

EPRA sustainability best practice recommendations

26 June 2019

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Introduction

We report on our energy, GHG emissions, water and waste impacts as well as on social and governance indicators in accordance with the 3rd edition of the EPRA Sustainability Best Practice Recommendations (EPRA sBPR). Our reporting response has been split into 2 sections:

1. Overarching recommendations
2. Sustainability Best Practice Performance Measures

Overarching recommendations

1.1 Organisational boundaries

We use an operational control approach for our organisational boundary. Unless indicated otherwise, the key figures relate to the financial year in question and the entire Group (i.e. all the fully consolidated companies and equity-accounted companies based on the shareholdings as per the consolidated annual financial statements). The recognition of the energy production of G+D Gesellschaft für Energiemanagement GmbH, Magdeburg, a joint venture in which Deutsche Wohnen holds a 49% stake, constitutes an exception. The energy that G+D supplies to the Deutsche Wohnen portfolio, which is provided with heating centrally, is recorded in the energy footprint consumption figures and is considered in all the key figures derived. The energy which is sold and fed into the grid (combined heat and power [CHP] plants and the energy produced by G+D's Stadtwerke Thale GmbH is not included in Deutsche Wohnen's energy and environmental footprint.

1.2 Coverage

Please see our EPRA performance tables for individual coverage of each performance measure.

1.3 Estimation of landlord-obtained utility consumption

Regarding the portfolio data for the most part, the tenants' actual heating energy and district heating consumption levels are presented, these being calculated based on bills. An estimate based on prior-year figures or attested energy efficiency classes was made for approximately 20% of the values due to lacking or implausible data. The forecast values for 2017 were adjusted based on actual consumption. Electricity and water data represent real consumption based on bills.

1.4 Third Party Assurance

We do not have third party assurance.

1.5 Boundaries – reporting on landlord and tenant consumption

We only report on landlord-obtained utilities consumption (although the bills we receive include consumption in tenant areas). Nearly 100% of the total consumption within the common and tenant areas for natural gas (fuel), district heating and cooling as well as water is recharged to the tenant because the clear majority is consumed by the tenants in common and tenant areas. We recharge the tenants based on the floor area and the individual tenant consumption within the residential units. The reported values reflect real consumption and are thus dependent not only on the buildings' energy requirements but also on the individual consumption behaviour of the tenants that is not within our direct control. Tenant-obtained data (i.e. from bills which the tenant receives directly) is excluded.

1.6 Analysis - Normalisation

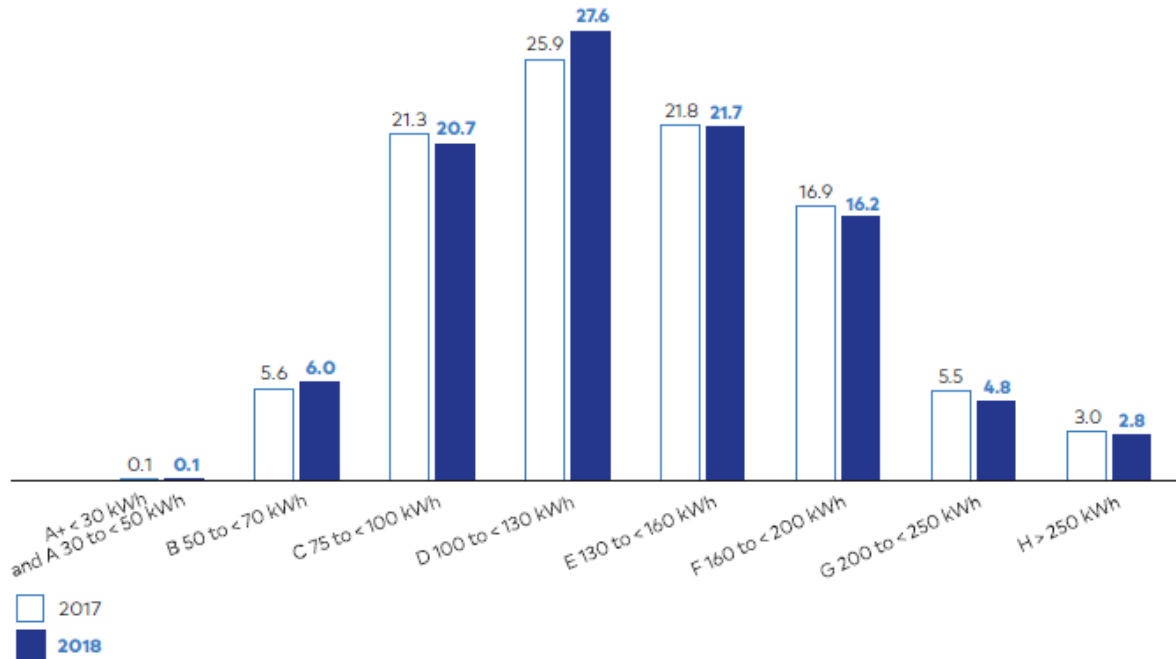
Intensity indicators are calculated using floor area (sqm) for whole buildings. We are aware of the mismatch between nominator and denominator, as our consumption for electricity relates to common areas only, whereas we receive district heating and cooling, natural gas (fuel) and water bills for the entire building and cannot separate common area from tenant area consumption. For our own offices we report intensity performance measures using floor area (sqm) as a denominator, too.

