

For a Sustainable Future.

VONOVIA

## Dear Readers,

**GRI** 102-14

When the chips are down, people band together. No questions asked. Even when it comes at a cost. That is what we have seen over the last two years during the pandemic. We are seeing this principle in action once again as thousands of people, displaced by the military conflict between Russia and Ukraine, are coming to Germany. Most of them are women and children looking for safety in central Europe.

Vonovia is cutting through all the red tape that it can in order to provide them with housing – even though that is no substitute for the familiar world they have left behind. It also probably won't do anything to ease their worries about their friends and family who are still in Ukraine. Nevertheless, gestures like these can, at the very least, provide some kind of respite. It is also evidence of people's willingness to stand together, regardless of borders.

We will need to come together in a similar way if we are to find solutions to the big issues that society is currently facing. From climate change through to demographic trends, urbanization and growing inequality – our society, and by extension our policymakers and cities, will only be able to overcome these challenges by pulling together and working with large residential real estate companies.

But how do we fit into this picture? I am convinced that solving the issues at hand isn't about individual buildings. It's about neighborhoods. Neighborhoods define the quality of life of their residents. They let us cultivate the diversity that we need. And a neighborhood approach is the only way for us to improve the energy efficiency of our portfolios – a key part of the energy transition – in a way that is financially viable for both tenants and landlords.

We are aiming for our portfolio to be virtually climate neutral by 2045. This simply won't be possible unless we take a neighborhood-based approach. Realistically, insulating buildings won't be enough to achieve climate neutrality; we need to take a new integrated approach that brings energy, heat and mobility together.

Our neighborhoods are the power plants of the future. That's why we are setting up rooftop systems that generate green energy for our tenants to use. We are looking at the possibility of switching to eco-friendly hydrogen for our electricity and heating needs. Pilot projects in Bochum-Weitmar are helping us to draw up plans for a decentralized energy supply, where energy is generated, stored and consumed within the neighborhood – either by residential units or at charging stations. This approach is becoming increasingly relevant for our customers with energy prices on the rise.

There's no time to waste if we are going to get a handle on the climate crisis. That's why we are accelerating our projects; we want to have photovoltaic systems installed on 17,000 roofs by 2030. These will generate 194 million kWh per year, cutting emissions by 133,000 t  $CO_2$ . We intend to install a photovoltaic system on every suitable roof in our portfolio by 2050.

We will also be reducing our carbon emissions significantly by using different building materials. We built 700 modular wooden homes extremely quickly in the Reinickendorf district of Berlin last year, showing that it is possible for large construction projects to be sustainable.

We launched the Energiesprong project in Bochum at the end of last year. This sustainable serial refurbishment process prefabricates parts used for facade insulation to the exact millimeter. All of the construction materials used are sustainable, and some of them are recycled. The project is powered by solar panels and geothermal energy. Buildings refurbished using

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the Energiesprong process generate just as much energy as they consume each year. This is where we need to get to, along with the rest of the housing industry.

This fall we will be running a conference all about building materials to give representatives across the industry a chance to come together – much as we did with our 2020 climate conference. Experts from the housing industry and the construction and construction materials sector will meet with representatives from associations and the worlds of science and politics to discuss sustainability, recycling and the affordability of construction materials.

Dear reader, I hope it's clear that we take our social and environmental responsibilities seriously – just as seriously as we take our responsibility for our customers. All of the steps we are taking come back to the heart of what drives us as a company: providing affordable housing where people can feel at home.

We have ramped up the intensity of our sustainability efforts over the last two years. The progress we have made is reflected in our improved Sustainability Performance Index (SPI). At 109%, our key non-financial indicator was four percentage points higher than we expected. This improvement was mainly driven by our German portfolio's carbon intensity going down from 39.5 in 2020 to 38.4 kg  $CO_2e/m^2$ . This figure came to around 56 kg  $CO_2e/m^2$  in 2014. We have definitely made progress, but there's even more to come.

Thank you for your interest in everything we are doing as a company in the interest of sustainability. Keep reading to find out more about our progress and future plans in our seven action areas. Please get in touch if you have any questions. Our sustainability team is looking forward to hearing from you!

Bochum, April 2022		
Rolf Buch		

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# Sustainability at Vonovia

#### Our Seven Action Areas at a Glance

The 2020 materiality analysis of sustainability topics for Vonovia SE provided the basis for our activities in 2021. The materiality analysis identified eleven material topics and 22 important topics. We assigned these 33 topics to different action areas, which in turn serve as the basis for our sustainability reporting process.

- > In the **Environment and Climate** action area, we have set ourselves the goal of being almost completely climateneutral by 2045.
- > We ensure that the living space we manage is designed sustainably in the Sustainable Construction and Development action area.

- > In our Society and Contribution to Urban Development action area, we are committed to creating neighborhoods that are a pleasure to live in.
- > Our Homes and Customers action area focuses on our efforts to provide attractive housing for our tenants.
- > This is made possible by our diverse and creative workforce, which is taken into account in the action area Corporate Culture and Employees.
- > Our governance principles and the measures that we implement to ensure compliance are defined in the action area Governance and Responsible Business Practices.
- > The Future Fitness and Capital Market action area covers everything we do to ensure our sustainable and continued success.





#### We will be climateneutral by 2045.

> Environment and climate



#### We are on track for long-term success.

> Future fitness and capital market



We take on responsibility – every one of us, wherever we are, at all times.

> Responsible business practices and governance

We offer housing for all.

> Homes and customers

Sustainability at Vonovia

and employees

methods.

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Vonovia is committed to providing attractive living space at an affordable price. By doing this, we are acting in the interest of society and working towards ensuring a sustainable future for the housing industry. We implement holistic measures to respond to ever-changing environmental, business and political requirements and meet our tenant's needs. These cover a wide ranges of areas, such as expanding the use of renewable energies, fostering a healthy corporate culture and securing our future fitness on the capital market.

#### **REFERENCES**

- → to page(s) in the report
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Indicators GRI 103-2

UNGC Principle 1 SASB IF-RE-410a.1

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# Vonovia in the Context of Current Trends and Developments

GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-7

The effects of the coronavirus pandemic – the exact extent of which can not yet be estimated – continued to grip the world in 2021. Even though we are all desperate for life to return to normal, it is safe to assume that the pandemic has caused significant changes to how people throughout society live and work, and that these changes are here to stay. As we attempt to peer into the future from the fourth wave of the pandemic, it is impossible to say what other economic, political and social changes we might see as a result of the coronavirus.

Another key issue facing us at the moment is how to best combat climate change caused by human-induced global warming. This climate crisis led to extreme weather conditions throughout 2021. July 2021 was the warmest month on record. Weather phenomena like extreme heat, dry conditions and fires pose as much risk to a company as heavy rain, flooding, melting glaciers and rising sea levels. More and more people around the world are being affected by extreme weather. The catastrophic flooding in the Ahr valley made it clear that we are no exception, and that action is required now.

This intense focus in the political sphere and society at large now needs to be reflected in the world of business. Corporate strategies and business models now need to go well beyond how to generate a return. More and more companies are setting and working towards targets to demonstrate their commitment to sustainability in a wide variety of different areas.

The megatrends that we recognize in society – climate action, reducing carbon emissions, urbanization, housing shortages, digitalization and demographic change – are all increasing in intensity. Going forward, everything that Vonovia does as a company will be based around responding to these megatrends. That is why Vonovia reviewed and updated its sustainability strategy last year. We have also made considerable headway in terms of incorporating sustainability issues into our business processes.

#### **VONOVIA SE AT A GLANCE**

Vonovia operates around 505,000 of its own apartments (December 31, 2021) in almost all of Germany's attractive cities and regions as well as around 22,000 apartments in Austria and approximately 38,000 in Sweden. Vonovia is one of the leading residential real estate companies in Europe.

Vonovia SE is based in Germany. Its registered office has been in the city of Bochum since 2017. On September 30, 2021, Vonovia took control of Deutsche Wohnen. As of December 31, 2021, 736 legal entities/companies formed part of the Vonovia Group (see ♀ List of Shareholdings).

Vonovia SE performs the function of the management holding company for the Group. In this role, it is responsible for determining and pursuing the overall strategy (including the sustainability strategy) and implementing the company's goals. It also performs property management, financing, service and coordination tasks for the Group. Furthermore, it is responsible for the management, control and monitoring system as well as risk management system of the Group.

To carry out these management functions, Vonovia SE has established a series of **service companies**. These focus on providing support to business and operational processes. From an organizational perspective, these service companies are grouped together centrally in shared service centers. Vonovia manages its business via the four segments: Rental, Value-add, Recurring Sales and Development.

Further information on Vonovia SE and its corporate structure can be found at \$\mathbb{T}\$ Corporate Structure.

Nowadays, companies have a crucial role to play in societal, political and economic change. This is particularly true for Vonovia, because our business model – providing homes – is very much in the public interest. As a result, Vonovia is committed to meeting its responsibilities to society and providing the information that stakeholders need in a transparent way. We are increasingly transitioning from a shareholder approach to a stakeholder approach, which requires the company to earn its social license to operate.

Our strategy has a part to play in society finding sustainable solutions to meet the challenge of current megatrends. Our sustainable and robust business model once again provided a firm foundation for growth in 2021, despite the impact of the pandemic. Vonovia's acquisition of Deutsche Wohnen puts us in an even better position to provide long-term solutions which benefit everybody.

The takeover of Deutsche Wohnen lays the foundation for forming a leading European real estate company which can take an even more effective approach to tackling the central social and environmental challenges of the housing industry. Integrating Deutsche Wohnen into the organizational structures of Vonovia will be one of the company's most important tasks in 2022. We expect the integration process to be complete by the beginning of 2023.

The sustainability report and the figures reported for the 2021 financial year refer to the Vonovia Group excluding Deutsche Wohnen. In the interest of clarity, a separate 

☐ sustainability fact book has been prepared for Deutsche Wohnen for the 2021 fiscal year.

## Vonovia in Figures

(December 31, 2021)1)

**GRI** 102-8

565,334

Own apartments (incl. Deutsche Wohnen)

€ 5.2 billion

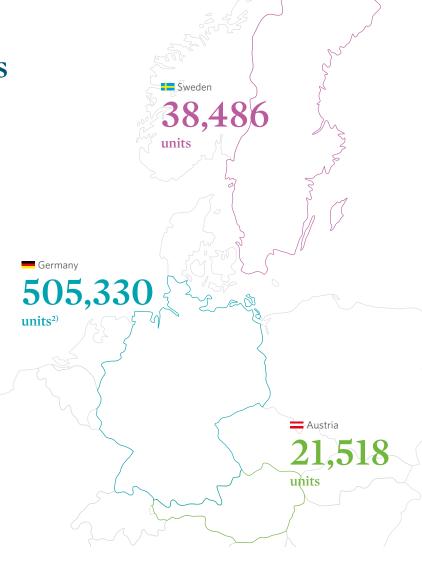
**Total segment revenues** 

€ 2,269.3 million

**Adjusted EBITDA** 

15,871

**Employees** 





Newly built apartments in 2021<sup>3)</sup>

Total: 2,200



Average rent<sup>3)</sup>

€ 7.38 m<sup>2</sup>



Average apartment size

DE: approx. 62  $\text{m}^2$  / AT: 74  $\text{m}^2$  / SE: 71  $\text{m}^2$ 



Total living area

35,529,000 m<sup>2</sup>



Commercial

**Total: 9,289** DE: 6,558 / AT: 594 / SE: 2,137

DE: Germany AT: Austria SE: Sweden

Further key figures can be found in the  $\square$  Management Report and in the section  $\square$  The Company and Its Shares of the current Annual Report.

<sup>1)</sup> Vonovia incl. Deutsche Wohnen.

<sup>2)</sup> Including 26,569 units at other strategic locations, 1,461 units at non-strategic locations and 151,367 units belonging to Deutsche Wohnen.

<sup>3)</sup> Vonovia alone excl. Deutsche Wohnen.

# Our Approach to Sustainable Development in Detail

**GRI** 102-15, 102-18, 102-31, 102-32

## Integration of Sustainability into the Corporate Strategy

Sustainability is at the heart of Vonovia's identity as a company. We recently added sustainability factors to our successful strategy to reflect this. We are making continuous improvements to our sustainability agenda in order to reflect changes in society, the world of politics, the environment and the economy.

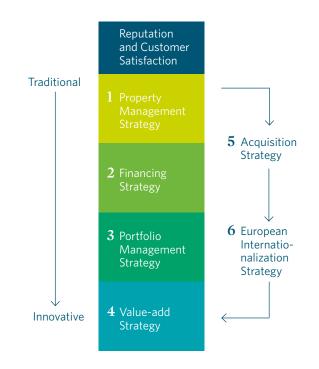
The strategy that Vonovia introduced as part of the IPO in 2013 has reached a high level of maturity, and demonstrated its robustness and flexibility in the year under review. This strategy continues to consist of the four basic approaches of the property management strategy, the financing strategy, the portfolio management strategy and the value-add strategy. It is enhanced and complemented by two supplementary approaches: opportunistic acquisitions and internationalization. Together, they constitute our 4+2 strategy. In recent years, the strategy has allowed us to increase the satisfaction of our tenants, meet new challenges and establish new business models. A detailed description of the 4+2 strategy is available in the 2021 \$\mathbb{P}\$ Annual Report.

In order to respond properly to megatrends (see → Vonovia in the Context of Current Trends and Developments) and meet the changing demands of our various stakeholders, we update our strategy on a continuous basis, with a particular focus on detailing our efforts to meet sustainability targets. This ensures that we have a business model that is fit for the future.

Our sustainability strategy specifically addresses the current sustainability requirements of the Sustainable Development Goals (SDGs) of the United Nations as well as other concrete ESG (Environment, Social and Governance) targets of European and national regulations.

Our strategy remains focused on ensuring the success of the company, while also including the following sustainability-related topics: a voluntary commitment to meeting climate targets and reducing carbon emissions (E), taking social

#### The 4+2 Pillars of our Strategy



- 1 Management platform/Austrian client/digitalization
- 2 LTV/financing strategy/financial risk management
- 3 Portfolio management/recurring sales and Non-core Disposals/investment strategy/ development and new construction
- 4 Housing and property-related services/business development/digitalization
- 5 Opportunistic acquisition strategy Germany
- 6 Austria/Sweden/France/Netherlands

responsibility for our tenants, customers and employees (S) and reliable, transparent and trustworthy governance (G).

To demonstrate the importance of sustainability for our company, we integrated aspects of our sustainability strategy into Vonovia's management system by introducing the Sustainability Performance Index (SPI) in 2021, in addition to remuneration-related non-financial indicators.

Vonovia's acquisition of Deutsche Wohnen provides the synergy we need to meet the challenges facing the environment and society in a way that benefits everybody. We are also

#### **Dimensions of Sustainability at Vonovia**

#### Environmental

### Contribution to climate protection and reducing CO<sub>2</sub>.

- > Environment and climate
- > Sustainable construction and development

#### S Social

### Social responsibility for our tenants, customers and employees.

- > Society and contribution to urban development
- > Homes and customers
- > Corporate culture and employees

#### G Governance

#### Reliable, transparent and trustbased corporate governance.

- > Responsible business practices and governance
- > Future fitness and capital market

committed to continuously expanding as a European real estate company which is leading the way in the field of sustainability. The process of integrating Deutsche Wohnen into the Vonovia Group began in 2022 and is due to be complete by the beginning of 2023.

Vonovia's sustainability strategy commits the company to playing its part in meeting Germany's climate protection targets, ensuring that its property portfolio is almost entirely carbon neutral by 2045 as well as reliable and transparent governance.

In concrete terms this means for us:

E: With the climate plan developed in 2021, we are committing to the goal of a virtually climate-neutral building portfolio by 2045, while also meeting binding annual interim targets along the way. However, this requires both a more consistent level of refurbishment than in the past and increased, decentralized use of renewable energies for heating and powering neighborhoods. Vonovia has drawn up a development plan for its urban quarters to help it achieve this objective (see → Environment and Climate and → Sustainable Construction and Development).

S: We assume social responsibility for our tenants, customers and employees. In doing so, we rely on a socially responsible, reliable rent policy and see the expansion of a social infrastructure incorporating innovations and new technologies as an integral part of community development projects. We have a social responsibility to ensure that urban housing is ecological and affordable. We offer our employees an attractive working environment characterized by diversity

and personal scope for development (see  $\rightarrow$  Homes and Customers,  $\rightarrow$  Society and Contribution to Urban Development and  $\rightarrow$  Corporate Culture and Employees).

G: We are committed to governance that is reliable, transparent and trustworthy, and based on the best practices of the international Corporate Governance Code. We comply with all applicable laws and internal and external guidelines. This is an integral part of being a reliable and trustworthy partner (see → Governance and Responsible Business Practices and → Future Fitness and Capital Market).

We also want to create transparency and reliability through our sustainability reporting. We have therefore had this Sustainability Report externally certified with a **limited** assurance engagement in accordance with ISAE 3000. We incorporated the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD) into our reporting. We also prepared a report in accordance with the requirements of the EU Taxonomy for the first time in 2021 (see → Auditor's Report and 및 Non-financial Group Declaration in the 2021 Annual Report).

The Sustainability/Strategy department is responsible for making improvements to the sustainability strategy, monitoring sustainability targets and coordinating sustainability-related activities within the Group. Due to its significance, this department reports directly to the Chief Executive Officer of Vonovia.

#### Vonovia's Financial and Non-financial Key Performance Indicators

#### 

We have also implemented a sustainability committee with a managerial function. This broad base ensures that decisions on the implementation of our sustainability strategy are borne by all relevant divisions and all the way through to local implementation levels (see  $\rightarrow$  Organizational Establishment in the Company).

Vonovia uses three different approaches to assess the sustainability topics which are of relevance for the company:

- Outside-in perspective: the relevance and impact of social and environmental changes on the business and on value creation
- Inside-out perspective: the impact and relevance of the business model and company activities on the environment and society
- Stakeholder perspective: compares the interests and concerns of stakeholder groups in comparison to the interests and concerns of Vonovia

We performed a materiality analysis in the previous fiscal year on the basis of these perspectives in order to provide a three-dimensional weighted overview of non-financial topics (see  $\rightarrow$  Material Topics). This overview will remain relevant in the current year.

We added non-financial performance indicators to our management system in the 2021 fiscal year in the form of the **Sustainability Performance Index** (SPI). In the process, we have made considerable headway in terms of embedding sustainability in the company's business processes.

The Non-financial performance indicator SPI comprises six indicators based on the material topics of Vonovia (see ☐ Non-financial Perfomance Indicators). These comprise the carbon savings achieved annually in housing stock, the energy efficiency of new buildings, the share of accessible (partial) modernization measures in relation to newly let apartments, the increase in customer and employee satisfaction and diversity in the company's top management team. The SPI achieved an index value of 109% in the reporting year. For a more detailed description of our sustainable business model, please refer to the chapter entitled ☐ Fundamental Information About the Group in the 2021 Annual Report.

We have defined specific targets to be achieved by 2025 for each of these indicators. The relevant key figures are recorded quarterly by Controlling and used in our external reporting as well as for communication with the capital market.

Annual targets are also provided for the indicators derived from the SPI. Since the last fiscal year, these have been part of the remuneration system for the Management Board and top management (first level below the Management Board) (see  $\rightarrow$  Remuneration Report and  $\rightarrow$  Management System).

#### Organizational Establishment in the Company

GRI 102-20, 102-30, 102-31, 102-32

Responsibility for Vonovia's efforts in the area of sustainability lies directly with CEO Rolf Buch. On the Supervisory Board side, the Audit Committee has a particular responsibility for sustainability.

The **sustainability committee** established in 2020 meets three to four times a year – as required – to discuss the overall strategic direction and to evaluate the company's sustainability performance. This committee comprises the entire Management Board (including the chief representatives) as well as the heads of Sustainability, Investor Relations, Corporate Communications, Controlling, Accounting and Business Innovation. Establishing sustainability at the highest levels of the company allows us to ensure the systematic implementation of our sustainability strategy in all business areas right down to our local neighborhoods.

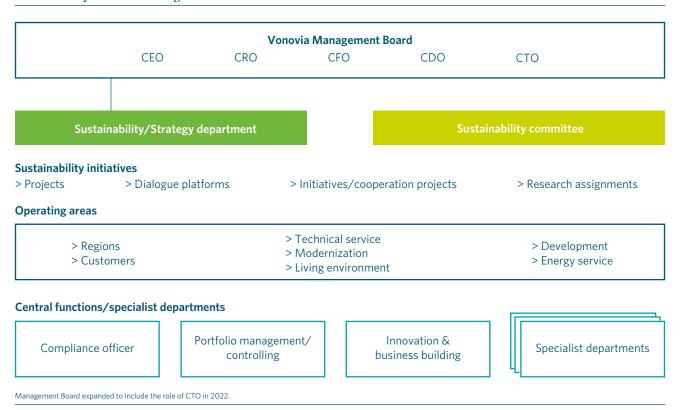
The Sustainability/Strategy department reports to and coordinates its operations directly with the CEO in terms of sustainability topics related to the company's strategy and business model. The Head of Sustainability/Strategy regularly exchanges views with the CEO and the sustainability committee on current developments and issues. The department is also responsible for sustainability reporting. These include further developing the sustainability strategy and road map, defining and monitoring sustainability objectives and implementing sustainability projects. The department drives innovation and proposes solutions in response to

political, social and regulatory developments. It focuses on monitoring changes to legislation related to ESG reporting, actively assessing and participating in ESG rating systems and enhancing ESG-related KPIs.

The processing and implementation of sustainability projects is carried out via the relevant specialist departments and regions. The employees responsible ensure that sustainability issues are implemented as part of day-to-day business or in pilot projects and research initiatives. Innovations and technical solutions related to the energy revolution are developed until they are ready to implement (see  $\rightarrow$  Renewable Energies and Energy Mix) as part of a process shared by Innovation & Business Building (I&BB), Vonovia Technischer Service (VTS) and the regions. Vonovia has identified the urban quarters as a key implementation level due to the opportunities that are available in this area.

There are comparable staff functions in Austria and Sweden. They coordinate the interaction between the Sustainability/ Strategy department and the individual countries, while also developing the country-specific sustainability strategies pursued by the BUWOG companies in Austria and the Swedish company Victoriahem (Victoria Park/Hembla until December 31, 2021). In order to take the development business of the German company BUWOG into account, a coordination function for sustainability has been set up there, too.

#### Sustainability in Vonovia's Organizational Model



#### Our Understanding of Sustainability

Vonovia sees itself as a stakeholder which has an active role to play in material topics. Our day-to-day business is geared toward fulfilling people's basic need for a home. We take a sustainable and responsible approach to living up to this responsibility. We have a particular obligation towards more than one million customers in Germany, Austria and Sweden, as well as society as a whole, the environment and our shareholders.

Vonovia revamped its \$\mathbb{P}\$ Business Philosophy in 2019 to reflect this commitment. Our business philosophy provides details about the approach and values which we apply when fulfilling our responsibilities to society. It also provides guidance outlining how employees are expected to treat each other and external stakeholders. We want our work to be measured against the values detailed in the business philosophy.

Vonovia drew up a comprehensive **\(\quad \) Understanding of Sustainability** in 2020. This is derived from the materiality matrix and the revised corporate strategy, which incorporates sustainability-related issues to a greater extent than in the past. Our Understanding of Sustainability explains our approach to sustainability and details our social task (Purpose).

We have identified 33 material and important topics, which are addressed in seven different action areas. How we run our company and our daily actions sustainably is largely guided by this understanding of sustainability. This shared understanding also makes it easier for us to communicate our ambitions to external parties with a unified voice.

We know that the decisions we make as a company always have an impact on people, neighborhoods, and the environment. We weigh the consequences up carefully, particularly when it comes to modernizing buildings and designing neighborhoods. Our revised **climate path** includes binding annual interim targets which will help us to achieve carbon neutrality by 2045. After all, protecting the environment and our climate should go hand-in-hand with our understanding of sustainable living. We are committed to providing safe and high-quality housing at fair prices.

As a real estate company with a long-term focus, we aim to strike a balance between commercial success on the one hand, and social responsibility and ecological objectives on the other. We are committed to the principles of the social market economy and profitability. Vonovia takes responsibility as a provider of affordable housing and as a service provider, building contractor and developer, but also as a stakeholder in society. For us, sustainability means managing our business activities in a way that generates the greatest possible long-term benefit for society as a whole.

This is the standard we want to be measured against. We want this to be embodied by every employee. We base our sustainability activities on the applicable laws, regulations and standards of the countries in which we operate. In addition, numerous national and supranational standards and agreements serve as a guide for designing our sustainability concept. These include the Sustainable Development Goals (SDGs), the 2015 Paris Climate Agreement and the German government's plan to achieve climate neutrality by 2045 on the basis of the Federal Climate Change Act. However, observing human rights and labor standards as well as complying with duties of care and protective regulations also play a decisive role for us. We are also addressing the consequences of recent developments, such as the EU-wide classification system for sustainable and climatefriendly investments (the EU Taxonomy).

# **Material Topics**

GRI 102-40, 102-42, 102-43, 102-44, 102-46, 102-47, 102-48, 102-49, 103-1

#### **Materiality Analysis**

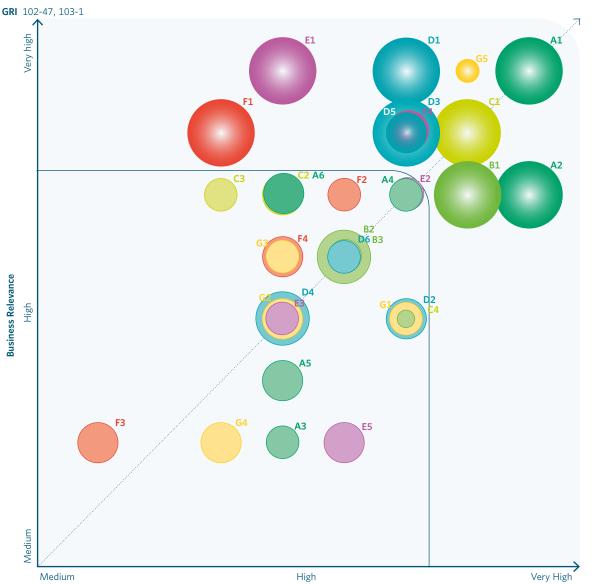
A home is a basic human need. We help to meet this need by creating new homes and letting out existing ones. We act responsibly and sustainably by paying attention to the environmental footprint of our buildings and by having committed to the goal of climate-neutral housing stock by 2045. We also live up to our social responsibility by providing attractive housing for every member of society at fair prices. Our activities are incorporated into a governance structure that meets high value benchmarks and that is well suited to being perceived as trustworthy and reliable by our stakeholders.

Our structured approach to monitoring social and environmental changes ensures that this will remain the case in future. We analyze our sustainability topics from three different perspectives: in light of their impact on our business and value creation (outside-in perspective), the impact of our business model on the environment and on society (inside-out perspective) and from the viewpoint of our relevant external stakeholder groups. These analyses are incorporated into a materiality matrix that is based on both the CSR Directive Implementation Act (CSR-RUG) and the GRI standards.

Vonovia redefined the **material topics** in 2020 as part of an extensive, testable  $\ \Box$  materiality analysis. The materiality matrix includes **a total of 33 topics** related to our sustainability efforts in **seven action areas**. Eleven of the 33 topics are considered material topics – these are covered in greater detail in this report due to their significance. The other 22 are considered important topics, and are covered in less detail. There has been no change in the materiality analysis, which provides the structure for the sustainability topics covered in this stand-alone report on Vonovia's activities for the year 2021.

The process of integrating the two materiality analyses over the course of 2022 will take the new GRI standards into consideration. The Group-wide integration process encompasses the consolidation of concepts, management approaches, applied due diligence processes, and goals and events relating to the non-financial topics determined in the Vonovia materiality process.

## **Materiality Matrix**



Impact on the Environment, Society and the Economy

#### Action Area A: Environment and Climate

- A1 Reducing CO<sub>2</sub> in the real estate portfolio/energy-efficient modernization
- A2 Renewable energies and energy mix
- A3 Energy efficiency and carbon reductions in operations
- A4 Innovations for climate and environment
- A5 Water, effluents and waste **A6** Biodiversity

#### Action Area B: Sustainable Construction and Development

- **B1** Sustainable construction and refurbishment
- **B2** Sustainable materials and
- B3 Social and environmental standards in the supply chain

#### Action Area C: Society and Contribution to Urban Development

- C1 Community development and contribution to infrastructure
- C2 Inclusion, diversity and social cohesion
- C3 Involvement and participation
- C4 Shaping political dialogue

#### Action Area D: Homes and Customers

- D1 Living at fair prices
- D2 Contribution to new build pro-
- jects in metropolitan areas D3 Homes that meet people's needs and transformation due to demographic change
- **D4** Maintenance of existing properties
- **D5** Customer satisfaction and service quality
- D6 Dialogue with tenants

#### Action area E: Corporate Culture and Employees

- E1 Attractiveness as an employer
- E2 Training and personal development
- E3 Fair and appreciative remuneration
- E4 Approach to diversity and equal opportunities
- E5 Promoting health and safety

#### Action Area F: Governance and Responsible Business Practices

- F1 Governance and compliance
- F2 Stakeholder orientation F3 Respect and promotion of human rights
- F4 Information management and data protection

#### **Action Area G: Future Fitness and** Capital Market

Significance for stakeholders

- G1 Sustainable and long-term
- growth

  G2 Managing opportunities and risks
- Digitalization of processes
- Sustainable relationships with business partners
- G5 Appeal on the capital market

Material topics are defined by their high significance for at least two of the following three dimensions: impact on the business and value creation, impact of the business model on the environment and society, and the perspective of relevant external stakeholder groups.

Material topics are marked in bold.

#### **Deriving Sustainable Development Goals**

The Sustainable Development Goals (SDGs) serve as the framework for action for sustainable development on a global level. The United Nations published the SDGs in 2015 as part of its 2030 Agenda. The 17 main goals, which are broken down into a further 169 targets, address social, economic and environmental challenges globally. Achieving the SDGs will require action from all sectors of society, including the corporate sector.

In terms of the direction of its sustainability strategy, Vonovia is guided by international standards and frameworks, such as the Sustainable Development Goals (SDGs) and the UN Global Compact. As a company with international operations, we aim to contribute to achieving these goals with our business in Germany, Austria and Sweden. We have used our materiality analysis to identify priorities in this area as well and have identified a total of eight key SDGs

## SUSTAINABLE GALS DEVELOPMENT

































to which we want to make a particular contribution at Vonovia. This report details the progress we have made in terms of achieving these goals:

SDG	Targets	Our contribution to key SDGs
Environm	ent and Climate	
13 CLIMATE ACTION		We align our neighborhoods with clear climate protection targets. The goal of a virtually climate-neutral building portfolio by 2045 is a guiding principle for us. We reduce our greenhouse gas emissions in particular by consistently using renewable energies and implementing energy modernization measures in our apartments. We also promote climate protection in our neighborhoods by expanding sustainable infrastructure, for example for electromobility. For all new construction projects, we ensure that we use sustainable resources.
	Climate protection measures	→ Environment and Climate
7 AFFORMANIE AN		Expanding renewable energy use is an important lever for us to achieve our goal of a virtually climate-neutral building portfolio by 2045. To supply our neighborhoods with energy, we also rely on innovative technologies that we use across buildings and combine efficiently within our neighborhoods. This includes research into new generation and storage technologies. When selecting measures, we always keep affordability in mind from the perspective of our tenants. We actively involve them in the process in order to successfully introduce decentralized power gene ration in our neighborhoods. At the political level, we advocate for a framework that enables all citizens to participate in the energy transition.
MA	Renewable energy	→ Environment and Climate
1C UFE		With our diverse measures in environmental and climate protection, we strengthen the sustaina ble use of soils and ecosystems. We attach importance to construction methods that conserve resources as much as possible and use sustainable materials in our new construction projects. In our neighborhoods, as well as at our business site, we implement projects that preserve habitats for animal and plant species and promote biodiversity.
15 UFE ON LAND		→ Environment and Climate
		→ Sustainable Construction and Development
_	Land ecosystems and biodiversity	→ Society and Contribution to Urban Development



Innovation and infrastructure

We carry out research in cooperation with partners from the world of science, driving innovation in the real estate industry and in renewable energies. This is how we explore new technologies and approaches to climate protection in our neighborhoods. Scientific support enables us to better identify successful models and implement them practically. It is precisely our company's size that enables us to be pioneers of technological but also social progress in the housing industry.

- → Sustainable Construction and Development
- → Homes and Customers

SDG Targets

Our contribution to key SDGs

#### Society and Contribution to Urban Development and Sustainable Construction and Development

More than 70% of our portfolio is located in areas that make up neighborhoods. This is where we design the living spaces for our tenants. We offer them urban and environmentally friendly living at fair and transparent prices. We also pay equal attention to ecological and social aspects in community development. We take demographic change into account and are committed to harmonious coexistence at a local level. We are dedicated to climate protection by implementing energy-saving measures when it comes to construction and infrastructure. When designing residential environments, we pay attention to spaces that promote environmental protection and nature conservation. This is how we create sustainable living spaces in cities and communities for everyone.

- → Sustainable Construction and Development
- → Society and Contribution to Urban Development
- → Homes and Customers

Partnerships help us pool expertise and achieve our goals more effectively. We want to consistently make our neighborhoods in cities and communities more sustainable. Using various participation measures, we actively involve our local tenants, cities and communities. We work with different stakeholders from the fields of politics, research, business and civil society, and regularly exchange ideas with them. In this way, we learn from each other, grow together and drive the sustainable development of the housing industry.

- ightarrow Society and Contribution to Urban Development
- → Responsible Business Practices and Governance
- → Future Fitness and Capital Market



Partnerships for sustainable development

Sustainable cities and neighborhoods

#### **Corporate Culture and Employees**

Transparency, diversity and appreciation are important values in our corporate philosophy. We want to give everyone equal opportunities and are categorically opposed to discrimination of any form. We see diversity as an opportunity for our teams and our business, and as an important element in remaining attractive as an employer. We select our employees on the basis of their qualifications and skills. We also make sure that we take active measures to support women and to open up opportunities for them to assume management and technical roles. This also includes offering more flexible working time models and supporting our employees in balancing work and family life.





Gender equality

#### Responsible Business Practices and Governance and Future Fitness and Capital Market

We can only be sustainable if we are also commercially successful. As a listed company, we are committed to maintaining clear standards. With our systematic focus on sustainability and ESG criteria, we ensure that we generate growth while remaining attractive in the long term. We offer our employees a good, secure workplace. We create a trusting environment in which violations of rules and laws can be reported. We also ensure compliance with social and environmental standards within our supply chains.





ightarrow Future Fitness and Capital Market



Promote jobs and economic growth

# Our Road Map

**GRI** 103-2

Vonovia has launched a sustainability road map for the structured implementation of its sustainability efforts. The topics of climate change and a climate-neutral portfolio (E) as well as the action areas of social responsibility (S) and governance (G) are of particular importance.

Our aim	Our goals	Year	Status	What we achieved in 2021
Environment and Climate				
Reducing CO <sub>2</sub> in the real estate portfolio/e	nergy-efficient modernization			
	Reduction of carbon intensity to $<25 \text{ kg CO}_2\text{e/m}^2$ (in Germany)	2030	<b>(</b>	> Reduction of carbon intensity to 38.4 kg CO₂e/m² or rentable area (in Germany)
For the existing buildings in our portfolio, we aim to reduce carbon intensity annually and achieve a climate-neutral building portfolio by 2045.	Implementation of climate path in Germany (carbon intensity) and expansion to Sweden and Austria	2022	<u>(4</u>	> New scientific climate path for Germany developed with binding annual interim targets
	Maintain refurbishment rate (in Germany) at around 3% on average	Ongoing	<u> </u>	> 2.3% refurbishment rate achieved (in Germany) > Projection 2.0%-2.5%
Renewable energies and energy mix				
We are pushing the expansion of renewable energy generation in our neighborhoods.	Install photovoltaic systems on 17,000 roofs with a total out- put of > 200 MWp	2030	<u> </u>	> The number of turbines increased from 424 (output: 15.9 MWp) to 451 (output 16.8 MWp) > 2022 target: 24.4 MWp
	Gradual expansion of charging			> Investment in the development and expansion of public charging stations for electromobility
We provide future-fit mobility concepts in our neighborhoods.	infrastructure in our neighbor- hoods	2030	<u>(-</u>	> Electric vehicles made available within the framewo of car sharing schemes
Sustainable Construction and Developmen	t			
Sustainable construction and refurbishmen	t			
In construction and conversion projects,			1	> Average primary energy demand of new buildings o 338.6 kWh/m² in 2021



#### Society and Contribution to Urban Development

ciency and environmentally conscious

construction methods.

#### Community development and contribution to infrastructure

We carry out neighborhood development projects with cities and municipalities with the aim of improving infrastructure and social cohesion.

Holistic orientation of future community development projects while taking into account our climate protection goals

energy demand for new buil-

dings to 31 kWh/m<sup>2</sup>

Ongoing

(2)

2025

- > 15 community development projects with around 8,600 residential units under implementation
- > € 61.6 million invested for community development

> 90% of new buildings completed in Germany in 2021

in energy class A/A+ ( $\leq$  50 kWh/m<sup>2</sup>)

- > Project management at a neighborhood level in progress
- > Funding framework and social projects expanded despite pandemic (around € 1.5 million invested)



Our aim Our goals Year Status What we achieved in 2021



#### Homes and Customers

#### Living at fair prices

Keep modernization affordable: The voluntary commitment to limit the allocation of modernization costs to € 2/m² will be largely retained

 $\overline{\mathbf{M}}$ 

 $\overline{\mathbf{A}}$ 

 $\bigcirc$ 

(4)

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> Hardship management scheme continued successfully

Ongoing

> 654 positive decisions reached out of 874 hardship cases; average allocation € 1.24/m²

> Over-70s arrangement to ensure affordable housing for tenants aged over 70 continued

We offer everyone a chance to have a home at a fair price.

Maintain special protection for people over 70

 $\square$ Ongoing

> 161 positive decisions out of 316 requests

#### Homes that meet people's needs and transformation due to demographic change

Every year, we modernize 30% of our newly rented apartments to meet the needs of an aging society.

Proportion of new rentals in Germany that are barrier-free, (partially) modernized apartments: approx. 30% annually

Annually

> Proportion of new rentals that are barrier-free, (partially) modernized apartments: 30.0% achieved (10,070 apartments)

#### Customer satisfaction and service quality

We are continuously expanding our digital channels and offering extended accessibility. We regularly carry out customer satisfaction surveys.

Keep customer satisfaction levels high

2025

> 4.5% increase in customer satisfaction (in Germany)

> Improving the quality of communication and service by expanding the customer app with additional selfservice functions



#### Corporate Culture and Employees

#### Attractiveness as an employer

We want to be perceived as an attractive, trustworthy and forward-looking employer. We regularly carry out employee surveys to improve our performance.

Keep employee satisfaction levels high across the Group

> Group-wide survey performed in 2021

> Increase in employee satisfaction by 5 percentage points

> Around 1,900 new recruits, despite and during the coronavirus pandemic

> Training rate at 5.0% (in Germany)

#### Approach to diversity and equal opportunities

We make sure that we take active measures to support women and to open up opportunities for them to assume management and technical roles.

Proportion of women in management positions at 29%

2025

2025

> Target for the proportion of women in management positions extended to the entire Group

> Increase proportion of women in management positions by over 2 percentage points to 28%

> Gender pay gap at management level<sup>1)</sup> <4%



#### Corporate Governance and Responsible Business Practices

#### Governance and compliance

Integrate sustainability into our management system

Continue to avoid misconduct

through consistent preventative

Ongoing

Ongoing

(4)

> Sustainability index (SPI) introduced and included in report for the first time in 2021 - with relevance for remuneration at board and management levels

> 2021 SPI target achievement of 109%

> Whistleblowing hotline set up

> Group-wide, web-based compliance risk analysis carried out

> Development of a catalog of measures and expansion of the training catalog for compliance-related topics



#### Appeal on the capital market

We are pursuing the goal of transparently presenting our sustainability performance to the capital market. One way we are doing this is by participating in relevant ESG ratings.

We are a trustworthy and reliable partner.

It goes without saying that all of our emp-

loyees comply with laws and regulations.

In relevant ESG ratings we aim to maintain or improve our per-Ongoing formance

 $\mathbf{W}$ 

- > Good ESG rating performance in all relevant ratings
- > Green Bond Framework expanded: EU Taxonomyaligned, including social bonds

> Social & green bonds issued (March 2022)

1) Management level includes first and second management level below the Management Board.

measures



# Environment

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- **25** Reducing CO<sub>2</sub> in the Real Estate Portfolio/ Energy-efficient Modernization
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## **Environment and Climate**

GRI 103-1, 103-2, 103-3, 305-4, 305-5 **UNGC** Principle 7, Principle 8, Principle 9











#### Disclosure

In July 2021, several regions near the Ahr and Erft rivers were struck by a once-in-a-century flood due in part to the heaviest rainfall since records began. The striking images of the devastation that the event caused in Germany and Belgium made it abundantly clear that climate change is no longer just an abstract scientific problem. The impact of climate change is only going to become more significant, and we are not going to be immune to its effects in this part of the world.

The events in the summer of 2021 provided yet more evidence that limiting global warming and protecting the natural resources required for life on earth are one of the most important challenges facing us as a society. That is why environmental and climate protection have such an important role to play in our sustainability strategy. We support targets set at an international level, such as the 1.5°C target set out in the Paris Agreement and the European Union Green Deal, as well as the goal set by the German Federal Government in 2021 to achieve climate neutrality by 2045. The Austrian government is going even further, and wants to be climate neutral by 2040. The world of business has an active role to play in achieving this target. It can also drive the research and development that will be needed in order to reach global climate targets. The real estate sector has an important part to play in this because the construction and operation of buildings emit a significant amount of the greenhouse gases that cause climate change. As the housing industry market leader in Europe, we aim to be a central driving force behind climate protection. With a portfolio of 413,967 residential units (excl. Deutsche Wohnen) in Germany, Austria and Sweden and its involvement in a number of wide-ranging development activities, Vonovia has a significant role to play in protecting our environment and mitigating climate change.

#### HIGHLIGHTS 2021

- > Climate path for the existing German portfolio updated: virtually climate-neutral building portfolio by 2045 set as target (<25 kg CO₂e/m² by 2030)
- > Carbon intensity in Germany improved by 2.8% to 38.4 kg CO<sub>2</sub>e/m<sup>2</sup>
- > 2.3% refurbishment rate achieved in Germany
- > Decarbonization tool for implementing environmental targets on regional and neighborhood levels. Neighborhood approach also a focal point of climate protection
- > Serial refurbishment in line with Energiesprong principle piloted
- > 1,000th roof fitted with photovoltaic system. New target set for expansion: installation of PV systems of >200 MWp on 17,000 roofs
- > BUWOG in Austria becomes partner in "klimaaktiv Pakt2030" with the goal of reducing emissions by 55% by 2030 against the base year of 2005

A decentralized energy transition is vital in order for the climate action plan being taken by governments and companies to be successful. Residential real estate companies can make an important contribution in this area while also opening up new business areas for themselves. Their properties offer great potential for generating renewable energies, e.g., by using photovoltaic or solar thermal installations on roofs. This provides the basis for innovative schemes like landlord-to-tenant electricity models - prospectively also for heat pumps and charging infrastructure. This approach puts Vonovia in a position to make use of the opportunities that will arise as a result of our increasing demand for renewable energy and the transformation underway in the transport and energy sectors. We also believe that there is significant potential for Vonovia to drive innovation within the residential property sector while remaining at the forefront of the energy revolution and achieving our own climate targets. Of course, we need a suitable statutory and technological framework in order for this to be successful.

