VONOVIA SE
ANNUAL REPORT 2018

Seeing the big Picture
—
Taking Action

VONOVIA

SEEING THE BIG PICTURE

TAKING ACTION

THE COMPANY AND ITS SHARES

COMBINED MANAGEMENT REPORT

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“Are we on the right track? The best way to answer this question is to ask the people who know best – our employees, our customers, policymakers and also social institutions.”

ROLF BUCH, CEO

REFERENCES

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to website
www.vonovia.de

to page(s) in the Sustainability Report
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Understanding the Needs, Wishes and Concerns

Seeing the big Picture

“I want to do everything I can to help my daughter as she moves through life. I want her to feel safe and secure at home, and to learn at school the skills she’ll need to take the next step in life.”

STEFANIE LENZ, SINGLE MOTHER LIVING IN BERLIN-SCHÖNOW

WHAT WE ALSO UNDERSTAND FROM THESE STATEMENTS:

- The time I spend with my child is valuable and important.
- I don’t want anything to stand in the way of a good education for my child.
- Also as a single parent, I want to offer my child quality of living.

“Bochum is an urban metropolis offering a successful mixture between city and home. More housing space, densification and more mobility within the districts – these are the challenges faced to become a place to be, place to work and place to live.”

THOMAS EISKIRCH, MAYOR OF BOCHUM

WHAT WE ALSO UNDERSTAND FROM THESE STATEMENTS:

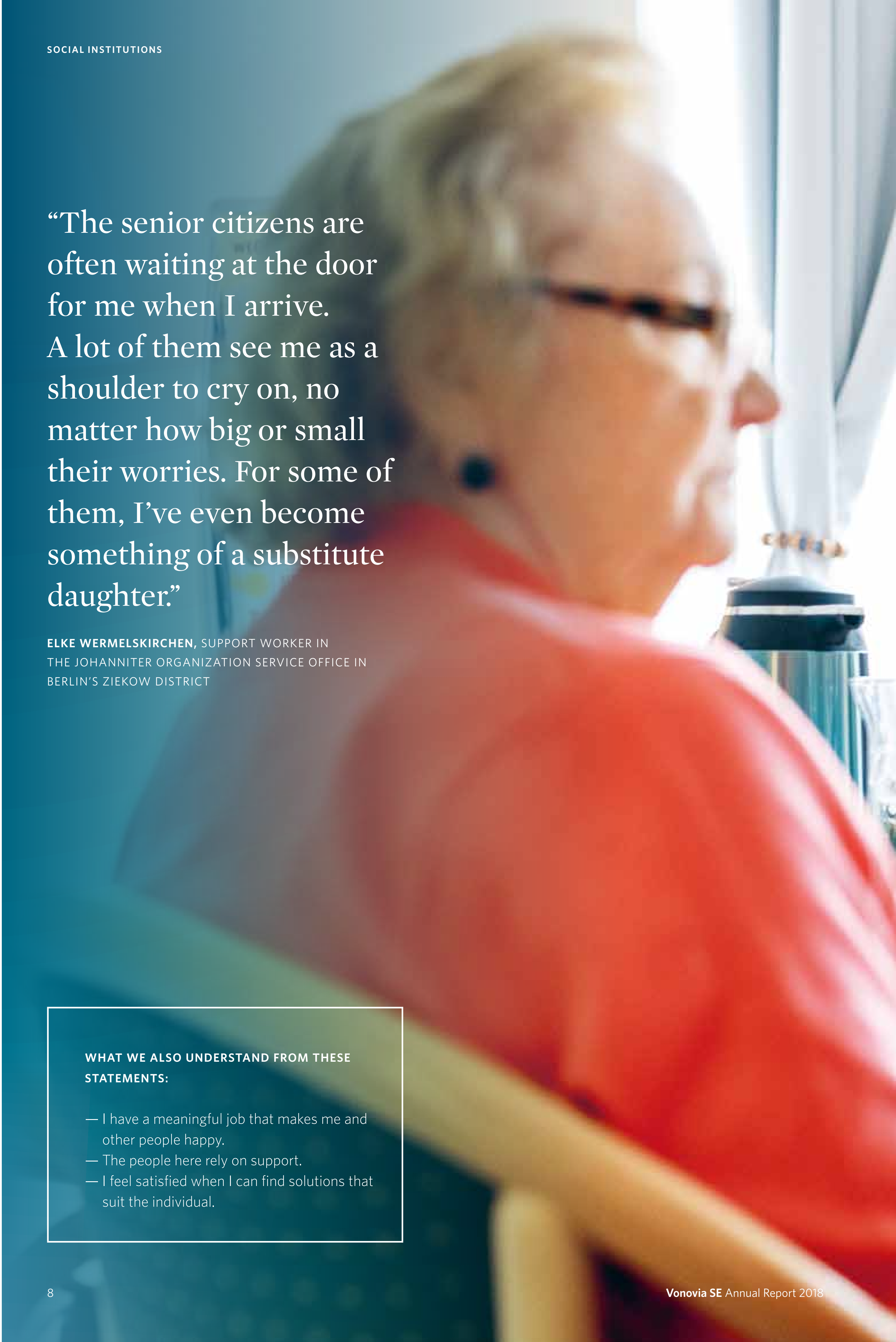
— Developing a city is a challenging task.
— I need competent partners for my city.
— People want to be involved.

"After so many years in the working world, now is the time for us to focus on the things we enjoy: music, handicraft, travel. And we might well stumble upon a few new interests as well."

ULLA AND KLAUS BECKER, TENANTS IN A NEW MODULAR CONSTRUCTION BUILDING LOCATED ON INSTERBURGER STRASSE IN BOCHUM-HOFSTEDE

WHAT WE ALSO UNDERSTAND FROM THESE STATEMENTS:

— We now feel that we deserve an apartment that will suit our needs in the future, too.
— This is the place we want to stay and grow old. We want to have a reliable point of contact to deal with any matters that crop up within the building.



"The senior citizens are often waiting at the door for me when I arrive. A lot of them see me as a shoulder to cry on, no matter how big or small their worries. For some of them, I've even become something of a substitute daughter."

ELKE WERMELSKIRCHEN, SUPPORT WORKER IN THE JOHANNITER ORGANIZATION SERVICE OFFICE IN BERLIN'S ZIEKOW DISTRICT

WHAT WE ALSO UNDERSTAND FROM THESE STATEMENTS:

- I have a meaningful job that makes me and other people happy.
- The people here rely on support.
- I feel satisfied when I can find solutions that suit the individual.

“Whenever I’m sitting in the evening and think there is nothing I haven’t seen, the next day comes along and I’m confronted with a completely new situation. It’s not always easy, but I really enjoy it.”

NORA WOKER, PROJECT MANAGER AND SITE OFFICER FOR VONOVIA IN DORTMUND-WESTERFILDE

WHAT WE ALSO UNDERSTAND FROM THESE STATEMENTS:

— Neighborhood management requires a considerable degree of commitment and creativity.
— A lot of problems can be resolved on site and, most importantly, through teamwork.
— The commitment shown by our employees is our most valuable asset.

Requirements, Expectations, Issues, Responsibilities

Taking Action

Established in 2015 and online since 2016, it has more than one million "active neighbors" in 2019. The nebenan.de platform serves to promote neighborhood dialogue, addressing a key social issue in the process. After all, in a world that is undergoing dynamic change, our social environment is becoming increasingly important. One of the co-founders provides an insight into the platform.

Neighbors that you know play a key role in turning a home into a good home

Michael Vollmann, co-founder of nebenan.de and managing director of the nebenan.de foundation

What is the idea behind nebenan.de? How did you come up with it?
Michael Vollmann: The idea was essentially born out of necessity. My brother Christian and I come from a small town, like a number of the other four co-founders of nebenan.de. Back there, our day-to-day lives were characterized by experiences enjoyed as a community: Everyone knew each other, people would meet up in the local clubs and associations and doing charity work was the norm. That's something we missed when we moved to the city. Urban environments are very anonymous and older people often experience loneliness. Gone are the days when people used to introduce themselves to their neighbors when they moved in. Nowadays you might say a quick "hi," but that's usually about it.

This was something we wanted to change within our neighborhood – we started off with an email distribution list which very quickly evolved into a specialized local platform. The response was so positive that we wanted to make the platform available to every single neighbor throughout Germany.

It would appear that your idea has touched upon a pressing issue in modern society ...
Vollmann: Exactly. Today, nebenan.de brings interested neighbors from all over Germany together on the online platform. People use the platform to network with other locals in their neighborhoods, they pursue joint interests and set up regular meet-ups in local bars and restaurants. Many of them use the platform to find lost possessions, exchange things they no longer need or organize extra tuition for their children. Voluntary work is another element of the platform: People offer their time to go shopping for older people, get involved in food-sharing concepts and organize non-monetary donations for the homeless or refugees.

To what extent can institutions use the platform as well?
Vollmann: nebenan.de is open to anyone that plays an active role in neighborhood development work, urban development or neighborhood initiatives. This includes associations in particular, as well as charitable and municipal institutions. The only criteria that we impose are that the organization has a link to the local area and that the neighborhood will benefit. The platform offers municipal authorities, in particular, a new way of communicating with their citizens: They can use it to draw attention to local events, find voluntary workers and provide information on projects within the area. The city of Hanover, for example, is using the platform to provide registered neighbors with information on its support services for senior citizens, while the local authorities of Berlin-Lichtenberg post information on current neighborhood activities on the platform.

Does that include information on businesses?
Vollmann: Yes, but the businesses have to be local ones. We see the local retail sector and local service providers as key players in the neighborhood and we want to help

strengthen the role that they play. The yoga school, the physiotherapist and the little food store operated by a sole proprietor are key elements of a functioning neighborhood. The framework for their participation, however, is limited, meaning that nobody can use the platform for targeted advertising measures or to roll out data-driven business models, for example.

What about your foundation? What is its role?
Vollmann: Our fundamental focus is on the social idea behind the concept. The not-for-profit nebenan.de Foundation is also helping us to turn this idea into a reality. It has allowed us to attract additional strong partners, such as the German Federal Ministry for Family Affairs, Diakonie Germany (the social welfare organization of Germany's Protestant churches) and also Vonovia. We work hand-in-hand with these partners to organize events such as "Neighbors' Day" or the "German Neighborhood Award," for example. Vonovia also provides key support for the prize.

What is the idea behind the German Neighborhood Award?
Vollmann: Since 2017, this award has gone to individuals who show a particular commitment to fostering a sense of community within their neighborhood. The foundation nominates 100 or so projects out of all of the applications received. 16 state juries and one federal jury then select the winner from among the nominees. The aim is to showcase commitment within the neighborhood and give it the recognition it deserves.

What day-to-day problems do you face? How do you deal with the issue of data protection?
Vollmann: It takes a long time for new concepts to be accepted in Germany and people are very skeptical about anything relating to the Internet. One of the main tasks that we face is trying to dispel these fears. The issue of data protection was a top priority for us from day one. We only the request the data that is absolutely necessary to operate the platform. This essentially includes the user information. An external data protection officer makes sure that we stick to these principles. We use a comprehensive verification process to ensure that the people who want to communicate with each other on the platform really are neighbors. We have obtained certification for our technical platform from the German Association for Technical Inspection, TÜV.

What is your impression of people in Germany?
Vollmann: The level of commitment shown is impressive. The Germans really like getting involved. At the same time, we can see that digitization is releasing centrifugal forces that would appear to be pulling society even further apart. Younger and older people don't run into each other anymore. Community service has been abolished. People from different social groups barely mix. This poses a threat to social cohesion and it's a trend that we want to counteract.

Has anything taken you by surprise?
Vollmann: We have noticed that people are really interested in the concept of the neighborhood. Ideas such as "belonging" to a certain place, or having a place to call "home," are becoming more important.

7,000 neighborhoods have already been connected at www.nebenan.de; this number is expected to grow to 30,000.

There is a certain pull back towards the idea of a "local" community. Neighbors that you know play a key role in turning a home into a good home. This is certainly a trend. I was surprised by the high level of commitment shown by people when it comes to getting down to the hard work. At magazin.nebenan.de, we tell some great stories about local people who are committed to helping refugees or other people in need. We have 3,500 registered local initiatives on our platform, and then there are the countless activities that are organized informally. The wealth of ideas and the dedication shown are impressive. It's something that really motivates us and confirms that we are on the right track.

What are your plans for nebenan.de? What is your vision for the future?
Vollmann: In the medium term, we want the platform to be self-sufficient in financial terms. We also want our foundation to have even more of an impact in terms of supporting democracy and promoting social cohesion and integration.

We currently have 1.1 million active users in more than 7,000 neighborhoods located in over 350 municipalities. My vision is for us to one day be able to offer a platform to all 30,000 neighborhoods in Germany. I hope that our work will turn the large number of strangers who are currently living next to each other day in, day out, into good neighbors again and that this will help to alleviate loneliness and strengthen social cohesion at local level. Neighborhoods can offer us a place to call home in our dynamic world.

For more information on nebenan.de, please visit the website: www.nebenan.de.

You can find out more about the German Neighborhood Award on the website www.nachbarschaftspreis.de.

Creating new living space

Our cities are becoming increasingly attractive, but living space remains in short supply. This is an issue that we want to tackle by building new apartments designed to suit people's needs.

Germany needs up to 400,000 new apartments a year. Around 300,000 were completed in 2018. The gap is proving a problem for the country's major cities, in particular, because their populations are growing at an above-average rate. Our modular construction concept allows us to create new, but also affordable living space, within a short space of time. We started work on the construction of 1,000 residential units last year. Once everything is running smoothly and the processes in place at the local authorities are fully up to speed, we will be able to realize more than twice as many apartments every year in the future. As things stand at the moment, we expect that we can use conventional project development to build around 12,000 new apartments in the years to come.

In order to exploit the opportunities open to us to the greatest extent possible, we are focusing on three approaches: vertical expansion, densification and project development in new areas. We use technical systems to identify potential for densification and vertical expansion in particular: These systems "scan" our portfolio for opportunities that conventional methods might have missed.

The neighborhood environment is something that we also always consider when thinking about new construction. In the current fiscal year, eleven neighborhood development projects encompassing a total of around 6,800 residential units are in the operational implementation stage across Germany. Our objective is always to achieve sustainable improvements within the neighborhoods in question.

In series, yet still individual: Modular construction provides a way to create new apartments quickly and efficiently.

You can find more information on this in the press section: www.vonovia.de/ueber-vonovia/presse

Knorr district: Construction for today and tomorrow

When we want to create new living space, we think not only about the apartments themselves, but also about the surrounding infrastructure. One example is the project located on Knorrstrasse in the central Frankfurt district of Gallus, which was completed last year. As part of this project, we modernized a portfolio of 100 apartments built in 1956 and 1957, including measures to add balconies and elevators. At the same time, we also built 40 new residential units on existing open spaces using serial wooden hybrid construction. Eight of these apartments were created by adding additional stories to existing buildings. All in all, this equates to almost 3,200 square meters of new living area in a central location and at fair prices.

As far as measures to improve the neighborhood are concerned, we modernized the sewage system, laid a power line and renewed the road surface. We also created 52 car parking spaces and added green spaces. Today, the Knorr district is an attractive neighborhood for existing tenants and new customers alike, and is a flagship project that showcases innovative living space concepts. The project has inspired us to realize similar projects in other locations in the future.

By 2035, 24 million people living in Germany will be aged over 65, meaning that they will be in need of senior-friendly homes. At the same time, digitization is opening up new opportunities for making homes more comfortable and secure. We aim to exploit these opportunities to the benefit of our customers.

Offering a place to live for a large number of people

People tend to become less mobile as they get older. For many people, this means having to leave the place they have called home for many years because it no longer meets their needs. As we also want our older tenants to be able to stay in the place they call home, we are gradually making our apartments more accessible. And when we build new apartments, we take the criterion of "senior-friendly" living into account from the outset. The fact that the costs are added onto the rent over a prolonged period makes them manageable for our customers.

Our customers want to enjoy all of the modern conveniences in their homes. In line with our strategy of positioning ourselves as a service provider, we have already identified numerous approaches that tie in with this idea of contemporary living, offering services that our customers value: Cable TV, bathroom and kitchen modernization in response to tenant request, mailboxes for packages in our buildings, special apartment security measures or convenient processes allowing electricity costs to be settled via the rent. We take care to ensure that all of these services are attractive for our customers.

Shared living facility for dementia sufferers: rising to everyday challenges together

Particularly in old age, many people are forced to live with an illness that calls for a particular form of support: dementia. The condition affects around 1.7 million people in Germany, a figure that is set to rise to three million by 2050 due to demographic change. In order to demonstrate our commitment to working towards solutions in this area, too, we opened the first shared living facility for dementia sufferers in Vonovia's portfolio in Essen in November 2018. With the support of the nursing care provider Humanika, the facility allows up to ten residents suffering from dementia to live largely independently.