1.7 Analysis – Segmental analysis (by property type, geography)

The entire portfolio of Deutsche Wohnen is located in Germany with around 70% in the area of Greater Berlin. Therefore, a segmental analysis by geography is not applicable. In 2018, our property portfolio has been composed of 98.4% (164,265) residential assets and 1.6% (2,715) commercial assets. The largest share of the commercial assets is represented by so-called “commercial units with residential attributes” which do not differ greatly from regular residential units in terms of floor space or consumption data. In this regard, segmental analysis is not applicable. We have carried out a segmental analysis of energy efficiency classes in relation to the energy certificate grade by level attained (see the graph below which shows the proportion of units by energy efficiency class):

Energy Intensity of residential units

Classification into energy efficiency classes¹ by final energy requirements in kWh/sqm in %



The weighted average of the final energy consumptions is based on the current energy performance certificate of properties. Discrepancies in the final energy requirements of approximately 20 kWh may arise due to the non-specification of the type of heating in question. The allocation according to current category of energy efficiency of properties is therefore based solely on the classification in accordance with the German Energy Saving Ordinance (EnEV). With the exception of approximately 30,000 listed units for which no energy performance certificate is required, the data comprises almost 100% of our total portfolio.

1.8 Disclosure on own offices

Our own occupied offices are reported separately to our portfolio. Coverage is reported in relation to the total floor area of our offices. Please see 2.2 EPRA own office table p. 9.

1.9 Narrative on performance

Please refer to p. 6 for our portfolio, p. 9 for our own occupied offices and p. 11 for social and governance indicators for more detail on consumption and/or performance trends.

1.10 Location of EPRA Best Practice Performance Measures in companies' reports

EPRA Best Practice Performance Measures for our portfolio, own offices, social and governance indicators can be found in section 2.1 EPRA portfolio table (p. 6 et seq.), section 2.2 EPRA own office table (p. 9 et seq.) and 2.3 EPRA social and governance table (p. 11 et seq.) of this report.

Sustainability best practice performance measures (EPRA tables)

2.1 EPRA environmental performance measures (portfolio)

Indicator	EPRA	Unit of measure	Absolute		Like-for-like (LfL)		
			2017	2018	2017	2018	% change
Electricity consumption for landlord controlled areas	Elec-Abs, Elec-LfL	kWh	32,948,000	33,895,835	31,792,000	32,726,000	2.9
Proportion of electricity consumption from renewable sources		%	90	90	90	90	n/a
Coverage of total units		%	89	90	86	88	2 pp
Energy consumption from landlord obtained district heating and cooling	DH&C-Abs, DH&C-LfL	kWh	629,157,874	663,174,274	535,643,974	559,890,935	4.5
Proportion of district heating & cooling from renewable sources		%	No district heating & cooling from renewable sources				
Coverage of total units		%	88	85	76	74	-2 pp
Energy consumption from landlord obtained fuels	Fuels-Abs, Fuels-LfL	kWh	613,553,012	611,468,523	523,490,249	523,140,140	-0.1
Proportion of fuels from renewable sources		%	Share of energy from renewable sources (pellets) around 1.4%.		Share of energy from renewable sources (pellets) around 0.5%.		
Coverage of total units		%	88	85	76	74	-2 pp
Building energy intensity	Energy-Int	kWh/sqm	141	144	140	143	2.1
Direct Scope 1 GHG emissions (total)	GHG-Dir-Abs, GHG-Dir-LfL	t CO ₂	148,740	148,203	127,603	127,449	-0.1
Coverage of total units		%	88	85	76	74	-2 pp
Total Scope 2 indirect GHG emissions (location based)	GHG-Indir-Abs, GHG-Indir-LfL	t CO ₂	202,965	212,211	174,769	181,171	3.7
Total Scope 2 indirect GHG emissions (market based)		t CO ₂	187,338	197,294	159,690	166,768	4.4
Coverage of total units		%	88 = DH&C-Abs 89 = Elec-Abs	85 = DH&C-Abs 90 = Elec-Abs	76 = DH&C-LfL 86 = Elec-LfL	74 = DH&C-LfL 88 = Elec-LfL	-2 pp = DH&C-LfL 2 pp = Elec-LfL
Building GHG emissions intensity	GHG-Int	t CO ₂ /sqm	0.038	0.039	0.038	0.039	2.6
Total water consumption	Water-Abs, Water-LfL	m ³	7,929,615	8,497,993	7,893,641	8,118,905	2.9
Coverage of total units		%	65	67	65	63	-2 pp
Building water consumption intensity	Water-Int	m ³ /sqm	1.24	1.26	1.24	1.28	3.2

