INFORMATION AND KEY FIGURES

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_2e-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 (restatement): heating consumption and the resulting CO_2e 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_2e 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_2 Emissions

The scope of consolidation relevant for calculating CO_2 emissions was defined in coordination with the scope of consolidation for the other environmental key figures. We deliberately had our calculation of CO_2 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_2 emissions were based on the greenhouse gas protocol (GHG Protocol), the internationally recognized standard for calculating CO_2 emissions. CO_2 emissions were calculated as CO_2 equivalents (CO_2e). Carbon dioxide equivalent (CO_2e) 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_2), although it is the most well-known. Other gases, such as methane (CH4) and nitrous oxide (N2O), are converted to CO_2 equivalents using a conversion factor, which simplifies comparability in terms of detrimental effects on the climate. Only the CO_2 emissions from refurbishments were not calculated as CO_2 equivalents.

The CO_2e 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_2 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_2 results are reported under Scope 3.

Business Operations

CO_2e 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_2e emissions. 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_2 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 [1)]
Number of nationalities	78
Average age (total)	41.4 years
Number of people with disabilities	330 [2)]
Total number of trainees	485 [3)]
of which commercial/technical trade	152/333

[1)] = 89.3%
[2)] Not including Victoria Park.
[3)] = 4.9% of the total workforce.

Employee Key Figures Vonovia Germany

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GRI Standard
Total Number of Employees by Employment Contract and Gender			
Total headcount	**8,448**	**8,899**	102-8
Full-time equivalents	8,123.3	8,579.7	102-8
of which female	1,666.6	1,715.4	102-8
Employees with permanent contracts	7,347	7,916	102-8
of which female	1,381	1,533	102-8
Employees with temporary contracts	576	983	102-8
of which female	236	356	102-8
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
Total Number of Permanent Employees by Type of Employment and Gender				
Full-time employees	**7,592**	**8,090**	102-8	PE7
of which female	1,331	1,402		
Part-time employees	**856**	**809**		
of which female	507	487		
Marginal employees*	**181**	**161**		
of which female	48	47		
Proportion of part-time employees (in %)	**11.5**	**9.1**		
of which female (in %)	59.2	60.2		
of which male (in %)	40.8	39.8		

[1] The marginally employed are included in the number of part-time employees.

Key Figures	Dec. 31, 2017	Dec. 31, 2018	GdW
Traineeships			
Total number of trainees	**462**	**470**	PE8
of which female	122	104	
	26.4%	22.1%	
Commercial trainees	144	137	
	31.2%	29.1%	
Vocational trainees	318	333	
	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[1]	2018	GRI Standard	EPRA	GdW
Personnel Turnover					
Newly hired employees	2,957	1,995	401-1	Emp-Turnover	PE12
	35.0%	22.4%			
Employees leaving the company	988	1.318			
	11.7%	14.8%			
Turnover rate (in %) [1]	**11.7**	**14.8**			
Turnover rate in technical service	12.9	15.4			
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.
[1] Adjusted for integration process-related dismissals.

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

[1] Since 2017, parental leave that covered only part of the year has been included.
[2] All employees that returned from parental leave in 2018.
[3] 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
Employee Occupational Safety					
Total number of work and commute-related accidents, total employees	**456**	**462**	403-9 403-10	H&S-Emp	PE11
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	–	–			
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 [1]	0	0			
Work-related employee deaths (in %)	0.0	0.0			
Time lost (in days) [2]	4,884	5,492			
Time lost (in %) [3]	0.3	0.3			
Absence (in days) [4]	103,173	126,780			
Absence (in %) [5]	5.9	6.8			

Vonovia does not yet record the accident figures of subcontractors.
[1] Fatalities/number of working hours of all employees (ODR).
[2] 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.
[3] Total days lost due to work-related accidents of all employees/total required working days of all employees (FTE).
[4] 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.
[5] 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
Further Training					
Number of participants in further training [1]	1,487	2,176	404-1	Emp-Training	PE10
Further training rate (in %) [2]	17.6	24.5			
Cost of further training (in € million)	2.4	3.8			
Total further training days [3]	4,888	6,257			
Further training intensity [3]	0.60	0.73			
Total hours of further training	39,100	50,454			
Average hours of further training per employee [4]	4.8	5.9			

[1] Including works council.
[2] Number of participants in further training/total employees (headcount).
[3] 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).
[4] Total hours of further training/total for all employees (FTE).