The shared facility features individually designed rooms and communal areas such as a large living room, a kitchen and a bathroom. With professional assistance on hand to help them master the day-to-day challenges that they face – and to provide the appropriate medical care if need be – the residents can enjoy a safe environment that meets their needs and allows them to live largely independently and with the dignity they deserve.

We plan to step up our cooperation with Humanika over the next few years to realize more projects like these in the future.

You can find more information on this in the press section: www.vonovia.de/ueber-vonovia/presse

Most people want to be able to stay in their own homes as they grow older. And with the right living concepts, they can.

Promoting community life

Demographic change, migration and increasing individualism are changing the face of our society. These developments are also leaving their mark on our neighborhoods. We want to help ensure that neighborhoods remain stable and that integration is a success story.

Community life, education, culture – these are three areas that offer straightforward solutions for fostering integration and community spirit. We are actively involved in all three areas, either directly or via our foundations. We organize a whole range of different events, launch competitions and grant scholarships.

It is not just in their apartments that people come together, but also in the area surrounding their homes. Their neighborhoods are their living environment and we want to make sure that this environment is one they feel at home in. We organize green spaces, maintain trees, install benches and design playgrounds and outdoor gyms.

Our customers have diverse cultural backgrounds. We offer our customer services in various languages and are also on hand on site to ensure that tenants settle in to their new environment. And should particular issues arise in the course of day-to-day life, then our social and neighborhood managers can help to iron out any problems.

You can find more information on this in the press section: www.vonovia.de/ueber-vonovia/presse

A neighborhood community center in Berlin-Ziekow

"Thinking ahead and exploiting new opportunities" – this is the principle based on which we will gradually be converting a total of 145 apartments in two high-rise residential buildings in Berlin-Reinickendorf to make them fully accessible and senior-friendly. We have already laid the foundation for ensuring that our older residents in Berlin-Reinickendorf are well integrated into the community. One step in this process is the cooperation with the Johanniter Unfallhilfe accident assistance organization of the Order of St. John.

Since last summer, the organization has been running a neighborhood community center that allows older people to make use of support services ranging from group lunches to assistance with minor day-to-day tasks. In addition to individual advice, the services also include the opportunity to take part in group activities such as exercise programs for senior citizens, memory training courses and excursions. Residents can also make use of outpatient nursing care services, a meals service, concierge services and a home distress call solution.

Based on the positive experience in Berlin-Ziekow, we will be turning similar projects into a reality in other locations in the future. At the same time, we are considering expanding the services that we ourselves offer our older tenants: for example a laundry service, a medication delivery service, the acceptance of mail and parcels or the installation of a home distress call system.

In an aging society, social care occupations are quickly becoming important. With 22,000 employees and around 37,000 volunteers, the Johanniter organization contributes to this greatly.

In order to limit the implications of climate change and to ensure that global warming does not surpass the two degrees mark, our buildings also have to become more environmentally friendly. As a real estate company, we want to play an active role in ensuring that this objective is met.

Doing our bit to protect the environment

Especially in cities, parking lots are important spaces where modern mobility concepts can be put to different kinds of use.

The size of our portfolio entails a tremendous responsibility for protecting the environment. At the same time, however, we cannot lose sight of the cost effectiveness and affordability of our apartments. We are helping to protect our environment first and foremost through our energy-efficient building upgrades aimed at reducing energy consumption and emissions. This is also an area in which the standards that apply to new buildings are much higher than those that apply to our existing portfolio.

We are also realizing modern energy concepts to make a further contribution to climate protection. We already operate 208 photovoltaic plants and have been supplying 450 apartments with biomass district heating since last year. We will be implementing further projects to substantially increase the number of our environmentally-friendly systems over the next few years.

Our coordinated organizational processes also allow us to make a significant contribution to climate protection: Smart route planning for our craftsmen and the high level of digitization inherent in our processes, for example, allow us to avoid a large number of unnecessary trips.

Car sharing mobility concept

The infrastructure in our conurbations is already so advanced that many people can easily do without their own car entirely: Cars are relatively expensive and the space used to park them could otherwise be used for residential or open spaces. And that's not to mention the fact that they are bad for the environment. Last year, these concerns prompted us to think about more contemporary approaches to mobility: We have been offering tenants in our neighborhoods car sharing services available directly outside their front door since the middle of the year. Our partner in this initiative is Flinkster, the car sharing network with the highest level of coverage in the German-speaking world. A second exclusive partner is the shared mobility provider MOQO HOME.

Our tenants can book car sharing services quickly and easily using the website of the partner concerned. The car they choose is unlocked, and then locked again after its return, using a cellphone app. The costs are billed directly via the cooperation partner. The vehicles on offer include small cars for the city and station wagon models for family outings or bigger shopping trips.

After the concept was rolled out in the Stuttgart, Berlin, Frankfurt, Düsseldorf, Essen and Dresden regions in the summer, tenants in Kiel, Bremen, Dortmund, Duisburg, Frankfurt, Mannheim and Freiburg are now also able to use the convenient system to collect their cars and then park them in the designated areas once their trip is complete, with no stress involved. The next step in the project will involve the installation of electric charging stations in car sharing parking lots. The first electric charging station in Vonovia's portfolio has already been installed in the Eltingviertel District in Essen.

You can find more information online:
www.vonovia.de/carsharing

KEY FIGURES

Financial Key Figures in € million	2014	2015	2016	2017	2018
Rental income*	789.3	1,414.6	1,538.1	1,667.9	1,894.2
Adjusted EBITDA Rental	482.6	924.4	1,046.2	1,148.7	1,315.1
Adjusted EBITDA Value-Add (previously “Value-Add Business”)	23.6	37.6	57.0	102.1	121.2
Adjusted EBITDA Recurring Sales				62.2	79.1
Adjusted EBITDA Development				6.7	39.4
Adjusted EBITDA Total	553.5	1,028.7	1,186.5	1,319.7	1,554.8
EBITDA IFRS*	500.3	838.4	1,083.7	1,271.8	1,534.4
Group FFO				975.0	1,132.0
FFO 1*	286.6	608.0	760.8	919.5	1,064.7
thereof attributable to Vonovia shareholders	275.1	555.5	713.4	866.2	1,002.4
thereof attributable to Vonovia hybrid capital investors	-	33.0	40.0	40.0	40.0
thereof attributable to non-controlling interests	11.5	19.5	7.4	14.6	22.3
Group FFO per share in €				2.01	2.18
FFO 1 per share in €	1.00	1.30	1.63	1.90	2.06
Income from fair value adjustments of investment properties	371.1	1,323.5	3,236.1	3,434.1	3,517.9
EBT	589.1	1,734.5	3,859.8	4,007.4	3,874.3
Profit for the period	409.7	994.7	2,512.9	2,566.9	2,402.8
Cash flow from operating activities	453.2	689.8	828.9	946.0	1,132.5
Cash flow from investing activities	-1,177.9	-3,239.8	416.4	-1,350.1	-3,892.5
Cash flow from financing activities	1,741.7	4,093.1	-2,812.4	-870.5	3,041.5
Maintenance and modernization	345.5	686.3	792.4	1,124.8	1,569.4
thereof for maintenance expenses and capitalized maintenance	173.8	330.7	320.1	346.2	430.4
thereof for modernization (incl. new construction)	171.7	355.6	472.3	778.6	1,139.0

Key Balance Sheet Figures in € million	Dec. 31, 2014	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2018
Fair value of the real estate portfolio	12,759.1	24,157.7	27,115.6	33,436.3	44,239.9
Adjusted NAV	6,472.0	11,273.5	14,328.2	18,671.1	23,262.6
Adjusted NAV per share in €	22.67	24.19	30.75	38.49	44.90
LTV in %	49.3	46.9	41.6	39.8	42.8

Non-financial Key Figures	2014	2015	2016	2017	2018
Number of units managed	232,246	397,799	392,350	409,275	480,102
thereof own apartments	203,028	357,117	333,381	346,644	395,769
thereof apartments owned by others	29,218	40,682	58,969	62,631	84,333
Number of units bought	31,858	168,632	2,815	24,847	63,706
Number of units sold	4,081	15,174	26,631	11,780	15,102
thereof Recurring Sales (previously “Privatize”)	2,238	2,979	2,701	2,608	2,818
thereof Non-core Disposals (previously “Sell portfolio”)	1,843	12,195	23,930	9,172	12,284
Vacancy rate in %	3.4	2.7	2.4	2.5	2.4
Monthly in-place rent in €/m²	5.58	5.75	6.02	6.27	6.52
Organic rent increase in %	2.5	2.9	3.3	4.2	4.4
Number of employees (as of Dec. 31)	3,850	6,368	7,437	8,448	9,923

EPRA Key Figures in € million	2014	2015	2016	2017	2018
EPRA NAV	6,578.0	13,988.2	17,047.1	21,284.6	26,105.0
EPRA NAV per share in €	23.04	30.02	36.58	43.88	50.39
EPRA NNNAV	-	9,739.8	12,034.4	14,657.5	17,669.5
EPRA earnings	-	329.2	450.0	572.6	685.3
EPRA net initial yield in %	-	4.5	4.1	3.7	3.5
EPRA topped-up net initial yield in %	-	4.5	4.1	3.7	3.5
EPRA vacancy rate in %	3.0	2.5	2.2	2.3	2.3
EPRA cost ratio (incl. direct vacancy costs) in %	-	31.9	28.4	26.3	25.9
EPRA cost ratio (excl. direct vacancy costs) in %	-	30.2	27.0	24.8	24.6

* Comparable figures for the previous year acc. to the current definition of key figure.
The key figures per share are based on the shares carrying dividend rights on the corresponding reporting date: values for 2014, TERP-adjusted.

THE COMPANY AND ITS SHARES

Vonovia once again lived up to its social responsibility last year. The company made considerable investments in its portfolio and neighborhoods and expanded its range of services in the interests of its customers. At the same time, the increase in the value of the company – partly as a result of acquisitions – benefits investors.

Dear Shareholders, Ladies and Gentlemen,

As a residential real estate company, Vonovia plays a central role in society. This explains why our activities are never focused exclusively on financial aspects, but also take social factors into account. We are aware of the special role that we play: As a service provider and the provider of homes for around one million people, our focus is on our customers and their needs. This is why we strive to maintain our building stock and make an active contribution to shaping neighborhoods. It is also why we are committed to offering contemporary apartments and developing services that offer better quality of living. Our focus on our customers is also the reason why we are addressing a social issue that is particularly important at the moment: the construction of new apartments.

Affordable housing looks set to remain in short supply in our conurbations in the future, too. There are no quick solutions to this challenge, as is the case for the other pressing issues faced by our society: Building communities of people from a whole range of different backgrounds isn't something that happens by itself. Age structures within our society are shifting: By 2030, we will need up to 3 million senior-friendly apartments in Germany. These are issues that each and every one of us has to address. And even though policymakers are setting climate objectives that I believe make sense, this is another area in which the concepts to implement the objectives in a cost-effective and, at the same time, socially responsible manner are often not entirely clear.

We can offer answers to these questions and want to help work towards the solution. But that will not be enough in itself. In everything that we do, we need partners and joint efforts.

Last year, we achieved an **outstanding renovation rate of 5%** in our portfolio. We are revamping our buildings in order to reduce heating costs and restrict CO_2 emissions. This rate stands for contemporary living comfort, good levels of building efficiency and greater climate protection. We are committed to these efforts because they make sense from both a commercial and an ecological point of view. But because we want to take a whole range of different perspectives into account and also ensure that our rents remain affordable, we will be reducing the volume of energy-efficient building upgrades in the future and investing more in the construction of new apartments. As far as our future building upgrades are concerned, we will only be realizing projects that do not increase our customers' rents by more than € 2 per square meter.

from left
Rolf Buch — Chairman of the Management Board (CEO)
Helene von Roeder — Member of the Management Board (CFO)
Klaus Freiberg — Member of the Management Board (COO)
Daniel Riedl — Member of the Management Board (CDO)

At the same time, we are developing solutions in order to further reduce CO_2 emissions. These include state-of-the-art energy concepts, such as our own photovoltaic plants, or electromobility. We are also investing in neighborhood development to ensure that urban diversity is a success story and will be stepping up our investments in the construction of new apartments. These measures will create modern multifamily rental residences and, as of late, also condominiums.

Let's now take a look back at our operating performance over the last fiscal year: In 2018, we picked up exactly where we had left off in the previous years in terms of continuing with our good performance. We made good progress with our modernization and new construction measures. Our craftsmen's organization increased the range of services that it offers.

The volume of business continued to increase in the areas of cable television, metering services, insurance and residential environment services as well. In a growing business area, Vonovia Immobilien Treuhand now manages around 84,000 apartments for other owners. We created a new business segment, energy supply, allowing us to supply our customers with renewable electricity and, in some cases, also with natural gas.

At the same time, we continued to make adjustments to our residential portfolio to reflect the regions that are strategically important to us. In terms of fair value, 98% of our German portfolio now belongs to our strategic holdings.

We believe that one of the opportunities open to us lies in using our business model to grow abroad – when the opportunity arises. This strategy paid off again in 2018: The acquisition of the Austrian company BUWOG and the Swedish company Victoria Park allowed us to increase the proportion of apartments located outside of Germany to more than 39,000 units, or just under 10% of our portfolio. We also acquired a minority stake in the purchase of 4,000 residential units previously held by the French railway operator SNCF. This will help us to better understand the French residential property market, too, in the long run.

In many of our discussions with you, we on the Management Board continually emphasize the fact that we only buy portfolios that are a good fit for us. These are portfolios that allow tenants to benefit from our business model and the services we offer. This certainly applies to the Austrian and Swedish markets. I am delighted that our shareholders and also the management teams of BUWOG and Victoria Park share our view and want to support our approach accordingly. But let me take this opportunity to stress that Germany will remain our core market.

Vonovia remains a success story in financial terms, too. Once again, all key figures showed an improvement as against the previous year. Our operating earnings, FFO 1, rose by 15.8% to € 1.07 billion. This was also helped along by income from the acquisitions and enhanced by additional income resulting from the investments made in the portfolio as well as in new construction and vertical expansion measures. The sustained high demand for housing is another driver of our success. It means that we have virtually no properties lying vacant, with a vacancy rate of 2.4%.

As far as our operating result is concerned, I would like to add that, as of this year, we have replaced FFO 1, the key figure previously used to measure our operating success, with Group FFO. This is because we have included the field of project development in our business with the acquisition of BUWOG. Project development includes the design and construction of new residential buildings for third parties and for our own portfolio on land specifically acquired for this purpose. Group FFO reflects this business area as well. In the context of the integration of BUWOG, we also revamped our management system and reorganized our segments. In addition to the three segments that you are already familiar with, we will also have a fourth segment in the future: Development. You can find details in this report on page 64 ff.

The market value of our portfolio increased significantly last year: The adjusted net asset value rose by 24.6% year-on-year to € 23.3 billion. Expressed per share, it increased by 16.7% to € 44.90. This encouraging development can be traced back to increased valuations and to the incorporation of the BUWOG and Victoria Park portfolios.

Our financing basis remains stable. Our debt coverage ratio remains within the target corridor and the debt maturity profile is balanced with long maturities. We remain committed to using a broad range of financing instruments so that we can cover our liquidity needs in a flexible manner at all times. In addition, we are still making use of the current low interest rate environment in order to replace expensive financing arrangements with better ones.

Dear shareholders,

My colleagues on the Management Board and I are delighted to be able to propose the distribution of an increased dividend of € 1.44 per share to the Annual General Meeting together with the Supervisory Board. Provided that the overall conditions allow, we want to offer the option of a stock dividend over and above the conventional cash dividend in the current year, too.

Together with our 10,000 or so employees, we will be using 2019 to once again demonstrate our firm commitment to supporting our customers and living up to our responsibility vis-à-vis society. This means that we will be listening carefully and collaborating with partners to find solutions.

We would once again like to thank you, our shareholders, our partners and our employees for the trust you have placed in us.

Bochum, Germany, March 2019

Sincerely,

Rolf Buch
Chairman of the Management Board (CEO)

Rolf Buch (CEO)

Management Board

The Management Board of Vonovia SE consisted of four members as of December 31, 2018.

Rolf Buch
Chairman of the Management Board (CEO)

As Chief Executive Officer, Rolf Buch is responsible for transactions, general counsel, investor relations, HR management, auditing, corporate communications, the Management and Supervisory Board offices, sustainability and land management. Before joining the company in 2013, Rolf Buch was a Member of the Management Board at Bertelsmann SE and Chairman of the Management Board at Arvato AG. During his time at Arvato, the company grew into a global BPO service provider with over 60,000 employees in more than 40 countries and became the fastest-growing division of Bertelsmann SE. Rolf Buch began his career at Bertelsmann in 1991 after studying mechanical engineering and business management at RWTH Aachen University.

Klaus Freiberg
Member of the Management Board (COO)

As Chief Operating Officer, Klaus Freiberg is responsible for product management, IT, customer service, residential environment, technical service, engineering and the local rental business in the various regions (north, south, southeast, east, central, west). He held various leadership positions within the Arvato Group (Bertelsmann) in the period between 1995 and 2010, where he assumed responsibility for, and worked on the optimization of, the Service Centers of Deutsche Post and Deutsche Telekom, among other things. Klaus Freiberg is a recognized expert in making companies customer-focused. Klaus Freiberg completed his degree in history, social sciences and economics at the Westfälische Wilhelms University of Münster in 1990.