Indicator	EPRA	Unit of measure	Absolute		Like-for-like (LfL)		
			2017	2018	2017	2018	% change
Weight of waste by disposal route (total)	Waste-Abs, Waste-LfL	tonnes	not applicable				
		% recycled	not applicable				
		% sent to landfill	not applicable				
Coverage		%	not applicable				
Type and number of assets certified	Cert-Tot	% of portfolio certified OR number of certified assets	100	See therefore 1.7	100	See therefore 1.7	0

Notes:

- Coverage for each indicator and year has been defined as the proportion of the total portfolio consisting of:
 - 2017: 163,134 residential and commercial units;
 - 2018: 166,980 residential and commercial units;
- The Like-for-Like scope covers 124,061 residential and commercial units for heating energy consumption, and 143,097 units for electricity consumption.
- Heating energy is provided by either district heating or fuel (natural gas, domestic fuel oil or pellets). In total, heating energy consumption coverage in absolute terms in 2017/18 amounts to 88/85% of our total portfolio and in LfL terms to 76/74% of our total portfolio. The share of units which use DHC and fuels breaks down as follows (2017/2018): DH&C-Abs (46/44%), DH&C-LfL (40/39%), Fuels-Abs (42/41%) and Fuels-LfL (36/35%).
- The heating energy consumption figures (DH&C-Abs, DH&C-LfL, Fuels-Abs, Fuels-LfL) were adjusted to reflect weather conditions using the climate factors of Germany's National Meteorological Service (Deutscher Wetterdienst - DWD).
- The LfL share of renewable sources has been calculated as a proportion of the absolute and LfL consumption data.
- Waste indicators (Waste-Abs, Waste-LfL) are not applicable as Deutsche Wohnen is not responsible for waste across its portfolio.
- GHG emissions represent direct (Scope 1) and indirect (Scope 2) energy climate emissions based on the portfolio's energy consumption. The Scope 1 value and the location-based Scope 2 value were calculated using the emission factors of the Institute for Living and the Environment (Institut Wohnen und Umwelt – IWU) with GEMIS 4.93 and the year-specific emission factor for the German electricity mix of the German Environment Agency (Umweltbundesamt – UBA). The market-based Scope 2 value is also presented to illustrate the positive effects on the climate of sourcing certified green electricity. The share of emissions based on green electricity factor (0 g CO₂e/kWh) is displayed in the table under Elec-Abs, Elec-LfL.
- GHG-Int: The energy and climate emissions intensity per sqm of floor area is based on the buildings' consumption of heating supply from natural gas, heating oil, pellets and district heating. At just 1% of heating energy consumption, electricity consumption is negligible. Certified green electricity is sourced for 90% of the letting portfolio.

- Water data (Water-Abs, Water-LfL) relates to our Berlin portfolio sourced from the municipal supplier and is taken from our main water meters. Absolute water data (Water-Abs) covers 106,318 units (2017) and 111,337 units (2018). Like-for-Like water data (Water-LfL) covers 105,868 units in the period 2017-18. These records both the individual tenants' consumption levels, which account for the majority of total consumption, and general water consumption in the communal areas as well as for sprinkler systems. There are no sub-meters for the individual spaces in part of our portfolio. It is therefore currently not possible to provide separate data for water consumption in the communal areas, which account for only a very small proportion – less than 1% – of the total area.
- Cert-Tot: The weighted average of the final energy consumption is based on the current energy performance certificate of properties. Discrepancies in the final energy requirements of approximately 20 kWh may arise due to the non-specification of the type of heating in question. The allocation according to current category of energy efficiency of properties is therefore based solely on the classification in accordance with the German Energy Saving Ordinance [EnEV]. With the exception of approximately 30,000 listed units for which no energy performance certificate is required, the data comprises almost 100% of our total portfolio. See therefore 1.7 for the percentage of energy performance by level attained.

