentwässerung, another public-sector company owned by the City of Munich.  |
|   | 303-3 Water withdrawal   | pp. 5, 40, 43  |   |
|   | 303-4 Water discharge  | p. 20  |   |
|   | 303-5 Water consumption  | p. 43  |   |
| <b>Emissions</b>                                |  |  |   |
| GRI 3: Material Topics 2021                     | 3-3 Management of material topics  | pp. 9, 31 et seq.  |   |
| GRI 305: Emissions 2016                         | 305-1 Direct (Scope 1) GHG emissions   | p. 34 et seq.  |   |
|   | 305-2 Energy indirect (Scope 2) GHG emissions  | p. 34 et seq.  |   |
|   | 305-3 Other indirect (Scope 3) GHG emissions   | p. 34 et seq.  |   |
|   | 305-5 Reduction of GHG emissions   | p. 33 et seqq.   |   |
| <b>Supplier Environmental Assessment</b>        |  |  |   |
| GRI 3: Material Topics 2021                     | 3-3 Management of material topics  | pp. 62–67  |   |
| GRI 308: Supplier Environmental Assessment 2016 | 308-1 New suppliers that were screened using environmental criteria                                      | p. 65 et seq.  |   |
|   | 308-2 Negative environmental impacts in the supply chain and actions taken                               | p. 64  |   |
| <b>Employment</b>                               |  |  |   |
| GRI 3: Material Topics 2021                     | 3-3 Management of material topics  | pp. 12, 47–59  |   |
| GRI 401: Employment 2016                        | 401-1 New employee hires and employee turn-over  | p. 53  |   |
|   | 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees | pp. 54–55  | Company benefits are provided to all employees of SWM – including temporary employees to the extent to which Articles 12 and 8 of the German Temporary Employment Act (Arbeitnehmerüberlassungsgesetz, AÜG) are applicable and implemented by the labour leasing company. |
|   | 401-3 Parental leave   | p. 54  |   |
| <b>Labour/Management Relations</b>              |  |  |   |
| GRI 3: Material Topics 2021                     | 3-3 Management of material topics  | pp. 47 and 52 et seq.  |   |
| GRI 402: Labour/Management Relations 2016       | 402-1 Minimum notice periods regarding operational changes   |  | We inform our employees as timely as possible regarding organisational changes.   |

| GRI Standard   | Disclosure   | Page number(s) | Comments/omissions   |
|--|--|----------------|--|
| <b>Occupational Health and Safety</b>                          |  |                |  |
| GRI 3: Material Topics 2021                                    | 3-3 Management of material topics  | pp. 58–59      |  |
| GRI 403: Occupational Health and Safety 2018                   | 403-1 Occupational health and safety management system   | p. 58          |  |
|  | 403-2 Hazard identification, risk assessment, and incident investigation   | pp. 58–59      |  |
|  | 403-3 Occupational health services   | pp. 58–59      |  |
|  | 403-4 Worker participation, consultation, and communication on occupational health and safety                        | pp. 58–59      |  |
|  | 403-5 Worker training on occupational health and safety  | pp. 58–59      |  |
|  | 403-6 Promotion of worker health   | p. 59          |  |
|  | 403-8 Workers covered by an occupational health and safety management system   | pp. 58–59      |  |
|  | 403-9 Work-related injuries  | pp. 58–59      |  |
| <b>Training and Education</b>                                  |  |                |  |
| GRI 3: Material Topics 2021                                    | 3-3 Management of material topics  | p. 47 et seqq. |  |
| GRI 404: Training and Education 2016                           | 404-1 Average hours of training per year per employee  | p. 51          |  |
|  | 404-2 Programs for upgrading employee skills and transition assistance programs                                      | p. 49 et seqq. |  |
| <b>Diversity and Equal Opportunity</b>                         |  |                |  |
| GRI 3: Material Topics 2021                                    | 3-3 Management of material topics  | p. 55 et seqq. |  |
| GRI 405: Diversity and Equal Opportunity 2016                  | 405-1 Diversity of governance bodies and employees   | pp. 49, 56     |  |
|  | 405-2 Ratio of basic salary and remuneration of women to men   |                | We pay our employees in accordance with various collective bargaining agreements – and they receive at least the statutory minimum wage. No distinction between men and women is made in this respect.                                 |
| <b>Non-discrimination</b>                                      |  |                |  |
| GRI 3: Material Topics 2021                                    | 3-3 Management of material topics  | p. 49 et seqq. |  |
| GRI 406: Non-discrimination 2016                               | 406-1 Incidents of discrimination and corrective actions taken   |                | Equal opportunity officers responsible for this issue have been appointed in all divisions. Isolated discrimination incidents were reported in the year under review. They were reviewed, and the necessary measures were implemented. |
| <b>Freedom of Association and Collective Bargaining</b>        |  |                |  |
| GRI 3: Material Topics 2021                                    | 3-3 Management of material topics  | p. 52 et seq.  |  |
| GRI 407: Freedom of Association and Collective Bargaining 2016 | 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk |                | We are not aware of any operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.  |



| GRI Standard                              | Disclosure   | Page number(s)                                | Comments/omissions  |
|---|--|---|---|
| <b>Child Labour</b>                       |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | p. 65 et seq.                                 | Business Partner Code of Conduct<br><a href="https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf">https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf</a><br><br>Code of Conduct<br><a href="https://www.swm.de/dam/doc/english/code-of-conduct.pdf">https://www.swm.de/dam/doc/english/code-of-conduct.pdf</a> |
| GRI 408: Child Labour 2016                | 408-1 Operations and suppliers at significant risk for incidents of child labour                   |   | We are not aware of any operations or suppliers that are at a significant risk for incidents of child labour.   |
| <b>Forced or Compulsory Labour</b>        |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | p. 65 et seq.                                 | Business Partner Code of Conduct<br><a href="https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf">https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf</a>   |
| GRI 409: Forced or Compulsory Labour 2016 | 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour    |   | We are not aware of any operations or suppliers that are at significant risk for incidents of forced or compulsory labour.  |
| <b>Local Communities</b>                  |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | pp. 12, 15 et seq., 18, 21, 23, 25 et seq.    |   |
| GRI 413: Local Communities 2016           | 413-1 Operations with local community engagement, impact assessments, and development programs     | pp. 5, 12, 15 et seq., 18, 21, 23, 25 et seq. |   |
| <b>Supplier Social Assessment</b>         |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | pp. 62–66                                     | Business Partner Code of Conduct<br><a href="https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf">https://www.swm.de/dam/doc/english/geschaftspartnerkodex_engl.pdf</a>   |
| GRI 414: Supplier Social Assessment 2016  | 414-1 New suppliers that were screened using social criteria                                       | p. 65 et seq.                                 |   |
|   | 414-2 Negative social impacts in the supply chain and actions taken                                | p. 64   |   |
| <b>Public Policy</b>                      |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | p. 66   |   |
| GRI 415: Public Policy 2016               | 415-1 Political contributions  |   | Political parties do not receive any contributions from SWM.  |
| <b>Customer Health and Safety</b>         |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | pp. 15, 20, 24, 50                            |   |
| GRI 416: Customer Health and Safety 2016  | 416-1 Assessment of the health and safety impacts of product and service categories                | p. 20   |   |
| <b>Customer Privacy</b>                   |  |   |   |
| GRI 3: Material Topics 2021               | 3-3 Management of material topics  | p. 64   |   |
| GRI 418: Customer Privacy 2016            | 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data | p. 64   |   |

## Contact and imprint

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### Design

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### Picture credits

#### Cover

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