Climate action and protecting the environment are becoming increasingly relevant topics in wider society. As a listed company, our activities and transparency in the area of climate change mitigation reflect the increasing importance of this topic for our customers and shareholders. They are also a response to changes in the regulatory requirements that affect how we do business. The growing demand for sustainable investments and the Sustainable Finance action plan set out by the EU Commission have the potential to transform our financial markets, as do the EU Taxonomy for sustainable activities and the TCFD framework (see → Implementation of the Recommendations Made by the Task Force on Climate-related Financial Disclosures (TCFD)).

The steps that will be required in order to reach the targets of the Paris Agreement and the European Union Green Deal will also be of importance for Vonovia. The extent of the impact that we have on the environment is dependent on how we choose to go about building new residential units and managing our existing portfolio. The same is true for the choices that we make about the ecological environment of our buildings. Maintaining and improving biodiversity in our residential environments is one positive step that we can take in order to protect the environment. We are also committed to conserving resources and contributing to the circular economy whenever possible.

The topics discussed in this section provide the framework for our activities, and are assigned to the two material topics that come under the area of Environment and Climate:

Reducing CO<sub>2</sub> in the Real Estate Portfolio/Energy-efficient

Modernization and Renewable Energies and Energy Mix.

The other important topics in this section are Biodiversity,

Water, Waste and Effluents and Energy Efficiency and

Carbon Reductions in Operations. The important topic of
Innovations for Climate and Environment is a central theme
that is primarily presented under the material topics.

#### Implementation of the Recommendations Made by the Task Force on Climate-related Financial Disclosures (TCFD)

**GRI** 102-15, 201-2

We began the process of integrating sustainability risks into the company's risk management system in 2020. In this context, we have incorporated the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) into our reporting process in order to shed special light on the climate-related risks of our business. Implementing the recommendations of the TCFD provides us with a better understanding of the risks that are relevant to our company.

#### Implementation of the TCFD Recommendations at Vonovia

Content of the						
recommendations	Implementation at Vonovia	Further Information				
Governance						
Organizational structure of the company regarding climate-related risks and opportunities	<ul> <li>Overall, Management Board bears responsibility for sustainability and climate protection as well as climate-related risks and opportunities; it decides on strategy and targets</li> <li>Sustainability Committee - comprising the entire Management Board and representatives of the central functional departments Sustainability/Strategy, Controlling, Communication, Investor Relations and Accounting - determines the strategy and targets and monitors progress</li> <li>The central department Sustainability/Strategy, within the executive division of the CEO, coordinates and drives the measures and their implementation</li> <li>Climate-related risks are calculated and collated on a half-yearly basis as part of the company-wide risk management process; the process is coordinated by Controlling, with the Management Board taking the final decision on risk assessment</li> <li>Energy efficiency modernization in the existing portfolio in Germany is the responsibility of the CRO (Regions and Portfolio Management); for Austria, the CDO is responsible, for Sweden, the CEO of Victoriahem</li> <li>Technical implementation and use of new technologies by Value-add unit</li> <li>Non-financial indicator Sustainability Performance Index (SPI) includes carbon intensity of the building portfolio</li> </ul>	2021 Sustainability Report:  → Environment and Climate  → Managing Opportunities and Risks  2021 Annual Report:  □ The Company  □ Corporate Structure  □ Sustainability Management at Vonovia  □ Management System □ Environmental Issues □ Opportunities and Risks				
Strategy						
Actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	<ul> <li>Climate protection and carbon reduction is a fundamental part of the corporate strategy as a key driver for long-term business success</li> <li>Binding climate path defined on the basis of various scenarios in partnership with scientific institutions</li> <li>Comprehensive modernization measures to increase energy efficiency as well as use of neighborhood solutions with renewable energies (fuel switch)</li> <li>Currently, transitory rather than physical risks are expected, e.g., through legislation in Germany (carbon pricing) and the European Union, as well as through the lack of economic viability of energy-efficient modernization and the development of renewable energy generation (balance between investments, apportionment opportunities and affordability for tenants)</li> <li>Particularly promising opportunities to generate energy for tenants to use for heating and electricity</li> </ul>	2021 Sustainability Report:  → Environment and Climate  → Sustainable Construction and Refurbishment  2021 Annual Report:  □ Strategy  □ Sustainability Management at Vonovia  □ Environmental Issues  □ Risk Assessment Based on Sustainability				
Risk management						
How the organization identifies, assesses, and manages climate-related risks	<ul> <li>Climate risks integrated into company-wide risk management process, assessment of all risks by management every six months</li> <li>Physical risks will be assessed in the future on the basis of regularly updated risk maps</li> <li>No material risks for building portfolio of Vonovia currently identified</li> </ul>	2021 Sustainability Report:  → Managing Opportunities and Risks  2021 Annual Report:  ¬ Risk Assessment Based on Sustainability  ¬ Opportunities and Risks				
Metrics and targets						
Metrics and targets used to assess and manage re- levant climate-related risks and opportunities	> Comprehensive and complete carbon footprint report for building portfolio and business operations according to GHG emissions protocol and IW.2050 > CO <sub>2</sub> e in portfolio (in Germany) 2021: 871,290 tons (Scope 1, 2, 3")) > Expansion of renewable energies with photovoltaic systems: 451 systems with 16.8 MWp nominal output  Targets: > Virtually climate-neutral portfolio by 2045 (<5kg CO <sub>2</sub> e/m² of rentable area) > Reduction of carbon intensity from current 38.4 kg to <25 kg CO <sub>2</sub> e/m² of rental area by 2030 > Installation of PV systems with nominal output of >200 MWp on 17,000 roofs by 2030 > Reduction of the average primary energy demand in new buildings to 31 kWh/m² by 2025	2021 Sustainability Report:  → Environment and Climate  → Sustainable Construction and Development  → Environmental Indicators  2021 Annual Report:  ♀ Strategy  ♀ Management System  ♀ Environmental Issues  ♀ Forecast Report				

1) Scope 3.3: "Fuel- and energy-related emissions upstream".

#### Reducing CO<sub>2</sub> in the Real Estate Portfolio/ Energy-efficient Modernization

**GRI** 102-11, 102-13, 103-1, 103-2, 103-3, 302-3, 305-1, 305-2, 305-3, 305-4, 305-5

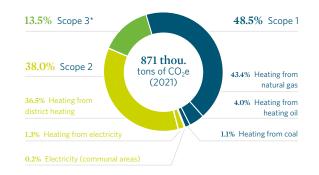
#### **Our Approach**

Vonovia is committed to making its property portfolio almost completely climate neutral by 2045. Owing to the size of the company, we see ourselves as a key driver of climate action in the housing industry. This means that we can help the sector as a whole make great strides towards achieving the goal of a carbon-neutral building stock. We track our emissions using the recognized Greenhouse Gas Protocol. Most of our emissions are Scope 1 emissions (direct emissions, approx. 45%) and Scope 2 emissions (indirect emissions caused by consumption of district heating and power, approx. 40%) of the properties in our portfolio. The majority of these are in Germany.

In the reporting year, we further developed our climate strategy and redefined our goal. In light of the new Federal Climate Change Act and the sector targets contained therein, we have set the target of achieving a virtually climate-neutral building portfolio by 2045, with carbon intensity of less than 5 kg of  $CO_2$  equivalents per  $m^2$  of rental area. Along the way, we want to reduce our carbon intensity to less than 25 kg  $CO_2$ e/ $m^2$  by 2030. This target has been incorporated into our sustainability performance index (SPI),

#### CO<sub>2</sub>e Emissions – Portfolio (in Germany)

in %



\* Scope 3 emissions comprise energy-related emissions upstream and commodities leased downstream.

which affects the remuneration of the Management Board. Carbon intensity is the most significant component of the sustainability performance index in terms of its weighting. The targets were developed as part of an interdisciplinary collaboration between various functional areas and with the support of the scientific community (Fraunhofer ISE). They are contingent – not only on a comprehensive improvement of the building portfolio's energy efficiency through energy efficiency modernization, and an increased share of renewable energies in our neighborhoods – but also on a profound transformation of the energy sector. As such, the provision

#### Vonovia Climate Path: Portfolio Decarbonization Strategy

Carbon intensity in kg CO<sub>2</sub>e/m²a\* 40 35.2 34.1 32.8 31.6 kg 2 30 < 25 kg 20 10 < 5 kg 0 2035 2040 2020 2025 2030 2045

### The 3 elements of the climate path

- > Continuation of comprehensive energy efficient refurbishment
- Replacement of conventional heating units with hybrid systems and heat pumps
- > Photovoltaic systems
- > Establishment of a local heating network in the neighborhood with renewable energies
- > Conversion of the energy sector to carbon-free district heating and green electricity
- \* Includes Scopes 1 and 2 as well as Scope 3.3 "Fuel- and energy-related activities upstream"; referring to German portfolio without Deutsche Wohnen. Development of the energy sector according to the Agora Energiewende KND 2045 scenario; comparison: CRREM path MFH 1.5° DE 2045 = 5.4 kg/CO<sub>2</sub>/m² (July 2021); development of climate path supported by Fraunhofer ISE.

of sufficient volumes of carbon-free district heating and electricity by the energy sector, coupled with a more rapid phase-out of coal, as described in the Coalition Agreement, are fundamental prerequisites for a climate-neutral buildings sector.

With respect to the attainment of our climate target and the targets of the housing sector as a whole, the right subsidy instruments and the removal of legal hurdles remain decisive. After all, we believe that ambitious, long-term partnerships and above all a different political framework are needed in addition to commitments and investments in order for climate-neutral housing to become a reality and stay affordable. Our commitment to modeling and developing sustainable solutions to mitigate climate change demonstrates that we are operating in a field that is undergoing rapid regulatory change while also attempting to meet the needs of a wide variety of stakeholders and remain profitable.

For this reason, our climate path takes social and economic targets into consideration in addition to the environment. Following the initial definition of the target in 2020, concrete implementation work continued in the reporting year. Energy-efficient refurbishments are a key element of our climate path. A specially developed decarbonization tool makes it possible to break down the Group target at the level of regions and neighborhoods − and identify nuanced solutions (see → project box "The Vonovia Decarbonization Tool − CO₂ in Focus"). We make improvements to the tool on a continuous basis in order to identify the optimal balance between carbon targets and our performance as a business. This provides us with the best possible basis for making decisions as a company.

# Decarbonization Tool

#### helps to identify solution strategy

Here, too, the focus lies on the urban quarter, particularly in the context of the energy revolution. Many integrated solutions for energy provision with renewable energies and carbon reduction can only be implemented in a technically feasible and economically viable way within larger neighborhoods. The innovation clause of the German Buildings Energy Act (GEG), for example, is only applicable to neighborhoods. These circumstances have increased our focus on neighborhoods and underline the importance of taking a holistic approach.

# Finding solutions at neighborhood level

A holistic view of urban quarters

#### **Organizational Focus**

The Portfolio Management unit reports to the Chief Rental Officer (CRO) and is responsible for the general planning and coordination of modernization measures in the portfolio. Within the unit, the Climate-neutral Portfolio/Strategic Projects department is tasked with developing solutions for bringing our property portfolio and the corresponding investment strategy in line with our climate action goals. It is also supported by the Sustainability/Strategy unit, which reports to the Chief Executive Officer (CEO). The properties/ neighborhoods to be modernized are selected in a targeted manner in cooperation with the regions, and the optimal degree of modernization for each building is defined. Investments for modernization measures are approved by the full Management Board. Compliance rules require the involvement of the Supervisory Board in some cases. The Investment Management department manages the budget for modernizing the portfolio. Vonovia Technical Service (VTS) is responsible for planning and execution.

#### **Carbon Intensity - Portfolio (in Germany)**



Carbon emissions from heating and electricity; comparability restricted between 2019 and 2020 due to change in method.

# The Vonovia Decarbonization Tool – CO<sub>2</sub> in Focus



At the start of 2021, Vonovia entered into a development partnership with GLS Bank, the advisory company d-fine, and the climate metrics provider right.based on science, with the goal of developing an IT system to analyze the climate impact of residential property and portfolios. With this, Vonovia is setting new standards in the industry. The digital Decarbonization Tool makes it possible to integrate climate-related key figures as well as energy-technical and economic indicators in the management of neighborhoods and real estate portfolios. The software provides an analysis of the portfolio's climate impact at the current time and in view of the goal of achieving a virtually climate-neutral building portfolio by 2045. The emission reductions achieved by planned modernization projects and community development activities are mapped in the tool and compared with the 1.5°C target set in Paris.

"We firmly believe that the rising pressure on greenhouse gas emissions in the building sector and significant financial risks for the industry urgently require new ideas in order to take the complex interrelationships of building emissions and global warming to a place that allows for sustainable climate-protective building management." Dr. Lars Dittmann, Climate-neutral Portfolio department head.

The Decarbonization Tool is being used to implement the Vonovia climate path at an operational level and aims to address, for example, the effects of modernization, changes in energy sources, and portfolio changes. The tool indicates, for example, whether the Vonovia portfolio as a whole, or individual neighborhoods, are on track to meet the 2045 climate target, and what influence climate-impacting measures have on achieving the target. This is how we intend to manage our target of achieving climate neutrality in the reporting period through 2045 in an economically prudent and ecologically forward-looking manner.

# 1.5°C objective

firmly in sight



#### The top four features of the Vonovia decarbonization tool:

- > Visualization of the long-term climate impact of modernization measures
- > Possibility of establishing regional climate paths
- > Prioritization algorithm shows the order of priority in which buildings are to be modernized
- > Evaluation of modernization programs by inputting data on the planned or achieved carbon reductions

Energy efficiency modernization measures in Austria are, like overall business operations in Austria, the responsibility of the Chief Development Officer (CDO) under the BUWOG umbrella, where they are led by the Real Estate Management division.

Division heads are responsible for planning investments in modernization work at Victoriahem in Sweden. This process is integrated into the annual budget planning process and is updated in line with the company's business forecast. The investment plan is reviewed by regional managers, the Head of the Energy and Environment Department, business controllers and project managers to make sure that the estimated savings and costs are accurate before the plan is approved by the CFO, COO and CEO.

#### **Objectives & Measures**

In line with our holistic approach, our measures focus more on neighborhoods than our individual rental units (see

→ Society and Contribution to Urban Development). In Germany, we use public funding programs to keep modernization work affordable for our tenants. The revised terms of the federal funding program for efficient buildings (BEG) include some interesting options in this respect, such as direct subsidies for modernization work. Serial refurbishment is another approach that will limit the costs of modernization. Serial refurbishment is defined as the process of using pre-fabricated facade and roof elements to refurbish existing buildings with the aim of making them more energy-efficient.

The refurbishment rate in Germany in the reporting year was 2.3%, compared to 2.9% in the previous year. The drop is, among other things, attributable to the new conditions for subsidies and the adjustments to the internal management system to focus on the neighborhood level, which requires more complex and therefore longer planning. In the year ahead, it is expected that the refurbishment rate will once again exceed 2%.

Alongside optimization of building envelopes, the switch to lower-carbon energy sources also stands at the forefront. As part of our quest to achieve a virtually climate-neutral housing stock in 2045, Vonovia is aiming to have reduced the carbon intensity of its housing stock in Germany to below 25 kg CO<sub>2</sub>e/m<sup>2</sup> by 2030. In the reporting year, carbon intensity stood at 38.4 kg CO<sub>2</sub>e/m<sup>2</sup> and was therefore approx. 2.8% lower than in the previous year (2020: 39.5 kg CO<sub>2</sub>e/m<sup>2</sup>). The metric comprises Scope 1 and Scope 2 emissions across our entire portfolio, and part of the Scope 3 emissions (fuel- and energy-related emissions upstream and commodities leased downstream). As such, the goal set for the reporting year of a reduction of at least 2% was achieved. In particular, the reduction is based on energy efficiency modernization and an improvement in the carbon intensity of district heating. For further information, please refer to

→ Environmental Key Figures.

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

38.4

kg CO<sub>2</sub>e/m<sup>2</sup> living area Carbon intensity of the existing portfolio

(in Germany)

#### Notes on the Calculation of Carbon Emission

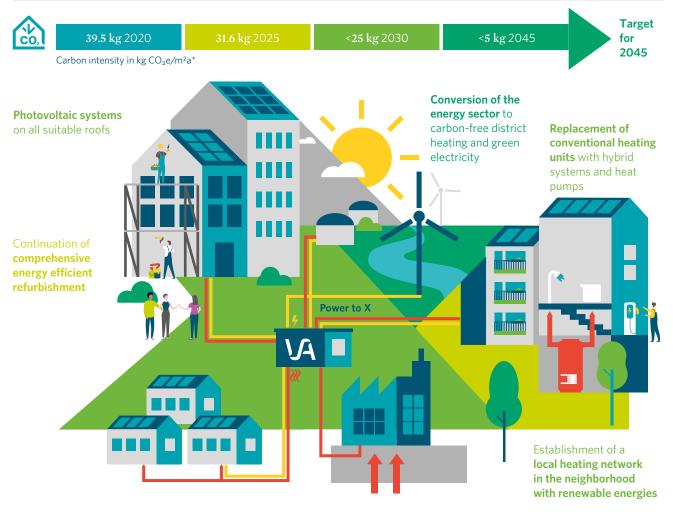
- > In accordance with GHG Protocol and IW.2050/ GdW Arbeitshilfe 85
- > Total property portfolio, including listed buildings
- > Based on energy certificates, in relation to rental area (not total area)
- > GEMIS 5.0 carbon factors used
- > Specific carbon factors for district heating in some cases
- > Including energy-related upstream emissions (Scope 3)

As part of the continuous enhancement of our calculation of carbon emissions, we will make a modification in the calculation of carbon emissions for district heating starting in the 2022 fiscal year, where we will use the Carnot allocation method in the future. This has the advantage that the allocation of carbon emissions between electricity and district heating is based on purely physical considerations, meaning that we can structure our long-term climate strategy and corresponding innovations in a way that is robust against regulatory changes in the long term. Had this method been applied to the building portfolio in the 2021 reporting year, it would have resulted in a theoretical carbon intensity of 35.6 kg  $\mathrm{CO}_2\mathrm{e}/\mathrm{m}^2$ .

#### Focus of energy-efficient modernization measures

The energy-efficient modernization measures focus on heat insulation for facades, basement ceilings and attics, the replacement of windows and the installation of new heating boilers. We modernized around 8,200 units in the reporting year, not including heating system upgrades. That equates to

#### Vonovia Climate Path: Portfolio Decarbonization Strategy



\* Includes Scopes 1 and 2 as well as Scope 3.3 "Fuel- and energy-related activities upstream"; referring to German portfolio without Deutsche Wohnen.

Detailed explanations can be found in the footnote to the climate path chart on p. 25.

a refurbishment rate of 2.3% in Germany for 2021. The year-on-year drop (2020: 2.9%) is, among other things, attributable to the new conditions for subsidies and the adjustments to the internal management system to focus on the neighborhood level, which requires more complex and therefore longer planning. In terms of heating modernization, we focus on the use of hybrid solutions, heat pumps and wood pellets. We are also investigating the potential of connecting to new and existing district heating networks in Germany. We replaced boilers in around 4,100 units in the reporting year. By the end of 2022, we also aim to have replaced all existing oil heating systems in existing buildings in Germany.

# **Around 8,200**

residential units modernized in the reporting year (in Germany excl. heating system upgrades)

When carrying out energy efficiency building refurbishments, we need to consider both the strain on the tenants/ residents concerned and the rising costs. Vonovia is committed to using numerous (academically supported) cooperation projects and integrated approaches to find innovative and cost-efficient, effective solutions for energy efficiency and a climate-neutral housing stock. One example of this sort of approach is the Energiesprong initiative, a serial refurbishment concept that uses standardized and pre-fabricated construction components to minimize refurbishment times and maximize residential comfort on the basis of an innovative financing model. The aim of the initiative is to conduct refurbishments to bring buildings to net zero, meaning that they generate as much energy in a year as they consume. The Energiesprong principle is currently being piloted at 24 units in Bochum and is also to be rolled out further within the portfolio at a future stage (see → project box "Energiesprong: Serial 'Green' Refurbishment"). Vonovia is also taking part in projects to optimize the operational management of heating systems and the interaction between, for example, system technology, user behavior and structural

# Energiesprong: Serial "Green" Refurbishment



Bochum-Mitte: A series-produced Energiesprong element being carried onto the construction site





In the search for innovative solutions, Vonovia is leading by example. At the end of 2021, in cooperation with the Fischbach Group, the company launched the first carbon-neutral refurbishment in series construction in Bochum-Mitte in line with the Energiesprong principle, which is still in its infancy.

Three residential buildings with a total of 24 apartments are being refurbished in series. The buildings date from the 1950s and will be brought up to a carbon-neutral standard through the Energiesprong refurbishment project. As part of this process, timber-frame facade elements made of sustainable building materials are prefabricated to the precise millimeter. The elements are then simply joined together at the construction site. Due to the high degree of prefabrication, serial refurbishment offers great potential for facilitating the implementation of the energy revolution in the portfolio despite the shortage of skilled workers. In addition, this construction method produces significantly less noise than conventional construction sites. The heating, water and air supply system technology, which has also been completely renewed, is powered by the building's own photovoltaic system on the roof. The carbon emissions caused by the operation of the building will be reduced to zero over one year of operation through the use of 100% renewable energies. Over the course of a year, the building generates exactly as much energy as it consumes (net zero). Another goal of the Energiesprong approach is to achieve a neutral impact at the level of rent including ancillary expenses. Tenants pay exactly the same amount for rent, heating and electricity as they did before the modernizations thanks to the improved energy efficiency.

The energy revolution has top priority at Vonovia, but this should not financially overburden the tenants of our buildings. Thanks to cost-saving series construction and the generation and use of green energy in the neighborhood, the Energiesprong principle will go a long way toward ensuring that refurbishments can be carried out over the long term without additional charges to the tenants.

**☐** Serial Refurbishment with Energiesprong in Bochum

measures, so as to deliver further cost minimization solutions. One of these is the interdisciplinary research project BaltBest headed up by the EBZ Business School. The purpose of this three-year project was to uncover new ways to reduce the costs involved in heating properties. This was the largest research project of its kind in Germany to date, and identified a number of improvements that could cut heating costs by up to 20% per property. These include optimizing operational management, replacing boilers to save energy, improving communication with tenants about energy consumption and large-scale data gathering.

# Cooperation and innovation

for the development of innovative and cost-efficient solutions

#### Average Energy Intensity in the Portfolio\* (in Germany)



\* Relates to final energy demand and rentable area.

We organize events with various stakeholders on a regular basis to provide a platform for dialogue. Following on from our Outlook for Climate-neutral Housing conference in 2020, we held climate discussions in the form of digital lunches for our stakeholders in 2021. Due to their popularity, we have a number of sustainable conference formats planned for 2022, such as a conference on the Outlook for Climate-neutral Construction.

We took part in a number of events held by Initiative Wohnen.2050 (IW.2050) in 2021, of which we are a founding member. The initiative focuses on learning from each other and fostering dialogue, with the ultimate aim of the entire housing industry having a shared understanding of the importance of climate change mitigation and taking a unified approach to combating climate change. The initiative uses a

#### Energy Efficiency Standards in the Portfolio (Germany) - 34.9% in Efficiency Class C or Better\*

Portfolio share in % (relates to final energy demand and rentable area) Energy efficiency classes in kWh/(m²a)



variety of guidelines, tools and dialogue formats on strategic and technical issues for this purpose.

Implementation and active participation in further

# Initiative Wohnen.2050

formats in the reporting year

In Austria, BUWOG has been a partner of the "klimaaktiv pakt" climate protection initiative launched by the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology since 2011. Following completion of the first stage of the initiative in 2020, BUWOG has set a new goal as part of "klimaaktiv2030", the aim being to achieve a reduction in emissions of 55% by 2030, compared to the base year of 2005 (see → project box "Leading the Way: BUWOG Signs klimaaktiv Pakt2030"). Modernization and improvements to our existing portfolio will account for the majority of carbon reductions. Insulation refurbishments, improvements in the efficiency of heating systems and switching to more eco-friendly energy sources have the most important role to play. BUWOG has also had a certified energy management system that is consistent with ISO 50001 standards in place in Austria since 2013/14 and in Germany since 2018. The system is a tool used voluntarily to systematically manage energy performance and improve it continuously. The corresponding establishment of processes that reflect this policy in the company and clearly defined objectives serve to increase energy efficiency, reduce energy consumption and cut energy costs.

In Sweden, virtually all existing Victoriahem buildings are supplied with district heating, the generation of which already produces extremely low carbon emissions. Therefore, the road to climate neutrality will primarily be shaped by further decarbonization of heating supply, coupled with ongoing improvements in energy efficiency.



# Leading the Way: BUWOG Signs klimaaktiv Pakt2030

"We hope that we can also motivate as many other real estate companies as possible to work on reducing their carbon emissions."

**Daniel Riedl, Vonovia CDO** 

Climate change mitigation and quality of life must go handin-hand. It is with this conviction that BUWOG has made a voluntary commitment to reduce carbon emissions by 55 percentage points by 2030. The Vonovia subsidiary is one of only eleven Austrian major companies - and the only one in the real estate sector – to be accepted into the Austrian Federal Ministry for Climate Action's new "klimaaktiv" pact, and, with its voluntary commitment, even exceeds the target of reducing carbon emissions by half by 2030. This solidifies BUWOG's leading position in the area of climate change mitigation. "We hope that we can also motivate as many other real estate companies as possible to work on reducing their carbon emissions," says BUWOG chief Valerija Karsai. In order to achieve this ambitious goal, BUWOG is implementing a number of measures within the building portfolio - first and foremost, insulation refurbishment, improvements in the efficiency of heating systems and switching to more eco-friendly energy sources. In new construction projects, properties are built exclusively with low-energy status, flanked by greening and environmentally friendly mobility solutions. You can find more about the \( \frac{1}{2} \) klimaaktiv Pakt online.

#### "klimaaktiv"

is a climate action initiative launched by the Austrian Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK). The initiative develops quality standards and, in addition to training and education programs, also offers consultation and information services and has a large partner network in its portfolio.



#### Renewable Energies and Energy Mix

GRI 103-1, 103-2, 103-3, 302-4

#### Our Approach

We take a two-pronged approach to achieving our climate objectives: in addition to using energy efficiently and reducing energy consumption (see → Reducing CO<sub>2</sub> in the Real Estate Portfolio/Energy-efficient Modernization), we are also committed to expanding our use of renewable energy. Our holistic and neighborhood-based approach will play a significant role in the success of this strategy due to long-term synergy effects and an expanded package of measures. A major lever that can be used to reduce greenhouse gas emissions is the expansion of renewable sources of energy. That is why we see our residential neighborhoods as the linchpin of a decentralized energy revolution. We want to implement innovative methods of generating renewable energies and actively promote their use in our own properties, especially at a neighborhood level. We want to continuously increase the proportion of renewable energies being consumed and generated. We want to do this by making greater use of hybrid heating systems, expanding heat pumps and photovoltaic systems, solar thermal systems, pellet heating and integrated neighborhood systems, which will link these technologies to each other as well as to storage technologies, in order to serve buildings in groups instead of individually. We are also piloting innovative approaches such as the use of hydrogen technology in combination with electricity from renewable sources.

Continual expansion of

# renewable energy sources

in the neighborhoods

One of the most important ways in which we contribute to the decentralized supply of renewable energies is by installing PV systems on the roofs of our properties. We will significantly increase our generation capacity over the next few years. We also aim to install photovoltaic systems on all suitable roofs. In light of the increasing regional demand for photovoltaic systems, we have included expanding our use of photovoltaic systems as a key measure of the performance of our regional managing directors.

Ongoing installation of

# PV systems

on all suitable roofs

We are convinced that innovation and developing new solutions have a crucial role to play in our ability to achieve objectives in the area of Climate and Energy. We have such a strong focus on innovation and research because because we believe that reducing the carbon emissions of our buildings to zero will not be possible or economically viable simply by implementing energy-efficient refurbishments of building envelopes and using existing technology (see

Vonovia enables its own tenants to buy certified electricity from renewable energy sources via its own energy service company (VESG) so that they can reduce their carbon footprint. In the medium and long term, Vonovia is counting on implementing concepts for supplying energy to its own buildings. Our objective is to maximize the share of energy we produce ourselves for the benefit of our customers and the environment, and also to use it for our housing-related services, e.g., e-mobility. This will also reduce the amount of resources that we consume by simplifying our accounting and administrative processes, consolidating procedures and reducing the workload for employees.

Our plan in Austria involves supplying heat from sustainable energy sources from the public supply network (e.g., district heating in Vienna). We are focusing on an energy mix that includes a significant proportion of renewable energy sources. Wherever possible, we want to provide a way for buildings to generate their own power. We want to avoid changes at a later date as this could involve additional switching costs for residents. This will also ensure that our apartments stay attractive and above all affordable over the long term.

The switch to renewable energy is also fully underway for our portfolio in Sweden. We also have set ourselves a target of reducing energy consumption per square meter by 30% by 2030, compared to 2015 levels. In the future, all of our new buildings will perspectively be certified in accordance with the Miljöbyggnad Silver Standard of the Swedish Green Building Council to ensure a consistently high level of energy efficiency and work together with local energy providers to identify potential savings.

#### **Organizational Focus**

All activities relating to renewable energies and energy distribution in Germany are organized in the Value-add business area and are managed by a chief representative who reported directly to the CEO of Vonovia SE until the end of the 2021 fiscal year. This responsibility moved to the Chief Transformation Officer (CTO) with effect from January 1, 2022. Energy sales, through which our customers can sign green electricity contracts directly with Vonovia, are handled through the company's own Vonovia Energie Service GmbH (VESG). The PV program and other innovative approaches aimed at the carbon optimization of the real estate portfolio as part of the neighborhood concept are developed and managed by the Innovation & Business Building department.

Business operations in Austria are the responsibility of the Chief Development Officer (CDO) and Managing Directors under the umbrella of BUWOG. All sustainability-related measures (for both new construction and the existing portfolio) are developed and managed by the Development and Property Management divisions.

The Division Heads of Victoriahem in Sweden are responsible for planning and installing photovoltaic systems on the roofs of buildings in the company's portfolio. The head of the Energy and Environment department and the respective team support this process by providing technical advice and calculating savings in partnership with the Business Controller. The Head of the Energy Management team reports to the COO.

#### **Photovoltaic Plants Installed**



#### **Objectives & Measures**

One of the milestones along the path to making our portfolio climate neutral is reducing the carbon intensity of the Vonovia building stock to 25 kg CO<sub>2</sub>e per m<sup>2</sup> of rentable area by 2030 and to increase the share of renewable energy Sources (see → Reducing CO<sub>2</sub> in the Real Estate Portfolio/Energy-efficient Modernization). Expanding use of photovoltaic systems is one of the measures that we are using to achieve this objective. After focusing our efforts on drawing up plans and running trials in 2020, the reporting year was all about scaling up. We achieved our objective of setting up photovoltaic systems on 1000 flat roofs last year (see → project box "Landlord-to-Tenant Electricity From 30,000 Roofs"). We want to install photovoltaic systems on 17,000 roofs by 2030 in order to harness the considerable potential of suitable roof areas. This is equivalent to an installed output in excess of 200 MWp (compared to 16.8 MWp in 2021). In order to achieve this goal, we are also investing in in-house installation capacities and creating about 100 new jobs. By 2050, we intend to fit all 30,000 suitable roof spaces in the German portfolio with PV panels. Looking ahead - as soon as the legal context provides the opportunity/the realm - the plan is to perspectively use the energy generated directly as landlord-to-tenant electricity in the individual neighborhoods as soon as the overall legal conditions make this commercially feasible. The first such efforts were started in the year under review.

#### **Creation of**

# around 100 new jobs

# >1,000 roofs

already equipped with photovoltaic systems - target achieved

However, the decentralized energy supply strategy is reliant on some external factors. Our efforts to expand our use of photovoltaic systems in the reporting year were slowed by supply bottlenecks that affected materials like solar modules and meter boxes. The skills shortage also had an impact, as we found when we were unable to meet our need for electricians (see → Corporate Culture and Employees). We continued the time-consuming process of fostering expertise internally in response to the skills shortage in 2021. We plan to press ahead with these measures on the basis of our insourcing strategy in 2022, with the goal of carrying out the work through our own craftsmen's organization.

**PROJECT** 

# Landlord-to-Tenant Electricity From 30,000 Roofs



Construction Minister of North Rhine-West-phalia, Ina Scharrenbach (pictured here with CEO Rolf Buch) visited the site and was impressed with how Vonovia's plans for increasing the use of renewable energies are being implemented. The "1,000 roofs" program was completed in Bochum in the summer.

In the reporting period, we achieved the target laid out in our 2019 "1,000 roofs" program of fitting at least 1,000 roofs in our portfolio with photovoltaic modules. This still is not enough, though, as Vonovia intends to focus much more heavily on solar energy in the future. Our new goal is to fit every suitable roof in our building portfolio with photovoltaic systems as part of our quest to achieve climate neutrality. That's 30,000 roofs by 2050. By 2030 we want to

nummer.

have already achieved over half of our target with 17,000 roofs fitted, which will generate 194 million kWh of climate-friendly solar power and avoid 76,500 t of CO<sub>2</sub> every year.

We will manage our "30,000 roofs" project ourselves, creating around 100 new jobs. While the energy generated from the "1,000 roofs" program is fed into the public grid for the most part, in the medium to long term Vonovia is seeking to decentralize the energy supply to its own neighborhoods and landlord-to-tenant electricity systems. The green energy generated through our "30,000 roofs" program will be used for landlord-to-tenant electricity in addition to heat generation and e-mobility. Tenants will benefit from this with cheaper electricity costs over the long term.

"Vonovia is taking action and is focusing on landlord-totenant electricity. Electricity generated on roofs and made directly available to tenants is setting new standards. It is an intelligent form of energy generation," said Ina Scharrenbach regarding Vonovia's plans to install PV systems on 30,000 roofs.

# 25,000 customers

were supplied with green power in 2021

We are expanding our activities as an energy services provider because the ability to generate and supply energy on a decentralized basis play a key role in the energy revolution. We supplied green power to around 25,000 customers in 2021 through our energy distribution company VESG (Vonovia Energie Service GmbH). Our focus in terms of energy generation is on promoting networked neighborhood systems and sector coupling. This involves linking the electricity, heating and mobility sectors so that the electricity generated locally and the heat generated can be used for the apartments - turning our neighborhoods into efficient small power plants (prosumers). We are also piloting innovative approaches, such as a wide variety of storage systems - with a particular focus on the short-term and seasonal storage of energy - and maintained our partnerships with a variety of scientific institutions and partners during the reporting year. We opened the Power House of the Future project in April 2021 in Bochum-Weitmar with the aim of researching innovative energy systems and implementing them in practice. The project will also provide vital information and data that will be used to develop and scale technologies. Innovative technologies, including an electrolyzer that uses electricity to produce hydrogen, fuel cells, heat pumps and stratified storage that cover at least 60% of the heating needs of buildings and households in the area with carbon-free heat from a local source. We generate 25% of the power required locally using our own rooftop photovoltaic systems. As part of another research project in Bochum-Weitmar, we are developing an innovation neighborhood with a focus on climate change mitigation in partnership with scientists from a number of different Fraunhofer Institutes and Ampeers Energy GmbH. This project is funded by the state of North Rhine-Westphalia.

# Power House of the future

opened in Bochum-Weitmar in April 2021

Linking local energy management systems together in an intelligent way also includes e-mobility approaches. We are still working on the development of a range of scalable mobility concepts and solutions for needs-based charging infrastructure. Since each neighborhood is unique and has its own features and requirements, we are developing the concepts in such a way that the regions can use them as they see fit. One core element of our research and development work in this area is the expansion of charging infrastructure. The plan is for tenants with their own parking space to get a wallbox on request and pay for their electricity through Vonovia.

## **Biodiversity**

**GRI** 303-5, 306-2

When designing our neighborhoods, we find a balance between what is ecologically valuable and what is economically sensible. We take care to choose appropriate measures, such as landscaping, planting trees, installing nesting boxes, creating urban meadows and making sure there are suitable habitats for insects. We use forward-looking plans to ensure that aspects such as maintenance and potential future changes in climatic conditions are taken into account. We have established standard procedures for preparing biodiversity reports for flora and fauna. The purpose of these reports is to ensure that all of the animal and plant species in an area are protected and maintained. We also use woodland surveys to determine the health and conservation value of the roughly 215,000 trees that comprise the woodland in the vicinity of our buildings and neighborhoods. We take a number of steps to maintain biodiversity when building new homes, such as the creation of green areas (see → Sustainable Construction and Refurbishment).

Over the course of the reporting year, we gradually expanded our partnership with Naturschutzbund Deutschland e. V. (NABU), which began in 2019. Over 30 projects have been completed or are being developed nationwide on the basis of this partnership in locations including Berlin, Leipzig, Hamburg, Osnabrück and the Ruhr valley. Since this partnership began, in addition to converting over 100,000 m<sup>2</sup> of general purpose lawns into wildflower meadows, we have created more than 250 insect habitats and installed over 500 nesting boxes for swifts and roosts for bats. The NABU experts also recommended site-specific seed mixtures for the 22 different geographic areas in Germany. We continued to work together in 2021 on projects aimed at the revitalization of habitats in rainwater retention basins and other worthwhile causes. We also organized a coronavirus-safe walk through the neighborhood in partnership with NABU so that the tenants of our pilot neighborhood in Bochum-Weitmar would have a chance to learn about our commitment to protecting biodiversity when we develop residential

environments. We also held a walk for our stakeholders (incl. communication with the city, the Emschergenossenschaft water board, the planning office, NABU and Vonovia community development).

>100,000 m<sup>2</sup>

of general purpose lawns converted into wildflower meadows

## More than 500

nesting boxes for swifts and bats created

We are also working together with the NABU at our site in Bochum. An ecological nature trail is being created around Vonovia's headquarters, which will inform employees and visitors about the eco-friendly measures we are implementing in our residential environments.

# Ecological nature trail

around the corporate headquarters in Bochum created as part of the cooperation with NABU

We actively involve our tenants in order to raise their awareness of ecological issues, e.g., by landscaping common areas to make them close to nature or setting aside spaces that can be used for urban gardening. We launched a partnership with the non-profit organization Acker e. V. (previously known as Ackerdemia e. V.) in 2020. We support the "Gemüseakademie" project, which uses vacant land on the grounds of nurseries and primary schools to grow fruit and vegetables. This gives children a chance to find out about plants and gardening. We will use other projects like "Bohnenabenteuer" and "Ackerhelden" to make the residents of our neighborhoods more aware of biodiversity. We include articles about projects of this kind in our customer magazine "zuhause" on a regular basis.

We take the suggestions of our tenants into consideration when we run projects to upgrade their residential environment. We integrated a wide range of suggestions from our tenants into the redesign of the neighborhood in Duisburg-Hüttenheim, for example. We are planning to include a wildflower meadow and an insect habitat, along with other green areas for tenants. Vonovia also commissioned a woodland survey so that we can protect as much of the local woodland as possible. We worked together with experts to decide which trees to keep and which should be replaced by planting new trees. To date, we have created around 170 tenant gardens nationwide. In the coming years, we anticipate a significant expansion of this scheme to more than 2,000 tenant gardens in Germany.

# Around 170 tenant gardens

created nationwide

## Water, Effluents and Waste

**GRI** 303-5, 306-2

The increasing scarcity of water is becoming an increasingly important topic of discussion in Germany. Climate change is already making itself known in the form of longer periods of dry weather and more frequent heavy rain and storms. We are assuming that these will become more common in the future. Although our portfolio has been relatively unaffected so far, we are preparing for the possible consequences. To this end, we are working on measures that will help to mitigate extreme weather conditions at a microclimate level or have the capacity to cool urban heat islands, such as greening the facades of buildings or installing roof trenches. We need an innovative approach to water management that will be able to handle the challenges of the future. There is significant potential in local rainwater seepage systems (based on retention basins and green roofs, for example) and using rainwater to water gardens.

We integrated additional risk and damage minimization measures into our standard processes during the reporting year. These include soil and flood surveys, which will allow us to draw up more effective water management plans for our neighborhoods. Our planning process includes a digital terrain model in order to minimize water damage. In the future we intend to use our existing geoinformation system to improve the available data even further so that we can plan and implement measures with even more precision.

The BIM method (building information modeling) is one of the ways in which this is supported in the planning of open spaces.

# Digital terrain model

in order to minimize water damage included in planning process

## Examples of water management measures in our portfolio:

- > Partnership with NABU NRW to revitalize habitats in rainwater retention basins and to create green roofs and facades with the help of tenants (in progress since 2020)
- > Implementation of a community development project with integrated rainwater management in the Eltingviertel in Essen (in progress since 2020)
- > Implementation of a pilot project to prevent water damage by identifying and communicating burst pipes early in order to keep consequential damage to a minimum (in progress since 2020)
- > Planning of integrated water management in the pilot neighborhood of Bochum-Weitmar (including cooperation and study with the Fraunhofer Society)

We use water-saving sanitary systems in our offices to reduce water consumption. We provide drinking water systems for the roughly 1,000 employees who work at the corporate headquarters in Bochum to reduce their use of plastic.

Waste separation concepts for good waste management and the promotion of recycling play a particularly important role in our construction and refurbishment work because they enable us to reuse valuable resources like windows (see → Sustainable Construction and Refurbishment). They are also becoming increasingly relevant for waste management purposes in our neighborhoods. During the year under review, we expanded our use of sustainable recycling schemes in our neighborhoods. We launched a pilot project in a neighborhood in Essen to investigate ways in which we can recycle green waste and separate household waste. Our findings will be rolled out to other neighborhoods in the future. We separate the waste produced in offices and common areas and do not use disposable items in the cafeteria. In Sweden we involve our tenants in the subject of waste separation and tell them about the opportunities that exist in the area of waste separation and prevention. This is

of the ways in which we plan to significantly reduce the amount of waste in Sweden – by 30% by 2030.

By means of careful documentation and monitoring of the work carried out on the construction sites by qualified staff and health and safety officers, we always strive to ensure that (contaminated) materials are disposed of correctly and lawfully. We provide Vonovia technicians with training on how to dispose of materials correctly.

There is also potential in how we manage our green spaces. We recycle horticultural waste for energy production in biomass power plants, compost green waste and use leftover wood offcuts as lumber. We are making use of these opportunities by developing new and sustainable schemes for recycling and reusing materials.

## **Energy Efficiency and Carbon Reductions in Operations**

**GRI** 302-1

Letting homes is not a resource-intensive business. In contrast to the situation in the manufacturing industry, our business operations only account for a small part of our carbon emissions – around 3%. Nevertheless, we continuously seek out opportunities to increase our level of resource efficiency and reduce our impact on the climate and the environment in our internal processes. Our vehicle fleet, our tools and appliances, our own office buildings and the behavior of our employees all offer opportunities to make a difference, e.g., by transitioning the fleet to low-emission vehicles, using power-saving electrical appliances for work in neighborhoods, buying green power for office buildings and avoiding business travel and transport.