Narrative on performance:

- Elec-Abs and -LfL: The slight increase of the absolute value in 2018 reflects the larger scope (plus ~4,500 units). In comparison, the increase of the LfL value is within the range of yearly variations of electricity consumption patterns.
- DH&C-Abs and -LfL: The increase of for both values (absolute and LfL scope) is mainly due to the modernization of oil heating that shifts consumption to district heating. The values also depend on the heating consumption patterns of our tenants. Yearly variations can be explained by changing patterns (e.g. higher consumption by families, pensioners).
- Fuels-Abs and LfL: The investments into the modernization of heating systems already show in the slight decrease of both values (absolute and LfL scope). Since heating oil is also replaced by natural gas, the aggregated value does not reflect this change entirely. The effects of modernization will likely show more significantly in the following years.
- Energy-Int: Consistent figures (absolute and LfL scope) due to increasing district heating and electricity consumption values.
- GHG-Dir-LfL: The minimal decrease in fuel consumption in 2018 is mainly due to the modernization of the heating system, switching from oil to natural gas or district heating.
- GHG-Indir-LfL: The increase in emissions in 2018 is mainly attributable to higher consumption of district heating which is mainly due to the modernization of the heating systems, switching from oil to natural gas or district heating. Compared to district-heating-based emissions, the small proportion of electricity-based emissions is insignificant due to the increase of electricity produced by renewable sources within the German grid (location-based) as well as to our investment into electricity from renewable sources (market-based). Furthermore, about 1,005,000 kWh were produced by photovoltaic installations on our ground that was fed into the grid (please see Sustainability Report 2018 p. 107).
- GHG-Int: Consistent figures (absolute and LfL scope) due to increasing district heating and electricity consumption values.
- Water-Abs and Water-LfL: The value includes tenant area consumption as well and is therefore depending on tenant patterns within the assets as well as on individual consumption behaviour. One explanation for the higher consumption is the comparatively hot summer in the reporting year.
- Cert-Tot: In terms of energy consumption, approximately 60% of our units already perform better than the average residential property in Germany (135.5 kWh/sqm per annum). Some 27% of our units use less than 100 kWh/sqm per annum (A+ to C). The average consumption of our holdings stands at 132.3 kWh/sqm per annum, having fallen again slightly as compared to the previous year (2017: 133.4 kWh/sqm per annum). See therefore 1.7 for the percentage of energy performance by level attained.

2.2 EPRA environmental performance measures (own office)

Indicator	EPRA	Unit of measure	Absolute		Like-for-like (LfL)		
			2016	2017	2016	2017	% change
Electricity consumption	Elec-Abs, Elec-LfL	kWh	1,027,739	1,035,310	932,601	974,328	4.5
Proportion of electricity consumption from renewable sources		%	95	95	95	95	n.a.
Coverage of floor area		%	100	100	79	80	1 pp
Energy consumption from district heating and cooling	DH&C-Abs, DH&C-LfL	kWh	2,575,517	2,678,035	1,958,727	2,246,610	14.7
Proportion of district heating & cooling from renewable sources		%	not applicable				
Coverage of floor area		%	100	100	80	81	1 pp
Energy consumption from fuel	Fuels-Abs, Fuels-LfL	kWh	936,326	1,106,932	708,161	839,993	18.6
Proportion of fuels from renewable sources		%	Share of energy from renewable sources (pellets) around 0.5 %				
Coverage of floor area		%	100	100	80	81	1 pp
Building energy intensity	Energy-Int	kWh/sqm	158	170	158	178	12.7
Direct Scope 1 GHG emissions (total)	GHG-Dir-Abs; GHG-Dir-LfL	t CO ₂	227	219	175	185	5.7
Coverage of floor area		%	100	100	80	81	1 pp
Total Scope 2 indirect GHG emissions (location based)	GHG-Indir-Abs; GHG-Indir-LfL	t CO ₂	1,290	1,336	1,066	1,136	6.6
Total Scope 2 indirect GHG emissions (market based)		t CO ₂	787	817	602	686	14
Coverage of floor area		%	100 = DH&C-Abs; Elec-Abs	100 = DH&C-Abs; Elec-Abs	80 = DH&C-LfL 79 = Elec-LfL	81 = DH&C-LfL 80 = Elec-LfL	1 pp
Building GHG emissions intensity	GHG-Int	t CO ₂ /sqm	0.035	0.037	0.034	0.038	11.8
Total water consumption	Water-Abs, Water-LfL	m ³	not applicable				
Coverage		%					
Building water consumption intensity	Water-Int	m ³ /sqm	not applicable				
Weight of waste by disposal route (total)	Waste-Abs, Waste-LfL	tonnes	not applicable				
		% recycled					
		% sent to landfill					
Coverage		%					