Helene von Roeder
Member of the Management Board (CFO)

Helene von Roeder has held the position of Chief Financial Officer on the Management Board of Vonovia SE since May 2018 and is responsible for controlling, finance, accounting, tax, property evaluation, central purchasing, insurance and Immobilien Treuhand. Before joining Vonovia, she headed Credit Suisse's business in Germany, Austria and Central and Eastern Europe (CEE) as CEO Germany from 2014. She began her career at Deutsche Bank in London in 1995 after studying theoretical physics in Munich and theoretical astrophysics in Cambridge. She worked for UBS AG in Frankfurt and London from 2000 to 2004, before moving to Morgan Stanley Bank AG in Frankfurt, where her most recent role was Head of Global Capital Markets for Germany and Austria, Member of the Management Board of Morgan Stanley Bank AG.

Daniel Riedl
Member of the Management Board (CDO)

In this role as Chief Development Officer, Daniel Riedl is responsible for development in Austria, development in Germany and operating business in Austria. Daniel Riedl is a graduate in business administration from Vienna University of Economics and Business and a Fellow of the Royal Institution of Chartered Surveyors. Daniel Riedl has around 20 years' experience in the real estate industry, with more than ten of them spent at Management Board level. He served on the Executive Board of IMMOFINANZ AG from 2008 to 2014. He led BUWOG AG to a successful stock exchange listing in April 2014 and was the company's CEO until its delisting at the end of 2018.

Supervisory Board

The Supervisory Board currently consists of twelve members, all of whom were elected for a statutory term of office by the Annual General Meeting held on May 9, 2018. The inaugural meeting of the new Supervisory Board was held following the Annual General Meeting of May 9, 2018.

Jürgen Fitschen
Chairman
Senior Advisor at Deutsche Bank AG

Prof. Dr. Edgar Ernst
Deputy Chairman
President of the German Financial Reporting Enforcement Panel

Burkhard Ulrich Drescher
Managing Director of InnovationCity Management GmbH

Vitus Eckert
Lawyer – Eckert Fries Prokopp Rechtsanwälte GmbH

Dr. Florian Funck
Member of the Management Board of Franz Haniel & Cie. GmbH

Dr. Ute Geipel-Faber
Self-employed management consultant

Daniel Just
Chairman of Bayerische Versorgungskammer

Hildegard Müller
Member of the Management Board of innogy SE

Prof. Dr. Klaus Rauscher
Self-employed management consultant

Dr. Ariane Reinhart
Member of the Management Board of Continental AG

Clara-Christina Streit
Self-employed management consultant

Christian Ulbrich
Global CEO & President Jones Lang LaSalle Incorporated

Members Who Left the Supervisory Board

Hendrik Jellema (until May 9, 2018)
Chairman of Stiftung Berliner Leben

Supervisory Board Committees

Executive and Nomination Committee
Jürgen Fitschen, Chairman
Hildegard Müller
Prof. Dr. Klaus Rauscher
Dr. Ariane Reinhart
Clara-Christina Streit

Audit Committee
Prof. Dr. Edgar Ernst, Chairman
Burkhard Ulrich Drescher
Vitus Eckert
Dr. Florian Funck

Finance Committee
Clara-Christina Streit, Chairperson
Dr. Ute Geipel-Faber
Jürgen Fitschen
Daniel Just
Christian Ulbrich

Report of the Supervisory Board

Ladies and Gentlemen,

The letter below contains our report on the activities performed by the Supervisory Board over the last fiscal year. In 2018, we were once again able to support the Management Board of Vonovia SE through a successful fiscal year.

The issue of housing is currently very much in the public eye in Germany, meaning that, as the country's biggest private real estate company, Vonovia is faced with a challenging task: The company has to achieve positive further development in a financial sense in the interests of its shareholders while at the same time having to come up with constructive answers to the municipal and social housing issues faced by people living in Germany's metropolitan regions.

The Management Board once again found appropriate answers to both questions in the last fiscal year. It continued to pursue its long-term strategic approach and exploited the company's good market position in order to further develop the strategy in the interests of the company and its shareholders. The operating business showed successful ongoing development. The company improved its performance indicators, invested in its portfolio and once again made very good progress in expanding its service business. These developments led to good financial data for the year as a whole. The company was also successful with its opportunistic growth strategy again, expanding its international portfolio with the acquisition of the Austrian company BUWOG AG and the Swedish company Victoria Park AB (publ). Vonovia also invested in France for the first time, acquiring a small stake in a portfolio there. All in all, we are very satisfied with the development of the Vonovia Group in 2018.

In the 2018 fiscal year, the Supervisory Board continuously monitored the Management Board's management activities and provided the Management Board with regular advice concerning the running of the company. We were able at all times to establish that their actions were lawful, expedient and regular. The Management Board fulfilled its information obligations to an appropriate extent at all times, notifying us regularly, promptly and comprehensively, both in writing and verbally, of all circumstances and measures that were relevant to the company.

In both our committees and at our plenary meetings, we always had ample opportunity to critically appraise the reports and proposals submitted by the Management Board and to contribute our own suggestions. We discussed and tested the plausibility of all business occurrences of significance to the company, as communicated to us by the Management Board in written and verbal reports, in detail. Where required by law or the Articles of Association, we granted our consent to individual business transactions.

Cooperation Between the Management Board and the Supervisory Board

In the previous year up until May 9, 2018, the Supervisory Board consisted of eleven members, and thereafter twelve. We were in intensive dialog with the Management Board and supported it in its key decisions. Also, we followed the company's business development closely. The Management Board regularly informed us about key events and the company's strategic direction as part of a collaboration based on trust.

As Supervisory Board Chairman, I remained in close contact with the Management Board, and in particular with the Chairman of the Management Board, even between Supervisory Board meetings, regularly exchanging information and ideas. Furthermore, I am interested in including the employee representative bodies in this communication and have led talks with representatives of the Group works councils. Other members of the Supervisory Board were notified of any important findings promptly, or at the latest by the next board meeting. In the fiscal year, there were no conflicts of interest of Management Board or Supervisory Board members, which are to be reported immediately to the Supervisory Board.

Focal Points of Our Work

In line with the duties assigned to the Supervisory Board by law, the Articles of Association and the rules of procedure, we once again closely scrutinized the Group's operational, economic and strategic progress last year. This included, as in the past, the expansion of the service offering, the implementation of the investment program and adjustments to this program to reflect market requirements, neighborhood development and investments in new living space, the exploitation of opportunities resulting from digitization, the portfolio strategy, internationalization and the evaluation and provision of support with regard to opportunities for further portfolio expansion. We also took an in-depth look at the future management structure of the company.

Meetings

In the 2018 fiscal year, the Supervisory Board met a total of seven times to consult and pass resolutions: five times at meetings (March, twice in May, September, December) and twice via conference call (January, March). The Supervisory Board made decisions by written circular in two cases (February, October). Any individual members absent from the seven meetings had always been excused.

Meetings of Supervisory Board and Committees in the 2018 fiscal year

Member	Supervisory Board	Audit Committee	Executive and Nomination Committee	Finance Committee	Participation rate
Jürgen Fitschen (since May 2018)	3/3	–	1/1	3/3	
Burkhard Drescher	7/7	4/4	–	–	
Vitus Eckert (since May 2018)	3/3	2/2	–	–	
Prof. Dr. Edgar Ernst	6/7	4/4	3/3	5/6	
Dr. Florian Funck	7/7	3/4	–	–	
Dr. Ute Geipel-Faber	7/7	–	–	8/9	
Hendrik Jellema (until May 2018)	4/4	2/2	–	–	
Daniel Just	7/7	–	–	9/9	
Hildegard Müller	5/7	–	4/4	–	
Prof. Dr. Klaus Rauscher	7/7	–	4/4	–	
Dr. Ariane Reinhart	6/7	–	3/4	–	
Clara-Christina Streit	7/7	–	4/4	8/9	
Christian Ulbrich	6/7	–	–	7/9	

Participation in the seven Supervisory Board meetings averaged around 94% in the 2018 fiscal year. No member of the Supervisory Board took part in less than half of the meetings during their term of office. The same applies to the committees. In preparation for the meetings, the Management Board submitted timely, comprehensive and valid written reports and resolution proposals to us.

Information on the individual meetings and their content is provided below:

On **January 17, 2018**, the Supervisory Board discussed, and passed a resolution on, transitional and succession arrangements for the Controlling and Finance Management Board functions by way of a conference call.

On **February 21, 2018**, the Supervisory Board approved the submission of the "Declaration of Conformity by the Management Board and the Supervisory Board of Vonovia SE to the Recommendations of the German Corporate Governance Code Pursuant to Section 161 of the German Stock Corporation Act (AktG)."

On **March 5, 2018**, we met to adopt the balance sheet: the Supervisory Board approved the company's annual and consolidated financial statements as of December 31, 2017, and prepared the agenda and the resolution proposals for the Annual General Meeting. This also included the proposal for the appropriation of profit. Regarding the manner in which the dividend would be granted, the Supervisory Board decided to once again propose to the Annual General Meeting that the dividend be paid either in cash or in the form of shares. Other proposals for the agenda included the approval of a supplement regarding approved and conditional capital and the acquisition of own shares. The Supervisory Board also approved the Non-financial Declaration. Under the "HR-related matters" agenda item, the Supervisory Board discussed remuneration issues (target agreements, short-term and long-term incentive plans, pension model), as well as the rescission of the contract of employment with Dr. A. Stefan Kirsten, and passed corresponding resolutions. As far as operational issues are concerned, the Supervisory Board looked at the customer satisfaction analysis and activities relating to digitization. The Supervisory Board discussed economic performance, obtained information on capital market activities and discussed the results and proposals of the Finance Committee. Within this context, the Supervisory Board passed a resolution on the financing of the acquisition of the shares in BUWOG by issuing bonds as part of the EMTN program in the amount of up to € 3.7 billion.

Under the leadership of Prof. Dr. Edgar Ernst, the Supervisory Board addressed the issue of appointing a Chairperson of the Supervisory Board and passed a resolution nominating Jürgen Fitschen, who introduced himself to the Supervisory Board at the beginning of the meeting, as a candidate.

On **March 16, 2018**, the Supervisory Board used a conference call to discuss the recruitment of Daniel Riedl to assume responsibility, within the Management Board, for the Austria region and the development business; it assigned a corresponding negotiation mandate to the Chairman of the Supervisory Board, Prof. Dr. Edgar Ernst. The Supervisory Board also passed a resolution on a proposal to be made to the Annual General Meeting regarding the election of the Supervisory Board members and discussed the structure of the mandate term within the Supervisory Board.

At the meeting held on **May 2, 2018**, the Supervisory Board passed a resolution on the appointment and recruitment of Daniel Riedl with effect from May 9, 2018, and with an initial term of office of three years. It discussed what was likely to be the new distribution of duties and also discussed the consolidated interim financial statements as of March 31, 2018, looking, in particular, at the impact of the integration of BUWOG AG – both in financial terms and with regard to sustainability factors. The Supervisory Board also discussed operating business performance in detail: the key operating figures, the planned investment programs, the neighborhood development project in Berlin-Tegel and the expansion of the "technical service" and "multimedia and metering services" areas. The Supervisory Board discussed the company's financial performance in relation to its competitors and discussed the current developments on the capital market. This also involved the Supervisory Board looking at the performance of Vonovia's shares and feedback from investors and analysts, as well as the recommendations made by the voting right consultants on the items on the agenda for the Annual General Meeting. The Supervisory Board approved capital increases for the planned scrip dividend and for the purposes of making a takeover offer to the shareholders of Victoria Park AB, including a loan agreement in the amount of € 960 million and the implementation of a capital increase as part of an accelerated capital increase. Other issues included the increasingly critical media response to the issue of housing, the status of the integration of BUWOG AG and the acknowledgment of a consulting assignment for the energy-efficient refurbishment of a Vonovia neighborhood with a company in which a member of the Supervisory Board is a managing director.

At its inaugural meeting held on **May 9, 2018**, the Supervisory Board made arrangements regarding the responsibilities of its members for the new term of office. It elected Jürgen Fitschen as Chairman and Prof. Dr. Edgar Ernst as Deputy Chairman. The chairs of the Finance and Audit Committee were also elected. Due to the increased consolidation outlay associated with the integration of the BUWOG Group, the company was unable to meet the financial reporting deadlines for 2018. As a result, the Supervisory Board updated the Declaration of Conformity pursuant to the German Corporate Governance Code at the meeting. After Helene von Roeder also assumed responsibility for the Finance division with effect from May 9, 2018, the Supervisory Board also passed a resolution on the new distribution of duties within the Management Board.

At the meeting held on **September 11, 2018**, we discussed the reports on the decisions made by the Finance Committee and the Executive and Nomination Committee, the results of the Audit Committee on the financial statements for the first half of 2018, the focal points of the audit and fee for the auditor of the annual financial statements for the 2018 fiscal year and the reports on the Compliance and Internal Audit departments. One focal issue was the strategy, which we confirmed with regard to all of its sub-aspects given the company's positive operating and financial performance (and, as a result, also the positive development in its value). Within the context of this strategy, we also had an in-depth discussion on the current environmental developments and megatrends in the housing industry that the company has to pay increasing attention to due to the role it plays on the market: Major issues included the shortage of housing, new construction, ghettoization, integration, neighborhood development and electromobility. We also discussed the increasingly critical coverage by the media and the requirement for communication with tenants and representatives of the media. Other strategic issues included the portfolio strategy in Austria, the further development of the Development segment and the development potential in France and Sweden. Another set of issues related to an evaluation of the company's operating business performance: Within this context, we looked at customers' increasing demands in terms of service, the increased additional expenses relating to the portfolios to be integrated, the investment program and business performance in the Development segment with the implementation projects in Berlin, Hamburg and Vienna.

On **October 29, 2018**, we used a written circular to approve the move to take out a current liability to achieve the intragroup restructuring of those companies belonging to the BUWOG Group with real estate holdings in Germany.

At the meeting held on **December 5, 2018**, we discussed HR-related topics and reports from the committees within the Supervisory Board. We discussed and adopted the budget for 2019 submitted by the Management Board and discussed the medium-term planning for the next five years. Other issues included the reports on operating business performance, developments within the Development segment, economic performance, capital market developments and the media coverage analysis. The Chairman of the Supervisory Board also reported on the corporate governance roadshows held in September and October. Internationalization was another issue on the agenda: Within this context, we discussed the status of affairs in Sweden (Victoria Park) and in France (consortial share purchase in a portfolio of rail workers' apartments).

Work of the Committees

In order to perform our duties effectively, we formed an Audit Committee, a Finance Committee and an Executive and Nomination Committee. The committees prepare subjects which are to be discussed and/or resolved by the Supervisory Board. In addition, the committees passed further resolutions that we had delegated to them instead of passing them on the Supervisory Board as a whole.

In addition to regular dialogue between the Audit Committee and the auditors at the quarterly meeting, there is also regular communication between the Chairman of the Audit Committee and the auditors, particularly before the quarterly meetings of the Audit Committee.

Audit Committee

The Audit Committee had four members in the reporting year. Prof. Dr. Edgar Ernst assumed the role of Chairman. The other members were Burkhard Drescher, Vitus Eckart (as of May 9, 2018), Dr. Florian Funck and Hendrik Jellema (until May 9, 2018). One position was vacant during the fiscal year under review. In 2018, the Audit Committee met four times (March, May, August, December).

At the meeting held on March 5, 2018, the Committee reviewed the annual and consolidated financial statements as of December 31, 2017, as well as the combined management report for the 2017 fiscal year. Its review took account of both the company's reports and the reports prepared by the auditor. The auditor considered the main points of the audit of the consolidated financial statements to be the valuation of investment properties located in Germany, the value of the goodwill as well as the identification and measurement of assets and liabilities acquired as part of the acquisition of the conwert Group. For the separate financial statements of Vonovia SE, the focal points of the audit were the valuation of equity investments and the merger of Gagfah S.A. with Vonovia SE. The Committee drew up a proposal for the appropriation of profit and developed a recommendation for a resolution to be submitted to the Supervisory Board regarding the adoption of the annual financial statements. The Committee developed a proposal for the selection of an auditor for the 2018 fiscal year and for this auditor's appointment as the auditor responsible for the audit of the condensed consolidated interim financial statements and interim Group management reports. Other topics included the application of the Group guidelines on "Non-audit services provided by the auditor" to cover the BUWOG Group, the report of the Internal Audit department and the compliance status report.

