

2018

|  
**Sustainability  
Report**

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# Ladies and gentlemen, Dear Readers,

✉ 102-14

As a residential real estate company, Vonovia is an integral part of today's society. This is a very good situation, but one that entails great responsibility, too. We are able to help ensure that people in cities have homes worth living in. However, it is also a challenging position. It puts our company under the microscope for a number of stakeholder groups, who all have very different expectations from us.

We investigate these expectations immediately because we want to fulfil them, as far as they fall under our responsibilities, to the fullest extent possible. This isn't always an easy task. Finding solutions to varying demands often involves compromise. But by maintaining dialogue we are always able to bring different points of view together.

Our business approach is also helpful in this regard. As a service provider and the provider of homes for around one million people, our focus is on our customers and their needs. With this in mind, we preserve our buildings and actively shape the residential environment. This is also why we are committed to offering contemporary, senior-friendly apartments and developing services that offer better quality of living. Our focus on customers is also the reason why we are addressing a social issue that is particularly important at the moment: the construction of new apartments.

Last year we began construction work on more than 1,000 apartments; in the coming years it will be significantly more. The new apartments will not be constructed just anywhere, but where they are needed: in conurbations. The average rent for the apartments in our portfolio is around €6.50 per m<sup>2</sup>. This is affordable for the large majority of people.

To some extent, we also consider it our responsibility to ensure that people can live together in their neighborhoods harmoniously. That is why we are implementing comprehensive neighborhood projects throughout Germany, cooperating with charities, promoting cultural and neighborhood projects and working closely with the local communities. In the past year alone, we invested €50 million in neighborhood projects like this. We also donate money through our foundations. It is also our aim to understand interaction in our neighborhoods better and are therefore actively investing in research in this area. We are financing an endowed professorship in Bochum for research into neighborhood development.

We support the German government's ambitious target of achieving an almost climate-neutral building stock by 2050 through a number of measures to reduce energy consumption and the release of CO<sub>2</sub>e emissions. Implementing energy-efficiency modernizations and maintaining buildings are important measures in this regard. We were able to achieve a refurbishment rate of 5% once more in 2018 and thereby significantly improve the energy intensity of many buildings. This shows that we are on the right track.

I'm pleased that we are also very popular as an employer now, too. Almost 10,000 people work for us now – around 1,000 of those are located in Austria and Sweden. The majority of our employees is in direct contact with our customers, which also makes their work very valuable in a social sense. We currently employ 485 trainees completing commercial and craftsmen/technician traineeships throughout the whole Group.

We take care of things. And we do it sustainably. That's because our business has a long-term focus and flourishes best in a healthy environment.

In our latest sustainability report, you can read in detail all about what Vonovia is doing in Germany to ensure people feel happy with us for the long term and how we are taking our responsibility as a corporate citizen seriously.

I hope you enjoy reading the report.

Bochum, April 2019

Yours,

A handwritten signature in black ink, appearing to read 'R. Buch', with a long horizontal flourish extending to the right.

Rolf Buch

# SUSTAINABILITY AT VONOVIA

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# About Vonovia

☒ 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-7, 102-10, 102-16, 103-2, 201-1

**As a service provider that puts its customers at the heart of its activities, Vonovia is fully focused on offering attractive homes and innovative housing-related services at fair prices. We are aware of our responsibilities toward society and the environment, and are involved in solving economic, social and environmental challenges in a number of ways – from the long-term maintenance of the properties in our portfolio to the inclusive approach we take in designing our neighborhoods, through to creating new homes.**

## The Company [103-2](#)

As a residential real estate company, Vonovia plays a central part in society. Including the German BUWOG portfolio, we manage around 358,000 apartments (Dec. 31, 2018) in attractive cities and regions in Germany, and a portfolio of around 23,000 homes in Austria and approximately 14,000 in Sweden. Vonovia also holds a minority stake in a portfolio previously held by the French railway operator SNCF. Altogether, more than a million people are currently renting their homes from us. [102-1](#), [102-7](#)

In order to meet the associated responsibilities, we thoroughly investigate the numerous issues that are important to our target groups. We communicate with our stakeholders through various channels and always align our targets with their needs.

This results in a business model that allows us to offer an efficiently managed property portfolio of affordable homes and modern housing-related services for a wide range of the population. We simultaneously guarantee our homes remain attractive through maintenance and modernization work, and take a holistic approach to developing the neighborhoods in which our properties are located.

Recently, implementing modern and innovative new construction concepts has gained in importance for us – particularly since the acquisition of the Austrian company BUWOG last year, which brought additional project development skills to the Group.

In addition to the rental and service business, we also want to use new ideas to set trends for the housing industry. We therefore contribute to society in various ways at a political, social and economic level – for instance, as an initiator of participative neighborhood development projects. [102-2](#), [102-4](#), [102-6](#)

We have been listed since 2013. Our share has been traded in the DAX 30 index since 2015. We consider our share to be an attractive investment for those interested in a long-term investment with stable and reliable dividends.

## Corporate Structure

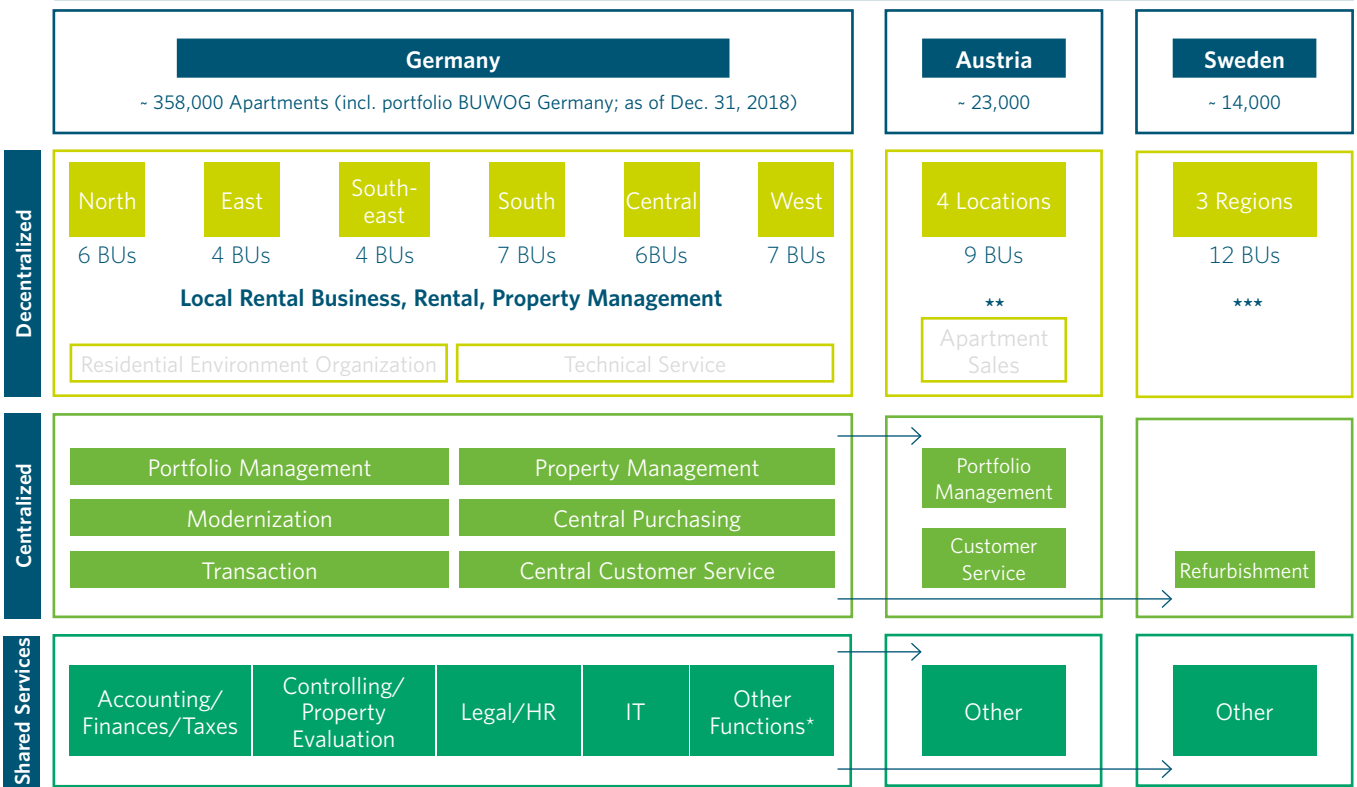
Vonovia SE, the parent company of Vonovia Group, is organized in the legal form of a dualistic European company (SE) and is managed by a Management Board consisting of four members, assisted by a Supervisory Board. Vonovia SE has its registered headquarters in Germany. Since 2017, its registered office has been in Bochum. [102-3](#)

The parent company performs the function of the management holding company for the Group. As such, it is responsible for determining and pursuing the overall strategy and implementing it in the form of the company's goals. It 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. [102-5](#)

Unless stated otherwise, all figures in this report relate to Vonovia's operations in Germany, without the business activities and the portfolios of the recently acquired BUWOG and Victoria Park. A detailed list of Vonovia SE shareholdings can be found in the Annual Report.

Vonovia's core operating business is divided into six regions – north, east, southeast, central, south and west. These are, in turn, split into business units (BUs), each of which is responsible for an average of around 10,500 residential units on site as part of a decentralized structure. Organization of caretakers, technicians and the residential environment is also based on a regional structure.

### Corporate Structure Rental



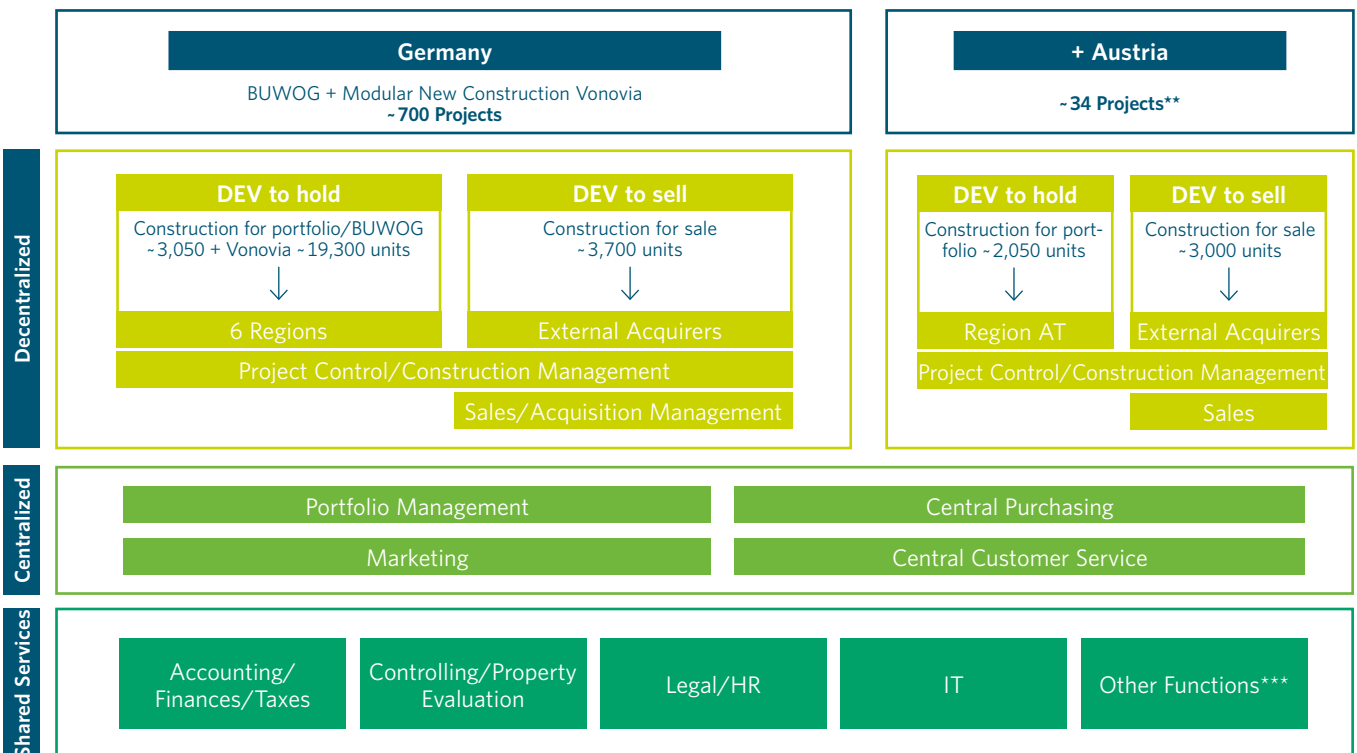
\* Other shared services and staff functions: investor relations, product management, revision, corporate communication, insurance.

\*\* Asset management, commercial and technical property management, rental, caretakers/facility support.

\*\*\* Customer service, facility support, rental, local rental business.

→ = Partial takeover from or existence of central functions or shared services.

### Corporate Structure Development\*



\* Not included in this Sustainability Report.

\*\* Total projects in progress, preparation and planning.

\*\*\* Other shared services and staff functions: investor relations, revision, corporate communication, insurance.

Responsibility for the other activities that belong to the Value-add segment, in particular product management, data and energy services, vertical expansion and modernization, is centralized at Vonovia. The same applies to activities relating to sales and acquisition. 102-2

The management of the business is based on the company's strategic approaches and, since last year, has been conducted via the four segments: Rental, Value-add, Recurring Sales and Development. For more information about our corporate structure, we refer to the Annual Report (see chapter Fundamental Information About the Group [AR 2018, p. 60 et seq.](#)).

## BUWOG

### About BUWOG

The three main companies of BUWOG (BUWOG Group GmbH, BUWOG Bauträger GmbH and BUWOG Immobilien Treuhand GmbH) have been wholly owned subsidiaries of Vonovia SE since November 2018. While BUWOG Bauträger GmbH focuses on the development business in Germany and BUWOG Immobilien Treuhand GmbH handles the management of apartments for third parties in northern Germany, BUWOG Group GmbH manages the entire value chain of the residential sector in Austria with the business areas of asset management, property sales and property development. The existing real estate portfolio in Austria encompasses approximately 21,300 portfolio units. The development pipeline includes about 5,000 residential units in Vienna and about 7,000 residential units in Germany. The BUWOG brand stands for a high level of customer satisfaction in the real estate development business. As a result, approximately 11,000 new apartments are planned in Austria and Germany in the next five to six years. Of these, about 5,000 units are intended for rental by the company. The company is thus making an important contribution to easing the shortage of apartments (see chapter Corporate Structure [AR 2018, p. 64 et seq.](#)).

In terms of sustainability performance, we consider employees and climate and environmental protection in the portfolio to be topics of particular relevance and cover both in greater detail below.

### Climate and Environmental Protection in Our Development Activities

The planning and development of new residential properties takes place within a social framework in which climate and environmental protection are playing an increasingly important role. Of particular significance are the issues of:

- > energy supply and consumption,
- > the use of environmentally friendly materials,
- > mobility, and
- > residential environment and neighborhood solutions.

Energy supply, consumption and energy-efficient building technology are the main issues in development. Various pilot and research projects, including energy supplied from renewable energy sources and other energy-related innovations, are implemented in new constructions. One example of this is the new construction project "52 Grad Nord" in the Grünau district of Berlin with its own district heat supply for the neighborhood. This puts the primary energy factor at zero. District heat is primarily generated by biomethane gas from non-fossil sources using a cogeneration unit specifically set up for this purpose. The facade of the CHP unit has also been planted with vegetation. In addition to a total of approximately 1,000 residential units, neighboring buildings are also set to be supplied in future.

We are also investing in the use of sustainable materials in the new construction project in Berlin by using wood-hybrid construction and other methods. The facades and roofs of several buildings are made of prefabricated wood-wall elements, while supporting building elements, such as floor slabs, stairs and partition walls are made of concrete. Other materials, such as insulation, wood and paints, are selected with sustainability criteria in mind and should have the corresponding certification.

In order to handle valuable raw materials that we come across when dismantling old buildings in a sustainable manner, BUWOG launched a large-scale project in Vienna in 2018 for recycling and reusing entire construction elements. In collaboration with social enterprises and recycling businesses, we have organized dismantling operations in such a way that it is possible to separate a considerable amount of miscellaneous materials such as aluminum, copper, marble, etc., and return them to the materials cycle for reuse. During the dismantling of real estate in Vienna that formerly belonged to Coca Cola, we were also able to prevent around 450 tons of waste and recycle some of the materials, such as the roofing panels.

Designing ecological leisure spaces is a primary concern in all of BUWOG's new construction projects. Numerous buildings feature extensive 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 building up in densely populated urban areas. The new neighborhood “Biotope City” in Vienna will be a pioneering example of urban design incorporating vegetation.

Intelligent mobility solutions, too, will become increasingly important in urban areas and play an increasingly larger part in our urban development projects. We include e-mobility, bicycle concepts and public transport in our new construction projects from an early stage and take future needs for electric charging stations and empty cable tunnels for retrofitting into consideration in order to avoid higher costs later and to actively contribute to ecological transport developments.

We are currently aiming to obtain building certification, such as the German Sustainable Building Council (DGNB) gold standard or the Austrian Sustainable Building Council gold standard, for various development projects in Germany and Austria. This certification helps us to show investors, owners, tenants and the wider public to what extent we consider sustainability aspects in the planning, construction and operation of our buildings.

### Certified Energy Management System

BUWOG is a long-term partner of the ambitious “klima-aktiv pakt2020” climate protection initiative launched by the Austrian Federal Ministry for Sustainability and Tourism. It has had an ISO 50001-certified energy management system in place in Austria since 2013/14, which features both established processes and a written energy policy. This tool for the professional management of energy-related issues was expanded to cover the area of development in Germany in 2018. This means management of energy issues in the entire new construction portfolio of the BUWOG companies and the portfolio management of BUWOG Group GmbH in Austria is conducted within a certified energy management system.

### Employees

Responsibility, commitment, flexibility and professionalism are the qualities of the BUWOG team. In order to ensure that this does not change, we are focusing on employees’ long-term health, safety, performance and motivation.

We have been committed to promoting family life for years now, the aim being to allow our employees to strike a balance between family and work commitments by offering a range of tools designed to meet their specific needs. This is a matter that is particularly important to BUWOG Group GmbH in Austria. As a result, our subsidiary has been participating in the “berufundfamilie” (work and family) audit conducted by the Austrian Federal Ministry of Families and Youth since 2017. This is a voluntary government seal of quality that aims to achieve improvements in the awareness of family issues. The seal is awarded as part of a structured audit process. The objective is also to use the audit to achieve positive commercial effects on employer appeal, employee loyalty, motivation and identification, and to minimize staff turnover and absences.

In addition to a company physician, an occupational psychologist and a safety officer, our health promotion within the company also includes a health day, held roughly twice a year, where we inform our employees about topics such as exercise, ergonomics, nutrition and psychology. Our employees can also take a medical exam or receive biofeedback. Workshops on a diverse range of topics, such as reducing stress, conflict management and relaxation, were also offered in cooperation with the occupational psychologists.

We conduct annual appraisals with the aim developing our employees’ skills and promoting their personal development. Targets are formulated and development and training requests are discussed along with more general development options. The range of individual measures offered in the form of individual training or group training includes professional courses covering topics such as non-profit housing law and tenancy law, and personal development seminars based on the Process Communication Model®. In the reporting year, the focus of our management training was on measures to support the change process for the integration with Vonovia SE. The efforts we made in the past to train employees to take on management positions have paid off once again. We were able to fill virtually all new team and department head positions internally.

Find out more at [www.buwog.at/en/company/sustainability](https://www.buwog.at/en/company/sustainability)

## Victoria Park

### Sustainability Performance

Victoria Park, a subsidiary of Vonovia, has a portfolio consisting of 14,288 apartments with a total area of 1,128,000 m<sup>2</sup> and a market value of 18.1 billion Swedish krona (SEK). Victoria Park's business model is to acquire, develop and manage residential real estate with a high level of development potential in growing cities throughout Sweden. We aim to constantly improve our portfolio by renovating apartments in such a way that value appreciates, and through densification.

Victoria Park also focuses on socially sustainable management in order to raise the long-term attractiveness of their neighborhoods and thereby also the value of the apartments.

Based on our portfolio of existing and acquired apartments, our management approach is as follows:

#### **Investing in Raising Standards:**

- > We intend to achieve a standard that makes our apartments comparable with newly constructed owner-occupied apartments through an efficient and high-quality refurbishment process. Refurbishments are always performed when apartments are vacant in order not to encumber existing tenants.
- > By making cost-saving investments, we also want to lower the impact our buildings have on the climate and improve their energy efficiency. For instance, by improving the ventilation systems, installing LED motion-sensor lighting, additional insulation in the attics, heating systems controlled by weather forecasts and systems for individual water meter reading.

#### **Socially Sustainable Management:**

- > We actively work on our relationships with residents and cultivate a sense of belonging in the buildings and the neighborhood. This enables us to contribute to the creation of calm, safe and attractive residential areas.
- > We strive to be included fully in the local social environment, e.g., through comprehensive cooperation with the authorities, municipalities, organizations and owners.

### Socially Sustainable

A material element of Victoria Park's management model is our sustainability agenda. By establishing sustainable relationships between companies, citizens and society, we can cultivate commitment and promote integration, contributing toward more sustainable urban and social developments. This encourages more people to actively participate in their neighborhood and contribute toward creating a calm, safe and attractive residential environment.

We always aim to commission companies that have a social clause covering local procurement.

Since 2013, Victoria Park has been employing long-term unemployed people – primarily residents from our own neighborhoods – to work on a temporary basis in the Victoria Park program as environment wardens or residential coaches. Environment wardens are responsible for maintenance of the residential buildings, while residential coaches deal with practical rental issues and recording refurbishment needs. In 2017, the national economist Ingvar Nilsson conducted an external study of the Victoria Park program and wrote an evaluation report entitled "Behind the Financial Statements." The results showed the program had both economic and socioeconomic advantages. Over a period of 20 years, reintegrating long-term unemployed people into the world of work results in a social profit of around SEK 120 million. Additionally, we published a comprehensive report on our social sustainability initiative in the Herrgården area of Rosengård, Malmö, in 2018. The report "Droppen som urholkar stenen" (little strokes fell big oaks) analyzes the effect of our initiatives between 2013 and 2018 and presents the direct social impacts that they have, e.g., that residents get back into work after a (longer) period of unemployment and are therefore no longer reliant on welfare. In order to create a financial parameter for measuring the effect of this kind of social sustainability work, Ingvar Nilsson used a calculation method that employed various realistic assumptions and precautionary principles. His calculations show that the advantages that result from the social sustainability work implemented and planned by Victoria Park in Herrgården will amount to SEK 261 million over the next ten years.

## Environment

In our apartments, energy is primarily used for heating, ventilation, running laundry rooms and lighting public spaces. Almost 90% of our energy consumption is from district heating and 10% is from electricity that is generated without any fossil fuels whatsoever. Tenants also use electricity for lighting, household devices and electronics, but this electricity consumption is not normally included in the rent and therefore not recorded by Victoria Park.

Our aim is to achieve a constant improvement in the portfolio's energy efficiency. We achieve this by using new technology, better insulation and intelligent control systems, for example. In 2015, Victoria Park launched an ambitious project to regulate the heating system according to the weather forecast, thus aiming to optimize energy consumption. By the beginning of 2018, this technology had been fitted in around 5,000 apartments. Thanks to comprehensive investments in energy-saving measures – around SEK 100 million in 2018 – energy efficiency was improved, CO<sub>2</sub> emissions were reduced and energy intensity was lowered. This development shows that measures to reduce the impact of climate change are working. With large, unused roof spaces facing south, many of our apartments have favorable conditions for photovoltaic plants. A solar module test project was launched at the end of 2018. We expect that this initiative will allow a total of 200,000 kWh of environmentally friendly electricity per year.

Another important topic is the reduction of water consumption. As part of our kitchen and bathroom refurbishments to improve standards, we regularly implement measures throughout the portfolio that contribute to reducing water consumption. For example, water-saving faucets and toilets that significantly reduce consumption are installed in 1,200 apartments per year. Our water project also includes the replacement of sanitary facilities and repairing sewage pipes. Water consumption can also be effectively reduced by installing individual water meters. This means that residents receive detailed information regarding their water consumption and can adapt their behavior accordingly.

These investments have a direct impact on both tenant behavior and climate. We have achieved reductions in water consumption of more than 20% on average in the residential portfolio.

Victoria Park also assigns refurbishment and conversion work to quality companies that take into account environmental aspects, such as energy efficiency, material selection and correct handling of hazardous chemicals.

## Employees

Victoria Park strives to create an inclusive working environment that allows all of our employees, regardless of age, gender, ethnic origin or sexuality, to remain true to their character. We wish to offer our employees a progressive working environment that promotes work satisfaction and a healthy lifestyle. We stepped up our strategic agenda regarding the working environment in 2018 with the aim of securing high attendance rates and an effective process for helping returning employees to settle back into their work. A central safety committee was established for this purpose that will deal with all issues relating to the workplace, covering social, organizational and health concerns.

Our Code of Conduct clearly condemns all forms of discrimination and includes our customers, suppliers and partners in this. As part of our endeavors to ensure that the Code of Conduct is applied correctly and to simplify the reporting of irregularities, we introduced an external whistle-blowing service in 2018.

Find out more at [www.victoriapark.se](http://www.victoriapark.se)

## Mission Statement 102-16

Vonovia is well established in its communities and maintains constant communication with a number of stakeholders. In order to live up to their expectations and our expectations of ourselves, we have set out binding principles for our conduct in our mission statement.

The **vision** explains how Vonovia wishes to be perceived by its stakeholders. Our goal is to be held in high esteem by all our partners as a force shaping the housing industry.

As far as society at large is concerned, we are committed to the idea that "owning residential property implies an obligation" and we aim to act in a manner that embraces the three aspects of sustainability: financial, ecological and social responsibility.

The **mission** describes the company's core business and its responsibilities toward its stakeholders. As a leading real estate company, Vonovia aims to give people a home:

- > Homes form the basis of our business, which we are constantly enhancing using our competence and financial strength, in order to set new trends in the housing industry.
- > We offer our customers affordable homes that meet their needs together with housing-related services and reliable customer support.
- > We offer a high level of customer orientation and a scalable business model that aims to establish us as the quality leader in our market.

We offer our customers more than just a residence – Vonovia provides a home for the whole family. We are on hand to provide reliable service when our customers need us. We want our employees to identify with their employer, Vonovia, thanks to our commitment to putting team spirit into practice, a long-term focus, a culture of appreciation and continual new challenges. The company provides investors with sustainable and adequate yields. We act as a discerning and fair partner to our suppliers.

# Vonovia Germany in Figures (incl. portfolio BUWOG Germany)

(Dec. 31, 2018)

☒ 102-4, 102-6, 102-7



## On site

in 526 cities and communities and 16 federal states



## Employees

9,923  
(incl. BUWOG Austria and Victoria Park)



## Garages and parking spaces

93,030



## Own apartments

358,451



## Average apartment size

approx. 62 m<sup>2</sup>



## Commercial units

4,022



## Total living area

22,364,651 m<sup>2</sup>

You can see more key figures in our 2018 Annual Report  
☒ AR 2018, p. 104

# Sustainability Management

☒ 102-15, 102-19, 102-20, 102-44, 201-2

**The size of our property and service portfolio means Vonovia has an equally large responsibility toward the environment and society. We strive to fulfil our responsibilities in the interests of our stakeholders and align our activities with this aim. We include sustainability issues and current societal developments in our decisions and planning for this purpose.**

## Our Understanding of Sustainability

Vonovia's business model aims to maintain the value and foster the long-term development of the real estate portfolio as well as to keep our service promise to our customers. On this basis, we work to achieve the sustainable growth of our company with stable income over the long term.

Our business model is integrated into social and ecological change processes. For our company, these include, in particular, demographic change, the ongoing trend for urbanization, migratory flows to Germany and regulatory and social changes brought about by climate change.

As a result of our business model, we believe that economic, ecological and social sustainability are closely interlinked and covered by regulatory frameworks. This is the framework within which Vonovia operates in order to generate added value for its core business in ecological and social areas too.

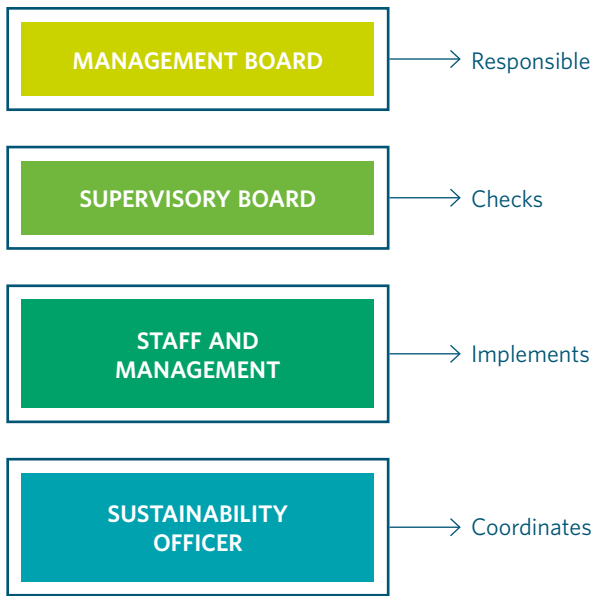
## Our Sustainability Approach

Our sustainability approach takes into account the developments affecting our business. We also take into consideration the impact of our business processes on society and the environment. The main focal point, however, is always on providing a comfortable home. After all, a home is a basic human need. Good living standards and sound neighborhoods are essential for making sure that customers feel content in their homes over the long term. We meet our customers' needs by providing affordable, high-quality homes that are integrated in lively neighborhoods. [102-44](#)

Within this context, we also implement extensive measures to maintain and develop our portfolio. These efforts include, in particular, measures to improve the energy efficiency of our stock. This allows us to make a contribution to protecting our climate. At the same time, well-insulated apartments increase efficiency and simultaneously reduce ancillary costs for our customers. Compliance with the regulatory requirements of environmental, energy and tenancy law is always a material component of our business processes.

A nice, stable environment is part of a good residential atmosphere. Therefore, together with other social actors, we become involved beyond our properties and set trends with cities, companies and city planners, with associations, initiatives and, last but not least, with our local customers for the sustainable development of entire neighborhoods.

**Sustainability organization**



In order to ensure that sustainability issues can be tackled in a more structured, cross-departmental manner and to expand our dialogue with stakeholders, the function of a sustainability specialist was established in 2017. General topics such as sustainability reporting, corporate citizenship, adjustments to relevant guidelines or the development of interfaces with relevant company processes are handled there on a centralized basis.

One particular challenge facing the real estate industry involves making environmental key figures available for the housing stock. These are calculated based on the consumption of resources in rented areas which is, in turn calculated largely based on the statements prepared by the utilities companies. In order to place more emphasis on this complex issue within the company and to significantly increase data quality, Vonovia launched a project on the collection and reporting of key environmental figures, under the auspices of the central controlling department at the end of 2018. 102-20

**Framework**

Vonovia always focuses on valid laws and provisions in its sustainability activities. In addition, numerous national and supranational standards and agreements serve as a guide for the structure and design of our sustainability concept. This includes the 2015 Paris Agreement and the German government’s 2050 climate protection plan as well as upholding human rights and working standards, fulfilling our duty of care and adhering to safety provisions.

**Establishment in the Company**

At the highest level, the Chief Executive Officer of Vonovia SE is responsible for the issue of sustainability at Vonovia. The Supervisory Board supports and monitors the issue in the Audit Committee. 102-20

The operational processing of sustainability-related issues is performed via the staff positions and line functions of Vonovia SE. Those responsible from the customer service, residential environment, product management, process management, HR, purchasing, accounting and communication departments, and the technical service ensure that the agreed measures are implemented in everyday business and our objectives are achieved. 102-19

# Environmental Developments

☒ 102-15, 201-2

## Environmental developments relevant to Vonovia's business

## How we prepare for them

### Society

The demand for (affordable) housing is increasing.

By means of efficient property management, we are keeping costs low in order to maintain rents appropriate. At the same time, we build new homes where we can.

Social tensions in society (and on the housing market) are on the rise.

In the future, we will be conducting less modernization work than in the past. Our modernization allocation will be restricted to €2 per square meter. We keep our modernization measures affordable and do our best to avoid causing hardship with efficient processes, the help of volume advantages and by looking for individual solutions. We ensure an attractive residential environment and support socially disadvantaged groups with active neighborhood management. We are increasing our dialogue with stakeholders, and have been including them right from the planning process stages.

The proportion of senior citizens is growing.

We are stepping up our senior-friendly extension and refurbishment activities and expanding our portfolio to include residential communities supervised by nursing assistants, for instance.

More and more people are moving into metropolitan areas. This is putting more pressure on large cities in particular.

By means of densification and vertical expansion, we are creating additional living space on our land and in our existing properties. Future-oriented mobility concepts allow us to reduce car parking spaces wherever possible and to create new spaces for alternative uses.

### Regulation

Statutory requirements relating to housing and construction are rising, occasionally resulting in conflicting aims.

We are in dialogue with policymakers and participate in deliberations about the feasible simplification of statutory law. At the communal level, we are involved in constructive discussions to find solutions that benefit all parties.

### Environment and Climate

The real estate sector is responsible for a considerable amount of greenhouse gas emissions. The ecological and economic costs are rising for the housing industry.

The German government is pursuing the ambitious target of establishing a virtually climate-neutral building stock by 2050. We are currently conducting energy-efficiency refurbishments in approximately 5% of our portfolio and are researching further cost-effective and efficient processes for reducing CO<sub>2</sub> emissions. The efficiency of our processes enables us to keep the environmental costs and consequences of our operations as low as possible. For example, the centralized procurement of materials and route optimization has allowed us to reduce fuel consumption considerably.

The energy revolution is stagnating in an increasing degree, while fossil fuels are becoming ever more scarce.

For the country to reach its climate targets, Germany needs a comprehensive energy and heating revolution. Vonovia is actively involved in helping to achieve these targets with the energy-efficiency measures conducted in our properties; for example, by fitting good insulation and new windows. When installing new heating units, we use modern and resource-conserving technologies. We are also investing in the expansion of decentralized renewable energy.

### Digitization

Processes are increasingly being linked and automated.

We are monitoring digitization developments, examining their impact and benefits on our business model and, where necessary, adapting solutions for application at Vonovia. With interconnected processes we can improve interactions with our customers and the coordination of our employees.