We completed a DIN EN 16247-1 energy audit in Germany in 2020. The areas that were identified for improvement can be applied to the entire Group due to the homogeneity of asset structures and consumption patterns at Vonovia. The audit found that Vonovia employees were highly aware of how to use energy efficiently. We use a number of energy-saving and resource-efficient measures in our offices, including LED lighting, motion sensors to turn lights on and off, and airsource heat pumps as an energy-efficient heating solution. We are also moving towards paperless offices.

Measures already implemented in the vehicle fleet:

- > Fuel-efficient vehicles procured
- > Transparency ensured by assessing consumption of individual vehicles
- > Conversion to e-vehicles in Austria
- > Training course on fuel efficiency for drivers/ employees
- > Use of electric vehicles for short trips
- > Eco-tuning
- > Use of fuel-saving tires and engine oil

The company is also working towards using and generating energy in a manner which is better for the environment by switching all of the administrative buildings that it owns over to green electricity provided by VESG. This switchover will start on January 1, 2022, with around 60 sites concentrated in the South region. In the future, all of these sites will be supplied with carbon-free green electricity. All office locations of BUWOG in Austria have used certified green electricity (UZ46) since 2021. In addition to improving our carbon footprint, this also optimizes our internal processes. We want to roll this model out to other regions in 2022.

All administrative buildings in the company's own portfolio gradually switching over to

# green electricity

provided by VESG

The vehicle fleet accounts for about three-quarters of emissions from our business operations. Vonovia has around 5,750 vehicles, the majority of which are used by our service technicians. This is therefore where we have the most leverage for reducing carbon emissions in our own processes. We continued the process of switching our fleet over to low-emission vehicles over the course of the year. Whenever possible, we provided innovative transport solutions based on small low-emission vehicles. The company limited the speed of its commercial vehicles to reduce emissions. We are also continuing to switch our fleet over to electric vehicles and are using more bikes and electric bikes. Electric vehicles are now available as company cars. We continued to add electric vehicles to our fleet in Austria. This allowed us to reduce the average emissions of our fleet from 221 in the previous year to 210 g CO<sub>2</sub>e/km. Average fuel consumption was 6.9 l/100 km (2020: 7.3 l/100 km). As a result, we reduced our overall fuel consumption despite increasing the size of our fleet by around 60 vehicles.

Further reduction in average emissions of the fleet to

 $210 \text{ g CO}_2\text{e/km}$ 

(previous year: 221 g CO\_e/km)

Our residential environment organization also made significant advances during the reporting year, and replaced around 1,000 combustion engine components with environmentally friendly battery-powered versions. The new appliances are highly recyclable and have the potential to significantly lower carbon and noise emissions, benefiting our tenants and improving the health of our employees.

Around 1,000

combustion engine components replaced with environmentally friendly battery-powered versions

# Sustainable Construction and Development



**GRI** 102-9, 102-13, 302-5

UNGC Principle 1, Principle 7, Principle 8, Principle 9







#### Disclosure

Taking responsibility for the environment, conserving resources and meeting the needs of society are the foundation for lasting success in the real estate industry. In addition to a growing awareness of sustainability among our customers and partners, we are seeing more and more ambitious targets being set at a government and regulatory level. In 2021, the German government set itself the objective of achieving climate neutrality by 2045. The European Union announced a net zero target as part of the European Green New Deal, which it intends to meet by 2050. The EU Taxonomy lays down criteria in a number of relevant areas, including energy efficiency of new buildings, climate change adaptation, the circular economy and the use of materials. On the other hand, demand for new homes remains high; the recently signed Coalition Agreement expects 400,000 new homes to be built each year.

As one of the largest residential real estate companies in Europe, we can make a decisive contribution to meeting these objectives by finding approaches to building and development that are both sustainable and economically viable. This is particularly important given the fact that residential real estate is frequently used for far more than 50 years. Because of this, all of our new construction and refurbishment efforts have to be fit for the future so that we can meet the challenges that lie ahead. Increases in the price of materials and supply chain disruption have the potential to pose a risk to the economic viability of construction and development projects. By researching and using innovative construction materials and processes, we can meet our obligations to society and under the law, while also achieving our own sustainability and climate change mitigation objectives and remaining economically viable and competitive.

#### **HIGHLIGHTS 2021**

- > Primary energy demand of newly built apartments introduced as a key performance indicator in the SPI 2021 Sustainability Performance Index – this amounted to 38.6 kWh/m² in 2021
- > 2020 target almost achieved: 2,135 new apartments completed Group-wide (target: approx. 2,300)
- > More than 90% of new buildings completed in Germany are in energy efficiency class A or A+
- > Signing of the new "klimaaktiv Pakt2030" agreement and pursuit of the climate targets set therein until 2030
- > Analysis of the climate footprint of a building throughout its entire life cycle and the use of sustainable construction methods (e.g., hybridtimber structures and pre-fabricated parts)

Our holistic approach to construction and refurbishment extends to how we procure and use sustainable materials and products, in addition to ensuring that statutory requirements are met in our supply chains. We are committed to implementing the requirements of the Duty of Care in Supply Chains Act (LkSG) in order to identify and minimize risks in the supply chain. An additional benchmark here will be the applicability of the minimum safeguards criteria of the EU Taxonomy. These criteria help to make our supply chains more resilient and less susceptible to disruption. Failing to meet these requirements would damage the reputation of Vonovia and could result in legal fees.

We have identified Sustainable Construction and Refurbishment as a material topic due to its importance in the context of our business model. Other important topics are Sustainable Materials and Products and Social and Environmental Standards in the Supply Chain.

## Sustainable Construction and Refurbishment GRI 102-9, 102-13, 103-1, 103-2, 103-3, 302-5

#### **Our Approach**

Vonovia's construction projects create fairly priced homes that are urgently needed, particularly in metropolitan areas. Our construction and conversion projects focus on optimizing energy efficiency, renewable energy and using environmentally conscious construction methods that conserve resources, with a greater use of renewable resources. We also make sure that the layouts of our buildings and developments are suitable for a wide variety of lifestyles, in addition to providing accessible homes. Our strategy is economically and ecologically sustainable, and combines profitability with our objective of being climate neutral by 2045 (see → Climate Path).

# Climate and energyefficiency targets

## an integral part of Management Board decisions on new construction projects

We set clear targets and integrate sustainability aspects into our decision-making processes. We have clear, Group-wide targets for energy consumption and efficiency standards for all construction projects. The average primary energy demand of newly constructed buildings, in relation to rental area, make up the most important performance indicator. This performance indicator is part of the planning process and must be made transparent as part of all Management Board approvals of newbuild and development projects.

By taking a holistic neighborhood-based approach to developments, we bring together planning expertise and construction (see  $\rightarrow$  Society and Contribution to Urban Development). This involves focusing on vertical expansion and densification in order to provide additional homes while minimizing surface sealing. Our approach is complemented by our Building Information Management (BIM) strategy, which allows us to identify effective measures on the basis of data from across the entire life cycle of our neighborhoods. This reflects our commitment to long-term sustainability, which takes a close look at every stage of a building's life – from

finding plots of land through to handing over the keys and demolition – in order to minimize its emissions, the impact it has on the environment and the amount of resources that it consumes. Our holistic approach to the planning process includes incorporating elements such as playgrounds and leisure areas, charging stations and wildflower meadows into the residential environment. The progress that has been made – particularly in terms of reducing the annual carbon emissions of our portfolio and the energy efficiency of new buildings – was incorporated into the SPI, a non-financial indicator that was introduced in 2021 (see \$\mathbb{T}\$ Sustainability in the Corporate Strategy).

It is extremely likely that only projects that meet the KfW40 standard will be subsidized in Germany going forward. Based on guidance from the government, this standard will be the new statutory construction standard from 2025 onwards. We are already using this standard as a benchmark in our projects. We also look at the option of applying for sustainability certification for large-scale development projects from the German Sustainable Building Council (DGNB), its Austrian counterpart the Austrian Sustainable Building Council (ÖGNI), or for certification in accordance with the klimaaktiv building standard or the Green Pass. These certification programs make it possible to verify and compare the sustainability performance of different properties so that we can meet the expectations of a wide variety of interest groups, such as investors, owners, tenants and the general public.

#### **Organizational Focus**

BUWOG focuses on the development of high-quality residential neighborhoods for the company's own portfolio (to hold) and for direct sale (to sell) in Germany and Austria. These activities are the responsibility of the Chief Development Officer (CDO), and the individual development projects are approved by the Management Board. Until recently, Vonovia Technische Service GmbH (VTS) worked together with the regions in Germany on new construction projects, with a particular focus on densification and the addition of extra stories as part of our neighborhood development projects. The decision was made to integrate the new construction division of VTS into BUWOG Germany during the reporting year. The central Procurement department is responsible for supplier management and the processes for procuring construction materials and services. Architects, technical building service engineers and structural engineers are responsible for agreeing on the best use of sustainable construction methods, insulation and technology in internal modernization and development and construction projects. All plans for development and new construction projects are examined carefully by the Vonovia Management Board and approved.

#### **Objectives and Measures**

To achieve our aim of creating new and affordable housing, we set ourselves a target of around 2,300 completions for the portfolio and direct sales (to hold and to sell) Groupwide in 2021. By completing around 2,200 apartments across the Group, we almost reached this target despite the coronavirus pandemic. Across the Group we were able to

#### Valuable Contributions to Society and the Group

#### Development 1 Acquisition 2 Development **3** Planning **4** Construction 5 Marketing and Sales > Identification of > Design idea > Integral planning > Preparing for > Development of > Analysis of market acquisition opporand cross-disciplinaconstruction marketing concepts tunities and regulations ry project teams > Procurement and > Sale > District and city > Type and product > Initial rental > Assessment of awarding of cons-> Customer service development opporrepresentatives, development truction contracts > Trade coordinaand aftercare tunities citizens, service > Determination of > Due diligence providers and other aesthetic, ecologition/construction (legal, tax, technistakeholders cal, functional management cal, environmental, > Construction and economic > Construction etc.) optimization and requirements > Quality control > Cross-disciplinary city development > Detailed project > Coordination of acquisition teams calculation > Development of zoning > Professional project pipeline, planning property database > Coordination of construction approval process

transfer 1,373 of these new residential units to our own portfolio, of which 1,073 are located in Germany. In addition, 8,000 further apartments are in the planning stage – including for the company's own portfolio. The overall potential (to hold and to sell) is significantly higher and comprises – including the medium-term development potential of 36,000 units – a development pipeline of approximately 49,000 residential units (see  $\square$  Portfolio in the Development Business).

2021 target of

# 2,300 completions

almost reached

The average primary energy demand of newly constructed buildings, in relation to rental area, make up the most important performance indicator. Our aim is to reduce this significantly in the medium term. The increase in average primary energy demand in 2021 (2020: 35.7 kWh/m², 2021: 38.6 kWh/m<sup>2</sup> per year) is attributable to projects that had already been planned and approved under other framework conditions prior to the setting of our goals. For the same reason, we expect this figure to increase slightly in 2022 to 49.0 kWh/m<sup>2</sup> per year, before going down significantly in subsequent years (2025 forecast: 31.0 kWh/m² per year). This will be achieved by insulating buildings to a high standard, focusing on district heat with a low primary energy factor and the increased use of air source heat pumps combined with photovoltaic systems. These efforts have allowed some projects to meet the KfW Effizienzhaus EE standard, which requires a building to use renewable energy for more than 55% of its heating and cooling needs.

During the reporting year, we analyzed the climate footprint of a building throughout its entire life cycle (i.e., from the manufacturing process used for the construction materials through to the running of the building and its ultimate demolition) in order to find ways to make the construction process more environmentally friendly and less resource-intensive. We compared six different construction methods in terms of their carbon emissions, primary energy requirements and resource intensity. We will use the results of this analysis to calculate the emissions and requirements of all of our development and construction projects so that they can be incorporated into the planning phase. This data can also be used as the basis for subsidies and certification in future. The next step of this process involves determining the costs involved in each of these construction methods. We will also

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

38.6

kWh/m² p.a. average primary energy demand of new buildings (2020: 35.7 kWh/m²)

is based on energy performance certificates, excluding purely commercial spaces and vertical expansions

be taking a closer look at the methodology that we use to assess the disposal and reuse of materials.

Investigation and analysis of the

# climate footprint

over the life cycle of a building

We believe that this approach will allow us to compare a range of different construction methods in terms of their sustainability, expense and potential for a return. This will make it possible for us to use sustainable construction methods involving wood frame, solid wood or hybrid-timber structures, in addition to using pre-fabricated parts. We will continue our strategy of integrating different energy sectors together and generating our own energy. These approaches will provide new ways to significantly reduce our carbon emissions. A pilot project looking at this area is due to start in 2022, and will involve a total of 167 residential units in the Münsterberger Weg neighborhood in Berlin. The project will be the largest neighborhood made purely of timber structures from a single provider. It will also integrate a number of different energy systems together in order to ensure that more than 55% of the neighborhood's energy comes from

# Living on the Water: 52° Nord Sponge City



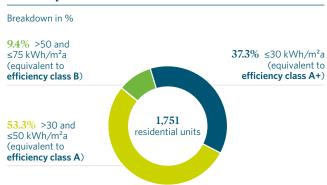
BUWOG's THE VIEW trio was completed in June 2021.

More green spaces, less soil sealing - that's what the climate needs. In Berlin-Grünau, BUWOG is developing the 

□ neighborhood 52° Nord on a former industrial wasteland on the banks of the Dahme River. It is based on the concept of a "sponge city", embedded in a comprehensive sustainability strategy that pays special attention to the integration of biodiversity and seepage areas for rainwater. Rainwater is becoming more and more valuable as periods of drought and heat become longer and more frequent, even in Germany. It is therefore not drained away in the sponge city of Grünau. Instead, in addition to the green spaces, a 6,000 m<sup>2</sup> rainwater retention basin with plants was integrated into the planning process. Based on the sponge city model, this basin collects the rainwater from the surrounding properties, cleans it biologically and returns it to the natural water cycle. It also serves as a biotope for aquatic animals and insects and helps to create a cooler microclimate on hot days. The neighborhood's sustainability strategy also includes green roofs, an efficient local heating network and the advancement of electromobility.

In 2020, the BUWOG sponge city project was presented with the "Award Deutscher Wohnungsbau" for German construction projects. This is awarded by the Federal Foundation for Building Culture (Bundesstiftung Baukultur) in partnership with other organizations. By 2025, around 1,000 rental and owner-occupied apartments will be built as part of various sub-projects that will meet a wide range of requirements, from family homes close to nature to student apartments, and will ensure a mixed and lively neighborhood life. One of the most architecturally imposing ensembles is BUWOG's THE VIEW complex of three buildings, which was completed in June 2021.

## Over 90% of New Buildings Completed in Line With Efficiency Class A or Better\*



\* Based on energy certificates, excluding purely commercial spaces and extensions. Proportion in relation to rental area.

renewables. The project also marks the first time that Vonovia Technical Service (VTS) will be responsible for supplying energy to a neighborhood in this manner. The 94 units completed between 2020 and 2022 that make up the Kompass- und Lotsenhäuser project in the 52°Nord neighborhood in Berlin-Grünau are made from hybrid-timber material and meet Niedrigstenergiehaus energy standards. A large proportion of the facade elements and floors are made from pre-fabricated European timber and meet the current KfW 40 energy efficiency standards.

We play our part in the circular economy by using construction materials that are separated out at the end of their life cycle so that they can be reused in future construction projects. BUWOG has put the circular economy at the heart of a pilot project called Monte Laa in the 10th district of Vienna. The tender process involved specific questions about the planned amount of recycled and recyclable materials, which factored into how the bids were assessed. We will discuss and champion these and other approaches at our "Perspectives on the Future of Construction" conference, which is planned for 2022 (see → project box "Construction Conference 2022 - a Look at the Future of Construction").

We have also spearheaded activities in this area outside of Germany, with one example being our involvement in the "klimaaktiv pakt" in Austria. The "klimaaktiv pakt" climate protection initiative was launched by the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology. BUWOG has been involved in the initiative for many years. A new agreement was signed in 2021 with targets set out for 2030. BUWOG is the only company in the Austrian real estate sector to have signed up to the agreement. It is now committed to reducing its carbon emissions by 55% by 2030, compared to the base year of 2005. The initiative is largely focused on modernizing our existing portfolio, but does also set some criteria for new construction projects. It primarily addresses insulation refurbishments, improvements in the efficiency of heating systems and switching to more eco-friendly energy sources. All of BUWOG's construction projects meet the Niedrigstenergiehaus standard. Additional measures like adding green spaces and providing environmentally friendly mobility solutions (charging stations, rental bikes, parking spaces for bicycles) will also improve the sustainability of our neighborhoods (see → Reducing CO₂ in the Real Estate Portfolio/ **Energy-efficient Modernization**). The 25th floor of the Marina Tower project in Vienna's second district was completed in January 2021. The project will provide around 500 new residential units spread over 40 floors by spring 2022. The project was awarded the klimaaktiv GOLD certificate in 2020 due to the high quality of its construction materials and products, the fact that a comprehensive product and chemical management system is being used throughout the construction project, and the planned use of geothermal energy for heating, cooling and electricity due to the building's proximity to the Danube. In Sweden, we aim for new buildings to meet the requirements of the Miljöbyggnad Silver Standard set by the Sweden Green Building Council. With this in mind we provide our employees with annual training courses on energy and environmental topics.

Following the end of the previous pact, a new agreement was signed in 2021 with

# targets set out for 2030

Making sure that construction site management are aware of their responsibilities has a key role to play in ensuring that construction and refurbishment are done in a sustainable way. The German Occupational Safety and Health Act (ArbSchG) requires us to meet a high standard when it comes to protecting the health of our employees and promoting their well-being (see → Promoting Health and Safety), as do employer's liability insurance associations and the German Employee Secondment Act. Construction site compliance with these requirements is ensured by a safety and health coordinator to ensure that these requirements are implemented and complied with as completely as possible. Our general contractors and subcontractors are also subject to strict safety standards. These include measures like risk assessments and discussions, on-site safety inspections, rules about fencing, warning signs, protective clothing and safety equipment, in addition to an obligation to provide regular training for all employees (see → Promoting Health and Safety).

The German Waste Management Act (AWG) sets strict requirements for waste management. Mistakes like failing to sort waste properly carry the risk of significant financial penalties. While we are committed to sustainability in its own right, this provides an additional financial incentive to make sure that we have a responsible approach to waste management. That is why we include the cost of disposal in our tenders as standard in Germany and Austria.

Designing the residential environment and preserving biodiversity are top priorities for us (see → project box "Living on the Water: 52° Nord Sponge City"). Numerous buildings feature green spaces that serve as natural habitats for flora and fauna at ground level, on roofs or on facades. In addition to the optical effects, these green spaces also offer a practical added value, for example, by slowing the flow of rainwater into the partially overburdened municipal sewage system and by making a considerable contribution to the microclimate, especially by preventing heat from building up in densely populated urban areas. Attention is also paid to conserving resources and protecting the environment during the construction phase, too (see → Biodiversity).

# Construction Conference 2022 – a Look at the Future of Construction

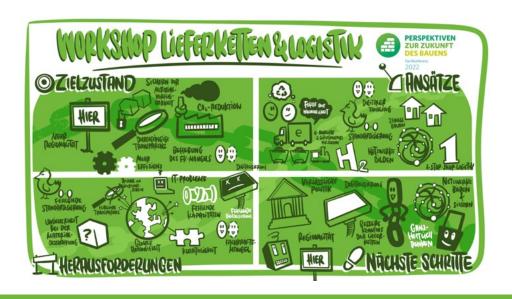
The construction and real estate sector has a major social responsibility when it comes to climate protection targets. Vonovia intends to live up to its responsibility. On March 23, 2022, we organized a conference in partnership with the Fraunhofer Alliance on  $\Box$  "A look at the future of construction" at the Berlin Design Offices. This event gave us the opportunity to discuss the topics of environmentally friendly and resource-conserving construction with various stakeholders.

The conference laid the foundations for discourse surrounding sustainable construction. In four workshops, players from the worlds of business, science and politics tackled the topics of production of building materials, renewable resources, recycling, and supply chains and logistics. Particular attention was paid to the question of pricing policy, the availability of raw materials, and the conflict between sustainability and economic efficiency. After all, the future of construction ultimately needs to be both sustainable and affordable for buyers and tenants.

In the coming months, the working groups will begin to develop detailed proposals and approaches for the climate-friendly future of construction, which will be presented at the final event on November 23, 2022, at Futurium Berlin.



The workshops provided a forum for intensive discussion and collaboration in small groups.



We also implement a number of measures to protect species that are under threat. We make sure to follow all of the relevant statutory requirements in this area and ensure that surveys are done at an early stage of the planning process for every refurbishment or construction project to determine whether the project poses a threat or an issue to any protected plant or animal species in the area. We follow a strict statutory framework - which includes the German Federal Nature Conservation Act (BNatSchG) in Germany and the Federal Environmental Impact Assessment Act (UVP-G-200) in Austria - in addition to municipal building regulations and our internal planning guidelines (such as those related to protecting woodland areas and incorporating protected species into the planning process) in order to protect any species in the immediate vicinity of the construction site that may be under threat. We commission all surveys required under biodiversity legislation whenever we buy new areas or plots of land for construction purposes. Whenever a survey uncovers a protected species, we implement a wide range of measures to ensure that this species is protected from the impact of any construction or refurbishment projects. We do this in close partnership with specialists and the relevant authorities. Whenever necessary, we purchase land that can be used as an alternative habitat for endangered animal populations or for planting. Biodiversity surveys were used as part of the planning phase for the new development project on the grounds of the former freight yard at Brunsbütteler Damm in Berlin-Spandau. This project was scheduled to provide 320 units for students, families and older people by 2024. Before work began, we relocated a colony of sand lizards - which are strictly protected - to an appropriate habitat in partnership with the authorities in Spandau. In 2021, BUWOG worked closely together with the Nature Conservation Office in Leipzig to commission a survey of potentially protected species in advance of the construction of the Lößniger Straße neighborhood in the city's Bayerischer Bahnhof district. BUWOG secured a 5.5 hectare area near the Hainer Lake as an alternative biotope for the population of green toads that were found by the survey. Their new habitat is due to be ready in spring 2022.

#### **Sustainable Materials and Products**

Using sustainable materials and products for construction, refurbishment and demolition work has an impact on the climate and the environment and is becoming increasingly important. Sustainable construction methods such as modular timber or hybrid methods have a lower energy consumption and reduced carbon emissions over their entire life cycle (see → project box "850 Cubic Meters of Wood for Sustainable Construction"). We also use mineral wool for insulation. which has less of an impact on the environment than commonly used polystyrene-based insulation. It is also important that buildings can be broken back down into their original constituent parts so that these materials can be fed back into the circular economy. Timber structures that are held together with screws and joints perform very well in this regard. In early 2021, we took our next step forward in this area by becoming a partner of Madaster, an initiative developing a global registry of materials. The online platform functions as a library of materials. We use it to manage data about the materials that go into our properties and create material passports. These documents contain information about the quality, origin and location of the materials used in a particular building. They also provide an insight into the financial value of a building and its materials, while also giving users an indication of the value of these materials in the circular economy.

# Madaster partner

since early 2021 – an initiative to develop a global cadastre for materials

Raw materials in buildings are valuable resources that can be reused in various different ways. In the future, we therefore want to include the life cycle costs (production, operation, maintenance, refurbishment, reclamation) of components and products in the product manual and planning guidelines for procurement purposes. Our product manual for Germany and Austria will have a section on the circular economy. The product manual will also be made binding for our partners in these countries and form part of our contracts with them. As part of our Building Procurement Days, we run training workshops to inform our employees about the importance of sustainability in their day-to-day work and in the supply chain.



# 850 Cubic Meters of Wood for Sustainable Construction

Prefabricated modules are delivered during the construction period.

Sixty new apartments and a commercial unit have been constructed at Amendestraße on the corner of Herbststraße in Berlin using resource-conserving wooden modular construction systems. On October 5, 2021, the new building was opened after only 18 months of construction. Three-quarters of the apartments are barrier-free.

Timber construction offers numerous advantages when it comes to sustainability. The production process generates less than 30% of the carbon emissions of conventional solid construction. In addition, the timber also permanently absorbs  $CO_2$  – approximately one ton per cubic meter. It is also possible to deconstruct and reuse a large number of individual parts from the timber construction. Finally, the tenants benefit from a pleasant and healthy indoor atmosphere.

Modular construction approaches can cut construction time by a long way, and can drastically reduce the impact that the construction has on the residents of the surrounding buildings. In addition to the specific environmental advantages of modular timber construction, the project at Amendestraße incorporates yet more features of sustainable building design. The complex has been equipped with an air-to-water heat pump, a photovoltaic system and a green roof. Rainwater will largely be allowed to seep into the property grounds and will not be released into the sewer system.

"Modular construction combines several pioneering elements of sustainable construction ranging from building materials to energy supply. In addition to saving resources, we were also able to save valuable time with the modular construction approach and see the process used at Amendestraße as a recipe for success that we plan to apply to other similar projects in the future." Sebastian Jung, Managing Director – East, Vonovia

-30%

carbon emissions with timber construction compared to conventional solid construction

Vonovia is committed to using environmentally sound raw materials and production methods, as well as sustainable and recyclable construction materials. We also drive product innovation in these areas where necessary. Sustainability and cost-effectiveness are not mutually exclusive. We prioritize energy-efficient electrical equipment in all of our

renovation and construction projects, and are working hard to use more products that are made from secondary raw materials. In response to the increasingly tight rules surrounding the disposal of materials, we avoid using hazardous or toxic substances from the outset. Whenever the disposal of hazardous or contaminated building materials

requires careful professional handling, we expect all of our service providers to comply with applicable legislation and regulations, particularly those concerning health and safety and environmental protection. Our own employees also receive regular training on these subjects.

## Social and Environmental Standards in the Supply Chain

**GRI** 308-1, 308-2

We take the entire life cycle of new construction and refurbishment projects into consideration; this extends to how we procure materials from suppliers. That's why compliance with social and environmental standards in the supply chain is an important topic for us and part of our sustainability strategy. We are also committed to making sure that all of our construction and refurbishment projects meet health and safety standards. Vonovia manages its partnerships with external partners and service providers through the Business Partner Code, its general terms and conditions of purchasing and individual agreements as part of its structured approach to supplier management. In this way we ensure compliance with all current European procurement standards and regulations. In 2022, we will focus on enhancing our processes in light of the requirements of the Duty of Care in Supply Chains Act (LkSG), which will be applicable in Germany as of January 1, 2023. This process also includes the review of existing guidelines, codes and processes, e.g., the aforementioned Declaration of Respect for Human Rights. An additional benchmark here will be the applicability of the minimum safeguards criteria of the EU Taxonomy. In Sweden, we defined environmental criteria that will be binding for all new suppliers from 2021 onwards. These criteria will be made binding for all other suppliers from 2025 onwards.

The Vonovia partner portal plays a vital role in our sustainable approach to supplier management. Social and environmental standards are integrated into the processes we use to select and approve suppliers (see → Sustainable Relationships With Business Partners). We require our partners to observe and apply our product manual in order to promote the procurement of sustainable materials. We also communicate with them regularly about ecologically friendly construction materials. More about compliance with labor and social standards in the supply chain can be found under → Respect for and Promotion of Human Rights.

# Society and Customers

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# Society and Contribution to Urban Development



**GRI** 103-1, 103-2, 103-3, 203-1 **UNGC** Principle 1







The social megatrends of climate change, urbanization and demographic change set out the scope for change within

#### Disclosure

coronavirus pandemic.

which the housing industry needs to find services and solutions. From ensuring that our portfolio is climate-neutral (see ♀ Environmental Issues), increasing levels of urbanization and tenants having an increasingly wide range of requirements (see → Fairly Priced Housing) to our aging society (see → Needs-based Housing (Demographic Change)), the challenges that we face are becoming increasingly complex and intertwined. That is why the environment in which people live and their neighborhoods are becoming an increasingly important focus area for the residential real estate industry – a trend that has been given significant impetus by the

Quality of living has more and more to do with what is going on at a neighborhood level; people want to identify with where they live and feel at ease in their environment. A balanced mix of rented apartments and condominiums, the integration of small businesses, attractive open and communal spaces, the availability of local suppliers, modern transport connections and mobility, good educational facilities, and social and cultural facilities – the interplay of all these factors promotes diverse and vibrant neighborhoods. This is an aspect that is also becoming increasingly important to tenants. In this way, the real estate industry is also partaking in urban development and is able to contribute its own expertise to the design processes through direct contact with tenants.

Neighborhoods bring together stakeholders with different interests, including through varied ownership and tenant structures. In order to feel at home, many people want to be involved in decisions that will have an impact on the environment around their homes. Participation measures are therefore becoming increasingly important to strengthen acceptance for community development and the associated, often long-term, measures. Our experience shows that participation processes can achieve even better results by incorporating new and varying points of view and by inte-

HIGHLIGHTS 202

- > Holistic orientation of future community development projects while taking our environmental and social responsibilities seriously
- > Portfolio segmentation aligned with neighborhood approach: around 70% of portfolio located in areas that make up "urban quarters"
- > 15 community development projects with around 8,600 residential units under implementation (investment volume of  $\epsilon$  61.6 million), 20 more in the pipeline
- > Internal knowledge management for neighborhoods (Neighborhood Academy and Vonovia Neighborhood Guide)
- > Urgent assistance totaling over € 400,000 provided in response to catastrophic flooding in Germany, employees involved directly
- > Grants for social/cultural projects and facilities of around € 1.5 million

grating them into decision-making processes. The complexity and probability of not being able to fulfill all stakeholder wishes equally also increases.

Focusing on providing holistic solutions at a neighborhood level makes it possible to align urban development specifically with social and ecological needs and to exploit synergies. Innovative solutions that enable buildings to be networked together are especially important if climate protection targets are to be achieved. Social cohesion can only be achieved by looking outside of one's own front door and towards the neighborhood.

The social infrastructure of a neighborhood therefore plays an important role in social cohesion. A cohesive civil society with all its social and cultural offerings creates space for diversity and contributes significantly to the attractiveness and liveliness of neighborhoods. Social institutions and civic engagement support exchange and thus successful coexistence in local communities.

It is of the utmost importance that tenants, residents and local politicians have a high level of acceptance for all changes made in neighborhoods. This goes without saying when you consider that we help shape people's immediate living environment. We need to inform residents about planned measures in good time so that they have an opportunity to voice their worries and concerns. Involving people in the community provides us with a significant opportunity to improve our neighborhoods together and make a positive contribution to cohesion. Open and transparent communication with municipal authorities also has a crucial role to play in the success of urban development projects.

We have identified Community Development and Contribution to Infrastructure as a material topic. This is complemented by the important topics of integration, diversity and social cohesion, involvement and participation and shaping political dialogue, all of which play an important part in our neighborhood approach. The section below provides information about our approach, the steps we have taken to integrate this approach into our processes and our targets and measures related to the material topic.

## Community Development and Contribution to Infrastructure

GRI 103-1, 103-2, 103-3, 203-1

#### Our Approach

Vonovia offers people a home in its neighborhoods. The company's aim is for them to be able to find a good neighborhood in which they feel comfortable and which brings different generations together. We are convinced that a livable neighborhood strengthens tenant loyalty and increases the value of residential properties.

As a result, thinking and acting in terms of neighborhoods is our main approach to finding solutions which will drive the economic, environmental and social development of our urban housing portfolios. With this in mind, Vonovia takes a holistic perspective on neighborhoods and develops infrastructure that is tailored to suit the individual challenges of each neighborhood, that is geared toward the needs of the tenants and that combines structural design, climate protection and services to meet social needs.

We analyzed and restructured our portfolio structure in 2021 in order to increase our focus on the neighborhood approach. Around 70% of Vonovia's portfolio is located in neighborhood settings - equivalent to 586 urban quarters, each containing 430 residential units on average. In this context, we understand an urban quarter - as per the definition of the German Housing and Real Estate Companies (GdW) - as a visually coherent urban development structure that is seen by its residents as a distinct area and that represents an area for action in which the residential real estate company can make a difference and see positive effects. It comprises at least 150 apartments. In addition to the urban quarters, there are unique strategic properties (urban clusters) to which the options for action of the strategy and business model are adaptively applied (see **☐** The Company).

In our view, the development of these interconnected portfolios offers a great deal of potential for shaping construction and society and contributing to sustainable community development. Vonovia neighborhoods are always aligned with clear climate protection requirements (see  $\rightarrow$  Reducing CO<sub>2</sub> in the Real Estate Portfolio/Energy-efficient Modernization) and social compatibility (see  $\rightarrow$  Fairly Priced Housing). This adds joined-up approaches and new technology-based options to the range of measures that we have available to shape our portfolio while creating places that are fit for the future from both a social and environmental perspective. Synergy effects truly release their potential within the neighborhood approach.

Derived from this, we develop a coordinated neighborhood-specific infrastructure that combines structural design, climate protection and social offerings. Our climate protection goals will only be within reach when we take a systematic neighborhood approach. It is particularly important that we take a holistic approach in this area so that we can ensure that our neighborhoods are developed in line with our climate plan and aligned with climate protection requirements. Strategies that bring together power, heat and mobility in our neighborhoods have a decisive role to play in ensuring the success of our energy transition (see → Reducing CO<sub>2</sub> in the Real Estate Portfolio/Energy-efficient Modernization). This kind of strategy opens up entirely new ways to expand our range of services and trial new technologies like sector coupling (see → Renewable Energies and Energy Mix). We are creating new living space in conurbations through densification and adding extra stories (see → Sustainable Construction and Refurbishment).

We also take responsibility for designing our neighborhoods. We are expanding the infrastructure to meet local needs. To achieve this, we are creating space for local suppliers, medical services or educational institutions, social facilities and services, and creative artists (see → Inclusion, Diversity and Social Cohesion). Modern mobility options such as the creation of a charging infrastructure for e-mobility (see → Renewable Energies and Energy Mix), car sharing options, or the expansion of parking spaces for bicycles are also important parts of community development that must be considered from the outset. Vonovia also designs residential environments, playgrounds and green spaces in such a way that they strengthen participation and urban coexistence, enhance the quality of living and are also sustainable from an ecological perspective (see → Biodiversity).

As a matter of principle, we want to implement community development projects in such a way that the acceptance of construction measures and other projects increases. We therefore actively involve our tenants in the associated intensive coordination processes (see > Involvement and Participation). We also cooperate with authorities and other municipal and social institutions and exchange ideas with political representatives. Through discussions with the stakeholders involved, we gather experience and incorporate it into our concepts. Only if they are supported by everyone can we implement them successfully and promote value creation.

#### **Organizational Focus**

Community development projects are planned and managed on a decentralized basis via the regions. The regional managers for the West, North, East and South regions are responsible for the respective projects and implement them along with their regional managers.

The Chief Rental Officer (CRO) is the Management Board member responsible for the property management business in the North, East, South and West business areas, as well as for customer service and portfolio and tenant management. We are increasingly using our own neighborhood developers for on-site implementation. This allows us to address any specific issues as and when they arise.

The regions are also responsible for managing the investment and participation formats, as well as corporate citizenship and philanthropy. This approach is supplemented, also from a quality assurance perspective, by centrally managed supporting measures via corporate communications.

#### **Objectives and Measures**

Our goal is to create housing that meets people's needs and is worth living in. To this end, we carry out community development projects in cooperation with cities and municipalities and initiate further projects every year with the aim of improving the infrastructure, realizing integrated energy concepts and dealing with urban development issues.

In concrete terms, this means, depending on demand:

- > Creating affordable homes by means of vertical expansion, densification and new construction
- > Implementing modernization in a socially responsible manner
- > Optimizing the energy requirements of our portfolio
- > Thinking about and designing the residential environment in an integrated way, including recreational areas, playgrounds, and holistic mobility concepts
- > Local suppliers, daycare centers, doctors and social and cultural institutions
- > Promoting dialogue with tenants and stakeholders in order to encourage acceptance and influence

In 2021, there were 15 community development projects in the operational implementation stage across Germany comprising approx. 8,600 residential units as part of the community development investment program. These include various key components such as energy-efficiency refurbishments, constructing new homes, and measures to design an appealing residential environment. These are supported by additional social services, aspects pertaining to urban development and necessary infrastructure measures. These projects generally run for a period spanning several years. In 2021 Vonovia invested  $\epsilon$  61.6 million into

# Integration and Coworking in Bremen Commercial Units



Vonovia has temporarily rented out two vacant floors of the building at Bürgermeister-Smidt-Straße 47 in Bremen. Two associations each have an area of approximately 250 m<sup>2</sup> available. The Afrika-Netzwerk Bremen e. V. has established a new location on the second floor of the building. The site is being used as office space, while also serving as an intercultural community center and meeting point. Bremen is home to a large African community. The association is using the center as a space where citizens of Bremen with and without African backgrounds can come together - a place for cultural exchange and integration. The Bremen College of the Arts started using the second floor as a coworking space after the area it was previously using had to close due to the coronavirus pandemic. The space has provided a space for students to come together and work on projects in the fields of design, art and digital media since September 2021. The temporary leases were arranged through the agency ZwischenZeitZentrale (ZZZ). Both groups are paying competitive rent. Since March 2010, ZZZ has arranged far more than 400 projects like this one, all of which involve using vacant properties to harness good ideas.

"Afrika-Netzwerk
Bremen and the coworking space are great, inclusive and young. We're thrilled to have them as our tenants."

Timm Tebbe,
Vonovia Regional Manager
for Bremen

From left to right: Oliver Hasemann (ZZZ ZwischenZeitZentrale Bremen), Eric Patzer (Vonovia Bremen), Daniel Schnier (ZZZ ZwischenZeitZentrale Bremen), Julian Eßig (ZZZ ZwischenZeitZentrale Bremen) and Dustin Sherman (coworking space tenant).



15 community development projects. As part of the further development of our investment strategy, some 20 neighborhoods in 2022 will be analyzed in terms of their environmental performance and social megatrends before being extensively prepared.

15 community development projects with

# approx. 8,600 residential units

in the operational implementation stage as part of the community development investment program

In 2021, Vonovia invested

## € 61.6 million

in 15 community development projects

Environmental and social aspects go hand in hand within our neighborhood approach. Vonovia is equally committed to both aspects and to promoting social interaction in the local community. Measures to strengthen shared living only become manageable and effective through the neighborhood approach. This is a process involving city and municipal authorities as well as our tenants in order to jointly develop solutions for the neighborhood. It uses various instruments and cooperation initiatives to achieve this, e.g., by making premises available, establishing services, neighborhood meet-ups and daycare centers hand-in-hand with cooperation partners that focus on the greater good (see

→ project box "Integration and Coworking in Bremen Commercial Units").

In Austria, we set up community development schemes where necessary, which will support every new neighborhood until its structures have been fully established. We also support social and technical infrastructure through financial contributions.

Another aspect of community development projects is the promotion of modern mobility concepts such as e-mobility. For example, e-charging stations give our customers the opportunity to switch to an electric car, and car sharing options allow them to do without their own car altogether. This not only has a positive impact on the climate, but also reduces costs for our customers and strengthens their relationship with Vonovia, while also increasing land values in our neighborhoods by reducing the amount of land devoted to parking. In terms of e-mobility, this comprised the measures for 2021 detailed below – which will be gradually rolled out in our neighborhoods over the next few years:

- > Reducing car parking spaces and installing bicycle parking spaces and bicycle garages for e-bikes
- > Expanding car and bike sharing services (including for e-vehicles)
- > Providing connections to public transportation
- > Promoting electromobility, e.g., by installing charging stations for cars and e-bikes

# Car sharing locations

in Berlin, Dieburg,
Dresden, Frankfurt am Main,
and Vienna

According to our internal specifications, charging stations must always be pre-installed when modernizing existing buildings or constructing new buildings. Around 30% of our new construction projects completed in 2021 already feature charging stations. On average, each newly built apartment currently has 1.7 parking spaces for bicycles, and the closest public transport connection can be reached on foot in less than four minutes.

The residential environment plays a particularly key role in the community development measures implemented by Vonovia. New green spaces and playgrounds, as well as socially designed community centers outside the buildings can create real added value for tenants. Particularly in urban environments, the issue of spaces for relaxation is becoming an increasingly important factor in terms of how people assess quality of life (see → project box "Kennedy Garden: Shell of 'Lavandula' & 'Orchidea' Completed"). We make a positive contribution to social development through projects such as establishing community gardens. In 2021, we were able to establish wildflower meadows and insect habitats in numerous locations (see → Biodiversity).

# Kennedy Garden: Shell of "Lavandula" & "Orchidea" Completed

The KENNEDY GARDEN project team at the topping out ceremony for Lavandula and

In the 14th district of Vienna, just a few minutes on foot from the Kennedy Bridge, BUWOG is building a striking new residential environment: the KENNEDY GARDEN. The project will provide a wide range of rented and owner-occupied apartments, with a focus on environmental and social sustainability. A total of 512 units will be built by early 2023, divided between six different units. The topping out ceremony for the Orchidea (124 rental apartments built as part of the Vienna Housing Initiative) and Lavandula (114 privately financed rental apartments) units were held in October 2021.

The apartments in the Kennedy Garden development were designed to suit a range of modern lifestyles and requirements, with different spaces set up to meet the needs of families and smaller households. Part of the development is designed specifically with single parents in mind, and offers suitable homes and common areas.



The development is set to be ready at the start of 2023 and features large green areas with a wide variety of vegetation. These will have a positive impact on the microclimate and biodiversity in the city. Cycle parks and charging stations will also be included. The development has excellent links to the public transport network and cycle paths, making it ideal for tenants who value a sustainable lifestyle. Energy-efficient heat generation, which at the same time protects the environment and keeps residents' heating costs low, is provided by a condensing gas boiler system and two heat pumps, which are also supplied with electricity via photovoltaic panels. All of these interconnected measures work together to facilitate a pioneering form of green living at the KENNEDY GARDEN development. The project is already Greenpass certified, and is now looking to achieve "klimaaktiv" certification as well.



Green spaces and roofs ensure a pleasant microclimate throughout the



Community development calls for complex teamwork and extensive knowledge of all employees to ensure successful implementation on location. From an organizational standpoint, the challenge of the neighborhood approach lies in reflecting networked thought and action within the organizational structure, facilitating knowledge transfer and establishing the processes necessary for this to happen. Here, Vonovia follows the approach of providing central support services for local decision-makers and actors and ensuring the transfer of best practice.

Thanks to the Neighborhood Academy, an internal training and networking format launched in 2021 as acapacity building project, employees can be qualified as community development experts. This certification program provides a solid foundation for an active and innovative culture of learning and development at Vonovia which will ensure the success of our community development projects. Over the twelve-month program, internal and external experts in the economy and research topics will run virtual live sessions and workshops on a variety of subjects. Participants will also be able to learn on their own time to get a well-rounded understanding of community development. The Neighborhood Academy not only teaches innovative knowledge, but also focuses on the training of specific skills. At the same time, it enables the systematic sharing of experiences among participants. The program was designed by the Human Resources department in partnership with the European Training Center for the Housing and Real Estate Industry (EBZ) in Bochum. Participants have provided extremely positive feedback about the program (see

→ project box "Vonovia Neighborhood Academy: Ourt Innovative Expert Program"). The Neighborhood Academy is looking forward to its second intake in mid-2022.