At its meeting held on May 2, 2018, the Committee looked at the condensed consolidated interim financial statements for the first quarter. It took a detailed look at the economic and operational implications of incorporating BUWOG into Vonovia. It discussed the auditor's report and the statements made by the latter on the assessment of the tax compliance management system, as well as the IFRS 15 standard that came into force at the beginning of the year and is already implemented by Vonovia. The Committee also took an in-depth look at sustainability reporting, the extension of the risk management system to cover the Development segment, the status of the audits conducted by the Internal Audit department, the company's tax position, the status of the tax audit for the years from 2012 to 2015 and compliance (GDPR).

At its meeting held on August 30, 2018, the Committee approved the consolidated interim financial statements as of June 30, 2018, and passed a resolution on the commissioning of KPMG AG Wirtschaftsprüfungsgesellschaft to audit the annual and consolidated financial statements as of December 31, 2018. It discussed the company's report and, within this context, addressed issues including the impact of the integration of Victoria Park AB on the company's financial performance and the development of the value of the real estate portfolio. Other topics covered included the status report on non-audit services provided by the auditor of the annual financial statements and the status reports prepared by the Internal Audit department on sustainability reporting and compliance management.

At the meeting held on December 5, 2018, the Committee discussed the condensed consolidated interim financial statements, along with the corresponding reports prepared by the company and the auditor. It looked at the preliminary results of the property valuation, risk management, the compliance report and ongoing major legal disputes. It also discussed the report prepared by the Internal Audit department on the status of its audits and on the internal control system (ICS) and set the audit plan and audit budget for the Internal Audit department for the 2019 fiscal year.

Finance Committee

In 2018, the Finance Committee consisted of five members. The Chairperson was Clara-Christina Streit. The other members were Prof. Dr. Edgar Ernst (until May 9, 2018), Jürgen Fitschen (as of May 9, 2018), Dr. Ute Geipel-Faber, Daniel Just and Christian Ulbrich. The Finance Committee met nine times in the reporting year, twice at a face-to-face meeting (May, December) and seven times using conference calls (twice in March, once in April, three times in May and once in September). The Committee made decisions using a written circular in three cases (June and twice in September).

The Finance Committee had been previously authorized by the Supervisory Board to make all decisions on matters outside the scope of the topics for which it is generally responsible.

At a conference call held on March 3, 2018, the Finance Committee discussed offering the shareholders a scrip dividend and prepared a decision depending on share price performance. In addition, the Committee discussed, and passed a resolution on, optimizing the financing of the BUWOG takeover offer by issuing bonds under the EMTN program in an amount of up to € 3.7 billion.

At a conference call held on March 14, 2018, the Committee discussed the 73.8% acceptance rate achieved for the takeover offer made to the BUWOG shareholders during the first acceptance period and the associated financing measures.

On April 30, 2018, the Committee used a conference call to discuss the option of a takeover offer for the Swedish real estate company Victoria Park AB as an opportunity to forge ahead with the company's internationalization. Within this context, the Committee discussed possible financing using a capital increase, excluding subscription rights, as part of an accelerated bookbuilding procedure, taking the influence of remaining minority shareholders into account.

After the negotiations were successfully concluded by the Management Board, the Committee used the first conference call held on May 3, 2018, to approve the submission of a takeover offer to the shareholders of Victoria Park AB, the conclusion of a bridge facility and moves to contact investors regarding the option of a capital increase as part of an accelerated bookbuilding procedure.

During the second conference call held on that same day, the Finance Committee approved the accelerated capital increase by up to 28 million new shares in Vonovia and the authorization of J.P. Morgan to subscribe to and assume the new shares.

Following the successful bookbuilding process, the Committee used a third conference call to develop a more detailed resolution on the accelerated capital increase by 26 million new shares at a placement price of € 38.30 per share.

At a meeting held on May 9, 2018, the Committee discussed, and passed a resolution on, the general granting of a scrip dividend in line with the general resolution on the appropriation of profit previously passed by the Annual General Meeting, with a resolution still to be passed on the exact number of new shares.

On June 4, 2018, the Finance Committee used a written circular to approve the more detailed resolution passed by the Management Board on the implementation of a non-cash capital increase as part of the dividend option for shareholders in Vonovia SE.

On September 4, 2018, the Committee used a written circular to approve the extension of the commercial paper program and the working capital facility.

On September 21, 2018, the Committee approved the sale of 3,853 residential units in 33 locations in Schleswig-Holstein, Mecklenburg-West Pomerania, Lower Saxony and Brandenburg.

On November 23, 2018, the Finance Committee used a conference call to approve the acquisition of the Starsign portfolio by Victoria Park AB, consisting of 2,341 residential units in Stockholm and Gothenburg for an amount of up to 4.3 billion Swedish kronor/€ 415 million.

At the meeting held on December 5, 2018, the Committee approved the issue of a bond in the amount of up to € 1 billion for possible use in connection with the refinancing that would be necessary in 2019.

Executive and Nomination Committee

In the fiscal year under review, the Executive and Nomination Committee consisted of five members. It was chaired by Prof. Dr. Edgar Ernst up until May 9, 2018. On the same day, he handed over the task to Jürgen Fitschen, his successor as Supervisory Board Chairman. The other members were Hildegard Müller, Prof. Dr. Klaus Rauscher, Dr. Ariane Reinhart and Clara-Christina Streit. The Executive and Nomination Committee met four times in 2018, twice at meetings (February, December) and twice using conference calls (January, March). The Committee made three decisions by written circular.

At a conference call held on January 17, 2018, the Committee discussed the appointment of Helene von Roeder as a new Management Board member to assume the role of Chief Controlling Officer as Gerald Klinck's successor, making a recommendation to this effect to the Supervisory Board.

At the meeting held on February 23, 2018, the Committee developed resolution proposals for the Supervisory Board on the 2017 short-term incentive plan (target achievement), the 2018 short-term incentive plan (target agreements) and the long-term incentive plan for the Management Board (2018 tranche), as well as the rescission of Dr. A. Stefan Kirsten's contract with effect from the end of the Annual General Meeting on May 9, 2018. The Committee reviewed the appropriateness of Management Board remuneration and recommended that the conditions set out in the existing contracts remain in place. Another topic of discussion was the setting of the age limit for Management Board members in cases where members wished to draw retirement benefits early via the "Pension instead of cash remuneration" model. After consulting an independent HR consultancy agency, the Committee developed a proposal to be submitted to the Annual General Meeting regarding Jürgen Fitschen's appointment to the Supervisory Board, also as a candidate for the office of future Supervisory Board Chairman.

On June 12 and July 31, 2018, the Committee used written circulars in each case to pass resolutions on the acquisition of office equipment by former Management Board members and then on the short-term incentive plan target agreements for 2018 with the new Management Board members Helene von Roeder and Daniel Riedl.

On September 18, 2018, the Committee used a written circular to approve Rolf Buch's assumption of a mandate as member of the Council of Shareholders of the Kötter Group, Essen.

In its session on December 5, 2018, the Executive and Nomination Committee discussed the results of the Corporate Governance Road Show conducted by the Supervisory Board Chairman and the possible effects on the structure and reporting of the Management Board remuneration.
As part of the review of the remuneration structure of the Management Board, the possibility of switching from the current granting of virtual shares to the future creation of actual shares should be discussed in the 2019 fiscal year. Other topics of discussion included succession arrangements within the Management Board and the approval of Helene von Roeder's assumption of a mandate as a member of the committees of Merck KGaA.

Corporate Governance

The Management Board and Supervisory Board of Vonovia SE are committed to the principles of good corporate governance. As a result, the members of the Supervisory Board once again looked at the German Corporate Governance Code in the reporting year. On January 31, 2019, the Management Board and the Supervisory Board issued an updated Declaration of Conformity pursuant to Section 161 of the German Stock Corporation Act (AktG). The Management Board also reports, including on behalf of the Supervisory Board, on corporate governance at Vonovia in the declaration on corporate governance. Both declarations will be permanently published by the company on its website for perusal.

Audit

After being appointed at the Annual General Meeting on May 9, 2018, to audit financial statements for the 2018 fiscal year, KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, has duly audited the annual financial statements and consolidated financial statements of Vonovia SE as of December 31, 2018, and the combined management report for the 2018 fiscal year and has expressed an unqualified opinion thereon. In accordance with German legal regulations, the content of the non-financial declaration, which is included in a separate section of the combined management report, was not reviewed by the auditor. In accordance with Section 317 (4) of the German Commercial Code (HGB), KPMG also assessed the risk early warning system of Vonovia SE.

The auditor has affirmed its independence to the Chairman of the Audit Committee and duly declared that no circumstances exist that could give grounds for assuming a lack of impartiality on its part. The audit assignment was awarded to KPMG AG Wirtschaftsprüfungsgesellschaft by the Chairman of the Audit Committee in line with the Committee's resolution and the choice of auditor made by the shareholders at the Annual General Meeting.

The annual financial statements were prepared by the Management Board in accordance with the German commercial law and stock corporation law provisions, including the generally accepted accounting practice. The consolidated financial statements were prepared by the Management Board in accordance with the International Financial Reporting Standards (IFRS), as applied in the European Union, as well as the supplementary provisions applicable pursuant to Section 315e (1) HGB.

For the annual financial statements and the consolidated financial statements, Vonovia SE prepared a combined management report based on the requirements set out in Sections 315, 298 (2) HGB.

Every member of the Supervisory Board received copies of the annual financial statements, the consolidated financial statements and the combined management report and the auditor's report in good time. On the basis of the preliminary examination and assessment by the Audit Committee, about which the Audit Committee Chairman reported to the Supervisory Board, the Supervisory Board has scrutinized in detail the annual financial statements, consolidated financial statements and combined management report of Vonovia SE for the 2018 fiscal year and also considered the Management Board's proposal for the appropriation of profit. With regard to the Non-financial Declaration to be published pursuant to the CSR Directive Implementation Act, the Supervisory Board complied with its review obligation.

At the joint meeting on March 6, 2019, with the Audit Committee, and at the subsequent Supervisory Board meeting held on the same day, the auditors reported both on their findings including the strategic audit objectives and key audit matters. The strategic audit objectives and the key audit matters set out in the auditor's report had been defined by the auditor, within the context of the latter's independent mandate, in the second half of 2018 and had already been discussed and agreed upon with the Audit Committee in advance.

In the 2018 fiscal year, with regard to the consolidated financial statements, particularly key audit matters included the value of goodwill, the valuation of investment properties and the identification and valuation of the acquired assets and liabilities as part of the acquisition of BUWOG and Victoria Park. With regard to the annual financial statements of Vonovia SE, special importance was given to the value of the shares in affiliated companies as well as the concealed contribution in kind at fair value as part of the intragroup restructuring of the conwert Group.

The auditors gave detailed answers to our questions. After an in-depth review of all documentation, we found no grounds for objection. As a result, we concurred with the auditors' findings. On March 06, 2019, we followed the Audit Committee's recommendation and approved the annual financial statements and consolidated financial statements of Vonovia SE, as well as the combined management report. The annual financial statements are thus duly adopted.

Dividend

The Supervisory Board considered the Management Board's proposal for the appropriation of profit. It gave particular consideration to the liquidity of the company/the Group, tax-related aspects, financial and investment planning. Following its audit, the Supervisory Board agrees with the proposal set out by the Management Board to be made to the Annual General Meeting, namely the proposal that, from the profit for the 2018 fiscal year, a dividend of € 1.44 per share or € 746,032,224.96 in total on the shares of the share capital as of December 31, 2018, be paid to the shareholders and the remaining amount be carried forward to the new account or be used for other dividends on shares carrying dividend rights at the time of the Annual General Meeting that go beyond those as of December 31, 2018.

The dividend will be paid either in cash or in the form of shares in the company. The shareholders' right to opt for a dividend paid out in shares is communicated separately in a timely manner together with other information, particularly on the number and type of shares.

Personnel

The following staff-related changes were made within the company's management team during the reporting period: On January 17, 2018, the Supervisory Board appointed Helene von Roeder to the Management Board to assume the position of Chief Controlling Officer. Following the end of the Annual General Meeting held on May 9, 2018, she also assumed the role of Chief Financial Officer. Dr. A. Stefan Kirsten, who had held the position of CFO up until then, left the Management Board at his own request at the end of the Annual General Meeting. Gerald Klinck, who did not seek to extend his contract as Chief Controlling Officer, also left the Management Board at the end of the Annual General Meeting. Daniel Riedl joined the Management Board as a new member at the end of the Annual General Meeting. He is responsible for the Development segment and for Austria.

The Supervisory Board would like to thank those members who have left the Management Board for their valuable contributions to the company's excellent performance in recent years. Dr. A. Stefan Kirsten managed the Finance division for more than seven years. The financial basis for Vonovia's successful development was established under his leadership. Gerald Klinck was responsible in particular for the positive development of the areas of Group and portfolio controlling, property valuation, central procurement and condominium administration.

The following changes were made within the Supervisory Board in 2018: Jürgen Fitschen and Vitus Eckert were appointed as new Supervisory Board members at the Annual General Meeting on May 9, 2018. Jürgen Fitschen was appointed Chairman of the Supervisory Board at the inaugural Supervisory Board meeting held on the same day. He replaced Prof. Dr. Edgar Ernst, who had held the position on an interim basis since September 7, 2017, and who then assumed the role of Deputy Chairman. Hendrik Jellema left the Supervisory Board on May 9, 2018.

The Supervisory Board would like to thank Hendrik Jellema for his dedicated work as a member of the Board.

Concluding Remarks

We would like to thank the Management Board for successfully managing the company over the last year and would also like to thank our employees for what was, once again, an excellent performance. We would like to thank the employee representative bodies for another year of constructive collaboration.

Bochum, Germany, March 6, 2019

On behalf of the Supervisory Board,

Jürgen Fitschen

Corporate Governance Report

In this corporate governance declaration (also known as the Corporate Governance Report), we report, in accordance with Sections 289a and 315 (5) of the German Commercial Code (HGB) and No. 3.10 of the German Corporate Governance Code (GCGC) on the principles of management and corporate governance. The declaration contains the declaration of conformity, information on corporate governance practices, a description of how the Management Board and Supervisory Board work and key corporate governance structures. The declaration is also available to the public on our website at www.vonovia.de. Pursuant to Section 317 (2) (4) HGB, the disclosures pursuant to Sections 289 a, 315 (5) HGB are not included in the audit performed by the auditor of the annual financial statements.

https://investors.vonovia.de

Fundamental Information

Fundamental Understanding

Corporate governance is the responsible management and supervision of a company. The Management Board and the Supervisory Board are committed to the principles of corporate governance. The principles are the basis for the sustainable success of the company and therefore serve as guidelines for conduct in the company's daily management and business.

Good corporate governance strengthens the trust of our shareholders, business associates, customers, employees and the general public in Vonovia SE. It increases the company's transparency and strengthens the credibility of our group of undertakings. With balanced corporate governance, the Management Board and the Supervisory Board wish to safeguard Vonovia SE's competitiveness, strengthen the trust of the capital market and the general public in the company and sustainably increase the company's value.

Standards of Corporate Governance

As a major housing company, we are aware of the particular significance of our entrepreneurial actions for society at large. As a result, we are also committed to the general principles of corporate governance, as well as all the main aims and principles of the Institute for Corporate Governance in the German Real Estate Industry, which we have been a member of since November 14, 2003. The initiative supplements the corporate governance principles to include housing-specific aspects and is committed to even greater transparency, an improved image and a more competitive real estate sector.

Corporate governance, acting in accordance with the principles of responsible management aimed at increasing the value of the business on a sustainable basis, is an essential requirement for the Vonovia Group, embracing all areas of the business.

Our corporate culture is founded on transparent reporting and corporate communications, on corporate governance aimed at the interests of all stakeholders, fair and open dealings between the Management Board, the Supervisory Board and employees as well as on compliance with the law.

The Code of Conduct provides the ethical and legal framework within which we act and want to maintain a 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.

Information on the Company's Governing Constitution

The designation Vonovia comprises Vonovia SE and its Group companies. Vonovia is a European company (SE) in accordance with the German Stock Corporation Act (AktG), the SE Act and the SE Regulation. Its registered headquarters is in Bochum. It has three governing bodies: the Annual General Meeting, the Supervisory Board and the Management Board. The duties and authority of those bodies derive from the SE Regulation (SE-VO), the German Stock Corporation Act (AktG) and the Articles of Association. Shareholders, as the owners of the company, exercise their rights at the Annual General Meeting.

According to the two-tier governance system, Vonovia SE has a Management Board and a Supervisory Board. In the two-tier governance system, the management of business and the monitoring of business are strictly separated from each other. The duties and responsibilities of these two bodies are clearly specified by law in the German Stock Corporation Act.

In accordance with the governing laws, in particular the SE Regulation and the German SE Employee Participation Act (SEBG), the Supervisory Board is only made up of representatives of the shareholders. The highest representative body of the employees is the Group works council. An SE works council was also set up at the level of Vonovia SE.

The Management Board and Supervisory Board of a company listed in Germany are obliged by law (Section 161 of the German Stock Corporation Act) to report once a year on whether the officially published and relevant recommendations issued by the government commission German Corporate Governance Code, as valid at the date of the declaration, have been, and are being, complied with. Companies affected are also required to state which of the recommendations of the Code have not been, or will not be, applied and, if not, why.