# Material Topics

☒ 102-46, 102-47, 102-48, 102-49, 103-1

**In order to meet our responsibilities toward the environment and society, we focus our sustainability efforts on topics that are material and relevant to Vonovia. We analyze and update these topics based on developments in the European real estate markets, society and politics. We also include topics that we can influence with our business model.**

## Performing a Materiality Analysis

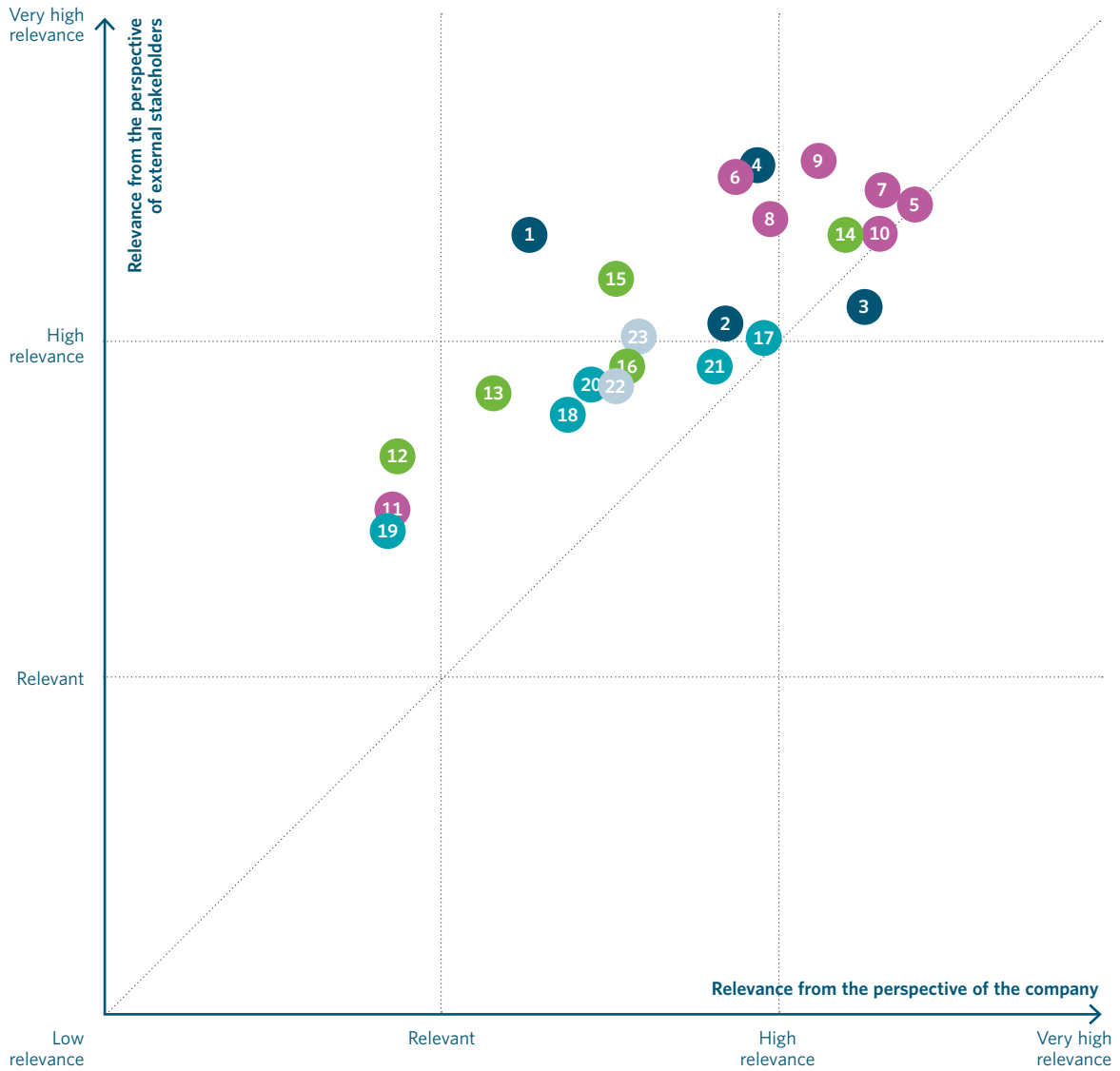
We identified and prioritized the topics that were material to our company and our business activities for the first time in preparing the 2015 sustainability report. A stakeholder survey was conducted at the beginning of 2017 to validate and amend these topics. Please refer to the 2016 Sustainability Report for a detailed description of the procedure. ☒ **SR 2016, p. 22 et seq.** 102-48, 102-49

The evaluation of the topics was transferred to a materiality matrix, which showed that none of the topics were classified as irrelevant by the stakeholders. The topics raised by the stakeholders themselves were all topics that Vonovia already addresses. 102-46

We intend to perform another materiality analysis in 2020. The aim is to reflect the course taken until that point and give us the opportunity to include or reevaluate current developments and issues in our sustainability management.

# Materiality Matrix

☒ 102-47



**Sustainable Management**

- 1 Adjustments to Reflect Climate Change
- 2 Compliance and Anti-Corruption
- 3 Long-Term Growth
- 4 Open Dialogue with Society
- 22 Social and Labor Standards in the Supply Chain
- 23 Environmental Standards in the Supply Chain

**Society and Customers**

- 5 Portfolio Maintenance
- 6 Affordable Rents
- 7 Tenant Health and Safety
- 8 Neighborhood Development
- 9 Creation of Homes
- 10 Service Quality and Customer Satisfaction
- 11 Corporate Citizenship

**Environment**

- 12 Impact of Transportation/Logistics
- 13 Company Environmental Protection
- 14 Energy Efficiency and Reducing Greenhouse Gas Emissions in the Portfolio
- 15 Environmental Protection in the Portfolio
- 16 Environmental Protection in Connection with Renovation and New Construction Measures

**Employees**

- 17 Initial and Further Training
- 18 Occupational Health and Safety
- 19 Co-Determination
- 20 Diversity and Equal Opportunities
- 21 Work-Life Balance

# Material Topics per Focus Areas

☒ 102-47, 103-1

Material topic	Material for			GRI topics	Page reference
	Vonovia/ business processes	Custo- mers/ society	Supply chain		
<b>Sustainable corporate governance</b>					
Long-term growth	x			Economic performance	22-27
Open dialogue with society		x		Public policy // Stakeholder engagement	28-30, 41
Compliance and anti-corruption	x		x	Anti-corruption // Human rights // Anti-competitive behavior // Environmental compliance // Socio-economic compliance // Marketing and labeling	32-36, 65-67
Adjustments to reflect climate change	x	x		Economic performance	22-27
Environmental standards in the supply chain			x	Procurement practices // Supplier environmental assessment	65-67
Social and labor standards in the supply chain			x	Procurement practices // Supplier social assessment // Human rights	32-36, 65-67
<b>Society and customers</b>					
Portfolio maintenance	x	x	x	Material topic - not covered by GRI	43-45
Tenant health and safety		x		Customer health and safety	33-36, 43-45
Creation of homes		x		Local communities	47-49, 51-53
Service quality and customer satisfaction		x		Stakeholder engagement	28-29, 41
Neighborhood development	x	x		Indirect economic impact // Local communities	26-29, 41-42, 47-49, 51-53, 64
Affordable rents	x	x		Indirect economic impact	26-29, 41-42, 47-49, 64
Corporate citizenship		x		Indirect economic impact	26-29, 41-42, 47-49, 64

Material topic	Material for			GRI topics	Page reference
	Vonovia/ business processes	Custo- mers/ society	Supply chain		
<b>Environment</b>					
Energy efficiency and reducing greenhouse gas emissions in the portfolio	x	x		Energy // Emissions	59-62, 68-71
Environmental protection in the portfolio	x	x		Biodiversity // Water // Effluents and waste	59-62, 63-64
Environmental protection in connection with renovation and new construction measures	x			Water // Effluents and waste	59-62, 65-67
Company environmental protection	x			Energy // Emissions // Water // Effluents and waste	59-62, 68-71
Impact of transportation/logistics	x			Energy // Emissions	59-62, 68-71
<b>Employees</b>					
Training and education	x			Training and education	76-79
Work-life balance	x			Employment // Occupational health and safety	73-75, 80-85
Diversity and equal opportunities	x			Diversity and equal opportunity // Anti-discrimination/equal treatment	33-36, 86-87
Health management/occupational health and safety	x			Occupational health and safety	80-83
Co-determination	x			Labor/management relations // Freedom of association and collective bargaining	73-75

# SUSTAINABLE CORPORATE GOVERNANCE

As a residential real estate company, Vonovia plays a central role in society. Our activities are never solely about economic issues, they also have social aspects – this is because housing is a special, sensitive and long-term product. The life cycle of buildings stretches over a number of decades, and the direction that Vonovia takes is also characterized by the long-term development of the portfolio. Our relationships with our customers – and their relationships with our offering – are therefore a vital element in the strategic orientation of our company.

In this context, trust, transparency and reliability are decisive criteria for the company's success. This means it is absolutely necessary to stick to the rules – from laws and directives to social norms and agreements. Good corporate governance also plays a part in this, as does open and transparent dialogue with our stakeholder groups. We will only be in a position to meet our customers' needs and wants with our apartments if our tenants feel they can rely on us. Sustainability is therefore a material aspect of our basic sense of identity as a company.

- 22 Our Approach Regarding Sustainable Corporate Governance
- 24 Long-term Growth
- 28 Open Dialogue with Society
- 32 Corporate Governance and Compliance/Anti-corruption

# Our Approach Regarding Sustainable Corporate Governance

☒ 103-1, 103-2, 103-3

## Management Approach 103-1

We continually develop our building stock and keep stock in the portfolio over the long term because long-term, stable growth forms the basis of Vonovia's business model. This is legitimized by our conduct and the presence of our employees – and is also reflected in customer demand and their flexibility within the applicable framework conditions. Transparent corporate governance, which includes taking responsibilities for people and the environment seriously, is indispensable. After all, residential real estate companies cannot easily move their "products" and employees. Residential real estate companies thrive through long-term customer relationships and the development of their physical portfolios (see chapter Long-term Growth → p.24 et seq.).

As a residential real estate company that is aware of its relevance to society, we maintain close contact with various stakeholder groups from the worlds of politics, business, society and the scientific community. We take their views, concerns and ideas on board and include them in our work. This raises appreciation of our business operations markedly (see chapter Open Dialogue With Society → p.28 et seq.).

Vonovia is a trustworthy and reliable partner. This is how we want to be seen by our customers, shareholders, business partners, employees, society and the wider public. Adhering to laws and directives is just as important as pursuing the good and sustainable guidelines laid out in our corporate code (see chapter Corporate Governance and Compliance/Anti-corruption → p.32 et seq.).

In terms of sustainable corporate governance, we have identified the following material topics and integrated them into our materiality matrix:

- > Long-term growth
- > Open dialogue with society
- > Corporate governance and compliance/anti-corruption

In the following chapter, we will cover these topics in detail and explain their relevance for Vonovia. The relevant challenges, opportunities and risks, and the objectives, measures and indicators are outlined for each topic.

## Challenges, Opportunities and Risks 103-1

There is a strong public focus on the housing industry and – due to the current high demand for homes – it is currently an area of business that has a high emotional value attached to it. Vonovia's business model is influenced by current social and property management developments, which pose challenges for acquiring residential properties and their management. This is also shown by the partially controversial nature of the public discussions surrounding housing. It once more clearly shows that our long-term success is particularly dependent on the satisfaction of our tenants.

Moving our business is impossible due to the fixed nature of residential property. This means we can only react to unforeseeable developments with a limited amount of flexibility.

The internationalization of our activities and the strong growth of our companies bring their own challenges, such as the integration of different cultures, languages, data systems and processes. Language barriers pose particular problems in the area of compliance and in the communication of guidelines and rules that must be communicated in a way that prevents any misunderstanding even in another language.

The increase in our (new) construction activities also brings about challenges for our company – for instance, in the form of numerous regulations that apply to construction.

All of our activities carry the risk of losing the trust of our customers and the public. This is a loss that can only be remedied with great effort. Nevertheless, our activities also provide us with the opportunity to build up trust with our services and our reliability and to remain a good corporate citizen.

Details regarding the risks related to business can be found in the risk report in our 2018 annual report.

▣ AR 2018, p. 131 et seq.

## Objectives, Measures and Indicators

103-2, 103-3

Vonovia is obliged to carry out sustainable ongoing maintenance in the portfolio and to provide modern, affordable homes that meet society's needs. We aim to keep buildings in our portfolio long term and to develop them sustainably. In addition to providing homes, we offer housing-related services that generate added value for our customers.

In order to achieve our goals, we must establish trust: The trust of our customers, partners, service providers, employees and investors in Vonovia as a company and in our services. We must show that we are a reliable partner and employer that takes their concerns and needs seriously and understands them, and we must reflect this in our conduct. Only then can we build up the long-term and trusting relationships that we would like to have.

Vonovia's corporate governance is aimed at generating long-term growth and we include not only economic but also ecological and social aspects in our corporate decisions. It is based on good corporate governance, which we strengthen through our consistent adherence to applicable laws and regulations as part of our compliance management processes, as well as through voluntary obligations that often exceed international standards. Corporate governance at Vonovia involves good and open cooperation between the Supervisory Board and the Management Board and the deployment of effective control bodies.

As part of the internationalization of our business and in collaboration with our subsidiaries Victoria Park and BUWOG, we are currently adjusting the existing compliance rules to the new circumstances. This ensures compliance throughout the Group. Our Code of Conduct serves as an ethical and legal guideline for our conduct. It

is closely related to our internal mission statement, which provides orientation for our everyday activities. We manage the cooperation with external partners and service providers in our supply chain through our Business Partner Code, our general terms and conditions of purchasing, and individual agreements.

We maintain close and ongoing contact with our stakeholder groups. This allows us to identify trends, developments, changes and, most importantly, their expectations, early on and integrate them into our business processes. This dialogue also helps us to create transparency with regard to our activities and to establish and strengthen stakeholders' – and the public's – trust in our company.

## Outlook for 2019

We plan to review our risk reporting to include sustainability aspects in 2019, e.g., the financial consequences of climate change.

We are also aiming to gradually introduce the guiding principles for human rights laid out in the federal government's national action plan, and to publish a corresponding declaration. This gives the issue of human rights even more weight within the company. We will also expand dialogue with our stakeholders on this topic as a result.

We will expand our control processes in 2019 in order to ensure adherence to our Business Partner Code. We will, for instance, roll out a supplier management platform throughout the Group and derive early warning indicators to flag suspicious developments at supplier sites. We will also continue to take measures to increase sustainability in procurement, for example, as regards the construction materials we purchase.

# Long-term Growth

☒ 102-15, 103-1, 103-2, 103-3, 201-2, 203-1

## Management Approach 103-1

A home is a fundamental human need. It provides security and shelter and is an expression of a person’s lifestyle. Housing has become a scarce resource for many people in Germany in recent years, however. Particularly in metropolises and conurbations, the pressure on the housing markets has increased dramatically.

Vonovia aims to contribute toward a long-term solution to the housing problem in metropolitan areas by providing modern and affordable homes. Developing our real estate portfolio through acquisitions and sales as well as densification and vertical expansion are important elements of our strategy.

Vonovia’s business model is built on two pillars: renting out affordable homes and providing housing-related services at fair prices. These pillars are boosted by our construction and acquisition activities and the efficient management of the portfolio. This allows us to ensure that rents remain affordable and ancillary costs remain low in the long term. 203-1

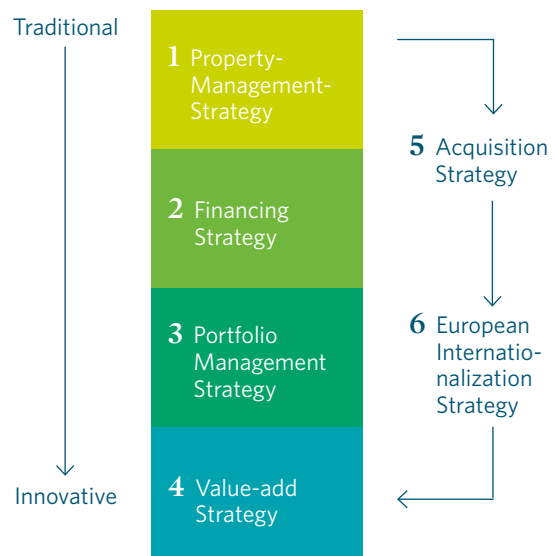
## Corporate Strategy

We have pursued a corporate strategy based on the 4+2 pillars since 2013. The sixth pillar, our internationalization strategy, was added in 2017.

- 1. Property management:** Improving key operating figures through efficient property management and digitization, improving quality and efficiency in our customer services; efficiently managing maintenance and modernization measures.
- 2. Financing:** Securing sufficient, optimized liquidity, a balanced structure and maturity of debt, and the optimization of financing costs with an internationally competitive financing structure and safeguarding ratings.

- 3. Portfolio management:** Renting out properties in a manner that increases value by optimizing existing properties and investing in maintenance and modernization; improving energy efficiency in the portfolio; expanding the development business and the established new construction and vertical expansion activities; pooling capacities by focusing on strategic regions.
- 4. Value-add:** Adding customer-oriented services with a close relationship to rental business (e.g., technical services, managing the residential environment, property management, multimedia services, metering services, decentralized energy supply, caretaker services, managing outdoor and green spaces) to the core business.
- 5. Acquisition:** Boosting the effectiveness of the core strategies through continual checks and including suitable portfolios in the list of existing properties.
- 6. Internationalization:** Transferring knowledge and analyzing potential target markets in Europe.

## The 4+2 Pillars of our Strategy





Our annual report contains a detailed description of our 4+2 corporate strategy (see chapter Strategy [AR 2018, p. 66 et seq.](#)).

### Corporate Governance

Vonovia's corporate governance is based on our corporate strategy and is aligned with our sustainable business activities. In the 2018 fiscal year, we expanded our business activities outside of Germany with the acquisition of BUWOG AG and Victoria Park AB. The acquisition of BUWOG also added development activities to the scope of our business. We adjusted our management system in the fourth quarter of 2018 and added the Development segment in the course of this business expansion. The segment formerly known as the Sales segment was renamed Recurring Sales, and the sale of buildings and properties is now shown as a separate business activity. We thus have four segments now: **Rental, Value-add, Recurring Sales** and **Development**.

- > **Rental:** This segment covers all business activities related to the management of our portfolio in a way that increases value.
- > **Value-add (formerly "Value-add Business"):** This segment pools all housing-related services performed by the craftsmen's and residential environment organization, the condominium administration business, the cable TV business, metering services, energy supplies and our insurance services.
- > **Recurring Sales (formerly part of the "Sales" segment):** This segment covers all regular sales of individual condominiums and single family homes.
- > **Development:** This segment covers project development in new residential buildings

We align our business activities effectively with the aim of sustainably increasing company value using an integrated planning and control system based on central performance indicators.

You can find out more about our corporate governance in our annual report. [AR 2018, p. 94 et seq.](#)

### Challenges, Opportunities and Risks 103-1, 102-15

2018 was another year of growth for the German economy. This growth did slow toward the end of the year, however, and thus did not quite meet expectations. Home prices continued to rise during the year, but the increase in rent was somewhat more restrained than in the previous year. Despite the constant rise in demand for homes in metropolitan areas, the housing market is not strained everywhere – rural regions in particular are experiencing a decline in population. Nevertheless, demand for homes will continue to outstrip supply in future, which will keep rents at a high level and see them increase. These economic and social developments have a decisive impact on our business and our success – and bring about both risks and opportunities for Vonovia.

One example of an opportunity these developments present for Vonovia is that households in Germany are becoming smaller in general, while one and two-person households are on the increase. In light of this, demand and market opportunities for small and medium-sized apartments, which represent Vonovia's core product, should rise in future, improving rental yields further.

The current social trends and our 4+2 strategy (see chapter Corporate Strategy → [p. 25 et seq.](#)) also present us with the opportunity to grow throughout Europe with targeted acquisitions and by tapping into new business areas. This in turn gives us the opportunity to increase the share of services provided by our technical service.

### Risk Management 102-15

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

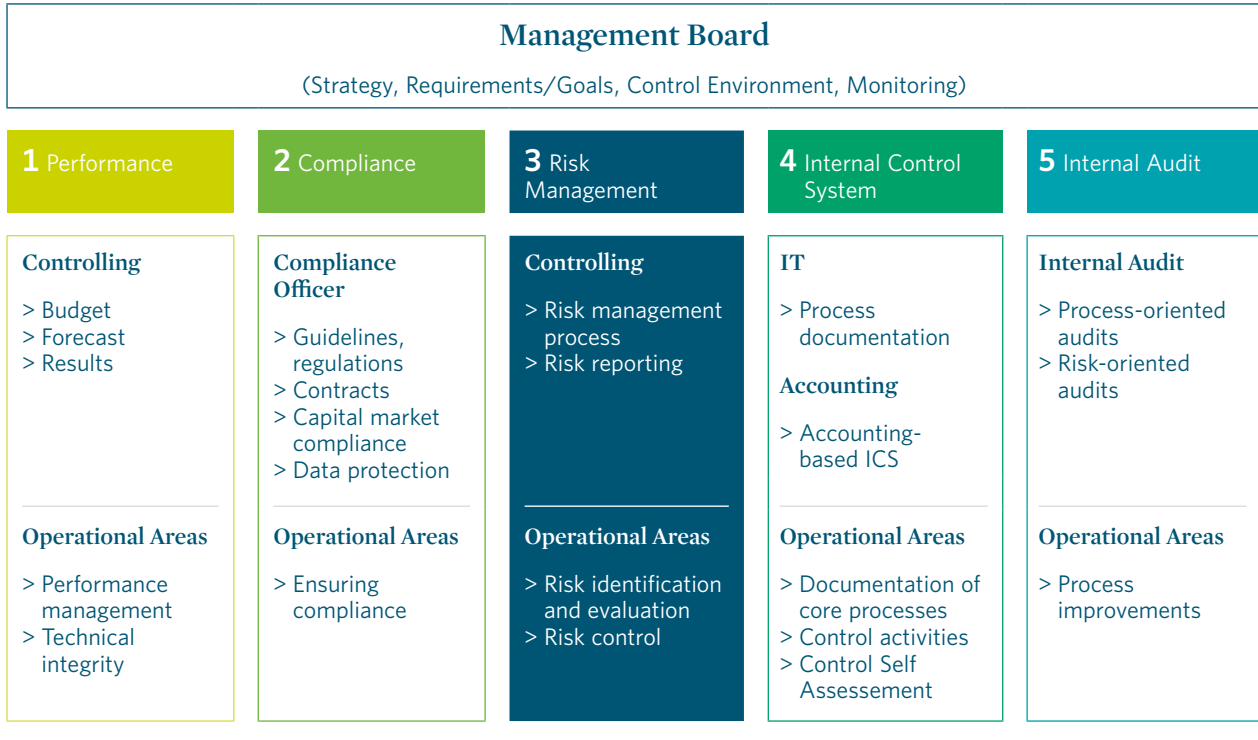
- > reduces potential threats,
- > secures the future viability of the company,
- > promotes strategic development, and
- > supports sustainable conduct.

For transparency purposes, we explain Vonovia's risk situation in detail in our annual reporting and publish a qualified list of the "Top 10 Risks" on behalf of the Management Board (see chapter Risk Report [AR 2018, p. 131 et seq.](#)).

The Management Board bears full responsibility for risk management. A risk manager, who reports to the Chief Financial Officer (CFO), coordinates the risk management process and creates a ranking of the company’s material

risks twice a year as part of a risk analysis. He is supported by risk owners – managers at the level directly below the Management Board. The management is based on an integrated, five-pillar management approach:

**Five Pillars of Risk Management at Vonovia**



In order to safeguard stability and long-term growth, Vonovia responds to individual risks with a comprehensive package of measures.

You can find detailed information on this in our annual report (see chapter Opportunities and Risks [AR 2018, p. 131 et seq.](#)).

Vonovia monitors and evaluates any risks that may be caused by climate change. Our properties are not located in areas that are exposed to particular risks arising from the potential impact of climate change. We therefore believe there are currently no direct risks worth mentioning that could result from extreme weather conditions due to climate change such as strong rains and flooding. Vonovia nevertheless performs regular proactive checks to ensure building safety, taking into consideration all building regulations, and safeguards against any possible damage with extensive building insurance cover. [201-2](#)

**Objectives, Measures and Indicators** [103-2, 103-3](#)

Our objective is to provide our customers with modern, comfortable and affordable homes and housing-related services. Vonovia creates attractive homes in numerous German cities and takes care of the building stock by investing in new construction, building and apartment optimization and holistic neighborhood development. We aim to provide important services ourselves rather than being dependent on external service providers. We are therefore focusing on our services in the following three areas.

> **Vonovia technical service (VTS):** The majority of construction work in our portfolio is performed by the VTS, which enables us to guarantee secure supply and a high level of service speed.

- > **Residential environment organization:** The residential environment organization performs gardening and landscaping work in the portfolio, such as creating new green spaces and playgrounds or creating communicative neighborhood centers outside of the buildings.
- > **Caretaker organization:** The caretakers from our caretaker organization support our tenants on site and respond to customer inquiries and requests that cannot be handled on the phone by the central customer service center.

Customer satisfaction is a non-financial performance indicator that is especially important to Vonovia since our economic success is directly linked to our tenants' satisfaction levels. Our central customer service center assists Vonovia tenants with issues such as queries relating to lease agreements and consumption bills and ancillary expense bills.

We expanded our range of housing-related services once more in 2018 and began looking into more services that we can offer our customers. These include:

- > launching Vonovia Energie Service GmbH (VESG), which allows us to offer our customers electricity and gas at favorable conditions,
- > providing remote meter readings using smart-metering devices in 130,000 apartments,
- > continuing to pilot car sharing offers and expanding charging infrastructure,
- > harnessing further potential in decentralized energy generation and generating heat for potable water and heating systems using cogeneration units (CHP units), and
- > expanding senior-friendly apartment conversions and renovating bathrooms in response to tenant requests.

You can find out more about additional measures we have put in place to grow sustainably in the annual report (see chapter Our Service Promise [AR 2018, p. 88 et seq.](#); chapter Report on Economic Position [AR 2018, p. 98 et seq.](#)).

# Open Dialogue With Society

☒ 102-13, 102-40, 102-42, 102-43, 102-44, 103-1, 103-2, 103-3, 203-2, 415-1

## Management Approach <sup>103-1</sup>

Vonovia belongs to a network of various social players who have an influence on the company on a micro and macro level. We actively consider their views and concerns when deciding the direction our company takes and how our neighborhoods are developed. We value ongoing communication on an equal footing to find common solutions for a positive community spirit in the properties that make up our portfolios. We hear and evaluate the opinions of all stakeholders in our work. We then bundle a variety of views and include these results in our strategic decision-making process. Vonovia has a bridge-building role within the neighborhood. We therefore consider dialogue with stakeholders to be an opportunity for participation and a way to improve our reputation and increase acceptance for our actions.

Our main stakeholders include tenants, employees, shareholders, investors and analysts as well as policy-makers at the municipal, state and federal levels in Germany, Austria and Sweden. Additional interest groups are tenants' associations, suppliers and service providers, the media and non-governmental organizations (NGOs). <sup>102-40</sup>

**Tenants:** Direct contact with our tenants is the most important dialogue for us. They expect straightforward, service-oriented and rapid responses to their queries. A good level of availability, fast reaction times and, as far as possible, presence on site to personally hear and deal with our tenants' queries, worries and wants is decisive. We achieve this with the help of our caretakers at the portfolio properties, our rental offices, which serve as local points of contact, tenant assemblies and parties. Our customer portal and customer service hotline mean that we can be contacted around the clock. We also provide tenants with information on various subjects in our quarterly customer magazine and via our online communication channels (see chapter Society and Customers → p. 37 et seq. ☒ AR 2018, p. 75 et seq.). <sup>102-43, 102-44</sup>

**Employees:** Our employees want an attractive job with an interesting remit, professional and personal development, and a reliable, fair working environment. Thanks to our diversified business approach, employees find numerous opportunities for professional and personal development in an industry offering future security. We offer training in 14 commercial and technical trade professions, impart knowledge via our academy, cooperate with EBZ Business School in Bochum, a university geared to the real estate industry, and conduct HR development activities customized to personal needs (see chapter Employees → p. 72 et seq. ☒ AR 2018, p. 80 et seq.). <sup>102-43, 102-44</sup>

**Shareholders, Investors and Analysts:** Transparency about our business model and its successful implementation is a key issue for this stakeholder group. We mainly use face-to-face meetings, conference calls, presentations and road shows to maintain regular dialogue with shareholders, investors and analysts (see chapter Strategy ☒ AR 2018, p. 66). <sup>102-43, 102-44</sup>

**Public Policy:** Public policy has made housing the number one issue of our time. This has created an expectation that requires us to be involved in discussions relating to neighborhood and city development in order to find solutions for the rising demand for homes, for example, but also to social issues such as demographic and climate change. We have regular and extensive contact with political and association representatives, conduct cross-party discussions with representatives, participate as an opinion leader in forums and events on real estate matters, and also initiate projects of social relevance. In our dialogue with policymakers, we refer to the effects of proposed legislation for our industry. Vonovia remains neutral in political matters, makes no political donations, and refuses to participate in parties or party-related networks or foundations. <sup>102-43, 102-44, 415-1</sup>

**Tenants' Associations and Initiatives:** Dealing with tenant matters fairly and reliably, and identifying solutions quickly and in a constructive way, is particularly important when conflicts arise. We maintain close contact with local tenants' associations, organize tenant assemblies and are also available at short notice for representatives of interested parties. In order to avoid escalations, we thoroughly review the legitimacy of criticism directed at us if possible. In case of legitimate criticism, we attempt to eliminate the deficiencies quickly. [102-43](#), [102-44](#)

**Suppliers and Service Providers:** Our collaboration with partners is based on a cooperative business relationship that takes the interests of both parties into account. We and our partners from all trades are bound together by the common interest to deliver very good services to Vonovia and our tenants. Our Business Partner Code and Code of Conduct ensure that we are on the same page in terms of the key cornerstones of our collaboration (See chapter Compliance Management and Anti-corruption → [p. 32 et seq.](#)). [102-44](#)

**Media/Public Relations:** Journalists expect us to be willing to provide information and have an open communication policy, even and especially in dealing with difficult questions. We conduct comprehensive public relations and strive to provide information quickly. In order to prioritize our communication properly, we ensure we are always up-to-date on issues that influence our environment. We conduct regular press conferences and discussions and are available for interviews. We endeavor to provide journalists with information as soon as possible in the event of a crisis or disruptions. [102-43](#), [102-44](#)

**NGOs and the Corporate Environment:** As a corporate citizen, Vonovia is directly involved in the lives of the communities. Vonovia makes both economic and operational contributions to social topics, fulfilling society's desire for the company to take its responsibilities seriously. We cooperate with numerous organizations such as welfare associations and church institutions. We participate in school projects, maintain playgrounds and support clubs, social and cultural institutions and disadvantaged individuals through our foundations. In addition, we involve public organizations in the development of new services (see chapter Neighborhood Development → [p. 50 et seq.](#)). [102-43](#), [102-44](#), [203-2](#)

## [Establishment in the Organization](#) [103-2](#)

Dialogue with our stakeholders primarily takes place during day-to-day business and is dependent on existing networks. This means it is well established on several levels and in several areas of the business, for example, with the Management Board, regional managing directors and regional managers. Corporate communications, which ensure uniform internal and external communications, play a pivotal role. This also includes the public affairs department, which ensures two-way communication with political representatives.

## [Challenges, Opportunities and Risks](#) [103-1](#)

The size and presence of Vonovia in Germany (and in Austria) give rise to opportunities and risks that have an impact on stakeholder dialogue. Issues such as faulty heating systems, incorrect invoicing of ancillary costs and rent increases due to modernization allocations can impact tenants', and the wider public's, perception of Vonovia. In turn, the company's reputation can impact operations in local markets.

When developing existing neighborhoods and constructing new buildings, taking the needs, wants and concerns of the tenants and residents into account is indispensable to the success of the project. Dialogue is the most important tool for recognizing critical topics early on, dispelling negative impressions and finding common solutions. We also take care to take diverging stakeholder interests and expectations into consideration. Our communication style is open and we seek out direct contact in order to discuss issues such as affordable homes and new construction and modernization measures. We consider dialogue with our stakeholders to be a natural part of tenant participation. It boosts acceptance of our plans and our reputation.

Landlord-to-tenant electricity and car sharing are innovative products. An open communication style helps Vonovia to be seen as more than just a landlord, and provides the company with an opportunity to position itself as a driver of social development. [102-42](#), [103-1](#)

## Objectives, Measures and Indicators

103-2, 103-3

Vonovia provides homes for more than one million people. Early communication is particularly important in cities where we have a large portfolio of properties. Including stakeholders early on is especially relevant when it comes to larger projects, such as comprehensive modernization work. Direct communication with our customers is another of our most important tasks. By engaging in dialogue with tenants' associations, citizen forums, tenant discussions and assemblies, we include the residents of our neighborhoods in our planning and measures. Vonovia's aim is to maintain continuous and intensive dialogue with its stakeholder groups. Vonovia thus promotes and expects transparency beyond the individual corporate departments.

Amid the current discussions in society and the world of politics, we consider our commitments in the field of public affairs to be particularly important. Our approach involves establishing contacts and channels of communication. We are open for discussion with members of local political organizations (e.g., committee members, district mayors) and state and government representatives. In the future, we intend to increase our local representatives' qualifications to enable them to actively drive forward dialogue with political stakeholders. In the world of politics, Vonovia is involved in everyday discussions, attends events organized by political parties and groups and regularly communicates with the CDU's economic council, the SPD's economic forum, the Green Party's economic dialogue group and the FDP's economic forum. We do not aim to influence any specific planned legislation, but rather view ourselves as a player with practical experience, able to contribute our assessments of the potential consequences of (statutory) regulations to the discussions. Through our involvement, we also aim to recognize any changes to the legal framework early on in order to be able to plan and implement relevant measures within our company.

We are also active in a number of residential and property management associations, contributing to the strengthening of the property management sector in Germany. We are also involved with several initiatives aimed at protecting the climate.

### Selected Memberships of Industry Associations and Initiatives 102-13

- > AGV Arbeitgeberverband der Deutschen Immobilienwirtschaft e. V.
- > AGW Arbeitsgemeinschaft Großer Wohnungsunternehmen
- > Bundesverband Freier Immobilien- und Wohnungsunternehmen e. V.
- > DDIV Dachverband Deutscher Immobilienverwalter e. V.
- > 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
- > GdW Bundesverband deutscher Wohnungs- und Immobilienunternehmen e. V.
- > Initiativkreis Ruhrgebiet
- > Institut für Corporate Governance in der deutschen Immobilienwirtschaft e. V.
- > InWIS Forschung und Beratung - Förderverein e. V.
- > KlimaDiskurs.NRW e. V.
- > Open District Hub e. V.
- > Verein der Freunde und Förderer der EBZ School e. V.
- > vhw - Bundesverband für Wohnen und Stadtentwicklung e. V.
- > ZIA (Zentraler Immobilienausschuss) e. V.