Indicator	EPRA	Unit of measure	Absolute		Like-for-like (LfL)		
			2016	2017	2016	2017	% change
Type and number of assets certified	Cert-Tot	% of portfolio certified OR number of certified assets	not applicable				

Notes:

- The reporting period is different to the portfolio table due to the late availability of consumption data from various providers. Therefore, the reporting reflects the previous periods 2016 and 2017 for which actual data is available.
- Coverage for absolute indicators has been defined in relation to the total floor area of our own occupied offices:
 - 2016: 28,686 m²
 - 2017: 28,354 m²
- The Life-for-Like scope covers 22,781 m² of our own offices for both, electricity and heating energy consumption.
- Heating energy is provided by either district heating or fuel (natural gas, domestic fuel oil or pellets). In total, heating energy consumption coverage in absolute terms in 2016/17 amounts to 100% and in LfL terms to 80/81% for our own offices. The share of units which use DHC and fuels breaks down as follows (2016/2017): DH&C-Abs (76/74%), DH&C-LfL (61/62%), Fuels-Abs (24/26%) and Fuels-LfL (19/19%).
- The heating energy consumption figures (DH&C-Abs, DH&C-LfL, Fuels-Abs, Fuels-LfL) were adjusted to reflect weather conditions using the climate factors of Germany's National Meteorological Service (DWD). The vehicle fleet fuel consumption is not included (please see Sustainability Report 2018 p. 106)
- GHG emissions represent direct (Scope 1) and indirect (Scope 2) energy climate emissions of our own offices. The Scope 1 value and the location-based Scope 2 value were calculated using the emission factors of the Institute for Living and the Environment (Institut Wohnen und Umwelt – IWU) with GEMIS 4.93 and the year-specific emission factor for the German electricity mix of the German Environment Agency (Umweltbundesamt – UBA). The market-based Scope 2 value is also presented to illustrate the positive effects on the climate of sourcing certified green electricity. The share of emissions based on green electricity factor (0 g CO₂e/kWh) is displayed in the table under Elec-Abs, Elec-LfL.
- GHG-Int: The energy and climate emissions intensity per sqm of floor area are based on the buildings' consumption of heating supply from natural gas, heating oil, pellets and district heating. At just 1% of heating energy consumption, electricity consumption is negligible. Certified green electricity is sourced for 95% of our own offices.
- Water-Abs and Water-LFL: We do not have reliable information on water consumption from our own offices due to shared water meters with other non-office units.
- Waste-Abs and Waste-LFL: We do not have reliable information on waste in our own offices besides for the waste category paper (please see Sustainability Report 2018 p. 106).
- Cert-Tot: We do not have information for our own offices.

Narrative on performance:

- Elec-Abs and -LfL; DH&C- Abs and -LfL; Fuels-Abs and -LfL: The increase of both values (absolute and LfL scope) in 2017 is due to a higher occupancy rate of our offices due to the higher number of employees.
- Energy-Int: The main factor contributing to the increase is the higher number of employees. In fact, taken the heating energy consumption per capita, the intensity value decreased by -2.7% in the period 2016-18. Even further, the intensity value for electricity consumption per capita decreased in the same period by -11.9% (please see Sustainability Report 2018 p.104).
- GHG-Dir-Abs and -LfL; GHG-Indir- Abs and -LfL; GHG-Int: The increase of emissions in 2017 reflects the increased energy consumption as explained above.