The Management Board reports in its declaration, also on behalf of the Supervisory Board, on important aspects of corporate governance pursuant to Section 289 a of the German Commercial Code (HGB) and No. 3.10 of the German Corporate Governance Code (GCGC).

Declaration of Conformity to the GCGC Pursuant to Section 161 of the German Stock Corporation Act (AktG)

The Management Board and the Supervisory Board of Vonovia SE declare that the company complies with the recommendations made by the "Government Commission on the German Corporate Governance Code (GCGC)" as published on February 7, 2017, in the official section of the federal gazette by the German Federal Ministry of Justice.

Since issuing the previous declaration of conformity in May 2018, Vonovia SE has observed all of the recommendations in the GCGC with the following exception:

No. 7.1.2 sentence 3, 2nd half-sentence GCGC (interim financial reports):

The company was unable to publish the interim financial reports for the second and third quarter of the 2018 fiscal year within the recommended period due to the increased time required for the necessary consolidation process due to the acquisition of a majority stake in BUWOG AG. No. 7.1.2 sentence 3, 2nd half-sentence GCGC is adhered to again as of the fourth quarter of 2018.

Shareholders and Annual General Meeting

Shareholder Information: Shareholders can obtain full and timely information about our company on our website and can access current as well as historical company data. Among other information on its website, Vonovia regularly posts all financial reports, important information on the company's governing bodies (including resumes), its corporate governance documentation (declaration of conformity), information requiring ad hoc disclosure and press releases.

Directors' Dealings: Information on directors' dealings/managers' transactions notifiable pursuant to Article 19 of the Market Abuse Regulation is published by Vonovia without delay in accordance with the Regulation and is made available on the company's website.

Financial Calendar: Shareholders and interested members of the financial community can use a regularly updated financial calendar on the website to obtain information on publication, conference and information dates, roadshows and the timing of the Annual General Meeting early on.

Annual General Meeting and Voting: The Annual General Meeting decides in particular on the appropriation of profit, the ratification of the acts of the members of the Management Board and of the Supervisory Board, the appointment of the external auditor, amendments to the Articles of Association as well as specific capital measures and individually elects the shareholders' representatives to the Supervisory Board.

Our shareholders can exercise their voting rights at the meeting or instruct a proxy of their choice or one of the proxies provided for that purpose by the company. Our shareholders are also able to submit a postal vote. The details regarding the postal voting procedure are in the respective shareholder's invitation to the Annual General Meeting.

The entire documentation for the Annual General Meeting and opportunities to authorize, and issue instructions to, the company's proxies as well as to submit a postal vote are available to shareholders at all times on the Vonovia website.

There are no plans to allow the Annual General Meeting to be followed on the Internet.

Remuneration Paid to Executive Bodies: The remuneration paid to the Management Board and the Supervisory Board is set out in detail every year in the combined management report in line with the corporate governance requirements. The basic principles of the remuneration system for Management Board members have been approved by the Annual General Meeting. The Chairman of the Supervisory Board will submit subsequent changes to the Annual General Meeting.

Supervisory Board

Duties and Responsibilities

The Supervisory Board appoints, supervises and advises the Management Board and is directly involved in decisions of fundamental importance to the company. The Supervisory Board performs its work in accordance with the legal provisions, the Articles of Association, its rules of procedure and its resolutions. It consists of twelve members, who were each elected for a statutory period of tenure by the 2018 Annual General Meeting. The Supervisory Board continuously oversees the management and advises the Management Board.

The Supervisory Board examines and adopts the annual financial statements and the management report. It assesses and confirms the proposal for the appropriation of profit, as well as the consolidated financial statements and the combined management report, on the basis of the report prepared by the Audit Committee. The Supervisory Board reports in writing to the shareholders at the Annual General Meeting on the result of its examination.

The Chairman of the Supervisory Board is an independent member. The same applies to the chairs of the committees which the Supervisory Board has set up. → p. 39

The Chairman of the Supervisory Board chairs the meetings and coordinates communications. The members of the Supervisory Board generally have the same rights and obligations. Supervisory Board resolutions are above all passed in the Supervisory Board meetings but also, if necessary, using the written procedure or by other communication means. At least two meetings are held every six months. In addition, if necessary and on the basis of the rules of procedure of the Supervisory Board, a meeting of the Supervisory Board or its committees can be convened at any time at the request of a member or the Management Board. In the 2018 fiscal year, the Supervisory Board had seven meetings – including conference calls – and made decisions using the written procedure in two cases.

The Supervisory Board is composed in such a way that its members as a group have the knowledge, ability and specialist experience required to properly complete its tasks, and are all familiar with the real estate industry as the sector in which the company operates. Each Supervisory Board member shall ensure that he or she has enough time to carry out his or her mandate.

At least one member of the Supervisory Board has expertise in the fields of accounting or auditing (Section 100 [5] of the German Stock Corporation Act).

Two Supervisory Board members, who are also members of the management board of a listed company, do not have any other supervisory board mandates, over and above the Supervisory Board mandate at Vonovia, at non-group listed companies or on supervisory bodies of non-group entities that make similar requirements. At the time at which this declaration was prepared, no Supervisory Board members exercised directorships or advisory tasks for important competitors of the company (see below Conflicts of Interest).

The Supervisory Board performs regular efficiency reviews that are performed, in alternation, as self-evaluations using a written survey conducted among the members and with the involvement of an independent and experienced moderator in the form of personal interviews. The 2020 Annual Report will report on the next efficiency review, which is scheduled for 2019.

Supervisory Board Committees

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. Committees are made up of at least four members of the Supervisory Board. The committees prepare subjects which are to be discussed and/or resolved by the Supervisory Board. In addition, they pass resolutions on behalf of the entire Supervisory Board. The basis for committee work was the transfer of tasks and responsibilities within the scope of the legal provisions.

The **Executive and Nomination Committee** is made up of the Chairman of the Supervisory Board and four other members to be elected by the Supervisory Board. The Chairman of the Supervisory Board is the Chairman of the Executive and Nomination Committee. The tasks of this committee are, in particular, to prepare the appointment of Management Board members, to advise on the remuneration system, to assign responsibilities and to decide in cases of legal and loan transactions with members of the Management Board and conflicts of interest.

The **Audit Committee** handles, in particular, the monitoring of the accounting process, the effectiveness of the internal control system, risk management system and internal audit system, the audit of the annual financial statements and – unless another committee is entrusted therewith – compliance.

The Supervisory Board appoints one of the members of the Audit Committee as the Chairman of the Audit Committee. When electing the committee members, the Supervisory Board shall ensure that the Chairman of the Audit Committee has specialist knowledge and experience in the application of accounting principles and internal control processes. The Committee Chairman should be independent and not be a former member of the company's Management Board whose appointment ended less than two years before their appointment as Chairman of the Audit Committee. The chairman of the Supervisory Board shall not be the chairman of the Audit Committee.

The Audit Committee prepares the resolutions of the Supervisory Board on the annual financial statements (and, if applicable, the consolidated financial statements), and, in place of the Supervisory Board, reaches the agreements with the auditor (in particular the issuing of the audit mandate to the auditor, the determination of strategic audit objectives and the fee agreement). The Audit Committee takes suitable action to determine and monitor the independence of the auditor. In place of the Supervisory Board, the Audit Committee adopts resolutions on the approval of the contracts with the auditor on additional, non-audit-related consultancy services, insofar as, according to corporate governance procedures for the Management Board, these contracts require approval.

The **Finance Committee**, which consists of the Supervisory Board Chairman or the latter's Deputy Chairman and four other members, prepares the resolutions of the Supervisory Board on the following matters:

a) Financing and investment principles, including the capital structure of the Group companies and dividend payments
b) Principles of the acquisition and disposal policies, including the acquisition and disposal of individual shareholdings of strategic importance

In place of the Supervisory Board, the Finance Committee adopts resolutions in particular on general guidelines and principles for the implementation of this financial strategy, including the handling of currency risks, interest, liquidity and other financial risks and the handling of credit risks and the implementation of external financing principles as well as on important transactions regarding the acquisition and disposal of properties and shares in companies as well as on the acquiring of financing.

The Management Board

Duties and Responsibilities

The Management Board members are jointly accountable for independently managing the company in the company's best interests while complying with the applicable laws and regulations, the Articles of Association and the rules of procedure. In doing so, they must take the interests of the shareholders, the employees and other stakeholders into account.

The Management Board is monitored and advised by the Supervisory Board. It has adopted the rules of procedure in consultation with the Supervisory Board. The Management Board has a chairman who coordinates the work of the Management Board and represents it in dealings with the Supervisory Board. The Chairman of the Management Board has the right to veto Management Board resolutions.

The members of the Management Board are Rolf Buch (Chairman) as well as Klaus Freiberg, Helene von Roeder and Daniel Riedl. Further information can be found on → p. 32 et seq. of the 2018 Annual Report. The decision has been made not to establish any Management Board committees.

The Management Board informs the Supervisory Board regularly, in due time and comprehensively in line with the principles of diligent and faithful accounting in accordance with the law and the reporting duties specified by the Supervisory Board.

The Management Board develops the company's strategy, coordinates it with the Supervisory Board and implements it. The Management Board ensures that all statutory provisions and the company's internal policies are complied with. The Management Board also ensures appropriate risk management and risk controlling in the company.

It submits the corporate planning for the coming fiscal year to the Supervisory Board as well as the midterm and strategic planning. The Chairman of the Management Board informs the Supervisory Board Chairman without delay of important events that are essential for the assessment of the situation and the development of the company or for the management of the company as well as of any shortcomings that occur in the monitoring systems.

The Management Board requires the approval of the Supervisory Board for certain important transactions. Transactions and measures that require Supervisory Board approval are submitted to the Supervisory Board in good time.

The Management Board members are obliged to disclose any conflicts of interest to the Supervisory Board without delay and to inform the other Management Board members accordingly.

The Management Board members are subject to a comprehensive non-competition obligation. Management Board members may only take up sideline activities, in particular positions on supervisory boards outside the Group, with the approval of the Supervisory Board.

Important transactions between the company, on the one hand, and the Management Board members as well as persons they are close to or companies they have a personal association with, on the other hand, require the approval of the Supervisory Board. Reference is made to such relations in the remuneration report.

Recruitment of Members of Executive Bodies

In accordance with the German Corporate Governance Code, the Supervisory Board and the Management Board must be composed in such a way that these bodies/their members as a group have the knowledge, ability and specialist experience required to properly complete their tasks. The requirements were extended and set out by law with the entry into force of the CSR Directive Implementation Act. The Supervisory Board has adopted the following criteria and objectives for recruiting individuals to the Management and Supervisory Boards, taking the above mentioned requirements into account:

Recruitment of Members of the Supervisory Board

Composition: As a listed company that is not subject to codetermination, the Supervisory Board of Vonovia SE is to include twelve members, an appropriate number of whom are to be independent within the meaning of the Code. All members should have sufficient time available to perform the duties associated with their mandate with due regularity and care.

When proposing candidates to fill new Supervisory Board positions to the Annual General Meeting, the Supervisory Board should have performed an extensive review to ensure that the candidates standing for election meet the corresponding professional and personal requirements (see below) and must disclose the candidates' personal and business-related relationships with the company, the governing bodies of the company and any shareholders with a material interest in the company. Shareholders are deemed to hold a material interest if they hold more than 10% of the voting shares in the company, either directly or indirectly.

Other general criteria governing composition include:

> No more than two former members of the Management Board shall be members of the Supervisory Board.
> Supervisory Board members shall not exercise directorships or similar positions or advisory tasks for important competitors of the company.
> If a (designated) member belongs to the management board of a listed company, this member shall not accept more than a total of three supervisory board mandates in non-group listed companies or on supervisory bodies of non-group entities that make similar requirements.
> The standard limit for length of membership on the Supervisory Board has been set at a maximum of 15 years.
> The age limit has been set at 75 at the time of election to the Supervisory Board.

Skills profile: The Supervisory Board of Vonovia SE should be composed so as to ensure qualified supervision of, and provision of advice to, the Management Board. The candidates nominated for election to the Supervisory Board should be able, on the basis of their knowledge, skills and professional experience, to perform the duties of a Supervisory Board member of a listed real estate company that is active on the international capital market.

In terms of their personality, the candidates nominated for election should show integrity, professionalism and commitment. The aim is to ensure that the Supervisory Board as a whole offers all of the knowledge and experience that the Group considers to be important for ensuring Vonovia's operational and financial further development.

Independence: The Supervisory Board shall only include members that it considers to be independent. Material conflicts of interest that are not merely of a temporary nature, e.g. arising from functions on executive bodies or advisory roles performed at the company's major competitors, should be avoided. A Supervisory Board member is, in particular, not to be considered independent if they have personal or business relations with the company, its bodies, a controlling shareholder or a company associated with such a shareholder that may cause a substantial and not merely temporary conflict of interest.

Diversity: When nominating candidates for election, the Supervisory Board should also take diversity into account. In accordance with the German Act on the Equal Participation of Women and Men in Leadership Positions in the Private Sector and the Public Sector (Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in Privatwirtschaft und im öffentlichen Dienst), the Supervisory Board should comprise at least 30% women and 30% men. In addition, at least one woman should be a member of the Nomination Committee. Vonovia's Supervisory Board should meet both criteria.

When assessing potential candidates for reelection or to fill a Supervisory Board position that has become vacant, qualified women should be included in the selection process and given appropriate consideration when the nominations are made.

Target Achievement: The objectives regarding the composition of the Supervisory Board set out above have been met: There are four female members of the Supervisory Board (33 %). Hildegard Müller, Clara-Christina Streit and Dr. Ariane Reinhart are members of the Executive and Nomination Committee. All 12 members of the Supervisory Board are considered by the latter to be independent within the meaning of No. 5.4.2 of the GCGC. The main knowledge, skills and professional experience of the Supervisory Board members are summarized in the table below. The Report of the Supervisory Board in this Annual Report includes a table showing meeting attendance. → p. 37 It shows that all members performed the duties associated with their mandate with due regularity.

Supervisory Board Qualifications Profile

					Key skills & areas of experience*							
Name	Independent?	Year of birth	Year appointed	Nationality	Accountancy, finances	Real estate	Strategy	Legal and regulation	International experience, M&A, capital markets	Investment expertise	Digitization	Sustainability
Jürgen Fitschen (Chairman)	yes	1948	2018	German	x		x	x	x	x		
Prof. Dr. Edgar Ernst	yes	1952	2013	German	x		x	x	x	x		
Burkhard Ulrich Drescher	yes	1951	2014	German		x	x	x			x	x
Vitus Eckert	yes	1969	2018	Austrian		x	x	x	x	x		
Dr. Florian Funck	yes	1971	2014	German	x		x	x	x	x		
Dr. Ute Geipel-Faber	yes	1950	2015	German	x	x			x	x		
Daniel Just	yes	1957	2015	German	x	x	x			x		x
Hildegard Müller	yes	1967	2013	German	x		x	x			x	x
Prof. Dr. Klaus Rauscher	yes	1949	2008	German	x	x	x	x	x			
Dr. Ariane Reinhart	yes	1969	2016	German			x	x	x		x	x
Clara-Christina Streit	yes	1968	2013	German/US	x		x		x	x	x	
Christian Ulbrich	yes	1966	2014	German		x	x		x	x	x	

* The members of the Supervisory Board can specify up to 5 areas of expertise.

Recruitment of Members of the Management Board

In accordance with the German Corporate Governance Code, the Management Board is responsible for managing the company in the best interests of the company, meaning that it considers the needs of the shareholders, the employees and other stakeholders, with the objective of sustainable value creation. The Management Board develops the strategy for the company, agrees it with the Supervisory Board and ensures its implementation. The Management Board ensures that all provisions of law and the company's internal policies are complied with, and endeavors to achieve their compliance by the Group entities (compliance). The Management Board is also responsible for ensuring appropriate risk management and risk control and, when filling management positions, must take the diversity principles into account in accordance with the objectives that have been set internally.

Composition: In accordance with the Articles of Association, the Management Board of Vonovia SE consists of at least two members. The Supervisory Board appoints the Management Board members in accordance with the Articles of Association and the law. The Supervisory Board can appoint a Chairman of the Management Board and a Deputy Chairman of the Management Board.

The decisions made by the Supervisory Board on the composition of the Management Board should be based on a careful analysis of the existing and future challenges facing the company.

The Management Board of Vonovia SE should be composed so as to ensure that, as the management body, it can perform the duties set out above reliably and in full. When taken as a whole, it should combine all of the knowledge and experience required to ensure that the Group can pursue its operational and financial objectives in an effective and sustainable manner in the interests of the shareholders and other stakeholders.

While membership of the Management Board is not limited to a certain period of time, the contract of employment of a Management Board member ends when the member turns 67 at the latest.

Skills profile: Newly appointed Management Board members should be able, on the basis of their knowledge, skills and professional experience, to reliably perform the duties assigned to them in a listed real estate company that is active on the international capital market. In addition to having good professional and fundamental general qualifications, they should also show integrity, professionalism and commitment.