Key Figures	2017	2018	GRI Standard	EPRA
Performance Appraisal				
Employees who have had an appraisal interview/performance appraisal	**2,700**	**2,682**	404-3	Emp-Dev
Employees who have had an appraisal interview/performance appraisal (in %)	32.0%	30.1%		
	1,495	1,131		
of which female	55.4%	42.2%		
	1,205	1,551		
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
Employees by Category, Gender and Age Group					
Total number of employees	**8,448**	**8,899**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	1,838	1,889			
of which female	21.8%	21.2%			
	9	13			
of which under 20 years	0.1%	0.1%			
	1,507	1,555			
of which 20–29 years	17.8%	17.5%			
	2,226	2,381			
of which 30–39 years	26.3%	26.7%			
	2,098	2,186			
of which 40–49 years	24.8%	24.6%			
	2,151	2,241			
of which 50–59 years	25.5%	25.2%			
	386	471			
of which 60–65 years	4.6%	5.3%			
	71	52			
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
Employees in technical service	**4,615**	**4,986**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	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%			
	1.198	1.284			
of which 40–49 years	26.0%	25.8%			
	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			
Employees in real estate service	**1,359**	**1,347**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	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%			
	345	339			
of which 40–49 years	25.4%	25.2%			
	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
Employees in customer service	**771**	**822**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	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%			
	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			
Employees in holding company	**700**	**763**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	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%			
	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
Employees in residential environment	**580**	**646**			
	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			
Employees in Immobilien Treuhand	**332**	**332**			
	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
Employees in other sectors	**91**	**3**	102-7 102-8 405-1	Diversity-Emp	PE1 PE2 PE3
	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%			
	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
Composition of Controlling Bodies			
Members of the Supervisory Board	**11**	**12**	405-1
	4	4	
of which female	36.4%	33.3%	

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

[1] According to the social law definition for disabled status pursuant to SGB IX Section 2.

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

[1] Employee remuneration in accordance with the German Commercial Code (excluding F0, F1 and executive employees): monthly salary + allowances + holiday and vacation bonus.

Environmental Key Figures Vonovia Germany

Key Figures	Unit	2017	2018
General Key Figures			
Portfolio [1]			
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^2	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

[1] German portfolio excluding BUWOG. Buildings that serve only as car parks are not included.

Portfolio Environmental Figures

							Like-for-like (Lfl)			
Key Figures	Unit	2017 [9]	2018	EPRA	GdW	GRI Standard	2017	2018	Coverage [3]	EPRA
Energy Consumption in the Portfolio										
Total energy consumption in the portfolio [1] [2]	MWh	**3,794,005**	**3,565,044**			302-1	**3,428,344**	**3,337,885**	**93.4%**	
Energy intensity										
Total energy intensity (electricity and heating per m² of rentable area)	MWh/m²	**0.172**	**0.166**		BM5/6		**0.171** [4]	**0.166**		
Heating consumption per m² of rentable area	MWh/m²	0.170	0.164				0.169	0.164		
Electricity per m² of rentable area	MWh/m²	0.002	0.002				0.002 [4]	0.002		
Total energy intensity (electricity and heating per rented unit)	MWh/rented unit	10.920	10.550	Energy-Int		302-3	10.812 [4]	10.526	**93.4%**	
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 [4]	0.139		
Heating consumption in the portfolio										
Total heating consumption in the portfolio [2]	MWh	**3,746,884**	**3,513,857**				**3,387,785**	**3,290,061**	**93.4%**	
from non-renewable sources	%	100.0	100.0	DH&C-Abs		302-1	-	-		DH&C-Lfl
from renewable sources	%	0.0	0.0				-	-		
Total consumption of natural gas	MWh	**2,057,957**	**1,886,284**				**1,873,280**	**1,774,547**	**94.0%**	
Total consumption of heating oil	MWh	**199,762**	**170,608**				**186,200**	**162,916**	**95.9%**	
Total consumption of district heating	MWh	**1,349,239**	**1,344,131**				**1,206,601**	**1,247,747**	**92.7%**	
Total consumption of electricity	MWh	**82,513**	**61,340**				**68,957**	**54,037**	**86.0%**	
Total consumption of coal	MWh	**57,413**	**51,494**				**52,746**	**50,814**	**98.2%**	
Electricity consumption communal areas										
Total electricity consumption in communal areas	MWh	**44,909**	**51,187**	Elec-Abs			**40,559** [6]	**47,825** [7]	93.4%	Elec-Lfl
from non-renewable sources [8]	%	58.7	63.5			302-1	-	-		
from renewable sources [8]	%	41.3	36.5				-	-		