We maintain ongoing and effective dialogue with our investors and shareholders. We again made use of various channels to accomplish this in the 2018 reporting year, for example:

- > Attending 18 investors' conference days,
- > organizing 27 roadshows for the most important European, Asian and North American financial markets,
- > attending numerous investor forums,
- > numerous one-on-one discussions and conference calls with investors and analysts,
- > various portfolio viewings for interested investors,
- > organization of a Capital Markets Day (June 2018), at which Vonovia showed external participants under the motto "Unlocking Potential" the potential that can arise for the business from the topics of energy, neighbourhood development and project development.

In addition, the new Chairman of the Supervisory Board, Jürgen Fitschen, organized a corporate governance road-show with 14 of our largest investors in fall 2018. The response to the transparent information on how corporate governance is put into practice at Vonovia was very positive, and we intend to continue to organize these events at regular intervals. We also participate in a whole range of sustainability benchmarks and ratings, for example, the EPRA Best Practices Recommendations on Sustainability Reporting (sBPR), for which we received a Gold Award in 2018 for our sustainability reporting in 2017. Participation in the CDP or the sector-specific GRESB rating also highlights our efforts to make our sustainability performance transparent.

# Corporate Governance, Compliance and Anti-corruption

☒ 102-12, 102-16, 102-18, 102-19, 102-22, 103-1, 103-2, 103-3, 205-2, 205-3, 206-1, 308-2, 405-1, 414-1, 414-2, 419-1

## Management Approach 103-1

### Corporate Governance

Corporate governance refers to the responsible management and monitoring of our company. The principles of corporate governance and the principles of the corporate governance institute in the German residential property sector, which the Management Board and Supervisory Board of Vonovia are committed to in their entirety, guide our conduct in the everyday management and operation of our company. Consistent adherence to these principles allows us to create the foundation for successful corporate governance and meet our responsibilities toward our stakeholders. This boosts our credibility and strengthens the trust our shareholders, business partners, employees, customers and the general public have in Vonovia and sustainably increases the value of our company. 102-12

You can find out more about corporate governance at Vonovia in our annual report (see chapter Corporate Governance Report ☒ AR 2018, p. 44 et seq. and chapter Non-financial Declaration ☒ AR 2018, p. 70 et seq.).

### Compliance and Anti-corruption

Taking all applicable regulations and laws into account is an indispensable prerequisite for Vonovia to be able to act and be recognized as a reliable and trustworthy partner. By monitoring our compliance rules, we protect the integrity of employees, customers and business partners, and shield our company from negative influences. Good compliance management is therefore not just an important factor in sustainable development and value creation within the company, but also provides our customers with more security and reliability in their everyday home life. Overheated residential property markets are a breeding ground for misconduct due to the scarcity in supply and the fear of losing one's home. Vonovia is aware of this and thus places even more value on employees observing the applicable tenancy laws and regulations without exception. We also have the same requirements of our suppliers

and service providers, as they play a central part in helping us to achieve our objectives. That is why we always aim for long-term partnerships with our suppliers.

### Establishment in the Organization 103-2

Compliance management at Vonovia is the responsibility of the legal department, which monitors adherence to rules as part of our central compliance management system pursuant to IDW Standard PS 980 (see chapter Compliance Management ☒ AR 2018, p. 132 et seq.).

Committee work at Vonovia will be coordinated by a newly established Management Board and Supervisory Board office, which will also organize information flow and cooperation between the Management Board and the Supervisory Board.

Adherence to labor and social standards in the supply chain is managed by the procurement department through supplier selection and management.

## Challenges, Opportunities and Risks 103-1

### Corporate Governance

In light of both social and legal changes, Vonovia has established new business areas in recent years. Digitization is becoming an increasingly important aspect of our processes and offers, for instance. In the composition of the Supervisory Board this presents a challenge, but also an opportunity, to increase its expertise in areas that will be important in the future by bringing new members on board, thereby broadening Vonovia's range.

Vonovia is currently preparing for the upcoming changes to German stock corporation law resulting from the implementation of the second shareholders' rights directive (ARUG II), and the associated revision of the German Corporate Governance Code (GCGC). As significant changes in remuneration policy and the associated



reporting including presentation to the shareholders is expected (known as “say on pay”), it is currently vital that Vonovia follows these developments closely. 102-12

### Compliance and Anti-corruption

With the increase in construction activity, a supplementary field of activity has opened up for Vonovia in which we will face new challenges, opportunities and risks. Procuring subcontractor services that are performed outside of our processes is a particular challenge. The risks primarily relate to compliance with labor and social standards by construction companies and their subcontractors. We can reduce the majority of these risks in advance by fulfilling many of the technical construction work steps with our own technical service. This lessens Vonovia’s dependency on external construction companies and can even exclude them if they do not comply with sustainability criteria. We can also better ensure our high quality standards by performing the majority of services ourselves across the Group.

We minimize risks by adhering to our general terms and conditions of purchasing and the Business Partner Code, and we also take additional measures, such as establishing a structured supplier management system to generate further security. The procurement department frequently updates the existing regulations in order to minimize these risks, and published the latest version in 2018. As part of this, we requested numerous documents and other forms of proof from our subcontractors, and we monitor their validity on an ongoing basis to reduce risks further. We developed and implemented a standard audited process for new construction procurement in the reporting year.

## Objectives, Measures and Indicators

103-2, 103-3

### Corporate Governance 102-18, 102-19, 102-24

Corporate governance, which means acting in accordance with the principles of responsible management with the aim of increasing the value of the business on a sustainable basis, is an essential requirement for Vonovia, and embraces all areas of the business.

The Code of Conduct provides the ethical and legal framework within which we act and want to stay on successful course for the company. The focus is on dealing fairly with each other but also in particular on dealing fairly with our tenants, suppliers, customers and investors. The Code of Conduct specifies how we assume our ethical and legal responsibility as a company and is the expression of our company values.

Vonovia’s Management Board is solely responsible for managing business operations. The Management Board provides the Supervisory Board with regular information on business developments, the strategy and potential opportunities and risks. As the supervisory body, the Supervisory Board monitors the management of the company’s business and supports the Management Board with decisions of fundamental importance.

Vonovia’s Supervisory Board was newly appointed in the reporting year. For the first time, the skills profile for selection now also includes the category sustainability.

🌐 [www.vonovia.de](http://www.vonovia.de) We established the unit “Management Board and Supervisory Board office” in the same year.

The Supervisory Board sets up an Executive and Nomination Committee, an Audit Committee and a Finance Committee from among its members. Further committees are formed as required. The Audit Committee is specifically responsible for monitoring:

- > the accounting process,
- > the effectiveness of the internal control system, the risk management system and the internal audit system,
- > the audit of financial statements, and
- > compliance (if not assigned to another committee).

Since the act to strengthen the non-financial reporting aspects of companies in their management and Group management reports (CSR Directive Implementation Act) came into force in 2017, the Audit Committee has been responsible for monitoring Vonovia's sustainability reporting and in particular the Non-financial Declaration. 102-22

After a year, the Supervisory Board will now evaluate the quality of its work in its new composition. The newly elected Supervisory Board is currently focusing on identifying the potential need for adjustments in corporate governance at Vonovia due to possible changes in legal corporate governance framework conditions (ARUG II and GCGC).

Promoting diversity in Vonovia's management bodies remains a goal. Diversity criteria are applied when filling positions on both the Supervisory Board and the Management Board, and qualified women are included in the selection process. Gender should be irrelevant when it comes to filling positions. Vonovia's Supervisory Board should consist of at least 30% women and 30% men. The Supervisory Board has also decided that the share of women on the Management Board should be at least 20% by December 31, 2021. The target ratios were met in the reporting period. We also intend to have a share of 30% women in the first two management levels below the Management Board by the end of 2021. At the moment, the share of women in management positions in the first management level remains at 17.6%. At 33.9%, the targeted proportion of women at the second level of management below the Management Board has already been met.

You can find out more about our corporate governance in the annual report (see chapter Corporate Governance Report [AR 2018, p. 44 et seq.](#) and chapter Non-financial Declaration [AR 2018, p. 70 et seq.](#)).

### Compliance and Anti-corruption

Through the corresponding monitoring of our compliance rules, we protect the integrity of employees, customers and business partners, and shield our company from negative consequences. We have established rules and Group guidelines internally – for example, to protect the capital market, ensure data protection, secure information, manage risks, fight corruption and set out guidelines on how to deal with donations and sponsorship – based on the relevant statutory requirements, the articles of association and the rules of procedure for the Supervisory Board and the Management Board. Our compliance principles are also detailed in our Code of Conduct which is binding for all employees under the Group works council agreement.

The Vonovia Compliance Committee, which is responsible for refining the compliance management system and adapting it to fulfil current requirements, meets several times a year. The members of this committee are the compliance officer, compliance managers, the ombudsperson, and representatives from the internal audit, risk management and HR management departments and the works council.

Members' tasks:

- > **Compliance officer:** Central point of contact for compliance matters and potential cases, identification of compliance risks, derivation of measures for preventing and discovering risks.
- > **Compliance managers and specialists:** Supporting the compliance officer from within the departments.
- > **External ombudsperson:** Recording information regarding potential compliance cases – also anonymous, confidential contact for all employees and business partners.

### Compliance Information and Training

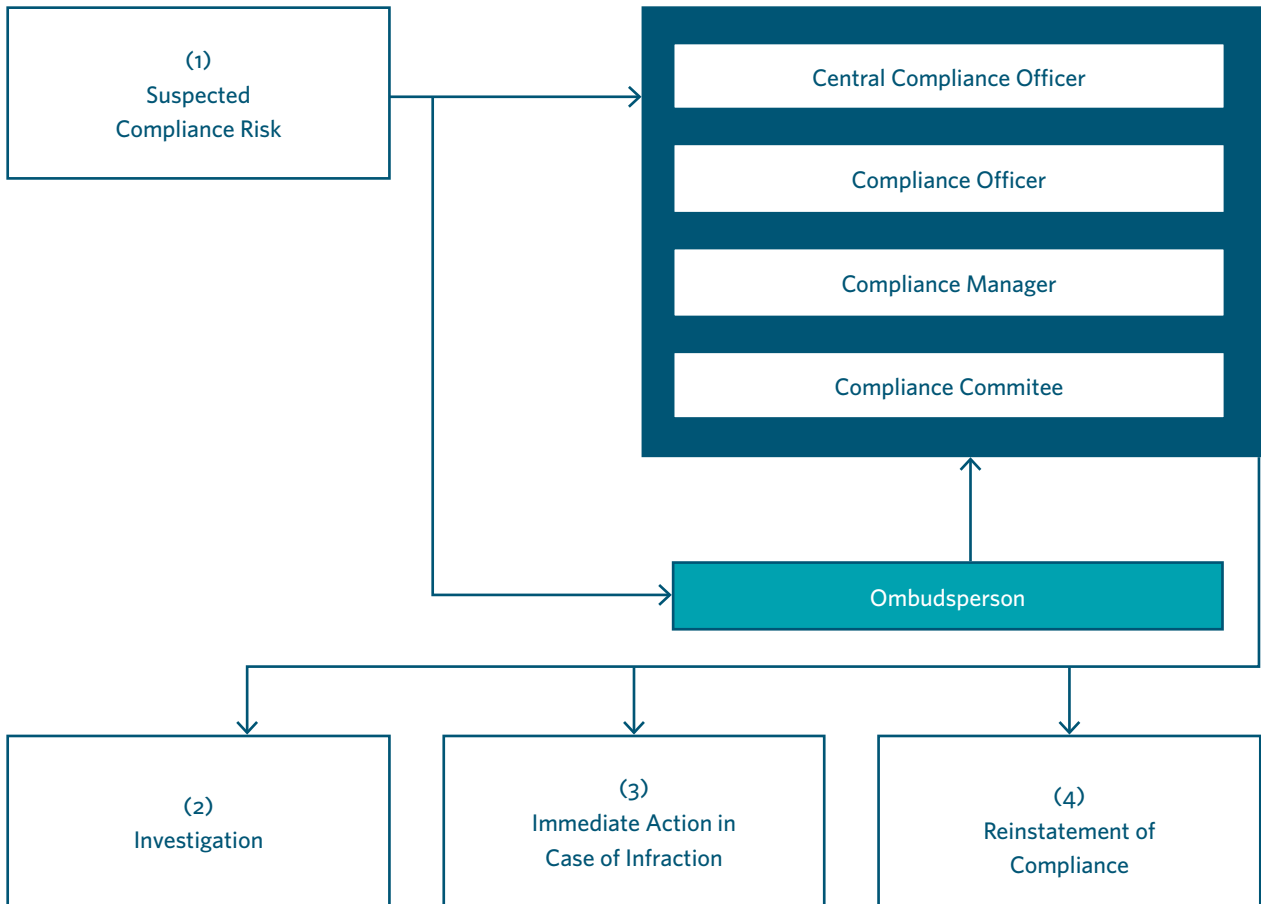
Vonovia's Supervisory Board regularly receives comprehensive information about compliance issues and corruption along with existing guidelines and processes. The compliance report, which is forwarded to the Audit Committee, provides information about potential breaches, measures and training relating to corruption. 205-2

Our employees receive regular training on compliance issues. For instance, the procurement department, for which the issue is particularly relevant, receives special training on corruption and criminal law pertaining to corruption. A particular focal point in 2018 was the implementation of the EU General Data Protection Regulation. We conducted comprehensive training on this topic.

In the 2018 fiscal year, there were isolated suspected cases of corruption, which we have since investigated diligently. None of the cases were confirmed. 205-3

There were several immaterial compliance violations or suspected cases in 2018. This clearly shows that the system we have put in place is proving effective. Cases were reported and addressed and corresponding consequences ensued. 419-1

**Compliance-Management-System**



**Dealing with Antitrust Proceedings**

One area in which antitrust law is of particular importance is company acquisitions. We inform the German Federal Cartel Office as soon as possible of any potential acquisitions and begin the integration of acquired companies or portfolios only following approval. There were no violations of competition law guidelines in 2018. 206-1

**Adherence to Environmental, Labor and Social Standards in the Supply Chain**

Vonovia’s procurement processes primarily consist of construction services, construction material and material costs (indirect materials and services). We want long-term relationships with our business partners and are therefore setting up a structured supplier management system. The foundation of this system is the Business Partner Code and the general terms and conditions of purchasing along with individual contractual provisions. [www.vonovia.de/ihre-services](http://www.vonovia.de/ihre-services) Our Business Partner Code for subcontractors and suppliers sets out clear expectations regarding integrity, legal compliance and ethical conduct. One important aspect from our perspective is

that our suppliers and subcontractors not only accept our Business Partner Code as binding, but also put the principles set out in the Code into practice on a daily basis at Vonovia’s construction sites. Among other things, the Code 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. In addition, we also ensure that demolition materials and rubble are disposed of in a professional and environmentally friendly manner and minimize the risk of hazardous or poisonous materials being used by processing the procurement of the majority of construction materials centrally through Vonovia. In order to protect our employees and tenants alike, we ensure material safety using the systematic TÜV Rhineland Toxic Materials Management System (TOGs®), in which all information is recorded, documented and evaluated centrally. This provides us with an ideal basis within the VTS for conducting risk assessments and developing operating and handling instructions.

By signing the code, our business partners – and their subcontractors – commit to acting in an economically and legally compliant manner and to adhering to our corruption prevention guidelines. Vonovia does not tolerate corruption under any circumstances. Violations of these rules may result in the business relationship being restricted or even completely terminated. [102-16](#), [205-2](#), [414-1](#)

We promote transparency and security within the company by observing the compliance rules, Group procurement guidelines and our Code of Conduct. We currently do not conduct any systematic checks on site, but we do monitor risks using active documentation management as part of our supplier management system. Construction managers in Germany also maintain direct contact with subcontractors and have a clear picture of the people working on construction sites. Compliance with the Business Partner Code can thus be largely verified within the scope of this working relationship. In addition, our procurement department holds annual reviews with key subcontractors. No violations by suppliers or service providers against labor standards, human rights or corruption regulations were discovered by central purchasing in the reporting period. [414-2](#)

A uniform supplier assessment system is currently being developed. The goal is for key suppliers to be evaluated by procurement as well as the Group's departments in order to achieve transparency and to obtain a systematic overview of the performance and development of suppliers. The aim is to develop a performance indicator as part of the supplier assessment system.

As Vonovia operates within a strictly regulated and controlled legal framework within the European Union, possible challenges relating to human rights are not considered to be material. There is therefore no explicit performance indicator for this group of issues. The procurement department, however, acts as a watchdog in this regard by selecting suppliers accordingly in order to ensure the protection of fundamental rights and adherence to the law. In the future, Vonovia will also be making a voluntary commitment to the Federal Government's national action plan and will be taking corresponding action.

# SOCIETY AND CUSTOMERS

The satisfaction of our customers, the quality of our portfolio and the ability to provide new homes are all vital for the long-term success of our company. It is of fundamental importance to Vonovia that we can guarantee our customers homes that they can stay in long term. In order to offer our customers attractive, secure homes with a high living standard, we align our business decisions with the needs of our tenants and develop our portfolio in a holistic manner according to socially relevant issues.

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46	Creating Appropriate Living Space and Affordable Rents
50	Neighborhood Development

# Our Approach regarding Society and Customers

☒ 103-1, 103-2, 103-3

## Management Approach 103-1

In order to fulfil our tenants' needs we consistently pursue solution-oriented approaches for our activities on the residential property market that focus on these needs (see chapter Customer Satisfaction → p. 40 et seq.). It is our aim to promote long-term loyalty to the company among our tenants. This means we have to guarantee that the homes remain affordable in the long term, i.e., our measures must ensure that we can provide modern, energy-efficient and also affordable homes for all population groups. The main focus of our activities therefore is on renting out our buildings efficiently, using digitized processes, for instance, such as our customer portal, and creating new homes (new constructions and vertical expansion). The aim is to alleviate the tense situation on the residential property markets (see chapter Creating Living Space and Affordable Rents → p. 46 et seq.). The debate surrounding the allocation of modernization costs has shown that the acceptance for cost allocation – even for measures to protect the climate and improve living standards – is declining significantly. Vonovia has thus pledged:

- > not to conduct modernization work in the future that would add more than €2 per month to the tenant's basic rent per m<sup>2</sup>,
- > to ensure that our customers can stay in their homes, and
- > to investigate hardship cases individually and actively look for solutions.

We develop existing homes according to peoples' needs. This includes senior-friendly apartment conversion, the establishment of residential communities supervised by nursing assistants or offering assistance to older tenants in moving. When it comes to our portfolio properties, our focus is on quality and we aim to create an attractive residential environment with a high standard of living that tenants can actively help shape. This also means that we:

- > use environmentally friendly and safe materials,
- > equip our apartments with modern fittings, and
- > offer our tenants additional services for more comfort.

Safety and healthy living are fundamental elements in the design of our apartments and the surrounding area (see chapter Portfolio Maintenance and Tenant Health and Safety → p. 43 et seq.).

When it comes to the composition of our portfolio, we strive to develop and acquire properties that are close together. This not only allows us to increase the efficiency of our management, but also provides us with a holistic overview that enables us to adopt new approaches. We take social, ecological and economic circumstances into consideration in our approaches by:

- > making infrastructure available (e.g., mobility offers),
- > creating spaces for well-being,
- > designing green spaces and community spaces, and
- > cooperating with social, pedagogical and cultural institutions.

We initiate participation concepts in order to purposefully include the people living in our neighborhoods and to increase acceptance of the measures we intend to take. This allows us to strengthen neighborhoods and networks, and we benefit as a company from peoples' suggestions and lessons learned (see chapter Neighborhood Development → p. 50 et seq.).

This results in the following material topics for Vonovia related to society and customers, which are visually depicted in our materiality matrix:

- > Portfolio maintenance
- > Tenant health and safety
- > Creation of homes
- > Affordable rents
- > Neighborhood development
- > Social commitment

In the following chapters we will deal with these topics in more depth and explain their importance to Vonovia. We will describe the management approach, challenges, opportunities and risks, targets, measures and indicators for each topic.

## Challenges, Opportunities and Risks 103-1

Discussions in the political and public spheres have shown that our business goes hand in hand with high reputational risks. This can have a negative impact:

- > on demand for our homes,
- > in the form of stricter regulations on the residential property market, and
- > on Vonovia's attractiveness as an employer.

In this regard, a lack of skilled workers, continually climbing construction costs, rising requirements (e.g., the increase in regulations and legislative processes such as tenancy law and modernization cost allocation) and drawn out administration processes (e.g., relating to construction approvals) constitute particular challenges for Vonovia.

Neighborhoods that tenants consider to offer a particularly high standard of living increase Vonovia's attractiveness and demand for our homes. We support this effect through our growth strategy and the development of new fields of business within the Value-add segment, ensuring that new opportunities are created for Vonovia. We can, for instance, increasingly generate cost advantages, improve the planning for measures and better overcome capacity bottlenecks by increasing the number of employees we have. By decentralizing our structures further, we can increase proximity to our tenants. Simultaneously, we generate efficiency advantages by standardizing processes and managing partial functions centrally. Serial construction enables us to keep costs low and shorten the time of construction work.

## Objectives, Measures and Indicators 103-2, 103-3

It is our aim to increase customer satisfaction further, thereby securing the foundation of our economic success. We leave nothing to chance in this area and purposefully align all measures that we take to generate positive effects.

One material aspect of this work is the preservation and improvement of the quality of our portfolio properties, which we primarily achieve through maintenance and modernization measures to improve energy efficiency and the standard of living (see chapter Increasing Portfolio Quality → p. 43 et seq.). In 2017, we set ourselves the target of implementing a modernization rate (refurbishment rate) of more than 3% per year for the first time, and in the reporting year achieved almost 5% for the second consecutive time. This means we exceeded the target once more. We always focus on the health and safety of our tenants in all that we do, for example, in the choice of

materials used in construction and the implementation of security concepts.

Constructing new homes has been the focus of our activities for a number of years. The size of our company allows us to achieve economies of scale in many areas, reduce costs and thereby offer affordable homes. Modular and serial construction methods, which we have employed for just as long, also play an important role.

In all of our activities, we never lose sight of our stakeholders' interests. We have established processes that enable us to include our stakeholders' interests in our planning and decision making and thus find the best solutions for our neighborhoods. Our stakeholders' ideas, opinions and suggestions are an important element of Vonovia's neighborhood development work.

## Outlook for 2019

In the medium term, we intend to expand the current scale of our customer satisfaction surveys further.

We will push forward with our conversion measures for accessible homes in 2019 and within this context also aim to increase the speed with which elevators are repaired and installed while also reducing the costs associated with this work.

We also plan to invest more in customer services in order to increase the amount of services we offer.

We will again implement new neighborhood development measures in 2019 and improve communities and the standard of living in our neighborhoods, such as Stuttgart-Kornwestheim or Dresden-Altreick, for example, by putting new ideas into practice.

# Customer Satisfaction

☒ 102-43, 102-44, 103-1, 103-2, 103-3, 203-2

## Management Approach 103-1

Vonovia sees itself as a service provider that offers tenants attractive homes and housing-related services. Satisfaction with our services is the key to our economic success and every employee is encouraged to actively contribute to improving our services. We support this:

- > through our central service center, caretakers on site, our technicians and the residential environment organization,
- > by processing issues rapidly and in a straightforward and reliable manner,
- > with comprehensive investment in maintenance and modernization work,
- > by establishing self-service functions, via the customer portal, for example, and
- > through service offers that provide real added value for our customers.

Our employees are there for our tenants during service hours and on weekends in emergencies, e.g., for urgent repairs. Tenants' direct contacts are well connected within the company and make sure that our service promise is fulfilled.

Whether and to what extent our customers use the services we offer as part of our Value-add strategy is the decisive indicator that helps us to determine if our offers are appropriate.

## Establishment in the Organization 103-2

Thematically and organizationally, customer satisfaction is assigned to our customer services department, however, every Vonovia employee is obliged to ensure customer satisfaction. The customer services department commissions a service provider to conduct a random survey in the full portfolio once a quarter. The results are prepared by the training & quality department along with suitable measures, which are then fed back to the customer service department along with the findings. This depart-

ment then distributes the findings of the survey to all of the Group's operational areas, which then implement the appropriate measures.

## Challenges, Opportunities and Risks 103-1

The ongoing housing shortage and rising rents, particularly in conurbations, have resulted in tensions on the German residential property market. Alongside rents, expectations regarding the quality of the homes and the service provided by Vonovia as a landlord are also rising. This provides us with an opportunity to set ourselves apart from the competition with outstanding service and rapid reaction times.

The public discussion regarding modernization cost allocation has shown us that acceptance for rent increases is limited. For us, this issue primarily brings with it a reputational risk that may impact our company and the success of Vonovia. That is why it is important to us to increase our communications with tenants in this regard. Vonovia has now decided on a voluntary modernization cost allocation cap (see chapter Society and Customers, → p.37 et seq.). We also want to improve the quality of our ancillary expense billing in order to further minimize the risk of sending out bills that are incorrect, as every incorrect ancillary expense bill that we send out is one too many.

The digitization of our processes brings with it a myriad of opportunities, including an effect on customer satisfaction. For example, we are boosting our online presence and expanding our self-service functions in the online customer portal for the benefit of our customers. This means it will be even easier for customers to contact us.



## Objectives, Measures and Indicators

103-2, 103-3

### Measures to Determine Customer Satisfaction

The Customer Satisfaction Index (CSI) is one of our main key performance indicators that we use for determining and managing customer satisfaction. It is also relevant for Management Board remuneration (see chapter Our Service Promise [AR 2018, p. 88 et seq.](#), [www.reports.vonovia.de](http://www.reports.vonovia.de)). The CSI is determined at regular intervals by means of systematic customer surveys and reflects how our services are perceived and accepted by our customers (see Establishment in the Organization → p.40). The findings of the survey are included in our investment decisions and measurement planning processes.

The customer surveys cover:

- > overarching topics such as image, loyalty and overall satisfaction,
- > issue-specific feedback on customer service, maintenance and modernization measures,
- > feedback on repairs, residential buildings and external areas. [102-43, 102-44](#)

Further customer satisfaction indicators include the vacancy rate, tenant fluctuation and the direct comments of tenants. Interviews conducted with tenants, e.g., service calls to ask new tenants about how happy they are with Vonovia, provide us with an additional source of feedback that aids internal quality assurance.

Our focus on personal contact with our tenants is one of our greatest strengths. This allows us to boost customer loyalty and satisfaction. We are therefore constantly working to improve our customer service, for instance, by optimizing communication between the central point of contact and our employees on site and monitoring the time it takes to process customer queries. We aim to reduce the average length of processing time further.

### Measures to Increase Customer Satisfaction

As rents rise, so do tenants' service expectations. Vonovia is not exempt from this change and is taking appropriate action – such as improving the quality of our ancillary expense billing. This is accompanied by an expansion of our online presence and the self-service functions on the customer platform. In 2019, we will launch an app for our tenants in order to reach another milestone in our service strategy. In the future, this will enable our customers to monitor the status of their personal queries and our services, for example. Customers will also be able to receive push notifications with information from Vonovia, pay online, book appointments and download documents.

In 2018, Vonovia took over customer service for our electricity customers. This service is now well established and gives us a better overview of our customers and their needs.

### *Value-add Offers*

Add-on products and housing-related services, or Value-add offers as we call them, supplement our core service, rental, and also create added comfort and value for our customers. We are continually reviewing additional service approaches that could increase customer satisfaction and expand our portfolio whenever appropriate. Those areas that have already been established successfully largely include the caretaker organization, the craftsmen's organization, the residential environment organization, multimedia services and metering services. In addition, we are currently expanding our offers to include energy supply and home automation.

Before services are added to our range of offers they must fulfil three conditions:

1. Provide added value
2. Be economical and affordable
3. Be suitable for standardization and implementation on a large scale

We can generate cost advantages for the benefit of our customers by providing offers that are subject to economies of scale. Examples include the bathroom, kitchen and security packages that we actively offer. [203-2](#)

### Energy Services Offers

We increase our customers' flexibility through smart metering solutions that read water and heating consumption meters digitally. This also enables us to create ancillary expense bills faster. We intend to expand this service further in the coming years. In 2017, around 80,000 residential units used this service. In 2018, this figure was up to around 130,000.

We also continued to pursue the landlord-to-tenant electricity concept in 2018, as part of the decentralized energy supply concept, and installed additional photovoltaic plants (PV plants). As of December 31, 2018, we had a total of 208 PV plants in operation. Our numerous cogeneration units (CHP units) allow us to provide heating and hot potable water (see chapter Energy Efficiency and Reducing Greenhouse Gas Emissions → p.58 et seq.). In 2019, we aim to expand our energy services and sales offers further.

### Residential Environment Services

We provide a number of residential environment services through our caretakers, technicians and gardeners, such as caretaking services, cleaning work and maintenance of green spaces. This allows us to perform high-quality repairs and modernization measures quickly, and provide our customers with a well-maintained residential environment. We offer our older tenants smart home solutions with innovative assistance systems by cooperating with social institutions and care services. We also provide senior-friendly apartment conversions. Thanks to standardized processes and economies of scale, our tenants benefit from cost advantages when it comes to procurement.

For more information about our services, we refer to the Annual Report (see chapter Our Service Promise ☐ AR 2018, p. 88 et seq.).

### Management of Hardship Cases

The discussions surrounding modernization cost allocation have shown us that we have to communicate with customers more about their individual situations and the consequences of energy efficiency modernizations, and pay closer attention to their specific needs. We are thus currently in the process of expanding our hardship management work. Four employees in Bochum are responsible for initiating contact with customers once notification of hardship is received and for launching a preliminary review. They then pass the case on to one of 20 neighborhood managers who take responsibility for contact with these customers. In a private interview, the manager records the tenant's situation in order to work on a solution together before the modernization work begins.

In personal hardship cases, for example, where the tenant is elderly or ill, Vonovia provides support during the construction work, including moving furniture and other objects or helping to move the tenant into a senior-friendly or barrier-free apartment. In economic hardship cases, for example, if tenants are no longer able to afford their rent following modernization due to low income, the neighborhood manager develops an individual solution, such as a gradual rent increase or a reduction of the modernization cost allocation for a certain period of time. A gradual increase in the rent enables the tenant to keep rental payments affordable over a longer period of time or, if necessary in the long term, to find a new home. In such cases, we work with the tenant to review the impact that different factors would have on the rent they pay; for example, if their financial situation were to improve due to a change in career.

# Portfolio Maintenance and Tenant Health and Safety

☒ 102-15, 103-1, 103-2, 103-3

## Management Approach 103-1

Vonovia's overarching goal is to continually increase the company's value through profitability and sustainability strategies. We want to manage our portfolio efficiently, while maintaining high living standards for customers.

Vonovia's German portfolio consists of approximately 360,000 apartments (incl. German BUWOG portfolios). The quality and structural condition are of the utmost importance to the company. After all, we can only gain long-term loyalty and be successful in the future if our tenants are safe and healthy in their homes and enjoy a high standard and good quality of living.

On the one hand, we define portfolio quality as the good structural condition of our properties. This includes all issues relating to maintenance and modernization. In addition to increasing the standard of living and attractiveness of homes, this point also relates to the health of the tenants, which we support by using environmentally friendly materials or by eliminating hazardous substances.

On the other hand, portfolio quality also covers issues relating to the residential environment. Tenants' sense of security is boosted through well-lit and cleverly designed exterior spaces, and areas designed to increase well-being are created in the neighborhood that are as free as possible from airborne and noise pollution.

### Establishment in the Organization 103-2

Changes affecting the structural condition of our buildings are usually conducted by the technical service, while the residential environment service takes care of the area directly surrounding our apartments. The procurement department – in cooperation with the portfolio management department – also plays a role here as it procures construction materials.

## Challenges, Opportunities and Risks 103-1

Managing and maintaining residential properties entails business risks for Vonovia. The construction boom in Germany and the associated scarcity of technician capacities mean that the cost of construction is continually rising, and implementing our construction measures economically is more difficult. Prolonged construction approval periods are also leading to an increase in the amount of time it takes to complete construction measures and a risk that construction costs could increase.

Insufficient information regarding the materials used in construction or the implementation of construction regulations also pose a particular challenge for Vonovia. We counter this risk by surveying properties in person, regularly checking building safety while taking all statutory construction regulations into consideration, checking for potentially hazardous materials, creating fire protection concepts where necessary and including professional planners to optimize construction work on our portfolio. In addition, clear specifications and strict quality specifications apply to the selection of materials.

## Objectives, Measures and Indicators

103-2, 103-3

### Increasing Portfolio Quality

Portfolio quality means:

- > ensuring the sound structural condition of our buildings through maintenance and modernization work,
- > guaranteeing our tenants' safety and health,
- > achieving value and return from the portfolio, which we aim to improve through new constructions, holistic neighborhood development and targeted acquisitions and sales.

Our maintenance and modernization measures are based on operational and strategic considerations, with a particular focus on increasing customer satisfaction.

Maintenance	Modernization
<b>Aim:</b>	<b>Aim:</b>
Long-term preservation of the building stock.	Increasing the standards and value in use of buildings.
<b>Measures:</b>	<b>Measures:</b>
Regular economic expenses planned over the long term, which allow us to avoid peaks in spending and additional costs	Measures to improve standards of living within closed apartment spaces (e.g., new balconies and kitchens, bathroom modernizations, senior-friendly conversions)
Planning oriented toward long-term and short-term needs	Energy-efficiency measures on building shells or supply infrastructure (e.g., apartment insulation, window and roof replacement, modern heating units)
Employing economies of scale to reduce costs	

In 2018, we once again exceeded our target of 3% and achieved a rate of almost 5% with our energy-efficiency program in Germany, which equates to approximately 18,000 apartments.

In 2018, we conducted measures to raise the standard of living in a total of 15,000 apartments (2017: 11,000). In the coming years, we will strive to maintain this level of work to improve standards of living, or even increase it.

In the reporting year, we continued to improve the green spaces belonging to our properties, for instance, by converting old wooded areas into lawns. This has allowed us to create leisure spaces for our customers in their neighborhoods, increasing the quality of our leisure spaces in external areas.

### Expenses for Maintenance and Modernization

Vonovia is maintaining its high level of investment. The key areas of focus are improvements to existing building stock, new construction and adding extra stories to existing buildings.

We made the following investments in 2018:

### Maintenance and Modernization

in € million	2017	2018
Maintenance and ongoing maintenance <sup>2)</sup>	346	430
Intensity of maintenance (€/m <sup>2</sup> ) <sup>2)</sup>	16	18
Modernization <sup>1) 2)</sup>	779	1,139
Intensity of modernization (€/m <sup>2</sup> ) <sup>2)</sup>	35	37
<b>Total</b>	<b>1,125</b>	<b>1,569</b>
<b>Total (€/m<sup>2</sup>)<sup>2)</sup></b>	<b>51</b>	<b>55</b>
Measures to improve the standard of living <sup>3)</sup>	200	250

<sup>1)</sup> Incl. new construction: 2018: € 234.3 million, 2017: € 65.7 million.

<sup>2)</sup> The scope covers Vonovia Group's complete scope of consolidation.

<sup>3)</sup> This includes measures requested by existing tenants.