Independence: The Management Board should perform its management duties in a manner that is free of any conflicts of interest. Functions on executive bodies or advisory roles performed at major competitors of the company should be avoided.

Diversity: When looking for candidates to fill a Management Board position that has become vacant, the Supervisory Board should include qualified women in the selection process and give them appropriate consideration. Gender should be irrelevant when it comes to filling Management Board positions. The Supervisory Board has set a target of at least 20% women on the Management Board, to be met by December 31, 2021. For the two levels of management below the Management Board, the target for the proportion of women is 30%.

Target Achievement: The objectives regarding the composition of the Management Board set out above have been met in full. The Management Board consists of one female and three male members who are able to manage the Group appropriately on the basis of their experience and skills. At the time at which this declaration was made, the first level of management below the Management Board still comprises 17.6% women, as the corresponding group of employees remains unchanged. The aim is to use corresponding succession planning to have achieved the new target of 30% by December 31, 2021. At 33.9%, the targeted proportion of women set by the Management Board for the second level of management below the Management Board has already been met.

Cooperation Between the Management Board and the Supervisory Board

The Management and Supervisory Boards vote on the strategic direction of the company and discuss the current status of its implementation at regular intervals. Furthermore, the Management Board regularly informs the Supervisory Board in written or verbal reports of topics including the development of business and the situation of the company. In this way, the Supervisory Board receives detailed documents from the Management Board regularly and in a timely manner on the economic development and the company's current situation as well as the half-yearly risk management and compliance reports that deal with the most important risks for the business of Vonovia SE as well as compliance management. On the basis of these reports, the Supervisory Board monitors the company's management by the Management Board, as well as via its committees where particular powers are delegated to these committees. The Supervisory Board meets on a regular basis without the Management Board if personnel matters relating to the Management Board are to be discussed.

Avoidance of Conflicts of Interest

In the fiscal year, there were no conflicts of interest of Management Board or Supervisory Board members, which are to be reported immediately to the Supervisory Board. There was no need to discuss or make decisions on legal matters, in particular lending transactions with members of executive bodies or individuals related to them.

Accounting and Financial Statement Auditing

The Annual General Meeting selected KPMG AG Wirtschaftsprüfungsgesellschaft as auditor for the annual financial statements and consolidated financial statements. In the audit assignment awarded to the auditor of the annual financial statements by the Audit Committee, an agreement has also been reached on adherence to the provisions set out in No. 7.2.1 (2) and 7.2.3 GCGC. We prepare the annual financial statements of Vonovia SE in accordance with the German Commercial Code (HGB) and the German Stock Corporation Act (AktG) and the consolidated financial statements in accordance with the International Financial Reporting Standards (IFRS) to be applied in the EU. In addition, we prepare a combined management report as required by the German Commercial Code and the German Stock Corporation Act (AktG). The Management Board is responsible for financial accounting. The Supervisory Board examines and adopts or approves the annual financial statements, the consolidated financial statements and the combined management report.

In addition to our annual financial statements, we also prepare interim statements for the first and third quarters, as well as an interim financial report for the first half-year in accordance with the German Securities Trading Act.

Both the interim statements and the interim financial report are presented to, and discussed with, the Audit Committee of the Supervisory Board before they are published.

Under German stock corporation and commercial law, there are special requirements for internal risk management that apply to Vonovia. Therefore, our risk management system covers risk inventory, analysis, handling and limitation. In accordance with Section 317 (4) of the German Commercial Code applicable to listed companies, KPMG assesses in its audit the risk early warning system as part of the risk management system.

Furthermore, we maintain standard documentation of all our internal control mechanisms throughout the Group and continually evaluate their effectiveness. Our auditor has not reported any material weaknesses in the accounting-related internal control system detected in its audit to the Management Board and the Supervisory Board.

In the combined management report, we provide comprehensive information on the main features of the internal control and risk management system with regard to the accounting process and the Group accounting process in accordance with our reporting duties pursuant to Sections 289 (5), and 315 (2) No. 5 of the German Commercial Code.

Vonovia SE on the Capital Market

> Shares in Vonovia significantly outperform DAX and EPRA Europe Benchmark Indices in relative terms in 2018
> Dividend: Increased for the fifth time running – Stock Dividend meets with high level of acceptance again
> First-Ever Corporate Governance Road Show generates keen interest among investors
> Inclusion in the Sustainability Equity Index GPR IPCM LFFS Sustainable GRES Index

Developments on the International Capital Markets

2018 was a very unsettled year for the international capital markets. Uncertainty regarding future interest rate developments and brewing trade conflicts, coupled with international political tension and fears of escalation, put pressure on capital markets across the globe.

The Dow Jones, for example, lost 6.7% in 2018, with the Dax losing as much as 18.3%. The EPRA index for European real estate stocks also closed the year with negative performance, namely at 1981.17 points, down by 11.7% in a year-on-year comparison.

Looking at the performance of the eurozone's major industrial sectors, it becomes clear that virtually all segments, including the real estate segment that also includes Vonovia's shares, came under pressure in 2018.

Shares in Vonovia

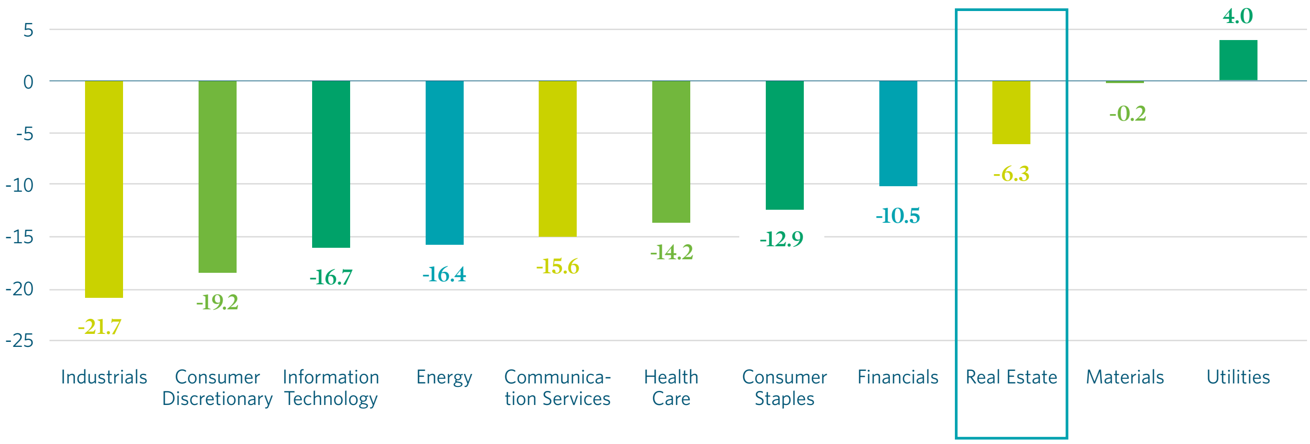
Although Vonovia's share price fell by approximately 4% in the 2018 fiscal year, dropping from a closing price of € 41.39 on December 31, 2017, to a closing price of € 39.59 on December 31, 2018, Vonovia's shares significantly outperformed the German leading index, the DAX, the EPRA index and the eurozone real estate industry as a whole in the course of the year.

We believe that the environment for the German residential real estate sector remains positive in general. In our view,

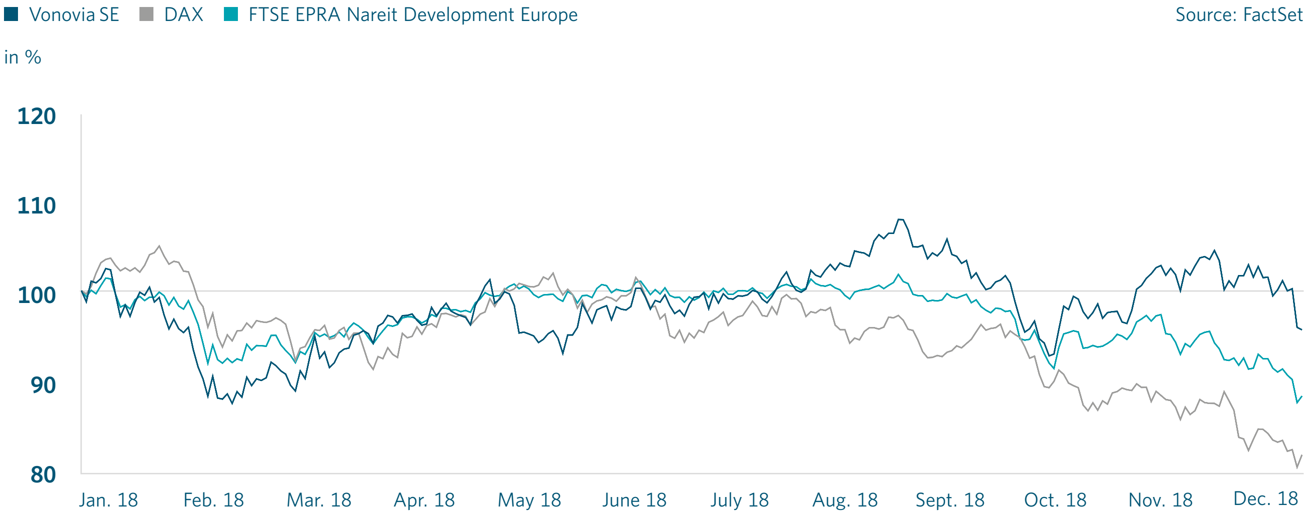
Development of Industrial Sectors in the Eurozone in 2018

in %

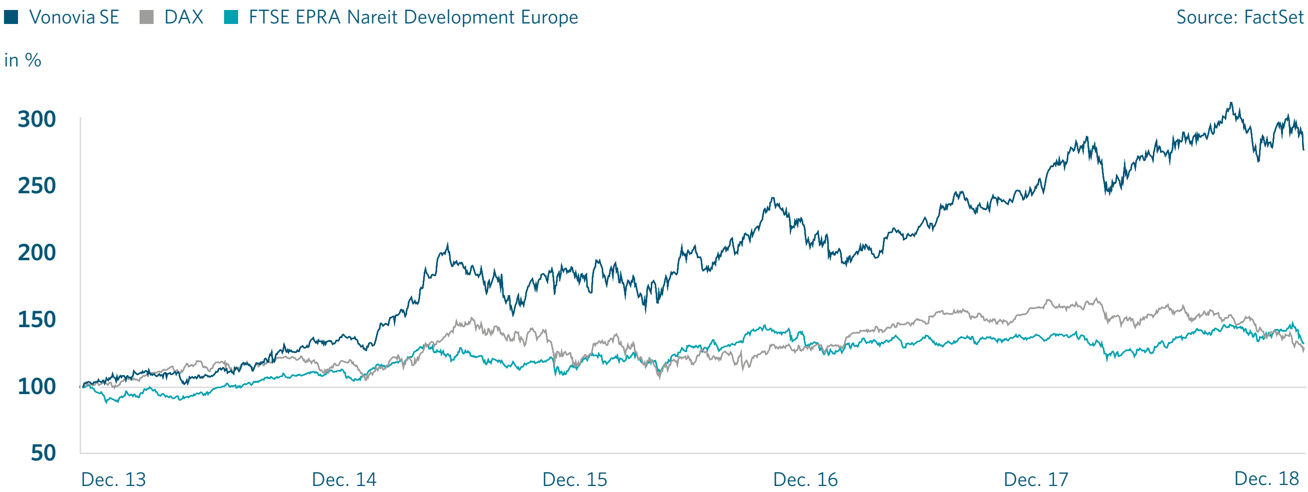
Source: Thomson Reuters



Share Price Development



Long-term Yield



the main drivers behind this will be the imbalance between high demand for and a short supply of affordable housing in urban locations, the ongoing favorable environment of low interest rates and a continued keen interest in German residential real estate.

Vonovia's market capitalization amounted to € 20.5 billion at the end of 2018.

Long-term Yield

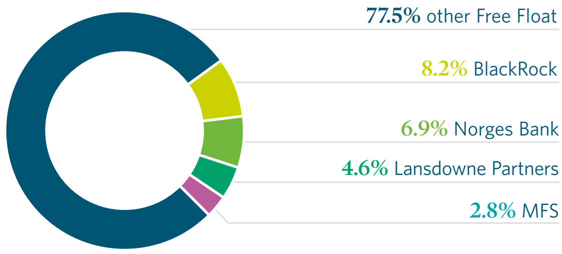
An investor who bought shares in Vonovia when the company went public in 2013 and has held them ever since, reinvesting each dividend in more shares in Vonovia, will have seen the value of his/her securities deposit account increase by approx. 180% by December 2018, achieving a result that far outstrips the performance of an investment in the benchmark indices.

Shareholder Structure

The chart below shows the voting rights pursuant to Sections 33 and 34 of the German Securities Trading Act (WpHG) as notified by the shareholders in relation to the current share capital. The number of voting rights reported could have changed within the respective thresholds without triggering an obligation to notify the company.

Based on the German stock exchange's definition of free float, only the interest held by Norges Bank (Ministry of Finance on behalf of Norway) does not count towards the free float. This means that 93.1% of Vonovia's shares were in free float on December 31, 2018. The underlying voting rights

Major Shareholders (as of December 31, 2018)



notifications and corresponding financial instruments reported by shareholders or other instruments pursuant to Sections 38, 39 WpHG can be found online.
https://investors.vonovia.de/disclosure-of-voting-rights/

In line with Vonovia's long-term strategic focus, the majority of its investors have a similarly long-term focus. The company's investors include pension funds, sovereign wealth funds and international asset managers in particular. There is also a large number of individual shareholders, although they only represent a small proportion of the total capital.

2018 Annual General Meeting

The Annual General Meeting of Vonovia SE was held in Bochum on May 9, 2018; 69.82% of the subscribed capital was represented. Since 2018, our investor portal (German report: investoren.vonovia.de/investorportal English report: investors.vonovia.de/investorportal) has given our shareholders a convenient option allowing them to attend to all formalities relating to registering for, and voting at, the Annual General Meeting online. **https://investors.vonovia.de/investorportal**

In the presence of around 300 guests and shareholders, all resolution proposals were accepted by the Annual General Meeting, including the proposal to distribute a dividend of € 1.32 per share for the 2017 fiscal year. This corresponds to an increase of 18% year-on-year and to a dividend yield of 3.2% based on the closing price of € 41.39 on the reporting date of December 31, 2017. The cash dividend for the 2017 fiscal year was paid out from a contribution account for tax purposes. It was therefore paid out to shareholders without capital gains tax or the solidarity surcharge being deducted. Vonovia also offered a stock dividend as an alternative option to a cash dividend for the second time. This meant that every shareholder had the choice of receiving the dividend in cash or opting for the receipt of new shares in order to benefit more strongly from any future increase in value of the company. During the subscription period, 40.9% of shareholders opted for the stock dividend as opposed to the cash dividend. As proposed by the Management Board and the Supervisory Board, the Annual General Meeting also resolved to increase authorized capital to the extent permitted by law. This financial flexibility is designed to enable the company to quickly and comprehensively increase its equity resources.

Investor Relations Activities

Vonovia SE is committed to transparent, ongoing dialogue with its shareholders and potential investors. In the 2018 fiscal year, Vonovia participated in a total of 18 investors' conference days and organized 27 roadshow days in the most important European, Asian and North American financial centers. In addition, Vonovia took part in various investor forums and numerous one-on-one meetings and teleconferences were held with investors and analysts to keep them informed of current developments and special issues.

In the fall of 2018, the Chairman of the Supervisory Board Jürgen Fitschen conducted a Corporate Governance Road Show together with the Head of Investor Relations to discuss corporate governance at Vonovia with 14 of the company's largest institutional investors. The event saw three topics emerge as being particularly relevant to the company's shareholders: Supervisory Board (composition, skills profile, remuneration, etc.), Management Board remuneration and authorized capital. Although corporate governance road shows are becoming increasingly popular at listed companies, they are not yet common practice. 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.

The fifth Capital Markets Day, which focused on "Unlocking Potential," took place in Berlin on June 5, 2018. In three workshops on energy, neighborhood development and project development, Vonovia demonstrated to the 55 external participants the business potential that these and other topics have to offer. The event wrapped up with a property tour that made two stops. First, smaller groups of participants were given a tour of a new construction project, where they were able to experience how professional development and sustainable construction is transforming an unused property into a high-value neighborhood with condominiums and rental apartments. The participants were then shown a neighborhood development project so they could see how socially responsible neighborhood development works. By viewing two model apartments, the group was able to get an idea of how senior-friendly modernization can be successfully realized.