2.3 EPRA social and governance performance measures (portfolio and corporate)

Indicator	EPRA code	Unit of measure	Scope	2017	2018
Employee diversity	Diversity-Emp	% male/female (Board)	Corporate operations	100.0% male 0% female	100.0% male 0% female
		% male/female (Senior management)		61.8% male 38.2% female	62.5% male 37.5% female
		% male/female (Other employees)		45.8% male 54.2% female	47.5% male 52.5% female
	Diversity-Pay	male/female (Board)	Corporate operations	Sustainability Report 2018, p. 63	
		male/female (Senior management)			
		male/female (Other employees)			
Employee training and development	Emp-Training	Average hours per employee	Corporate operations	18.1	25.6
	Emp-Dev	% of total workforce with performance appraisals	Corporate operations	94.1	91.5
	Emp-Turnover	Total number of new hires	Corporate operations	232	275
		Rate		20.9	21.5
		Total number of leavers		107	140
		Rate		9.6	10.6
Health and safety	H&S-Emp	Injury frequency rate	Corporate operations	0.02	0.02
		Lost day rate (number)		131	139
		Absenteeism rate		5.6	5.9
		Fatalities (Total number)		0	0

Indicator	EPRA code	Unit of measure	Scope	2017	2018
	H&S-Asset	% of assets undergoing health & safety assessments	Portfolio	100	100
	H&S-Comp	Total number of incidents of non-compliance from health & safety assessments	Portfolio	0	0
Communities	Comty-Eng	% of assets with community engagement initiatives	Portfolio	Sustainability Report 2017, p. 60 et seq.	Sustainability Report 2018, p. 40, 86 et seq.
Governance	Gov-Board	Total number of Executive members	Corporate operations	3 members	3 members
		Total number of Independent members (Supervisory Board)		6 members	6 members
		Average tenure		10 years	9 years
		Total number with competencies relating to environmental and social topics		Election process; full range of competencies to fulfil the role of supervision.	
	Gov-Select	Process for nominating and electing the highest governance body	Corporate operations	Sustainability Report 2018, p. 112	
	Gov-Col	Process for managing conflicts of interest	Corporate operations	Sustainability Report 2018, p. 112	

Notes:

- Diversity-Emp: % male/female (Other employees) includes trainees
- H&S-Emp: Injury frequency rate: Workplace accidents in relation to total working hours of all employees.
- H&S-Emp: Instead of the lost day rate per X hours worked, the lost day rate is reported as an absolute number based on the following definition: Period (days) in which work was not possible due to employees not being able to perform their usual duties because of a workplace accident.
- H&S-Emp: Absenteeism rate: Lost days based on calculation of actual absenteeism (as a percentage) of the total number of work days designated for the employees over the same period.
- Comty-Eng: This performance measure is not applicable as we do not conduct community engagement activities on a unit-by-unit basis. Deutsche Wohnen specifically focuses on measures that allow the company to use its core areas of expertise effectively to support numerous local activities in various locations. Since 2017, we have concluded joint arrangements with half of the Berlin boroughs (covering approximately 24% of our Berlin portfolio) in relation to complex refurbishment projects that govern the responsible and socially acceptable execution of refurbishment measures in residential complexes and which also stipulate caps on modernisation cost allocation. For more information on our approach and measures see our Sustainability Report 2018 p. 86 et seq.

Narrative on performance:

- Diversity-Emp: We commit to diversity and oppose any form of discrimination in all aspects of employment. Further information on the reasons for the gender composition of the Supervisory Board and the respective target is given in the annual report 2018 (Corporate Governance Report p. 10)
- Diversity-Pay: Our remuneration structure comprises four salary levels. These are based on a comparison of all the occupations at the individual Deutsche Wohnen companies and on wage agreements within the industry. We assign the employees to these four levels in accordance with their job description and qualifications. With this remuneration system based on transparent rules, we ensure that employees in comparable positions receive the same amount of remuneration.
- Emp-Turnover: Our workforce increased again on a net calculation basis by 135 employees.
- Emp-Training: Investments into staff development and the absolute number of training hours delivered increased. More information on our management approach and additional indicators are provided in our Sustainability Report 2018 (p. 68 et seq.; 102).
- H&S-Emp: The rates confirm the effect of our occupational health and safety management approach. The increase of lost days is due to the higher number of employees. More information is provided in our Sustainability Report 2018 (p. 103).
- H&S-Asset; H&S-Comp: In 2018 we kept our performance standard by carrying out a complete health & safety assessment of our portfolio with no reported incidents.
- Gov-Board; Gov-Select; Gov-Col: No changes in the selection process of the Supervisory Board or the rules to disclose conflicts of interest. Since the period of office of the Supervisory Board Chair Mr Uwe E. Flach ended at the close of the Annual General Meeting on 15 June 2018, Ms Tina Kleingarn was elected to the Supervisory Board at the Annual General Meeting on 15 June 2018. The Supervisory Board elected Mr Matthias Hünlein as its new chair.

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