### Health Safety of the Building Materials

It is important to us that our customers live in healthy homes. We therefore carefully select materials that meet modern standards for our construction work. This means that we exclusively use safe materials in our apartments and take meticulous care to prevent mold. If mold should be discovered in one of our apartments despite our meticulous care, the technical service eliminates the mold and launches prevention measures - immediately and without appointing blame.

In agreement with portfolio management, the procurement department decides which materials are used for work in the Vonovia buildings according to precise process guidelines laid out in our product manual. This allows us to react rapidly to legal changes and take the corresponding measures. We expect our subcontractors to strictly adhere to all of our product guidelines so that we can ensure all measures exhibit the same quality.

All materials must:

- > pass various quality controls taking into consideration their potential impact during the life cycle, and
- > meet the applicable safety, health and environmental standards.

In 2018, we decided that we would increase our use of mineral fiber as an insulation material in future energy-efficient modernization measures on facades. When

selecting products, we also look at energy efficiency – for instance, in choosing boilers – and pay particular attention to water quality in the portfolio properties, e. g., by installing special filter systems (see chapter Environmental Protection in Connection with Conversions and New Construction → p. 65 et seq.).

There was no need to conduct any special health and safety checks in connection with the materials used in the reporting year.

### Safety Concepts and Other Measures

#### Safety Concepts

We strive to ensure the safety of our tenants both in and around their homes because it is a fundamental prerequisite for personal well-being. A subjective sense of safety also plays an important role in establishing this feeling.

102-15

We therefore ensure that:

- > there are no “scary spaces” – such as unlit parking lots or paths,
- > there is sufficient lighting on paths, parking spaces and in foyers and halls,
- > we test and offer safety solutions to improve protection against burglary, in cooperation with the State Office of Criminal Investigations in North Rhine-Westphalia, such as reinforced bolts and burglar-proof apartment entrance doors,
- > we identify hazards by physically inspecting all open spaces and playgrounds every two years,

- > we adhere to all traffic safety obligation regulations without exception in order to minimize hazard risks in the long term,
- > we initiate measures immediately on identifying defects or risks in order to prevent accidents in open spaces on our properties.

#### Reducing Noise Pollution

Noise pollution can come from a variety of our sources in our neighborhoods – but it always impacts the well-being of our tenants. We want our tenants to live with as little noise pollution as possible, and therefore install sound-proof windows along streets with heavy traffic, for example. Complaints are often made about noise caused by other tenants. In these cases, Vonovia acts as mediator and strives to find a solution that is mutually acceptable to both parties. House rules in different languages serve to create a common understanding of living together.

Noise caused by construction work cannot be prevented. We aim to foster understanding for this among residents by announcing construction as early as possible at tenant assemblies and during office hours as well as through small gestures such as tenant parties. We endeavor to keep the disturbances caused by construction work as low as possible, because in certain cases, such as vertical expansions, apartments in the building remain occupied by tenants. Modular approaches for new construction work enable us to keep construction times to a minimum as the prefabricated residential modules only need to be put together by technicians and finalized with interior fittings.

### Safety inspections

	Inspection schedule	Total inspection list	Target inspections 2018 <sup>1)</sup>	Actual inspections 2018 (EPRA H&S assets)
Buildings	Every 2 years	52,900	30,653	90% <sup>2)</sup>
Open spaces with buildings	Every 2 years	35,187,000	13,702,026	100%
Open spaces without buildings	Every 2 years	2,746,000	1,464,274	100%
Trees	Depending on type of tree and pre-existing damage every 1, 2 or 3 years	214,000	152,617	100%
Playgrounds	Depending on playground equipment category 1 to 4 times a year	1,200	2,569	100%

Vonovia has established standard processes for handling defects discovered as a result of inspections, which provide for prompt handling. These processes continued to function perfectly during the reporting period (EPRA H&S-Comp).

<sup>1)</sup> The checks are conducted every two years from the date of the first inspection; the annual certificates are therefore not distributed exactly equally. (50%-50%).

<sup>2)</sup> Missing inspections were caught up on at the beginning of 2019.

# Creating Appropriate Living Space and Affordable Rents

☒ 102-15, 103-1, 103-2, 103-3, 203-2, 413-1

## Management Approach 103-1

The situation on the German housing market did not change in 2018 and housing demand continues to significantly exceed supply – particularly in metropolitan areas. This has resulted in rising rents and housing shortages. At the same time, construction of new buildings lags behind housing demand, particularly in metropolitan regions, despite a greater amount of construction being completed. Vonovia aims to counter this trend and to offer affordable homes, first and foremost through efficient processes and economies of scale, and to alleviate the situation on the housing market through the construction of new homes. This is the only way to lessen the pressure on the housing market. Vonovia is therefore continually investing in the expansion of its portfolio through new construction and acquisition, and offers conditions that in some cases – such as in Berlin – are significantly below the standard local comparative rents for newly constructed homes.

The housing market is also still undergoing a transformation due to demographic changes. On average, the population in Germany is aging and the number of one-person households is increasing. These developments are posing considerable challenges for the housing industry, particularly when it comes to providing homes that meet the needs of tenants. Vonovia intends to tackle these challenges with new constructions and by converting existing stock, e.g., changing the size of apartments and conducting senior-friendly apartment conversions.

The fact that awareness of the housing problems has noticeably increased in recent years also plays an important part here. Surveys suggest that the prevailing opinion is that policymakers have made the wrong housing policy decisions in the past and that they are still doing too little to combat the problem. This shortage of housing and the development in property prices/rent that this entails has created a subjective sense of inequality that pervades all sections of society, with political decision-makers under increased pressure to rectify the situation. Vonovia acts

between the political and social spheres in this tense environment, although the political framework is having an ever greater impact. We respond to these developments by forming individual agreements with some cities and municipalities, which enables us to continue offering affordable homes.

## Establishment in the Organization 103-2

The planning of new apartment construction either takes place via the BUWOG companies' development departments or the technical service. They are also usually in charge of expansions and conversions. In the field of portfolio and rental management, rent is calculated in coordination with the regions and hardship management processing.

## Challenges, Opportunities and Risks 103-1

Providing new homes that are also affordable carries both risks and opportunities for Vonovia. This is because we are active in an area where social housing, tenancy law and social political issues are intensely scrutinized publicly.

Over the past few years, construction costs have risen significantly – partially due to the higher cost of construction materials and services, a multitude of statutory requirements and regulations, and higher land prices, taxes and fees. In addition, we must also assume time delays in both the construction approval process and in the availability of construction services due to the construction sector working at full capacity. For example, the construction of an apartment building currently takes around two years from project planning to completion. This makes it increasingly difficult for Vonovia to create affordable homes the short run. By using serial construction methods, we can counter these developments a little by shortening construction times, but not fully compensate for them.

Tenancy law is also constantly changing and impacting our operations. Stricter regulations carry the potential risk of lowering incentives to create new housing and renovate existing housing. On the other hand, these regulations also contribute to making the situation more predictable and secure for both tenants and landlords.

In our opinion, serial/modular construction methods are an important way forward as they enable us to create new homes. The lower level of disruption that these construction methods cause for residents also increases acceptance for new construction and densification further in society. Nevertheless, the company still faces challenges. Individual local building regulations make the building process and adaptation of modular systems more difficult. Wooden hybrid construction properties, for example, cannot be erected in all federal states as intended due to different fire protection requirements. In addition, the requirements that apply in terms of accessibility have an impact on the modular concept and, as a result, on the construction costs.

## Objectives, Measures and Indicators

103-2, 103-3, 203-2

We make use of a variety of options to keep costs as low as possible for our tenants when providing new affordable homes that meet society's needs. Alongside voluntary agreements and obligations, these include the exploitation of economies of scale, lowering construction costs by deploying serial construction methods and conversions in existing stock to meet needs.

### Rent Cap Agreements

One of the first successful steps we have taken in restricting the burden on our tenants is the cap on allocable costs for modernization services. The intensity of the public debate surrounding rent increases as a result of modernization measures has shown the importance of this issue. Vonovia has thus pledged:

- > not to conduct modernization work in the future that would add more than two euros per month to the tenant's basic rent per square meter,
- > to ensure that our customers can stay in their homes, and
- > to investigate hardship cases individually and actively look for solutions.

Including our tenants at an early stage is important in this regard. By doing this, we aim to ensure that measures that increase the value of our stock and environmentally friendly refurbishments are still carried out, i.e., that we can ensure that we meet our responsibilities for climate protection measures.

A second element is the demand for homes. An increasing number of our homes are losing their social housing status. Whereas back in 1990, there were still around three million apartments classified as social housing in Germany, this figure is set to have fallen to around one million by 2020. Around 10% of Vonovia's homes are subject to social housing pricing restrictions. While there are now set rules in place for new constructions regarding rental price and occupancy-controlled homes – for instance, the Berlin model for cooperative building development sites, where 30% of the floor space must be occupancy controlled – there are usually no new regulations for existing properties. However, in many housing markets, Vonovia comes to voluntary agreements or finds individual solutions with cities and municipalities that also include new commitments for existing properties – and thus exceeds the statutory laws in many locations. We communicate with mayors, municipal authorities as well as tenants' associations (see Open Dialogue → p. 28 et seq.).

### Achieving Economies of Scale

Vonovia primarily achieves economies of scale through standardized processes and the scale of the organization. This enables us to generate cost advantages in the management of the portfolio and the procurement of services, which we pass on to our tenants through lower ancillary expenses, for example. We also apply standardized processes when investing in existing properties and use the same materials wherever possible for maintenance and modernization measures. This allows us to buy in bulk, which means we receive the materials at special conditions, for instance, in the form of a lower purchase price or a better quality standard for the same price.

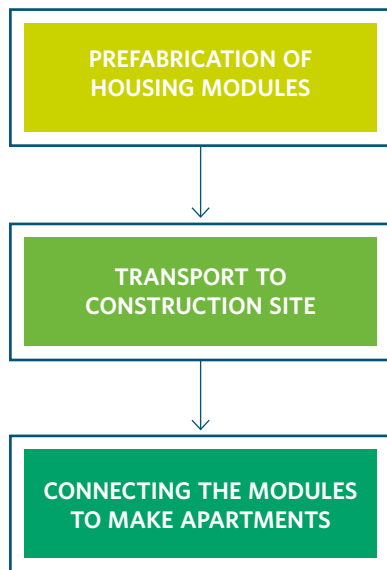
### New Construction, and Serial Planning and Construction 102-15, 413-1

Vonovia wants to offer homes that are affordable to a broad section of the population. In order to ensure that we can, we must keep construction costs low. Serial planning and construction make this possible. In this context, we do not set up individual projects to plan construction activities, but rather use systematic, standardized serial processes and then divide the planned homes into individual modules. This enables to reduce the costs and construction times considerably while also guaranteeing uniform quality standards. The shorter construction periods also



allow us to reduce the noise pollution and dirt that the residents are exposed to.

**Modular approach for new construction work:**



The fact that Vonovia has a large amount of land and potential for vertical expansion, even in central locations, continues to have a positive impact as it means that there is no need to acquire expensive building plots.

The individual building regulations in different federal states mentioned above make the serial approach to construction, which we apply to reduce construction costs, more difficult. In order to meet the challenges that these circumstances pose, we work closely with politicians and municipalities as well as building authorities. We invest a lot of time in long-term and detailed planning.

The public debates in the reporting year have shown that including citizens in construction measures is becoming increasingly important if the measures are to be implemented successfully. Vonovia therefore takes the approach of including tenants and other stakeholders in the planning of new construction measures or vertical expansion and takes on board their ideas, views and suggestions. For example, we speak to local advisory boards and tenants' associations early on and organize regular informational events. Where appropriate, we also bring in mediator support to deal with particularly complicated cases.

In 2018, we began and completed several serial construction projects in all our regions in Germany, such as two apartment buildings with steel modules in Wiesbaden and

a new building using reinforced concrete modules in Dresden.

In 2018, the construction of more than 1,000 new apartments began, some of which have already been completed. We are maintaining the high level of our investment program and will once more invest approximately € 1.3 billion to € 1.6 billion, primarily in energy-efficiency modernization and new construction. We aim to expand the range of tasks completed by our technical service and to deploy technicians for interior work in coordination with partner companies.

Needs-based Conversions and Extensions 102-15, 413-1

The increasing changes in housing needs presents the housing industry with the task of adapting homes – even and particularly existing stock – to meet people's needs. Alongside the fact that the German population is aging, there is additional demand from the rise in one and two-person households. This development is fueling the need for apartments to accommodate smaller households. Many of these apartments require fully accessible fittings and entry in order to enable elderly tenants to stay in their homes for as long as possible. Virtually no other aspect is as important to maintaining quality of living as remaining in your own home – even if care is needed.

To us, fully accessible means:

- > that apartments can ideally be accessed by elevator,
- > that thresholds and steps are leveled out and there are no floor level differences exceeding two centimeters, and
- > that wider entry and internal doors are fitted along with walk-in showers and accessible wash basins.

Our new constructions usually contain fully accessible features that exceed the statutory requirements, and during modernization measures we review the potential for improving accessibility. Our measures also include communal areas, where we widen entry doors or ensure there is separate space for storing walkers and other aids, for example.

We strive to meet changing needs, for instance, by conducting adequate senior-friendly conversions, establishing residential communities supervised by nursing assistants or offering elderly tenants support in their everyday lives.

We are testing models in Essen and Berlin, which we will roll out to other locations in future should they prove successful.



For our model project in Essen, we have established a supervised residential community for people suffering from dementia, where the people live together in one home and receive external care and support services. For this, four apartments, now inhabited by ten people with senile dementia who help each other in their daily routines, were joined together and made fully accessible. Responsible for this "Demenz-WG" (shared apartment for people with senile dementia) is the home care service provider Humanika. This manner of cohabitation offers elderly people and people with dementia the opportunity to live together and grow old on their own terms and to deal with their increasing need for care.

In the Reinickendorf district of Berlin, Vonovia is working on a neighborhood with a social project that focuses on the cohabitation of different generations. 145 senior-friendly and fully accessible one to two-room apartments will be created in two tower blocks – right in the heart of the neighborhood. In addition to precise floor plans, fittings such as automatic entry doors, larger bathrooms with non-slip flooring and handles, central power supply disconnection, special electricity sockets and built-in cupboards in the hall with room to store walkers are also included. We are also cooperating with the association "Johanniter Unfall-Hilfe," with whom we have created a concept for neighborhood meetings. The aim is to enable people to live independently in their own homes in a supportive environment, even in old age. Various everyday support services, including a pharmacy and laundry service, home care services, on-call emergency doctors, a meal delivery service and group activities such as trips, cooking together and memory training, are all designed to foster participation and higher quality of living.

# Neighborhood Development

☒ 102-15, 103-1, 103-2, 103-3, 413-1

## Management Approach 103-1

Vonovia believes that all areas in which it has large contiguous groups of buildings offer particular opportunities for sustainable development. These neighborhoods provide us with the opportunity to implement both construction and social measures. This brings with it a special responsibility, and the necessity of working with other players in urban society as partners. After all, developing entire neighborhoods is a project that requires the participation of many different people and stakeholder groups. Our aim is to cooperatively contribute to making our neighborhoods diverse and open spaces that people can identify with and where they can enjoy a high standard of living.

The holistic development of our neighborhoods is one of the areas that offers the greatest development potential for Vonovia. Neighborhood development includes key measures extending beyond modernization and maintenance to include the creation of new homes using new construction and vertical expansion measures, as well as measures to shape the residential environment.

We aim to develop entire areas of towns and cities with our holistic approach to neighborhood development by working with buildings within the same area, their surroundings and local districts. We take both economic and social criteria into consideration and are committed to diverse social issues. The goal of this is to achieve an increase in the value of our property portfolio, which in turn is reflected in visible improvements for our customers in the attractiveness of the living space and the neighborhood alike.

The early inclusion of stakeholders in planning and decision-making processes allows us to record differing interests and to boost acceptance of our activities through targeted communication and participation measures.

Terms such as “living neighborhoods” or “neighborhoods worth living in” show that quality of living is increasingly

being associated with life at a neighborhood level. As a result, neighborhoods are moving into the spotlight of the housing and real estate industry. In many respects, however, there is still a lack of sound research findings. In order to change this, Vonovia SE is sponsoring a professorship for “Neighborhood development, in particular residential living within the neighborhood” at the EBZ Business School – University of Applied Sciences. The aim of the endowment professorship is to research which parameters contribute to successful and forward-looking neighborhood development and what role residential real estate companies can play in this process.

## Establishment in the Organization 103-2

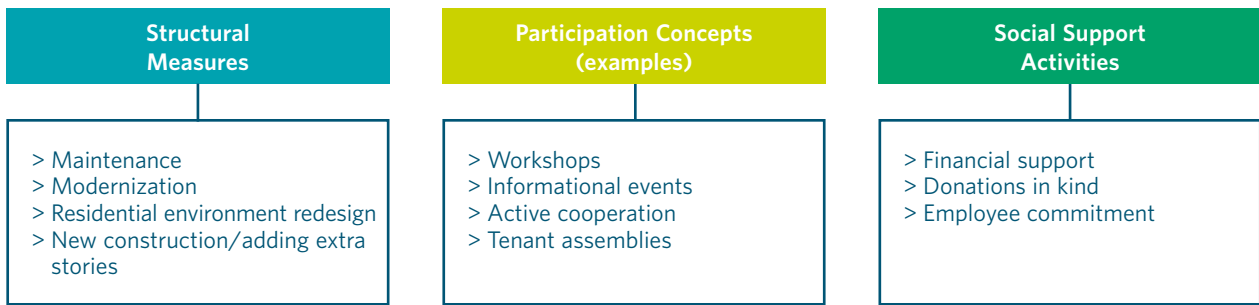
Regional responsibility for neighborhood development lies with the regional managers, who coordinate measures with the regional managing directors. The measures are increasingly implemented by our own neighborhood developers on site, which allows us to deal with special issues that come up as needed. Our portfolio and tenant management department provides centralized support for neighborhood planning.

The investment measures are bundled in a neighborhood development plan spanning a period of several years and expanded to include further measures. These measures comprise infrastructure improvements, urban development issues and the realization of fully-integrated energy concepts and social and environmental measures.. These components are given due consideration right from the planning phase of the development projects of the BUWOG companies.

## Challenges, Opportunities and Risks 103-1

The development of our neighborhoods is accompanied by a number of diverse social factors. Modernization and densification measures are becoming increasingly important in countering the scarcity of homes, yet acceptance is sometimes lacking for these measures. The inclusion of all

## Neighborhood Development Measures



stakeholders, especially tenants and municipal politicians, is a considerable challenge, but also one of our most important tasks. We are convinced that we can mitigate associated risks and lead cooperative discussion with active communication and by including tenants.

By providing a positive image of neighborhood development work to raise acceptance, we are taking the opportunity to increase general customer satisfaction further, establishing ourselves in the town's local society and contributing to the sustainable development of entire areas of towns or cities.

Finding the right balance between investment, economic viability and the affordability of homes remains important to Vonovia in its large-scale neighborhood development projects. We counter these challenges by making voluntary commitments or by utilizing public funding.

### Objectives, Measures and Indicators

103-2, 103-3

Eleven neighborhoods were developed across Germany in 2018 as part of the neighborhood development investment program, affecting approximately 6,800 apartments. We have already identified potential projects and needs beyond this, and in the next few years will help numerous tenants by conducting further neighborhood developments. In addition to structural measures to improve the quality of living long term, this will also include social projects that promote a sense of community and interaction within the neighborhoods. We hope to give our older tenants the opportunity to stay in their homes as long as possible, while also promoting a sense of community and the diversity of our tenants.

You can find out more about our neighborhood development approach in the management report in our 2018 annual report (see chapter Non-financial Declaration [AR 2018, p. 77 et seq.](#)).

### Construction Measures and Mobility Concepts

Investments are planned for the long term. The structural measures will be complemented by further measures, such as infrastructure improvements for demolition activities that may be necessary, the realization of holistic energy concepts and urban development issues.

The residential environment plays a key role in Vonovia's neighborhood development measures, in particular. Residential environment measures such as the creation of new green spaces and playgrounds, as well as moves to design neighborhood centers outside of buildings to provide residents with a place to meet up and communicate can, in the short term, help to increase the acceptance of renovation measures and, in the long term, 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 their quality of life, and will continue to do so in the future.

Projects such as the establishment of communal gardens for tenants can also make a positive contribution to fostering social development, particularly in neighborhoods facing cultural challenges and a difficult environment.

As part of the construction work in developing residential surroundings, mobility concepts, which we implement in partnership with towns and municipalities, are gaining in importance. In Munich, for instance, concepts such as car sharing are applied to the number of parking spaces, enabling the overall number to be reduced. We intend to add e-scooters, e-bikes and cargo bikes to our concepts and hope to encourage more towns and municipalities to apply such mobility concepts to their construction planning.

You can find an overview of structural measures taken in this sustainability report in the chapters Portfolio

Maintenance and Tenant Health and Safety → p. 43 et seq., and Creating Living Space and Affordable Rents → p. 46 et seq.

### Participation Concepts

When implementing neighborhood measures we often have to take a number of diverging interests into consideration. The active involvement of residents, public interest groups and other stakeholders in the neighborhood as well as the cooperation with towns and municipalities will help identify solutions to create neighborhoods worth living in. In this way, our tenants are involved in designing the residential environment (for example, in tenant workshops, allowing them to actively contribute to facade and playground design, route/pathway design, etc.), among other things. Participation and extensive communication involving all partners is a key component for the successful implementation of large neighborhood development projects. We do this through a number of measures. Examples are provided in the following neighborhood developments:

#### Berlin-Tegel (Ziekowkiez):

- > Completion of a social agreement with the Reinkickendorf district of Berlin. Main points of the agreement:
  - > Social acceptability of the modernization through a cap on the modernization cost allocation at €1.75 on basic rent per square meter and consistent consideration of social hardship,
  - > exclusion of rent increases in the first five years following modernization work,
  - > establishment of tenant contact hours and a fixed contact on site,
  - > inclusion of the agreement in every lease agreement.
- > Opening of community center „JOVO-Treff“ for seniors in cooperation with Johanniter-Unfall-Hilfe e.V. in June 2018, including a big party for the tenants.
- > Information event in November 2018 at Reinickendorf town hall to provide information to tenants and residents, and to give a complete overview of the planned work and the social agreement.
- > Opening of a “Kiezschau Fenster” (shop window for the area) with local contacts and presentation of a 3D model of the planned measures; providing informational material and opportunities for direct participation (e.g., notice board for residents to post requests and suggestions).
- > Employees of Vonovia and Zebralog, our communication and participation partner, conducting hundreds of “Haustürgespräche” (chats on the doorstep).

- > Zebralog creating a comprehensive participation concept and experienced professional planners created a comprehensive mobility concept.
- > Creating a social infrastructure with senior-friendly apartments, new childcare centers, planning for new local amenities and new parking space rental.
- > Workshop planning for tenant participation in 2019 for residential environment and mobility.

#### Hamburg-Wilhelmsburg:

- > On-schedule start to construction work – the first 15 loft apartments in the shell were completed by the end of 2018.
- > Opening of a meeting point for social and cultural interaction in October in partnership with Schotstek e.V., a non-profit organization in Hamburg, and providing customers with a migration background with offers for certain occasions, such as tutoring, language courses, kids’ programs, talks and concerts – from March 2019, offers are set to be made available continually.
- > Discussions with the “Mitte” district office regarding a leisure space and traffic concept aimed at freeing up leisure spaces and designing them in such a way that they make neighborhoods more lively.
- > Supporting the cultural district festival “48h Wilhelmsburg” in June 2019.

### Social Support Activities 413-1

It is the local people who are committed to the neighborhood initiatives, social institutions, associations and cultural institutions that shape our neighborhoods. But each neighborhood is different and has different requirements and faces different challenges – e.g., access to education may be lacking, or the neighborhoods lack cultural institutions, or there is no interaction between the different age groups.

This is why Vonovia cooperates with local social and state institutions such as daycare centers and schools, welfare organizations and other social agencies, and charitable and cultural institutions. Our business areas also support specific local projects and initiatives. We base our conduct in this area on our donation and sponsoring guidelines and support projects that promote community, education and culture, and thus contribute to the development of our neighborhoods. We differentiate in three categories: financial support, donations in kind and our employees’ personal commitment. These categories are not always clear-cut, as a combination of categories is often employed.

The objective of all these measures is to provide neighborhoods in which we have portfolio properties with the support that they need and help them develop. However,

the impressions of those involved are collected for further use during feedback and discussion rounds.

The following two examples are just a small sampling of our many activities.

#### Frankfurt Praunheim:

- > The construction of 36 new residential units, seven of which were publicly funded and are reserved for families with a right to rent-controlled homes.
- > Financial support for the "SAZ-ROCK" youth center of the quarter.
- > Diverse activities, regular homework assistance and advice, access to PCs and internet as well as educational projects.

#### Kiel Gaarden Ost (Gustav-Schatz-Hof):

- > Social community project in collaboration with the Frank Group, which operates a community center through Diakonie Altholstein, to strengthen the sense of community between different groups of the population and to promote dialogue.
- > Focus on cultural exchange across different generations
- > Linking assisted living and care offers with open migration and senior citizen work, targeted help with integration for residents with a migration background, advice and assistance for struggling households, public events and mediation.
- > Coffee meetings, play and crafts afternoons, group events with AWO Kinderhaus, crafts groups and memory training for senior citizens, seminars, religious celebrations and summer festivals.

#### Oberhausen (Friedrich-Karl Straße):

- > Focusing on the promotion of social interaction within the property with social and art projects and implementation of a „vertical development of the quarter“ to develop security and quality of living from within.
- > Cooperation with the artists' collective (Kultur im Turm e.V.) and joined implementation of diverse projects:
  - > Rent-free use of three apartments used for projects (language tuition, art projects, musical events, seats from ads) for kitev
  - > Implementation of the project „Refugee´s Kitchen“
  - > Light installation „Vielfalt ist unsere Heimat“ - Glück-auf! (diversity is our home - ayeup!) On the roof
  - > Planning of a concierge service for the barrier-free conversion of the the entry hall and other additional construction measures.

In addition to neighborhood development, which is planned and implemented at a local level, Vonovia also centrally organizes its own select projects:

- > **Vonovia Photo Competition:** Vonovia Photo Competition: Vonovia organizes an annual photo competition with the theme of "home." The prize money amounts to € 42,000 and is divided into three main prizes and one new talent award. The award is aimed at professional photographers and up-and-comers. An independent jury chooses the winners, with experts from the areas of photography, journalism, art and teaching as well as the real estate industry. In its second year, the competition has already established itself as one of Germany's most important photography competitions.

🔗 <https://award.vonovia.de>

- > **VfL Bochum:** Our company has a particular attachment to Bochum: the local stadium is named the Vonovia Ruhrstadion and is the home of second-division VfL Bochum and our "living room". The club and Vonovia will also work on a number of other joint activities as part of the cooperation. Vonovia will, for example, support VfL Talentwerk, the club's youth training program. And in 2019, a number of football camps for kids will be held in partnership with the football school.

🔗 [www.vfl-bochum.de](http://www.vfl-bochum.de)

- > **Foundation Work:** Vonovia also uses foundations to show its social commitment by providing support to tenants, the rental environment, and in cases of social hardship. The company is currently involved in four foundations: Vonovia Stiftung, Vonovia Mieterstiftung e.V., Stiftung Mensch und Wohnen and Stiftung Pro Bochum 🔗 [www.vonovia-stiftung.de](http://www.vonovia-stiftung.de)

You can find out more about our social commitment work in our 2018 annual report and at 🔗 [www.vonovia.de](http://www.vonovia.de). (see chapter Non-financial Declaration 🔗 [AR 2018, p. 78](#))

# ENVIRONMENT

Around the world, a considerable amount of the greenhouse gas emissions that contribute to climate change are caused by the construction and operation of buildings. The condition of the buildings and how they are managed also have a significant impact on the extent of the emissions released. With the treaty signed at the United Nations Climate Change Conference in Paris in 2015, the global community committed to restrict global warming to a maximum of two degrees by taking appropriate action. As a signatory to the Paris Agreement, the Federal Republic of Germany derived a target for itself to achieve a virtually climate-neutral building stock in Germany by the middle of the century. For a residential real estate company of our size, this gives rise to a special ecological responsibility. Vonovia aims to make a contribution to achieving this ambitious target through a number of measures in the area of climate and environmental protection.

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70	Impact of Transport and Logistics

# Our Approach Regarding Environment

☒ 103-1, 103-2, 103-3

## Management Approach 103-1

Vonovia is the largest real estate owner in Germany. The responsibility that we have toward the environment is therefore considerable.

Even if the consequences of climate change and environmental damage are not obvious from our buildings and open spaces, the signs of changes to come are mounting – for example, longer warm periods, heavier rainfalls and increasing air pollution in cities.

We want to provide our customers with comfortable, up-to-date and environmentally friendly homes – while also guaranteeing affordable rents. It is therefore very important to us to combine climate protection with fair rents, because climate protection must not become a question of social status.

Vonovia has aligned with the government's aim of making buildings climate-neutral in the long term and reducing greenhouse gas emissions. We are aware, of course, that the landlord can only influence energy and resource consumption in the operation of residential buildings to a limited extent – unlike in other property management building types, such as commercial properties and offices. It is ultimately the tenants' decision to decide how they consume electricity, water and heat. Nevertheless, we have a number of measures that we can implement to improve buildings from an energy perspective. Currently, the main approaches include energy-efficient building refurbishment, fitting modern boilers, and using and generating renewable energy, for instance, through decentralized energy provision offers and through our own energy sales. The size of our portfolio shows that this is the biggest lever we have for making an active contribution to climate protection (see chapter Energy Efficiency and Reducing Greenhouse Gas Emissions → p. 58 et seq.).

And we also look at other aspects of building operation. We address other possible negative effects on the environment through measures in areas such as waste

management and prevention, recycling waste, green waste and recyclable materials, or by paying attention to environmental criteria in purchasing materials and the use of regional products – for example wood from local stock (see chapter Environmental Protection in the Portfolio → p. 63 et seq.). The purchasing strength of our Group structure helps us to take ecological measures in an economical way.

Operating buildings is not the only material factor in the emission of greenhouse gases and impacts on the environment – new construction and dismantling, too, have an effect on the climate and environment through the materials that are used and the construction and recycling process. We therefore consistently adhere to the requirements of the 2016 German Energy Saving Ordinance (Energieeinsparverordnung EnEV) for new constructions. We minimize detrimental environmental impacts on our construction sites by dealing with hazardous waste correctly and specifically using environmentally friendly materials (see chapter Environmental Protection in Connection with Conversions and New Construction → p. 65 et seq.).

Our normal operations, too, require us to consume resources and energy, and release emissions. We therefore focus on keeping the negative environmental impacts of our internal processes as low as possible (see chapter Company Environmental Protection → S. 68 et seq.). The main factors in ensuring we keep these impacts low are general improvements in resource efficiency and targeted reductions, for instance, in energy and water consumption. The area where we can have the greatest influence is our fleet, which we manage through continual process optimization and by considering how we can reduce damaging environmental effects (see chapter Impact of Transport and Logistics → S. 70 et seq.).



We have identified five material environmental topics and have integrated these into our materiality matrix:

- > Energy Efficiency and Reducing Greenhouse Gas Emissions
- > Environmental Protection in the Portfolio
- > Environmental Protection in Connection with Conversions and New Construction
- > Company Environmental Protection
- > Impact of Transport and Logistics

In the following chapter, we will cover these topics in detail and explain their relevance for Vonovia. The relevant challenges, opportunities and risks, and the objectives, measures and indicators are outlined for each topic.

## Challenges, Opportunities and Risks 103-1

The implementation of climate and environmental remediation in residential properties is closely interlinked with analyses of potential and economic feasibility studies. We not only take the interests of our company into consideration, but, first and foremost, those of our customers. We are currently seeing that social acceptance for modernization work that drives up costs is noticeably declining. This means that the greatest challenge we currently face is performing ecologically important measures while also keeping any resulting financial burden for our tenants as low as possible.

A number of statutory requirements and regulations, that partially even contradict one another, also restrict our plans. The form the Landlord-to-Tenant Electricity Act has taken, for example, in connection with the reduction in the feed-in tariffs for photovoltaic plants (PV) has hindered the economic operation of our planned PV program. In addition, the number of regulations and directives is mounting constantly, while developments in the political frameworks – for example, with relation to the Building Energy Act, the Climate Protection Act and the rejection of the Federal Government’s Building Commission – are stalling and leading to uncertainty and an inability to plan in this area. Higher CO<sub>2</sub> costs – as sensible as they may be for achieving the government’s climate protection targets – could, depending on the form this takes, result in considerable burdens on both landlords and tenants. Depending on the distribution of the social burdens, however, this could also create opportunities for considerably boosting climate protection in the building sector. The building sector is fundamentally characterized by high initial investments and long useful lives. Changes in the legal framework conditions therefore have the potential to have long-term effects on the economic operation of the buildings.

Volatile energy prices also hinder planning processes and financial feasibility calculations for our energy sales.

The constant increase in the costs for construction services and materials in the past few years has also increased the pressure on the company to pay attention to value for money when making purchases in order to be able to continue to provide affordable homes. This increases the risk that more expensive – but ecologically more beneficial – construction materials are used less due to economic concerns. With our high purchasing volumes of construction materials, we can at least partly compensate for this effect.

In the field of building insurance, contributions may be increased or certain insurance services may be excluded, such as flood insurance. Due to Vonovia’s size, however, even if this risk materializes, we may assume it would have a low impact on results.

In addition, the ongoing discussion surrounding diesel vehicles also poses a potential risk for Vonovia due to the fact that the majority of our fleet consists of (modern) diesel vehicles. Court judgments and possible driving bans in cities may mean that we have to acquire new vehicles. This would result in considerable costs.

The expansion of our own services in trade professions presents us with opportunities. By employing more tradesmen, we can expand and keep knowledge in the company, including for environmental measures such as the correct separation and disposal of the materials that we use.

## Objectives, Measures and Indicators

103-2, 103-3

The federal government’s environmental protection plan aims to make building stock in Germany virtually climate neutral by 2050. In this context, “climate neutral” means that the buildings have very low energy requirements and that the energy requirements that do exist are primarily met with renewable energy. The material strategies involved in achieving this target are the reduction of resource consumption, increasing energy efficiency and substituting fossil fuels with renewable energy sources.

Energy-efficient building renovation continues to play an important part here, as refurbished buildings need less energy. The current refurbishment rate in Germany of approximately one percent is far from enough to achieve the savings effects required by the middle of the century. Several players in the world of politics, such as the Federal Environment Agency and the German Energy Agency (Deutsche Energie-Agentur [dena]) are therefore pushing to have this rate doubled.