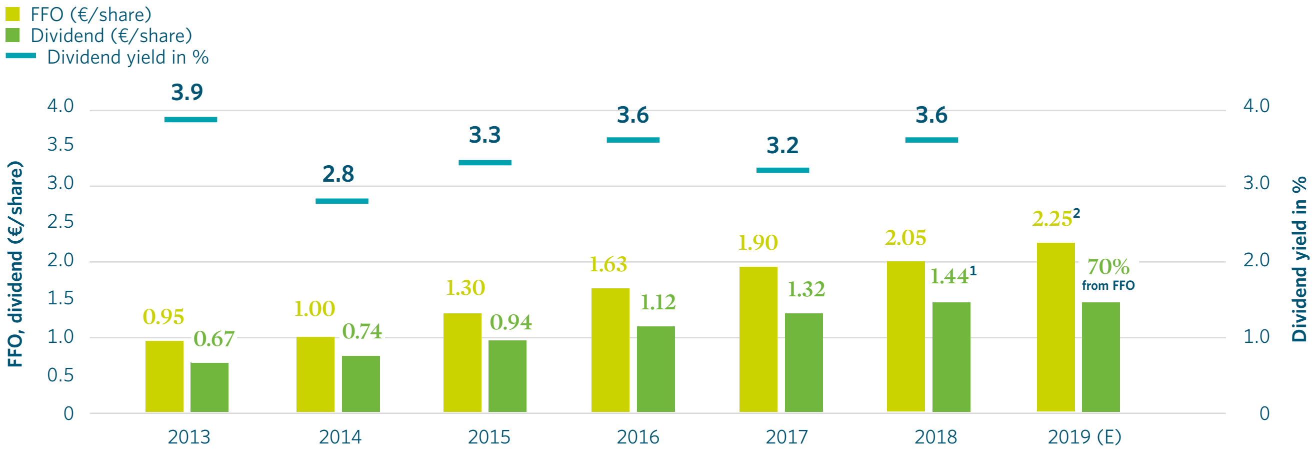
The Investor Relations team also organized and carried out numerous property tours for interested investors and analysts on location with colleagues from the operational areas of the company. The aim of these events was to provide the participants with firsthand insight into Vonovia's real estate portfolio and processes. Investor Relations also held detailed presentations on Vonovia and the situation on the German residential real estate market at informational events for private shareholders.

In 2019, we will continue to communicate openly with the capital market. Various roadshows, conferences and participation in investor forums have already been planned. Information can be found in the Financial Calendar on our Investor Relations website. **https://investors.vonovia.de**

Positive Analyst Assessments

At present, 31 international analysts publish studies on Vonovia on a regular basis (as of December 31, 2018). The average target share price was € 47.50 as of December 31, 2018. Of these analysts, 66% issued a "buy" recommendation, with 27% issuing a "hold" recommendation and 7% recommending that investors sell the company's shares. One broker has currently suspended coverage of Vonovia due to takeovers.

Attractive Dividend



1 Dividend proposed to the Annual General Meeting 2019.
2 Average forecast value. 2019 = Group FFO. All previous years FFO 1. 2013, 2014 TERP-adjusted.

Successful Development of Vonovia's Shares Over a Period of Several Years

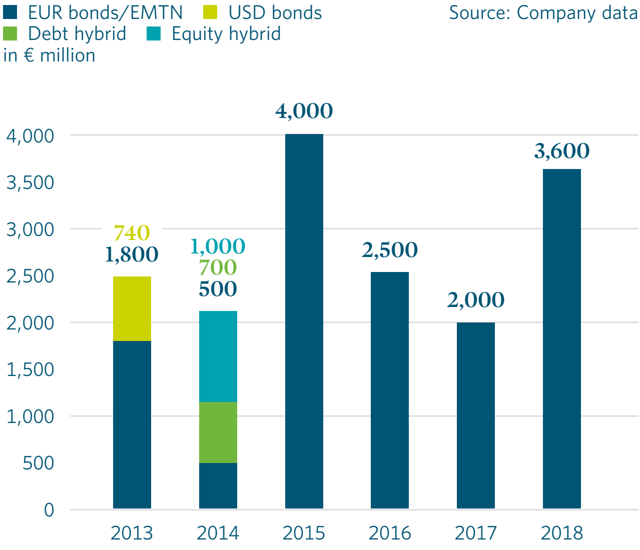
	2013	2014	2015	2016	2017	2018
Annual closing price (€)	17.13*	26.75*	28.55	30.91	41.39	39.59
High (€)	18.79*	26.75*	33.23	36.81	41.88	44.70
Low (€)	16.75*	17.13*	24.19	24.99	29.96	36.20
No. of shares as of Dec. 31	224,242,425*	271,622,425*	466,000,624	466,000,624	485,100,826	518,077,934
Market cap as of Dec. 31 (€ billion)	3.84*	7.3*	13.3	14.4	20.1	20.5
Average transaction volume per day (VWAP in € million)	1.3*	12.3*	45.2	41.2	47.6	55.8
Dividend per share (€)	0.67*	0.74*	0.94	1.12	1.32	1.44**
Dividend yield (%)	3.9	2.8	3.3	3.6	3.2	3.6

* Values are TERP-adjusted.
** Dividend proposed to the Annual General Meeting.
Source of share prices: Factset

Share Information

1st day of trading	July 11, 2013
Subscription price	€ 16.50
Total number of shares	518,077,934
Share capital in €	€ 518,077,934
ISIN	DE000A1ML7J1
WKN	A1ML7J
Ticker symbol	VNA
Common code	94567408
Share class	Registered shares with no par value
Stock exchange	Frankfurt Stock Exchange
Market segment	Regulated market (Prime standard)
Indices & weighting Dec. 31, 2018	DAX (2.4%) | Stoxx Europe 600 (0.3%) | MSCI Germany (2.0%) | GPR 250 World (1.7%) | FTSE EPRA/NAREIT Europe Index (9.8%) | GPTMS150 (2.6%)

Vonovia's Issue Volume Per Year



Share Information

The continuity of our business strategy is also reflected in our dividend policy. Our aim is to distribute around 70% of our Group FFO to our shareholders. As far as the 2018 fiscal year is concerned, we plan to propose a dividend per share of € 1.44 to the Annual General Meeting, which represents an increase of 9% as against 2017.

Financing Environment

2018 was characterized by a loose monetary policy and by the stabilization of economic data from the eurozone. There are increasing signs that inflation could gather speed in the medium term.

In the euro area, however, the European Central Bank's decision to continue with its asset purchase program, albeit on a smaller scale, up until September 2018 resulted in a stable interest rate environment overall. In June 2018, the ECB President announced that the asset purchase program would not be discontinued until the turn of the year 2018/2019. The ECB will, however, continue to reinvest payments from maturing bonds in further asset purchases even after this date. In September 2018, the ECB had voted to reduce its asset purchases made after September 2018 to a volume of € 15 billion a month, confirming that interest rates would remain at the current low level until mid-2019 at the very least.

The yield on ten-year German Federal bonds fluctuated in 2018, but without any sustained trend towards higher market interest rates. Increased macroeconomic risks, such as global trade conflicts and the uncertainty surrounding Brexit, bolstered the demand for low-risk bonds.

The Federal Reserve Bank (Fed), the world's largest central bank, made radical changes to its monetary policy course in 2018. It is no longer investing in bonds, meaning that it is not supplying the financial markets with any additional liquidity. On the contrary, bonds purchased by the Fed are even being sold again.

One of the World's Biggest Capital Market Issuers

The rating agency Standard & Poor's has assigned Vonovia a long-term corporate credit rating of BBB+ with a stable outlook and a short-term credit rating of A-2. Our first-class credit rating continues to give us unrestricted access to the international capital markets, on which we were able to establish ourselves within a short period of time. With an average issue volume of € 3.0 billion a year between 2015 and 2018, we rank 14th out of the world's top 15 EUR investment grade issuers based on analyses performed by Dealogic.

Successful Financing Measures in 2018

Thanks to the positive economic environment and the expansionary monetary policy pursued by a large number of countries, the global demand for investment among investors remained high in the first half of the year. As of the middle of the second half of the year, however, the announcement made by the European Central Bank on the gradual reduction of its asset purchase program, the potential for trade wars and the tension between the EU and Italy had a negative impact on risk premiums on the bond markets. Vonovia's bonds did not escape this trend unscathed.

In 2018, Vonovia placed an issue volume of € 3.6 billion in total on the primary market (2017: € 2.0 billion) at volume-weighted average interest cost of 1.45% (2017: 0.91% p. a.). The average maturity of the bonds we issued was 9.3 years in 2018 (2017: 6.3 years). This means that we were able to make active use of the attractive market environment in 2018 in order to extend our average maturity and further smoothen our maturity profile.

In order to increase its flexibility as far as refinancing strategies are concerned, Vonovia increased its commercial paper program by € 500 million to an issue volume of up to € 1.0 billion in 2018. The working capital facility was also increased by € 500 million to € 1 billion in 2018. Details on the financing portfolio can be found in the Notes to the consolidated financial statements.

Capital Market Outlook

As Vonovia does not have any operating business in the UK, Brexit is not expected to have any direct negative consequences for the company. As a result, the potential negative implications of Brexit for Vonovia are unlikely to be material. An escalation in the potential trade wars could put a damper on the macroeconomic climate and the global growth outlook, possibly leading to negative repercussions on the capital markets.

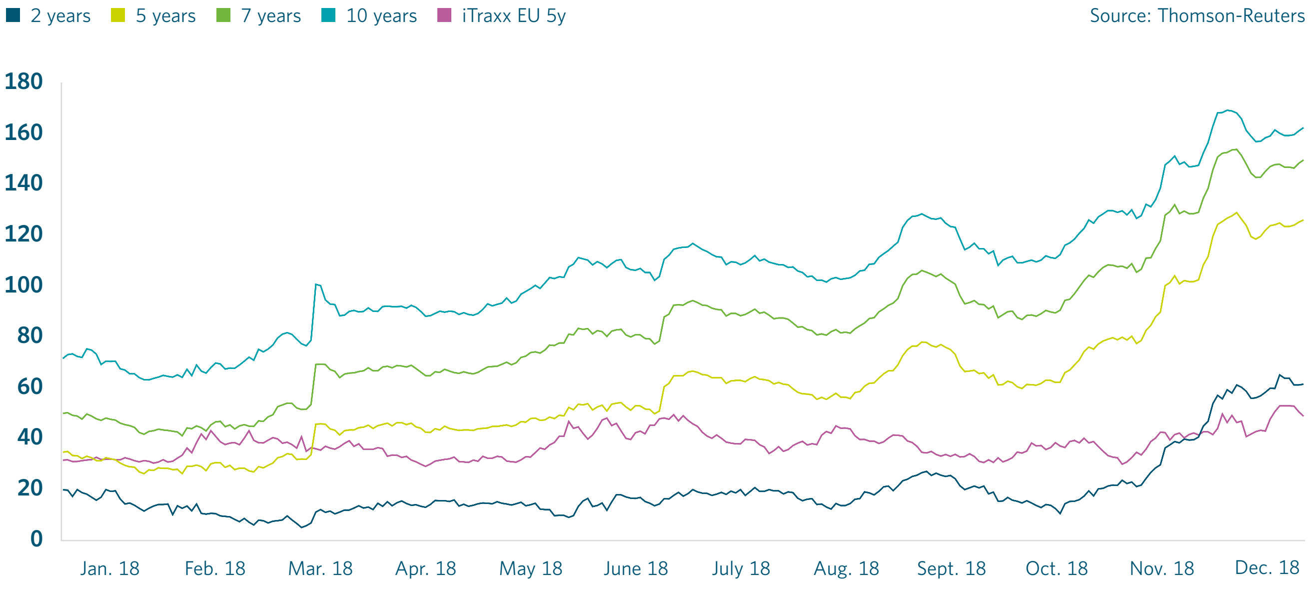
The reputation of German real estate stocks as a safe haven could be enhanced as a result of Brexit if investors opt to pull capital out of real estate stocks in the UK and seek alternative investment opportunities. This sort of increased demand could actually have a positive impact on the performance of Vonovia's shares.

We concur with a large number of analysts and market participants and expect receptive borrowing markets and attractive financing conditions to continue over the medium term due to an economic outlook that remains attractive, albeit slightly less than in the previous year, and based on the levels of liquidity that are still available. Given the global nature of the borrowing markets, we do not currently expect that the ongoing Brexit negotiations have any long-term impact in this regard either.

With a level of debt that is consistently in the Pfandbrief-eligible range and their investment grade rating, Vonovia's debt instruments will remain a sought-after investment – even if investment pressure is low or liquidity levels drop. We do not expect to see any direct correlation between interest rate developments and earnings given the long maturities of our financing instruments and the steady maturity profile. Rather, it is evident that the supply/demand situation regarding residential real estate market and, as a result, rental development has much more of an impact on earnings. This is enhanced by the results of the Value-add segment, which is unrelated to interest rates.

As far as interest rates are concerned, we do not expect to see any significant changes within the next 12 months, nor do we predict any marked increase in risk premiums, compared with the level witnessed at the end of 2018, following the reduction of the European Central Bank's asset purchase program.

Spread Development (in Basis Points)



COMBINED MANAGEMENT REPORT

In 2018, Vonovia picked up exactly where it had left off in the previous year in terms of business performance. We were successful in implementing our business strategy and all key figures showed an improvement. We are also optimistic as far as this fiscal year is concerned.

Fundamental Information About the Group

Overall Conditions of the German Residential Real Estate Market

Everyone needs a home. In addition to our basic physiological needs, a roof over our heads is a basic and fundamental human requirement; as well as offering protection and shelter, our home is also, first and foremost, an expression of our personal lifestyle. According to the latest estimates from the Federal Statistical Office, at least 42.0 million apartments are on offer for approx. 82.9 million people.

At the time of the last microcensus (2014), the proportion of owner-occupied apartments came to around 45.5%, with rented apartments accounting for around 54.5%. The vast majority of these apartments are made available by private small-scale providers. In addition to these providers and landlords, the German real estate market features cooperative, municipal, public-sector and church landlords, as well as private-sector professional landlords such as Vonovia. According to the German Association of Professional Homeowners (GdW), the latter provided a combined total of around 4.2 million apartments at the time of the microcensus. Vonovia currently rents out a total of around 358,500 apartments in Germany. This corresponds to around 8.5% of the total supply made available by private-sector professional landlords and to around 1.5% of the total number of rented apartments in Germany.

A large number of major cities and the areas surrounding them are experiencing rapid growth. This is due, in particular, to migration from other parts of Germany and from abroad, a trend that has been accelerated by the influx of refugees from global crisis regions. This is fueling greater demand for suitable and affordable living space in these growing cities and regions, resulting in housing shortages as well as rising rents and prices. Despite an increase in the number of completed developments, new construction is still lagging behind the demand for housing, particularly in the country's metropolitan regions. On the other hand, other cities and rural regions in various parts of Germany are faced with a dwindling population.

In addition, the German population is becoming older on average, creating major challenges for the real estate industry, particularly as far as senior-friendly housing is concerned.

Awareness of the housing problem, which is reflected in a shortage of available and affordable housing in Germany's metropolitan regions and in the associated significant increase in property prices on both the rental and owner-occupied markets, has grown considerably in recent years. At the same time, 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 comes along with it have created a subjective sense of inequality that pervades all sections of society, with political decision-makers under increased pressure to rectify the situation.

This means that housing providers have to adopt a very sensitive approach that gives due consideration to how the "housing issue" is seen in the public eye, and have to proactively seek dialog with political lobbyists and tenants at local, regional and nationwide level. As the issue affects a whole range of different stakeholders, a balance has to be struck between the demands created by the current societal megatrends on the one hand and the fundamental human need for housing on the other.

Societal Megatrends

Vonovia's business model is influenced by key environmental developments and megatrends. The main megatrends on the real estate market are (1) the shortage of housing, (2) climate change and the drive to avoid fossil fuels with the aim of limiting emissions that are harmful to the environment, (3) migration and social change and (4) demographic change and the demand for housing that meets the needs of today's society. (5) Digitization is also becoming increasingly important. These megatrends are affecting a real estate industry that is subject to stringent statutory regulation in a climate characterized by increasing concerns regarding the "housing problem" among the population at large.

(1) The shortage of housing in Germany is reflected in the need for around 350,000 to 400,000 new apartments to be built every year. In contrast, around 353,000 building permits are expected to have been granted in 2018, with only around 300,000 apartments actually completed. In Germany's seven largest cities alone, around 88,000 new apartments will have to be built every year, in real terms, in the period leading up to 2020. This shortage of housing means that the vacancy rate is now close to zero on the real estate markets in the country's top locations. As a result, rents in the country's major metropolitan areas are growing at a faster rate than wages, meaning that the burden associated with housing costs is growing disproportionately. What is more, an increasing number of apartments are no longer covered by restrictions put in place to secure an adequate supply of social housing. Whereas back in 1990, there were still around 3 million apartments classified as social housing in Germany, this figure is set to have fallen to around 1 million by 2020. Vonovia plans to use densification in existing neighborhoods to create new apartments in areas that it already owns. The company has efficient processes in place for modular new construction to create affordable living space in the short term. What's more, around 12,000 new apartments are to be built over the next few years thanks to the real estate development business.