1) 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).
2) Rentable areas were extrapolated to full building floor space using 20% premium for communal areas in accordance with ENEV 2014 Section 19 (2).
3) 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.
4) 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).
5) 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).
6) 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).
7) 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.
8) Calculation based on the share of renewable energy in the German electricity mix 2017 according to BDEW (location-based approach).
9) 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
Refurbishment			
Number of modernized buildings [3]	Number	approx. 2,000	approx. 2,300
Number of modernized rented units [3]	Number	approx. 18,000	approx. 18,000
Modernized rentable area [3]	Million m²	approx. 1.1	approx. 1.1
Number of rented units with upgraded heating systems [3]	Number	approx. 15,000	approx. 13,000
Modernization rate (refurbishment rate) [3]	%	approx. 5	approx. 5
Expenses for maintenance and ongoing maintenance [2]	in € million	346	430
Maintenance intensity [2]	€ /m²/a	16	18
Expenses for modernization [1] [2]	in € million	779	1,139
Modernization intensity [2]	€ /m²/a	35	37
Total investment [2]	in € million	1,125	1,569
Investment intensity [2]	€ /m²/a	51	55

1) Incl. new construction: 2018: € 234.3 million, 2017: € 65.7 million
2) The scope covers Vonovia Group's complete scope of consolidation.
3) Includes the program year of Vonovia's portfolio in Germany, excl. BUWOG.

Key Figures	Unit	2017	2018	EPRA
Energy-efficiency Standards Portfolio [1]				
By energy-efficiency rating				Cert-Tot
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	
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	

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

						Like-for-like (Lfl)			
Key Figures	Unit	2017 [1]	2018	EPRA	GRI Standard	2017	2018	Coverage [2]	EPRA
Fresh water consumption									
Total water consumption	m³	42.9	43.8	Water-Abs	303-5	38.9	41.4	95.3%	Water-Lfl
Water intensity	m³	1.93	2.04	Water-Int	CRE2	1.93	2.06	95.3%	

1) Correction of the figures published in the previous year due to a change in the method used for consumption data from ancillary expense bills.
2) 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	EPRA	GRI Standard
Waste volume portfolio [1]					
Total waste volume	t	**500,134**	**482,206**	Waste-Abs	306-2
Residual waste	t	126,525	121,990		
Waste paper	t	215,093	207,382		
Recycling	t	45,549	43,916		
Organic waste	t	112,968	108,918		
Recycling ratio	%	74.7	74.7		

[1] 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	EPRA	Association of German Housing and Real Estate Companies (GdW)	GRI Standard
Resource consumption						
Energy consumption office locations [1]						
Total energy consumption (electricity and heating)	MWh	7,768	10,017		GP1	302-1
Total electricity consumption	MWh	3,390	3,313	Elec-Abs		
Proportion from renewable energy sources [2]	%	45	42			
Total heating consumption	MWh	4,377	6,703	DH&C-Abs		
of which natural gas	MWh	3,171	3,410			
of which district heating	MWh	1,206	3,293			
Energy intensity	MWh/m²	0.26	0.15	Energy-Int	GP2	302-3
Total fuel consumption [3]	MWh	**67,241** [4]	**69,164**	Fuels-Abs		302-1
of which diesel	MWh	65,127 [4]	66,584			
of which petrol	MWh	2,114 [4]	2,580			
Average number of vehicles	Number	4,244	4,809			
Average fuel consumption	Liter/ vehicle/ month	132 [4]	120			
Water consumption office locations [1]						
Total water consumption	m³	15,698	19,285	Water-Abs	GP6	303-5
Water intensity	m³/m²	0.52	0.33	Water-Int		CRE2

[1] 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 m² of office space as well as several locations shared by Vonovia companies/organizations.
[2] 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).
[3] Only fuel consumption of the fleet was taken into consideration where no fuel from renewable sources is used.
[4] Adjusted for fuel consumption outside of the fleet.

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

[1] 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.
[2] Solely shows the amounts generated by PV plants.
[3] 2017: Generated by company-owned mini CHP units. 2018: Only contract plants belonging to third parties operated on behalf of Vonovia taken into consideration.
[4] 2017: Electricity generated and sold. 2018: Electricity traded exclusively by VESG procured on the electricity exchange.
[5] 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).
[6] Gas sold to tenants by Vonovia company (VESG).