In 2017, Vonovia initially set an annual refurbishment rate of 3%. We will continue to pursue this target, even in light of the fact that we are currently restricting energy-efficiency refurbishments due to economic considerations in order to avoid extra burdens for our tenants. The energy-efficient modernization measures focus on heat insulation for facades, basement and attic ceilings, the replacement of windows and the installation of new heating boilers. The aim is to constantly reduce energy consumption and greenhouse gas emissions in our portfolio (see chapter Our Service Promise [AR 2018, p. 91 et seq.](#)).

With new constructions, we can influence the low-emission realization of construction projects and later energy-efficient operation right from the planning stage. Considerably higher benchmarks and requirements apply in this area compared with refurbishing existing stock. We are therefore placing increasing value on optimized energy-efficient building designs and aiming for construction methods that conserve resources. We aim to meet the high requirements of individual KfW standards in both our energy-efficiency modernizations and new constructions.

Another major lever that can be used to reduce greenhouse gas emissions is the expansion of renewable sources of energy. Vonovia is also taking active steps in this area and is continually expanding the generation and sale of renewable energy through its own energy sales company.

We are aware, however, that these measures – even considered altogether – will not be sufficient to achieve the target of a climate-neutral building stock by the year 2050. The limits of energy-efficiency refurbishments are already visible – both in terms of tenants' acceptance and the efficiency gains. Vonovia is therefore actively initiating and participating in numerous research and development projects, providing momentum and driving innovation. The goal is to develop cost-effective measures to improve the energy balance and to reduce greenhouse gas emissions in the building stock.

Climate and environmental protection is also a factor in our operating processes, albeit a lesser one. We continuously seek out opportunities to increase our level of resource efficiency and reduce our negative impact on the climate and the environment in our internal processes. An important starting point here is our fleet of vehicles, for which we intend to reduce the fuel consumption/consumption intensity.

We are also engaged in dialogue with stakeholders from the world of politics, academia, business and civil society, and we include their ideas in our decisions. We are a member of the associations KlimaDiskurs.NRW e.V. and Deutsche Unternehmensinitiative Energieeffizienz e.V. (DENEFF) and are involved in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety's dialogue forum "Wirtschaft macht Klimaschutz" (Business Mitigates Climate Protection). The dialogue forum is a two-year project (2017–2019) designed to connect businesses from all industries and to establish specific climate protection measures in companies. [102-13](#)

## Outlook for 2019

In 2019, we intend to become more involved in the discussions surrounding climate change, primarily through networks, research projects and partnerships. Developing ideas and concepts regarding the implementation of measures and political demands that enable climate protection while also protecting our tenants are the main focal points. In addition, we intend to launch our own specialist conference in fall 2019, where we can exchange ideas with our stakeholders about the challenges we face and discuss specific possible solutions.

In the future, we also intend to raise awareness of circular economies at Vonovia. Recycling garden waste for energy generation or topsoil production could be an initial step in this area.

We intend to continue pursuing our ecological targets in the procurement department as far as possible, using our economic position in our procurement processes in order to purchase ecological construction materials and products at competitive prices.

We have gained some experience in the field of e-mobility in the past few years – for instance, by testing electric vans. We will continue to observe developments in this area and investigate deployment possibilities for our company. In 2019, we will test some vehicles with natural gas, hybrid and electric drives in everyday use and launch a pilot project on the use of vans with hydrogen drive.

# Energy Efficiency and Reducing Greenhouse Gas Emissions

☒ 102-13, 103-1, 103-2, 103-3, 302-1, 302-3, 302-4, 302-5, 303-5, 305-5, CRE1

## Management Approach 103-1

### Modernization

Every day, energy is consumed and emissions are released as a result of the operation of our buildings. On the one hand, volumes are dependent on the behavior of customers, on the other, however, they also depend on the age and condition of the building and on weather conditions. We only have a limited influence on individual use and we cannot control the weather, but we can improve the condition of our portfolio with suitable measures – thereby reducing the energy consumption and emissions from the apartments. Due to the size of our portfolio, this is Vonovia's primary lever for significantly reducing greenhouse gas emissions.

We will achieve this mainly through comprehensive energy-efficient modernizations in the portfolio and modern, energy-efficient new constructions. These measures will allow us to offer attractive and comfortable homes throughout Germany.

### Energy Supply

Lower resource consumption and higher energy efficiency are two important strategies in reducing harmful greenhouse gas emissions. Another lever we have is the expansion of renewable energy as part of the energy revolution, which is chiefly characterized by the decentralized generation and storage of electricity. Changes in legislation and various funding programs support projects are driving forward the decentralization of energy supply. Our connected neighborhoods – particularly in urban conurbations – and the expanse of roof surface provides us with interesting opportunities for using and expanding renewable energies in our real estate portfolio. They represent an effective lever that we and our customers could use to contribute to climate protection and the energy revolution in Germany. For Vonovia this also opens up new business areas in which climate protection could be advanced both economically and in a customer-friendly manner.

## Establishment in the Organization 103-2

The portfolio and tenant management department is responsible for planning and managing planned modernization measures in the portfolio. Planned new constructions are partly organized by our new constructions department and partly through the regions, and the portfolio and tenant management department provides support functions.

The business development department is responsible for energy supply issues. Energy sales, through which our customers can sign green electricity contracts directly with Vonovia, take place via the company's own Vonovia Energie Service GmbH.

## Challenges, Opportunities and Risks 103-1

### Modernization

Energy-efficient modernizations are currently considered to be the cause of rising rents, which are driving the cost of living considerably. The acceptance of large-scale modernization measures is therefore sinking in sociopolitical and media political opinion. The federal government has stipulated the reduction of modernization allocations from 11% to 8% and restricted allocation capacity of measures to a maximum of €3 per m<sup>2</sup> (or €2 for rents under €7 per m<sup>2</sup>) in its coalition agreement, and has now also enacted this into national law.

Nevertheless, energy-efficient modernization of the portfolio remains a necessary and effective measure in improving building performance and living comfort, and in reducing consumption. In order to keep the burden on our tenants as low as possible, we restrict the allocation to a maximum of €2 per m<sup>2</sup> and plan modernizations individually for each building. We achieve cost savings by combining measures – so that we can, for example, allocate costs for scaffolding to different measures.

Declining acceptance also means that the search for alternative approaches to improve building performance is becoming more important. However, as the legal framework conditions and requirements are becoming stricter and the cost of materials and purchased construction services are rising, the challenge is to test the shrinking elbowroom for forward-looking measures.

The further expansion of our technical service, which allows us to perform several key trade tasks ourselves, provides us with the opportunity to stretch out the elbowroom available to us a little in terms of costs and efficiency advantages.

### Energy Supply

We intend to keep driving forward energy generation from photovoltaic plants (PV). This in turn creates another opportunity for us to use our buildings to generate sustainable energy. We want to technically implement all new PV plants in a way that they can be integrated into a landlord-to-tenant electricity model and the electricity generated is available to our customers in their home or at charging stations.

The particular challenges we face in implementing the landlord-to-tenant electricity model include the expensive meter reading technology and the complicated invoicing processes and processes associated with the turnover of tenants for so-called customer plants. These lower the viability of the projects considerably and increase the economic risk associated with implementing the landlord-to-tenant electricity model. At the same time, however, they also offer the opportunity of deploying digital meter reading systems, also known as smart meters, which provide our customers with a visual presentation of the electricity being consumed and generated.

From a legal point of view, legislation relating to landlord-to-tenant electricity models remains incomplete and is not precise in its terminology. In addition, further statutory regulations hinder the implementation of sustainable energy projects, e.g., the energy pooling law, which will result in a drastic decline in feed-in tariffs and cause a considerable reduction in the associated tenant electricity subsidy from the beginning of 2019. Continual changes to funding principles is causing trust in the planning security of the projects to erode, but this trust is indispensable for making long-term investment decisions. Vonovia therefore follows legal developments very closely and is committed to promoting future regulations that are shaped in a sustainable and positive manner through its membership in associations such as the Association of German Housing and Real Estate Companies (Bundesverband deutscher Wohnungs- und Immobilienunternehmen GDW) and

German Association for Housing, Urban and Spatial Development (Deutscher Verband für Wohnungswesen, Städtebau und Raumordnung DV).

With Vonovia Energie Service GmbH, a licensed energy provider in Germany, we have created a good and important foundation to fully tap into numerous new business areas and add our own value. Decentralized energy supply, charging infrastructure for e-mobility and energy storage are just a few examples.

## Objectives, Measures and Indicators

103-2, 103-3

### Modernization

#### Energy-efficient Modernizations

Vonovia makes a considerable contribution to protecting the climate through energy-efficient modernizations and new constructions. We want to make a decisive contribution to realizing the Federal Government's target of a virtually climate-neutral building stock by 2050.

To this end, we will continue to conduct energy-efficient refurbishments on at least 3% of the building stock per year and have updated our modernization program for the reporting period to reflect this. In 2018, we again achieved a refurbishment rate of 5%, considerably exceeding the annual target of 3%.

Our modernization program in 2018 included:

- > Measures on the building shell: facade insulation, window replacements, attic and basement ceiling insulation. In total, approximately 18,000 apartments (2017: 18,000) with a living area of more than 1.1 million m<sup>2</sup> (2017: 1.1 million) were fully or partly modernized in 2018.



~ 5%

**Modernization rate 2018**  
(refurbishment rate)

> Heating system measures: exchanging old heating systems like individual coal or oil furnaces and gradual replacement with new gas condensing boilers. In 2018, we exchanged heating units in approximately 13,000 homes (2017: approximately 15,000). 303-5

To finance energy-efficiency refurbishments, we generally use funds provided by the German government-owned development bank Kreditanstalt für Wiederaufbau (KfW). The amount of funds available depends on the level of energy efficiency attained. Our measures particularly focus on the two funding programs KfW 151 and KfW 152. KfW 151 covers the refurbishment of a building, and the implementation of individual measures lead in total to achieving a KfW efficient house standard 100, while KfW 152 promotes the implementation of individual energy-efficiency measures such as window replacements and facade insulation. 302-4, 305-5

In the 2018 reporting year, we were able to cut a total of around 27,300 tons of CO<sub>2</sub> emissions (2017: 29,800 tons) by evaluating energy performance certificates. Based on their results, we carried out energy-efficient refurbishments on building shells and renewed heating systems. The energy intensity in 2018 amounted to an average of approximately 166 kWh/m<sup>2</sup> (2017: 172 kWh/m<sup>2</sup>). 302-3, CRE1, 302-4, 302-5, 305-5

### Average energy intensity in the portfolio

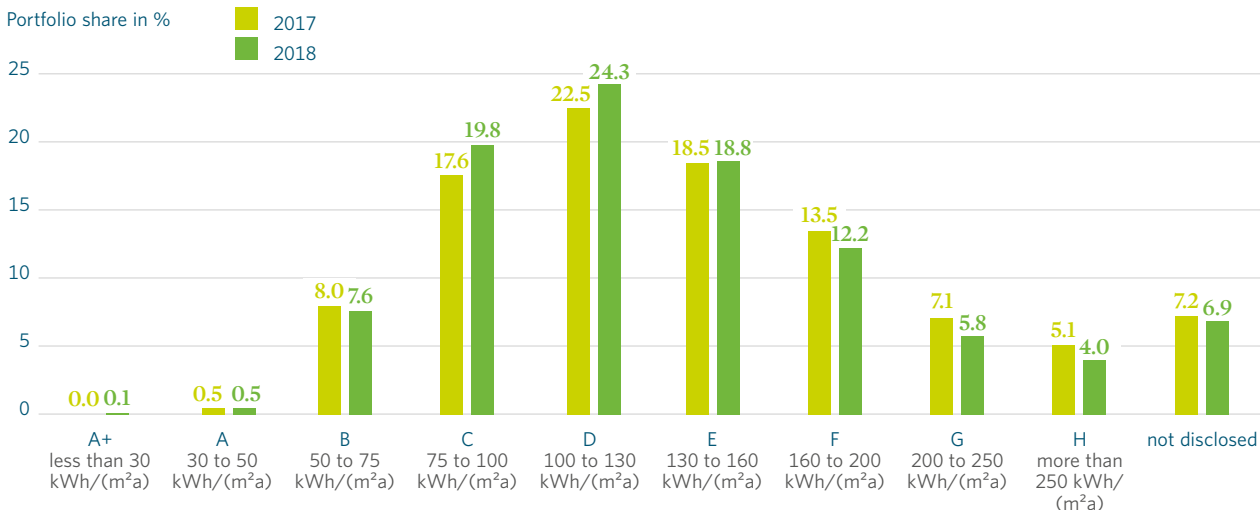
(KWh/m<sup>2</sup>)



### TOP 10 Modernization Locations by Investment Amount

City	Number of apartments	Area (in m <sup>2</sup> )	Investment volume (in € million)
Dortmund	2,340	138,507	53.2
Berlin	918	60,236	26.2
Bremen	752	48,132	24.9
Hanover	569	35,245	21.8
Essen	698	39,470	21.5
Dresden	1,472	79,402	20.5
Osnabrück	543	34,843	20.3
Bielefeld	581	38,323	16.6
Bochum	587	31,598	14.4
Cologne	1,235	86,784	14.0
<b>Total</b>	<b>9,695</b>	<b>592,541</b>	<b>233.3</b>

### Energy-efficiency in the portfolio



Energy-efficiency classes

In addition to the existing energy-efficient refurbishment measures, Vonovia initiates and participates in select research projects to test alternative and cost-efficient refurbishment options and tries them for economies of scale:

> The Alliance for Climate-neutral Building Stock is a joint project between the housing industry, research institutes and associations which aims to research technical measures to improve boiler efficiency, heat distribution and user behavior and to feed this research into political discourse. Vonovia plays an important part in this project by providing the buildings.

📄 [www.energieeffizient-wohnen.de](http://www.energieeffizient-wohnen.de)

> Energiesprong is a new refurbishment standard that represents a high level of living comfort, minimal refurbishment times and an innovative financing model. The aim is to conduct refurbishments to bring buildings to net zero, meaning that they generate as much energy in a year as they consume. Energiesprong was developed in the Netherlands and has already been implemented in more than 4,500 buildings. Vonovia is supporting Deutsche Energie-Agentur (dena) in its endeavors to introduce the Energiesprong principle to the German market. 📄 [www.energiesprong.de](http://www.energiesprong.de)

### Energy Supply

We review the technical and economic feasibility of deploying PV plants, cogeneration units (CHP units), heat recovery, solarthermal energy and charging infrastructure for electric vehicles in a standardized manner and across the board. We implement these systems directly wherever possible.

### Photovoltaics and Cogeneration Units

We thoroughly investigated the potential of photovoltaics in our portfolio in the reporting period. Using data-led preselection criteria, we conducted a detailed solar cadastre analysis on approximately 18,000 properties. We identified more than 5,000 properties that receive a high level of sunlight intensity on the roofs and therefore present considerable photovoltaic potential.

We are currently working on equipping these buildings with PV plants. A team consisting of project managers, back office staff and local construction managers are coordinating the projects. In addition, a large portfolio of approximately 800 individual properties in Dresden and Munich were tendered for PV plant fitting, planned in 2019.

# 8,525

customers

purchase green electricity from Vonovia.

# 5,944

MWh

green electricity sold

Our plant portfolio consisted of 208 PV plants as of the reporting date December 31, 2018, with total capacity of 5.7 MWp and annual electricity generation of around 5,350 MWh (2017: 3,700 MWh). 302-1, 302-4, 305-5

We use numerous cogeneration units (CHP units) for efficient, decentralized heat and electricity produced directly in the neighborhoods. 302-1

### Energy Sales

In 2018, we rolled out energy sales nationwide through our subsidiary Vonovia Energie Service GmbH, enabling us to provide our customers with gas and electricity directly. 100% of the electricity is from renewable sources. The primary source is Norwegian hydropower plants, and we provide proof of this in the form of certificates. In the fiscal year 2018, more than 8,500 customers used green electricity from Vonovia.

### Mobility

We aim to make an active contribution to the transport revolution and support alternative modes of mobility. We also want to get our customers interested in this and are investing in measures such as charging stations for electric cars and e-bikes, and car sharing parking spaces, while reducing the number of traditional car parking spaces. In Pasing, Munich, we are working on a mobility concept, as part of a new construction and vertical expansion project that will allow our customers to rely less on private vehicles in future. In addition to car sharing parking spaces, the concept includes offers for bicycle-based goods transport and a number of roofed bicycle parking

spaces. We are planning to include the development of mobility concepts in our neighborhood development projects in the medium term. Overall, Vonovia customers currently have access to 47 car sharing vehicles at 18 locations. Vonovia is also continuing its work on e-mobility concepts. For instance, we are currently planning to erect 34 public charging stations throughout Germany. We are also planning new constructions that enable charging stations and wall sockets to be rapidly retrofitted.

### **Sector Coupling & Neighborhood Approaches**

In addition to the expansion of renewable energies, there is an increased focus on more solid networks between local producers and users of electricity, heat and mobility. It seems probable that considerable savings potential can be realized here with smart management systems. The numerous connected buildings in our neighborhoods offer an interesting starting point in this regard.

- > Vonovia therefore decided to become a founding member of Open District Hub e.V., an initiative organized by Fraunhofer Gesellschaft aimed at enabling intelligent sector coupling in neighborhoods. By establishing open and scalable system solutions based on renewable energy, we aim to find new energy-efficiency property management modes at neighborhood levels. Vonovia is testing and implementing this approach in a pilot neighborhood in Bochum. [www.opendistricthub.de](http://www.opendistricthub.de)
- > As part of the "MAchUP" program funded by the European Commission, Vonovia is involved with the development of the Johannstadt district of Dresden. A combination of city development measures will be carried out to make this district an intelligent and energy-efficient neighborhood. The city, businesses and citizens are working together to discover solutions and new business models aimed at achieving measurable success in terms of energy and resource efficiency. We are modernizing a building complex of 560 apartments. In addition, the city of Dresden will be constructing and operating a PV plant on another Vonovia building. Electric vehicles will also be leased for our employees as part of this project and we will jointly construct charging stations for car sharing. [www.matchup-project.eu](http://www.matchup-project.eu) 102-13

# Environmental Protection in the Portfolio

☒ 103-1, 103-2, 103-3, 203-2

## Management Approach 103-1

Climate change is already affecting environmental conditions in many parts of the world. Such changes are also increasingly becoming visible in Germany with ever longer periods of warm weather, a rise in average temperatures, and a higher incidence of downpours and storms. The decline in biodiversity and the general decrease in natural areas add to this.

This is why protecting the climate and environment does not stop at the doorstep for Vonovia. Our company not only invests in energy-efficient building refurbishments but also takes responsibility for the areas surrounding its apartments. Vonovia's portfolio does not simply consist of individual apartment and buildings. We take care of more than 217,000 trees, around 40 million m<sup>2</sup> of open space, 14 million m<sup>2</sup> of lawns and around 310 kilometers of hedges. This greenery allows us to improve the residential atmosphere and air quality in our neighborhoods, provide habitats for animals and combat increasing soil sealing.

We want to motivate our tenants to protect the environment, too, and are supporting them in their endeavors. Our support primarily takes the form of helping them to reduce the resources they consume, such as water and energy, and reduce and recycle their waste.

Our security obligations mean we are responsible for ensuring that equipment, such as oil boilers and sewer canals, is used and maintained correctly and does not damage the environment.

## Establishment in the Organization 103-2

Our residential environment organization is responsible for taking care of our green spaces. The organization plans and carries out gardening and landscaping work. Currently, around 650 employees in the residential environment - around 400 of whom are gardeners - cultivate and landscape the open spaces. As far as maintenance is concerned, Vonovia implemented its first gardening and landscaping projects with its own employees in 2018. This move also allows the company to expand its training opportunities in the gardening and landscaping segment. The offices in Dresden, Berlin and Hanover are currently training employees in gardening and landscaping. Future growth and expertise will increasingly be generated within the company itself in the field of gardening and landscaping as well.

Traffic security obligations are recorded and managed by our central technology department.

Communication with tenants is supported through our centralized corporate communications.

## Challenges, Opportunities and Risks 103-1

Vonovia has thus far not dealt with the challenges, opportunities and risks of environmental protection in the portfolio in a systematic manner. This requires more comprehensive evaluations in order to derive more concise conclusions for the portfolio.

The development of standardized residential environment modules (such as playgrounds and refuse collection points), however, serves to boost efficiency and generate additional cost advantages. In addition to the higher quality of the services provided, cost savings can also be achieved in this area by bundling and standardizing procurement processes (consumer materials, playgrounds, etc.). Residential environment measures contribute to positive neighborhood development. Increased



visual appeal and moves to rid neighborhoods of areas that feel unsafe help to boost customer satisfaction.

## Objectives, Measures and Indicators

103-2, 103-3

### Green Spaces/Biodiversity

The natural areas in our portfolio contribute to the wellbeing of both residents and the environment in a number of ways. We therefore want to maintain and care for existing spaces so that they can fully develop their social and ecological potential.

We aim directly for an ecological balance when planning new constructions, for example, through compensation planting, greenery on roofs and vertical surfaces, and by planting trees, bushes and wildflower meadows. The measures are included in the development plans and reviewed against the approval requirements from local authorities. Our residential environment organization assists with this planning and reviews target attainment.

We always include soil sealing and flood protection in our new construction planning. It is our aim to keep unavoidable soil sealing from car and bicycle parking spaces to a minimum when carrying out vertical expansions and densification construction measures. One form this takes is through mobility concepts, where the parking area can be reduced through car sharing or charging stations, for example. We are developing new construction planning measures that use backwater installations and roof greenery to absorb sudden water surges from heavy rainfall. We collect flooding information for our drainage plans and include potential rain management measures such as reservoirs, trenches and run-off troughs. Retention area planning, which serves to provide flooding areas for running water, is included in the approval phase.

We also aim to protect insects and other animals by treating our natural spaces with care. We review the site for existing populations during planning for construction and modernization measures, install beehives on building roofs – as we have at our office in Berlin, for instance.

### Waste Management

Our customers can protect the environment by creating less waste and increasing the amounts they recycle. We actively support this, and have, for example, commissioned a service provider to sort through domestic waste and separate the recyclable waste. This allows us to reduce residual waste by approx. 50% and recycle a greater amount of waste. In turn, our customers benefit from lower waste surcharges and ancillary costs. 203-2

With our new construction projects, the design of the outdoor garbage collection points is an opportunity to exert a little influence on the behavior of our tenants. We are currently developing standardized, modular concepts for outdoor garbage collection points that provide customers with easier handling and thus can help boost the willingness to separate garbage. We are also looking into the installation of barrier-free garbage collection points that are set into the ground and are more easily accessible.

### Tenant Information

Our customers' energy and water consumption make up a considerable part of the resources consumed in the portfolio – and this is something we can only influence to a limited extent. We therefore regularly provide our customers with information about how they can save energy in their normal daily routines – for example, with the Caritas electricity check. We bring information to our customers with our customer magazine “zuhaus” and various flyers – explaining, for instance, how modern heating units work and how to heat your home efficiently. The aim is to animate our customers to conserve resources.

### Safety Obligations

Our tree stock is listed in a cadastre and cataloged. This gives each tree an identification number. We meet our traffic safety obligations by conducting regular review and inspection rounds and survey the condition of our portfolio. The processes we have in place to meet our operator obligations are laid out in our Group guidelines and detailed in an obligation document. This is updated every two years. The maintenance procedure for oil heating units is also laid out here, amongst other procedures, to prevent ground contamination from leakage of hazardous substances.



# Environmental Protection in Connection with Conversions and New Construction

☒ 102-9, 103-1, 103-2, 103-3, 203-2, 204-1, 306-2, 308-1, 308-2

## Management Approach 103-1

We impact the environment not only through the operation of our buildings, but also through our construction activities, which consume resources and release emissions. On our construction sites, we ensure that our employees and service providers adhere to all applicable laws and regulations in order to protect people and the environment to the fullest extent possible.

In addition, constructing new buildings gives us the opportunity to establish a sustainability-conscious focus directly in the planning processes. This is achieved through the use of sustainable materials, the addition of greenery or through efficient and – wherever possible – renewable energy supply. The recyclability of construction materials and the reduction of construction waste are also becoming more important. BUWOG's development projects specifically develop and pilot innovative processes (see chapter BUWOG → p. 8 et seq.).

Vonovia believes that sustainability and cost-efficiency can go together. We intend to seize the opportunities of sustainable procurement available to us through efficient and centrally organized procurement processes and cooperative supplier relationships.

## Establishment in the Organization 103-2

New constructions are organized and managed by our new construction department in cooperation with the regions. The portfolio and rent management department provides support functions. The central procurement department at Vonovia is responsible for procuring construction materials and services, and thus also supply chain management.

With the acquisition of BUWOG and its development division, Vonovia has gained significant potential in the new construction field. Further comprehensive development projects will continue to be conducted under the brand name and responsibility of BUWOG – partly for sale

and partly for the portfolio. More information is available in the section BUWOG → p. 8 et seq.

## Challenges, Opportunities and Risks 103-1

A key opportunity afforded by new construction and development projects is that climate and environmental aspects can be planned in right from the beginning of the life cycle. However, this also brings with it a considerable challenge – we must ensure that the buildings we construct now will meet the 2050 sustainability requirements.

The rising prices for materials and construction services could lead to the risk that the procurement department chooses cheaper – and thus possibly less environmentally friendly – construction materials in order not to encumber the later rental price.

## Objectives, Measures and Indicators

103-2, 103-3

### Environmentally Friendly Construction

In addition to BUWOG's development projects, densification and vertical expansions are the two most significant measures employed by Vonovia in new construction. We deploy prefabricated modules in wood hybrid, steel skeleton and precast concrete construction. We plan to construct more than 1,000 new apartments throughout Germany in 2019. One of the projects will be our first wood hybrid building in the district of Knorr in Frankfurt. We are also planning to build two carbon dioxide-free and glue-free solid wood houses with inner cores for stairs, lifts and utilities supply (point houses) in Kornwestheim near Stuttgart. An ecological balance sheet on the construction will be created by an external service provider that serves as proof that the building is carbon neutral. A new green building will be constructed in Bochum that will generate all of its energy from a PV plant.

As far as energy efficiency is concerned, the Energy Saving Ordinance (Energieeinsparverordnung [EnEV 2016]) is the decisive factor for our new construction projects. With intelligent construction methods we can come in under the base standards stipulated by EnEV by up to 10% in some cases – for example, through timber panel construction, core insulation or the use of solar thermal and PV plants. We generally use modular and prefabricated construction methods which allow us to place high-volume factory preproduction orders. This means we are saving resources and energy right from the production stage.

We apply for funding from the KfW 153 subsidy program for new constructions that fulfil the energy requirements of the KfW efficient house standards. The KfW 153 new construction project in Münster was recently completed. The new KfW “Katzenbruchstraße” construction project in Essen is currently in the preparation stage. Further new constructions are planned in Dortmund, Cologne, Berlin and Oberursel.

### Waste Management and Recycling

One of the most important environmental issues on our construction sites is waste management. This is due to the fact that substances hazardous to people and the environment may be released and influence resource consumption. Our internal environmental health and safety provisions (EHS) already deal with a number of issues related to environmental protection.

Our construction work – both new construction and modernizations – entail working with polluting materials, such as asbestos, which we must ensure are disposed of correctly. This task is entrusted to subcontractors that we commission, from whom we require full documentation regarding the amounts disposed of and the waste fractions, along with proof of disposal and landfill measures taken, amongst other things.

Our service technicians learn how to correctly dispose of the materials they use at the start of their training. Following initial training, they attend regular training sessions with experts and managers on the proper separation and correct disposal of various materials and construction materials.

A certified laboratory analyzes all construction components and materials for potential pollutants before they are used. We coordinate waste disposal schemes with the responsible firms and the authorities as necessary. Qualified staff from the companies commissioned and health and safety officers monitor the work performed on the construction sites.

In 2018, the technical service carried out energy-efficiency modernizations on 250 apartments in the Bremen district of Wohlers Eichen. In cooperation with plastic recycling companies, Vonovia collected and recycled the waste material from 800 windows that were replaced as part of the modernization work. This was later reused to make window profiles. Across the country, we have recycled more than 32,000 tons of PVC granulate from old windows in this way. We will continue the collaboration in 2019 to support this development process. 306-2

### Procuring Environmentally Friendly Materials

Our business activities require us to use a wide range of materials – from plumbing, painting and electrical consumer equipment to flooring, tiles and thermal insulation systems to tools, work clothing, cars and office equipment. Our technical operation managers and procurement department ensure that we adhere to common German and European standards and regulations. We purchase our materials almost exclusively from production plants within the European Union. We source trees and plants for our green spaces from regional suppliers. We also intend to integrate compliance with European biodiversity legislation into our processes and guidelines. 102-9, 204-1

We use sustainability criteria, for example the environmental friendliness of raw materials and production processes and their energy footprint, as a foundation when assembling and standardizing our range. We actively communicate this information to our suppliers and expect them to comply with the same criteria. 308-2

In 2018, we successfully tested a chlorine-free substance for eliminating mold, for example. This substance is safer for our employees and customers than the substances traditionally used and we will introduce it throughout the Group in 2019. We also plan to roll out the share of mineral fiber in 2019 to replace polystyrene for building insulation, due to be phased out in 2020. We monitor our insulation suppliers to ensure that insulation waste is optimally disposed of – there have been no negative incidents so far.

We reviewed our Business Partner Code in 2018 and made it mandatory for all suppliers. The Code also stipulates adherence to environmental protection criteria and traceability in relation to material origin for our suppliers. We are thus able to verify that:

- > Our suppliers operate a secure business that minimizes environmental damage and adheres to applicable environmental protection laws.
- > Materials and goods supplied to Vonovia come from traceable sources, and are not procured or manufactured through illegal or unethical means. [308-2](#)

These obligations are not (yet) audited, but the creation of a concept for systemic monitoring is planned for the year 2019. [308-1](#)

We also work closely with our suppliers on a number of projects. We exchange information directly, for example, regarding product characteristics and sometimes even develop complete products together. This not only enables us to improve quality, but also increases transparency in our supply chain.

We expect the companies that we commission to work with materials that do not harm the environment (mineral plaster, etc.). We specifically use mineral insulation materials with our steel module buildings, for instance. We only use FSC-certified timber for sandboxes and benches.

# Company Environmental Protection

☒ 103-1, 103-2, 103-3, 301-1, 302-3, 302-4, CRE1

## Company Environmental Protection 103-1

Renting out homes cannot be compared with industrial manufacturing in terms of resource consumption and emissions from our own business processes as they only relate to offices and Vonovia's vehicle fleet. And in comparison to our portfolio, too, the impact that our daily work has on the environment is minimal. Nevertheless, we endeavor to minimize negative impacts on the environment in this area also by optimizing our processes.

A large part of our in-house work takes place in our own or rented office spaces that are spread throughout Germany as well as in our new headquarters in Bochum. Around ten percent of our employees are based here. The other largest individual locations are used by our customer service department and are based in Duisburg and Dresden. A total of roughly 1,000 employees work there and take care of the needs of our customers.

We are also available on site for our customers – at construction sites, in the residential environment and in taking care of buildings. The mobility that this requires is provided by our large fleet of vehicles, which is responsible for a considerable part of our in-house resource consumption. Due to the significance of this, it is covered in more detail in the chapter Impact of Transport and Logistics (→ p. 70 et seq.).

### Establishment in the Organization 103-2

The facility management department is responsible for building management. This primarily concerns the headquarters in Bochum where around 1,000 people are based, but also includes activities across the Group, such as the energy audit. In addition, the managers of individual Vonovia companies are responsible for the decentralized locations.

## Challenges, Opportunities and Risks 103-1

According to the Energy Services Act (EDL-G), which implements EU energy-efficiency guidelines, Vonovia is obligated to conduct an energy audit every four years. The next audit cycle is due in 2019. Our greatest challenge in this regard is creating an overview of all of the independent work locations and their actual use, along with preparing basic data on consumption as a foundation. The integration of other companies, such as BUWOG, Victoria Park and conwert, and organizational changes, such as the establishment of the residential environment organization and expansion of the technical service, mean that the data needs to be collected and evaluated anew.

The new construction of our headquarters in Bochum provides us with an opportunity to improve our resource consumption and emissions. As the owner of the new property we are in a much better position to manage resource efficiency in and around the building.

## Objectives, Measures and Indicators

103-2, 103-3

In our operating business we have different levers to reduce our impact on the environment, e.g., using environmentally friendly office materials and equipment, and digitalizing processes. In this regard, we work with AfB gemeinnützige GmbH to consciously dispose of our end-of-life IT hardware. AfB takes our IT hardware and, if possible, refurbishes it for resale in compliance with data protection regulations. Any devices that cannot be refurbished are recycled in the correct manner. Reusing devices cuts emissions and the consumption of metals and energy, because new IT devices do not have to be made. In 2018, we were able to provide 141 devices for reuse, and regain valuable raw materials by recycling 394 devices. This saved a total of 4,822 kg of CO<sub>2</sub>e. 301-1, 301-2

With the introduction of digital tenant files and the overall reduction in paper printouts, we have been able to reduce

our paper consumption considerably. We are also increasingly handling jobs with our subcontractors through our digital service portal. [302-4](#)

The respective organizational units are responsible for saving energy and conserving resources at all sites; there are currently no mandatory Group rules in place that cover this. The company's intranet is used to communicate general measures, such as turning off lights and monitors, along with departmental training.

#### [Sustainably Built Corporate Headquarters](#) [302-4](#)

We moved into our new corporate headquarters in Bochum in the summer of 2018. The building has been awarded gold standard status by the German Sustainable Building Council (DGNB). It fulfils the requirements of the following five main criteria:

- > Ecological quality
- > Economical quality
- > Sociocultural and functional quality
- > Technical quality
- > Process quality

Examples include:

- > The selection of a site with links to public transport
- > The availability of bicycle stands and electric charging stations
- > Barrier-free approach
- > Upholding sustainable building criteria (incl. insulation, use of natural daylight)
- > Erection of a photovoltaic plant on the roof
- > Use of low-emission construction materials
- > Construction of a building that is repurposable and has a long useful life
- > Measures to reduce ancillary expenses, such as the use of low-maintenance constructions and equipment

The building's electricity requirements were completely met using certified renewable energy sources (hydro-power plant) in 2018.

We also stopped the use of disposable coffee-making equipment for employees and introduced centralized printer systems. Another important step was the introduction of water filter systems in all office kitchens. The systems, which are built directly into the faucets, cool and carbonate tap water so that it is not necessary to buy bottled water. This has considerably reduced the number of plastic and glass bottles that we use.

We are also looking into changing our printing paper to recycled paper in order to optimize our resource consumption in this area, too.

#### [Energy Audit](#)

We will conduct a Group-wide energy audit in 2019. This will require reliable data concerning all work locations and how these locations are used as well as all associated consumption. The centralization of payment management for rental and ancillary expenses for rented work locations that we use (currently around 120) has already had a positive impact on the data. In the second half of 2019, we intend to use a location database for all of our work locations, improving the quality of the data available for the upcoming energy audit. Preparation talks are already underway with an external service provider in order to coordinate the necessary processes as early as possible and secure the processing capacities.