In recent years, Vonovia has acquired a significant amount of experience in running large community development projects. It has employees with an extensive amount of expertise around the country. Specifically for the topic of community development, and in addition to the Neighborhood Academy, we developed a knowledge platform – the Vonovia Neighborhood Guide – in the year under review to assist with knowledge transfer and networking within the organization. The platform provides articles and guides from internal experts so that all Vonovia employees can benefit from the company's previous experience. The topics covered range from societal megatrends through to building solutions and pointers for handling social projects. The platform already covers over 50 topics. We add and update information on a regular basis.

In order to further spearhead research in the field of community development and living, Vonovia sponsors a foundation professorship – held by Prof. Dr. Jan Üblacker – at the EBZ Business School University of Applied Sciences in Bochum, thereby firmly embedding the neighborhood perspective in the education of EBZ students.

# Vonovia Neighborhood Academy

continued following extremely positive feedback in 2021

# Vonovia Neighborhood Academy: Our Innovative Expert Program

In order to incorporate our strategy of focusing on forward-looking and sustainable neighborhoods into our training and education offerings, we have developed an expert program covering all aspects of community development.

In March 2021, 19 participants selected from across a range of neighborhood-related company departments began a year-long program. This unique course combines tried-and-true expertise with new, innovative approaches. As the program is conducted internally and was designed in close collaboration between the HR department and other specialist and company departments, the course contents can be flexibly adjusted to fit new requirements in the realm of community development and the participants' needs. It specifically focuses on encouraging cross-departmental collaboration within the company as well as providing access to external experts from the worlds of business and science.

Following completion of the course, participants remain affiliated with the program as alumni. Regular communication with future participants as well as systematic knowledge management helps to create a new culture of continuous learning and networking – both internally and with external speakers and contributors. Nearly 20 participants have once again been nominated for the next course, which will begin in May 2022.



"We started the Neighborhood Academy to cultivate a culture of learning that encourages employees to discuss neighborhood development-related topics and share what they know."

Nina Manns, HR Specialist



The weather in Bochum was so good on June 15-16, 2021, that the first training sessions were



## Inclusion, Diversity and Social Cohesion

**GRI** 406-1, 413-1

Through promotions and support measures in the social sphere, Vonovia creates value for those who call our neighborhoods home. These include people from a wide variety of cultural backgrounds. Vonovia welcomed new tenants from over 150 nations in 2021, as well as from a wide variety of age groups and social structures.

Demand-oriented and functional cooperation with social institutions, cities, municipalities, and residential real estate companies underpins the holistic neighborhood concept and serves as a strategic building block for community development. The promotional activities provided by Vonovia, which address specific local needs, focus on social and ecological measures that strengthen coexistence in the neighborhood, contribute to greater diversity and promote a vibrant living environment (see  $\Rightarrow$  project box "Community Development for and with Tenants"). This is how we summarize it in our ♀ Group Donations & Sponsorship Policy. This defines the framework for action within which those responsible can select and implement suitable collaborations based on needs. The freedom to make decisions on site is important in order to be able to react to the respective challenges in a targeted manner. A wide range of measures and community development programs are emerging as a result, matching the diversity of society itself. These include:

- > Establishing neighborhood meetings and daycare centers
- > Cooperating with social institutions and sponsors as well as municipal neighborhood managers
- > Providing premises and services in kind for social and cultural institutions
- > Promoting cultural diversity by supporting small art projects
- > Helping those in need, e.g., by supporting food banks
- > Personal commitment of employees, e.g., for clean-up and planting campaigns

At  $\Box$  http://vonovia.de/vor-ort we showcase a variety of projects that demonstrate our engagement.

## >8,700 m<sup>2</sup>

of rent-free or discounted commercial space for social institutions (in Germany)

# Around € 1.5 million

invested in social/cultural projects (in Germany)

#### **2021 Projects and Partnerships (Examples):**

- > Cultural district festival in Hamburg-Wilhelmsburg: Support for the home-grown intercultural district festival 48h Wilhelmsburg. Embedded into the existing partnership with our neighborhood meet-up.
- > Neighborhood meet-up in Ulm: Funding and free venue for the neighborhood meet-up of the Phoenix Wiblingen e. V. association
- > Adventure playground in Bielefeld-Baumheide: Funding and volunteers (construction supervisors/ carpenters) provided for a new sheep pen in the adventure playground in the neighborhood
- > Storefront cinema in Dresden: An empty unit on the Dresden Hauptstrasse was made available free of charge to the Kino über Land e. V. association to screen short films from around the world.
- > Support for vaccination drives in Bremen: Financial support for mobile vaccination teams provided by the German Red Cross and St John Ambulance in Bremen
- > Center for women and girls in Hanover-Garbsen: Support for individual advice schemes and groups for women and young girls run by ecumenical social project NEULAND
- > Residential environment design in Leipzig: Assisted a housing community with the creation of a shared garden by providing construction materials and soil, in addition to creating an insect habitat and flower meadow
- > Soccer field upgrade in Hamburg: Construction of an amateur soccer field along with new seating, a wildflower meadow and insect habitat in order to provide people in the neighborhood with more opportunities to meet each other and exercise

# Community Development for and with Tenants

Interview with Jorunn Rådberg, Head of Social Sustainability at Victoriahem, Sweden

## What is the need for a Social Sustainability unit?

Jorunn Rådberg – Our goal is to offer our tenants safe and comfortable homes in which they can build their lives. The Swedish police classify a total of 61 areas throughout the country as vulnerable areas based on negative socioeconomic factors such as high unemployment and crime rates as well as lower social integration. As we have apartments in 30 of these areas, we want to do our part in making them safer and more socially sustainable. Our long-term goal is to make sure that our properties no longer rank in the highest category of vulnerability.

#### How do you work toward this goal?

JR - In each neighborhood, we try to strengthen the local society by connecting with important actors who play a role for the every-day life of our tenants. On an organi-



zational level, this includes official authorities and institutions, such as the police and social services, as well as libraries and schools. On the next level, we aim to support various networks in the neighborhoods to strengthen the collective efficacy by supporting neighborhood networks between people within the area. Finally, we also address people's individual situations.

As every neighborhood is faced with a unique set of challenges, we have to be flexible in our approach and base our work on their individual needs. This is why our neighborhood managers are so fundamentally important. They know the neighborhoods, their particularities and the people who live there. From our central office in Stockholm, my team and I work to coordinate ways in which we can help our neighborhood managers.

The projects that we're involved in are as diverse as our neighborhoods themselves. For instance, we support immigrant women to serve as positive role models, we offer summer jobs to local youth and we organize a number of sporting activities, to name but a few.

#### How do you measure the success of these projects?

JR - At the heart of our work is the long-term plan to advance social sustainability. In and of itself, this is hard to put into numbers on a year-to-year basis. However, there are some quantifiable indicators. Falling crime rates, less vandalism in our neighborhoods, less violence, fewer students dropping out of school, more young people joining the work force - these are indicators that tell us that we're successful with our work. And, of course, the police's classification system of the areas throughout Sweden serves as an official benchmark. When one of our neighborhoods is moved to a lower rank of social vulnerability, it's a great confirmation that we're on the right track. This is not to say that predicting the success of a given project is easy. We've learned that some ideas start out promisingly, but just don't pan out in the way that we had hoped for. On the other hand, some projects that we might have been rather unsure of end up yielding great results in the most unexpected ways. The most important lesson that we've learned is that we work with people and for people, so there will always be an element of surprise.

Rhineland-Palatinate and North Rhine-Westphalia were hit by catastrophic flooding in summer 2021 – the flooding was particularly devastating in the Ahr Valley and ruined the lives of countless people. Vonovia was quick to react. Our colleagues on the ground started (sometimes voluntarily) taking reports about damage and providing accommodation in the first days of the catastrophe. The employees of Vonovia Technical Service (VTS) and the residential environment services team were heavily involved in the cleanup process. Vonovia received almost 300 requests for alternative accommodation in the Rhineland region as a result of the flooding. In order to provide rapid assistance, we simplified the rental process, waived deposits, credit checks and the first rental payment, and gave tenants the right to terminate their lease with immediate effect. We used our social media channels to quickly spread the word about the help that we were offering. We also helped people get back on their feet by donating equipment, particularly boilers, which were urgently needed. The company invested a total of around € 400,000 in cleaning up residential units and providing alternative accommodation.

**Around € 400,000** 

invested in the restoration of homes and alternative accommodation following flooding

In the reporting year, we expanded our support services to include another special cooperation. In the coming years, we will be sponsoring Silbernetz e. V., who offer a nationwide telephone hotline to combat loneliness in old age. We inform our tenants about the offer, thereby creating contacts, providing the association with rooms for training courses and supporting the association's infrastructure with an annual donation.

The funding instruments are supplemented by our foundation work, primarily within the framework of the Vonovia Stiftung (Vonovia foundation), the Vonovia Mieterstifung e. V. and "Stiftung Mensch und Wohnen". With their help, we implement support measures for the benefit of our tenants and the rental environment. We continue to support tenants facing social hardship. In 2021, our foundations' funding volume amounted to just over  $\varepsilon$  200,000.

Funding from foundations of more than

€ 200,000

## **Involvement and Participation**

Participation processes are particularly important when it comes to comprehensive construction and modernization measures. There is a legally prescribed participation process for construction projects, which we consistently adhere to. We also use comprehensive voluntary participation formats, which allow tenants to have their say, and through which they are empowered to exert influence on the design of respective projects, for example on the topics of residential environments and parking lot design. Actively designed participation processes and citizen involvement procedures therefore begin at the planning phase. This helps us to develop collaborative solutions for the respective neighborhood, although it is sometimes several years before the actual construction work begins.

We rely on various formats such as tenant surveys, door-to-door or one-on-one meetings, tenant meetings and workshops, as well as information events and neighborhood walks. The first point of contact for people in the neighborhood expressing their concerns will continue to be the caretakers and neighborhood managers as well as our leasing offices.

Dialogue remained impacted by the coronavirus pandemic in 2021. As a result, we continued to use our alternative approach which we had implemented in 2020 – such as contacting our tenants more frequently by phone, particularly long-term and older tenants. Personal appointments also took place following consultation and in strict compliance with hygiene regulations. We have replaced large information events with neighborhood tours in small groups and video conferences. However, participation thrives when there is a low barrier to entry, which is why digital formats have (so far) reached their limits here.

## **Shaping Political Dialogue**

For information on our activities to help shape the political dialogue, see  $\rightarrow$  Stakeholder Orientation.

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tenant meetings and consultation procedures carried out despite the pandemic

#### Projects in 2021 (Examples):

- > Düsseldorf-Lichtenbroich neighborhood: As part of community development efforts, Vonovia gave more than 400 tenants the opportunity to contribute their ideas and suggestions regarding current project planning for the construction of 58 new residential units and 150 apartment buildings in online discussions and workshops.
- > **Duisburg-Hüttenheim neighborhood:** We keep tenants informed of updates in community development in a contact-free manner due to the coronavirus restrictions. As we want to take as many of the residents' requests into consideration as possible, we invite them to participate in written letters, via the tenant app, and also directly by phone.
- > **Dortmund-Westerfilde neighborhood:** New outdoor fitness facilities are to be built in the neighborhood. In order to do justice to tenants' requests, Vonovia carries out an online survey. In answer to residents' interests and needs, the neighborhood will be getting fitter.

## **Homes and Customers**

GRI 102-13, 103-1, 103-2, 103-3, 203-2 **UNGC** Principle 1









Our business activities are geared toward providing people with homes - one of their basic human needs. The needs and circumstances of our customers are just as diverse as our tenants. Each of our regional residential property markets face different challenges as well. Housing is becoming increasingly scarce, particularly in metropolitan areas, while demand shows no sign of abating. These developments are unfolding against the background of high climate protection requirements, which are particularly cost-intensive in the buildings sector. This is why, particularly when it comes to modernization projects, it is key to bear in mind what individual tenants can actually afford in order not to end up losing customers. After all, one aspect that is of fundamental importance to us is being able to offer our tenants the prospect of being able to stay in their homes in the long term. One of the biggest challenges facing us in this action area is continuing to provide a wide range of housing at fair and transparent prices while also achieving our objective of a climate-neutral property portfolio.

Affordable housing remains a burning topic in public discourse. The housing situation in major metropolitan areas like Berlin is particularly fraught: the Act on Rent Controls in the Housing Sector in Berlin ("the Berlin rent freeze"), introduced by the Berlin State Government in 2019, was declared unconstitutional by the German Federal Constitutional Court in the reporting year. A majority of voters in Berlin instructed the Berlin State Government by means of a referendum in fall 2021 to examine demands for socialization of the portfolios of major residential real estate companies in Berlin. This illustrates the urgent need for affordable housing in metropolitan areas like Berlin, and just how much pressure political decision-makers are under. It also strengthens Vonovia's commitment to providing an adequate amount of housing for all at fair prices.

Demographic change is increasing the demand for housing that meets the needs of an aging population. In Germany, the demand for senior-friendly housing will outstrip supply by around two million by 2035. In an aging society, it is

## **HIGHLIGHTS 2021**

- > Numerous cooperation agreements concluded with cities and municipalities to secure homes and fair rents
- > Average allocation of modernization costs stable at € 1.24/m<sup>2</sup>
- > Established hardship management program rolled out further and positive decisions reached for 654 out of 874 hardship cases - approx. 75%
- > Uniform standards for hardship cases in the event of modernization work developed and implemented with the German Tenants' Association and other residential real estate companies
- > Numerous projects and measures carried out under "Housing First" initiative to combat homelessness
- > Around 10,000 apartments in Germany (partially) modernized for the elderly (30% of new rentals)
- > Customer satisfaction up 4.5% on the previous year and at an all-time high
- > Customer app functionality expanded. Around 92,000 active users

crucial to enable a large number of people to live independently in their own homes for as long as possible. Maintaining and improving the quality of housing through needsbased expansion and renovation is therefore of particular importance. With this in mind, we are pushing the development of needs-based housing through maintenance, modernization, new constructions, and appropriate renovation where possible. Again and again, it becomes apparent that designing an apartment to be senior-friendly does not always have to entail the high and thus cost-intensive requirements of barrier-free design, e.g., those specified by the corresponding DIN standard. Effective solutions for older tenants can often be achieved with moderate measures that can also be implemented at low cost. We believe that we are responsible for enhancing and implementing these solutions.

Our tenants are at the center of our business activities. That is why customer satisfaction is an important measure of our success as a company. We want to be available to our clients at all times as contact persons on equal terms. The most important thing is that our tenants feel at home in their apartments and neighborhoods. Customer satisfaction is instrumental in Vonovia's success. Here, the quality of customer care and services plays a major role. Our experience tells us that availability, speed and transparency in customer service are pivotal when it comes to living up to expectations.

We defined a number of topics as absolutely material for Vonovia within the spheres of activity of homes and customers. These were fairly-priced homes, needs-based housing, action with regard to demographic change, customer satisfaction and service quality. Other important topics are contributing to new builds in metropolitan areas, maintaining existing properties and holding discussions with tenants.

## **Fairly Priced Housing**

GRI 102-13, 103-1, 103-2, 103-3, 203-2

#### **Our Approach**

Vonovia's core business is the provision of housing that meets everyone's needs. The fundamental challenge for us involves being able to provide a supply of housing at fair and transparent prices while at the same time achieving a climate-neutral housing stock. We believe that social responsibility and the transparency of our rents are two of our most important levers in this context. By further expanding our core business through letting and new construction, we make a substantial contribution to easing the current situation on housing markets. Our rental prices are based on local rent prices, and, if available, on certified rent indices. In our view, regulatory interventions in housing markets are necessary and conducive to the achievement of our objectives.

We also partner with cities and municipalities to offer subsidized and independently financed homes for people on low incomes and are responding to location-specific challenges with services tailored to needs (see → project box "Frankfurt and Vonovia Working Together for Climate-Friendly Housing at Fair Prices"). In Germany, around 10% of our housing is currently price-linked. In order to protect low-income tenants, we enter into individual agreements for rent-controlled homes. This secures our existing rents and plays into widerreaching social agreements. We are concluding more and more wide-ranging agreements with cities and municipal authorities in Frankfurt, Berlin, Cologne, Munich and elsewhere. The use of public subsidies - now and in the future also helps us to make existing and new housing affordable for our tenants and at the same time to implement climate protection measures. In this way, we can contribute to a balanced tenant structure and social heterogeneity in our neighborhoods.

Agreements with cities and municipalities to



and secure existing rents

# Frankfurt and Vonovia Working Together for Climate-Friendly Housing at Fair Prices



"We think longterm and want our tenants to stay with us."

> Arnd Fittkau, Vonovia SE, CRO

A first for Frankfurt: In 2021, the City agreed regulations with Vonovia for sustainable living at fair prices. This is the first arrangement of this kind between the City of Frankfurt and a private company. In March 2021, the "Agreement on climatefriendly and affordable housing in Frankfurt" was signed by Vonovia CRO Arnd Fittkau and Peter Feldmann, Mayor of Frankfurt-am-Main. It aims to alleviate the current situation for tenants in Frankfurt's housing market and to strengthen the social aspects of housing. Concrete measures and targets have therefore been drawn up. Vonovia will limit the average increases in existing rents to the level of inflation and to one percent for three years. It has also been agreed that new construction projects will include 30% subsidized housing. The two partners are also jointly involved in efforts to help people who are affected by or at risk of homelessness. In the long term, Vonovia will provide up to one hundred apartments for these people, who will receive additional assistance through the city's social welfare offerings. The agreement also stipulates measures to ease the financial burden on tenants when modernization measures are carried out. For the duration of the pandemic, tenants also have access to generous provisions for the payment of rent.

**Continuation of** 

# voluntary commitments

to modernization and a guarantee to protect people over the age of 70

We will retain our voluntary commitment in Germany to cap the modernization costs passed on to tenants at  $\varepsilon$  2/m². In the event that a disproportionately large amount of CO<sub>2</sub> – and therefore further heating costs for tenants – can be saved, it is possible to balance the objectives in favor of the climate-protection measures on a project-by-project basis. We remain committed to providing special protection for people over 70 years of age who are affected by regular rent increases. We do not want our older tenants to worry about their financial security or losing their home due to their rent going up.

In Sweden, Victoriahem works with tenant associations to reach agreements on issues such as changes in rent charges. Issues like these are discussed and agreed on in negotiations. Rent increases occur annually, between 1–2%, or after modernization to a higher standard.

We also provide tailored assistance through our hardship management program to ensure that our customers have access to affordable housing over the long term. All tenants have the opportunity to claim hardship due to exceptional circumstances in the case of energy modernizations. The team – which comprises five hardship managers working at the headquarters and 25 neighborhood managers working on site – looks at each individual case and works with the tenant to find an individual solution. Our goal is always to ensure that people can stay in their homes and that their homes remain affordable.

#### **Team of**

# 5 hardship managers and 25 neighborhood managers

#### work with tenants to find individual solutions

We also offer solutions for particularly vulnerable people such as refugees and the homeless. We do this, for example, within the framework of special agreements with state governments, cities and municipalities as well as other residential real estate companies. We do this because we are convinced that social cohesion only comes about through successful integration and inclusion. And this begins at home.

#### **Organizational Focus**

Rent structures and agreements with municipalities are managed in a decentralized manner via the regions. The Chief Rental Officer (CRO) is the Management Board member responsible for the property management business in the North, East, South and West business areas, as well as for customer service and portfolio management. The individual measures are planned and coordinated in the Portfolio Management department. Hardship management is the responsibility of Portfolio Management. Since 2019, it has been supported by community developers in the individual regions in order to provide even better support for the tenants concerned.

#### **Objectives & Measures**

In times where housing is increasingly hard to come by, one of the ways in which we live up to our responsibility to society is by providing homes at transparent and fair prices to suit different budgets. The results of our new customer survey show that we provide suitable homes for a wide variety of people. We have customers from over 150 nations, and 35,322 new tenancy agreements were signed in 2021 in Germany. Around half of these customers are single, while the average household size is 1.8 people. Students and trainees accounted for 9% of all new tenancy agreements in 2021. Notably, 47% of new tenants are between 18 and 30 years old. The top three locations for new tenants in 2021 were Dresden, Berlin and Dortmund.

# More than 150 nations

make up our diverse clientele

We have sent a number of signals that we want to be involved in changing the situation in Berlin, our second most popular location for new rentals, by bringing politicians, society and residential real estate companies together. In a first step, we waived potential claims for rental back payments arising from the ruling of the German Federal Constitutional Court on the Berlin rent freeze. In concert with Deutsche Wohnen, we have also gone a step further with our "Future and Social Pact for Housing" by selling 14,750 apartments to public housing companies, voluntarily limiting our rental increases for the next five years in Berlin and committing to build 13,000 new apartments. We are playing an active role in solving the housing shortage in Berlin.

"Future and Social Pact for Housing"

This includes the sale of 14,750 apartments to public housing companies in Berlin

In 2020, we entered into a framework agreement with the city of Munich to ensure that affordable apartments are rented long-term. The partnership will make affordable housing available in two different ways: firstly by renting homes to people who are eligible for subsidized housing, and secondly by providing suitable housing for employees of the city on a lower income. These and other partnerships with municipalities and cities – including the establishment of an independent mediation body in Dresden – demonstrate that Vonovia strives to work in partnership with politicians and society to tackle municipal challenges and that the company is taking specific societal and social challenges into account within its planning.

Our rents saw a moderate and socially responsible increase, underlining our commitment to providing homes for all. The average rent in the reporting year was  $\in$  7.38/m² (in Germany  $\in$  7.19/m²) throughout the Group. We respect all regulatory provisions such as rent ceilings and rent indices. The average modernization cost allocation in the reporting year was  $\in$  1.24/m² – identical to the previous year. This shows that we still had quite a bit of room to maneuver in 2021, in light of our commitment to limit the modernization cost allocation to  $\in$  2/m².

€ 7.19

average rent price per m<sup>2</sup> (in Germany)

€ 1.24/m<sup>2</sup>

average allocation of modernization costs (in Germany)

Nevertheless, there will always be people who are unable to handle rent increases caused by modernization costs, for a number of different reasons. Our well-established hardship management team works with tenants to find individual solutions for their financial and personal difficulties. This can include deferring or reducing rent increases. In the case of personal hardship, this may also mean that we help tenants to move house, rearrange their furniture or find alternative accommodation. The hardship team can be reached directly via a dedicated telephone number. This ensures that our customers have fixed contact persons. When they receive notification of a case of hardship, the hardship managers perform an initial preliminary review before handing the case over to the community managers for further processing, who then personally contact the tenants concerned. During the reporting year, 874 customers submitted hardship cases to Vonovia, of which 654 were approved - a rate of 75%.

# Approval rate: 75%

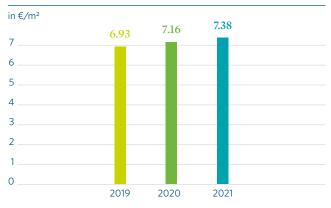
874 customers have submitted hardship cases to Vonovia, of which 654 were approved

In 2021, we also cooperated with the German Tenants' Association and other housing companies to agree on consistent standards for dealing with hardship cases in the event of modernization work, applying a common guidance framework. As such, we are contributing to greater reliability and transparency in cases of hardship.

We continued our over-70s scheme to protect older tenants. Since 2019, the scheme has provided individual help for over 500 people off the back of just under 1,000 inquiries. 161 of the 316 inquiries submitted in the reporting year were approved.

The coronavirus pandemic has made it even clearer what a difference our approach to hardship can make for our tenants. Customers need to feel safe within their own four walls, now more than ever. Vonovia has issued a guarantee that nobody will lose their apartment, if they encounter difficulties paying their rent due to the coronavirus pandemic. This guarantee remained in effect in 2021, even though we have seen a slight downturn in outstanding rent.

#### **Vonovia Rent Growth Since 2019**



Increase from 2018 figure to 2019 particularly due to the acquisition of Hembla; rents in Sweden only partially comparable with rents in Germany and Austria due to varying rental systems, which sometimes include heating costs; excl. Deutsche Wohnen.

People who are homeless or at risk of becoming homeless are a particularly vulnerable group in society. That is why we continued to engage in a number of projects and measures in this area in the reporting year. Our "Housing First" approach ensures that homeless people are provided with a standard tenancy agreement with all of the normal rights and obligations, regardless of any mental or physical health conditions that they might have. It is only after this that they are offered help in order to get some stability into their lives. Vonovia provides homes as part of a wide range of partnerships. We have an agreement with the Sozialdiensten katholischer Frauen und Männer and Cologne Drogenhilfe. The latter provide assisted living for addicts and run events that provide information about addiction prevention. A joint case management team was set up in order to provide tenants with information about addictive behavior and other conflicts, in addition to being a port of call for additional help. In Bonn, we work with the Verein Frauen to help women as part of the "A Home at Last" initiative in North Rhine-Westphalia. We entered into a similar partnership with the city of Leipzig at the beginning of 2022. This followed on from our efforts to provide housing for a homeless project, which began in November 2021.

Implementation of and support for

# numerous projects and measures

in line with the "Housing First" approach

We provided new facilities in a building bought by BUWOG to "Haus Strohhalm", a homeless facility in Berlin Treptow-Köpenick, after their old location – which was owned by the SPI association had to close. We made sure that the SPI association was closely involved in the planning process for the building, which has space for over 44 people. The construction project took their requirements into account.

We support other groups in need of protection. In Berlin, we work in partnership with the Hestia e.V association. We will make 15 homes available to this association over the next four years for women and children fleeing from violent situations.

We continue to provide homes for refugees. Currently, in 2022, we are providing housing for people who have been displaced from Ukraine due to the ongoing war, and are trying to do this as quickly and unbureaucratically as possible. To do this, we are using a tool that proved its worth during the 2015/2016 refugee crisis. We established the house map platform that local authorities could use to access housing from a variety of residential real estate companies. We will also be using this extremely successful format in 2022. We are also giving our craftsmen the opportunity and the materials to set up homes for refugees, even if these homes are not in our portfolio.

## Needs-based Housing (Demographic Change)

**GRI** 103-1, 103-2, 103-3

### **Our Approach**

The demand for senior-friendly housing is expected to outstrip supply in Germany by around two million by 2035. In an aging society, we want to provide people with the opportunity to live on their own terms and in their own homes for as long as possible. We want to use our varied property portfolio to meet the changing needs of our customers and the requirements of real estate markets, particularly the need for accessible homes and homes that are suitable for elderly tenants. In the event that architectural conditions no longer support independent living, it is important to Vonovia that the barrier to accessing further care services is low. This underlines the importance of our neighborhood-based approach. Making sure that homes meet people's needs doesn't stop at their door; we also need to consider their everyday requirements and the wider social context.

By taking a consistent approach to making sure that our construction and refurbishment projects meet people's needs, we can respond to demographic changes by providing our older tenants with homes that are adequate and affordable. We are investigating the possibility of partial modernization in order to minimize costs and disruption. New leases in particular offer us a good window of opportunity to carry out appropriate renovation measures. In Austria, all new buildings are constructed in such a way that they can be adapted to meet future needs. In doing so, we are following the respective building regulations and OIB guidelines as well as other standards, using these as a basis for planning barrier-free and accessible new buildings.

In addition, we are continuously expanding our range of social services and partnerships and our investments in the social infrastructure of our neighborhoods in order to meet the needs of our tenants.

### Organizational Focus

Responsibility for the senior-friendly housing programs lies with the Chief Rental Officer (CRO). The structure of the refurbishment program is managed centrally and is implemented via the regions. Changes affecting the structural condition of our buildings are usually conducted by the technical service department.

In Austria, needs-based refurbishments and renovations are carried out in close coordination between the technical real estate management and regional/asset management. In the development stage, we determine and define the location and project-specific housing breakdown, as well as their features and fittings, in advance.

#### **Objectives & Measures**

We want our tenants to stay safe and healthy in their homes over the long term. We therefore pursue the target of modernizing 30% of newly rented apartments every year so that they meet the demands of an aging society. To this end, we review existing buildings to determine their potential for accessibility. We mostly achieve this with partial modernizations, which is our way of keeping the product affordable. This allows us to retrofit apartments one by one, ideally according to the stage of life of our customers, in line with their needs.

When planning construction and modernization work, we also consider adapting the size of apartments. Homes that are completely barrier-free, according to German industry standard DIN 18040-2, are only necessary in very rare cases. Rather, a small number of measures, such as the fitting of non-slip flooring or flush-to-floor showers, are often sufficient to significantly increase the level of living comfort in old age. In 2021, 10,000 apartments were (partially) modernized to make them more accessible and senior-friendly. That accounts for around 30% of new tenancies in Germany during the reporting year.

# Around 10,000 apartments

in Germany (partially) modernized for the elderly (approx. 30% of new rentals)

In addition to structural measures, the social infrastructure in the neighborhood also plays a key role. As such, we are also investing in alternative forms of housing with more extensive support services. This is in addition to building extensions suitable for senior citizens and the disabled. This also includes care and support services for older tenants in cooperation with social institutions and service providers, such as specialized communities for tenants with dementia and establishing neighborhood meetups. Vonovia has signed a partnership with the Humanika Group, a provider of alternative housing for people who need support in North Rhine-Westphalia. The companies aim to roll out their well-established and successful range of communities for tenants with dementia from Essen to Rhineland. Some projects are already in the planning phase. Our new Alboingärten neighborhood in Berlin will provide 15 homes for people with mental impairments. AWO pro:mensch gGmbH is responsible for the management of the therapeutic community. We provide space for communities for artists to collaborate in the Eltingviertel area of Essen free of charge,

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

# Approx. 30%

Proportion of accessible (partially) modernized

newly rented apartments in Germany

as well as an area for people to meet and discuss in the district, all in the context of a holistic approach to neighborhood development (see  $\rightarrow$  project box "Eltingviertel Does Art").

Our new Alboingärten neighborhood in Berlin will provide

## 15 homes

for people with mental impairments

We want to talk to our customers and target groups so that we can understand their requirements better. This is why we remained in contact with women's organizations in Austria, as well as initiatives that advocate senior-friendly homes, e.g., JUNO, ROSA and Kolokation.

# Eltingviertel Does Art

The Eltingviertel district in the north of Essen, not far from the city center and the university, used to have to contend with a weak social structure, vandalism, a high vacancy rate, outdated housing infrastructure, and high levels of tenant fluctuation until Vonovia launched its first large-scale community development project here in 2015. Today, the neighborhood is a sought-after residential area, and some are already hoping that it will become a cultural capital within Essen. In addition to the energy-efficient modernization of the buildings and the residential environment, the Vonovia team has paid special attention to networking and joint activities with stakeholders on site - from municipal and social institutions to public institutions and private and business people.







"Our dedication has had an impact and spurred other property owners in the neighborhood to invest as well. The Eltingviertel has experienced a 180-degree image shift – today, the district is home to art and culture." Ralf Feuersenger, Regional Manager, Essen-Mitte.

The idea of revitalizing the neighborhood with social and art projects played a key role from the very beginning. Residents can now enjoy a variety of art projects, ranging from "herrmann" studio pieces to a sculpture in the neighborhood square (winner of the Vonovia sculpture competition). Something very special happened in the reporting period. In 2021, the Museum Folkwang and the Neue Essener Kunstverein launched the "Neue Folkwang Residence" program. Every year, two grants are awarded to international artists for a five-month residency in Essen. The grant includes a solo exhibition at the Neue Essener Kunstverein or the Museum Folkwang. In October 2021, the first two recipients of the grant, Olu Ogunnaike from London and Min Yoon from Vienna, moved into Vonovia's new residential and studio building in the Eltingviertel district. The program is made possible by the association Folkwang-Museumsverein and the Olbricht Foundation, and is financed by Vonovia.

## Contribution to New Build Projects in Metropolitan Areas

In recent years, the influx into cities has increased the pressure on residential property markets, especially in metropolitan areas. By building new housing in urban and central locations, Vonovia aims to help reduce this pressure. To this end, in recent years we focused even more intensely on developing entire neighborhoods (see  $\rightarrow$  Community Development and Contribution to Infrastructure). As part of this we are stepping up our development activities and, in addition

to conventional methods, are focusing on a modular approach to new construction work in the case of densification and roof extensions in order to create new living space quickly and efficiently (see \$\mathbb{P}\text{Portfolio}\$ in the Development Business\*). Densification continues to be of great importance to Vonovia, as it enables us to identify previously unused potential in our spaces and optimize their use. Furthermore, when it comes to forward-looking mobility concepts, we are reducing car parking spaces wherever possible and freeing up the space for alternative uses, such as homes and green areas.

The development business of the BUWOG companies is spearheading new construction projects. We refrain from speculating with building land and place increasing emphasis on implementing ecologically, socially and economically sustainable projects that meet the needs of all of our stakeholders in the long term.

For more on the topic of new construction, see  $\rightarrow$  Sustainable Construction and Development.

### Maintenance of Existing Properties **GRI** 416-1

We want our tenants to be healthy and safe, and to stay with us over the long term. That is why Vonovia aims to manage its portfolio efficiently and to make it optimal and livable for customers. With this in mind, preserving the fabric of buildings and ensuring the quality of the living space itself are of great importance.

We define maintenance as all regular and long-term planned economic expenditure with the goal of preserving the fabric of the building. We do not offload these costs onto rent prices. More information can be found in the 2021 Annual Report \$\mathbb{G}\$ Group FFO.

#### **Investment in Maintenance**

in € million	2020	2021	Change in %
Expenses for maintenance	321.1	332.7	3.6
Capitalized maintenance	270.9	333.7	23.2
Maintenance services total	592.0	666.4	12.6
Intensity of maintenance (€/m²)	22.31	25.18	12.9

The focus is on ensuring the health and safety of tenants both inside and outside their homes. We reduce the risk of danger by complying with all the requirements for road safety and fire protection, and by preventing and combating mold growth and legionella outbreaks. This includes, for example, measures such as preparing fire protection concepts, regular checks on building safety in compliance with building regulations, or preventing and controlling mold growth – for example by providing information on proper ventilation, but also by reacting quickly in the event of a hazard.

In the residential environment, we ensure structural facilities are maintained and improved, for example by repairing and replacing playground equipment, conducting regular inspections of the open spaces, and ensuring that tree care work is carried out in a professionally correct and safe manner (see  $\rightarrow$  Safety Inspections).

#### **Customer Satisfaction and Service Quality**

**GRI** 103-1, 103-2, 103-3

#### **Our Approach**

Customer satisfaction is instrumental in the success of a company. For us, this is mainly associated with the question of whether our tenants feel at home in their apartments and residential environments and whether they feel that they are treated fairly by us as their landlord. Here, the quality of customer care and services plays a major role. Our experience shows that accessibility, speed and transparency in service are decisive factors for meeting customer expectations.

Our customer service team plays a particularly important role as the primary point of contact for our customers. Our customer service department's main task is to provide fast and uncomplicated assistance and to support our customers in a wide variety of matters. More than 800 employees working in two service centers in Essen (previously in Duisburg) and Dresden are available to our customers through a variety of channels. By choosing these two locations, we also want to express our commitment to two of the large housing portfolios that Vonovia has – in Dresden and in the Ruhr region.

Direct contact with our tenants and getting them involved, e.g., in community developments, are valuable opportunities for us to learn about their wants and make them a part of our decision-making process. On site, caretakers and our own craftsmen, for example, take care of our tenants' concerns. This allows us to ensure a fast and reliable service and increase acceptance of our measures. We also conduct regular surveys to ascertain the wishes and needs of our customers. The related customer satisfaction index (CSI) was included in the sustainability performance index in 2020 as one of six non-financial performance indicators. It therefore has an impact on the remuneration of our top management and the Management Board.

In addition to personal contact, the digitalization of our services that address customer concerns is an important field for us in order to make accessibility even faster, more convenient, and flexible. This is why we are continuing to expand self-service functions such as our "My Vonovia" customer app. Protecting the data and privacy of our customers is always our top priority, because this is the only way we can build trust. In this sense, every Vonovia employee is called upon to actively contribute to improving customer satisfaction and to fulfilling the company's service promise.

#### **Organizational Focus**

Responsibility for the customer service center lies with the CRO. While customer satisfaction is assigned to the central customer service center in strategic terms, it affects all customer-facing operating departments and is ensured by each and every Vonovia employee. Designing and controlling the customer app and the customer portal is also the responsibility of the central customer service center.

In Austria, responsibility for customer satisfaction lies with the quality management team, who report the results of the customer surveys to the departments and to management on an ongoing basis and derive appropriate measures from this.

#### **Objectives & Measures**

The goal of Vonovia is to increase customer satisfaction by continuously improving its services and products.

Customer satisfaction is measured using a quarterly customer survey and is reflected in the Customer Satisfaction Index (CSI). The survey includes aspects such as image, loyalty and overall satisfaction. We use it to collect feedback on customer care, maintenance and modernization measures, the residential building and outdoor facilities, and necessary repairs. The results are then analyzed by all of our operational departments. Measures are then derived based on customer feedback, implemented, and reviewed to further improve service quality.

In 2021, Vonovia reached an all-time high in the CSI. This success is further reflected in an award given by analysis institute AktivBo, which Vonovia received in the fiscal year under review as the company with the largest improvement in the service index. The aim is to cement this positive trend on a permanent basis. BUWOG in Austria and Victoriahem in Sweden also carry out regular customer satisfaction surveys. Looking forward, we aim to introduce a harmonized CSI in Germany, Sweden and Austria in order to be able to compare the results of the individual surveys.

In Austria, we also use customer satisfaction surveys as a tool, primarily online for all new construction projects in Vienna and for 5–10% of the portfolio every year. The results are discussed directly with the departments in order to develop suggestions for improvement. Measures are always implemented using a feedback loop and include a report to management. We create transparency for our customers with regard to the results of these measures, e.g., by posting notices or allowing them to contact our community developers personally. Based on customer feedback and the optimization potential identified in the process of handling complaints, we also develop training courses for employees in Austria to enhance their skills in dealing with customers.

## **Customer satisfaction**

also represents a fundamental benchmark for business processes in Austria and Sweden

In Sweden, too, customer satisfaction is a fundamental benchmark for all business processes. The aim is to achieve ongoing positive development in the CSI. Indicators such as the vacancy rate and tenant fluctuation support our analyses in this regard.

To achieve our customer satisfaction target and to be able to offer our customers a transparent and fast service, we are continuously working on improving our customer service. This includes direct contact with tenants, expanding self-service functions in order to provide round-the-clock service and, in Austria, improving the website to include customer-relevant topics, and designing barrier-free customer communication. In 2021, we considerably increased the telephone availability of our customer services team, thereby significantly reducing waiting times.

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

+4.5%

**Customer Satisfaction Index** 

CSI (in Germany)

# Availability considerably increased,

thereby significantly reducing waiting times

In order to further boost flexibility and speed, we are pressing ahead with the digitalization of our service functions. The key channel in this regard is the tenant app, which has already been downloaded more than 325,000 times and is used actively by some 92,000 users. In 2021, we added two new features to the app - the digital lease agreement and the apartment search (see → project box "Digital Tenant Service: **Expanding the Customer App"**). As a result, the entire customer journey can now be shown in the app: from searching for an apartment and scheduling viewing appointments through to digital contract drafting, ancillary expense bills and all other topics for existing customers. In the future, the app will be expanded to include additional features such as consumption data that can be read remotely. The systematic implementation of digital solutions also helps the environment and has already enabled us to save more than a million sheets of paper.

Tenant app

downloaded 325,000 times and used actively by around 92,000 people

Due to the fact that a large proportion of our customer service processes have been digitalized, we are still able to provide a high level of service despite the ongoing coronavirus pandemic.

Our customer service team addresses a wide range of concerns, the majority being everyday questions related to tenancy agreements and heating and operating cost statements. We also provide a wide range of special promotions for our customers. For example, telephone campaigns were conducted to offer elderly tenants assistance with shopping or to organize meal deliveries.

The knowledge database for employees in Austria went live in the fall of 2021 as planned. This will help these employees to provide assistance for customers that is even more efficient and effective in order to contribute to customer satisfaction. We intend to launch a customer platform for owners and tenants in Austria in spring 2022.

During the reporting year, the customer service team relocated from Duisburg to Essen in response to the requests provided by colleagues in the employee survey. The new site provides a wide range of meeting and training rooms, is easier to divide up and has better acoustics and better air. The team in Dresden also moved, but stayed within the city.

## Digital Tenant Service: Expanding the Customer App



The Vonovia tenant app: 92,000 active users and downloaded 325,000 times



The "My Vonovia" customer app was previously only available to Vonovia tenants, but now it has two new functions (apartment search and lease agreement signing) that make it attractive to new customers. The customer app was also expanded as planned in 2021 to include an energy feature. From now on, our tenants can view and update their energy and gas contracts or book relevant offers.

New Vonovia tenants who want a digital contract can simply upload all documentation relevant to their contracts. Standing orders for rent payments can also be set up directly within the app. Apartment hunters can create a profile and will be notified of apartments fitting their requirements. Viewings can also be quickly and easily booked via the app.

Digital contract solutions are in demand and are desired by the majority of people in Germany. The success of the new lease agreement feature on our customer app is making Vonovia a digital pioneer.

# Employees

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## Corporate Culture and Employees



**GRI** 102-8, 103-1, 103-2, 103-3, 401-1, 403-2, 403-4, 403-5, 403-6, 404-1, 405-1, 405-2 **UNGC** Principle 3, Principle 6





#### Disclosure

In order to keep their fingers on the pulse, residential real estate companies need to view themselves as service providers for customers - both on a day-to-day basis and in the context of fixing issues and getting tradespeople in to take care of their tenants' concerns. Any company which understands this and fully incorporates this approach into how they do business will have satisfied customers. And satisfied customers make for successful companies. That's why it's so important for a residential real estate company to have highly motivated and properly qualified employees it's our employees who are responsible for ensuring that the company is successful by focusing on the customer and providing an excellent level of service, day in and day out. Vonovia can only make full use of this potential by providing jobs which are attractive and keep talent within the company.

We have been hit particularly hard by a skills shortage on the labor market, particularly when it comes to the manual trades and technical positions. Vonovia uses its own tradespeople to handle a wide variety of tasks. As a result, falling behind in the competition for qualified staff and managers is a significant risk for us. If we are unable to fill vacant positions in the company, we would be forced to procure these services on the market at a more expensive price. This would restrict our ability to grow as a company, while also having the potential to have a negative impact on the satisfaction of our customers due to their receiving a relatively poor level of service. The battle for talent has also made it easier for qualified staff and managers to pick and choose where they want to work from a variety of different options.

This makes it even more important for Vonovia to position itself as an attractive and modern employer in order to make the pool of highly qualified applicants as large as possible.

What staff want from their employer is changing – issues like work-life balance, flexible working and benefits are becoming increasingly important, particularly for the younger generation. Like any other employer, Vonovia needs to

#### **HIGHLIGHTS 2021**

- > The training rate at Vonovia in Germany is above average at 5.0%
- > Around 1,900 new recruits, despite and during the coronavirus pandemic
- > Digitalization process ongoing
- > Training and education programs focusing on HR management
- > Increase in employee satisfaction by 5 percentage points
- > Gender pay gap at management level at < 4%

accommodate these changing priorities. The coronavirus pandemic has unleashed rapid change in society and the world of business – the last two years have seen a steady stream of new challenges. This has increased the importance of security and reliability in the eyes of employees, along with a desire to work for a company which values sustainability.