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

[1] 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 m² of office space as well as several locations shared by Vonovia companies/organizations.
[2] Other waste includes bulk waste, wood, iron and steel.

Key Figures	Unit	2017	2018
Business Journeys			
By rail	Pkm [1]	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

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

CO_2 Balance Sheet

Key Figures	Unit	2017	2018	EPRA	GRI Standard	Like-for-like (Lfl) 2017	Like-for-like (Lfl) 2018	Change [2]
CO_2e emissions in portfolio								
Total CO_2e emissions in portfolio	t CO_2e	1,125,712	1,049,766		305-1			
Total CO_2e emissions per r.u.	t CO_2e	1,098,531	1,021,244		305-1			
Total CO_2e emissions in communal areas	t CO_2e	27,181	28,522		305-1			
CO_2e heating intensity per rented unit	t CO_2e/r.u.	3.320	3.012	GHG-Int	305-4 CRE3			
CO_2e heating intensity per rentable area	t CO_2e/m^2	0.051	0.049	GHG-Int	305-4 CRE3			
CO_2e reductions by heating program	t CO_2e	7,400	6,958		305-5			
CO_2e reductions by modernization	t CO_2e	22,358	20,348		305-5			
Scope 1 (direct CO_2e emissions)								
Combustion processes at stationary plants	**t CO_2e**	**602,993**	**522,421**					
Heating from natural gas (r.u.)	t CO_2e	514,451	449,860	GHG-Dir-Abs	305-1	446,340	443,604	-1%
Heating from heating oil (r.u.)	t CO_2e	63,494	50,580	GHG-Dir-Abs	305-1	59,183	51,782	-13%
Heating from coal (r.u.)	t CO_2e	25,049	21,980	GHG-Dir-Abs	305-1	23,013	22,170	-4%
Scope 2 (indirect CO_2e emissions)								
Location-based	**t CO_2e**	**428,840**	**406,913**					
Electricity (communal areas)	t CO_2e	27,181	28,522	GHG-Indir-Abs	305-2	24,734	26,646	8%
Heating, electricity (r.u.)	t CO_2e	49,491	34,668	GHG-Indir-Abs	305-2	35,572	27,544	-23%
Heating, district heating (r.u.)	t CO_2e	351,718	343,723	GHG-Indir-Abs	305-2	273,173	279,883	2%
Other indirect CO_2e emissions (Scope 3)								
Commodities leased downstream [1]	**t CO_2e**	-	**34,930**					
Natural from gas (r.u.)	t CO_2e	-	21,676	GHG-Indir-Abs	305-3	21,945	21,173	-4%
Heating from oil (r.u.)	t CO_2e	-	3,647	GHG-Indir-Abs	305-3	3,803	3,578	-6%
Coal (r.u.)	t CO_2e	-	486	GHG-Indir-Abs	305-3	431	484	12%
Heating from electricity (r.u.)	t CO_2e	-	2,458	GHG-Indir-Abs	305-3	2,931	2,437	-17%
Heating from district heating (r.u.)	t CO_2e	-	6,663	GHG-Indir-Abs	305-3	6,515	6,493	0%
Fuel and energy-related emissions (not Scope 1 and 2)	**t CO_2e**	**93,879**	**85,502**					
Upstream, natural gas (r.u.)	t CO_2e	84,668	77,605	GHG-Indir-Abs	305-3			
Upstream, heating oil (r.u.)	t CO_2e	8,506	7,265	GHG-Indir-Abs	305-3			
Upstream, coal (r.u.)	t CO_2e	705	632	GHG-Indir-Abs	305-3			