# Impact of Transport and Logistics

☒ 103-1, 103-2, 103-3, 305-5

## Management Approach 103-1

A number of our employees, particularly our technicians, gardeners and caretakers, often work directly on site at our buildings renovating apartments, caring for green spaces and providing customer service. This requires a good deal of mobility and availability. This applies particularly to our technical service, because their availability and response times have a direct impact on customer satisfaction. Our logistics system focuses on avoiding downtimes in the maintenance of apartments. The technical service therefore provides a vehicle for virtually each technician.

Vonovia's fleet consists of a total of around 4,800 vehicles. Due to the high level of fuel consumption, the fleet is responsible for the majority of CO<sub>2</sub> emissions caused by our internal business processes. By modernizing the fleet of vehicles and attempting to reduce the number of kilometers driven, we aim to ensure that the increase in fuel consumption and CO<sub>2</sub> emissions is proportionately lower to the growth in the technical service. The average fuel consumption per vehicle was reduced from 132 litres per month in 2017 to 120 litres in 2018.

The decentralized organizational structure and the internationalization of the business areas – due to the acquisition of BUWOG in Austria and Victoria Park in Sweden in 2018 – is causing an increase in the number of business trips. However, we are committed to employees using modes of mobility that conserve resources and are environmentally friendly. We are thus constantly optimizing our processes in the field of transport and logistics and looking for alternative solutions.

## Establishment in the Organization 103-2

Vonovia's central procurement department is responsible for fleet management throughout the company. As the vehicles in the fleet are primarily minivans used by our technicians and gardeners, the technical service and residential environment companies are included in the management of the fleet – particularly when it comes to user behavior.

The central procurement department also records business trips – in partnership with HR management.

## Challenges, Opportunities and Risks 103-1

We believe the modernizations of our fleet and the use of modern, low-consumption vehicles presents us with an opportunity to make mobility more efficient both ecologically and economically in the long term. In 2018, we continued testing electric minivans, focusing on their practicality for our everyday work. We faced particular challenges with their reliability and reach. We have thus started new pilot projects with other electric minivans and will continue these in 2019.

## Objectives, Measures and Indicators

103-2, 103-3

### Vehicle Fleet

We primarily optimize the efficiency of our fleet of vehicles through the use of modern, low-consumption vehicles and regular maintenance. GPS systems and journey optimization are included as standard, which has led to a reduction in the distances covered and better capacity utilization of the vehicles. Empty journeys are avoided wherever possible.

We make sure that our vehicles are up-to-date in terms of technology. We have completely stopped adding diesel

vehicles to our compact car segment and swapped to low-consumption ecoFlex gas vehicles. We have also replaced a wide range of old diesel vehicles with new Euro 6d-TEMP standard vehicles, and we have expanded our network of service and workshop partners to avoid unnecessary journeys.

We will integrate a number of natural gas, hybrid and electric drive vehicles into the fleet in 2019 and test them in our everyday work. We are also planning a pilot project for the use of hydrogen drive vans.

The use of e-bikes has also become more commonplace at Vonovia now. 21 employees travel through our neighborhoods on e-bikes. This makes it even easier for our customers to approach our employees directly and connect with Vonovia – while our employees protect the environment. 174 traditional bicycles are also currently a regular part of our vehicle fleet. 305-5

### Fleet Software

We systematically collect and analyze the fuel consumed by our fleet using our fleet software. We inform employees who cover a lot of miles of the costs and CO<sub>2</sub> emissions associated with their driving and provide advice on fuel-saving driving. 305-5

### Reducing the Number of Kilometers Driven

#### *Centralized Processes*

Through the centralization of processes in transport and logistics and the use of our journey planning tool we can drastically reduce the miles our employees have to drive. Our repair center, for instance, is responsible for centrally handling repair queries and coordinating service appointments. Our employees estimate demand and the amount of time needed based on the number of queries they receive and plan appointments for the service technicians in a way that optimally conserves resources and ensures cost efficiency. Our service technicians are also responsible for dealing with smaller jobs from other trades so that no other Vonovia employees have to attend. Our technicians receive training for this where necessary.

In order to avoid long journeys at the beginning of the working day, we try to make appointments for our technicians close to their homes. We use local subcontractors to complete trade work at buildings that are far from our technical service locations.

#### *Innovative Logistics Concepts*

We have been making use of an overnight delivery system for a number of years now. The service delivers replacement parts and materials directly to our vehicles overnight so that our employees do not have to pick them up. We were able to increase the volume of direct deliveries again in 2018. Our close branch network of trade partners enables us to procure materials and replacement parts at short notice that could not be delivered.

The “empty apartment deliveries” system is another successful logistics concept that we use across the Group, and is a well-established process. This system entails bundling materials for several trades into one delivery.

Both concepts save us time and reduce kilometers driven – and therefore also reduce the consumption of valuable fuel and CO<sub>2</sub>e emissions. 305-5

#### *Deploying New Technology*

In our modernization work we fit our apartments with smart meters that enable the digital recording and billing of heating consumption. This means heating meters no longer have to be read by Vonovia employees in person, which in turn allows us to reduce the energy consumption of our fleet further. We now use smart meters to bill customers in around 130,000 residential units (2017: 80,000 residential units) via a wholly-owned subsidiary of Vonovia.

#### *Reducing Business Trips*

We try to avoid business trips as much as possible and instead use digital communication channels whenever employees from different locations need to exchange information with one another or with stakeholders.

Whenever a business trip can't be avoided, we try not to fly but prefer to travel by rail and car. Car pools are formed if several employees are going on the same business trip.

# EMPLOYEES

Our employees are the key to our success. They possess personal and professional skills that they employ every day to help bring Vonovia one step closer to achieving its targets. As an employer, we are responsible for offering our employees a working environment in which they are happy, healthy and able to advance in line with their own expectations. To ensure these values are upheld, we implement measures in the various HR management areas and, wherever possible, across the company.

73	Our Approach Regarding Employees
76	Training and Education
80	Health Management and Occupational Safety
84	Balancing Career and Family
86	Diversity and Equal Opportunities



# Our Approach Regarding Employees

☒ 102-8, 103-1, 103-2, 103-3, 401-1, 401-2, 407-1

## Management Approach 103-1

Vonovia has grown successfully over the past few years. We will continue to pursue our growth strategy, not just in Germany but across Europe. This presents our HR management with a wide range of new tasks and challenges, as for our growth strategy to be successful, recruiting employees and establishing HR activities with a long-term focus is essential. We need qualified and motivated employees throughout the company that will stay with us for a long time. There is particular demand for such employees in the Vonovia technical service (VTS) and residential environment, where our employees are in close contact with our customers. As BUWOG and Victoria Park were in the process of being integrated into Vonovia in 2018, we will dedicate this chapter exclusively to the reporting of Vonovia Germany data. Thus we ensure them to be comparable to the data in last year's sustainability report.

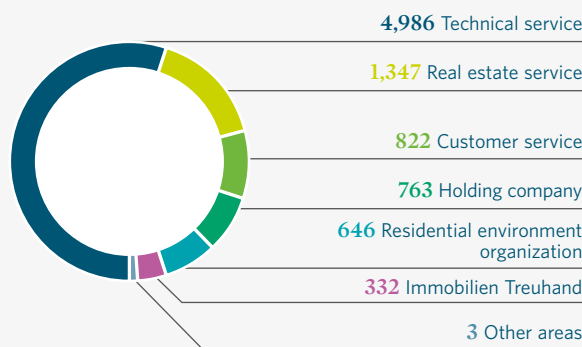
The number of employees we employ rose by 451 in 2018, from 8,448 (December 31, 2017) to 8,899 employees (December 31, 2018) - an increase of approximately 5.3%. 102-8, 401-1

In 2018, the turnover rate was 14.8%. 401-1

We aim to place each employee in an area suited to their strengths, and to purposefully develop their skills from there. Performance, appreciation, responsibility and team spirit are all important elements of our HR work and our corporate culture. By investing in the digitization of our company, we intend to adapt the processes and structures of our HR management, which is organized as a shared service within Vonovia SE, to the growing number of employees, and to make it more efficient.

We search for applicants both within and outside of the company in order to fill vacant positions with the right employees. We particularly encourage existing employees to fill specialist and management positions and provide specific training for this. The majority of the employees

## Employee numbers by area



who joined the Group with the new subsidiaries were successfully integrated into our structure in 2018 and are already benefiting from our HR development program (see chapter Training and Education → [p. 76 et seq.](#)).

We are continually expanding our range of offers and provide our customers with numerous services that use our own resources. This “insourcing” helps us to meet our social responsibilities and create secure employment for various qualification levels. In order to fill vacant positions quickly, we endeavor to position ourselves as an attractive employer (in the sense of an employer brand) for new employees on the labor market and to boost this image with our existing employees. Boosting our attractiveness as an employer is an important task in the competition for qualified employees. This is something we began working on in 2018, for example, by concentrating on occupational safety, health management (see chapter Health Management and Occupational Safety → [p. 80 et seq.](#)), and balancing career and family (see chapter Balancing Career and Family → [p. 84 et seq.](#)).

Diversity is also a key topic at Vonovia; we respect and encourage diversity in the company as it has a positive impact on our business operations in all areas. We employ people of all age groups and genders, from different

nationalities and cultures, and with a whole range of educational backgrounds. We also employ people with disabilities. This diversity is a particular benefit when it comes to contact with our customers, who come from all over the world. We thus ensure equal opportunities for our employees and a working environment that is free of discrimination, where appreciation, tolerance and respect are the underlying principles (see chapter Diversity and Equal Opportunities → p. 86 et seq.). In addition, we have committed ourselves to further increasing the number of women in management positions at Vonovia (see chapter Corporate Governance Report → AR 2018, p. 44 et seq.).

We take our social responsibility seriously at all of our locations. Our growth creates secure and stable employment; we only employ temporary workers in exceptional cases and do not outsource positions abroad. By re-integrating craftsmen activities we ensure that our high HR standards are applied to these Vonovia services. The majority of our employees (89%) is working under permanent employment contracts.

This results in material topics for Vonovia in relation to employees. These have been added to the materiality matrix according to their relevance:

- > Training and Education
- > Health Management and Occupational Safety
- > Balancing Career and Family
- > Diversity and Equal Opportunities

In the following chapters we will deal with these topics in more depth and explain their relevance at Vonovia. We will describe the management approach, challenges, opportunities and risks, targets, measures and indicators for each topic.

Co-determination is also a material topic. Corporate co-determination and employee surveys conducted throughout Vonovia help us to evaluate our internal corporate approach. We ensure that all applicable laws are adhered to at all of our locations; for example, laws relating to individual and collective employment rights. No corresponding breaches were determined at any of our locations in 2018. Works councils, for example, have been established in all of Vonovia’s business areas. The exchanges between the works councils and management are constructive and based on mutual trust. In the event of significant changes within the company, we inform our workers within the legally prescribed notice periods. 402-1, 407-1

**Employees by contract type<sup>1)</sup>**



<sup>1)</sup> Temporary employment contracts excluding interns, trainees, students, temporary staff, marginal employees, employees with pre-retirement part-time work arrangements, those on leave of absence, part-time employees, those on parental leave, bodies and external staff

**Challenges, Opportunities and Risks 103-1**

In light of current social developments (for instance, the ongoing construction boom) and corporate challenges (such as the integration of our new subsidiaries), Vonovia is constantly facing new challenges with regard to HR management. The high annual recruitment figures that we are aiming for in order to meet our HR needs relate to filling both new positions resulting from our growth and to filling positions left vacant due to turnover. In addition, the requirements we have of our employees are changing - due to increasing digitization, for example. Simultaneously, it is becoming ever more important for Vonovia to position itself as an attractive employer in order to gain qualified employees and retain them in the long term. Gaining personnel as craftsmen or for gardening and landscaping is a particular challenge due to the tense situation in these parts of the labor market. Online application channels, for example, which we have established to increase the efficiency of our application processes, may be an obstacle for some and prevent qualified people from applying.

In terms of HR management, the 2018 fiscal year was dominated by the integration of our acquisitions, particularly BUWOG AG which has its main focus in Germany. The structures and processes of BUWOG AG were integrated by January 1, 2019. We have reported on measures relating to BUWOG and Victoria Park in two separate chapters.

Another significant opportunity for us is the diversity of our employee structure, which is shaped by the many different cultural and social backgrounds of our employees. It not only boosts our brand as an employer, but also supports our customer orientation. In addition, our comparatively high training rate means we can counter the tense situation on the labor markets. Vonovia’s train-

ing rate is significantly above average in comparison with other large companies, especially among the DAX 30 companies.

Public debates on Vonovia's business model have as yet only affected single cases of employee recruitment.

## Objectives, Measures and Indicators

103-2, 103-3

The aim is to meet the mounting and constantly changing requirements of the working world at Vonovia, exploit synergy potential and find employees, who are a perfect fit for the positions on offer. Thus, gaining and retaining qualified employees is the most important HR management task. We confront this issue through targeted recruiting, training and education, health management and occupational safety measures as well as measures to improve the balance between career and family. These measures are described in detail in the following chapters.

In 2019, we aim to recruit approximately 900 new employees and will be implementing recruitment measures both internally and externally. Targeted training and education offers are an important factor for the success of our company in this regard. We also plan to refine our external image and to strengthen our employer brand. By conducting internal workshops with representatives from various professional target groups, we have determined what Vonovia embodies as an employer and why employees decide to work for our company. An employer promise and employer characteristics were derived from the results, and we have developed an employer branding concept that is gradually implemented through HR marketing measures since the end of 2018. We have decided to particularly highlight our company's innovative ability, the importance of team work and workplace safety. The new career portal on Vonovia's website also went live in 2018. [www.karriere.vonovia.de](http://www.karriere.vonovia.de) Our online image will be further optimized, both technically and in terms of content, as will our company profiles on ratings portals such as Xing and kununu, in order to make more information available and to better target applicants. The employer branding concept is scheduled to be completely integrated in our work processes by 2019. After successful implementation of the concept, the issue of employer image will continue to accompany us in our day-to-day work and remain in focus, e.g., through the implementation of new recruiting methods.

## Outlook for 2019

We intend to continue "insourcing" in 2019 and – along with the further expansion of our workforce – fill vacant positions and new positions internally wherever possible. A customized HR development strategy will be implemented to tackle the associated challenges. This includes expanding our training offers and adapting them to individual areas' needs. Identifying and training talented individuals from among our own workforce will support our structured succession planning. In connection with this, one measure we intend to implement will be the extension of our successful strategy round table – a dialogue approach between the Management Board and our top talent.

As part of co-determination processes, various Group and works agreements will be harmonized further in 2019. We will also conduct a Vonovia-wide employee survey in 2019 in order to evaluate previous measures and identify new spheres of activity. We specifically intend to focus on employee satisfaction and loyalty, and to review the implementation of our targets in relation to our culture of appreciation, responsibility and team spirit. [102-41](#)

Process harmonization and digitization will continue to be key focal points in 2019.

In 2019, managers will receive more occupational safety training and we will raise awareness among managers of their responsibilities toward employees. Risk assessments will also be carried out in order to gain an overview of the risks associated with various activities.

# Training and Education

☒ 103-1, 103-2, 103-3, 404-3

## Management Approach <sup>103-2</sup>

The training and education of our employees is a particularly important topic. It allows us to build up and expand important skills and to guarantee high quality work in the interests of our customers.

### Traineeships

Vonovia offers a wide range of traineeships. We believe that this has a positive impact on Vonovia's public image, because it allows us

- > to create secure jobs,
- > to take social responsibility, and
- > to increase our attractiveness as an employer.

Our focus on craftsmen training allows us to expand our technical service and adapt it to meet the requirements of the company. This can help us to minimize the risk of bottlenecks relating to qualifications and to ensure a well-balanced average age in our workforce. Training is an indispensable element of Vonovia's HR policy, because it

- > safeguards our company's competitiveness,
- > ensures the availability of qualified junior employees and the preservation of knowledge,
- > secures need-based and timely HR development (for instance with regards to digitization), and
- > is designed to make us less dependent on the external labor market (particularly for the craftsmen/technical service areas).

We offer our trainees good prospects once they have completed their training. This is reflected in the high number of people taken on after their training, which stood at 81.1% in 2018.

## *Establishment in the Organization* <sup>103-2</sup>

HR management's training and HR development department is responsible for training. It cooperates closely with other business areas and external partners to ensure the highest quality of training.

### Further Training

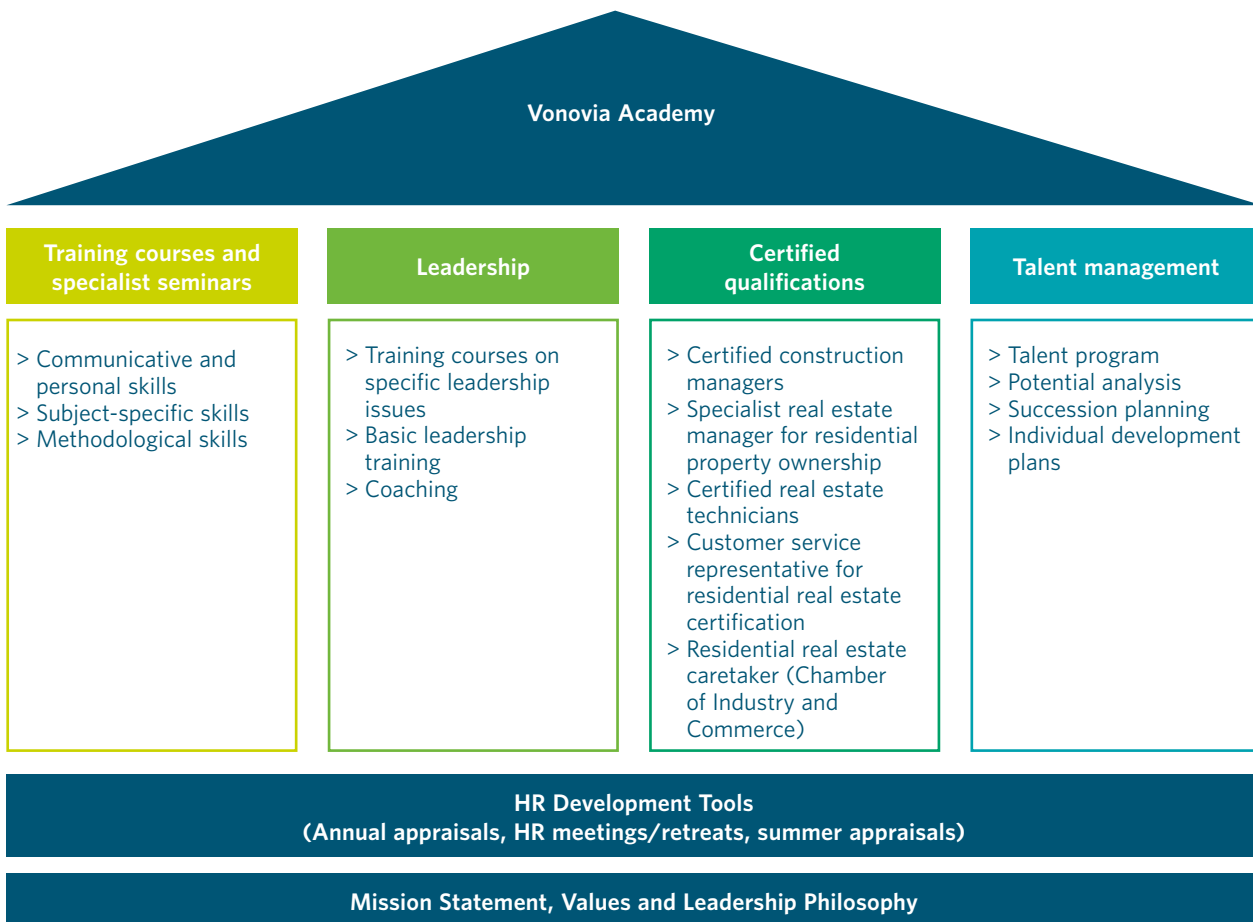
Further training of Vonovia employees is a core element of HR activities. We aim to ensure that our employees are optimally qualified, provide them with support in their current work and prepare them for future tasks. This allows us to help every employee find the position that is right for them. Our Vonovia Academy offers training courses, specialist seminars, manager training, talent management and certified qualifications that are tailored to our needs and targets. The academy provides our employees with numerous opportunities to develop their skills and methods and to develop personally, and it helps us to fill positions with internal candidates where possible. As a result, we attach a great deal of importance to talent management, to ensuring that our top performers stay with Vonovia and to systematic succession planning. And it helps improve the motivation and satisfaction of our employees.

Important aspects of our HR development work are:

- > Leadership
- > Succession planning
- > Talent management
- > Further training
- > Assessment and feedback.

We are systematically developing and expanding our work in these areas. This will allow us to secure our existing workforce of employees and managers, as required by our operations, identify junior managers and prepare them for future management responsibilities.

## The Pillars of the Vonovia Academy



Structured HR development also helps to improve the company's efficiency and profitability and prepare for future tasks and challenges.

### The Vonovia Academy

All HR development tools at Vonovia are based on our mission statement, our values and our leadership philosophy. This is also true for the Vonovia Academy. The academy is an important part of our HR development work, and continuously offers a range of training and coaching opportunities, specialist and management seminars and certified qualifications – such as dual study courses or master craftsman training – adapted to meet the specific needs of our departments. Special in-house training courses include “the starter pack for successful entry into management” and the training series “basic leadership training.”

### Establishment in the Organization 103-2

The training and HR development department is responsible for HR development. The department works closely with other business areas and our external education suppliers.

## Challenges, Opportunities and Risks 103-1

### Traineeships

In light of our constant need for new employees, declining applications and increasing restrictions to training are a risk to our company. More and more high school graduates decide for an academic career. Lacking educational qualifications are becoming an ever bigger obstacle, especially in the skilled manual crafts. Traineeships being ended before completion – due to some young people's lack of career orientation – mean an unnecessary waste of resources. In order to counter these risks, we are strengthening our commitment to training marketing, looking for innovative recruitment methods and taking measures to retain junior employees. This gives us the opportunity to address additional target groups, such as those who have left a course of study before completing it, and to recruit them to our company. Trainees at Vonovia benefit from good career prospects. This in turn gives us at Vonovia the opportunity to expand our personnel structure in the long term, retain valuable knowledge in the company and, most importantly, safeguard our competitiveness.

We have expanded our commitment to integrate refugees in our traineeships. During the reporting period, 31 refugees were training with Vonovia. And the number of trainees with a migration background is high across the company in general. This diversity offers our company numerous opportunities, but it also requires us to develop individual solutions for training the individuals, e.g., through qualification measures to prepare trainees for a career, or training and tutoring offers for dual study courses.

### Further Training

The diversity of our business model and the continual growth of our company result in a constant stream of new tasks and challenges for our employees. We include these in our training offers, and this, together with the size of our company, allows us to offer our employees numerous opportunities. However, we also have to consider the various groups of employees who work in locations throughout Germany. For this reason, and because of the rising employee numbers, we are increasingly conducting more in-house events in partnership with various education providers. The number of e-learning seminars featured in our range of training offers is also growing. In order to ensure that the right training course can be selected from this wide range, we offer individual support for employees with regards to their development. This also helps us to achieve our goal of filling as many vacancies as possible internally.

## Objectives, Measures and Indicators

103-2, 103-3

### Traineeships

Vocational training is a key pillar of Vonovia's recruitment strategy. We offer a wide range of vocational training programs. We adapt our training schemes to current developments in the world of work and systematically prepare junior employees for these changes, for instance with regard to digital technologies. This also includes developing the personal skills necessary for shaping and transforming work structures, such as applying more initiative when dealing with tasks.

We are currently offering training in 22 locations for 14 different occupations, as well as offering dual study programs. In addition, we offer part-time traineeships for young mothers and fathers, athletes and home carers.

Vonovia employed a total of 470 trainees as of December 31, 2018 (Dec. 31, 2017: 462), of whom 137 were commercial trainees and 333 were technical trade trainees. This means that trainees account for 5.3% of the total



# 5.3%

**Training rate in Germany (excl. BUWOG Germany)**

(Group: 4.9%)

workforce. Since our employee numbers are currently growing faster than our trainee numbers, the training rate declined by 0.1 percentage points against the previous year. Nevertheless, we remain one of the few companies in the DAX 30 increasing their training rate further.

We intend to focus on:

- > Training offers for skills and qualifications oriented toward our actual needs at Vonovia
- > Training schemes adapted to the changing needs of the future working world
- > Keeping our high training rate constant by creating training roles and filling vacant positions
- > Offering our trainees good prospects for the future and keeping the number of trainees we keep on high as part of our succession planning
- > Filling 10 percent of the training roles with the sons and daughters of our tenants (Aktion Mieterkind)

We are implementing various measures to help us achieve our targets, such as the expansion and strengthening of our employer brand (see chapter Challenges, Opportunities and Risks → p.77 et seq.), as well as new innovative recruiting measures such as 'trainee speed dating'. We are also actively encouraging women and girls to take an interest in the trade professions, for instance with our annual Girls' Day.

### Sustainability Issues in Traineeships

During their training, trainees at Vonovia complete a number of stations in various departments. This gives our trainees an insight into current issues, including sustainability issues, such as demographic change, energy efficiency and renewable energies.

### Further Training

Our HR development tools are a main aspect of HR development. These tools include:

- > **Annual employee appraisal with a manager:** Discussing performance and assessing potential for further development; agreeing on specific development measures and targets 404-3
- > **HR routines/meetings between managers and their supervisors/the Management Board:** Discussing annual results and identifying sources of potential; agreeing individual development plans and planning succession guidelines
- > **Summer employee appraisal with a manager:** Confidential feedback sessions and discussing cooperation; deriving measures to improve cooperation where necessary 404-3

We organized special training sessions in 2018 in order to support our managers in conducting these appraisals with a view to raising awareness of their management responsibilities. Developing our managers' skills is an important topic for Vonovia in general because our managers bear special responsibilities and serve as role models for our employees. We use current situation assessments to identify their strengths and the areas in need of development, and derive the necessary measures to be taken. We expanded our further training offers for managers in 2017 to reflect the area-specific needs.

In order to identify individuals with talent and potential, and expand our succession planning, we included more training courses in our further training program in 2018, focusing particularly on the needs of the technical service. In HR meetings and routine work we identified employees who would benefit from these training courses.

The fundamental aim of our HR development work is to offer employees target group-specific development opportunities. This includes communication training for our installers and gardeners, for example.

Our portfolio also contains training courses on cultural diversity amongst our tenants, communication, dealing with difficult situations and reducing stress.

Internal customer service training:

- > Internal trainers regularly conduct training and coaching sessions in the customer service department
- > The aim of the sessions is to help employees deal with issues in a more customer friendly and service oriented manner
- > The sessions include onboarding and basic training, department-specific specialist and communication training and training for specific systems
- > The aim of these measures is to provide our employees with the best support for their everyday work and to provide personal development on-the-job

**Sustainability Issues in Further Training**

Many sustainability issues are part of our employees' daily work. We therefore offer further training to raise awareness of these issues among our employees and to offer them relevant certification.

Our certified real estate technician course, for example, covers building technology topics and aspects such as the causes of, preventing and eliminating mold and damp, heat insulation and the German Energy Saving Ordinance (EnEV).

2,176

employees

took part in further training in 2018.

€ 3.8

million

was invested in further training in 2018.

108

new trainees

started work at Vonovia in the technical trade area in 2018.

14

traineeships and study courses

are available at Vonovia.



# Health Management and Occupational Safety

☒ 103-1, 103-2, 103-3, 403-2, 403-3

## Management Approach 103-1

Vonovia employees work in a variety of fields – ranging from office work to installation and gardening. They face physical and mental stressors that can influence their performance. We ensure that potential threats to our employees are minimized through comprehensive health management and professional occupational safety structures so that they can work in a healthy environment.

### Health Management

Our employees' health is important to us. We aim to promote the wellbeing of our employees, maintain their performance and motivation in the long term and keep them with our company through comprehensive health management, by systematically designing work processes and structures in such a way that they promote health.

### Establishment in the Organization 103-2

The team "Health and Social Affairs" is responsible for developing and implementing health management measures.

### Occupational Safety

A working environment in which our employees are protected to the best degree possible against risks, hazards and work accidents – regardless of the time, place or type of work – is important to us. We minimize potential risks through targeted measures and adhere to applicable laws and guidelines to the fullest extent possible. Each individual employee and each manager bears responsibility for their own safety and that of their colleagues. This also applies to the employees of companies that we integrate into our company.

The risks that our employees in the headquarters face are relatively low compared with employees in craftsmen and gardening positions. In this area, occupational safety takes the form of assistance as primarily preventative measures are implemented, such as regular safety instructions or

the constant updating of instructional documents and operating manuals.

Due to the nature of their work, the potential threats faced by our employees in the technical service and residential environment organization are more severe than those faced by administrative employees. We conduct regular risk assessments in order to identify possible hazards and to derive preventative or corrective measures. 403-2

### Establishment in the Organization 103-2

#### Facility Management and Internal Coordinators

The facility management department is responsible for coordinating occupational safety in the company and initiates and supports measures throughout the company. Occupational safety issues are managed by our internal coordinators for occupational safety. Internal coordinators have been appointed in each of Vonovia's Group companies. A company representative appointed by the Management Board is the central contact for all employees. The representative communicates regularly with the internal coordinators. Together they work on central occupational safety issues.

#### Group-wide Occupational Safety Standards

We also provide specialist support for the Group companies through our Group-wide occupational safety standards. We safeguard the transfer of knowledge through regular specialist exchanges between the Group companies. We gradually transfer the existing occupational safety structures of companies that we integrate into our organization. We expand our processes, for instance reviews and instructions, to new employees and locations and document the process. 403-2



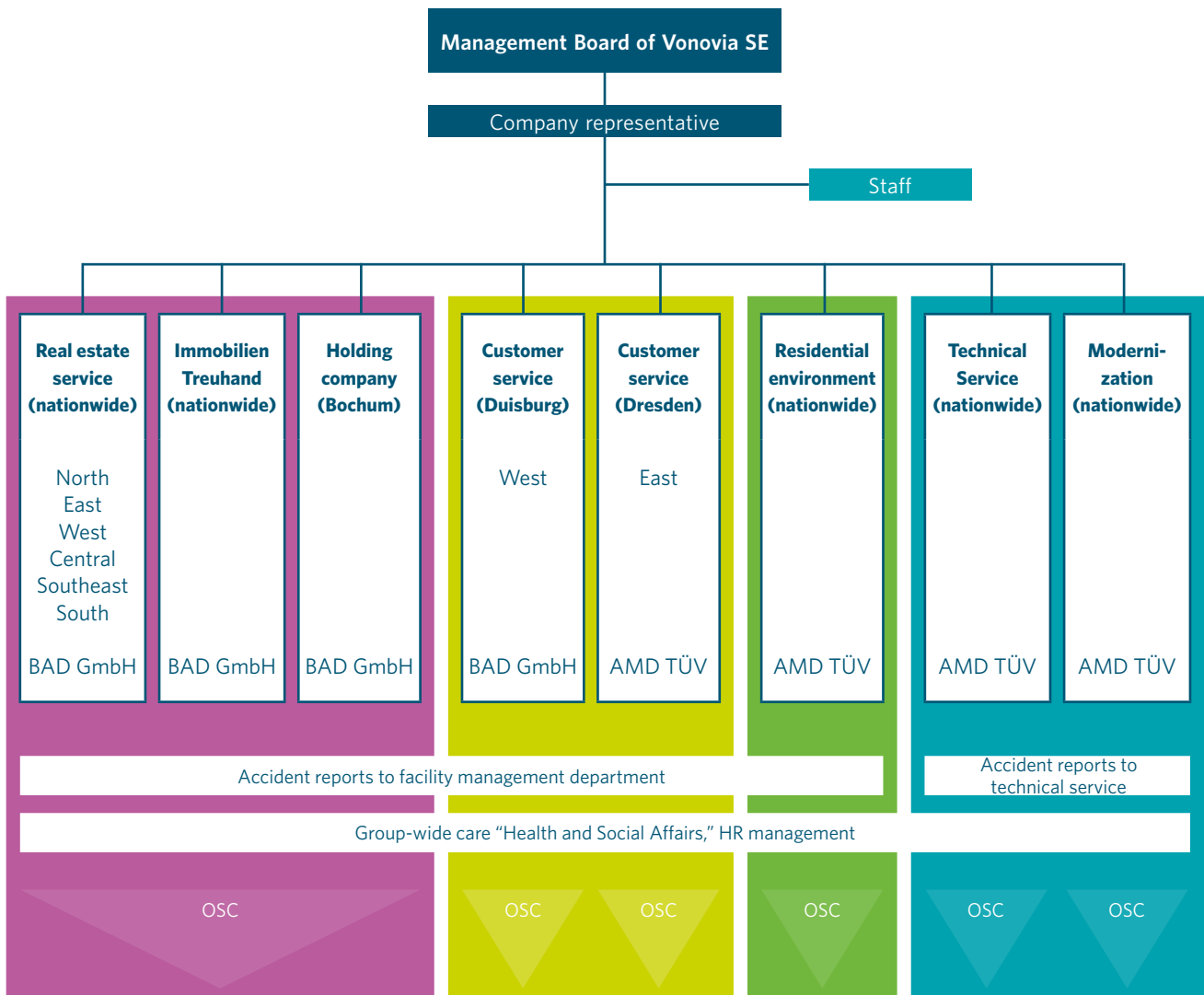
### Occupational Safety Committees

Occupational safety committees (OSC) meet regularly at the Group companies and investigate occupational safety optimization opportunities. The committees work closely with external occupational safety and occupational health experts and adapt occupational safety measures to current developments, such as workplace requirements, applicable laws, (accident prevention) guidelines, technical requirements and legal acts. Once a quarter the company representatives discuss new developments and the implementation of measures with occupational safety experts, occupational health specialists, safety officers and the works councils at the OSC meetings. 403-4

### Technical Service and Residential Environment Service

Due to the number of trade unions at Vonovia and their specific occupational safety demands, the technical service and the residential environment service have their own occupational safety organization.

## Organizing Occupational Safety at Vonovia



## Challenges, Opportunities and Risks 103-1

### Health Management

As it is our aim to be seen as an attractive employer on the labor market, our comprehensive health management and numerous benefits, for example, those concerning work-life balance, are important elements that allow us to stand out from the competition.

In the skilled manual crafts, the physical strains of the work can be very high. This leads to the following risks:

- > Qualified employees have to leave the company prematurely due to these strains and are not able to pass on their knowledge
- > Valuable skills have to be relearned at considerable expense and taking considerable time
- > Filling these positions is more difficult due to the lack of suitable candidates

Vonovia has a number of locations in Germany as well as neighboring European countries such as Austria and Sweden, which means we cannot always provide our services across the board – such as massages or membership of fitness center chains. The digitization of the working world, however, does allow us to expand our offering regardless of the location, for example, with online fitness exercises, our health portal and information via email.