The sustainability debate has also made us all much more aware of the importance of people being treated equally, regardless of their socio-economic background, gender, faith or ethnicity. Diversity is now one of the main issues which people take into consideration when choosing an employer. Companies have to respond to this change in society – this involves transforming their corporate culture while also taking action to support potentially disadvantaged groups.

We want to be an employer which provides its employees with ways to develop, both personally and professionally. We are committed to having a workforce which reflects the social, cultural and linguistic diversity of our society. We want to be a place that fosters new ideas and approaches that benefit society. This will allow us to live up to the expectations of our current workforce while also meeting the needs of the next generation.

Vonovia has identified Attractiveness as an Employer and our Approach to Diversity and Equal Opportunities as material topics. Our approaches to these topics are described below, along with the steps that we are taking to embed them into how the company operates. We will also address some relevant targets and measures. We have also identified some other topics that are important to us:

Training and Personal Development, Fair and Appreciative Remuneration and Health and Safety. These areas also affect how attractive we are as an employer.

#### Attractiveness as an Employer

GRI 103-1, 103-2, 103-3, 401-1, 401-3

#### Our Approach

It is important to us to have motivated employees with relevant qualifications who focus on the needs of their customers as part of their everyday work. As an employer, we want to provide our staff with a home away from home that is professional – in the truest sense of the word. That is why we foster a values-based corporate culture which is flexible enough to meet the varied needs of our workforce. Values like appreciation, performance, responsibility and team spirit guide everything that we do as a company and how we treat each other. Because our employees play an essential role in the company achieving its objectives, we want to retain them over the long term.

Vonovia is committed to pursuing an insourcing strategy. This means that, instead of relying on external service providers, we use our own employees to handle a wide variety of tasks – from caretaker work and garden maintenance through to modernization. By taking this approach, we can offer our tenants a high level of quality, efficiency and reliability. All of these tasks are managed and organized by the Vonovia Technical Service (VTS) and our residential neighborhood organization. One risk involved in this approach is that we always need a lot of staff. This is a particularly pressing issue when it comes to finding people skilled in manual trades, as they are in high demand throughout the housing industry. However, this risk is significantly outweighed by the benefits of taking precisely this approach. However, this issue does make it even more important for

the company to be an attractive employee for both potential applicants and its current workforce.

That is why we take a holistic approach to HR planning: targeted recruiting is complemented by ongoing training and education, talent promotion and fair remuneration and extensive social benefits to promote employee loyalty. We are convinced that mutual trust is the best foundation for a long-term partnership. We appreciate and reciprocate the trust that employees place in us. We are also constantly on the lookout for ways in which we can shape the ongoing digitalization of our structures and processes for the benefit of our staff. Vonovia invested in this area in 2021 specifically for the purpose of providing its employees with more flexibility and security. Thanks to this, hybrid working models have been instituted in a number of departments and divisions on the basis of the works agreement on mobile working. We are also implementing harmonization measures to provide structures that are clear and reliable, with the aim of facilitating transparent communication with our employees.

1,907

new employees despite coronavirus pandemic

The sustained financial stability of our company throughout the pandemic has strengthened its position as an employer that you can rely on, even in uncertain times. We had more than 1,900 new hires in the 2021 fiscal year, and avoided making any staff redundancies due to the pandemic. The overwhelming majority of our employees – over 90% – have a permanent employment contract. We do not outsource jobs to other countries and only employ workers on a temporary basis in exceptional cases. We also had no need to use the works agreements on company shutdowns and short-time working in 2021.

>90%

of Vonovia employees have a permanent employment contract

All of our efforts are built on a solid foundation. We are committed to upholding international working standards and statutory regulations as the minimum standard for our workplace. Our \( \frac{1}{2} \) Declaration of Respect for Human Rights, published by the Management Board in 2020, specifically spells out our commitment to meeting global human rights standards. This Declaration also applies to our subsidiaries. Neither we nor any of our partners tolerate forced or child labor under any circumstances (see → Respect for and Promotion of Human Rights). We also make sure to comply with all relevant legislation in Germany, Austria and Sweden. We make sure that all changes to the law are reflected in our processes. Our  $\blacksquare$  Code of Conduct, provides clear expectations for how the company and its employees are expected to behave. Vonovia is committed to the core labor standards of the International Labour Organization (ILO) in all areas, particularly with regard to freedom and rights of association. We aim to ensure that applicable laws (e.g. individual and collective labor laws), are complied with at all our sites. This includes protecting our employees' right to codetermination. We are committed to fostering a trusting and constructive exchange between management and employees in all of Vonovia's business units through channels like works councils. Employees are also free to associate themselves with trade unions and to exercise their freedom of association in accordance with the law.

#### **Organizational Focus**

At Vonovia, the CEO is responsible for the company's human resources work, which has been established centrally as a shared service within the HR department (previously known as the HR Management department). In 2021, the shared services approach was transformed into a HR business partner model, which is further developed on an ongoing basis.

Austria and Sweden have their own HR departments. Austria reports to the HR department in Germany via dotted-line reporting, whereas Sweden is still not firmly established in the reporting line. Here, monitoring and reporting takes place as and when required. The Head of HR discusses developments with the CEO on a regular basis. The objectives and focus of HR work are developed in collaboration with the Management Board and are then cascaded down throughout the organization.

#### **Objectives and Measures**

The happiness of our employees is extremely important to us. We would therefore like to empirically record and safeguard this. For this purpose, we regularly conduct employee satisfaction surveys. In 2021, we used an external service provider to conduct a comprehensive survey of employees in Germany, Austria and Sweden. This made it possible to expand the most recent survey (conducted in 2019) to the entire Group. The survey contains questions on five dimensions that are of particular importance for our company: credibility, respect, fairness, pride and team spirit (see → project box "Group-wide Employee Survey").

The results of the employee survey bolster the success of the measures taken in the previous year. The Group-wide response rate increased from 72% in 2019 (excluding Sweden) to 82% in 2021. Changes in the employee satisfaction level - which became a component of the Group's key non-financial performance indicator (SPI) in 2021 - will offer a regular indication of the degree to which Vonovia is an attractive employer. With this in mind, it is planned to repeat the employee satisfaction survey each year. Another key performance indicator examined by the employee survey is the extent to which employees are satisfied with Vonovia's management of the pandemic so far. 82% of employees in Germany, Austria and Sweden across the Group stated that they were very satisfied. Vonovia was certified as a "great place to work" in February 2022, reflecting all of the company's efforts to improve employee satisfaction.

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

+5

percentage points increase in employee satisfaction



## Group-wide Employee Survey

Putting things in motion together, engaging in dialogue, actively shaping and moving Vonovia forward – that is exactly what we want to achieve with our employee survey. The satisfaction of our employees is our top priority and is a decisive indicator for allowing us to assess our attractiveness as an employer. In 2021, we used an external service provider to conduct another comprehensive survey of employees in Germany, Austria and Sweden. As such, it was possible to expand on our most recent survey of the entire Group (excluding Deutsche Wohnen), which was conducted in 2019.

A lot has happened since then. Using a structured bottom-up process, we actively involved all employees in the development of measures for improvement – with great success. This was the only way we could respond to the request for an improved range of social benefits, which we have comprehensively unified and expanded following the last survey. One example is the introduction of a bike sharing program. It is clear from the results of the survey that the workforce has responded well to this – satisfaction with the social benefits offered increased by a full 15 percentage points.

76%\*

"very good place to work"

\* Answered = "strongly agree" or "largely agree"



"I am proud of the fact that we have made improvements in so many areas since 2019, and that so many of our employees took part in the process."

Rolf Buch, Vonovia SE, CEO

We also used the ongoing coronavirus pandemic as an opportunity to expand the survey. Here, we wanted to hear feedback from Vonovia employees about our crisis management so far. 83% said they were very satisfied with the company's management of the coronavirus pandemic. This is a good indicator of the fact that our testing and vaccination drives, as well as the highest possible coronavirus premium, have been well received by employees.

Another new feature of the survey is a separate questionnaire for our almost 500 trainees. We aim to constantly improve our training programs by asking targeted questions about the quality of our training, teaching relevant knowledge and skills, and working with trainers.

#### Harmonization & Digitalization

We adapted and/or redefined benefits for our workforce in Germany in 2021 to ensure that our staff are treated as equally as possible. These included the new bicycle leasing program, the employee share program and tax-free employer grants for capital formation purposes. The employee share program was also rolled out for employees in Austria during the fiscal year.

Vonovia made significant progress with its digitalization efforts in 2021 (link to (see → Digitalization of Processes). We implemented additional modules of the SAP Success Factors IT application as planned. These modules provide additional functionality in the areas of Performance & Goals, Succession & Development and Learning, while also automating processes and digitalizing content. Employees and managers now have an easy way to initiate processes themselves and access content as and when they need it, such as the training materials provided by the Vonovia Academy. Managers can now use tools to develop themselves or their teams. Our digitalization efforts have also made performance appraisals a more transparent and structured process for our employees.

We have also continued processes which make things easier for employees on a day-to-day basis. The ticketing system which was introduced at the end of 2020 has been expanded. Over 40 processes – such as requesting an employer statement – have now been digitalized. Last year also saw Vonovia implement some digital solutions in the area of document management, such as the ability to link standardized documents with employee data from the HR system. In addition to improving our flexibility as a company, these measures have also had the benefit of making work significantly easier and safer for our employees, particularly against the backdrop of the ongoing pandemic. We will continue our digitalization strategy – which includes digitalizing the remuneration planning process – in 2022.

#### Recruiting

In addition to making sure our current workforce is satisfied, we also want to attract highly qualified new talent into the company. We focused especially on addressing the shortage of qualified workers in the manual trades during the reporting year. Vonovia is committed to approaching this issue from multiple angles. We are making a special effort to attract women into the workforce, as they are still underrepresented in the manual trades. Our recruitment efforts in 2021 revolved around our \(\mathbb{T}\) "Hand aufs Werk" campaign. The purpose of this campaign was to encourage more people to join Vonovia in skilled trade occupations (see \(\rightarrow\) project box "Hand aufs Werk' Recruiting Campaign").

We are also standing shoulder to shoulder with other companies and partners in order to develop strategies which will help us all to adapt to changes in work and society. We are a founding member of the  $\[ \]$  Alliance of Opportunities, which wants to play an active role in shaping these changes. The Alliance provides a platform for representatives from the world of politics, civil society and institutions to come together and exchange ideas. The Alliance of Opportunities also runs a number of projects for exchanging and developing skilled workers.

We revised our employer branding concept in Austria, which was one of the objectives we set ourselves in the previous year. Our main goal was to position BUWOG as an attractive employer and increase the public's awareness of the company. 🖵 BUWOG's New Careers Website was launched in May 2021 with employee videos and a brand new layout. We made more use of new communication channels like careers websites and social media, and put out blog posts and videos showcasing BUWOG's credentials as an employer. We also partnered together with trade journals to publish articles about relevant topics like diversity and what goes into making a company an attractive employer. These efforts certainly seem to have been successful, as BUWOG was recognized with a number of awards during the reporting period. In addition to being acknowledged once again as a family-friendly employer by the Republic of Austria, it was recognized as a Leading Employer in 2021. The Kurier newspaper named it a Popular Employer in 2021, while trend, statista and kununu included it as a Top Employer in 2021.

## "Hand aufs Werk" Recruiting Campaign



We launched our "Hand aufs Werk" recruitment campaign on September 20, 2021 to attract craftsmen and gardeners to the company. The campaign used radio ads, targeted online advertising and testimonials to make people in 42 cities across Germany aware of all of the jobs available with Vonovia in these areas. We also set up a tailored careers portal at \$\mathbb{P}\$ hand-aufs-werk.de to make the application process easier and more attractive. The website provides clear and appealing profiles of the gardening and craftsman positions available at Vonovia. People looking for jobs can apply quickly and easily through the website. Overall, roughly 65% more applications were received during the ten-week campaign period than in the comparison period before the campaign.

"This is an outstanding campaign that makes Vonovia an extremely attractive proposition for craftsmen. Just as we hoped, we have been getting far more applications than before – the simplified application process has definitely helped." Chief Representative Konstantina Kanellopoulos.

"We are an attractive target for skilled craftsmen."

Konstantina Kanellopoulos, Chief Representative of Vonovia SE



### Approach to Diversity and Equal Opportunities

**GRI** 102-12, 103-1, 103-2, 103-3, 405-1, 405-2, 406-1

#### Our Approach

There are a number of reasons why Vonovia is committed to respecting diversity and putting it into practice. We provide homes for tenants from every background you can imagine, and employ people from over 70 different countries. We also believe that, in a complex world, diversity gives us a significant advantage over the competition. We signed the Diversity Charter in 2013 to express our conviction. We are also committed to upholding other national and international guidelines, as detailed in our Declaration of Respect for Human Rights (see Compliance and Guidelines). By treating every employee in the Group equally, we create a working environment where people are respected, tolerated and appreciated, regardless of their age, ethnic origin, nationality, gender, sexual identity, physical or mental abilities, religion, worldview, sexual orientation, social background, education or disability. Even though we conclude from this figure that we have already achieved considerable equality of opportunity and that we embrace and promote diversity within the company, we continuously institute further measures in this context and/or adapt existing measures to reflect changes in underlying conditions.

## >70 nationalities

work at Vonovia

At the top level of management, the diversity concept for the composition of the management and control bodies is set out in detail in the  $\square$  Corporate Governance Declaration.

#### National and International Guidelines

- > Core ILO norms
- > UN Global Compact
- > Diversity Charter
- > General Act on Equal Treatment (AGG)

#### **Organizational Focus**

All managers in the company are responsible for implementing and respecting our diversity and equal opportunity standards and complying with the corresponding policies on a daily basis.

#### **Objectives and Measures**

We believe that increasing the number of women in the company is particularly important, as they – chiefly due to the technical occupations in the field of skilled trades – are considerably underrepresented with a share of 28.2% of the workforce as a whole. The SPI indicator "Proportion of women in leadership roles in the first and second level below the Management Board" clearly illustrates that we take care to proactively promote women and give them opportunities to pursue leadership positions and technical occupations. When setting the target – 29% by 2024 – we were guided by the representation of women in the Group as a whole. In Austria, we were not only awarded the equalitA certification for the internal promotion of women, but also the state certification as a family-friendly company.

NEW NON-FINANCIAL PERFORMANCE METRIC 2021

28%

Proportion of women in management positions

(first and second levels below the Management Board)

Responsibility for gender equality was elevated to the Management Board during the year under review. This highlights the importance of this issue for Vonovia, both strategically and in terms of the company's ethos. In addition to taking action to increase the number of women in management positions, we also want to provide more networking opportunities for the women in our workforce. We are planning to set up networking groups to this end in the future.

The Vonovia Academy offers courses which are specially designed to provide our female employees with opportunities for professional development, such as "Women in management – what it means to be successful as a woman in leadership". In 2022, we are also planning to keep our SPI indicator "women in management positions" on a par with the previous year.

We have also revised the training course covering the General Act on Equal Treatment (AGG) in order to raise our employees' awareness of this issue. All new hires are required to complete this training course. We have also condensed and updated our training material covering discriminatory behavior. This material is closely related to the training course on our Code of Conduct, which all employees are required to complete every two years. All of these training courses are provided digitally so that they can be accessed from anywhere. We are proud that, as in previous years, there was not a single case of discriminatory behavior to report during the year under review.

## Once again zero cases

of discrimination reported

More information can be found in the  $\rightarrow$  Governance and Compliance section.

#### **Training and Personal Development**

**GRI** 404-1, 404-3

Providing training and upskilling opportunities for our employees has a major role to play in ensuring that they stay with the company over the long term. This approach also puts us in a better position to address skills shortages, while also giving our staff every chance to progress in their careers. Vonovia sees training up junior staff as an opportunity for growth, particularly when it comes to the manual trades. Providing junior employees with the skills we need them to have reduces our dependence on the wider labor market and keeps us competitive.

This year's employee survey included a separate trainee survey for the first time in order to provide us with feedback from this specific part of our workforce. We will use our findings to implement measures which will make us an even more attractive option for trainees going forward. BUWOG's program for trainees in Austria represents the first step in this process. The program was set up in January 2021 to provide training for real estate agents - with a focus on administration - and office clerks. In addition to launching workshops and training courses for managers and instructors, we have set up a number of relevant IT applications, including a knowledge database. The purpose of these measures is to ensure that trainees are provided with the best possible support during their time with the company. Five new apprentices joined the company during the reporting period, four of whom are still under the constant supervision of mentors and qualified trainers.

We don't just support junior talents while they are being trained – we prepare them for management. We are continuing to professionalize our approach to succession planning for management roles as part of our HR planning process. Vonovia also uses structured annual appraisals to give its workforce additional opportunities for development. These appraisals are held using a standardized questionnaire which is based around our mission statement. There may be changes to this next year, as Vonovia is currently working on updating the list of questions in connection with the merger with Deutsche Wohnen and other developments.

We support the career development of our high-potential employees through the Vonovia Academy and partnerships with the EBZ European Business School for Real Estate Management in Bochum and other educational establishments.

#### **Human Capital Development Programs (Selection)**

- > Talent programs "Management Talent" and "Strategy Circle"
- > Manual and technical training for "Vonovia Site Manager" qualification and other specialist courses
- > Part-time business studies courses, e.g., in property management
- > Leadership training and programs such as "Fit for Leadership" and "Basic Management Education"
- > Development of department-specific junior talent programs in customer service and elsewhere
- > Holistic development program for managers with initial management experience in a CFO role

The Vonovia Academy forms a key element of our human capital development measures. It offers employees a range of professional training which is continuously adapted to the specific needs of our departments. It provides training and coaching along with technical and leadership seminars and certified qualifications such as part-time degrees or a "Meister" in a manual trade.

#### The Pillars of the Vonovia Academy

#### Vonovia Academy

#### Training courses and specialist seminars

- > Communication and personal skills
- > Subject-specific skills
- > Methodological skills

#### Leadership

- > Training courses on specific leadership issues
- > Basic leadership training
- > Coaching

### Certified qualifications

- > Certified construction managers
- > Specialist real estate managers for residential property ownership
- > Certified real estate technicians
- > Customer service representatives for residential real estate certification
- > Residential real estate caretakers (Chamber of Industry and Commerce)

#### **Talent management**

- > Talent program
- > Potential analysis
- > Succession planning
- > Individual development plans

Human capital development tools
(annual appraisals, HR meetings/retreats, summer appraisals)

Mission statement, values and leadership philosophy

Agreement signed to facilitate the recruitment of skilled workers from Colombia (from left to right): Angi Velásquez, Head of the Colombian Labor Administration, Hans-Peter Knudsen Quevedo, Colombian Ambassador to Germany, Markus Biercher, Managing Director of International Affairs at the Federal Employment Agency.

## **Qualified Staff From Colombia**

Our search for craftsmen has taken us to South America. In order to address the acute local skills shortage, Vonovia and the Lower Saxony GalaBau Association have recruited around 50 craftsmen in Colombia as part of the Federal Employment Agency's TEAM (Trabajadores Especializados de Colombia para AleMania) project. Vonovia selected 15 electricians and eight gardeners who applied digitally during the reporting period. The new hires have been on an introductory language course in Bogota, Colombia, since January 2022. They are due to join the company in Hanover on August 1, 2022. They will all be working in the Hanover area because the Hanover Chamber of Commerce is closely involved in the partnership. The new hires will be able to transition over to permanent contracts once their training has been officially recognized and they have worked for Vonovia for a year. Agreements like these are made possible by the new Qualified Staff Immigration Act (Fachkräfteeinwanderungsgesetz), which speeds up the process of getting official recognition for an employee's previous training. Along with GalaBau, Vonovia is one of the first companies in Germany to use the placement agreement concluded by the Federal Employment Agency with Colombia to recruit electricians and gardeners.



"It is great to have this opportunity to look outside the EU for the staff we so urgently need."

Konstantina Kanellopoulos, Chief Representative of Vonovia SE

#### **Promoting Health and Safety**

GRI 403-2, 403-4, 403-5, 403-6

Vonovia uses its professional health and safety management policy to minimize potential hazards and promote a working atmosphere in order to effectively protect all employees from health risks in the workplace. We also focus on the well-being of our older employees as the shortage of qualified staff means it is becoming more and more important to ensure they remain productive. We systematically design working processes and structures that are conducive to good health as part of our corporate approach to health management. This includes a broad range of fitness and preventive health care programs.

Internal coordinators for occupational health and safety meet four times a year. These meetings are run by the company representative. Additional meetings can also be arranged on an ad hoc basis. In line with our Group policies, the Management Board is informed once a year about occupational health and safety measures and the accident figures for the previous year. Our Group Occupational Health and Safety Guideline has now been translated into English and will also be introduced in Sweden as soon as a coordinator is available.

All other measures and activities are based on risk assessments, which were updated during the year under review. Risk assessments, regular inspections and training for employees ensure that we have an effective occupational health and safety system across the Group. These measures, as well as the provision of role-specific personal protective equipment, prevent accidents and contribute to keeping our employees healthy. A range of mandatory and voluntary medical examinations are available from company physicians. Flu vaccinations, colorectal cancer examinations and advice on ergonomics in the workplace are also made available in partnership with certified external service providers. These have been extremely popular with our employees.

External safety coordinators are responsible for ensuring that our construction sites are safe to work on. We are committed to making sure that site regulations are complied with. Team meetings are held to discuss safety on construction sites. This topic is also covered as part of our TEOX training module. Our sites also meet the training quotas of the DGUV (German Social Accident Insurance) for first aiders and fire safety personnel. Additional training is provided by external providers in certain areas. Fire safety officers in the Central Technology department provide the Vonovia Technical Service with support when required. We believe that an effective approach to occupational safety involves providing appropriate personal protective equipment, running relevant safety training courses and using

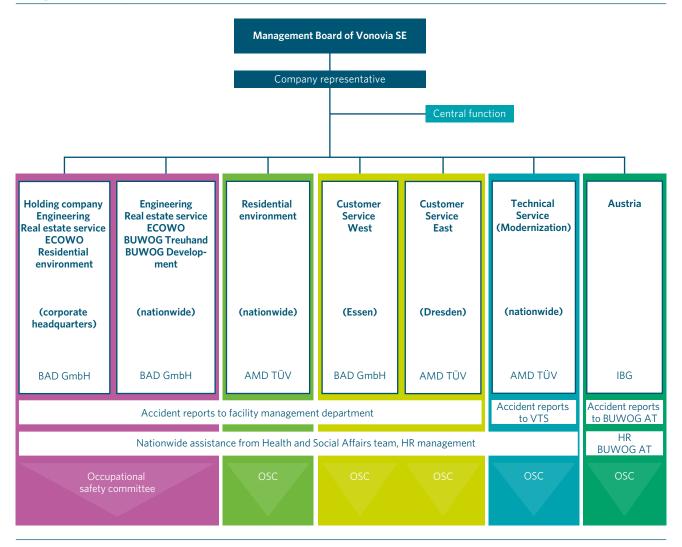
documented instructions to operate equipment and machinery, all with the ultimate aim of preventing accidents and illness. The purpose of everything that we do in this area is to reduce accidents, with a particular focus on keeping the number of work-related fatalities at zero.

We make continuous adjustments to our safety measures and communicated these to employees throughout the Group in 2021 to reflect changes in official COVID-19 safety requirements. Thanks to our efforts, the regional administration found no issues with our approach despite a number of unannounced official inspections. In addition to digital health and safety measures, we also run a number of in-person schemes. These included a number of coronavirus testing facilities, as well as vaccination and booster shot drives to keep our employees as safe as possible. We also continued to provide masks and disinfectant at all of our premises and made sure that access to buildings and workplaces was controlled. The pandemic was an enormous challenge for some areas, particularly our craftsmen's organization. Despite this, over 80% of employees across the Group said that they were very satisfied with how we have managed the pandemic.

We will continue to use a hybrid model to make employees aware of the importance of keeping themselves healthy. We provided employees with information about stress, relaxation and mindfulness, managing the psychological challenges of working at home and information about mobile working. We also provided employees with guidance about how to best set up their workspace at home. All of our measures are based on the foundation that our employees are responsible for their own health. We provide them with information about what they should do, such as using disinfectant and wearing a face mask.

We also made progress in the area of preventive health management. Under a Group works council agreement in Germany, we launched a bicycle leasing program for our employees on June 1, 2021. This program was implemented in direct response to the findings of the most recent employee survey. We received 190 orders for bicycles as soon as the scheme opened. We are also expanding our range of fitness partnerships, in addition to providing more and more information and support related to health issues. Our Intranet site now includes information about pregnancy, working for caregivers and nutrition, as well as videos to provide our employees with guidance about economics and mobile working. Our employees also have access to psychosocial counseling as part of the Employee Assistance Program.

#### Occupational Safety at Vonovia



#### Fair and Appreciative Remuneration

**GRI** 102-35

Vonovia treats all of its employees equally across the Group. Remuneration is an important factor in this context and has an impact on employee satisfaction. This indicator was included in our Sustainability Performance Index (SPI) in the year under review. The SPI incorporates environmental, social and governance-related targets. Since 2021, it has been a factor in the long-term remuneration of the Management Board and the first level of management. Employees and managers have an opportunity to set targets in annual performance appraisals. These targets have an impact on the performance-related variable remuneration component, particularly for employees in commercial roles. All employees benefit from the employee profit-sharing scheme, which is based on the extent to which the Group achieves its targets.

In 2020, we began the process of harmonizing various works agreements on special employee benefits in order to strengthen equal opportunities and a sense of solidarity within the company. We continued these measures and made progress during the year under review. All areas of the Group in Germany now have access to the employee share program, special holiday schemes and tax-free employer grants for capital formation purposes. We also introduced a new and extremely attractive employee retirement benefit plan during the year under review. This plan is available to all employees in Germany. Vonovia makes contributions to this retirement plan which go well beyond the requirements of the Company Pension Scheme Contributions Act (Betriebsrentenstärkungsgesetz). This is yet another area in which we live out our social responsibility to our employees.

The employee share program, for example, has been rolled out in Austria. The HR department in Austria prepares a

mandatory biennial salary report for the works council to ensure that all employees are treated equally regardless of their gender, age or ethnicity. The HR department also provides the works council with a salary list on a monthly basis so that any inequalities can be dealt with swiftly.

Gender pay gap at management level at



Current figures show that there is a gender pay gap at Vonovia, with female employees paid more than male employees (see → Social). This is due to the higher proportion of men in the technical occupations and a more balanced gender ratio in commercial roles. Group-wide grading has not yet been implemented due to the integration process of Deutsche Wohnen.

## Sustainable Governance

- Responsible Business Practices and Governance
- Disclosure
- Governance and Compliance
- Respect for and Promotion of Human Rights
- Stakeholder Orientation
- Information Management and Data Protection
- 103 Future Fitness and Capital Market
- Disclosure
- Appeal on the Capital Market
- **108** Sustainable and Long-term Growth
- Digitalization of Processes
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- Sustainable Relationships With Business Partners

## Responsible Business Practices and Governance



**GRI** 102-9, 102-11, 102-13, 102-16, 102-22, 102-24, 102-25, 102-31, 102-35, 102-36, 103-1, 103-2, 103-3, 207-1, 207-2, 207-3, 414-1, 414-2, 415-1

**UNGC** Principle 1, Principle 2, Principle 4, Principle 5





#### Disclosure

In order for a company to be successful, its business model has to be accepted by all relevant stakeholder groups, from its customers through to civil society and the public, investors and business partners. Managing with integrity, the sustainability of business models and the extent to which a company is perceived as living up to its social responsibilities are playing an increasingly important role. Housing is a basic human need, and is therefore always an emotional issue for our customers. Reliable, transparent and trustbased corporate governance is therefore at the heart of our business model. Securing the trust of our customers, employees and all other key stakeholders is our top priority. This requires managers who lead the company responsibly and independently in accordance with the principles of good corporate governance, and whose "tone from the top" attests to their credibility. The same applies to compliance with legislation, directives and regulations, because it is only by consistently following all of the rules - both those defined by law and those we set ourselves - that we will be seen as reliable and trustworthy.

If we fail to meet the expectations of our stakeholders in terms of responsible corporate governance, this may lead to risks that could have an impact on our business and our reputation. That's why we strive to be seen by our stakeholders as a trustworthy and reliable partner in order to strengthen the competitiveness of our company. Non-compliance with laws and regulations would also imply financial risks, such as liability risks, the risk of administrative penalties or other official sanctions.

With this in mind, we are continuously refining our corporate strategy to include stakeholder expectations and the ESG (environment, social and governance) targets defined by international standard-setters. We want to play an active role in society and engage with stakeholders on an equal

#### **HIGHLIGHTS 2021**

- > Sustainability Performance lindex (SPI) introduced and included in report for the first time in 2021 with relevance for remuneration at board and management levels: SPI 2021 target achievement of 109%
- > Supervisory Board with all 12 members fully independent
- > Independent Whistleblower Hotline
- > Revision of guidelines on whistleblowing, information security, compliance and data protection
- > Code of Conduct updated
- > Group-wide, web-based compliance risk analysis carried out

footing. Their opinions make a valuable contribution to what we do as a company. This engagement is particularly important at this time due to the general uncertainty in society surrounding the coronavirus pandemic. Without it, we would be less aware of what stakeholders are looking for. The capital market and other key stakeholders may see this as being detrimental to society.

Vonovia is committed to upholding human rights in everything that it does, not least due to the recently introduced due diligence legislation. However, the legal systems of

Germany, Austria and Sweden already provide workers with a secure framework when it comes to labor and social standards. Vonovia develops and builds homes itself, in particular via the subsidiaries of its BUWOG brand. The focus is therefore on compliance with labor and social standards on construction sites from a risk/human rights perspective.

In light of the ongoing trend of digitalization and the integration of digital working and communication processes into the world of business, the structured management of information and data is an increasingly relevant topic. This issue is particularly relevant for us as we handle sensitive corporate and personal data. It is extremely important that we keep this data safe in order to avoid a loss of reputation and potential legal fees.

We have identified **corporate governance and compliance** as a material topic in the action area Responsible Business Practices and Governance due to its relevance. Other important topics are **stakeholder orientation**, **respect and support for human rights**, **information management and data protection and privacy**.

#### **Governance and Compliance**

**GRI** 102-11, 102-13, 102-16, 102-22, 102-24, 102-25, 102-31, 102-35, 103-1, 103-2, 103-3, 205-3, 207-1, 207-2, 207-3

#### Our Approach

Changes in society and regulations are transforming the standards for modern governance. We meet the standards by being transparent with our stakeholders. Our approach to corporate governance – or business ethics – is the foundation for the company's ongoing economic success.

The primary objective of our governance strategy is to establish, implement and consistently maintain a clear, functional and transparent system of rules that meets the demands of modern society. Our Group-wide business philosophy, Code of Conduct and Business Partner Code (see  $\blacksquare$  Compliance and Guidelines): provide a framework for governance within Vonovia. The Declaration of Respect for Human Rights adopted by our Management Board sets out many of the principles that we follow in this area (see  $\blacksquare$  Attitude). We live up to this attitude with our independent Supervisory Board and our commitment to the principles of the German Corporate Governance Code (GCGC, see  $\blacksquare$  Corporate Governance Declaration).

Further information on corporate governance at Vonovia can be found in the  $\bigcirc$  **2021 Annual Report**.

A good compliance management system (CMS) makes a key contribution to sustainable company performance and value creation, and gives our customers and partners even greater security concerning their relationship with us. By adhering to compliance rules, we not only protect the integrity of employees, customers and business partners, but also shield our company from negative influences. This provides Vonovia with the foundation it needs to act and to be perceived as a reliable and trustworthy partner.

That's why we place such an emphasis on compliance with applicable legislation and tenancy law. This is as true for our employees as it is for our suppliers and service providers (see → Sustainable Relationships With Business Partners) because they play a key role in Vonovia achieving its objectives, very much in the spirit of the long-term partnerships that we are aiming for.

The CMS is based on three pillars: the "prevention of", "identification of" and "reaction to" any misconduct. These pillars are underpinned by an extensive system of measures and processes as part of the compliance program. The basis takes the form of the Compliance Guidelines (see **Compliance and Anti-Corruption**), which follow the Principles for the Proper Performance of Reasonable Assurance Engagements Relating to Compliance Management Systems (IDW PS 980).

#### **Important Internal and External Guidelines**

- > German Corporate Governance Code (GCGC) as amended on March 20, 2020
- > Code of Conduct
- > Business Partner Code
- > Vonovia's own compliance guidelines (based on the Principles for the Proper Performance of Reasonable Assurance Engagements Relating to Compliance Management Systems, IDW PS 980)
- > Policies on anti-corruption, money laundering prevention and whistleblowing
- > Core labor standards of the International Labour Organization (ILO)
- > UN Global Compact (UNGC)
- > Vonovia Declaration of Respect for Human Rights

#### **Organizational Focus**

The Management Board and Supervisory Board office coordinates the work of Vonovia's committees. It also organizes information flow and cooperation between the Management Board and the Supervisory Board. The Legal department, Management Board and Supervisory Board office work together closely to decide how to implement resolutions taken by the decision-making bodies.

At Vonovia, compliance management is the responsibility of the Legal department, which monitors adherence to the rules that apply within our central CMS. The Management Board (CEO) is responsible for the implementation of the CMS. The CMS applies to the entire Group. Managing directors of subsidiaries are supported in compliance matters by the Vonovia Legal department (see \$\mathbb{C}\$ Compliance Management).

A Compliance Committee comprising the Compliance Officer (Legal department), compliance managers, the ombudsperson and representatives of the Internal Audit, Risk Management and HR departments and members of the works council regularly updates the CMS in line with current requirements and is responsible for its ongoing development. In this context, the Compliance Officer acts as a central contact point within the company for compliance-related questions and suspicions. He reports to the CEO on a regular basis, and also on an ad hoc basis when special cases arise. His activities are supported by the compliance managers and specialists in the individual departments.

All employees and business partners are able to contact the external ombudsperson confidentially if they have any questions concerning compliance. Vonovia also has a whistleblowing hotline that is managed by an independent law firm. Compliance breaches can also be reported  $\Box$  online.

This service is available to employees, suppliers, customers and other stakeholders. Reporting within the whistleblowing system (BKMS) may be anonymous or personalized as desired.

The Supervisory Board regularly receives comprehensive information about compliance issues and corruption along with existing guidelines and processes. The compliance report, which is forwarded to the Audit Committee via the Compliance Officer (following prior consultation with the CEO), provides information about potential breaches, measures and training relating to corruption.

Whenever legislation in Austria or Sweden conflicts with Group-wide rules, a different rule is adopted for the subgroup in the form of a national guideline. The responsibility lies with the respective managing directors.

#### **Objectives and Measures**

Across the Group, our aim is for full compliance with guidelines, applicable laws, values, corporate governance principles and the Code of Conduct.

#### **Corporate Governance**

At Vonovia, corporate governance refers to all of the functions, processes, frameworks and divisions that ensure our company is managed and monitored responsibly and independently. We have implemented uniform standards across the company for corporate governance and employee behavior, such as our Code of Conduct and our business philosophy. Whenever we integrate new companies into the structures of the Group, we determine which policies are already in effect and identify any changes that are required. The responsible managers review our guidelines every two years to determine if they have to be updated. In 2021, updates were made to our guidelines related to the whistleblowing system, information security, compliance and data protection, among others. The Code of Conduct was also updated. We started the process of harmonizing our guidelines with our Swedish subsidiaries.

We also submit an annual PDeclaration of Conformity with the principles of the GCGC and are guided by the principles of the Institute for Corporate Governance in the German Real Estate Industry. Our Management Board and Supervisory Board are responsible for their implementation. Effective and secure audit and control processes at a Supervisory Board level, e.g., the Executive and Nomination Committee and the Audit Committee, help us to monitor corporate governance. Our corporate governance declaration states that all members of the Supervisory Board of Vonovia SE should be independent.

Our Investor Relations website provides additional information about  $\square$  corporate governance, including the  $\square$  shares in our company held by our board members.

We have also taken steps to further integrate standard processes for related party transactions (RPT), established in 2020, into the company's operations. These included reporting them on a regular basis to the Annual General Meeting as part of the Supervisory Board report. The Supervisory Board receives information from the Management Board on other related party transactions – once a year from board members and twice a year in the form of the compliance report in accordance with the German Stock Corporation Act. Transactions with related parties are documented in accordance with ARUG II. The Supervisory Board reserves the right to make a decision itself on any RPT requiring approval or to delegate the decision to one of its committees. There were no RPTs during the reporting period that met this criteria.

Elements of Long-term Variable Management Board Remuneration

- > Relative Total Shareholder Return (relative TSR)
- > NTA (Net Tangible Assets) per share
- > Group FFO (Funds from Operations) per share
- > Sustainability Performance Index (SPI)

As reported in the previous year \$\mathbb{Z}\$ 2020 Sustainability Report, we agreed on a new remuneration structure for the Management Board, which includes sustainability targets. These targets are defined in our sustainability performance index (SPI). The new remuneration structure was presented to the Annual General Meeting in April 2021 at the time that the SPI was introduced, and approved by over 80% of the votes in attendance. We prepared our first report about the SPI in 2021. The SPI achieved an index value of 109% in the 2021 reporting year. A detailed description of our \$\mathbb{Z}\$ Management System is provided in our Annual Report. Further information is available in the \$\mathbb{Z}\$ Remuneration Report.

The remuneration report was prepared in accordance with the German Commercial Code (HGB), German accounting standards (DRS 17), legislation governing the disclosure and appropriateness of Management Board remuneration (VorstAG, VorstOG) and the principles of the German Corporate Governance Code (GCGC). In addition to providing information about the remuneration for each Board member, the remuneration report also includes rules about topics like clawback, malus and say on pay.

Management Board: 25%

Supervisory Board: 33%

Proportion of women in management and supervisory bodies

We will continue to improve the diversity of the Group's decision-making bodies going forward by taking diversity criteria into account when members are appointed to the Management Board and Supervisory Board. In accordance with the German Act on the Equal Participation of Women and Men in Leadership Positions in the Private Sector and the Public Sector, Vonovia's Supervisory Board consists of at least 30% women and 30% men. Vonovia intends for the Nomination Committee to continue to have at least one female member. Vonovia intends for its Supervisory Board to meet both criteria in the period up to December 31, 2021, and the following period, which runs up to the end of 2026. The company met 33% of this target in the reporting year.

The Supervisory Board set a target of at least 20% female members on the Management Board in the period between December 31, 2021, and December 31, 2026. A new target was set for 29% of positions in the two management levels below the Management Board to be held by women by December 31, 2024 (see → Approach to Diversity and Equal Opportunities). The targets for the Management Board were met in full.

More information can be found in the  $\square$  Corporate Governance section of the Annual Report.

#### Compliance

In the 2021 fiscal year, we carried out a Group-wide, webbased compliance risk analysis at the level of senior company executives. As part of this analysis, information was requested on the topics of active and passive corruption, money laundering, antitrust law, social compliance and IT/ data security. The aim of the survey was to systematically evaluate compliance risks, increase comparability between the countries in which Vonovia operates and identify potential areas of focus for further development of the CMS. Overall, the findings of the survey were positive. The potential for improvement was identified in the areas of money laundering prevention and cyber security - both of which involve a moderate level of risk. Social compliance was evaluated as the area least exposed to risk. Compliance management identifies a catalog of measures from the findings, including a comparison of material compliance risks with the Group risk management system and an expansion of the training catalog for compliance-related topics. With a view to enabling the transfer of best practice, the Austrian process for determining beneficial owners will be rolled out to Germany, as the Austrian requirements are more stringent in this regard (see → project box "Compliance Risk Analysis").

Group-wide, web-based

## compliance risk analysis

carried out at the level of senior company executives

#### Main Compliance Regulations at Vonovia

- > Compliance guidelines
- > Code of Conduct
- > Business Partner Code
- > Inspection guidelines
- > Group guidelines on guideline management
- > Donations and sponsorship guidelines
- > Anti-corruption program
- > Whistleblowing guidelines

Regular training sessions are the cornerstone for preventing misconduct before it happens. A comprehensive catalog of regular and mandatory training events is already firmly established and has been adapted for the various internal target groups. The Procurement department, for which the issue is particularly relevant, receives special training on corruption and criminal law pertaining to corruption, for example. As certain compliance seminars could not be held in person in the previous year due to the coronavirus pandemic, we digitalized and, in some cases, reworked further seminars in the reporting year. For example, the Code of Conduct and data protection seminars, including progress tests, are now available online to all employees. All employees in Germany are required to complete training on these topics every two years. The close cooperation between the Compliance and HR departments plays a vital role in the success of these training courses. The Compliance department is responsible for choosing which departments go through special training, while HR is responsible for allocating personnel and other tasks.

## The complaints management

and whistleblower protection system has now entered regular operation

The complaints management and whistleblower protection system, expanded in 2021, has now entered regular operation. The anonymous \$\mathbb{T}\$ whistleblowing hotline is not only available to employees, but also to external parties such as customers and business partners, in both German and English. This is safeguarded by \$\mathbb{T}\$ Group Policies on preventing and tackling corruption, on preventing money laundering, on the whistleblowing system and on the compliance guidelines. It complements and extends the existing system of the independent ombudsman. The hotline is also integrated

## Compliance Risk Analysis

#### **Process analysis**

We performed a Group-wide compliance risk analysis during the reporting period in order to evaluate Vonovia's core business processes from a compliance perspective. This risk analysis used a web-based questionnaire that covered the topics of money laundering, social compliance, antitrust law, active and passive corruption and cyber security. Our aim was to identify any risks in our compliance management system (CMS) and provide a reliable foundation for Group-wide international comparisons. We plan to repeat this process every five years, but with varying groups of people and questions.



The responses we received from 139 senior executives in Germany, Austria and Sweden provided the company with valuable information and pointed out specific areas of the CMS that could be improved. The six compliance areas mentioned above, which are covered by the compliance risk analysis, were found to involve a low or moderate level of risk. Potential for improvement was identified in the areas of money laundering prevention and cyber security – both of which involve a moderate level of risk. The lowest level of



risk was identified in the area of social compliance. The questions related to this area covered topics such as the speak-up culture and compliance culture at Vonovia.

#### Measures

A comprehensive report was prepared on the findings of the compliance risk analysis. Based on this report, Vonovia Compliance Management has put together a package of measures for improvements. The first measures to be implemented include aligning Vonovia's guideline management with the Swedish company Victoriahem, and implementing the strict Austrian money laundering verification process – in line with best practices – in Germany and Sweden. The remaining measures are set to be implemented over the course of the year.

within the partner portal for business partners. A whistleblower report is prepared by an external party every six months. This report is incorporated into the company's compliance report. One of the key performance indicators in this area is the total number of proven cases of corruption in Germany (see  $\Box$  Combating Corruption and Bribery). There were no proven cases of corruption during the reporting year.

### No

### confirmed incidents of corruption or breaches of anti-money laundering regulations in 2021

As at October 11, 2021, 45 (2019: 103, 2020: 53) suspected cases of corruption or compliance issues had been reported and carefully investigated in Germany in the 2021 fiscal year. No material compliance violations were uncovered. The severity of all reported cases was determined to be minor. The vast majority of reported cases involved incidents with tenants, racist statements or abuse, conflicts of interest involving employees, unauthorized brokerage activities and violations of confidentiality requirements/data protection.