Greenhouse gases included in the calculations: CO_2 equivalent (greenhouse gases regulated by the Kyoto Protocol: CO_2, CH4, N2O, SF6, HFCs).
Sources of emission factors: GEMIS 4.95
[1] Condominium buildings (ownership rate ≤ 50 %), calculated separately for the first time in 2018.
[2] Decline in CO_2 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_2 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
CO_2e emissions in business operations						
Total CO_2e emissions in business operations	t CO_2e	**27,563**	**29,342**			
CO_2e emissions per square meter [3]	t CO_2e / m2	0.10	0.06	GHG-Int		305-4
Scope 1 (direct CO_2e emissions)						
Combustion processes at stationary plants	t CO_2e	638	852	GHG-Dir-Abs	GP4	305-1
Natural gas	t CO_2e	638	852			
Combustion processes at mobile plants	t CO_2e	20,512	21,084			
Gasoline	t CO_2e	570	696			
Diesel	t CO_2e	19,942	20,388			
Scope 2 (indirect CO_2e emissions)						
Location-based	t CO_2e	2,284	2,864	GHG-Indir-Abs	GP4	305-2
Electricity	t CO_2e	1,914	2,005			
District heating	t CO_2e	370	860			
Market-based	t CO_2e	1,278	1,224			
Electricity	t CO_2e	1.278	1.224			
District heating [1]	t CO_2e	–	–			
Scope 3 (other indirect CO_2e emissions)						
Business Journeys	t CO_2e	330	710		GP4	305-3
By rail	t CO_2e	19	16			
By plane	t CO_2e	311	318			
Per private vehicle [2]	t CO_2e	-	377			
Fuel and energy-related emissions (not Scope 1 and 2)		3,779	3,831			
from stationary combustion upstream (natural gas)	t CO_2e	214	140			
from mobile combustion upstream (petrol)	t CO_2e	128	157			
from mobile combustion upstream (diesel)	t CO_2e	3,457	3,534			

Greenhouse gases included in the calculation: CO_2 equivalents (greenhouse gases regulated by the Kyoto Protocol: CO_2, CH4, N2O, SF6, HFCs). Sources of emission factors: GEMIS 4.95, Deutsche Bahn, BCD Travel GHG Protocol

[1] 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.

[2] Collected for the first time in 2018.

[3] Only stationary emissions taken into account.

Procurement Practices

Key Figures	Unit	2017	2018	GRI Standard
Suppliers				
Supplier structure				
Number of suppliers [1]	Number	4,259	4,524	102-9 204-1
of which from Germany [2]	Number	4,179	4,509	
of which from Europe (excl. Germany) [3]	Number	80	15	
of which contract partners (minor maintenance work, renovation of vacant apartments and construction) [4]	Number	2,530	1,354	
of which suppliers of material	Number	729	347	
of which ancilliary costs [5]	Number	750	113	
of which material costs [6]	Number	250	225	
Local suppliers				
Amount of local suppliers as a proportion of the procurement budget	%	95	98	204-1
Review of suppliers				
Amount of new suppliers reviewed on the basis of				308-1 414-1
Environmental criteria	Number	– [7]	– [7]	
Human rights	Number	– [7]	– [7]	
Labor standards	Number	– [7]	– [7]	
Corruption	Number	– [7]	– [7]	
Amount of existing suppliers reviewed on the basis of				
Environmental criteria	Number	– [7]	– [7]	
Human rights	Number	– [7]	– [7]	
Labor standards	Number	– [7]	– [7]	
Corruption	Number	– [7]	– [7]	
Amount of cases of noncompliance with				
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 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	

1) 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.
2) 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).
3) The figures were based on estimates in previous years; systematically we currently use only 15 foreign suppliers, mainly in Eastern Europe.
4) The figure was based on estimates in previous years; the 2018 figure reflects active contracts in construction services
5) Includes all costs that were allocated to the tenant, e.g., staircase lighting or cleaning, disposal costs or similar.
6) Includes tools, work uniforms, office and business equipment, IT, telecommunications.
7) 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.

Material topic	Name of the indicator	Page in the report	Omissions
GRI 101: Foundation 2016			
GRI 102: General Disclosures 2016			
Organizational Profile			
102-1	Name of the organization	6	
102-2	Activities, brands, products, and services	6, 8	
102-3	Location of headquarters	6	
102-4	Location of operations	6	
102-5	Ownership and legal form	6	
102-6	Markets served	6, 13	
102-7	Scale of the organization	6, 13, 95–99 As Vonovia is divided into companies and employs only a few people abroad, the figures are not presented according to strategic regions.	
102-8	Information on employees and other workers	84, 86, 92, 93, 95–99	
102-9	Supply chain	66, 108	
102-10	Significant changes to the organization and its supply chain	AR 2018: 64–65	
102-11	Precautionary Principle or approach	Vonovia does not yet comply with the precautionary principle of the UN.	
102-12	External initiatives	32, 33	
102-13	Membership of associations	30, 57, 62	
Strategy			
102-14	Statement from senior decision-maker	2	
102-15	External initiatives	16, 25–26, 45, 47–49, 50 AR 2018: 131–140	
Ethics and Integrity			
102-16	Values, principles, standards, and norms of behavior	36	
Governance			
102-18	Governance structure	33	
102-19	Delegating authority	15, 33	
102-20	Responsibility for sustainability	15	
102-22	Composition of the highest governance body and its committees	34	