### Occupational Safety

Occupational safety requirements are continually developing at Vonovia as a result of the changes to work flows and activities as well work/operating equipment and materials. We therefore constantly analyze safety instructions and operating manuals on dealing with and how to behave in dangerous situations, and update these when necessary. This is necessary to raise awareness among our employees about safety at the workplace and to protect them.

We take workplace hazards very seriously and investigate these issues in depth. The authority that this generates and the associated expertise mark our company out and boost our image both internally and externally.

## Objectives, Measures and Indicators

103-2, 103-3, 403-5, 403-6

Preserving the well-being and boosting satisfaction among our employees in the long term is something that is important to us. As a result, Vonovia attaches considerable importance to offering employees a work environment in which they are protected against risks and threats to their health to the greatest extent possible while carrying out their work. This applies, in particular, to those departments and trades that are involved in the construction process, as there are considerable potential hazards in their working environments.

### Health Management

Our health management objectives are:

- > Promoting the work-life balance of our employees,
- > maintaining their health and ability to perform in the long term,
- > assisting them in establishing healthy lifestyles,
- > boosting their motivation and loyalty to the company.

We offer a range of services to achieve these objectives. The Health and Social Affairs team offers services such as:

- > Colorectal cancer prevention
- > Flu shots
- > Massages
- > Cooperation with fitness centers (e.g., McFit) and company sports
- > Service hotline providing advice for employees and managers and coaching (psychosocial counseling)

The colorectal cancer prevention and fitness center membership services are very popular.

### Dealing With Stress

At the Vonovia Academy we offer seminars on dealing with stress and preventing burnout. There are also courses on dealing with complaints, arguments and difficult situations involving customers. One seminar on improving health is specifically tailored to our managers in order to raise their awareness of the responsibility they have toward employees.

### Health Portal

Nutritional advice, BMI calculator, fitness exercises for the office and advice for the next medical checkup: The "Time for Health" portal offers our employees a wealth of health-related information. In addition, employees can participate in internally organized running events or soccer competitions.

### Corporate Integration Management

Following longer absences from work due to illness, we support the affected employee's return to work through corporate integration management. This allows the employee to slowly acclimatize to their work again.

### Ergonomic Seating and Nutrition

We moved into our new company headquarters mid-2018. Due to the move, we procured office equipment for up to 1,000 employees, including electric standing desks, for instance. The new company headquarters also offers additional benefits like the all-in-one water system, which provides employees with free fresh, cooled and filtered still or sparkling water and a much bigger range of options in the canteen to promote a balanced diet.

### Occupational Safety

Every new employee at Vonovia receives initial safety training followed by annual safety training. Mandatory safety inspections, for example, on portable electrical operating equipment or ladders, are performed regularly. To avoid incorrect internal assessments, we also commission repeat risk assessments from external service providers on locations and activities as required. We are currently focusing on repeat DGUV (Deutsche Gesetzliche Unfallversicherung – German Statutory Accident Insurance) V3 inspections throughout Germany on portable electrical operating equipment.

Monitoring and management is performed automatically and electronically using feedback sent via email.

We continually adapt our occupational safety processes and measures to new requirements resulting from amendments to law and our findings following analyses of work accidents. The increase in the number of employees at Vonovia, resulting from growth, and the fluctuation rate mean that initial training is gaining in importance.

For example, in 2018 we:

- > Conducted 31 evacuation drills throughout Germany
- > Thoroughly examined and updated all VTS risk assessments related to trade
- > Updated the fire protection organization at numerous locations

- > Organized training for newly appointed and existing safety officers with VBG (Verwaltungsberufsgenossenschaft)
- > Organized seven nationwide internal training sessions for another 64 "ladder officers" (person authorized to inspect ladders and steps)
- > Organized six nationwide internal training sessions on "Occupational Safety for Managers – corporate duties and liability risks" for around 60 managers

### Planned Measures

At the beginning of 2019 we intend to plan more internal management training sessions on "Occupational Safety for Managers – corporate duties and liability risks" and hold them over the course of the year.

We also plan to conduct risk assessments on the following issues in the following locations:

- > **VTS:** mental strain
- > **Residential environment:** mental strain, biological substances ordinance, interior and glass cleaning
- > **Real estate service and Immobilien Treuhand:** managers, landlords, technicians, caretakers, sales personnel and WEG (Condo owners' association) administrators at new locations across Germany

In the residential environment we also intend to restructure various instructional documents, for instance, for concierge services, and expand the fire protection organization at new locations. The VTS will review the contents of the risk assessments updated in 2018 as part of the nationwide efficiency checks of the locations and with the trades on site.

# Balancing Career and Family

☒ 102-8, 103-1, 103-2, 103-3, 401-3

## Management Approach 103-1

Developments in recent years show that employees and applicants are increasingly interested in a good work-life balance. As a responsible employer, Vonovia takes this issue very seriously. We are thus developing company-wide as well as location-specific measures. We are underscoring our commitment in this area with the membership in "Erfolgsfaktor Familie [Success Factor Family]," a corporate program organized by the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth.

## Establishment in the Organization 103-2

The Health and Social Affairs team is responsible for coordinating measures for balancing career and family.

## Challenges, Opportunities and Risks 103-1

Our employees' requirements are becoming ever greater, and the benefits that Vonovia offers as an employer are keeping pace. Balancing career and family in particular is becoming increasingly important. Vonovia must face the challenge to meet these demands in order to be an attractive employer for all employees.

If, for instance, we do not enable employees to take advantage of alternative working time models, there is a risk that satisfaction levels will drop or they will decide not to join Vonovia to begin with. Firstly, this would mean that Vonovia loses valuable knowledge, and secondly, that we cannot gain the employees that we urgently need.

However, this affords us an opportunity to become an attractive employer to employees with families, to boost the motivation and health of our employees and to contribute toward their decision to stay with the company in the long term.

## Objectives, Measures and Indicators

103-2, 103-3

We have been committed to promoting family life for years now, and allow our employees to strike a balance between work and family commitments by offering a range of tools designed to meet their specific needs. We have implemented measures at numerous locations throughout Germany. For instance, we work with a family services provider that supports our employees in the search for daycare for children or caregivers for family members.

Working time models and individual part-time agreements are important elements in our work to support an improved work-life balance. These also benefit our trainees, with options, for example, for part-time training or individual time plans for athletes and single parents.

### Full-time and part-time employees 102-8, 401-3

**Full-time employees**  
8,090



**Part-time employees**  
809

**Employees on parental leave**  
171 in total  
of which around 66% were male

## Child Care

Vonovia works with the family services provider pme Familienservice. Their portfolio of services includes:

- > Childcare offers, such as support in finding a daycare facility, plus help at short notice when daycare is unavailable and on public holidays,
- > Day-long or week-long programs for children, and longer holiday trips.

Our employees in Bochum and Duisburg have access to parent-child offices. We are also expanding our cooperation with daycare centers - we have, for instance, begun working with a daycare center in Bochum.

We are certain that these measures to help employees balance their work and family commitments have a positive impact and that our employees actively enjoy them. An indication for this is the large amount of male employees who took parental leave in 2018 (66% of a total of 171 employees). 401-3

## Caring for Family members

Some of our employees are caregivers for family members. We provide support for this difficult task and cooperate with pme:

- > To arrange home-based and hospital care assistants and services
- > To provide advice regarding financing care and senior-friendly living
- > To arrange assisted living

We also provide information regarding legal issues such as living wills, powers of attorney and care directives. Our "Family and Work" program also offers psychosocial counseling in dealing with illness and providing care for family members.

# Diversity and Equal Opportunities

☒ 102-8, 102-12, 103-1, 103-2, 103-3, 405-1, 405-2, 406-1

## Management Approach 103-1

Our corporate culture is based on the understanding that all people should be treated equally and their individuality respected to the greatest extent possible. Within our company and when interacting with our customers, we benefit from a wealth of perspectives, backgrounds, ways of thinking and approaches every day that are the result of the social, cultural and linguistic backgrounds of our employees. We believe this gives us an important competitive advantage.

In 2013, we signed the Diversity Charter and underscored our company's commitment to diversity. We support our employees equally regardless of their gender, age, sexual orientation and identity, race, nationality, ethnic origin, religion or world views. Appreciation, tolerance and respect are the values that we live by at Vonovia and they make our working environment a positive one.

## Challenges, Opportunities and Risks 103-1

Our employees, who come from more than 78 countries, know about different cultures and speak a range of languages. This enables communication with our customers and allows our employees to deal with customers' problems quickly. In addition, varied experiences and points of view encourage mutual learning and contribute toward the continual development of the company.

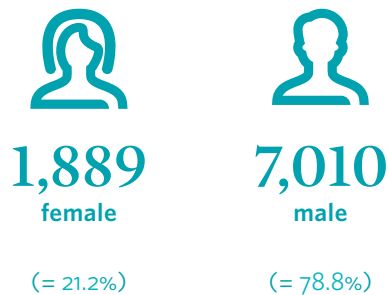
## Objectives, Measures and Indicators 103-2, 103-3

Men often dominate the trade professions. We work hard to get women and girls interested in the trade professions at Vonovia. We visit schools purposefully to inform female pupils about technical trade traineeships at Vonovia, for example. We also participate in the national Girls' Day every year. Our female trainees go into schools and talk about their working day as part of the "Ausbildungs-

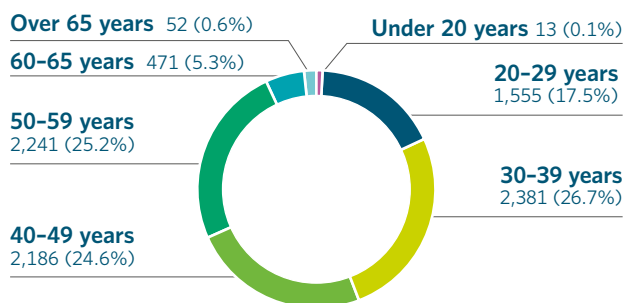
## Employees by gender and by age (2018)

102-8, 405-1

### Employees by gender



### Employees by age



botschafter" (training ambassador) program organized by the Chamber of Commerce (IHK).

When looking for new employees - particularly for the Vonovia technical service and residential environment trade professions, but also for the commercial professions - we include refugees in our recruitment processes and support them in settling into their new lives in Germany.

We cooperate with the German Federal Employment Agency, for instance, to integrate refugees into the working world. In 2018, we conducted application days in a joint pilot project and were able to find suitable candidates for traineeships with potential permanent contracts. We will continue this project in 2019.

In order to promote equal opportunities at all levels, Vonovia is aiming to further increase the proportion of women in management. At present, approx. 37% of managers at Vonovia are women. 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 Declaration on Corporate Governance.

🔗 [www.investoren.vonovia.de](http://www.investoren.vonovia.de) Remuneration at Vonovia is based on performance-related and market-related factors and does not take the gender of the employee into account. The chapter Employee Key Figures includes the ratio of men's to women's salaries at Vonovia. 405-2

There were no incidents of discrimination at Vonovia in 2018. 406-1



# 2013

Diversity Charter signed



# 78

countries (Group)

Our Employees come from various nations.



# 170

nations

Our customers come from all over the world.

# INFORMATION AND KEY FIGURES

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# About this Report

☒ 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 fourth sustainability report, with which we are broadening and consolidating our reporting. In the reporting period, we particularly focused on improving the quality of our environmental key figures.

The report 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.

The thematic focus is on the areas of sustainable corporate governance, customers and society, the environment and employees. 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 was prepared in accordance with the core option of the GRI standards (2016 version), supplemented with selected voluntary sector-specific disclosures for "Construction and Real Estate." We have informed GRI of the application of the GRI standards and the publication of this report. 102-54

Vonovia's Sustainability Report is published on an annual basis. This reporting period relates to the 2018 fiscal year (Jan. 1 to Dec. 31, 2018), meaning that it picks up exactly where the 2017 Sustainability Report, which was published in June 2018, left off. 102-50, 102-51, 102-52

In addition, as a capital market-oriented company, Vonovia SE is obliged by the CSR Directive Implementation Act to disclose information pursuant to Sections 289 a-e HGB and 315 b-c HGB (combined non-financial declaration). The necessary reporting requirements were implemented in the management report, which forms part of the annual report, published March 7, 2019.

In order to base our report on the needs of our stakeholders, we identified our relevant stakeholders as part of the 2015 Sustainability Report and analyzed key topics for the sustainability of our business activities. In line with the GRI guidelines, the content of the report was selected based on the criterion of materiality.

In early 2017, we used a structured stakeholder survey and expert interviews to perform a materiality analysis in order to validate these topics. The results of this process have been incorporated into this report. This means that our Sustainability Report covers all topics that either reflect areas in which Vonovia has a major economic, social or ecological impact, or could have a significant impact on our stakeholders. We have refrained from reapplying for the Materiality Disclosures GRI logo this year, as the material topics have not changed since the 2016 reporting period and therefore remain valid (see chapter Material Topics → p.17 et seq.). 102-46, 102-48

In addition, we are following the EPRA Best Practice Recommendations on Sustainability Reporting (sBPR) (third version from 2017) as well as the Code of Conduct of the ZIA Zentraler Immobilien Ausschuss e. V. (the German Property Federation). The collection and calculation of environmental key figures was headed by the Controlling department and supported by Portfolio Management, Business Development, HR, 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).

An independent third party has not conducted an external review of the report's content. The sustainability report was, however, audited by the Internal Audit department. We are working constantly on improving the quality of the data collection processes. 102-56

### Refining the Environmental Key Figures

The environmental key figures underwent comprehensive restructuring in this, our fourth reporting year. An environment controlling team was established in the Controlling department, which resulted in quality improvements in both content definition and data management. This led to new calculation methods being applied to some environmental key figures and new calculations being performed for the previous year's results. Calculation methods for the key figures on energy consumption in the portfolio, water consumption in the portfolio as well as CO<sub>2</sub>e-emissions were improved. Due to the calculation methods applied in 2018, recalculated results for the previous year were published for the following sets of key figures (restate-ment): heating consumption and the resulting CO<sub>2</sub>e emissions in the portfolio, refurbishment intensity in the portfolio, water consumption in the portfolio and fuel consumption in business operations. This allows for comparison of results from 2017 and 2018.

### **Organizational Boundaries/Scope of Consolidation**

The key figures published focus on Vonovia SE's activities in Germany, excluding the recently acquired new areas and sites in Germany, Austria and Sweden. This means the BUWOG companies' portfolio in Germany and Austria and the activities of Victoria Park AB are excluded from sustainability reporting. Accordingly, the environmental key figures for 2018 apply to 337,988 residential and commercial units. Financial key figures on the topic of refurbishment are excluded from this, as they relate to the entire scope of consolidation. The Vonovia Group contains a total of 395,769 residential units (see chapter Housing Stock by Regional Market [AR 2018, p.275](#)). Due to the currently ongoing integration process and different data collection processes, the sustainability figures of these companies will only be fully consolidated in future sustainability reporting. You can find brief profiles of the sustainability activities of the recently acquired business units on pages [→ p.8-11](#). The basic definition of the scope of consolidation will be reviewed for the next reporting cycle and expanded if necessary. [102-45](#)

#### **Portfolio**

The construction of new apartments is a new business area for Vonovia. Environmental impacts and construction emissions are caused by, e.g., the energy consumed on the building site, the manufacture of building materials and transport. Currently, the environmental key figures from construction activity in the Group are not collected consistently. They are therefore not included in this report. New construction activity is a field that Vonovia will be focusing

on in the future as it has become more relevant with the integration of the BUWOG companies. We will thus examine to what extent environmental key figures and CO<sub>2</sub>e emissions that relate to new construction activity can be reported.

#### **Business Operations**

It is Vonovia's objective to attain as complete a view as possible of the environmental impact of the Group, which is spread across a number of different locations. In addition to the company headquarters in Bochum and the large customer service centers in Duisburg and Dresden, there are a number of regional administration offices, caretakers' offices, and offices and workshops used by the technical service and the residential neighborhood services. Some of these belong directly to the Vonovia portfolio; some relate to rented space. For the latter, Vonovia can only improve the environmental performance to a limited extent, or only in agreement with the landlord. The corporate headquarters in Bochum, and the customer service centers in Duisburg and Dresden and twelve other locations have been included in the 2018 reporting. The database was thus significantly expanded in comparison with the previous year. Due to the large number of rented office spaces, recording the environmental key figures for all work locations involves a disproportionately high amount of effort. System boundaries are due to be gradually extended once again for the 2019 reporting period.

The personnel key figures in this report also only cover Vonovia SE's activities in Germany and exclude the activities of the BUWOG companies in Germany and Austria and Victoria Park AB in Sweden.

#### Like-for-like Assessment

Due to portfolio changes from sales and purchases there may, in part, be considerable deviations from the previous year's values. Like-for-like assessments and intensity figures are therefore more suitable when it comes to performance considerations. For the comparison between annual results we again used the data cleansing approach employed by EPRA. That is why the changes in the portfolio were considered as follows in the calculation of like-for-like key figures: Acquisitions after January 1, 2017, were excluded from the portfolio key figures for reporting years, while the portfolio key figures were adjusted for any residential units sold before the end of the 2018 reporting year. This corresponds to the reporting principles used by EPRA.

## CO<sub>2</sub> Emissions

The scope of consolidation relevant for calculating CO<sub>2</sub> emissions was defined in coordination with the scope of consolidation for the other environmental key figures. We deliberately had our calculation of CO<sub>2</sub> emissions audited by an external third party to ensure that these sensitive calculations were conducted independently and in accordance with the highest quality standards.

The calculations of CO<sub>2</sub> emissions were based on the greenhouse gas protocol (GHG Protocol), the internationally recognized standard for calculating CO<sub>2</sub> emissions. CO<sub>2</sub> 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 CO<sub>2</sub> emissions from refurbishments were not calculated as CO<sub>2</sub> equivalents.

The CO<sub>2</sub>e factors from the GEMIS database version 4.95 were applied 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 accurate, up to date and consistent.

### Portfolio

The calculation of CO<sub>2</sub> 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 (around 75%). For the rest of the portfolio, in which the company holds a minority interest, the 2018 CO<sub>2</sub> results are reported under Scope 3.

### Business Operations

CO<sub>2</sub>e factors from the GEMIS database version 4.95 were also applied for the majority of the emissions resulting from business operations. To calculate the market-based emissions from electricity, we used the exact electricity providers' emissions and converted them to CO<sub>2</sub>e emis-

sions. To calculate Scope 3 emissions from rail business travel, we used Deutsche Bahn's emissions factors. GHG Protocol factors from external travel agencies were applied for flights. These CO<sub>2</sub> factors were selected because they are up to date and accurate.

### Data Collection and Raw Data

#### Portfolio

The environmental key figures relating to heat consumption in the portfolio were calculated based on the energy certificate data. These cover heat consumption in both the residential units and communal areas. Energy certificates contain mandatory information regarding the energy rating of individual buildings. Only approved external companies (usually engineering firms or similar) are able to perform these calculations and provide official documents to the building owner. A distinction is made between demand and consumption certificates. The majority of Vonovia energy certificates are covered by demand certificates (approx. 73% in 2018, approx. 58% in 2017), and more demand certificates will be generated in the future.

The environmental key figures for electricity consumption in the portfolio's communal areas are based on smart meter readings and the projected values of the Vonovia company VESG (Vonovia Energie Service GmbH).

The portfolio's water consumption is based on VESG's smart meter readings and refers to the residential and communal areas.

The portfolio's waste volumes are calculated using an average waste volume per residential unit.

#### Business Operations

The offices' environmental key figures are partly based on water and electricity bills from the energy providers, the municipal water utilities and the waste disposal company. Extrapolations were necessary in some cases because the bills from utility companies for the reporting period had not yet been received at the time of publication.

The fuel consumed by Vonovia's fleet was evaluated based on fuel cards.

# Key Figures

This chapter contains additional GRI standards and EPRA sustainability indicators that are relevant to us in relation to employees, the environment and procurement, and which we report on collectively in order to maintain reading flow in the main chapters.

## Employee Key Figures

### Differentiated Group Number of Employees (incl. BUWOG companies and Victoria Park)

Category	Number
Total number of employees	9,923
of which female	2,386
of which permanent	8,863 <sup>1)</sup>
Number of nationalities	78
Average age (total)	41.4 years
Number of people with disabilities	330 <sup>2)</sup>
Total number of trainees	485 <sup>3)</sup>
of which commercial/technical trade	152/333

<sup>1)</sup> = 89.3%

<sup>2)</sup> Not including Victoria Park.

<sup>3)</sup> = 4.9% of the total workforce.

## Employee Key Figures Vonovia Germany

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard
<b>Total Number of Employees by Employment Contract and Gender</b>			
<b>Total headcount</b>	<b>8,448</b>	<b>8,899</b>	
Full-time equivalents	8,123.3	8,579.7	
of which female	1,666.6	1,715.4	
Employees with permanent contracts	7,347	7,916	102-8
of which female	1,381	1,533	
Employees with temporary contracts	576	983	
of which female	236	356	
Temporary workers	73	62	
of which female	38	26	

The number of employees at Vonovia is not subject to seasonal variation.

Total employees according to HGB (excluding interns, external staff, bodies, other employees, employees on parental leave, employees with pre-retirement part-time work arrangements).

Fixed-term contracts excluding interns, trainees, students, temporary staff, marginal employees, bodies, external staff, employees with pre-retirement part-time work arrangements, those on a leave of absence, part-time employees, employees on parental leave.

Key Figures	2017	2018	GRI Standard	GdW
<b>Total Number of Permanent Employees by Type of Employment and Gender</b>				
<b>Full-time employees</b>	<b>7,592</b>	<b>8,090</b>		
of which female	1,331	1,402		
<b>Part-time employees</b>	<b>856</b>	<b>809</b>		
of which female	507	487		
<b>Marginal employees*</b>	<b>181</b>	<b>161</b>	102-8	PE7
of which female	48	47		
<b>Proportion of part-time employees (in %)</b>	<b>11.5</b>	<b>9.1</b>		
of which female (in %)	59.2	60.2		
of which male (in %)	40.8	39.8		

\* The marginally employed are included in the number of part-time employees.

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GdW
<b>Traineeships</b>			
<b>Total number of trainees</b>	<b>462</b>	<b>470</b>	
	122	104	
of which female	26.4%	22.1%	
	144	137	
Commercial trainees	31.2%	29.1%	PE8
	318	333	
Vocational trainees	68.8%	70.9%	
Total number of trainees in part-time training	-	3	
Proportion of trainees in total workforce (in %)	5.5	5.3	
Hiring rate (in %)	72.7	81.1	PE9

Key Figures	2017 <sup>1)</sup>	2018	GRI Standard	EPRA	GdW
<b>Personnel Turnover</b>					
	2,957	1,995			
Newly hired employees	35.0%	22.4%			
	988	1,318			
Employees leaving the company	11.7%	14.8%			
<b>Turnover rate (in %)<sup>1)</sup></b>	<b>11.7</b>	<b>14.8</b>			
Turnover rate in technical service	12.9	15.4	401-1	Emp-Turnover	PE12
Turnover rate in real estate service	3.5	7.9			
Turnover rate in customer service	16.3	16.9			
Turnover rate in holding company	6.3	6.7			
Turnover rate in residential environment	17.1	21.1			
Turnover rate in Immobilien Treuhand	22.9	28.9			

Employees joining and leaving the company: Figures in accordance with the German Commercial Code (excluding trainees, external staff, bodies and miscellaneous employees). Employees leaving the company include voluntary resignations, dismissals, retirement, deaths and expiration of temporary contracts but exclude traineeships that have come to an end and integration process-related dismissals.

<sup>1)</sup> Adjusted for integration process-related dismissals.

Key Figures	2017	2018	GRI Standard
<b>Employees on Parental Leave <sup>1)</sup></b>			
<b>Total number of employees on parental leave</b>	<b>219</b>	<b>171</b>	
	130	58	
of which female	59.4%	33.9%	
	89	113	
of which male	40.6%	66.1%	401-3
Employees returning to their workplace after parental leave <sup>2)</sup>	120	196	
of which female	51	60	
Employees returning to their workplace after parental leave and still employed 12 months after their return <sup>3)</sup>	103	94	
of which female	47	37	

<sup>1)</sup> Since 2017, parental leave that covered only part of the year has been included.  
<sup>2)</sup> All employees that returned from parental leave in 2018.  
<sup>3)</sup> All employees that returned from parental leave in 2017 and were still with the company as of December 31, 2018.

Key Figures	31.12.2017	31.12.2018	GRI Standard	EPRA	GdW
<b>Employee Occupational Safety</b>					
<b>Total number of work and commute-related accidents, total employees</b>	<b>456</b>	<b>462</b>			
of which commute-related accidents	40	52			
of which workplace accidents of employees in technical service	337	329			
of which workplace accidents of real estate service employees	27	29			
of which workplace accidents of customer service employees	5	1			
of which workplace accidents of holding company employees	2	0			
of which workplace accidents of residential environment employees	41	50			
of which workplace accidents of Immobilien Treuhand employees	4	1			
of which workplace accidents of employees in other areas	-	-	403-9 403-10	H&S-Emp	PE11
Number of work and commute-related accidents per 1,000 employees	54	52			
Number of workplace accidents per 1 million working hours	32.9	30.9			
Work-related employee deaths <sup>1)</sup>	0	0			
Work-related employee deaths (in %)	0.0	0.0			
Time lost (in days) <sup>2)</sup>	4,884	5,492			
Time lost (in %) <sup>3)</sup>	0.3	0.3			
Absence (in days) <sup>4)</sup>	103,173	126,780			
Absence (in %) <sup>5)</sup>	5.9	6.8			

Vonovia does not yet record the accident figures of subcontractors.

<sup>1)</sup> Fatalities/number of working hours of all employees (ODR).

<sup>2)</sup> Only time lost due to work and commute-related accidents; occupational diseases cannot be evaluated as the reason for occupational diseases is not recorded in Germany.

<sup>3)</sup> Total days lost due to work-related accidents of all employees/total required working days of all employees (FTE).

<sup>4)</sup> 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.

<sup>5)</sup> Total days lost due to illness of all employees/total required working days of all employees (FTE).

Key Figures	2017	2018	GRI Standard	EPRA	GdW
<b>Further Training</b>					
Number of participants in further training <sup>1)</sup>	1,487	2,176			
Further training rate (in %) <sup>2)</sup>	17.6	24.5			
Cost of further training (in € million)	2.4	3.8	404-1	Emp-Training	PE10
Total further training days <sup>3)</sup>	4,888	6,257			
Further training intensity <sup>3)</sup>	0.60	0.73			
Total hours of further training	39,100	50,454			
Average hours of further training per employee <sup>4)</sup>	4.8	5.9			

<sup>1)</sup> Including works council.

<sup>2)</sup> Number of participants in further training/total employees (headcount).

<sup>3)</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>4)</sup> Total hours of further training/total for all employees (FTE).

Key Figures	2017	2018	GRI Standard	EPRA
<b>Performance Appraisal</b>				
<b>Employees who have had an appraisal interview/performance appraisal</b>	<b>2,700</b>	<b>2,682</b>		
Employees who have had an appraisal interview/performance appraisal (in %)	32.0%	30.1%		
of which female	55.4%	42.2%	404-3	Emp-Dev
of which male	44.6%	57.8%		

Key figures excluding technical service employees.

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	EPRA	GdW
<b>Employees by Category, Gender and Age Group</b>					
<b>Total number of employees</b>	<b>8,448</b>	<b>8,899</b>			
of which female	21.8%	21.2%			
of which under 20 years	0.1%	0.1%			
of which 20-29 years	17.8%	17.5%			
of which 30-39 years	26.3%	26.7%	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
of which 40-49 years	24.8%	24.6%			
of which 50-59 years	25.5%	25.2%			
of which 60-65 years	4.6%	5.3%			
of which over 65 years	0.8%	0.6%			
Average age (in years)	41.11	41.2			

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	EPRA	GdW
<b>Employees in technical service</b>	<b>4,615</b>	<b>4,986</b>			
	323	389			
of which female	7.0%	7.8%			
	3	7			
of which under 20 years	0.1%	0.1%			
	892	906			
of which 20-29 years	19.3%	18.2%			
	1,341	1,453			
of which 30-39 years	29.1%	29.1%	102-7	Diversity-Emp	PE1
	1,198	1,284	102-8		PE2
of which 40-49 years	26.0%	25.8%	405-1		PE3
	1,011	1,111			
of which 50-59 years	21.9%	22.3%			
	161	220			
of which 60-65 years	3.5%	4.4%			
	9	5			
of which over 65 years	0.2%	0.1%			
Average age (in years)	39.55	39.91			
<b>Employees in real estate service</b>	<b>1,359</b>	<b>1,347</b>			
	349	339			
of which female	25.7%	25.2%			
	2	1			
of which under 20 years	0.1%	0.1%			
	83	74			
of which 20-29 years	6.1%	5.5%			
	214	211			
of which 30-39 years	15.7%	15.7%	102-7	Diversity-Emp	PE1
	345	339	102-8		PE2
of which 40-49 years	25.4%	25.2%	405-1		PE3
	562	537			
of which 50-59 years	41.4%	39.9%			
	113	148			
of which 60-65 years	8.3%	11.0%			
	40	37			
of which over 65 years	2.9%	2.7%			
Average age (in years)	47.69	48.17			



Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	EPRA	GdW
<b>Employees in customer service</b>	<b>771</b>	<b>822</b>			
	506	507			
of which female	65.6%	61.7%			
	0	0			
of which under 20 years	0.0%	0.0%			
	185	186			
of which 20-29 years	24.0%	22.6%			
	248	276			
of which 30-39 years	32.2%	33.6%	102-7 102-8 405-1	Diversity- Emp	PE1 PE2 PE3
	152	172			
of which 40-49 years	19.7%	20.9%			
	165	173			
of which 50-59 years	21.4%	21.0%			
	21	15			
of which 60-65 years	2.7%	1.8%			
	0	0			
of which over 65 years	0.0%	0.0%			
Average age (in years)	38.74	38.22			
<b>Employees in holding company</b>	<b>700</b>	<b>763</b>			
	318	350			
of which female	45.4%	45.9%			
	1	2			
of which under 20 years	0.1%	0.3%			
	144	169			
of which 20-29 years	20.6%	22.1%			
	166	180			
of which 30-39 years	23.7%	23.6%	102-7 102-8 405-1	Diversity- Emp	PE1 PE2 PE3
	181	190			
of which 40-49 years	25.9%	24.9%			
	177	193			
of which 50-59 years	25.3%	25.3%			
	31	29			
of which 60-65 years	4.4%	3.8%			
	0	0			
of which over 65 years	0.0%	0.0%			
Average age (in years)	39.45	39.4			

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	EPRA	GdW
<b>Employees in residential environment</b>	<b>580</b>	<b>646</b>			
	64	70			
of which female	11.0%	10.8%			
	2	3			
of which under 20 years	0.3%	0.5%			
	114	133			
of which 20-29 years	19.7%	20.6%			
	157	185			
of which 30-39 years	27.1%	28.6%	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	115	132			
of which 40-49 years	19.8%	20.4%			
	142	151			
of which 50-59 years	24.5%	23.4%			
	34	37			
of which 60-65 years	5.9%	5.7%			
	16	5			
of which over 65 years	2.8%	0.8%			
Average age (in years)	41.01	40.28			
<b>Employees in Immobilien Treuhand</b>	<b>332</b>	<b>332</b>			
	231	234			
of which female	69.6%	70.5%			
	1	0			
of which under 20 years	0.3%	0.0%			
	80	87			
of which 20-29 years	24.1%	26.2%			
	65	75			
of which 30-39 years	19.6%	22.6%	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	80	69			
of which 40-49 years	24.1%	20.8%			
	78	75			
of which 50-59 years	23.5%	22.6%			
	23	21			
of which 60-65 years	6.9%	6.3%			
	5	5			
of which over 65 years	1.5%	1.5%			
Average age (in years)	40.82	40.13			

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	EPRA	GdW
<b>Employees in other sectors</b>	<b>91</b>	<b>3</b>			
	47	0			
of which female	51.6%	0.0%			
	0	0			
of which under 20 years	0.0%	0.0%			
	9	0			
of which 20-29 years	9.9%	0.0%			
	35	1			
of which 30-39 years	38.5%	33.3%	102-7 102-8 405-1	Diversity- Emp	PE1 PE2 PE3
	27	0			
of which 40-49 years	29.7%	0.0%			
	16	1			
of which 50-59 years	17.6%	33.3%			
	3	1			
of which 60-65 years	3.3%	33.4%			
	1	0			
of which over 65 years	1.0%	0.0%			
Average age (in years)	42.24	60.56			

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard
<b>Composition of Controlling Bodies</b>			
<b>Members of the Supervisory Board</b>	<b>11</b>	<b>12</b>	
	4	4	405-1
of which female	36.4%	33.3%	

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard	GdW
<b>Disabled Employees</b>				
<b>Disabled Employees<sup>1)</sup></b>	<b>301</b>	<b>311</b>		
Disabled employees (in %)	3.6	3.5%		
	109	121		
of which employees in technical service	1.3%	1.4%		
	95	97		
of which employees in real estate service	1.1%	1.1%		
	36	33		
of which employees in customer service	0.4%	0.4%	405-1	PE4
	25	24		
of which employees in holding company	0.3%	0.3%		
	18	14		
of which employees in residential environment	0.2%	0.2%		
	9	7		
of which employees in Immobilien Treuhand	0.1%	0.1%		
	9	15		
of which employees in other sectors	0.1%	0.2%		

<sup>1)</sup> According to the social law definition for disabled status pursuant to SGB IX Section 2.

Key Figures	2017	2018	GRI Standard	EPRA
<b>Salary Structure</b>				
Average income male employees (in €) <sup>1)</sup>	34,305.68	35,028.55		
Average income female employees (in €) <sup>1)</sup>	41,504.32	41,949.25	405-2	Diversity-Pay
Average income ratio between female and male employees (in %)	121.0	119.8		

<sup>1)</sup> Employee remuneration in accordance with the German Commercial Code (excluding Fo, Fi and executive employees): monthly salary + allowances + holiday and vacation bonus.

## Environmental Key Figures Vonovia Germany

Key Figures	Unit	2017	2018
<b>General Key Figures</b>			
<b>Portfolio <sup>1)</sup></b>			
Number of rented units	Number	348,474	337,988
of which rented residential units	%	98.9	98.9
of which rented commercial units	%	1.1	1.1
Rentable area	m <sup>2</sup>	22,198,880	21,506,455
of which residential area	%	97.0	97.1
of which commercial area	%	3.0	2.9
Portfolio by age category	Number	344,586	334,218
of which built before 1939	%	14.0	14.0
of which built between 1940 and 1949	%	1.7	1.7
of which built between 1950 and 1959	%	29.1	29.6
of which built between 1960 and 1969	%	21.2	20.9
of which built between 1970 and 1979	%	18.0	17.8
of which built between 1980 and 1989	%	8.7	8.5
of which built between 1990 and 1999	%	6.8	7.0
of which built between 2000 and 2009	%	0.5	0.5
of which built since 2010	%	0.1	0.1
Number of buildings listed as historical landmarks	Number	4,405	4,415

<sup>1)</sup> German portfolio excluding BUWOG. Buildings that serve only as car parks are not included.