#### Tax Strategy

We remain committed to continuity and transparency when it comes to our taxes. As a result, the Tax Strategy adopted in 2018 is still in effect. We see ourselves as a taxpayer that lives up to its social responsibility in terms of contributing to society financially. Vonovia is committed to the due fulfillment of its tax obligations and has therefore set itself the goals of:

- > Meeting its tax obligations in Germany, Austria, Sweden and the Netherlands as a multinational company with operational subsidiaries
- > Ensuring full adherence to with tax compliance regulations
- > Maintaining a tax-compliant culture and organizational structure that ensures that subsidiaries are not misused as vehicles for tax optimization and that no tax havens are used

Our understanding of tax is based on clearly defined responsibility and control processes and a risk management system that comprises the following elements:

- > Regular exchange of information between the CFO and the Head of Tax
- > Information provided to the Supervisory Board about key topics and risks
- > Implementation of an internal tax compliance system (internally and externally audited)
- > Complete documentation of tax-related issues
- > Whistleblowing system)

The appropriateness and implementation as well as the effectiveness of our tax compliance management system was subjected to an external audit by the auditor in Germany for selected tax types in the reporting year and successfully certified in January 2022. The Austrian subsidiaries were also successfully audited for adequacy in 2020, followed by an effectiveness audit for the period from July 1 to December 31, 2020, at the beginning of 2021. The auditor did not identify any issues.

More information about taxes can be found in the  $\square$  Annual Report.

### Respect for and Promotion of Human Rights GRI 102-9, 414-1, 414-2

The European legal framework in which Vonovia operates with its business model is strictly regulated and overseen in the markets in Germany, Austria and Sweden. This applies in particular to fundamentally enshrined human rights, to which Vonovia attaches great importance irrespective of the legal framework. Our commitment to complying with and fostering these rights is reflected in our ethos and mission statement. We regularly scrutinize our guidelines and adapt them to reflect changes in society and the regulatory environment. As part of the process of integration of Deutsche Wohnen, we have scheduled an update of our corporate guidelines for the coming year.

Making reference to the National Action Plan (NAP) for human rights in Germany, the Management Board of Vonovia published a 

Declaration of Respect for Human Rights in 2020. In this statement, we communicate our clear conviction for a pluralistic democratic society and zero tolerance of human rights violations and our commitment to respect human rights in all aspects of our business. We adhere to the core labor standards of the International Labour Organization (ILO) and the principles of the UN Global Compact, which we committed to in 2020.

Vonovia develops and builds homes itself, in particular via the subsidiaries of its BUWOG brand. Compliance with labor and social standards on construction sites is a challenge from a risk/human rights perspective. This challenge is, however, mitigated by the fact that the company performs around one-third of its trade/construction activities in Germany via its own technical service. This lessens dependency on external construction companies and therefore this risk, as Vonovia is in a position to exclude service providers and suppliers that do not comply with labor law requirements without a material negative impact on operations (see → Promoting Health and Safety).

Concrete cooperation with external partners and contractors (see → Social and Environmental Standards in the Supply Chain) is governed by Vonovia through its ♀ Business Partner Code, the general terms and conditions of purchasing, the general terms and conditions of Vonovia SE for building services, and individual contractual agreements within the scope of structured supplier management. As such, we ensure compliance with common European standards and regulations, as well as material sustainability criteria, in the area of procurement.

Suppliers are required to sign the Business Partner Code before entering into a contract with Vonovia – this sets out, among other things, all material requirements necessary for compliance with human rights – from legal conformity and the fulfillment of legal standards for working conditions to an assurance of freedom of association and the exclusion of discrimination. It is updated regularly – most recently in the fourth quarter of 2021 – and applies for contractual relations in Germany and Austria. A corresponding separate code is in place in Sweden.

#### The Vonovia Business Partner Code

- > Provides the economic, legal and ethical basis for a business relationship in the spirit of partnership
- > Also applies to subcontractors of Vonovia's direct contractual partners
- > Sets out clear expectations regarding integrity, legal compliance and ethical conduct
- > Has to be signed to indicate binding acceptance and put into practice in all business areas
- > Is monitored by direct contacts to ensure compliance
- > Stipulates that illicit employment must be ruled out, that the legal minimum wage must be paid and that valid German regulations on occupational safety and human rights, and applicable environmental laws, must be observed
- > Is supplemented by the Vonovia Declaration of Respect for Human Rights

As part of the regular evaluation of our major suppliers and contractors via our partner portal, we ensure that the criteria stated in the Code are complied with. In the event of incidents and breaches, a structured management of measures is activated, which - once all other means have been exhausted - may result in blocks on orders and termination of contract. In Germany, suppliers and contractors are checked against the EU sanctions list before any agreement is entered into. If a supplier or contractor is found on this list, the Compliance department is informed. In Austria, the Procurement department reviews all new creditors and regularly reviews existing ones on a half-yearly basis as part of a compliance check that also includes an inspection of sanctions lists (via KSV1870). We are not currently aware of any infringements by our suppliers. Any suspicions can be reported to us via our  $\square$  Whistleblowing System at any time.

In 2022, we will focus on preparing for the Supply Chain Diligence Act (LkSG), which will come into effect in Germany on January 1, 2023. This process also includes the review of existing guidelines, codes and processes, e.g., the aforementioned Declaration of Respect for Human Rights. An additional benchmark here will be the applicability of the minimum safeguards criteria of the EU Taxonomy.

We also use long-term cooperation in the spirit of partnership to build a close relationship of trust with our contractual partners. This is largely the responsibility of the Procurement department and allows any misconduct to be addressed. The Procurement department reports to the CFO division of the Management Board with the intention of ensuring a high degree of neutrality and compliance both internally and externally. This responsibility moved to the Chief Transformation Officer (CTO) with effect from January 1, 2022.

#### **Stakeholder Orientation**

GRI 102-13, 102-40, 102-42, 102-43, 102-44, 415-1

Vonovia has close links with a wide variety of stakeholders, and is committed to addressing their needs and feedback. Their perspectives and their specific concerns (which sometimes conflict) provide valuable input for our corporate strategy and the development of our neighborhoods. We see ourselves as bridge-builders and value ongoing communication on an equal footing to find common solutions that foster a positive community spirit in our neighborhoods. We point the way for others, and the size of our company means that we have a particular responsibility to society and the environment – a responsibility that we take seriously. We are also well aware of our need to take responsibility due to our position as the largest private provider of homes in Europe.

Our key stakeholders are tenants, employees (see → Attractiveness as an Employer), shareholders and analysts (see → Appeal on the Capital Market) and policymakers at a municipal, state and federal level. Our other stakeholders are tenant associations, suppliers and service providers (see → Sustainable Relationships with Business Partners), media and non-governmental organizations (NGOs) (see → Inclusion, Diversity and Social Cohesion).

Our dialogue with stakeholders is as an expression of our outreach activities that enhances our reputation and can have a positive impact on how others view our activities. We structure the dialogue with our stakeholders on an individual

basis and are guided by the ever-changing expectations that groups have of us. As a community developer, what we do goes beyond providing homes. By developing infrastructure and green spaces, we play a role in shaping the urban environment. We take as many requests and suggestions from tenants into account as possible when planning our work. That is why we inform them of our plans ahead of time, in addition to inviting them to discuss projects and take an active role in shaping them (see  $\rightarrow$  Involvement and Participation).

#### <u>Selected Memberships in Industry Associations and</u> Initiatives

Vonovia is well aware of its responsibilities in the field of housing, and discusses the issue on a regular basis with policymakers. At the same time we have no party-political affiliation and do not make donations to political parties. This position is codified in a Group guideline that applies to the entirety of Vonovia.

However, we are still committed to playing a role in political discussions and taking a position on policy issues. We do this transparently and openly. All business meetings with a political dimension are coordinated with Corporate Communications, and may only be attended by the individuals defined in the Group guideline. We do this to ensure compliance with provisions of the lobbying register at a European level and in some state parliaments, as well as the requirements for registering as a lobbyist with the German Parliament, which came into effect on January 1, 2022. Vonovia is not a part of any national or international associations, and does not partner with state institutions.

We are transparent about the positions that we take – with a focus on issues that involve the interplay between housing and the environment. Representatives from the world of business, research and politics took part in our own ♀ "Outlook for Climate-neutral Living" forum in 2019 and 2020 at Vonovia's headquarters in Bochum. We will continue taking this successful approach to specialist conferences in 2022, with a focus on sustainable construction (see → Sustainable Construction and Development).

We are also active in a number of residential and property management associations at a national and European level, contributing to the strengthening of the property management sector. In Germany, Vonovia is represented in the economic fora of the CDU, SPD and Bündnis 90/Die Grünen political parties. We are also involved in several initiatives aimed at protecting the climate. Vonovia was a member of the following associations in the 2021 reporting year:

- > Återbruksnätverket Öst (Sweden)
- > AGV Arbeitgeberverband der Deutschen Immobilienwirtschaft e. V.
- > AGW Arbeitsgemeinschaft Großer Wohnungsunternehmen
- > BeBo Energimyndighetens nätverk för energieffektiva flerbostadshus (Sweden)
- > buildingSMART Austria (Austria)
- > DDIV Dachverband Deutscher Immobilienverwalter e. V.
- > Digital Findet Stadt (Austria)
- > DENEFF Deutsche Unternehmensinitiative Energieeffizienz
- > Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung e. V.
- > DIRK Deutscher Investor Relations Verband e. V.
- > EPRA European Public Real Estate Association
- > Fastighetsägarna (Sweden)
- > FGW Forschungsgesellschaft für Wohnen, Bauen und Planen (Austria)
- > GdW Bundesverband deutscher Wohnungs- und Immobilienunternehmen e. V.
- > Initiative Wohnen.2050 e. V.
- > Initiativkreis Ruhr
- > Institut für Corporate Governance in der deutschen Immobilienwirtschaft e. V.
- > InWIS Forschung und Beratung Förderverein e. V.
- > KlimaDiskurs. NRW e. V.
- > Klimaaktiv a climate action initiative launched by the Austrian Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology (Austria)
- > Linköpingsinitiativet (Sweden)
- > Österreichische Gesellschaft für nachhaltige Immobilienwirtschaft (Austria)
- > Österreichischer Verband der Immobilienwirtschaft (Austria)
- > Open District Hub e. V.
- > respACT Austrian business council for sustainable development (Austria)
- > SABO (Sweden)
- > UN Global Compact
- > Verein der Freunde und Förderer der EBZ School e. V.
- > vhw Bundesverband für Wohnen und Stadtentwicklung e. V.
- > ZIA Zentraler Immobilien Ausschuss e. V.

communication is consistent. Social media such as Facebook, Twitter and Instagram have become increasingly important for us in recent years. The Public Affairs department ensures dialogue with politicians.

### Information Management and Data Protection

Information and its management are an important part of our commercial success. Our information comes from a number of different areas – from marketing through to customer services, development and finance. Data security and protection is particularly important for us.

We adhere strictly to the applicable laws governing the protection and security of personal data. We have also developed a number of measures, including a uniform Group-wide rulebook on data protection and privacy, information security and the internal control system, and a cyber security system to protect company-related data. These measures are detailed in corresponding 

☐ Group guidelines. The comprehensive framework is strengthened by clear responsibilities and contact persons for all relevant areas of the Group. In addition to our data protection officer, we also have data protection coordinators in all departments in Germany and Austria and conduct regular training on data protection and privacy for our employees. All employees are required to complete this training when they joined the company and every year afterwards. Our data protection training was digitalized in 2021 and included in the online training catalog. As a result, employees can complete the training independently from any location. Data protection coordinators track the training on behalf of the employees in their department to ensure that they complete it. Detailed information about our data protection measures is available here: \$\foatin https://www.vonovia.de/en/datenschutz

### Uniform Groupwide rule book

on cyber security, information security and the internal control system introduced

Corporate Communications liaises with our stakeholders on a daily basis and ensures that our internal and external

Elements of the system for the protection of companyrelated data:

- > Implementation of the Risk2Value DPMS data protection management tool to help us meet statutory data protection requirements. This data protection management system catalogs the processes that involve the processing of personal information. We can also use the system to document and assess any data breaches that occur, in addition to taking steps in response.
- > Definition of a fundamental level of information protection to protect the company's assets and image; information security policy to ensure compliance with statutory requirements and the related tasks
- > Establishment of an IT security administrator with responsibility for achieving the IT security targets and for direct reporting to the Chief Information Officer (CIO)
- > Companies and specialist departments are responsible for security risks relating to information and data that is predominantly created, collected, used or processed within their sphere of responsibility
- > Management of the process with IT systems
- > Raising employee awareness as a prerequisite for information security
- > Holding regular data protection audits for providers that process personal data on behalf of Vonovia. Topics covered by the audit include the procedures and measures used to guarantee system resilience and IT disaster recovery plans.
- > Scanning relevant IT systems for weaknesses on a regular basis (e.g., pen tests). Cyber security is one of our key focus areas. We follow the current recommendations of the Federal Office for Information Security (BSI).
- > Certification of service providers (data center) to ensure that all IT systems are 99% covered in accordance with ISO 27001

Due to the extensive measures that we have taken in the area of data protection, we believe that risks related to inadequate IT security or violations of the General Data Protection Regulation only have an extremely low probability of occurrence. Mobile working, which we use far more extensively now than was the case before the coronavirus pandemic, does not involve any significant data protection-related risks.

The Management Board is provided with information about developments in the area of data protection and information security once a year. In Austria, a status report is provided to the management of BUWOG once a year. The Supervisory Board's audit committee deals with topics related to data security, and is also provided with the data protection report on an annual basis.

## Future Fitness and Capital Market



**GRI** 103-1, 103-2, 103-3





#### Disclosure

Vonovia has been listed on the Deutsche Aktienindex (DAX) since 2015. It became the first residential real estate company to be listed on the EURO STOXX 50 index in 2020, and is currently the only real estate company on the index. Our company is focused on the capital market. The access that we have to external capital and funding opportunities through the capital market is a core aspect of our business operations and our commercial success. This gives us the robust foundation that we need to respond to the challenges facing the housing industry, both now and in the future. Sustainability, transparency and success are more closely intertwined than ever. We take care to weigh up the interests of our shareholders against those of other stakeholders - particularly our customers - to make sure that we retain this access in future. We also have an increasingly stringent legal framework to comply with.

Both analysts and investors are taking greater notice of ESG (environmental, social and governance) criteria when deciding who to invest in. Investors can turn to a number of rating systems and benchmarks to assess the performance of a company from an ESG perspective. Failure to meet ESG expectations can sometimes even result in a company being excluded from an investor's investment portfolio or other access to capital. On the other hand, Vonovia can secure itself access to a wide range of investors by providing transparent information about its excellent performance in the area of sustainability – particularly in terms of its ESG ratings.

ESG criteria are also gaining in relevance in the political sphere. The EU Committee has launched its Sustainable Finance action plan in order to pursue its main sustainability objectives. The EU Taxonomy for sustainable activities came into effect in mid-2020 on the basis of the Taxonomy Regulation as part of this action plan. From 2024 onwards, the Corporate Sustainable Reporting Directive will further increase the need for structured and transparent sustainability reporting as of the reporting year 2023.

#### HIGHLIGHTS 202

- > Stability of the business model proven despite the pandemic
- > Positive business development once again
- > Sustainability risks integrated into risk management - implementation of TCFD recommendations
- > Green Bond Framework published in February 2022 updated and first social bond (100% EU Taxonomy-compliant) issued
- > Further improvement in some ESG ratings ranking among the top 7% of all real estate companies worldwide in the Dow Jones Sustainability Index Europe

The EU Taxonomy is covered in greater detail in our 2021 Annual Report in the  $\mbox{\ensuremath{\square}}$  Non-financial Group Declaration.

We want our business model to be sustainable and fit for the future. The digitalization trend has a significant role to play in making our company more sustainable and communicating about our sustainability performance in a transparent manner. The coronavirus pandemic accelerated this trend even further – leading both to new challenges and new opportunities for Vonovia. The high level of digitalization within the Group allows us to record and handle both opportunities and risks effectively while tying up fewer and fewer resources. We can secure the company's long-term success by acting early to respond to challenges and make use of any opportunities that arise. Particularly in these

times where opportunities for meeting in person are limited, this trend allows us to provide clear and reliable information about our activities, both to groups within the company and external parties. This allows us to establish and maintain long-term relationships with our business partners and tenants.

The section below covers our approach to handling these challenges, the measures we have taken to integrate this approach into our processes and the targets and measures derived from this approach, with a particular focus on the material topic Appeal on the Capital Market. Also covered are the important topics Sustainable and Long-term Growth, Digitalization of Processes, Management of Opportunities and Risks and Sustainable Relationships with Business Partners.

#### Appeal on the Capital Market

GRI 103-1, 103-2, 103-3

#### **Our Approach**

As a real estate company with a long-term focus, we aim to strike a balance between commercial activity on the one hand, and social responsibility and ecological objectives on the other. We are committed to the principles of the social market economy and profitability. The only way for us to be sustainable is if we are also commercially successful. We believe that our long-term success is dependent on having access to a broad mix of financing instruments so that we can choose the right product at the right time. This will allow us to attract different capital market participants like investors, banks and insurance companies while also guaranteeing our access to the capital market.

SPI (Sustainablilty Performance Index) introduced in 2021 - target achievement:

109%

Due to the increasing importance of ESG factors for the capital market, Vonovia used 2021 to enhance the company's strategic and operational governance in line with ESG criteria. This included integrating sustainability concerns into our corporate strategy. We have established and implemented structures and processes to this end (see

→ Our Approach to Sustainable Development in Detail). One key element of our approach is the Sustainability Performance Index (SPI) (see 및 Non-financial Performance Indicators in 2021 Annual Report). This has been one of the Vonovia Group's main non-financial performance indicators since 2021. Another key to ensuring sustainable governance is integrating sustainability risks into our risk management strategy (see → Managing Opportunities and Risks). We are also issuing new financing instruments to appeal to sustainability-conscious investors.

You can find more information in the  $\mbox{\ensuremath{\square}}$  Strategy section of the 2021 Annual Report.

Communication with our stakeholders on the capital market is handled by the Investor Relations (IR) department in consultation with the Management Board. Transparency is the guiding principle here. It is important to us to provide relevant information on our company and our economic development, but also on the sustainable direction of Vonovia, thereby providing an accurate picture of Vonovia. This also strengthens trust in the Vonovia brand. At the same time, IR acts in an inward-facing way so that the topics

communicated to us by capital market actors come to the attention of the right people within the company.

We have also established structures which enable us to process sustainability ratings systematically. By providing clear and transparent information about our activities, we can satisfy our stakeholders' demand for transparency while also meeting our legal obligations. We incorporate the latest trends and developments such as the EU Taxonomy, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) (see → Environment and Climate) and the United Nations Sustainable Development Goals (SDGs) (see  $\rightarrow$  Material Topics) into our reporting, while also making sure that we are guided by their requirements. In this context, the application of the GRI standards and the regulations of the EU Taxonomy and possible further European standards have priority for us as a European company. Due to the importance of English-speaking investors for us, we are also creating a mapping of the indicators for the content published in this report for the Real Estate reporting framework of the  $\rightarrow$  Sustainability Accounting Standards Board (SASB). We have also made our report on the EPRA Best Practice Recommendations on Sustainability Reporting available on our 🖵 Website.

#### **Organizational Focus**

Our Chief Executive Officer (CEO) and Chief Financial Officer (CFO) are responsible for our activities in the capital market. The Sustainability/Strategy department coordinates the company's participation in ESG ratings with the involvement of the operational departments. Communication with the capital market and our investors is handled by the IR department, which reports to our CEO, as does the Sustainability/Strategy department. Decisions regarding ESG ratings are made in the sustainability committee, which receives regular information on developments in this area. Finance & Treasury is responsible for implementing our financing instruments and reports to the CFO.

#### **Objectives and Measures**

We want to make sure that the information we provide to our stakeholders is transparent and reliable. Our aim is to provide investors with all of the information they need to get an accurate impression of our company. We want to generate attractive risk-adjusted rates of return for our investors and achieve sustainable revenue and value increases. Our overarching objective is to build trust in Vonovia.

Our participation and good performance in a variety of ESG rating systems is clear evidence of our commitment to sustainability. Our aim is to be represented in all relevant international ESG indices and obtain good to very good ratings in comparison to our peers. Our IR department surveys key investors every two years to identify the ESG rating systems that are most relevant to them. We use these surveys to check whether we are represented in the ratings that are most important for us and our stakeholders on a regular basis. The Sustainability Committee discusses which ESG ratings Vonovia should focus on based on this decision. We systematically use the results of ESG rating systems to enhance our sustainability efforts and make improvements in specific areas.

## Among the top 3 performers

out of 1,054 real estate companies in the Sustainalytics ESG Risk Rating

As such, we were able to maintain our membership of the prestigious Dow Jones Sustainability Index Europe and ISS-ESG Prime Status in the year under review. In the ESG Risk Rating of Sustainalytics, Vonovia was (as of December 9, 2021) one of the top 25 companies within the set evaluated, which included some 15,000 companies worldwide, as well as one of the top three performers in the real estate sector (out of 1,054 companies). We intend to keep our performance at a high level while making continuous improvements in the ESG rating systems that we are included in.

The results of selected rating systems from 2021 are available on our ♀ IR-website and provided in the → ESG Ratings and Indices section of this Sustainability Report. In 2022, we did not take part in GRESB due to the changes to the methodology used by the rating system and the significant changes that will be made in future.

### DJSI EUROPE Index

Ranking among top 7% of all real estate companies worldwide

Our IR department use a variety of formats to stay in regular contact with capital market players. The Capital Markets Day is an event that we use to showcase our company. Despite having to cancel the event in 2021 due to the coronavirus pandemic, we continue to use investor conferences, roadshows and one-to-one conversations to stay in contact with shareholders and potential investors. We are also making increasing use of visual formats. Our Annual General Meeting, for instance, was for the second time held virtually in April 2021.

We believe it is important to have access to a broad mix of financing instruments so that we can choose the right product at the right time, like bonds, promissory notes, secured real estate loans, commercial paper, working capital facilities and loans from development banks like the German government-owned development bank Kreditanstalt für Wiederaufbau (KfW) and the European Investment Bank (EIB). We also have access to innovative sources of finance like blockchain-based promissory notes, which we issued for the first time in 2021. This puts us in a position to attract different capital market participants like investors, banks and insurance companies. This diversification helps us to spread out our risk and handle periods where individual sources of financing are not available due to rapid developments in the capital market, as occurred with the coronavirus pandemic.

One of the steps that we took during the year under review to expand the mix of financing instruments at our disposal was to issue a green bond certified by the Climate Bond Initiative with a volume of  $\epsilon$  600 million. The fact that this bond was thoroughly oversubscribed demonstrates that there is healthy demand for investments of this nature. In 2022, we will revise our Sustainable Finance Framework which was published in February 2022 - in light of the EU Taxonomy, and add social components in order to be able to issue \(\frac{1}{2}\) Social/Sustainability Bonds. Based on the new framework, green and social bonds were successfully placed for the first time in March 2022 in the amount of € 2.6 billion (see → project box "Vonovia Social Bonds - Unique in the Real Estate Sector"; 

☐ Investor Relations). Through the success of this additional financing option, we feel strengthened in the continued development of our sustainable projects, especially in terms of the goal of a virtually climate-neutral building portfolio.

### Sustainable Finance Framework

#### developed and first social bond issued (2022)

Vonovia established a Green Finance Committee in 2020 to coordinate and refine this and other sustainable financing activities. It includes representatives from several different departments and is chaired by the Head of Finance & Treasury. With the update to the framework, the Green Finance Committee was renamed the Sustainable Finance Committee.

### Vonovia Social Bonds – Unique in the Real Estate Sector





"The bonds demonstrate that we take our social responsibilities seriously and are committed to our sustainability strategy."

Philip Grosse, Vonovia SE, CFO Sustainable financing is an effective tool for achieving the EU's environmental targets and the UN Sustainable Development Goals (SDGs). For this reason, Vonovia updated its first Green Bond Framework (first published in March 2021) in February 2022. The purpose of this framework is to drive up investment in assets with proven ecological and social benefits. On March 21, 2022, for the first time Vonovia issued two social bonds, with terms of 3.85 and 6.25 years, and a green bond with a ten-year term that is 100% EU Taxonomycompliant. These were the first such bonds to be issued by a company in the real estate sector.

The proceeds from the social bonds will be invested in social projects. This will include, for example, housing for low-income households and agreements for privately financed housing in Berlin with rents that are at least 15% lower than the standard local comparative rent charges, ensuring access to affordable housing. The proceeds from the social bonds will also be used to modernize housing to make it more accessible for an increasingly elderly population. Further information on green bonds, social bonds, and the use of funds, can be found in the  $\square$  Sustainable Finance Framework.

The generation of renewable energies via, e.g., photovoltaic systems is one of the selection criteria for the awarding of green bonds.



#### Sustainable and Long-term Growth

**GRI** 102-10, 102-11

Housing has become an increasingly scarce and desirable asset in many locations, particularly urban areas. Vonovia wants to help solve this problem by providing modern and attractive homes at fair prices.

Vonovia's business model is built on three main pillars:

- > Letting quality, modern homes at fair prices
- > Developing and building new apartments for our own portfolio and for sale
- > Providing housing-related services

The Vonovia business model proved to be robust and highly resilient during the coronavirus pandemic. We continued to concentrate on keeping our business processes going, particularly at the start of the pandemic, and on protecting customers and staff. The fact that our business processes were already largely digitalized meant that our back-office staff could continue to work remotely without any disruption. Downtime at construction sites was negligible.

Since 2013 we have pursued a corporate strategy with four basic pillars: property management, portfolio management, financing and value-add. This strategy is reinforced and rounded off by our acquisition and internationalization strategy, which includes opening up selected European markets. The acquisition of Deutsche Wohnen during the year under review was born out of this ongoing sustainable growth strategy. This strategy allows us to leverage new synergies, harmonize processes and make our procedures more efficient.

More information about our 4+2 strategy is available in our 2021 Annual Report under  $\mathbf{\mathbb{L}}$  Strategy.

The company has to maintain a robust strategy in this area due not only to the increasing pace of relevant megatrends but also sustainable business models becoming ever more important for a wide range of stakeholders. We want to play an active role in combating climate change by taking a sustainable approach to construction and modification, reducing the greenhouse gas emissions of our real estate portfolio, introducing innovations in the areas of energy supply, (construction) materials and biodiversity, cutting water consumption and reducing waste (see → Environment and Climate). Our neighborhoods are where the housing industry needs to focus its efforts in order to be socially responsible. By providing housing in our neighborhoods that meets people's needs in partnership with our tenants, we will improve customer satisfaction while also making our increasingly diverse society more integrated (see → Homes and Customers). Vonovia wants to be an attractive employer

which ensures that its employees have equal opportunities, supports them in their personal and professional development and offers positions which are secure and stable (see → Employees). We intend to emphasize the sustainability-related aspects of our successful strategy to ensure that both the strategy and business model are fit for the future.

#### **Digitalization of Processes**

Digitalization is becoming an increasingly important topic, both within the company and in terms of our interaction with customers. Standardization and simplification will allow us to improve our processes while freeing up staff and saving money, time and natural resources. Making our business processes more digital opens up new opportunities but also exposes us to new risks, such as the possibility of violating data protection requirements. We monitor these risks on an ongoing basis and take action whenever necessary (see → Information Management and Data Protection).

For this reason we continuously review our processes in different divisions to identify areas that could be improved. We have already introduced digital tenant and personnel files, along with a digital technician portal.

Remote working has been given a boost by the coronavirus pandemic. We are making greater use of collaborative digital tools and software than before. Digitalization is opening up a number of avenues that we can use to manage our portfolio more efficiently. Almost all of the elevator systems in our buildings send reports to the technology center in real time (see project box). This information is used to provide an overview of statistics, reports and data on a digital platform. Internet of Things (IoT) technology makes it possible for us to make data-based decisions, while also enabling us to analyze the condition of our elevator systems remotely and effectively. Remote monitoring of our central heating systems will also be rolled out in 2022. This technology will enable us to improve the carbon footprint of our buildings, while also making it easier to rectify faults thanks to a significantly improved reporting chain (see → project box "Reducing Carbon Emissions and Cutting Costs - the Heating Monitoring Pilot Project").

We are also using digitalization to improve our processes and develop new ideas when it comes to our relationship with our tenants. Our customer service department uses systems to automatically categorize customer requests to make sure they are directed to the right person. This enables us to respond more quickly and more precisely to inquiries from our customers. Our updated tenant app improved our communication with our tenants. The app makes a number of processes easier for our customers and our employees to manage. It has also improved our sustainability performance

by reducing the amount of resources that we use (see → Customer Satisfaction and Service Quality).

We are also taking digital steps in the area of financing and have initiated the financing of a fully digital bond via an online marketplace (see → Appeal on the Capital Market). We are committed to using digitalization in order to increase the efficiency and standardization of our business processes. This will provide a solid foundation for us to meet new challenges and react to developments in future.

We ramped up our efforts to digitalize our internal processes in the reporting year. We began using SuccessFactors modules in our HR department and digitalized HR processes such as reporting absences due to illness. Digital working has been expanded, partly due to the coronavirus pandemic (see → Attractiveness as an Employer).



Modern heating systems can be optimized by enabling remote reading.

Our digital heating monitoring project has the potential to significantly reduce carbon emissions and costs. The aim is to monitor these in real time and increase the efficiency of existing and new gas central heating systems. For this, we use the management and optimization tool of our partner othermo, which offers an innovative solution. It is based on an IoT gateway installed in the boiler room and a web portal coupled to it.

Digital heating monitoring systems provide environmental and economic advantages that benefit us as a company just as much as our tenants. Fuel savings benefit the tenants first and foremost, with associated reductions in heating costs. The company's economic benefit is based on three pillars: 1. Reduced carbon tax and certificate costs due to lower emissions both for tenants and Vonovia, 2. No need for multiple visits from craftsmen, and 3. Improved tenant communication and information through real-time data on heating status.

# Reducing Carbon Emissions and Cutting Costs - the Heating Monitoring Pilot Project



#### Current:

Configuration of heating systems is often not optimally adapted to the individual conditions on site.

Multiple trips to identify and rectify faults, notification of faults by tenants.

#### Objective:

Remote, highly customized configuration of heating systems according to load patterns and building condition to improve system efficiency and reduce carbon emissions.

Automatic notification of faults without tenant involvement and including detailed information on the cause, enabling the fault to be rectified promptly and in a targeted manner.

#### **Managing Opportunities and Risks**

**GRI** 102-15, 102-30

Assessing the risk related to sustainability factors is becoming increasingly important in the list of requirements that investors and analysts look at. This is reflected, by way of example, in the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD), which call upon companies to disclose the direct and indirect financial impact of climate change on their businesses for transparency (see → Implementation of the TCFD Recommendations).

Vonovia has a comprehensive risk management system in place that enables it to identify, assign weightings to, and manage opportunities and risks relevant to the company. This:

- > Reduces potential threats
- > Secures the future viability of the company
- > Promotes our strategic development
- > Helps us to act sustainably

The risk management system was revised in 2020 to bring it into alignment with the sustainability aspects of the corporate strategy. ESG risks were examined and assessed in terms of their impact on Vonovia (outside-in view) and their impact on the environment and society (inside-out view); an approach known as "double materiality."

# Integration

of sustainability aspects into risk management

For transparency purposes, we explain the risk situation at Vonovia in detail in our annual reporting and provide an up-to-date risk assessment on behalf of the Management Board (see ♀ Opportunities and Risks in the Annual Report 2021). We also provide a wide range of information in this sustainability report based on the TCFD framework for disclosing climate-related risks (see → Environment and Climate).

#### Potential Sustainability Risks for Vonovia

- > Unfavorable carbon tax
- > Failure to achieve climate path and carbon intensity targets
- > Violations of social charters
- > Failure to comply with statutory rent control provisions
- > Effects of crises or disasters such as floods, earthquakes or extreme weather events
- > Non-compliance with changing construction regulations
- > Non-compliance with legislation on working conditions, such as minimum wages and safety standards and human rights in the supply chain
- > Non-compliance with legislation on occupational health and safety management
- > Violations of the Code of Conduct, the Anti-Corruption Policy, legal requirements relating to bribery and corruption
- > Failure to meet the expectations of stakeholder and statutory requirements in terms of diversity
- > Failure to meet statutory requirements and expectations of investors or analysts concerning sustainability reporting
- > Loss of sustainable financing instruments due to a failure to meet sustainability targets
- > Long-term economic downturn triggered by macroeconomic and geopolitical risk factors, such as the intensification of trade wars, the economic impact of the coronavirus pandemic or foreign policy conflicts

Since 2020, the risk of an "unfavorable carbon tax" has been considered to be of material significance for the company, and is therefore closely monitored by the Management Board and the Supervisory Board. The German government has decided to levy a carbon price on energy used for heating as a policy instrument and a climate protection measure. The price of carbon emissions has been set until 2025 and will increase annually from a starting point of € 25 per ton in 2021. We were able to pass on the entirety of this cost to our customers in the year under review - it therefore had no effect on earnings. The new federal government is trialing a graduated model which divides the carbon price between tenants and landlords. Landlords are charged more in buildings which are less energy efficient. This model will be introduced in mid-2022 or at the beginning of 2023. We continue to estimate that the potential risk volume could be between  $\epsilon$  25 million and  $\epsilon$  100 million in the next five years, with a probability of occurrence of between 60% and 95%.

The Management Board bears full responsibility for risk management. The Head of Controlling reports to the CFO and is responsible for the operational management of the risk management system. Risk Controlling initiates the periodic risk management process and consolidates and validates the reported risks with the assistance of risk owners – managers at the level directly below the Management Board.

Detailed information about **♀ Opportunities and Risks** is provided in the 2021 Annual Report.

### Sustainable Relationships With Business Partners

**GRI** 102-9, 102-15

Vonovia is committed to long-term, constructive and trusting relationships with all of its business partners. This allows us to reliably provide a quality product and a high level of service, while also increasing our efficiency by reducing the amount of resources that we use.

In Germany, these working relationships are governed by the  $\blacksquare$  Business Partner Code and the  $\blacksquare$  Code of Conduct, which oblige our partners to observe economic and legal rules of conduct and to comply with anti-corruption policies in all of their dealings with sub-contractors. The Vonovia Business Partner Code was adapted in Austria in 2019 as part of the integration of BUWOG. In Sweden, the Code of Conduct fulfills this function (see → Respect for and Promotion of Human Rights). This structured and sustainable approach to partner management minimizes violations and risks in the supply chain. In 2021, to ensure compliance with the Supply Chain Diligence Act (LkSG), we performed a gap analysis and drew up a plan for surveying environmental standards and human rights violations in preparation for the implementation of the requirements of the LkSG, which was adopted in 2021. We will perform this survey in 2022, before the LkSG comes into effect as of January 1, 2023.

The \$\mathbb{P}\$ Vonovia Partner Portal has been an important element of our long-term partnership with our service providers and suppliers since 2019. We also use it for risk and supplier management. Vonovia uses the portal as a central repository for all of the documents and data used to assess suppliers and award contracts. This reduces our administrative workload, while also allowing us to track the suitability of business partners from a formal, technical and social perspective. The system will be expanded to include sub-contractors over time. When selecting service providers and suppliers, the Procurement department uses the Vonovia partner portal to check that the provider in question has acknowledged its duty to respect human rights as set out in the Business Partner Code. In the event of any irregularities

or scenarios in which these obligations are ignored, the cases are documented accordingly and sanctions are imposed. The Vonovia Partner Portal is also linked directly to our \$\frac{\text{\$\text{\$\text{whistleblower system}}}{\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$whistleblower system}}}}}, making it easy to handle complaints made against individual partner companies.

We digitalized our tendering processes on a separate platform in 2020 in order to be transparent about our supplier base and enter into partnerships and submit orders on a paperless basis. This platform uses an SAP-based process which is capable of setting contract award and payment blocks. Vonovia uses the  $\Box$  NOVA BIM platform to manage its tendering processes. In addition to removing the need for SharePoint and a manual email-based tendering process, the platform also makes it possible for departments to access individual tenders. As a result, the Procurement department is able to view the status of a tender, prices, bidder lists, tender documents and a standardized set of specifications, in addition to providing access to the GAEB files which are commonly used in the construction industry. This gives us the flexibility we need to manage ongoing tenders within departments. We upgraded the technology behind our craftsmen tool in 2021 to standardize and streamline the ordering process with our craftsmen. In future, we will be talking to our strategic business partners about the additional functions they think could add value and want to see added. Sustainability concerns have already been implemented into our purchasing processes and the supplier management system. We have also increased the level of digitalization within the Procurement department to make these processes more efficient and more transparent (see

→ Respect for and Promotion of Human Rights).

# Information and Key Figures

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# **ESG** Ratings and Indices

**GRI** 103-3

We actively communicate our progress in terms of sustainability to the capital market, where ESG criteria are becoming an increasingly important factor in investment decisions. This allows us to maintain and even increase our attractiveness for investors over the long term.

Potential investors frequently look at the position of our company in recognized sustainability rankings and the resulting indices. This is why we participate in a wide range of national and international sustainability ratings and benchmarks. This allows us to measure and present our sustainability performance and relevant key figures against recognized standards and competitors.

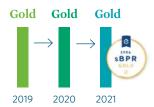
See chapter  $\rightarrow$  Appeal on the Capital Market

#### Selected Rankings and Results – ESG Ratings:



#### EPRA - sBPR

The European Public Real Estate Association (EPRA) evaluates the sustainability transparency of listed real estate companies based on the EPRA Sustainability Best Practice Recommendations (sBRP). In addition to our annual report and sustainability report, we publish a separate EPRA report every year, which is used for this assessment. In 2021, we received the Gold award for our governance, environmental and social performance for the fourth year running.





#### CDP - Climate Change

The Carbon Disclosure Project (CDP) helps companies to measure and manage their environmental performance and the associated opportunities and risks. Vonovia has been part of the CDP's Climate Change Program since 2017. We were awarded a B rating for our performance in 2021. This puts on the same level as the European average and above our direct peer group and global averages.





#### **Sustainalytics**

Sustainalytics is an independent, innovative service provider of responsible investment services. Sustainalytics takes all three dimensions of the ESG approach into account to analyze and evaluate the sustainability performance of companies and countries alike. Vonovia further improved its ESG company rating and achieved 85 points. In the ESG risk rating we received a mark of 6.7, putting us in the lowest risk category of "negligible risks". Vonovia is therefore classed as one of the absolute top performers in an industry comparison, and among the top 30 in a global comparison across all industries.

#### ESG Company Rating





2020

2021

2019

#### S&P Global

#### S&P Global CSA

The S&P Global Corporate Sustainability Assessment (CSA) evaluates the sustainability performance of around 8,000 international companies. Our performance is assessed in 61 industry-specific categories to encourage companies to bring their corporate strategies into line with social and ecological challenges. In 2021, Vonovia improved on the previous year's very good ranking, and achieved 68 (2020: 57) out of a possible 100 points. This also consolidated the company's position in the Dow Jones Sustainability Index Europe.





#### **ISS ESG – ESG Corporate Rating**

ISS ESG analyzes a company's ESG management based on up to 100 criteria, many of which are sector-specific. Vonovia was given Prime status for the first time in 2020, indicating that it is outperforming its peers. The company also improved its rating from C- (2019) to C (2020). This good result was reconfirmed in 2021 and the company's Prime status was maintained.





#### MSCI - ESG Research

MSCI ESG Research rates companies on a scale from AAA to CCC based on their ESG-related risk exposure and how they handle these risks compared to other companies. We were upgraded from BBB to A in the annual ranking for 2019 and have maintained this performance ever since.





#### **GRESB**

The GRESB (Global Real Estate Sustainability Benchmark) is an investor-initiated rating system for the sustainability performance of real estate companies. For the time being, we have made the decision to no longer participate in the rating. We have described the reasons for our decision transparently on our ⊋ Investor Relations website.

In return, we are participating in the GRESB Public Disclosure and achieved a full score (100%) for maximum transparency in 2021. The resulting assessment of A took us to first place in a comparison of German residential real estate companies and is significantly above the global average of C.

#### **ESG Indices:**

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA

#### **Dow Jones Sustainability Index Europe**

Our repeated significant improvement in the S&P CSA meant we were able to consolidate our position in the Dow Jones Sustainability Index (DJSI) Europe in 2021. The DJSI index family tracks economic, ecological and social criteria. It was launched in 1999 as a collaboration between Switzerland-based S&P Global (formerly known as SAM) and the Dow Jones Indexes. S&P Global uses positive criteria to select the most sustainable companies for inclusion in the index in question.

#### DAX 50 ESG

Vonovia was included in the new DAX 50 ESG index in 2020. Companies have to meet certain ecological, social and governance criteria to be included in the index. A total of 50 companies from the DAX, MDAX and TecDAX were listed on the index. Vonovia ranks first place in the index's ESG ranking (as of March 4, 2022).

# **About This Report**

GRI 102-45, 102-46, 102-48, 102-50, 102-51, 102-52, 102-54, 102-56

#### Content and Structure of the Report

This is our seventh sustainability report. It presents our company's performance based on financial and non-financial information. The aim of this reporting is to create transparency and comparability for sustainability activities with other companies on the market. This report only covers the activities and services of Vonovia SE and does not include Deutsche Wohnen SE, which was acquired on September 30, 2021. The process of integrating Deutsche Wohnen started in 2022 and is set to be completed by the start of 2023. As part of this integration process, all concepts, due diligence processes and performance indicators will be compared and integrated.

The thematic focal points of the Sustainability Report are the seven action areas that we identified as part of our materiality analysis – in accordance with the requirements of the Global Reporting Initiative (GRI) for the selection of  $\rightarrow$  Material Topics:

- > Environment and climate
- > Sustainable construction and development
- > Society and contribution to urban development
- > Homes and customers
- > Corporate culture and employees
- > Governance and responsible business practices
- > Future fitness and capital market

The report is structured according to our sustainability activities, which reflect the material economic, social and ecological aspects of Vonovia SE.

#### **Reporting Framework**

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards (as amended in 2016) Core option. We have applied more recent versions of individual GRI standards where available. The GRI Universal Standards in the version dated October 2021 do not yet apply. The corresponding → GRI Content Index can be found in the appendix to this report. We have informed GRI of the

application of the GRI standards and the publication of this report.

Vonovia's Sustainability Report is published on an annual basis. This reporting period relates to the 2021 fiscal year (January 1 to December 31, 2021), meaning that it picks up exactly where the ♀ 2020 Sustainability Report, which was published in May 2021, left off.

As a capital market-oriented company, Vonovia SE is also required to make disclosures in accordance with Sections 315b, 315c in conjunction with Sections 289c to 289e HGB. (Non-financial Group Declaration). The necessary reporting requirements were implemented as part of the management report in the  $\mbox{\ensuremath{\square}}$  2021 Annual Report, which was published on March 18, 2022.

In order to address the diverse stakeholder interests transparently and comprehensively, we are also guided – in addition to the GRI – by the EPRA Best Practice Recommendations on Sustainability Reporting (sBPR) (in its third version of 2017). For this purpose, we have prepared a separate EPRA report, which we publish on our ♀ website. In addition, for the Real Estate reporting framework of the → Sustainability Accounting Standards Board (SASB), we create a

→ Sustainability Accounting Standards Board (SASB), we create a mapping of the indicators to the content published in this report.