Material topic	Name of the indicator	Page in the report	Omissions
102-24	Nominating and selecting the highest governance body	33, AR 2018: 40–49	
102-25	Conflicts of interest	AR 2018: 50	
Stakeholder Engagement			
102-40	List of stakeholder groups	28	
102-41	Identifying and selecting stakeholders	75	
102-42	Approach to stakeholder engagement	29	
102-43	Key topics and concerns raised	28, 29, 41	
102-44	List of stakeholder groups	14, 28, 29, 41	
Reporting practice			
102-45	Entities included in the consolidated financial statements	90	
102-46	Defining report content	17	
102-47	List of material aspects	18, 19–20	
102-48	Restatements of information	17	
102-49	Changes in reporting	17	
102-50	Reporting period	89	
102-51	Date of most recent report	89	
102-52	Reporting cycle	89	
102-53	Contact point for questions regarding the report	118	
102-54	In accordance with the “core” option of the GRI standards	89	
102-55	External assurance	109	
102-56	Reporting period	90	

Material topic			
GRI 201: Economic Performance 2016			
103-1	Explanation of the material topic and its boundaries	19–20, 22, 24–26, AR 2018: 98–120	
103-2	The management approach and its components	6, 23, 26–27, AR 2018: 98–120	
103-3	Evaluation of the management approach	23, 26–27, GB 2018: 98–120	
201-1	Direct economic value generated and distributed	AR 2018: 148	
201-2	Financial implications and other risks and opportunities due to climate change	16, 26	
201-3	Defined benefit plan obligations and other retirement plans	AR 2018: 119	
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 availab-le in this form.
203-2	Significant indirect economic impacts	29, 41, 47–49, 64	not applicable, as figures are not currently availab-le 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
GRI 205: Anti-corruption 2016			
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	
205-2	Communication and training about anti-corruption policies and procedures	34, 36	
205-3	Confirmed incidents of corruption and actions taken	34	
GRI 206: Anti-competitive Behavior 2016			
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	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	35	
GRI 301: Materials 2016			
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	
GRI 302: Energy 2016			
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	
GRI 303: Water and effluents 2018			
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
GRI 304: Biodiversity 2016			
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	–	
GRI 305: Emissions 2016			
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	
GRI 306: Effluents and Waste 2016			
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	
GRI 307: Environmental Compliance 2016			
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.	
GRI 308: Supplier Environmental Assessment 2016			
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
GRI 401: Employment 2016			
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	
401-1	New employee hires and employee turnover	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 break-down by age and gender.
401-3	Parental leave	84, 85, 94	
GRI 402: Labor/Management Relations 2016			
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	
GRI 403: Occupational Health and Safety 2018			
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	
GRI 404: Training and Education 2016			
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	
404-1	Average hours of training per year per employee	95	No breakdown by gender, as the figures are not currently availab-le in this form.
404-3	Percentage of employees receiving regular performance and career development reviews	95	
GRI 405: Diversity and Equal Opportunity 2016			
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
GRI 406: Non-discrimination 2016			
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	
GRI 407: Freedom of Association and Collective Bargaining 2016			
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.	
GRI 413: Local Communities 2016			
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
GRI 414: Supplier Social Assessment 2016			
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	
GRI 415: Public Policy 2016			
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	
GRI 416: Customer Health and Safety 2016			
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
GRI 417: Marketing and Labeling 2016			
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.	
GRI 419: Socioeconomic Compliance 2016			
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	
Portfolio Maintenance 2016 (Material topic not covered by GRI)			
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
Environment			
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^2	102–103
GHG-Dir-Abs	Total direct greenhouse gas (GHG) emissions (scope 1)	t CO_2/year	105–107
GHG-Indir-Abs	Total indirect greenhouse gas (GHG) emissions (scope 2)	t CO_2/year	105–107
GHG-Int	Greenhouse gas (GHG) intensity from building energy	t CO_2/m^2 and t CO_2/units	107
Water-Abs	Total water consumption	m^3/year	102, 105
Water-Lfl	Total water consumption like-for-like	m^3/year	105
Water-Int	Building water intensity	t CO_2/m^2 and t CO_2/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
Social			
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