## Portfolio Environmental Figures

Key Figures	Unit	2017 <sup>9)</sup>	2018	EPRA	GdW	GRI Standard	Like-for-like (Lfl)			
							2017	2018	Coverage <sup>3)</sup>	EPRA
<b>Energy Consumption in the Portfolio</b>										
<b>Total energy consumption in the portfolio<sup>1) 2)</sup></b>	MWh	<b>3,794,005</b>	<b>3,565,044</b>			302-1	<b>3,428,344</b>	<b>3,337,885</b>	<b>93.4%</b>	
<b>Energy intensity</b>										
<b>Total energy intensity</b> (electricity and heating per m <sup>2</sup> of rentable area)	MWh/m <sup>2</sup>	<b>0.172</b>	<b>0.166</b>		BM5/6		<b>0.171<sup>4)</sup></b>	<b>0.166</b>		
Heating consumption per m <sup>2</sup> of rentable area	MWh/m <sup>2</sup>	0.170	0.164				0.169	0.164		
Electricity per m <sup>2</sup> of rentable area	MWh/m <sup>2</sup>	0.002	0.002				0.002 <sup>4)</sup>	0.002		
Total energy intensity (electricity and heating per rented unit)	MWh/rented unit	10.920	10.550	Energy-Int		302-3	10.812 <sup>4)</sup>	10.526	<b>93.4%</b>	
Heating consumption per rented unit	MWh/rented unit	10.785	10.399				10.684	10.376		
Electricity per rented unit	MWh/rented unit	0.130	0.151				0.128 <sup>4)</sup>	0.139		
<b>Heating consumption in the portfolio</b>										
<b>Total heating consumption in the portfolio<sup>2)</sup></b>	MWh	<b>3,746,884</b>	<b>3,513,857</b>				<b>3,387,785</b>	<b>3,290,061</b>	<b>93.4%</b>	
from non-renewable sources	%	100.0	100.0	DH&C-Abs		302-1	-	-		DH&C-Lfl
from renewable sources	%	0.0	0.0				-	-		
<b>Total consumption of natural gas</b>	MWh	<b>2,057,957</b>	<b>1,886,284</b>				<b>1,873,280</b>	<b>1,774,547</b>	<b>94.0%</b>	
<b>Total consumption of heating oil</b>	MWh	<b>199,762</b>	<b>170,608</b>				<b>186,200</b>	<b>162,916</b>	<b>95.9%</b>	
<b>Total consumption of district heating</b>	MWh	<b>1,349,239</b>	<b>1,344,131</b>				<b>1,206,601</b>	<b>1,247,747</b>	<b>92.7%</b>	
<b>Total consumption of electricity</b>	MWh	<b>82,513</b>	<b>61,340</b>				<b>68,957</b>	<b>54,037</b>	<b>86.0%</b>	
<b>Total consumption of coal</b>	MWh	<b>57,413</b>	<b>51,494</b>				<b>52,746</b>	<b>50,814</b>	<b>98.2%</b>	
<b>Electricity consumption communal areas</b>										
<b>Total electricity consumption in communal areas</b>	MWh	<b>44,909</b>	<b>51,187</b>	Elec-Abs			<b>40,559<sup>6)</sup></b>	<b>47,825<sup>7)</sup></b>	<b>93.4%</b>	Elec-Lfl
from non-renewable sources <sup>8)</sup>	%	58.7	63.5			302-1	-	-		
from renewable sources <sup>8)</sup>	%	41.3	36.5				-	-		

<sup>1)</sup> Consists of electricity consumption in the portfolio's communal spaces and total heat consumption in the portfolio (living and communal areas). Limited comparability due to the adjustment of the calculation method for electricity consumption in communal areas in 2017 (extrapolation of average electricity consumption per rented unit) to the 2018 method (evaluation of electricity meter readings).

<sup>2)</sup> Rentable areas were extrapolated to full building floor space using 20% premium for communal areas in accordance with ENEC 2014 Section 19 (2).

<sup>3)</sup> The share of the like-for-like portfolio as a percentage of the total portfolio, calculated as a share of the rentable area of those buildings that have been constantly in the portfolio for at least two years.

<sup>4)</sup> Limited comparability of like-for-like data for 2017 with 2018 due to the adjustment of the calculation method for like-for-like data for electricity consumption in communal areas, see footnote 6).

<sup>5)</sup> 19.8% share of renewable energy in district heat generation ("location based" Germany mix acc. to Federal Environment Agency), restatement for 2017 (cf. item 9).

<sup>6)</sup> As the figures for 2017 (using extrapolation of average consumption in communal areas) were used as the basis for calculating like-for-like in 2017, comparison of the figures with the like-for-like 2018 figures is limited. See footnote 1).

<sup>7)</sup> The like-for-like figures for electricity consumption in 2018 were calculated based on the like-for-like share of the living area in 2018.

<sup>8)</sup> Calculation based on the share of renewable energy in the German electricity mix 2017 according to BDEW (location-based approach).

<sup>9)</sup> Correction in comparison with the previous year due to change in the method used to energy certificate data for heat.

Key Figures	Unit	2017	2018
<b>Refurbishment</b>			
Number of modernized buildings <sup>3)</sup>	Number	approx. 2,000	approx. 2,300
Number of modernized rented units <sup>3)</sup>	Number	approx. 18,000	approx. 18,000
Modernized rentable area <sup>3)</sup>	Million m <sup>2</sup>	approx. 1.1	approx. 1.1
Number of rented units with upgraded heating systems <sup>3)</sup>	Number	approx. 15,000	approx. 13,000
Modernization rate (refurbishment rate) <sup>3)</sup>	%	approx. 5	approx. 5
Expenses for maintenance and ongoing maintenance <sup>2)</sup>	in € million	346	430
Maintenance intensity <sup>2)</sup>	€/m <sup>2</sup> /a	16	18
Expenses for modernization <sup>1) 2)</sup>	in € million	779	1,139
Modernization intensity <sup>2)</sup>	€/m <sup>2</sup> /a	35	37
Total investment <sup>2)</sup>	in € million	1,125	1,569
Investment intensity <sup>2)</sup>	€/m <sup>2</sup> /a	51	55

<sup>1)</sup> Incl. new construction: 2018: € 234.3 million, 2017: € 65.7 million

<sup>2)</sup> The scope covers Vonovia Group's complete scope of consolidation.

<sup>3)</sup> Includes the program year of Vonovia's portfolio in Germany, excl. BUWOG.

Key Figures	Unit	2017	2018	EPRA
<b>Energy-efficiency Standards Portfolio<sup>1)</sup></b>				
<b>By energy-efficiency rating</b>				
of which energy level A+	%	0.0	0.1	
of which energy level A	%	0.5	0.5	
of which energy level B	%	8.0	7.6	
of which energy level C	%	17.6	19.8	
of which energy level D	%	22.5	24.3	Cert-Tot
of which energy level E	%	18.5	18.8	
of which energy level F	%	13.5	12.2	
of which energy level G	%	7.1	5.8	
of which energy level H	%	5.1	4.0	
of which not disclosed	%	7.2	6.9	

<sup>1)</sup> German portfolio excl. BUWOG and incl. landmarked residential properties. Adjustment of disclosures for 2017. Percentage share determined by rentable area.

Key Figures	Unit	2017 <sup>1)</sup>	2018	EPRA	GRI Standard	Like-for-like (Lfl)			EPRA
						2017	2018	Coverage <sup>2)</sup>	
<b>Fresh water consumption</b>									
Total water consumption	m <sup>3</sup>	42.9	43.8	Water-Abs	303-5	38.9	41.4	95.3%	Water-Lfl
Water intensity	m <sup>3</sup>	1.93	2.04	Water-Int	CRE2	1.93	2.06	95.3%	

<sup>1)</sup> Correction of the figures published in the previous year due to a change in the method used for consumption data from ancillary expense bills.

<sup>2)</sup> The share of the like-for-like portfolio as a percentage of the total portfolio, calculated as a share of the rentable area of those buildings that have been constantly in the portfolio for at least two years.

Key Figures	Unit	2017	2018	EPR	GRI Standard
<b>Waste volume portfolio <sup>1)</sup></b>					
<b>Total waste volume</b>	t	<b>500,134</b>	<b>482,206</b>		
Residual waste	t	126,525	121,990		
Waste paper	t	215,093	207,382		
Recycling	t	45,549	43,916	Waste-Abs	306-2
Organic waste	t	112,968	108,918		
Recycling ratio	%	74.7	74.7		

<sup>1)</sup> Waste volume is based on weekly average amounts per rented unit (excl. commercial units) and type of waste. These average figures are based on the waste containers provided and their volume, not the actual quantity filled.

### Environmental key figures business operations

Key Figures	Unit	2017	2018	EPR	Association of German Housing and Real Estate Companies (GdW)	GRI Standard
<b>Resource consumption</b>						
<b>Energy consumption office locations <sup>1)</sup></b>						
Total energy consumption (electricity and heating)	MWh	7,768	10,017		GP1	
Total electricity consumption	MWh	3,390	3,313	Elec-Abs		
Proportion from renewable energy sources <sup>2)</sup>	%	45	42			302-1
Total heating consumption	MWh	4,377	6,703			
of which natural gas	MWh	3,171	3,410	DH&C-Abs		
of which district heating	MWh	1,206	3,293			
Energy intensity	MWh/m <sup>2</sup>	0.26	0.15	Energy-Int	GP2	302-3
<b>Total fuel consumption <sup>3)</sup></b>	MWh	<b>67,241 <sup>4)</sup></b>	<b>69,164</b>			
of which diesel	MWh	65,127 <sup>4)</sup>	66,584	Fuels-Abs		302-1
of which petrol	MWh	2,114 <sup>4)</sup>	2,580			
Average number of vehicles	Number	4,244	4,809			
Average fuel consumption	Liter/vehicle/month	132 <sup>4)</sup>	120			
<b>Water consumption office locations <sup>1)</sup></b>						
Total water consumption	m <sup>3</sup>	15,698	19,285	Water-Abs	GP6	303-5
Water intensity	m <sup>3</sup> /m <sup>2</sup>	0.52	0.33	Water-Int		CRE2

<sup>1)</sup> 2017 and 2018 results not comparable due to the fact that the database for 2018 was significantly expanded. Only three office locations were taken into consideration in 2017. In 2018, data was collected for 15 office locations, this includes locations with more than 500 m<sup>2</sup> of office space as well as several locations shared by Vonovia companies/organizations.

<sup>2)</sup> The share of renewable energy sources relates primarily to individual energy suppliers' disclosures at each location (market-based approach). In rare cases there was no information from the suppliers and we had to apply the German electricity mix in accordance with BDEW (location-based approach).

<sup>3)</sup> Only fuel consumption of the fleet was taken into consideration where no fuel from renewable sources is used.

<sup>4)</sup> Adjusted for fuel consumption outside of the fleet.



Key Figures	Unit	2017	2018
<b>Energy Generation and Sale</b>			
<b>Energy Generation</b>			
Total energy generation (heat & electricity) <sup>1)</sup>	MWh	4,180	15,088
Share of renewable energy <sup>2)</sup>	%	88.3	35.3
Total electricity generated	MWh	4,180	10,848
of which generated by cogeneration units <sup>3)</sup>	MWh	494	5,520
of which generated by photovoltaic plants	MWh	3,686	5,328
Heat generated by cogeneration units <sup>3)</sup>	MWh	-	4,240
<b>Energy Sold</b>			
Total energy sold <sup>4)</sup>	MWh	4,234	19,867
of which from renewable energy sources <sup>5)</sup>	%	88.3	50.2
Total gas sold <sup>6)</sup>	MWh	-	329,798

<sup>1)</sup> 2017: Electricity generated from photovoltaic plants (PV plants) and company-owned cogeneration units (CHP units). 2018: Electricity and heat supplied by PV plants and contracted CHP units.

<sup>2)</sup> Solely shows the amounts generated by PV plants.

<sup>3)</sup> 2017: Generated by company-owned mini CHP units. 2018: Only contract plants belonging to third parties operated on behalf of Vonovia taken into consideration.

<sup>4)</sup> 2017: Electricity generated and sold. 2018: Electricity traded exclusively by VESG procured on the electricity exchange.

<sup>5)</sup> Electricity sold to rentable areas for which the proof of origin states that it is 100% green electricity and electricity for the portfolio's communal areas in accordance with the German electricity mix according to BDEW (procured on the electricity exchange).

<sup>6)</sup> Gas sold to tenants by Vonovia company (VESG).

Key Figures	Unit	2017	2018	EPRA	GRI Standard
<b>Waste volume office locations</b>					
Total volume of commercial municipal waste <sup>1)</sup>	t	74	262		
of which recycled commercial municipal waste	%	38.0	40.2		
of which residual commercial municipal waste	%	62.0	59.8	Waste-Abs	306-2
Other waste <sup>1) 2)</sup>	%	-	63		

<sup>1)</sup> Comparability of results 2017 to 2018 not given due to the fact that the database for 2018 was significantly expanded. Only three office locations were taken into consideration in 2017. In 2018, data was collected for 15 office locations, this includes locations with more than 500 m<sup>2</sup> of office space as well as several locations shared by Vonovia companies/organizations.

<sup>2)</sup> Other waste includes bulk waste, wood, iron and steel.

Key Figures	Unit	2017	2018
<b>Business Journeys</b>			
By rail	Pkm <sup>1)</sup>	2,958,119	3,205,295
By plane	km	2,130,323	2,597,449
Amount of flights	Number	3,670	4,664
By private vehicle	km	-	2,784,873

<sup>1)</sup> Person kilometers (pkm) are the measurement unit for transport performance which uses kilometers traveled in public transport multiplied by the number of travelers.

## CO<sub>2</sub> Balance Sheet

Key Figures	Unit	2017	2018	EPRA	GRI Standard	Like-for-like (Lfl)		
						2017	2018	Change <sup>2)</sup>
<b>CO<sub>2</sub>e emissions in portfolio</b>								
Total CO <sub>2</sub> e emissions in portfolio	t CO <sub>2</sub> e	1,125,712	1,049,766					
Total CO <sub>2</sub> e emissions per r.u.	t CO <sub>2</sub> e	1,098,531	1,021,244		305-1			
Total CO <sub>2</sub> e emissions in communal areas	t CO <sub>2</sub> e	27,181	28,522					
CO <sub>2</sub> e heating intensity per rented unit	t CO <sub>2</sub> e/r.u.	3.320	3.012	GHG-Int	305-4 CRE3			
CO <sub>2</sub> e heating intensity per rentable area	t CO <sub>2</sub> e/m <sup>2</sup>	0.051	0.049					
CO <sub>2</sub> e reductions by heating program	t CO <sub>2</sub> e	7,400	6,958		305-5			
CO <sub>2</sub> e reductions by modernization	t CO <sub>2</sub> e	22,358	20,348					
<b>Scope 1 (direct CO<sub>2</sub>e emissions)</b>								
<b>Combustion processes at stationary plants</b>	<b>t CO<sub>2</sub>e</b>	<b>602,993</b>	<b>522,421</b>					
Heating from natural gas (r.u.)	t CO <sub>2</sub> e	514,451	449,860	GHG-Dir-Abs	305-1	446,340	443,604	-1%
Heating from heating oil (r.u.)	t CO <sub>2</sub> e	63,494	50,580			59,183	51,782	-13%
Heating from coal (r.u.)	t CO <sub>2</sub> e	25,049	21,980			23,013	22,170	-4%
<b>Scope 2 (indirect CO<sub>2</sub>e emissions)</b>								
<b>Location-based</b>	<b>t CO<sub>2</sub>e</b>	<b>428,840</b>	<b>406,913</b>					
Electricity (communal areas)	t CO <sub>2</sub> e	27,181	28,522	GHG-Indir-Abs	305-2	24,734	26,646	8%
Heating, electricity (r.u.)	t CO <sub>2</sub> e	49,491	34,668			35,572	27,544	-23%
Heating, district heating (r.u.)	t CO <sub>2</sub> e	351,718	343,723			273,173	279,883	2%
<b>Other indirect CO<sub>2</sub>e emissions (Scope 3)</b>								
<b>Commodities leased downstream <sup>1)</sup></b>	<b>t CO<sub>2</sub>e</b>	<b>-</b>	<b>34,930</b>					
Natural from gas (r.u.)	t CO <sub>2</sub> e	-	21,676			21,945	21,173	-4%
Heating from oil (r.u.)	t CO <sub>2</sub> e	-	3,647			3,803	3,578	-6%
Coal (r.u.)	t CO <sub>2</sub> e	-	486	GHG-Indir-Abs	305-3	431	484	12%
Heating from electricity (r.u.)	t CO <sub>2</sub> e	-	2,458			2,931	2,437	-17%
Heating from district heating (r.u.)	t CO <sub>2</sub> e	-	6,663			6,515	6,493	0%
<b>Fuel and energy-related emissions (not Scope 1 and 2)</b>	<b>t CO<sub>2</sub>e</b>	<b>93,879</b>	<b>85,502</b>					
Upstream, natural gas (r.u.)	t CO <sub>2</sub> e	84,668	77,605	GHG-Indir-Abs	305-3			
Upstream, heating oil (r.u.)	t CO <sub>2</sub> e	8,506	7,265					
Upstream, coal (r.u.)	t CO <sub>2</sub> e	705	632					

Greenhouse gases included in the calculations: CO<sub>2</sub> equivalent (greenhouse gases regulated by the Kyoto Protocol: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs).

Sources of emission factors: GEMIS 4.95

<sup>1)</sup> Condominium buildings (ownership rate ≤ 50 %), calculated separately for the first time in 2018.

<sup>2)</sup> Decline in CO<sub>2</sub> emissions in like-for-like comparison primarily due to modernization projects and change in energy source (e.g., replacement of heating oil and electricity as energy source). The increase in CO<sub>2</sub> emissions from electricity is due to the calculation method used in 2018; a like-for-like comparison with the actual figures for 2017 is therefore not possible.

	Unit	2017	2018	EPRA	GdW	GRI Standard
<b>CO<sub>2</sub>e emissions in business operations</b>						
<b>Total CO<sub>2</sub>e emissions in business operations</b>	t CO <sub>2</sub> e	<b>27,563</b>	<b>29,342</b>			
CO <sub>2</sub> e emissions per square meter <sup>3)</sup>	t CO <sub>2</sub> e / m <sup>2</sup>	0.10	0.06	GHG-Int		305-4
<b>Scope 1 (direct CO<sub>2</sub>e emissions)</b>						
<b>Combustion processes at stationary plants</b>	t CO <sub>2</sub> e	638	852			
Natural gas	t CO <sub>2</sub> e	638	852			
<b>Combustion processes at mobile plants</b>	t CO <sub>2</sub> e	20,512	21,084	GHG-Dir-Abs	GP4	305-1
Gasoline	t CO <sub>2</sub> e	570	696			
Diesel	t CO <sub>2</sub> e	19,942	20,388			
<b>Scope 2 (indirect CO<sub>2</sub>e emissions)</b>						
<b>Location-based</b>	t CO <sub>2</sub> e	2,284	2,864			
Electricity	t CO <sub>2</sub> e	1,914	2,005			
District heating	t CO <sub>2</sub> e	370	860	GHG-Indir-Abs	GP4	305-2
<b>Market-based</b>	t CO <sub>2</sub> e	1,278	1,224			
Electricity	t CO <sub>2</sub> e	1,278	1,224			
District heating <sup>1)</sup>	t CO <sub>2</sub> e	-	-			
<b>Scope 3 (other indirect CO<sub>2</sub>e emissions)</b>						
<b>Business Journeys</b>	t CO <sub>2</sub> e	330	710			
By rail	t CO <sub>2</sub> e	19	16			
By plane	t CO <sub>2</sub> e	311	318			
Per private vehicle <sup>2)</sup>	t CO <sub>2</sub> e	-	377			
<b>Fuel and energy-related emissions (not Scope 1 and 2)</b>		3,779	3,831		GP4	305-3
from stationary combustion upstream (natural gas)	t CO <sub>2</sub> e	214	140			
from mobile combustion upstream (petrol)	t CO <sub>2</sub> e	128	157			
from mobile combustion upstream (diesel)	t CO <sub>2</sub> e	3,457	3,534			

Greenhouse gases included in the calculation: CO<sub>2</sub> equivalents (greenhouse gases regulated by the Kyoto Protocol: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs). Sources of emission factors: GEMIS 4.95, Deutsche Bahn, BCD Travel GHG Protocol

<sup>1)</sup> Due to missing supplier disclosures/certificates, we are not able to disclose Scope 2 emissions for district heating in accordance with the market-based method.

<sup>2)</sup> Collected for the first time in 2018.

<sup>3)</sup> Only stationary emissions taken into account.

## Procurement Practices

Key Figures	Unit	2017	2018	GRI Standard
<b>Suppliers</b>				
<b>Supplier structure</b>				
Number of suppliers <sup>1)</sup>	Number	4,259	4,524	
of which from Germany <sup>2)</sup>	Number	4,179	4,509	
of which from Europe (excl. Germany) <sup>3)</sup>	Number	80	15	
of which contract partners (minor maintenance work, renovation of vacant apartments and construction) <sup>4)</sup>	Number	2,530	1,354	102-9 204-1
of which suppliers of material	Number	729	347	
of which ancilliary costs <sup>5)</sup>	Number	750	113	
of which material costs <sup>6)</sup>	Number	250	225	
<b>Local suppliers</b>				
Amount of local suppliers as a proportion of the procurement budget	%	95	98	204-1
<b>Review of suppliers</b>				
Amount of new suppliers reviewed on the basis of				
Environmental criteria	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Human rights	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Labor standards	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Corruption	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Amount of existing suppliers reviewed on the basis of				
Environmental criteria	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Human rights	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Labor standards	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Corruption	Number	- <sup>7)</sup>	- <sup>7)</sup>	
Amount of cases of noncompliance with				
Environmental criteria	Number	-	0	308-1 414-1
Human rights	Number	-	0	
Labor standards	Number	-	0	
Corruption	Number	-	0	
Amount of suppliers identified as not complying with the following criteria and for which corrective measures have been agreed				
Environmental criteria	Number	-	0	
Human rights	Number	-	0	
Labor standards	Number	-	0	
Corruption	Number	-	0	
Amount of suppliers identified as not complying with the following criteria and with which the business relationship was subsequently terminated				
Environmental criteria	Number	-	0	
Human rights	Number	-	0	
Labor standards	Number	-	0	
Corruption	Number	-	0	

<sup>1)</sup> The figures include all suppliers who are actively managed by the procurement departments in the centralized procurement process. Suppliers with minimal revenue were eliminated from calculation.

<sup>2)</sup> The increase in the supplier base is a consequence of the stronger regional presence of the procurement department as well as integrations in Germany (BUWOG DE portfolio).

<sup>3)</sup> The figures were based on estimates in previous years; systematically we currently use only 15 foreign suppliers, mainly in Eastern Europe.

<sup>4)</sup> The figure was based on estimates in previous years; the 2018 figure reflects active contracts in construction services

<sup>5)</sup> Includes all costs that were allocated to the tenant, e.g., staircase lighting or cleaning, disposal costs or similar.

<sup>6)</sup> Includes tools, work uniforms, office and business equipment, IT, telecommunications.

<sup>7)</sup> No systematic audits. However, upon hiring, suppliers commit to conforming to our standards by signing the Business Partner Code.

# GRI Content Index

☒ 102-55

**In the GRI Content Index we report on at least one associated indicator for every topic that has been identified as material in order to make our performance in this area transparent.**

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<b>GRI 102: General Disclosures 2016</b>			
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102-5	Ownership and legal form	6	
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102-8	Information on employees and other workers	84, 86, 92, 93, 95-99	
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102-11	Precautionary Principle or approach	Vonovia does not yet comply with the precautionary principle of the UN.	
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Material topic	Name of the indicator	Page in the report	Omissions
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**Material topic**

**GRI 201: Economic Performance 2016**

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**GRI 203: Indirect Economic Impacts 2016**

103-1	Explanation of the material topic and its boundaries	19-20, 24-26, 28-29, 40, 46, 63	
103-2	The management approach and its components	26-29, 41-42, 47-49, 64	
103-3	Evaluation of the management approach	26-29, 41-42, 47-49, 64	
203-1	Infrastructure investments and services supported	24	not applicable, as figures are not currently available in this form.
203-2	Significant indirect economic impacts	29, 41, 47-49, 64	not applicable, as figures are not currently available in this form.

**GRI 204: Procurement Practices 2016**

103-1	Explanation of the material topic and its boundaries	19-20, 65	
103-2	The management approach and its components	65-67, AR 2018: 93	
103-3	Evaluation of the management approach	65-67, AR 2018: 93	
204-1	Proportion of spending on local suppliers	66, 108	

Material topic	Name of the indicator	Page in the report	Omissions
<b>GRI 205: Anti-corruption 2016</b>			
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205-2	Communication and training about anti-corruption policies and procedures	34, 36	
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206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	35	
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103-1	Explanation of the material topic and its boundaries	19-20, 68	
103-2	The management approach and its components	68-69	
103-3	Evaluation of the management approach	68-69	
301-1	Materials used by weight or volume	69	
301-2	Recycled input materials used	69	
<b>GRI 302: Energy 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 55-56, 58-59, 68	
103-2	The management approach and its components	56-62, 68-69	
103-3	Evaluation of the management approach	56-57, 59-62, 68-69	
302-1	Energy consumption within the organization	61, 102, 104	
302-3	Energy intensity	60, 102, 104	
302-4	Reduction of energy consumption	60, 61, 69	
302-5	Reductions in energy requirements of products and services	60	
CRE1	Building energy intensity	60	
<b>GRI 303: Water and effluents 2018</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 58-59	
103-2	The management approach and its components	58-62	
103-3	Evaluation of the management approach	-	*
303-5	Water withdrawal by source	103, 104	
CRE2	Building water intensity	103, 104	

\* At the moment, the management approach is not yet subject to a structured evaluation.

Material topic	Name of the indicator	Page in the report	Omissions
<b>GRI 304: Biodiversity 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20	
103-2	The management approach and its components	This aspect is currently not evaluated by means of an explicit management approach at Vonovia. Of course, we keep in mind which of our residential buildings are located in, or adjacent to, protected areas and take appropriate measures if needed.	
103-3	Evaluation of the management approach		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	-	
<b>GRI 305: Emissions 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 55-56, 58-59, 70	
103-2	The management approach and its components	56-62, 70-71	
103-3	Evaluation of the management approach	56-57, 59-62, 70-71	
305-1	Direct (Scope 1) GHG emissions	106, 107	
305-2	Energy indirect (Scope 2) GHG emissions	106, 107	
305-3	Other indirect (Scope 3) GHG emissions	106, 107	
305-4	GHG emissions intensity	106, 107	
305-5	Reduction of GHG emissions	60, 61, 71, 106	
CRE3	GHG emissions intensity from buildings	106	
<b>GRI 306: Effluents and Waste 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20	
103-2	The management approach and its components	65-67	
103-3	Evaluation of the management approach	-	*
306-2	Waste by type and disposal method	66, 104, 105	
<b>GRI 307: Environmental Compliance 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 32, 65	
103-2	The management approach and its components	32-36, 65-67	
103-3	Evaluation of the management approach	33-36, 65-67	*
307-1	Noncompliance with environmental laws and regulations	During the reporting year, no material violations of applicable environmental laws and regulations became known. There were no significant fines or other monetary penalties.	
<b>GRI 308: Supplier Environmental Assessment 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 65	
103-2	The management approach and its components	65-67	*
103-3	Evaluation of the management approach	65-67	*
308-1	New suppliers that were screened using environmental criteria	67, 108	No percentage available.
308-2	Negative environmental impacts in the supply chain and actions taken	35, 66 During the reporting period, no significant actual or potential negative environmental impacts in the supply chain became known.	

\* At the moment, the management approach is not yet subject to a structured evaluation.



Material topic	Name of the indicator	Page in the report	Omissions
<b>GRI 401: Employment 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 73-75, 84	
103-2	The management approach and its components	75, 84-85	
103-3	Evaluation of the management approach	75	
		73, 93 As Vonovia is divided into companies and employs only a few people abroad, the figures are not presented according to strategic regions.	Vonovia does not provide a breakdown by age and gender.
401-1	New employee hires and employee turnover		
401-3	Parental leave	84, 85, 94	
<b>GRI 402: Labor/Management Relations 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 73-75	
103-2	The management approach and its components	-	**
103-3	Evaluation of the management approach	-	**
402-1	Minimum notice period regarding operational changes	74	
<b>GRI 403: Occupational Health and Safety 2018</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 80-82	
103-2	The management approach and its components	80-83	
103-3	Evaluation of the management approach	82-83	
403-2	Hazard identification, risk assessment, and incident investigation	80	
403-4	Worker participation, consultation, and communication on occupational health and safety	81	
403-5	Worker training on occupational health and safety	82-83	
403-6	Promotion of worker health	82-83	
403-9	Work-related injuries	94	
403-10	Work-related ill health	94	
<b>GRI 404: Training and Education 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 76-78	
103-2	The management approach and its components	76-79	
103-3	Evaluation of the management approach	78-79	
			No breakdown by gender, as the figures are not currently available in this form.
404-1	Average hours of training per year per employee	95	
404-3	Percentage of employees receiving regular performance and career development reviews	95	
<b>GRI 405: Diversity and Equal Opportunity 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 32-33, 86	
103-2	The management approach and its components	32-36, 86-87	
103-3	Evaluation of the management approach	86-87	
405-1	Diversity of governance bodies and employees	34, 86, 95-100	
405-2	Ratio of basic salary and remuneration of women to men	87, 100	

\* At the moment, the management approach is not yet subject to a structured evaluation.

\*\* Currently, Vonovia does not evaluate this aspect by means of an explicit management approach.

Material topic	Name of the indicator	Page in the report	Omissions
<b>GRI 406: Non-discrimination 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 86	
103-2	The management approach and its components	86-87	
103-3	Evaluation of the management approach	-	*
406-1	Incidents of discrimination and corrective actions taken	87	
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 73-75	
103-2	The management approach and its components	75	
103-3	Evaluation of the management approach	75	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	74 The right to freedom of association and collective bargaining is granted in all locations. Vonovia minimizes labour law risks associated with contractors with its Business Partner Code.	
<b>GRI 413: Local Communities 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 46-47, 50-51	
103-2	The management approach and its components	46-49, 50-53	
103-3	Evaluation of the management approach	47-49, 51-53	
413-1	Operations with local community engagement, and development programs	47-49, 52-53	No percentage available
<b>GRI 414: Supplier Social Assessment 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 32-33	
103-2	The management approach and its components	32-36	
103-3	Evaluation of the management approach	33-36	
414-1	New suppliers that were screened using social criteria	36, 108	
414-2	Negative social impacts in the supply chain and actions taken	36	
<b>GRI 415: Public Policy 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 28-29	
103-2	The management approach and its components	30	**
103-3	Evaluation of the management approach	-	**
415-1	Political contributions	28	
<b>GRI 416: Customer Health and Safety 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 32-33, 43	
103-2	The management approach and its components	32-36, 43-45	
103-3	Evaluation of the management approach	33-36, 43-45	*
416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	-	

\* At the moment, the management approach is not yet subject to a structured evaluation.

\*\* Currently, Vonovia does not evaluate this aspect by means of an explicit management approach.

Material topic	Name of the indicator	Page in the report	Omissions
<b>GRI 417: Marketing and Labeling 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20	
103-2	The management approach and its components	-	*
103-3	Evaluation of the management approach	-	*
417-2	Incidents of noncompliance concerning product and service information and labeling	During the reporting year, no significant violations of regulations and voluntary codes concerning product and service information and labeling became known.	
<b>GRI 419: Socioeconomic Compliance 2016</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 32-33	
103-2	The management approach and its components	32-36	
103-3	Evaluation of the management approach	33-36	
419-1	Noncompliance with product and service regulations	34	
<b>Portfolio Maintenance 2016 (Material topic not covered by GRI)</b>			
103-1	Explanation of the material topic and its boundaries	19-20, 43	
103-2	The management approach and its components	43-45	
103-3	Evaluation of the management approach	43-45	

# EPRA sBPR

## Overarching Recommendations

Code	Page
Organisational Boundaries	90-91
Estimation of landlord-obtained utility consumption	90-91
Boundaries - reporting on landlord and tenant consumption	90-91

## Performance Measures

Code	Performance Measure	Unit	Page
<b>Environment</b>			
Elec-Abs	Total electricity consumption	MWh/year	102, 104
Elec-Lfl	Total electricity consumption like-for-like	MWh/year	104
DH&C-Abs	Total district heating & cooling consumption	MWh/year	102-103
DH&C-Lfl	Total district heating & cooling consumption like-for-like	MWh/year	103
Fuels-Abs	Total fuel consumption	MWh/year	102
Fuels-Lfl	Total fuel consumption like-for-like	MWh/year	104
Energy-Int	Building energy intensity	kWh/m <sup>2</sup>	102-103
GHG-Dir-Abs	Total direct greenhouse gas (GHG) emissions (scope 1)	t CO <sub>2</sub> /year	105-107
GHG-Indir-Abs	Total indirect greenhouse gas (GHG) emissions (scope 2)	t CO <sub>2</sub> /year	105-107
GHG-Int	Greenhouse gas (GHG) intensity from building energy	t CO <sub>2</sub> /m <sup>2</sup> and t CO <sub>2</sub> /units	107
Water-Abs	Total water consumption	m <sup>3</sup> /year	102, 105
Water-Lfl	Total water consumption like-for-like	m <sup>3</sup> /year	105
Water-Int	Building water intensity	t CO <sub>2</sub> /m <sup>2</sup> and t CO <sub>2</sub> /units	102, 105
Waste-Abs	Total weight of waste	t/year	103, 105
Waste-Lfl	Total weight waste like-for-like	t/year	Not material
Cert-Tot	Type and number of sustainably certified assets	Number	103
<b>Social</b>			
Diversity-Emp	Employee gender diversity	%	95-99
Diversity-Pay	Gender pay ratio	Ratio	100
Emp-Training	Training and development	Number	95
Emp-Dev	Employee performance appraisals	%	95

Code	Performance Measure	Unit	Page
Emp-Turnover	Employee turnover and retention	Number and %	93
H&S-Emp	Employee health and safety	Number	94
H&S-Asset	Asset health and safety assessments	%	45
H&S-Comp	Asset health and safety compliance	Number	45
Comty-Eng	Community engagement, impact assessments and development programmes	%	28-30, 50-53

### Governance

Gov-Board	Composition of the highest governance body	Number	AR 2018: 34-35
Gov-Selec	Nominating and selecting the highest governance body	Narrative on Performance	AR 2018: 46-51
Gov-COI	Process for managing conflicts of interest	Narrative on Performance	AR 2018: 46-51

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