In this report, we also report on the implementation of the recommendations made by the Task Force on Climaterelated Financial Disclosures (TCFD) (see  $\rightarrow$  Environment and Climate).

The collection and calculation of environmental key figures was headed by the Controlling department and supported by Facility Management, Portfolio Management, Portfolio Controlling, Technical Service, Vonovia Energie- und Service GmbH, Customer Service, Data Management, Development/New Construction, Business Development, and the Procurement department. The key figures for employees were collected and consolidated by the HR department. The central Procurement department prepared the statements

relating to supplier management (procurement). Key figures from the governance area were provided by the Legal department.

Both the Non-financial Group Declaration and the Sustainability Report are audited by the auditor of the annual financial statements, KPMG. The Sustainability Report has been audited with limited assurance (see → Independent Auditor's Report). All references to content outside this report are considered additional information and are not covered by the audit performed by KPMG. Also excluded from the audit procedures are the "project profiles", which can be found in the substantive chapters of this report. These are clearly marked visually by a border and the heading "Project". SASB mapping is also excluded from the audit.

## Organizational Boundaries/Scope of Consolidation

These key figures focus on the activities of Vonovia SE in Germany, Austria and Sweden using the financial control approach. Deutsche Wohnen SE, which belonged to the Vonovia Group since September 30, 2021, is not included in this report. The process of integrating Deutsche Wohnen started in 2022 and is set to be completed by the start of 2023. Sustainability information can then be reported on a consolidated basis as of the 2022 reporting year. The basic definition of the scope of the Sustainability Report on the consolidated companies is regularly reviewed for the next reporting cycle, and adjusted if necessary.

# **Key Figures**

In this chapter, you will find selected key sustainability figures for our company. We are reporting differentiated data for each country (Germany, Austria and Sweden) as well as consolidated data for the whole Group. Figures for Deutsche Wohnen have not yet been included for the 2021 reporting year.

#### **Portfolio Description**

					2	2021 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
General Key Figures 1)							
Number of rented units	number	400,082	422,252	420,441	357,706	22,112	40,623
of which residential units	%	98.7	98.4	98.5	99.0	97.3	94.7
of which commercial units	%	1.3	1.6	1.5	1.0	2.7	5.3
Rentable area	m <sup>2</sup>	25,991,328	27,545,128	27,422,827	22,686,189	1,752,265	2,984,373
of which residential area	%	96.5	96.4	96.4	97.4	90.9	92.1
of which commercial area	%	3.5	3.6	3.6	2.6	9.1	7.9
Portfolio by age category	number	394,850	415,688	413,967	353,963	21,518	38,486
of which built before 1939	%	12.8	12.1	12.0	13.4	8.3	1.1
of which built between 1940 and 1949	%	2.3	2.3	2.2	2.0	6.9	1.6
of which built between 1950 and 1959	%	26.9	25.7	25.7	29.0	6.3	5.8
of which built between 1960 and 1969	%	21.4	22.2	22.2	20.7	11.0	42.2
of which built between 1970 and 1979	%	18.6	19.7	19.7	17.8	12.1	41.2
of which built between 1980 and 1989	%	8.7	8.9	8.9	8.5	19.5	6.0
of which built between 1990 and 1999	%	7.9	7.5	7.5	7.3	20.6	1.8
of which built between 2000 and 2009	%	0.9	0.8	0.8	0.5	7.4	0.0
of which built between 2010 and 2019	%	0.6	0.7	0.6	0.3	5.7	0.2
of which built since 2020	%	0.0	0.1	0.5	0.4	2.4	0.1
Number of buildings listed as historical landmarks	number	4,456	4,461	4,540	4,520	20	0

<sup>1)</sup> Total portfolio including buildings listed as historical landmarks, excluding buildings that serve only as car parks.

#### **Environment**

**GRI** 302-1, 302-3, 302-4, 302-5, 303-5, 305-1, 305-2, 305-3, 305-4, 305-5, 306-2

The section below shows the environmental key figures – broken down into key figures for the portfolio – for development/new construction, for business operations, for renewable energy and for the carbon footprint. You can find explanations of the content of the selected key figures presented here in the chapters → Environment and Climate, and → Sustainable Construction and Development. More detailed explanations on how the TCFD recommendations are applied can also be found in the chapter → Environment and Climate.

#### **Carbon Emissions**

The scope of consolidation relevant for calculating carbon emissions was defined in coordination with the scope of consolidation for the other environmental key figures. The carbon emission calculations were based on the greenhouse gas protocol (GHG Protocol), the internationally recognized standard for calculating carbon emissions. Carbon emissions were calculated as CO<sub>2</sub> equivalents (CO<sub>2</sub>e). Carbon dioxide equivalent (CO<sub>2</sub>e) is a standardized unit to measure the relative contributions of various gases to the greenhouse gas effect. Emissions that harm the climate are not only caused by carbon dioxide (CO<sub>2</sub>), although it is the most well-known. Other gases, such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), are converted to CO<sub>2</sub> equivalents using a conversion factor, which simplifies comparability in terms of detrimental effects on the climate. Only the calculations of emission savings (e.g., from modernization and heating renewal projects) are presented in tons of CO<sub>2</sub> and not in CO<sub>2</sub> equivalents.

We updated the data sources and harmonized the emission factors for the calculation of carbon emissions in the 2020 Sustainability Report. The values for 2021 and 2020 are therefore not directly comparable with figures for previous years.

The CO₂e factors from the GEMIS database version 4.95 (2019) and version 5.0 (2020/2021) were predominantly used to calculate the emissions. GEMIS (Global Emission Model for Integrated Systems) is an internationally recognized model for determining energy and material flows with an integrated database. The model calculates life cycles for all processes and scenarios, i.e., it takes into consideration all material steps from primary energy/raw material extraction to effective energy/material provision and also includes the auxiliary energy and cost of materials to produce energy plants and transport systems. The GEMIS data was selected because it is generally accepted, up-to-date and consistent, and was recommended by the Initiative Wohnen.2050 (IW.2050). If other emission factors are applied in individual cases, this is indicated accordingly.

#### Portfolio

The calculation of carbon emissions in the portfolio is conducted according to the "Financial Control Approach". Emissions produced as a result of portfolio operations are disclosed under Scope 1 and Scope 2 emissions. This takes into consideration the actual financial control exercised over the portfolio that exists for the majority of the portfolio area or rental units (Germany region: 97%, Austria region: 83%, Sweden region: 100%). For the rest of the portfolio, in which the company holds a minority interest, the carbon emission figures are fully reported under Scope 3. To calculate the market-based emissions from district heating and electricity, we used the providers' exact emission factors to calculate the emissions.

#### **Business Operations**

 ${\rm CO_2e}$  factors from the GEMIS database version 4.95 (2019) and version 5.0 (2020/2021) were also applied for the majority of the emissions resulting from business operations. To calculate the market-based emissions from electricity, we used the electricity providers' exact emission factors to calculate the emissions. To calculate Scope 3 emissions from rail business travel, we used emission factors taken from Deutsche Bahn and Österreichische Bundesbahnen. Business travel and transport are also reported for Sweden for the first time this year. GHG Protocol factors from external travel agencies were applied for flights.

#### Portfolio Environmental Figures

					20	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweder
Energy Consumption in the Portfo	olio						302-1, 302-3
Energy consumption 1)	MWh	4,318,235	4,548,951	4,447,794	3,527,373	343,998	576,422
Energy intensity							
Energy intensity of rentable area	kWh/m²	166.1	165.1	162.2	155.5	196.3	193.1
of which from supply of heating	kWh/m²	163.5	160.9	157.7	153.2	192.1	171.9
of which from general electricity consumption	kWh/m²	2.6	4.2	4.5	2.3	4.2	21.3
Energy intensity per rented unit	MWh/ rented unit	10.8	10.8	10.6	9.9	15.6	14.2
of which from supply of heating	MWh/ rented unit	10.6	10.5	10.3	9.7	15.2	12.6
of which from general electricity consumption	MWh/ rented unit	0.2	0.3	0.3	0.1	0.3	1.6
Heating consumption in the portf	iolio <sup>2)</sup>						
Heating consumption in the portfolio	MWh	4,249,600	4,433,194	4,325,611	3,476,009	336,644	512,959
from renewable sources	%	0	0	0.3	0	2.0	1.4
from non-renewable sources	%	100	100	99.7	100	98.0	98.6
Natural gas	MWh	2,086,988	2,090,876	2,034,751	1,911,305	123,445	0
District heating	MWh	1,799,648	2,029,574	2,015,140	1,360,651	153,811	500,678
Heating oil	MWh	207,233	181,555	167,659	140,122	27,537	0
Electricity	MWh	98,131	74,596	67,541	37,113	25,214	5,215
Coal	MWh	47,672	37,367	26,817	26,817	0	0
Other <sup>3)</sup>	MWh	9,927	19,226	13,703	0	6,637	7,067
Electricity consumption in commu	unal areas						
			Γ				
Total electricity consumption in communal areas	MWh	68.635	115.757	122.182	51.365	7.355	63,463
Total electricity consumption in communal areas  from renewable sources 4)	MWh	<b>68,635</b> 46.7	<b>115,757</b> 77.3	<b>122,182</b> 76.9	<b>51,365</b> 96.6	<b>7,355</b> 85.9	<b>63,463</b> 59.8

<sup>1)</sup> Consists of electricity consumption in the portfolio's communal spaces and total heat consumption in the portfolio (according to energy certificates, calculated for living and communal areas).

When calculating the heat energy used, the rental areas were extrapolated to the total building area in accordance with ENEV 2020 §82 (2) by adding 20% for the common areas. However, the denominator of this key figure remains the rental space without common areas. In 2019, calculation for the Austrian region according to extrapolated consumption in line with the Klimaaktiv Pact.

<sup>3)</sup> Other includes: Biomass, solar thermal, heat pumps.

<sup>4)</sup> Calculation based on the share of renewable energy in the Swedish electricity mix according to the Swedish Energy Agency, and in the Austrian electricity mix according to the E-Control 2020 electricity disclosure report (in each case location-based approach). For the Germany region since 2020, all volumes handled via VESG by means of 100% green electricity proof of origin, cleared via the Federal Environment Agency's register of guarantees of origin. Remainder and previously: electricity mix for Germany.

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Refurbishment							
Number of modernized buildings	number	1,745	1,382	1,152	1,027	22	103 <sup>1)</sup>
Number of modernized rented units	number	14,229	11,299	9,420	8,230	495	695 <sup>1)</sup>
Modernized rentable area	million m <sup>2</sup>	0.88	0.69	0.58	0.49	0.03	0,051)
Number of rented units with upgraded heating systems	number	7,939	7,247	5,025	4,087	162	776 <sup>1)</sup>
refurbishment rate	%	3.6	2.7	2.2	2.3	2.2	1,71)
Expenses for maintenance and ongoing maintenance	in € million	481.6	592.0	666.4	541.7	53.3	71.4
Maintenance intensity	€/m²/a	19.0	22.3	25.2	24.5	33.0	26.0
Expenses for modernization	in € million	996.5	908.4	758.6	594.1	1.6	162.9
Modernization intensity	€/m²/a	39.4	34.2	28.7	26.9	1.0	59.4
Investment in the portfolio	in € million	1,478.1	1,500.4	1,425.0	1,135.8	54.8	234.3
Investment intensity	€/m²/a	58.4	56.6	53.8	51.4	33.9	85.4
Expenses for new construction	in € million	493.0	435.5	526.6	389.1	119.4	18.0
Total investment intensity	in € million	1,971.1	1,935.9	1,951.6	1,525.0	174.3	252.4
Rented units modernized using KfW funds	number	10,146	4,906	4,300	4,300	0	0

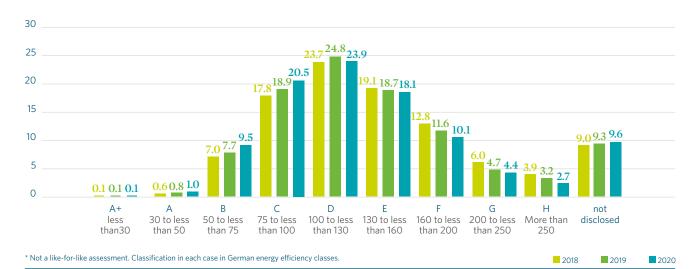
<sup>1)</sup> As in the previous years, refurbishments and modernizations with a total investment sum of more than €500 per square meter of rental space per business unit were taken into account for the Sweden region.

					2	021 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Energy Efficiency Standards by E	nergy End-use I	Efficiency Class 1)	•				
Rental area	m²	25,991,328	27,545,128	27,422,827	22,686,189	1,752,265	2,984,373
of which energy level A+	%	0.1	0.1	0.1	0.1	0.4	0.0
of which energy level A	%	0.6	0.8	1.0	1.0	2.7	0.0
of which energy level B	%	7.0	7.7	9.5	10.5	9.9	1.1
of which energy level C	%	17.8	18.9	20.5	23.3	10.9	4.8
of which energy level D	%	23.7	24.8	23.9	25.0	12.9	21.8
of which energy level E	%	19.1	18.7	18.1	16.9	9.5	32.5
of which energy level F	%	12.8	11.6	10.1	9.3	12.2	15.2
of which energy level G	%	6.0	4.7	4.4	3.9	11.0	4.1
of which energy level H	%	3.9	3.2	2.7	2.4	11.1	0.2
of which not disclosed	%	9.0	9.3	9.6	7.5	19.4	20.2

<sup>1)</sup> Existing buildings including listed buildings excluding pure car park buildings. Classification of all buildings according to German final energy classifications. No like-for-like consideration, therefore the change is also influenced by purchases.

#### Energy Efficiency Standards in the Portfolio (Total Vonovia) – 31.1% in Efficiency Class C or Better\*

Portfolio share in % (relates to final energy demand and rentable area) Energy efficiency classes in kWh/(m²a)



					2021 by region		
Key Figures	Unit	20191)	2020	2021	Germany	Austria	Sweder
Fresh Water Consumption i	n the Portfolio 1)						303-5
Water consumption	million m³	45.2	53.2	49.6	40.6	3.5	5.5
Water intensity	$m^3/m^2$	1.98	1.93	1.81	1.79	1.97	1.85

					2021 by region			
Key Figures	Unit	2019 1)	2020	2021	Germany	Austria	Sweden	
Waste Volume in the Portfolio 2)							306-2	
Waste volume	t	485,828	519,402	561,643	515,894	21,657	24,092	
of which residual waste	%	37.0	36.3	37.3	36.9	36.8	47,23)	
of which waste paper	%	34.7	33.4	30.8	32.2	16.3	13.1	
of which recycling 4)	%	7.8	9.1	9.3	8.2	20.2	23.6	
of which organic waste	%	20.4	21.3	22.6	22.7	26.7	16.0	
Recycling ratio 5)	%	63.0	63.7	62.7	63.1	63.2	52.8	

- 1) For the 2019 financial year, only the Germany region.
- 2) Calculations, especially for the regions of Austria and Sweden, are mainly based on statistical data due to lack of data availability.
- Reflects residual waste including bulky waste and incineration for energy generation.
   Region Germany and Austria: Glass, packaging, metals, wood, plastics, textiles. Region Sweden: Material from recycling centres and packaging waste.
- 5) Calculation of recycling rate via share of waste generation in tons. The recycling rate takes into account not only the volume of recycled waste but also the reusability of waste paper and organic waste.

#### **Development and New Construction**

#### Completion of new construction

			20	21 by region	
Key Figures	Unit	2021	Germany	Austria	Sweden
General Project Data					
Rented units 1)	number	2,201	1,751	275	175
Rentable area	m²	153,651	130,752	14,294	8,605
of which residential area	%	98.8	98.7	100.0	98.6
of which commercial area	%	0.5	0.5	0.0	1.4
of which social institutions <sup>2)</sup>	%	0.7	0.8	0.0	0.0
Site area	m²	119,995	101,022	10,771	8,202
of which green spaces	%	29.7	27.8	30.1	52.5
Energy and Heat Supply					
Rentable area not including vertical expansion	m²	134,669	115,141	14,294	5,235
of which district heating 3)	%	50.7	50.1	37.8	100.0
of which renewable energy sources/ hybrid systems 4)	%	19.5	15.0	62.2	0.0
of which fossil energy sources 5)	%	29.8	34.9	0.0	0.0
of which primary energy requirement of ≤30 kWh/m²a	%	35.9	37.3	37.8	0.0
of which primary energy requirement of >30 and ≤50 kWh/m²a	%	45.5	53.3	0.0	0.0
of which primary energy requirement of >50 and ≤75 kWh/m²a	%	9.9	9.4	0.0	48.0
of which primary energy requirement of >75 kWh/m²a	%	8.6	0.0	62.2	52.0
Average primary energy requirement 6)	kWh/m²a	38.6	33.7	62.6	79.8
Installed output of photovoltaic systems	kWp	255	255	0	0
Mobility <sup>7)</sup>					
Proportion of projects featuring charging stations 8)	%	29.6	26.1	50.0	50.0
Proportion of projects featuring empty cable conduits for charging stations	%	25.9	26.1	0.0	50.0
Number of bicycle parking spaces per rented unit	Avg.	1.7	1.7	1.4	1.6
Number of vehicle parking spaces per rented unit	Avg.	0.6	0.6	0.7	0.3
Minutes to reach the nearest public transport connection on foot	Avg.	3.9	3.5	6.1	3.4

<sup>1)</sup> Both projects to hold and to sell included. Including commercial, therefore not identical with the residential units reported in the Annual Report (2,200 units). Relative figures refer to rental

<sup>2)</sup> Category includes kindergartens, schools, homes and similar institutions.

<sup>3)</sup> Separate presentation, as both renewable and fossil energy sources can be used in district heating supply.

<sup>4)</sup> At least proportionate supply from renewable energy sources: biogas, biomass, wood pellets and heat pump (additional condition: Heat pump must be partly supplied with RE (solar thermal, geothermal, PV, or similar)).

 <sup>5)</sup> Fossil energy sources: natural gas, crude oil, non-renewably generated electricity.
 6) Based on completed rental space without extensions and without purely commercial buildings (analogous to Sustainability Performance Index indicator).

<sup>7)</sup> Calculated exclusively on the basis of completed projects without taking into account vertical expansion.

<sup>8)</sup> Charging stations can be publicly accessible or assigned to a private parking space.

#### New construction project pipeline

			20	21 by region	
Key Figures	Unit	2021	Germany	Austria	Sweden
Project Pipeline New Buildings 1)					
Rented units	number	12,737	9,407	2,934	396
Rentable area	m²	928,890	700,055	208,385	20,450
of which residential area	%	92.8	92.0	94.6	99.6
of which commercial area	%	4.5	4.4	4.9	0.4
of which social institutions <sup>2)</sup>	%	2.8	3.5	0.4	0.0
of which completion in 2022	%	26.6	12.6	74.6	18.0
of which completion in 2023	%	20.5	22.7	10.5	49.4
of which completion in 2024	%	27.9	36.0	0.0	32.6
of which completion after 2024	%	25.0	28.8	14.9	0.0

<sup>1)</sup> Projects under construction and projects with planned construction start in 2022. Both projects to hold and to sell taken into account. Relative key figures refer to rental space.

#### **Environmental Key Figures on Business Operations**

					20	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Energy Consumption in Business C	Operations 1)						302-1, 302-3
Energy consumption	MWh	30,001	28,163	31,306	30,018	975	313
of which electricity consumption	MWh	11,225	8,995	10,300	9,754	396	150
Proportion electricity from renewable energy sources <sup>2)</sup>	%	60.4	72.2	72.3	71.4	100.0	60.1
Heat consumption	MWh	18,776	19,168	21,006	20,264	579	164
of which natural gas	MWh	4,909	4,632	5,550	5,305	245	0
of which district heating	MWh	13,867	13,722	15,293	14,958	334	0
of which other 3)	MWh		813	164	0	0	164
Energy intensity	kWh/m²	163.7	157.8	154.0	157.9	100.0	91.9
Water Consumption in Business O	perations <sup>4)</sup>						303-5
Water consumption	m³	103,328	68,448	67,407	60,877	5,932	598
Water intensity	$m^3/m^2$	0.53	0.39	0.33	0.32	0.61	0.18

<sup>1) 2019</sup> includes the locations in Germany and Austria, since 2020 also the energy consumption of the office locations in Sweden (of which heat consumption from energy performance certificate data). Partially limited comparability due to delayed availability of actual data.

<sup>2)</sup> Kindergartens, schools, homes and comparable institutions.

The share of renewable energies is based on the information provided by the individual energy suppliers per location (market-based approach). Alternatively, the German electricity mix according to the BDEW location-based approach was used for the German region.
 Other energy sources include heating oil and heat pumps.

<sup>4)</sup> From 2021, Swedish office locations will also be taken into account for water consumption and water intensity. Partially limited comparability due to delayed availability of actual data.

					2021 by region			
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden 1)	
Waste Volume in Business Operation	ıs						306-2	
Total volume of commercial municipal waste	t	899	811	667	539	128	-	
of which recycled commercial municipal waste	%	45.5	31.5	35.6	37.5	27.9	_	
of which residual commercial municipal waste	%	54.5	68.5	64.4	62.5	72.1	_	
Other waste 2)	t	0	93	29	0	29	_	

<sup>1)</sup> No data collected for the Sweden region so far.

2) Other waste includes bulky waste, wood, iron and steel. Increased other waste generation in the Austria region due to relocation to new headquarters in 2020.

			2020		2021 by region		
Key Figures	Unit	2019		2021	Germany	Austria	Sweden
Mobile Combustion in Busines	s Operations 1)						302-1
Fuel consumption	MWh	76,190	76,108	75,893	74,311	667	915
of which diesel	MWh	71,792	72,002	71,475	70,426	472	577
of which gasoline	MWh	4,373	4,085	4,415	3,882	195	337
of which other 2)	MWh	25	22	7	7	0	0
Vehicles (yearly average)	number	5,265	5,685	5,746	5,491	32	223
Distance traveled	million km	92.7	104.9	109.9	107.4	0.8	1.7
Average fuel consumption	liters/ 100 km	8.2	7.3	6.9	6.9	8.8	5.6
Average emissions	gCO₂e/km	250	221	210	211	259	163

Only the fuel consumption of the vehicle fleet was taken into account. First data collection region Sweden in 2020.
 Position Other includes: Natural gas, LPG, electricity.

					2021 by region			
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden 1)	
Travel and Transport in B	Susiness Operations							
By rail	million pkm	4.17	1.99	2.08	1.99	0.02	0.08	
By plane	million pkm	4.12	0.95	0.93	0.70	0.14	0.09	
By private vehicle	million km	3.14	2.78	2.88	2.21	0.20	0.47	

<sup>1)</sup> First survey of business trips from the Sweden region for 2021.

2) "Passenger-kilometer" unit (pkm) stands for the kilometers travelled in passenger transport multiplied by the number of passengers.

#### Renewable energy

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Renewable Energy Generation							302-1
Energy generated 1)	MWh	5,652	7,324	12,838	12,040	184	615
of which from renewable sources	%	100	100	100	100	100	100
of which from photovoltaic systems	%	100	100	100	100	100	100
Installed output 2)	MWp	10.2	15.9	16.8	15.9	0.2	0.7
Portfolio	number	295	424	451	427	4	20
Avoided emissions 3)	t CO₂e	3,447	4,458	8,343	8,247	47	49

- 1) Photovoltaic systems owned by Vonovia as of the reporting date of Dec. 31; electricity generated only.
- 2) The proportional increase in the number of plants and installed capacity can deviate from the energy generated, as the number of plants also includes plants that have already been built and will
- not be connected to the grid until the following year.

  3) Theoretical annual emissions avoidance from energy generated by means of photovoltaic systems and fed into the general electricity grid. Calculated with emission factor for electricity displacement mix PV, source: Federal Environment Agency (for Germany). Comparability with previous years only possible to a limited extent due to different emission factors per kWh of electricity over time. Correction of data for 2019 and 2020.

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Energy Sales							302-1
Total energy sold	MWh	58,096	71,070	87,730	87,730	0	0
of which to rentable areas 1)	MWh	19,398	26,949	39,794	39,794	0	0
of which general electricity 2)	MWh	38,698	44,120	47,936	47,936	0	0
Share of electricity from renewable energy sources 3)	%	57.8	100.0	100.0	100.0	0.0	0.0
Avoided emissions	t CO2e	0	17,395	18,312	18,312	0	0
Total gas sold 4)	MWh	864,959	859,140	1,208,240	1,208,240	0	0

- Electricity sold by VESG for private use by tenants.
   Electricity sold by VESG for the common areas of the portfolio.
- 3) Since 2020, 100% green electricity by means of a guarantee of origin, deleted via the Federal Environment Agency's register of guarantees of origin. Previously: Electricity mix Germany.
  4) Gas sold to tenants by VESG; in order to remain cost-neutral for tenants, Vonovia has decided not to acquire proof of origin for green gas.

#### **Carbon Emissions**

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Total Emissions in the Portfolio 1)					305-	1, 305-2, 305-3,	305-4, 305-5
Emissions in the portfolio	t CO <sub>2</sub> e	1,176,496	1,021,319	988,942	871,290	80,407	37,244
Emissions from rented units	t CO <sub>2</sub> e	1,153,003	1,013,197	980,721	869,981	78,510	32,231
Emissions from							
communal areas 2)	t CO₂e	23,493	8,122	8,221	1,310	1,898	5,014
	kg CO₂e/						
Intensity of rentable area 3)	m <sup>2</sup>	45.3	37.1	36.1	38.4	45.9	12.5
	kg CO₂e/						
Intensity	r.u.	2,941	2,419	2,352	2,436	3,636	917
Emission savings due to heating modernization 4)	t CO <sub>2</sub> e	3,055	3,560	2,883	2,883		_
Emission savings due to moder- nization 4)	t CO₂e	11,562	13,152	8,529	8,529	_	_
Scope 1 (direct carbon emissions)		<i>'</i>					
Combustion processes at stationary plants	t CO₂e	571,744	466,848	448,790	422,026	26,533	232
of which heating from natural gas (r.u.)	%	86.5	87.5	88.6	89.5	74.9	0
of which heating from heating oil (r.u.)	%	10.7	9.8	9.4	8.4	25.1	100
of which heating from	%	2.0	2.8	2.0	2.2	0.0	0
coal (r.u.)	70	2.8	2.0	2.0	2.2	0.0	U
Scope 2 (indirect carbon emission	s)						
Energy delivery 5)	t CO₂e	466,892	410,369	401,316	331,432	32,928	36,956
of which heating from district heating (r.u.)	%	86.8	92.9	93.8	96.1	79.8	85.4
of which heating from							
or willer heating hom							
electricity (r.u.)	%	8.2	5.1	4.2	3.5	14.4	1.1
electricity (r.u.) of which electricity							
electricity (r.u.) of which electricity (communal areas) 2)	%	8.2 5.0	2.0	2.0	3.5 0.4	14.4 5.8	1.1 13.6
electricity (r.u.) of which electricity	%						
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased	% iissions)	5.0	2.0	2.0	0.4	5.8	13.6
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6)	% issions)	5.0 <b>37,292</b>	2.0 <b>35,085</b>	33,596	0.4 <b>22,724</b>	5.8 <b>10,872</b>	13.6
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.)	% iissions)	5.0	2.0	2.0	0.4	5.8	13.6
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.) of which heating from	% dissions) t CO <sub>2</sub> e%	<b>37,292</b> 60.3	<b>35,085</b> 59.4	<b>33,596</b> 60.6	22,724 66.1	<b>10,872</b> 49.3	13.6
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.) of which heating from district heating (r.u.)	% issions) t CO_2e%	<b>37,292</b> 60.3 24.7	<b>35,085</b> 59.4 28.2	33,596 60.6 27.9	22,724 66.1 21.0	10,872 49.3	13.6
electricity (r.u.) of which electricity (communal areas) <sup>2)</sup> Scope 3 (other indirect carbon em  Commodities leased downstream <sup>6)</sup> of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating oil (r.u.)	% dissions) t CO <sub>2</sub> e%	<b>37,292</b> 60.3	<b>35,085</b> 59.4	<b>33,596</b> 60.6	22,724 66.1	<b>10,872</b> 49.3	13.6
electricity (r.u.) of which electricity (communal areas) <sup>2)</sup> Scope 3 (other indirect carbon em  Commodities leased downstream <sup>6)</sup> of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating oil (r.u.) of which heating from	% issions) t CO_2e%	<b>37,292</b> 60.3 24.7	<b>35,085</b> 59.4 28.2	33,596 60.6 27.9	22,724 66.1 21.0	10,872 49.3	13.6
electricity (r.u.) of which electricity (communal areas) <sup>2)</sup> Scope 3 (other indirect carbon em  Commodities leased downstream <sup>6)</sup> of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating oil (r.u.)	% t CO <sub>2</sub> e % % %	<b>37,292</b> 60.3 24.7 8.8	<b>35,085</b> 59.4 28.2 6.8	33,596 60.6 27.9 6.1	22,724 66.1 21.0 7.9	10,872 49.3 42.3 2.3	13.6
electricity (r.u.) of which electricity (communal areas) <sup>2)</sup> Scope 3 (other indirect carbon em  Commodities leased downstream <sup>6)</sup> of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating oil (r.u.) of which heating from electricity (r.u.)	% t CO <sub>2</sub> e % % %	37,292 60.3 24.7 8.8	2.0 35,085 59.4 28.2 6.8 4.4	33,596 60.6 27.9 6.1	22,724 66.1 21.0 7.9	10,872 49.3 42.3 2.3	13.6
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating from electricity (r.u.) of which coal (r.u.)  Fuel- and energy-related emissions (not Scope 1 and 2) 7)	% t CO <sub>2</sub> e % % %	37,292 60.3 24.7 8.8	2.0 35,085 59.4 28.2 6.8 4.4	33,596 60.6 27.9 6.1	22,724 66.1 21.0 7.9	10,872 49.3 42.3 2.3	13.6
electricity (r.u.) of which electricity (communal areas) <sup>2)</sup> Scope 3 (other indirect carbon em  Commodities leased downstream <sup>6)</sup> of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating from electricity (r.u.) of which coal (r.u.)  Fuel- and energy-related	% t CO <sub>2</sub> e	37,292 60.3 24.7 8.8 5.3 0.9	2.0 35,085 59.4 28.2 6.8 4.4 1.2	2.0 33,596 60.6 27.9 6.1 4.3 1.1	22,724 66.1 21.0 7.9 3.5 1.6	10,872 49.3 42.3 2.3 6.1 0.0	0 - - -
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating from electricity (r.u.) of which coal (r.u.)  Fuel- and energy-related emissions (not Scope 1 and 2) 7) of which upstream,	% t CO <sub>2</sub> e	37,292 60.3 24.7 8.8 5.3 0.9	2.0 35,085 59.4 28.2 6.8 4.4 1.2 109,018	2.0 33,596 60.6 27.9 6.1 4.3 1.1 105,240	22,724 66.1 21.0 7.9 3.5 1.6	10,872 49.3 42.3 2.3 6.1 0.0	0 - - - - - 57
electricity (r.u.) of which electricity (communal areas) 2)  Scope 3 (other indirect carbon em  Commodities leased downstream 6) of which natural gas (r.u.) of which heating from district heating (r.u.) of which heating from electricity (r.u.) of which coal (r.u.)  Fuel- and energy-related emissions (not Scope 1 and 2) 7) of which upstream, natural gas (r.u.)	% t CO <sub>2</sub> e	37,292 60.3 24.7 8.8 5.3 0.9	2.0 35,085 59.4 28.2 6.8 4.4 1.2 109,018	2.0 33,596 60.6 27.9 6.1 4.3 1.1 105,240	22,724 66.1 21.0 7.9 3.5 1.6	10,872 49.3 42.3 2.3 6.1 0.0	0 - - - - - 57

Greenhouse gases included in the calculation:  $CO_2$  equivalents (greenhouse gases regulated in the Kyoto Protocol:  $CO_2$ ,  $CH_4$ ,  $N_2O$ ,  $SF_6$ , HFC and H-HFC).

Sources of emission factors: GEMIS 4.95, GEMIS 5.0, Defra, Federal Ministry of the Environment Germany, Federal Ministry of the Environment Austria, Covenant of Mayors for Climate and Energy and Swedenergy (Swedish non-profit organisation).

Complete conversion of emissions calculation in Germany from 2020 and Austria from 2021 to GEMIS 5.0, therefore limited comparability with previous years (explanation on page 120).

- 1) Consideration of the regions Sweden (part Hembla) from 2020 onwards.
- 2) For the Germany region since 2020, all volumes traded via the VESG (approx. 93% of general electricity consumption) via guarantee of origin 100% green electricity, cleared via the Federal Environment Agency's register of guarantees of origin.
- 3) Including fuel- and energy-related emissions from the upstream chain (Scope 3.3).
- 4) So far no calculation for the regions Austria and Sweden. In the modernisation sector, correction of previous years in favour of exclusive allocation of emission savings by year of completion.
- 5) Calculation using supplier-specific emission factors (market-based), if available in qualified form. Otherwise, use of location-specific emission factors (location-based).
   6) Rental units that belong to a condominium owners' association (WEG) in which Vonovia has an ownership interest of ≤ 50 % in the building (no full operational control). There are no proportional ownership rights in the Sweden region.
- 7) Contains the fuel- and energy-related emissions of the entire portfolio (incl. WEG share), stationary combustion in each case.

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Total Emissions in Business Opera	ntions <sup>1)</sup>				305-	1, 305-2, 305-3,	305-4, 305-5
Emissions	t CO <sub>2</sub> e	38,493	32,043	32,910	32,015	482	413
Emissions intensity 1)	kg CO₂e/ m²	55.2	45.7	44.7	46.5	22.5	7.3
Scope 1 (direct carbon emissions)							
Combustion processes at							
stationary plants	t CO₂e	1,222	1,084	1,118	1,069	49	0
of which natural gas	%	100.0	86.1	100.0	100.0	100.0	
of which heating oil		0.0	13.9	0.0	0.0	0.0	
Combustion processes at mobile plants	t CO₂e	23,169	19,127	19,071	18,677	166	228
of which diesel		94.9	94.8	94.4	94.9	71.4	63.9
of which gasoline		5.1	5.2	5.6	5.1	28.6	36.1
of which natural gas		0.0	0.0	0.0	0.0	0.0	0.0
or winer natural gas	70	0.0	0.0	0.0	0.0	0.0	0.0
Scope 2 (indirect carbon emission	s) <sup>2)</sup>						
Location-based	t CO <sub>2</sub> e	8,757	6,814	7,707	7,529	154	25
of which electricity	%	59.4	49.6	49.8	49.5	56.4	100
of which district heating	%	40.6	50.4	50.2	50.5	43.6	0
Market-based	t CO <sub>2</sub> e	3,116	1,437	1,726	1,726	0	-
of which electricity 3)	%	100	100	100	100		-
of which district heating 4)	%	-	-	-			-
Scope 3 (other indirect carbon em	issions)						
Business travel and transport 5)	t CO₂e	999	710	709	540	60	109
of which by private vehicle	%	2.0	1.6	0.0	0.0	0.3	0.0
of which by plane	%	55.6	15.3	13.8	13.1	29.0	9.0
of which by rail	%	42.3	83.1	86.1	86.9	70.7	91.0
Fuel- and energy-related emissions (not Scope 1 and 2)	t CO₂e	4,347	4,308	4,304	4,199	54	51
of which upstream, natural gas (stationary combustion)	%	4.7	5.0	6.0	5.7	31.1	0.0
of which upstream, heating oil (stationary combustion)	%	0.0	0.8	0.0	0.0	0.0	0.0
of which upstream, diesel (mobile combustion)	%	88.9	88.3	87.7	88.6	46.5	59.5
of which upstream, petrol (mobile combustion)	%	6.0	5.8	6.3	5.7	22.4	40.5
of which upstream, natural gas (mobile combustion)	%	0.4	0.0	0.0	0.0	0.0	0.0

Greenhouse gases included in the calculation: CO<sub>2</sub> equivalents (greenhouse gases regulated in the Kyoto Protocol: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFC and H-HFC).

Sources of emission factors: GEMIS 4.95, GEMIS 5.0, Defra, Federal Ministry of the Environment Germany, Federal Ministry of the Environment Austria, Covenant of Mayors for Climate and Energy and Swedenergy (Swedish non-profit organization).

Complete conversion of the emission calculation for Germany as of 2020 and Austria as of 2021 to GEMIS 5.0, therefore limited comparability with previous years (explanation on page 120). From  $2020\ onwards, the\ emission\ factors\ of\ the\ Germany\ region\ according\ to\ GEMIS\ 5.0\ were\ applied\ to\ mobile\ combustion\ across\ all\ regions.$ 

- 1) Only stationary emissions considered.
- For the sake of completeness, the location-based approach was used to calculate the total amount of CO<sub>2</sub> emissions from business processes.
   For locations in the Austria region: 100% green electricity.
- 4) Due to missing supplier data/certificates, the scope 2 emissions for district heating cannot be reported according to the market-based calculation.
- 5) From 2021 Sweden region included.

#### **Social**

**GRI** 102-7, 102-8, 203-1, 401-1, 401-3, 403-9, 403-10, 404-1, 404-3, 405-1, 405-2

The selected indicators presented under Social include personnel indicators, occupational safety data and indicators

covering social issues. You will find explanations of the contents in the chapters  $\rightarrow$  Corporate Culture and Employees,  $\rightarrow$  Homes and Customers and  $\rightarrow$  Society and Contribution to Urban Development. You can find a lot of additional information on the latter point in particular on our  $\Box$  company website.

#### **Employee Key Figures**

							2021 by region				
	2019		2020		2021		Germany	Austria	Sweden		
Key Figures	number	in %	number	in %	number	in %	number	number	number		

Employees by employmen	t contract and g	ender						102	2-7, 102-8
Total headcount 1), 2), 3)	10,059		10,622		10,768		9,900	377	491
of which female	2,401	23.9	2,626	24.9	2,764	25.7	2,370	240	154
Full-time equivalents	9,688		10,118		10,305		9,503	338	464
of which female	2,188	22.6	2,385	23.6	2,492	24.2	2,142	209	140
Employees with temporary contracts	651		584		919		821	7	91
of which female	215		199		330		297	5	28
Employees with permanent contracts	9,028	89.8	9,569	90.8	9,849	91.5	9,079	370	400
of which female	2,034		2,263		2,434		2,073	235	126
Temporary workers	58		51	0.5	182	1.7	107	0	75
of which female	21		18		63		22	0	41

<sup>1)</sup> Germany: Total number of employees according to the German Commercial Code (HGB) (excluding trainees, external staff, members of executive bodies, miscellaneous employees, employees on parental leave, employees with pre-retirement part-time work arrangements).

<sup>2)</sup> Austria: All employees, excl. pre-retirement part-time work arrangements, parental/educational leave, Management Board, but incl. management.

<sup>3)</sup> Sweden: All employees, excl. parental leave and members of executive bodies (CEO + CFO).

								2021 by	region			
	2019	)	202	0	2021	1	G	ermany		Austria		Sweden
Key Figures	number	in %	number	in %	number	in %						

Total number of permanen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,-,,,,	J. Jp.,		S					102-9
Full-time employees 1)	9,121		9,521		9,617		8,905	277	435	
of which female	1,792		1,959	20.6	2,009		1,728	159	122	
Part-time employees 1), 2)	938		1,018		1,151		995	100	56	
of which female	609		667		755		642	81	32	
Proportion of part-time employees 3)		9.3		9.7		10.7		10.1	26.5	11.4
of which female		64.9		65.5		65.6		64.5	81.0	57.1
of which male		35.1		34.5		34.4		35.5	19.0	42.9
Marginal employees 2)	158		171		179		172	7	0	
of which female	51	32.3	62	36.3	71	39.7	66	5	0	

<sup>1)</sup> Austria: All employees, excl. pre-retirement part-time work arrangements, parental/educational leave, Management Board, but incl. management; Sweden: All employees, excl. parental leave and members of executive bodies (CEO + CFO).

<sup>3)</sup> Number of part-time employees/total number of employees.

							20	21 by region	
	2019		2020		2021		Germany	Austria	Sweden
Key Figures	number	in %	number	in %	number	in %	number	number	number
Personnel turnover									401-1
Newly hired employees 1)	2,364	23.5	1,616	15.2	1,907	17.7	1,674	60	173
of which female	_	_	409	25.3	548	28.7	447	42	59
of which under 30 years of age	_	_	386	23.9	670	35.1	587	32	51
of which 30-50 years of age	-	-	770	47.6	951	49.9	829	23	99
of which over 50 years of age	-	-	214	13.2	286	15.0	258	5	23
Employees leaving the company 1), 2)	1,793		1,510		1,617		1,414	55	148
of which female	-	-	318	21.1	360	22.3	262	36	62
of which under 30 years of age	-	-	327	21.7	459	28.4	390	20	49
of which 30-50 years of age	_	_	762	50.5	799	49.4	696	26	77
of which over 50 years of age	_	_	362	24.0	359	22.2	328	9	22
Turnover rate (in %) 3)		17.8		14.2		15.0	14.8	14.6	30.1

<sup>1)</sup> All figures on employees joining and leaving the company calculated according to HGB: Headcount excluding trainees, members of executive bodies, other employees, external staff, temporary staff, working students, marginal employees, interns and school students. Differentiation by age group and female employees newly introduced for 2020.

<sup>2)</sup> The marginally employed are included in the number of part-time employees.

Employees leaving the company include voluntary resignations, dismissals, retirement and deaths, but exclude traineeships that have come to an end and integration process-related dismissals.
 Employees leaving the company/headcount (adjusted to reflect integration process-related dismissals) as of Dec. 31, 2021 x 100%. Based on EPRA definition (employees leaving the company in the period/headcount at end of period). The following employee groups are also deducted from the headcount according to HGB (headcount excluding trainees, members of executive bodies, other employees, external staff, temporary staff, working students, marginal employees, interns and school students).

							2021 by region				
	2019	2019		2020		2021		Austria	Sweden		
Key Figures	number	in %	number	in %	number	in %	number	number	number		

Employees by category, go	ender, age group	and disabili	ty						405-2
Total headcount 1)	10,059		10,539	Г	10,768		9,900	377	491
Total headcount, commercial <sup>2)</sup>	2,401	23.9	3,917	37.2	4,743	44.0	4,071	377	295
of which female	_	_	1,701	43.4	2,152	45.4	1,767	240	145
of which under 30 years of age	_		573	14.6	674	14.2	561	43	70
of which 30-50 years of age	_	-	1,982	50.6	2,541	53.6	2,101	259	181
of which over 50 years of age	_	-	1,362	34.8	1,527	32.2	1,408	75	44
of which with disabilities 3)	_	-	197	5.0	195	4.1	191	4	0
Total headcount, technical trade 4)	_	_	5,774	54.8	6,025	56.0	5,829	0	196
of which female	-	_	534	9.2	612	10.2	603	0	9
of which under 30 years of age	_	-	922	16.0	868	14.4	849	0	19
of which 30-50 years of age	_	_	3,282	56.8	3,406	56.5	3,298	0	108
of which over 50 years of age	-	-	1,570	27.2	1,751	29.1	1,682	0	69
of which with disabilities 3)	-	_	171	3.0	185	3.1	185	0	0
Average age (in years) 5)	42.3		42.5		42.8		43.0	41.1	40.7
Employees with disabilities 3)	350	3.5	368	3.5	380	3.5	376	4	0

<sup>1)</sup> Sweden: All employees, excl. parental leave and members of executive bodies (CEO + CFO).

New breakdown by operating company in 2020: Commercial employee headcount is based on figures for Germany. Classification by operating company is not carried out for Austria and Sweden. A retroactive breakdown by operating company is not provided in 2018 and 2019.
 Germany: According to the socio-legal definition of disability in accordance with Section 2 of the German Social Code (SGB IX); total number and ratio relate to Germany and Austria only as no disclosure to Sweden is legally possible.

<sup>4)</sup> New breakdown by operating company in 2020.

<sup>5)</sup> Average age (in years) of the total workforce on the reporting date of Dec. 31, 2021.

							20	21 by region	
	2019		2020		2021		Germany	Austria	Sweden
Key Figures	number	in %	number	in %	number	in %	number	number	number

Employees on parental leav	e								401-3
Employees entitled to parental leave 1)		100.0		100.0		100.0	100%	100%	100%
Total number of employees on parental leave 2)	272		302		399		286	14	99
of which female	108	39.7	134	44.4	176	44.1	115	14	47
of which male	164	60.3	168	55.6	223	55.9	171	0	52
Employees returning to their workplace after parental leave within the reporting period <sup>3)</sup>	253		260		404		302	17	85
of which female	95	-	90	34.6	155	38.4	106	15	34
of which male	158	_	170	65.4	249	61.6	196	2	51
Employees returning to their workplace after parental leave and still employed 12 months after their return 4)	163		196		299		229	9	61
of which female	52	-	67	34.2	100	33.4	68	7	25
of which male	111	_	129	65.8	199	66.6	161	2	36

- 1) There is a legal entitlement for all employees in Germany, Austria and Sweden (excl. interns).
- All employees who took parental leave in 2021 (Austria: excl. educational leave and family end-of-life care leave).
   All employees that returned from parental leave in 2021.
- 4) All employees that returned from parental leave in 2020 and were still with the company as of Dec. 31, 2021.

							20	21 by region	
	2019		2020		2021		Germany	Austria	Sweden
Key Figures	number	in %	number	in%	number	in %	number	number	number
Performance appraisal									404-3
Employees who have had an appraisal interview/performance appraisal <sup>1), 2)</sup>	3,379	33.6	3,715	35.0	3,970	38.6	3,655	315	_
of which female		41.8		42.5		45.4	1,606	196	_
of which male		58.2		57.5		54.6	2,049	119	_
Employees who have had an appraisal interview/performance appraisal, by employee category 1), 2)									
of which management level 3)		_		76.9		91.9	147	24	_
of which other employees 4)		_		32.8		37.0	3,508	291	_
Trainees 5)		_		100.0		100.0	526	4	_

- 1) The key figure for employees, who have had an appraisal interview/performance appraisal includes all meetings between employees and managers that have been recorded in the system.
- 2) Statistics not yet available for Sweden.
- 3) Germany: First and second level below the Management Board. Surveyed for the first time in 2020. The indicator will not be reported for 2019.
- 4) Germany: All employees excluding, marginal employees, trainees, interns, works council members. Surveyed for the first time in 2020. The indicator will not be reported for 2019.
- 5) Germany: Includes assessment meetings that have been conducted within the framework of training. Surveyed for the first time in 2020. The indicator will not be reported for 2019.

	2019		202	0	2021	L	202	21 by region	
Key Figures	number	in %	number	in %	number	in %	Germany	Austria	Sweden
Training and education									404-1
Vocational training									
Total number of trainees 1)	473		510		530		526	4	-
of which female	100	21.1	103	20.2	116	21.9	113	3	-
Commercial trainees	143	30.2	152	29.9	154	29.1	150	4	-
of which female	79	55.2	84	55.3	92	59.7	89	3	-
Technical trade trainees	328	69.3	357	70.1	376	70.9	376	0	_
of which female	21	6.4	19	5.3	24	6.4	24	0	_
Trainees in part-time training	2		3	0.6	3	0.6	3	0	_
Proportion of total workforce (in %) 2)		4.5		4.6		4.9	5.0	1.0	_
Proportion taken on (in %) 3)		68.8		73.6		68.5	68.5	0	_
Further training									
Total number of participants in further training 4), 5)	3,069		2,302		6,089		5,779	310	_
of which female	_		1,159	50.3	2,639	43.3	2,431	208	_
Further training rate (in %) 6)		30.5		21.7		56.3	55.4	81.4	_
Further training intensity 7)	0.9		0.5		5.2		5.2	6.1	-
Training and education									
Total training and education days 8)		_	45,545		54,348		52,270	2,078	_
Average training and education days per employee 9)	_	_	4.3		5.0		5.0	5.5	_
Total hours of further training <sup>10)</sup>	_	_	364,360		434,787		418,164	16,624	_
Average hours of further training per employee 11)	_	_	34.5		40.2		40.1	43.6	_
of which per female employee	_	_	8.2		10.2		9.6	27.6	_
of which per male employee	_	_	26.4		30.0		30.6	16.0	_
of which per commercial employee	_	_	31.5		17.2		16.2	43.6	_
of which per technical trade employee	_	_	21.1		23.0		23.9	0.0	_
Training and further education costs (in € million)	_	_	3.5		1.8		1.4	0.2	0.2
Average training and education cost per employee 12)	_	_	332.4		142.5		132.3	205.0	_

<sup>1)</sup> In Sweden, there is currently no traineeship program. In Austria it was introduced in 2021.

Change in the calculation methodology (to population) in 2020. Therefore, restatement for 2019.
 Number of trainees taken on/all trainees who had completed their training by Dec. 31, 2021 x 100%.

<sup>4)</sup> Statistics not yet available for Sweden.

<sup>5)</sup> Including works council.

<sup>6)</sup> Number of participants in further training/total employees (headcount); if employees participated in several different courses, they are counted only once.

<sup>7)</sup> Total number of working days used for processes related to professional further training by all employees during the reporting period/total for all employees (FTE).

<sup>8)</sup> Starting in 2020, education and training will be mapped together, so no values are available for prior years.

<sup>9)</sup> Total training days/number of employees (by headcount).
10) Assumption: 8 hours per training day, total training days x 8 hours.
11) Total training hours/total number of employees (headcount).

<sup>12)</sup> Total costs for training and education/total number of trainees + total number of participants in further training.

							202	21 by region	
	2019		2020		2021		Germany	Austria	Sweden
Key Figures	number	in %	number	in %	number	in %	in %	in %	in %
Female managers									405-1
Proportion of women in total workforce <sup>1), 2), 3)</sup>	2,401	23.9	2,626	24.9	2,764	25.7	23.9	63.7	31.4
Proportion of women at the first two levels below the Manage- ment Board 4)				25.9		28.0	27.8	32.0	

- 1) Germany: Total number of employees according to the German Commercial Code (HGB) (excluding trainees, external staff, members of executive bodies, miscellaneous employees, employees on parental leave, employees with pre-retirement part-time work arrangements).
- $2) \quad \text{Austria: All employees, excl. pre-retirement part-time work arrangements, parental/educational leave, Management Board, but incl. management.} \\$
- 3) Sweden: All employees, excl. parental leave and members of executive bodies (CEO + CFO).
- 4) Cumulation of the first two management levels below the Management Board as a total value for the Group.

							20	21 by region	
	2019		2020	)	2021		Germany	Austria	Sweden
Key Figures	number	in %	number	in %	number	in %	number	number	number
Gender pay ratio									405-2
Total average income <sup>1), 2), 3)</sup>	_		37,985		39,102		38,471	51,154	42,880
of which female	42,903		39,962		40,946		40,484	44,621	42,129
of which male	36,960		37,372		38,484		37,859	64,106	43,223
Total salary ratio in % (women/men)		_		106.9		106.4	106.9	69.6	97.5
Management level total salary ratio in % (women/men) 4)		_		-		-	91.5	102.6	_
Non-management level total salary ratio in % (women/men) 5)		_		_		_	106.6	70.7	_

- 1) Germany: Employees counted in accordance with the German Commercial Code (HGB) (excluding the Management Board and one management level below the Management Board, executive employees, temporary staff, marginal employees, students): basic monthly salary + allowances + holiday and vacation bonus (in line with the EPRA definition of "basic salary").

  Surveyed for the first time in 2020. The indicator will not be reported for 2019.
- 2) Austria: All employees, excluding pre-retirement part-time work arrangements and parental/educational leave, Management Board, management, heads of department. In line with the EPRA definition of "basic salary". Surveyed for the first time in 2020. The indicator will not be reported for 2019.
- 3) Sweden: All employees, excluding employees on parental leave as well CEO + CFO. In line with the EPRA definition of "basic salary". Conversion of Swedish salaries based on the exchange rate as of Dec. 31, 2021 (EUR 1 = SEK 10,29255).
- 4) First and second levels below the Management Board. Surveyed for the first time for Germany in 2020 and Austria in 2021. The indicator will not be reported for 2018 and 2019.
- 5) All levels starting from the third level below the Management Board. Surveyed for the first time for Germany in 2020 and Austria in 2021. The indicator will not be reported for 2018 and 2019.

#### Occupational Health and Safety

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden 1)
Occupational Health and Safety							403-9, 403-10
Total occupational and commuting accidents (from 3 days lost time)	number	420	289	297	295	2	/
of which commuting accidents	number	33	26	30	29	1	/
of which occupational accidents	number	387	263	267	266	1	/
of which occupational accidents, commercial	number	43	30	28	26	2	/
of which occupational accidents, technical trade	number	344	233	240	240	0	/
Number of occupational and commuting accidents per 1,000 employees <sup>2)</sup>	number	43	29	28.7	29.8	5.3	/
Accident rate (reportable occupational accidents) 3), 4)	number	26.1	15.5	14.0	14.0	/	/
Accident rate (from 1 day lost time/LTIFR) 3), 5)	number	_	26.1	21.0	21.0	/	/
Work-related fatalities	number	0	0	1	0	1	/
Work-related fatalities (ODR) <sup>2), 6)</sup>	in %	0.0	0.0	0.0	0	/	/
Time lost (in days) 3), 7)	number	5,095	4,137	4,274	4,274	/	/
Time lost 3), 8)	in %	0.2	0.2	0.2	0.2	/	/
Absence (in days) 3), 9)	number	117,227	118,209	138,068	138,068	/	/
Absence 3), 10)	in %	5.6	5.4	5.6	5.6	/	/

Vonovia does not yet record the accident figures of subcontractors.

- 1) Sweden: no statistics are kept/consolidated at present.
- 2) Total value = relates to Germany and Austria.
- 3) Total value = relates to Germany.
- Number of notifiable occupational accidents (from 3 days lost) per 1 million working hours; indicator renamed: recorded in previous year as "Workplace accidents per 1 million working hours".

  Number of occupational and commute-related accidents with at least one day lost per 1 million working hours (= LTIFR); new indicator introduced in 2020, therefore no data for previous year.
- 6) Fatalities/number of working hours of all employees (ODR).
- 7) Only time lost due to occupational and commuting accidents; occupational diseases cannot be evaluated as the reason for occupational diseases is not recorded in Germany.
- 8) Total days lost due to work-related accidents of all employees/total required working days of all employees (FTE).
- 9) Absence due to any type of incapacity for work (not limited to work-related accidents and occupational diseases). Not including approved absences such as vacation or parental leave and not including long-term illness.

  10) Total days lost due to illness of all employees/total required working days of all employees (FTE) (= absentee rate).

#### **Social Key Figures**

	2019	2020	2021
Social Key Figures (in Germany) 1)			
Voluntary commitments			
Average modernization cost allocation $^{2)}$	€1.36/m²	€1.24/m²	€1.24/m²
Customer care for modernization work (hardship management) 3)	863 positive decisions <sup>4)</sup> reached out of 1,346 hardship objection cases	753 <sup>5)</sup> positive decisions <sup>4)</sup> reached out of 1,017 hardship objection cases	654 positive decisions 4) reached out of 874 hardship objection cases
Protection for older tenants <sup>6)</sup>	176 positive decisions <sup>4)</sup> reached out of 315 requests	201 <sup>5)</sup> positive decisions <sup>4)</sup> reached out of 346 requests	161 positive decisions <sup>4)</sup> reached out of 316 requests

- 1) All key figures refer to Germany.
- 2) Related to the modernization program and modernization work within the scope of community development; excluding heating renovation. Vonovia has committed to limiting costs allocated to tenants for modernization work in Germany to max.  $\in 2/m^2$ .
- Individual support for customers in cases of rent increases due to modernization work.
   Rent increases were not implemented or were not implemented in the planned amount, or other support (e.g., help with moving, moving furniture, or finding an alternative apartment).
   Correction due to cases received by 31.12.2020 but not positively decided until 2021.
   Guarantee that apartments will remain affordable for people aged over 70 even if the standard local comparative rent changes.

		2019		2020	)	2021
Tenant participation						
Tenant meetings and consultation processes 1)	179		158 <sup>2)</sup>		79 <sup>2)</sup>	
Proportion of tenants involved (units) in modernization/construction measures	8,000 tenants reached in relation to 13,200 modernized residenti- al units	around 60%	6,534 tenants reached in relation to 11,299 modernized residenti- al units <sup>2)</sup>	57.8%	3,631 tenants reached in relation to 8,230 modernized residenti- al units <sup>2)</sup>	44.1%

- 1) Includes tenant meetings, workshops, advisory boards, consultation hours, neighborhood walks, etc.
- 2) Decline mainly due to limited opportunities during the coronavirus pandemic.

2019	2020	2021

Grants and social support						
Grants for social/cultural projects and facilities 1)		917,270 €		1,478,790 €		1,464,060 €
of which locally through regional contributions	77 projects	223,220 €	202 projects	408,925 €	176 projects	575,072 €
of which centrally via a funding program for social projects	94 projects	185,598 €	156 projects	387,715 €	146 projects	373,993 €
of which in Duisburg and Dresden via customer service ("Vonovia bewegt")	12 projects	12,000 €	24 projects	24,000 €	0 2)	0 €
of which via foundations	Grants from foundati- ons: Vonovia Stiftung (Vonovia foundation), Vonovia Mieterstif- tung e.V., Stiftung Mensch und Wohnen and Stiftung Pro Bochum	198,852 €	Grants from foundations: Vonovia Stiftung (Vonovia foundation), Vonovia Mieterstiftung e. V. and Stiftung Mensch und Wohnen	202,440 €	Grants from foundati- ons: Vonovia Stiftung (Vonovia foundation), Vonovia Mieterstif- tung e. V. and Stiftung Mensch und Wohnen	208,810 €
of which via central cooperation projects	Stifterverband, Jewish Museum in Frankfurt, Teach First Germany	297,600 €	Stifterverband, Jewish Museum in Frankfurt, Josef Albers Museum Bottrop, Ackerdemia e. V., Dia- log mit der Jugend, Wir im Revier, Freun- deskreis Schauspiel- haus Bochum, Freun- de & Förderer Zollverein Essen	455,710 €	Stifterverband, Jewish Museum in Frankfurt, Acker e. V., Dialog mit der Jugend, Freundeskreis Schau- spielhaus Bochum, Freunde & Förderer Zollverein Essen	306,185€
Units targeted via the central funding program for social projects	94 projects	131,383 units <sup>3)</sup>	156 projects	232,573 units <sup>4)</sup>	146 projects	181.600 units 5)
Rent-free or discounted commercial premises provided to social/charitable organizations	59 commercial units	5,911 m²	71 commercial units	6,624 m²	89 commercial units	8.782 m²

Includes both cash and in-kind contributions.
 Adjusted in 2021.
 37% of the 355,708 units in Germany.
 65% of the 355,285 units in Germany.
 51% of the 353,963 units in Germany.

#### Governance

GRI 102-9, 102-22, 204-1, 205-3, 206-1, 308-1, 308-2, 405-1, 406-1, 413-1, 414-1, 414-2, 416-1

#### Governance

You can find explanations of the content of the selected key figures presented here in the Governance section in the  ${\it chapters} \rightarrow {\it Responsible Business Practices and Governance}, \rightarrow {\it Corpo-}$ rate Culture and Employees, and  $\rightarrow$  Environment and Climate.

Further key figures and policies can be found in the 

□ Annual Report and on our  $\ensuremath{\square}$  Investor Relations website.

Key Figures	Unit	2019	2020	2021
Diversity of Controlling Bodies 1)				
Supervisory Board members	number	12	12	12
	number	4	4	4
of which female	%	33.3	33.3	33.3
of which under 30 years of age <sup>2)</sup>	%	-	0	0
of which 30–50 years of age <sup>2)</sup>	%	-	8.3	0
of which over 50 years of age <sup>2)</sup>	%	_	91.7	100
of which independent Supervisory Board members	number	12	12	12
Average term of office of Supervisory Board members	number	5	6	7
Supervisory Board members with sustainability-related skills	number	4	5	5

<sup>1)</sup> Further information on the composition of the controlling bodies can be found at: https://reports.vonovia.de/2021/annual-report/company-shares/corporate-governance/recruitment.html.

<sup>2)</sup> Differentiation by age group newly introduced in 2020.

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Anti-corruption							
Proven cases of corruption	number	0	0	0	0	0	0
Proven cases of money laundering	number	0	0	0	0	0	0
Confirmed cases in which employees have been dismissed or issued with warnings due to corruption <sup>1)</sup>	number	_	0	0	0	0	0
Confirmed cases in which contracts with business partners have been terminated or not renewed due to corruption <sup>1)</sup>	number	_	0,3	0	0	0	0
Number of public legal proceedings relating to corruption <sup>1)</sup>	number	_	0	0	0	0	0
Legal actions for anti-competitive behavior <sup>2)</sup>	number	3	1	0	0	0	0

<sup>1)</sup> New indicator introduced in 2020, therefore no survey in 2019.

<sup>2)</sup> All legal actions relate to the issue of VESG's energy supply contracts with our tenants. The matter in dispute related to whether so-called "opt-out clauses" (tenants have to actively delete the passage on energy supply) are legally permissible. Vonovia stopped using these clauses in February 2019.

3) No data has yet been collected for the Austria and Sweden regions for the 2020 fiscal year.

Key Figures	Unit	2019	2020	2021
Discrimination				
Incidents of discrimination	number	0	0	0

#### Portfolio security

			2019		2020			2021		
				pections ied out <sup>2)</sup>	Inspections carried out 2) Total				pections ied out <sup>2)</sup>	
Key Figures	Inspection schedule	Unit	number	in %	number	in %	inspection list	Target inspections 1)	number	in %
Safety Inspec	tions Vonovia Germany									416-1
Buildings	Every 2 years	number	30,578	113	28,465	111	53,983	31,428	28,739	91
Open spaces with buildings	Every 2 years	m²	23,911,016	112	18,038,049	97	37,072,494	18,508,140	18,508,140	100
Open spaces without buildings	Every 2 years	m²	1,239,618	102	1,353,458	89	2,673,013	1,161,258	1,161,258	100
Trees	Depending on type of tree and pre-existing da- mage, every 1, 2 or 3 ye- ars	number	160,888	107	151,560	101	214,890	174,951	177,801	102
Playgrounds	One to four times a year depending on playground equipment category	number	2,844	103	2,804	105	1,280	2,682	2,804	105

During the reporting period, the inspections did not reveal any violations of regulations and/or voluntary codes concerning health and safety aspects that were not immediately remedied. Vonovia has established standard processes for handling defects discovered as a result of inspections, which require prompt handling. These processes continued to function perfectly during the reporting period

<sup>1)</sup> The checks are conducted at regular intervals from the date of the first inspection; the annual certificates are therefore not distributed exactly equally (50%–50%). Forecast scope of inspections at the beginning of the year.

<sup>2)</sup> Inspections carried out up to Dec. 31; figures above 100% are the result of inspections carried out in the previous year.

#### **Procurement Practices**

					202	21 by region	
Key Figures	Unit	2019	2020	2021	Germany	Austria	Sweden
Supplier Structure							
Supplier 1)	Number	8,533	8,997	9,243	5,022	1,653	2,568
from home country	Number	8,493	8,942	9,172	4,987	1,622	2,563
from Europe (exclding home country)	Number	40	55	71	35	31	5
contract partner (small repairs, maintenacne, renovation, refurbishment, construction) <sup>2)</sup>	Number	1,518	1,392	1,230	751	47	432
material supplier 3)	Number	415	408	545	173	0	372
operating costs 4)	Number	169	313	402	95	12	295
other material and other services costs <sup>5)</sup>	Number	409	958	1,067	446	234	387
Share of expenses for local suppliers 6)	in %	98.0	99.4	99.2	99.3	98.1	99.8

<sup>1)</sup> The figure includes all suppliers that are actively managed by the purchasing departments in the central procurement process. Suppliers with micro-sales have been cleaned up.
2) The figure reflects the active contract partners in the construction work.

The figure reliects the active contract partners in the construction work.
 The figure includes all suppliers that are actively managed by material purchasing team for construction in the central procurement process. Suppliers with micro-sales have been cleared.
 Includes all suppliers managed by the purchasing department through SAP with the industry code "Supplier".
 Includes e.B tools, work clothes, office and business equipment, IT, telecommunications.
 Definition of "local": home country, i.e. Germany, Austria and Sweden.

Definition of "important operating sites": entire country in each case, as we are active in a decentralised manner.

				20	21 by region	
Key Figures	Unit	2020	2021	Germany	Austria 2)	Sweden <sup>2), 3)</sup>
Review of suppliers <sup>1)</sup>						
Number of new suppliers	Number	1,104	1,442	236	610	596
Number of <b>new suppliers</b> surveyed according to sustainability criteria	Number	230	181	95	86	_
environmental criteria	in %	50.5	21.4	40.3	14.1	-
social criteria (human rights, labor standards, corruption)	in %	50.5	21.4	40.3	14.1	_
Number of <b>existing suppliers</b> surveyed according to sustainability criteria	Number	1,098	2,270	371	800	1,099
environmental criteria 4)	Number	1,098	1,171	371	800	-
social criteria (human rights, labor standards, corruption) 4)	Number	1,098	1,171	371	800	_
Number of suppliers that have not met the following criteria	Number	5	8	5	0	3
environmental criteria	Number	0	0	0	0	-
social criteria (human rights, labor standards, corruption)	Number	0	5	2	0	3
others	Number	5	3	3	0	_
Number of suppliers that have been found non- compliant with the following criteria and meas- surements have been agreed upon or the busi- ness partnership has been terminated	Number	5	8	5	0	3
environmental criteria	Number	0	0   -	0	0	_
social criteria (human rights, labor standards, corruption)	Number	0	5	2	0	3
others	Number	5	3    -	3	0	_

<sup>1)</sup> Newly introduced category from 2020 survey.

An audit or verification of supplier does not take place systematically; before the connection, all suppliers are obliged to meet standards by the Business Partner Code.
 Due to the integration of Hembla and further restructuring, supplier management in Sweden is being reorganised. This leads to the high number of "new" suppliers. An evaluation of the new suppliers is not possible at this point in time, therefore the Swedish contract partners are not included in the evaluation of the new suppliers.
 Related to the new suppliers from Germany and Austria.

# **GRI Content Index**

**GRI** 102-55

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards (as amended in 2016) Core option. In the GRI Content Index we report on at least one associated indicator for every issue that has been identified as material in order to make our performance in this area transparent. In addition, this report also covers our contribution to the principles of the UN Global Compact (UNGC). We refer to the sections in the report that demonstrate our progress in terms of the UNGC Communication on Progress.\*

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
GRI 101: Foundation	1 2016			
GRI 102: General Di	isclosures 2016			
Organizational Prof	ile			
102-1	Name of the organization	7		
102-2	Activities, brands, products, and services	7		
102-3	Location of headquarters	7		
102-4	Location of operations	7		
102-5	Ownership and legal form	7		
102-6	Markets served	7		6
102-7	Scale of the organization	7, 130, AR 2021: U3		
102-8	Information on employees and other workers	7, 78, 130, 131		
102-9	Supply chain	41, 42 ,92, 99, 112, 141		
102-10	Significant changes to the organization and its supply chain	108, 119, AR 2021: 24 et seqq., 46 et seqq.		
102-11	Precautionary Principle or approach	25, 92, 93, 108		
102-12	External initiatives	84		7
102-13	Membership of associations	25, 41, 42, 64, 65, 92, 93, 100, 155		
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102-14	Statement from senior decision-maker	2		
102-15	Key impacts, risks, and opportunities	10, 24, 111, 112		
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102-16	Values, principles, standards, and norms of behavior	92, 93, For mission statement see Sustai- nability Report 2018 or https://investoren.vo- novia.de/en/corporate- governance/compliance- and-policies/attitude/		10

<sup>\*</sup> The principles not covered by GRI indicators can be found here: Principle 1: p.41 et seqq., p. 52 et seqq., p. 64 et seqq., p. 92 et seqq; Principle 2: p. 92 et seqq.; Principle 3: p. 78 et seqq.; Principle 4: p. 92 et seqq.; Principle 5: p. 92 et seqq. and at https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/attitude/.

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
Governance				
102-18	Governance structure	10, AR 2021: 38 et segq.		
102-20	Executive-level responsibility for economic, environmental, and social topics	13, see 102-18 The distribution of responsibilities can also be found in the section "Organizational Focus" for each material topic.		
102-22	Composition of the highest governance body and its committees	93, 95, 139 AR 2021: 24, 35		
102-24	Nominating and selecting the highest governance body	92, 93, AR 2021: 40 et seq.		
102-25	Conflicts of interest	92, 93, AR 2021: 43		
102-30	Effectiveness of risk management processes	13, 111 AR 2021: 132 et seg.		
102-31	Review of economic, environmental, and social topics	10, 13, 92, 93		
102-32	Highest governance body's role in sustainability reporting	10, 13 The Supervisory Board commissions the external assurance of the Sustainability Report.		
		89, 92, 93, AR 2021: 28 Note: In the future, and as a result of the Ger- man Act Implementing the Second Shareholder Rights Directive (ARUG II), remuneration will be reported on the Vonovia SE website.		
102-35	Remuneration policies	Remuneration Report 2021, download at: https://investoren.vono- via.de/en/news-and-pu- blications/reports-pu- blications/		
102-36	Process for determining remuneration	92, Remuneration Report 2021, download at: https://investoren.vono- via.de/en/news-and-pu- blications/reports-pu- blications/		
102-37	Stakeholders' involvement in remuneration	Remuneration Report 2021, download at: https://investoren.vono- via.de/en/news-and-pu- blications/reports-pu- blications/		
Stakeholder engagemen	t			
102-40	List of stakeholder groups	15, 100		
100.41			Vonovia guarantees its employees freedom of association and the opportunity to organize themselves into trade unions. We do not disclose the percentage of employees covered by collective bargaining	2
102-41	Collective bargaining agreements	1F 100	agreements.	3
102-42	Identifying and selecting stakeholders	15, 100		
102-43	Approach to stakeholder engagement	15, 100		
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GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
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GRI 203: Indirect Econor	nic Impacts 2016			
203-1	Infrastructure investments and services supported	52, 53, 138 AR 2021: 58 et seq.		
203-2	Significant indirect economic impacts	64, 65		
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GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
GRI 302: Energy 2016				
302-1	Energy consumption within the organization	39, 120, 125, 126, 127		
302-2	Energy consumption outside of the organization		We report energy consumption outside of the organization only in the form of emissions (Scope 3), see p. 128/129.	
302-3	Energy intensity	25, 31, 120, 125		
302-4	Reduction of energy consumption	34, 120		
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GRI 103: Management A	pproach 2016			
103-1	Explanation of the material topic and its Boundary	16, 22, 25		
103-2	The management approach and its components	19, 22, 25		
103-3	Evaluation of the management approach	22, 25		
GRI 305: Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	25, 128, 129		
305-2	Energy indirect (Scope 2) GHG emissions	25, 128, 129		
305-3	Other indirect (Scope 3) GHG emissions	25, 128, 129		
305-4	GHG emissions intensity	22, 25, 128, 129		
305-5	Reduction of GHG emissions	22, 25, 128, 129		
Material topic: Attractive	eness as an Employer			
GRI 401: Employment 20	016			
GRI 103: Management A	pproach 2016			
103-1	Explanation of the material topic and its Boundary	16, 78, 79		
103-2	The management approach and its components	20, 78, 79		
103-3	Evaluation of the management approach	78, 79		
GRI 401: Employment 20	16			
401-1	New employee hires and employee turnover	78, 79, 131		
401-3	Parental leave	78, 79, 133		
Performance indicator	Employee satisfaction	79		
Material topic: Approach	to Diversity and Equal Opportunities			
GRI 405: Diversity and E	qual Opportunity 2016			6
GRI 103: Management A	pproach 2016			
103-1	Explanation of the material topic and its Boundary	16, 78, 84		
103-2	The management approach and its components	20, 78, 84		
103-3	Evaluation of the management approach	78, 84		
GRI 405: Diversity and Ed	qual Opportunity 2016			
405-1	Diversity of governance bodies and employees	78, 84, 132, 135, 139		
405-2	Ratio of basic salary and remuneration of women to men	78, 84, 135		
		78, 84, 135		

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
Material Topics Not Cov	rered by GRI Indicators But Material to Vonovia Under GRI	Based on Materiality Analys	is	
Material topic: Custome	er Satisfaction and Service Quality			
GRI 103: Management A	Approach 2016			
103-1	Explanation of the material topic and its Boundary	16, 64, 73		
103-2	The management approach and its components	20, 64, 73, 74		
103-3	Evaluation of the management approach	64, 73		
Performance indicator	Customer Satisfaction Index (CSI)	73, 74, 75		
<b>Material topic: Appeal c</b> GRI 103: Management A				
103-1	Explanation of the material topic and its Boundary	16, 103, 104		
103-2	The management approach and its components	20, 103, 104		
103-3	Evaluation of the management approach	103, 104, 135		
Performance indicator	Performance in relevant ESG ratings	103, 104, 114 et seqq.		
Material topic: Needs-b	ased Housing and Action in Relation to Demographic Chang	ge		
GRI 103: Management A	Approach 2016			
103-1	Explanation of the material topic and its Boundary	16, 64, 70		
103-2	The management approach and its components	20, 64, 70		
103-3	Evaluation of the management approach	64, 70		
Performance indicator	Proportion of accessible (partially) modernized newly rented apartments	70, 71, 72		

#### **Other Topics**

In the following section, we report on other topics that are important to us, but which are not material topics for Vonovia within the meaning of the GRI. With this step, we hope to further increase our reporting transparency.

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
GRI 201: Economic	Performance 2016			7
201-1	Direct economic value generated and distributed	AR 2021: 19 et seqq., 55 et seqq.		
201-2	Financial implications and other risks and opportunities due to climate change	11, AR 2021: 132 et segg.		
GRI 204: Procureme	ent Practices 2016			
204-1	Proportion of spending on local suppliers	141		
GRI 206: Anti-comp	etitive Behavior 2016			
206-1	Legal proceedings for anti-competitive behavior	139		

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
GRI 207: Tax 2019				
207-1	Approach to tax	92, 98		
207-2	Tax governance, control, and risk management	92, 98		
207-3	Stakeholder engagement and management of concerns related to tax	92, 98		
207-4	Country-by-country reporting	https://investoren.vono- via.de/en/corporate-go- vernance/compliance- and-policies/taxes/		
GRI 303: Water and	Effluente 2019			
		20 122 125		
303-5	Water consumption	38, 123, 125		
GRI 306: Effluents a	nd Waste 2016			
306-2	Waste by type and disposal method	38, 123, 126		
GRI 308: Supplier Er	nvironmental Assessment 2016			
308-1	New suppliers that were screened using environmental criteria	50, 142		
308-2	Negative environmental impacts in the supply chain and actions taken	50, 142		
GRI 403: Occupation	nal Health and Safety 2018			
403-2	Hazard identification, risk assessment, and incident investigation	78, 88		
403-4	Worker participation, consultation, and communication on occupational health and safety	78, 88		
403-5	Worker training on occupational health and safety	78, 88		
103-6	Promotion of worker health	78, 88		
103-9	Work-related injuries	136		
403-10	Work-related ill health	136		
GRI 404: Training ar	ad Education 2016			
104-1	Average hours of training per year per employee	78, 85, 134		
404-3	Percentage of employees receiving regular performance and career development reviews	133		
CDI 406: Non diami	winding 2016			
GRI 406: Non-discri		60.04.130		6
406-1	Incidents of discrimination and corrective actions taken	60, 84, 139		
GRI 407: Freedom o	f Association and Collective Bargaining 2016			6
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		Vonovia minimizes the risks associated with contractors in the area of labor law through its Business Partner Code	
GRI 413: Local Com	munities 2016			6
413-1	Operations with local community engagement, impact assessments, and development programs	60, 137 et seq.		

GRI Standard	Disclosures	Page in the Report	Omissions	UNGC Principle
GRI 414: Supplier S	ocial Assessment 2016			6
414-1	New suppliers that were screened using social criteria	92, 99, 142		
414-2	Negative social impacts in the supply chain and actions taken	92, 99, 142		
GRI 415: Public Poli	cy 2016			
415-1	Political contributions	92, 100		
GRI 416: Customer	Health and Safety 2016			
416-1	Assessment of the health and safety impacts of product and service categories	73, 140		

# SASB Mapping Vonovia 2021

#### **SASB Real Estate Standard**

#### **Energy Management**

Accounting Metric	Category	Code	GRI Disclosure	References
				See: Sustainability Report 2020, p. 104 et seqq., "About This Report"
Energy consumption data coverage as a percentage of total floor area, by property subsector				We show the coverage here for the corporate carbon footprint. It can also be seen analogously for energy consumption. More detailed information is provided in the EPRA Report: https://investoren.vonovia.de/en/vonovia-at-a-glance/esg/esg-publications-and-downloads/.
	Quantitative	IF-RE-130a.1	N/A	Vonovia does not disclose this metric for each property subsector
1) Total energy consumed by portfolio area with data coverage, (2) percentage grid electricity, and (3) percentage rene- wable, by property subsector				We report for the entire portfolio. Missing coverage has been fore casted through projections. Therefore, the values in the following tables refer to the entire portfolio (100% coverage).
			302-1	Sustainability Report 2020, p. 108, table "Energy Consumption in the Portfolio" $$
	Quantitative	IF-RE-130a.2	302-2	Vonovia does not disclose this metric for each property subsector
Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property subsector			302-1	The like-for-like disclosure is provided in our EPRA report: https://investoren.vonovia.de/en/vonovia-at-a-glance/esg/esg-publications-and-downloads/
	Quantitative	IF-RE-130a.3	302-2	Vonovia does not disclose this metric for each property subsector
Percentage of eligible portfolio that (1) has an energy rating and (2) is certifed to ENERGY STAR, by property subsector				1) Sustainability Report 2020, p. 109, table "Energy Efficiency Standards by Energy End-use Efficiency Class"
	Quantitative	IF-RE-130a.4	N/A	2) not applicable
Description of how building energy management considerations are integrated into property investment analysis and operational strategy	Discussion and Analysis	IF-RE-130a.5	302-4	Sustainability Report 2020, p. 21 et seqq., chapter "Environment and Climate"

#### Water Management

Accounting metric	Category	Code	GRI Disclosure	References
				1) Sustainability Report 2020, p. 109, table "Fresh Water Consumption in the Portfolio" and p. 104 et seqq., chapter "About This Report". See also EPRA report: https://investoren.vonovia.de/en/vonovia-at-a-glance/esg/esg-publications-and-downloads/.  We report for the entire portfolio. Missing coverage has been for recasted through projections. Therefore, the values in the following tables refer to the entire portfolio (100% coverage).
Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with high or extremely high baseline water stress, by				2) Vonovia's portfolio is based in Germany, Austria and Sweden. None of the assets are based in regions with high or extremely high baseline water stress. Therefore water consumption is not a material topic for Vonovia.
property subsector	Quantitative	IF-RE-140a.1	N/A	Vonovia does not disclose this metric for each property subsector
(1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with high or extremely high baseline water stress, by property subsector			303-5 Water	1) We report for the entire portfolio. Missing coverage has been forecasted through projections. Therefore, the values in the following tables refer to the entire portfolio (100% coverage). See: Sustainability Report 2020, p. 109, table "Fresh Water Consumption in the Portfolio"
				2) see above
	Quantitative	IF-RE-140a.2	Consump- tion	Vonovia does not disclose this metric for each property subsector
Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property subsector	Ouantitative	IF-RF-140a 3	303-5 Water Consump-	The like-for-like disclosure is provided in our EPRA report: https://investoren.vonovia.de/en/vonovia-at-a-glance/esg/esg-publications-and-downloads/
	Quantitative	II NL 140a.5	LIOII	vollovia does not disclose this metric for each property subsector
Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	IF-RE-140a.4	303-1	The management approach regarding water consumption is provided on p. 36 Sustainability Report 2020.

#### **Management of Tenant Sustainability Impacts**

Accounting metric	Category	Code	GRI Disclosure	References
(1) Percentage of new leases that contain a cost recovery clause for resource efficiency related capital improvements and (2) associated leased floor area, by property subsector	Quantitative	IF-RE-410a.1	N/A	1) We provide detailed information about our energy renovations, e.g. about the refurbishment rate: Sustainability Report 2020, p. 109, table "Refurbishment" and p. 124, table "Social Key Figures (in Germany)", KPI "Average modernization cost allocation"  2) Sustainability Report 2020, p. 109, table "Refurbishment"  Vonovia does not disclose this metric for each property subsector
Percentage of tenants that are separately metered or submetered for (1) grid electricity consumption and (2) water withdrawals, by property subsector	Quantitative	IF-RE-410a.2	N/A	Vonovia does not disclose this metric.
Discussion of approach to measuring, incentivizing, and improving sustainability impacts of tenants	Discussion and Analysis	IF-RE-410a.3	N/A	Sustainability Report 2020, p. 21 et seqq., chapter "Environment and climate" and p. 58 et seqq., chapter "Living at fair prices"

#### Climate Change Adaptation

Accounting metric	Category	Code	GRI Disclosure	
Area of properties located in 100-year flood zones, by property subsector	Quantitative	IF-RE-450a.1	N/A	Vonovia does not disclose this metric (not material, see above IF-RE-140a.1 (2))
Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	Discussion and Analysis	IF-RE-450a.2	N/A	Sustainability Report 2020, p. 21 et seqq., chapter "Environment and climate" and p. 11 et seq., chapter "Implementation of the TCFD Recommendations" and p. 98 et seqq., chapter "Managing Opportunities and Risks" and Annual Report 2020, p. 124 et seqq. chapter "Opportunities and Risks"

#### **Activity metrics**

Accounting metric	Category	Code	GRI Disclosure	References
Number of assets, by property subsector	Quantitative	IF-RE-000.A	N/A	Sustainability Report 2020, p. 107, table "General Key Figures", and p. 8, "Vonovia in Figures" and Annual Report 2020, p. 73 et seqq., chapter "Portfolio in the Property Management Business" and p. 77 et seqq., chapter "Development Business"
Leasable floor area, by property subsector	Quantitative	IF-RE-000.B	N/A	Sustainability Report 2020, p. 107, table "General Key Figures", and p. 8, "Vonovia in Figures" and Annual Report 2020, p. 73 et seqq., chapter "Portfolio in the Property Management Business"
Percentage of indirectly managed assets, by property subsector	Quantitative	IF-RE-000.C	N/A	Annual Report 2020, p. 73 et seqq., chapter "Portfolio in the Property Management Business" Vonovia manages 74,021 residential units for other owners (15.1%).
Average occupancy rate, by property subsector	Quantitative	IF-RE-000.D	N/A	Annual Report 2020, p. 266, "EPRA Vacancy Rate"

# Limited Assurance Report of the Independent Auditor Regarding Sustainability Information\*

**GRI** 102-56

To the Management Board of Vonovia SE, Bochum

We have performed an independent limited assurance engagement on the sustainability information published in the report "Sustainability Report 2021" (further "Report") of Vonovia SE, Bochum, (further "Company") for the period from January 1 to December 31, 2021.

It was not part of our engagement to review the examples labelled with "Project" in each chapter and references to external websites and information sources, as well as future-related statements in the Sustainability Report.

#### Management's Responsibility

The legal representatives of the Company are responsible for the preparation of the Report and the determination and presentation of the sustainability information in accordance with the Reporting Criteria. Vonovia SE applies the principles and standard disclosures of the Standards of the Global Reporting Initiative (GRI) as Reporting Criteria.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, the legal representatives are responsible for the internal controls they deem necessary for the preparation of Report that is free of – intended or unintended – material misstatements.

#### Practitioner's Responsibility

It is our responsibility to express a conclusion on the Report based on our work performed within a limited assurance engagement.

We conducted our work in the form of a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", published by IAASB.

Accordingly, we have to plan and perform the assurance engagement in such a way that we obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the Sustainability Report of the Company for the period from January 1 to December 31, 2021 has not been prepared, in all material respects, in accordance with the Reporting Criteria.

We do not, however, issue a separate conclusion for each disclosure. As the assurance procedures performed in a limited assurance engagement are less comprehensive than in a reasonable assurance engagement, the level of assurance obtained is substantially lower. The choice of assurance procedures is subject to the auditor's own judgement.

<sup>\*</sup> Our engagement applied to the German version of the Sustainability Report. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

Within the scope of our engagement we performed, amongst others, the following procedures:

- > Inquiries of personnel who are responsible for the materiality analysis to get an understanding of the process for identifying material topics and respective report boundaries of Vonovia SE
- > A risk analysis, including a media research, to identify relevant information about sustainability performance of Vonovia SE in the reporting period
- > Reviewing the suitability of internally developed Reporting Criteria
- > Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring of sustainability disclosures included in the scope of this engagement, including the consolidation of the data
- > Inquiries of personnel who are responsible for determining disclosures on concepts, due diligence processes, results and risks, the conduction of internal controls and consolidation of the disclosures
- > Evaluation of selected internal and external documents
- > Analytical evaluation of data and trends of quantitative disclosures which are reported by all sites at group level
- > Assessment of the overall presentation of the disclosures

In our opinion, we obtained sufficient and appropriate evidence for reaching a conclusion for the assurance engagement.

## <u>Independence and Quality Assurance on the Part of the Auditing Firm</u>

In performing this engagement, we applied the legal provisions and professional pronouncements regarding independence and quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

#### Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the sustainability information in Sustainability Report 2021 of Vonovia SE for the period January 1 to December 31, 2021, has not been prepared, in all material respects, in accordance with the Reporting Criteria.

#### Restriction of Use/Clause on General Engagement Terms

This assurance report is issued for purposes of the Executive Board of Vonovia SE, Bochum, only. We assume no responsibility with regard to any third parties.

Our assignment for the Executive Board of Vonovia SE, Bochum, and professional liability as described above was governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab\_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms notice of the provisions contained therein including the limitation of our liability as stipulated in No. 9 and accepts the validity of the General Engagement Terms with respect to us.

Düsseldorf, April 27, 2022

KPMG AG

Wirtschaftsprüfungsgesellschaft

Original German version signed by

Stauder Brokof

Wirtschaftsprüfer Wirtschaftsprüfer
[German Public Auditor] [German Public Auditor]

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#### Note

This Sustainability Report is published in German and English. The German version is always the authoritative text.

The Sustainability Report can be found on the website at www.vonovia.de/en.

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