(2) Germany has made a commitment to achieving the targets agreed at the Climate Change Conference in Paris as part of its quest to combat climate change. This has created an urgent need for extensive energy-efficient refurbishment measures, particularly given that housing is one of the biggest producers of greenhouse gas emissions. Despite diminishing public acceptance for intensive measures, Vonovia most recently refurbished approximately 5% of its portfolio per year to meet the latest standards in energy efficiency, outpacing the national renovation rate. We want to continue to ensure that our tenants are not overwhelmed financially, while still being able to find solutions to reduce the CO_2 emissions of existing buildings. Energy-efficient modernization means investing in building facilities and insulation. Companies' internal processes, however, are also being put under the microscope as far as their energy efficiency is concerned. Vonovia discloses this information in its Sustainability Report.

(3) The influx of people from different cultural backgrounds as well as the internal migration towards the country's metropolitan regions/high-influx cities is often experienced by the native population, which can impact the social cohesion in and the image of the affected neighborhoods. The risk of insufficient social diversity and mounting tension in the day-to-day interaction between residents in these neighborhoods also has to be tackled in a responsible manner. Vonovia is living up to its responsibility in this area by taking targeted neighborhood development measures, i. e., it is developing its housing stock both by making investments in the residential environment, but also by investing in neighborhood and social structures with suitable cooperation partners. Rules should also be put in place to promote a harmonious communal life.

(4) At the same time, housing needs are changing. The German population is becoming increasingly older, presenting the real estate industry with considerable challenges, particularly when it comes to senior-friendly homes. The number of households is on the rise due to a growing number of one- to two-person households. This development is fueling even greater demand for apartments to accomodate smaller households. Migration patterns within Germany and immigration from abroad are increasing the demand for suitable and affordable housing in metropolitan areas even further. These trends are affecting a housing stock that was created to handle very different circumstances.

(5) Digitization: Digital transformation is also having an increasing impact on Vonovia's business model. Developments in the field of digitization, i. e. primarily the exponential increase in computing power, networking (Internet of Things (IoT)) and platform solutions, mobile devices, robotic process automation (RPA) and artificial intelligence (AI) are being monitored on an ongoing basis to evaluate the impact on our business model and adapt where appropriate. We evaluate digitization and the benefits that it offers with regard to our processes and our customers. For Vonovia, Smart Real Estate

already means the extensive digitization of business processes with a level of sophistication that includes RPA and even extends as far as the first few AI approaches, for example in contract and portfolio data analysis. In our new construction activities, we are using Building Information Modeling (BIM) solutions. Evidence of networking can be found, in particular, within the value chain in our management platform, which facilitates ongoing improvements in how we interact with our customers using corresponding apps and portal solutions, and in the coordination of the local customer service, the craftsmen's and residential environment organization and the commercial support functions. We are also, however, increasingly seeing approaches for smart home building solutions, from smart grid to assistance systems and predictive maintenance. Vonovia is not pursuing digitization as an end in itself, but rather to boost customer satisfaction, improve the basis on which decisions are made, further develop its business model and processes and reduce the use of resources.

The Company

Vonovia manages a housing stock of around **358,000 apartments** in almost all of Germany's attractive cities and regions. It also manages a portfolio of around 23,000 units in Austria and approximately 14,000 in Sweden. The total fair value comes to around € 44.2 billion, with net assets based on the EPRA definition coming to approximately € 26.1 billion (EPRA European Public Real Estate Association). In addition to its own apartments, Vonovia manages around 84,000 apartments for third parties. This makes Vonovia one of the leading residential real estate companies in Germany, Austria and Sweden, albeit with a very low market share of around 1.5% in Germany due to the highly fragmented nature of the market. Vonovia also holds a minority stake in a portfolio perviously held by the French railway operator SNCF.

Vonovia's roots and those of its predecessor companies extend back into the 19th century and lie in not-for-profit housing and housing for factory workers in Germany's Ruhr region. Deutsche Annington and GAGFAH, for example, were originally set up to build apartments for the workforce: They were housing companies and cooperatives that built low-cost housing for workers, salaried employees and civil servants. Many of the housing developments built in that era were model projects of the time and are now covered by preservation orders. Living in what were known as "workers' settlements" was about much more than just affordable living space. The residents were colleagues and neighbors; they worked and lived together.

The **age structure** of Vonovia's 358,000 or so German properties shows that around 69% were built between 1945 and 1980 and around 15% originate from the period before the Second World War, while around 16% were built after 1980. Of these, approximately 1% were built after the year 2000.

Vonovia's history also, however, includes a phase which was characterized by "private equity investors," as public-sector and private-sector employers started to withdraw from the management of company-owned apartments as part of the trend towards increasing privatization and liberalization within the real estate market. The German housing market as a whole underwent change. The investors found themselves faced with the challenge of pursuing their business model with an outdated housing stock for which **maintenance and modernization** measures were long overdue; their business model did not ultimately achieve the success they had hoped for and maintenance and investment in the housing stock was cut back even further. This was a partial cause of serious housing defects, which resulted in persistent complaints being lodged by tenants and damage to the housing companies' reputation.

Against the backdrop of the debate on how to limit climate change, it is important to note that Germany's total housing stock has a significant influence on greenhouse gas emissions, accounting for around 35% of the final energy consumption, and that the commitment made by the Federal Republic of Germany under the United Nations **Paris Agreement on climate change** can only be realized by taking substantial energy-efficient modernization measures to overhaul properties that are in need of modernization to begin with. The renovation rate for residential buildings in Germany currently stands at around 1%, considerably lower than the political target of 2%. (Reference is made to Vonovia's Sustainability Report at this point).

Vonovia is just as committed to achieving the targets set out in the Paris Agreement on climate change and reaching the **energy-efficient modernization** rate of 2% as it is to tackling the need to **preserve the building stock in the long term** and **to provide modern and affordable living space that meets tenant needs.** Political stakeholders and the real estate industry alike have to apply sound judgment as they attempt to strike a balance between the need for modernization, the legitimate commercial interests of private-sector landlords and the public perception of the acute housing situation.

As Germany's largest real estate company, Vonovia believes that it has a particular **responsibility** towards its customers, but also towards society and its shareholders. In order to live up to this responsibility, it is extremely important to take not only economic but also ecological and social aspects into account when making entrepreneurial decisions. This is why Vonovia addresses the latest developments and trends head on and is committed to intensive dialog with a whole range of stakeholders.

As Germany's leading residential real estate company, Vonovia maintains close dialog not only with customers, but also with numerous other stakeholder groups that are important for the company's development. These mainly include its employees, investors, suppliers and service providers, as well as social interest groups, including non-governmental/non-profit organizations. We also use our **sustainability reporting** to meet these stakeholders' expectations in terms of information.

As a **modern service company**, Vonovia focuses on customer orientation and, as a result, on the satisfaction of its customers, namely its tenants. Being able to offer tenants affordable and attractive homes, combined with one-stop property-related services, remains a prerequisite for the company's successful development.

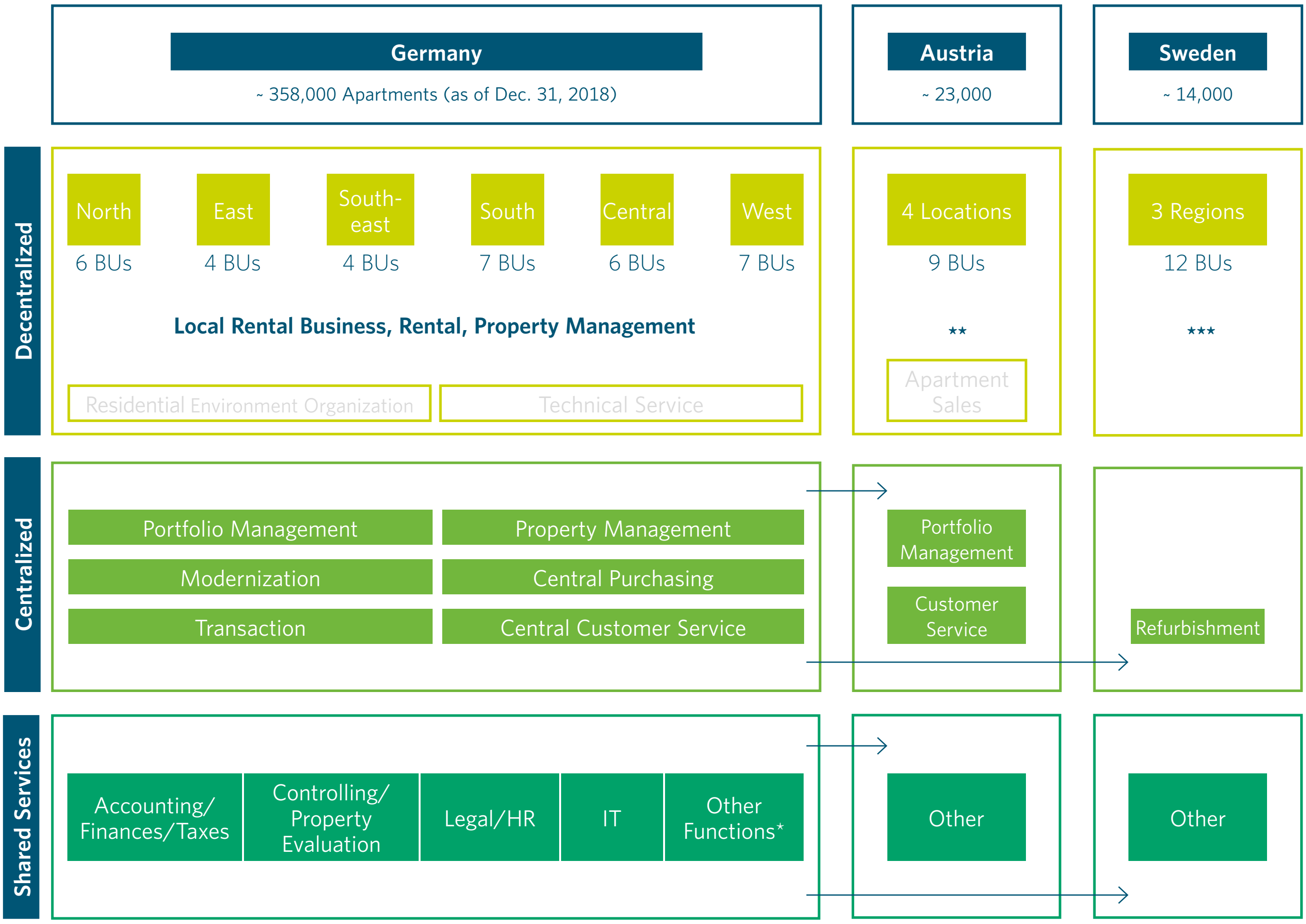
Vonovia's business model is based on the rental of good-quality, modern and, most importantly, affordable living space, the development and construction of new apartments, both for its own portfolio and for sale to third parties, and the provision of housing-related services. These housing-related services mainly relate to cable TV, bathroom renovations in response to tenant requests, automated meter reading and senior-friendly apartment modernization. This is supported by our caretakers and by our craftsmen's and residential environment organization.

With our **efficient organizational model**, optimized processes, a clear focus on service, and, as a result, on our tenants, and a clear investment strategy, we are laying the foundation for a sustainable economic management while safeguarding our legitimate interests as a private-sector company.

A balanced mix of services provided by the **central service center** and by **regional caretakers working on-site** as well as by our company's own technical and residential environment organization ensures that our tenants' concerns are attended to in a timely, straightforward and reliable manner. This plays a key role in ensuring that our customers feel that they have good support in their residential environment.

In addition to its successful long-term and modern property management, Vonovia also develops the real estate portfolio through targeted **acquisitions and sales**. The goals associated with new portfolios acquisitions include strengthening its overall regional presence, realizing operational and financial economies of scale and optimizing structures. In addition, Vonovia will be using development measures, densification and vertical expansion to build an increasing number of new apartments in order to meet the rising demand for living space in metropolitan areas in particular.

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

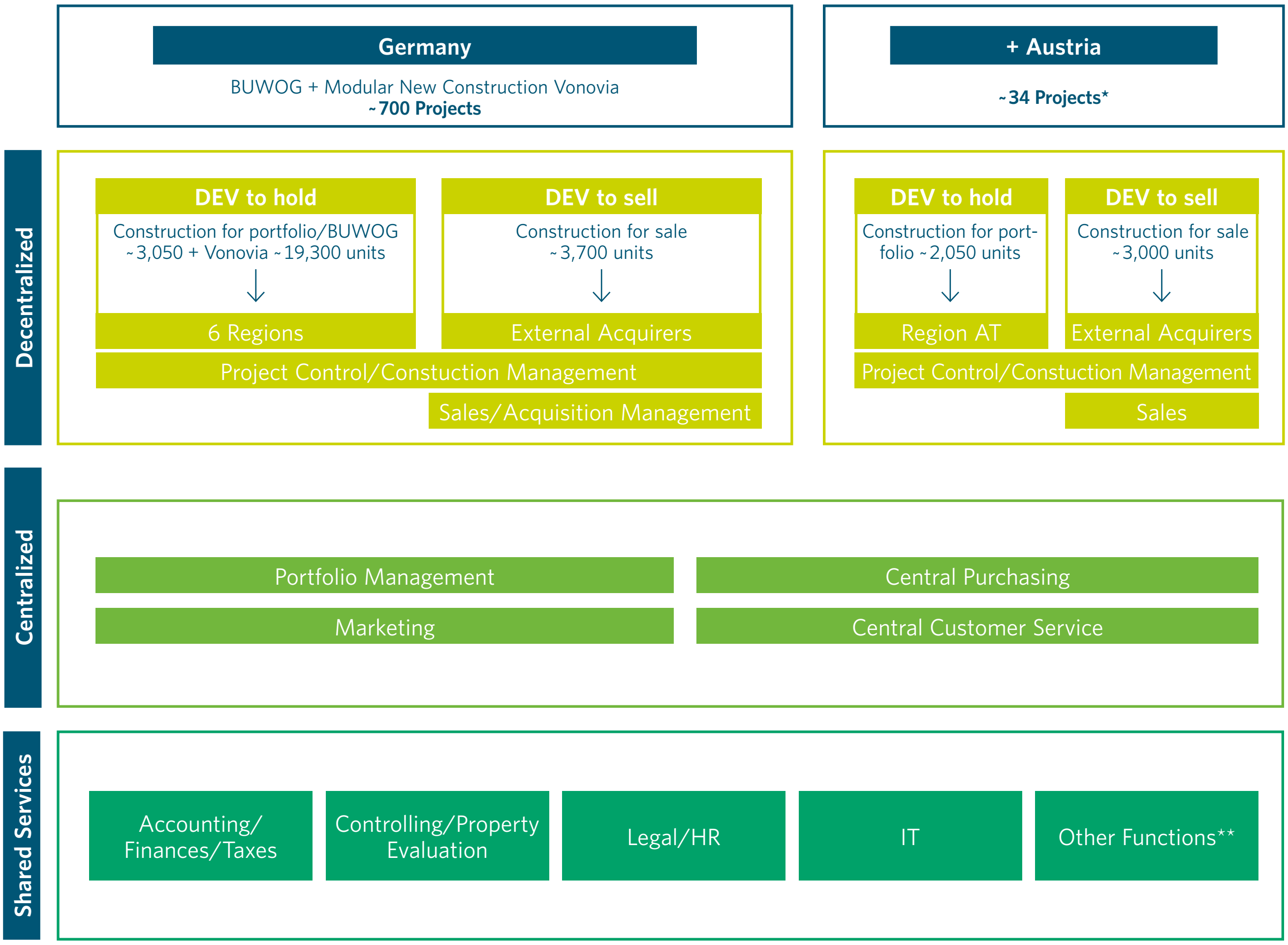
Vonovia SE, the parent company of the Vonovia Group, is organized in the legal form of a dualistic European company (SE). Vonovia SE is directed by a Management Board, which is responsible for conducting business and defining the Group's strategy. Implementation occurs in close coordination with the Supervisory Board, which is regularly briefed by the Management Board regarding the development of business, strategy and potential opportunities and risks. The Supervisory Board oversees the activities of the Management Board.

Vonovia SE has its registered headquarters in Germany. Since 2017, its registered office has been in Bochum. The head office (principal place of business) is located at Universitätsstrasse 133, 44803 Bochum. As of December 31, 2018, 522 legal entities/companies formed part of the Vonovia Group. A detailed list of Vonovia SE shareholdings is appended to the Notes to the consolidated financial statements.

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

In order to carry out its management functions, Vonovia SE has established a series of service companies, particularly for commercial and operational support functions, which are centralized in shared service centers. By pooling the corporate functions on a uniform management platform, Vonovia

Corporate Structure Development



* Total projects in progress, preparation and planning.
** Other shared services and staff functions: investor relations, revision, corporate communication, insurance.

achieves harmonization, standardization and economies of scale objectives, and the other Group companies thus do not need to perform such functions themselves. This bundling is a prerequisite for the effective and efficient management of a nationwide portfolio of 358,000 apartments and also provides the basis for the successful digitization of Vonovia's process chains.

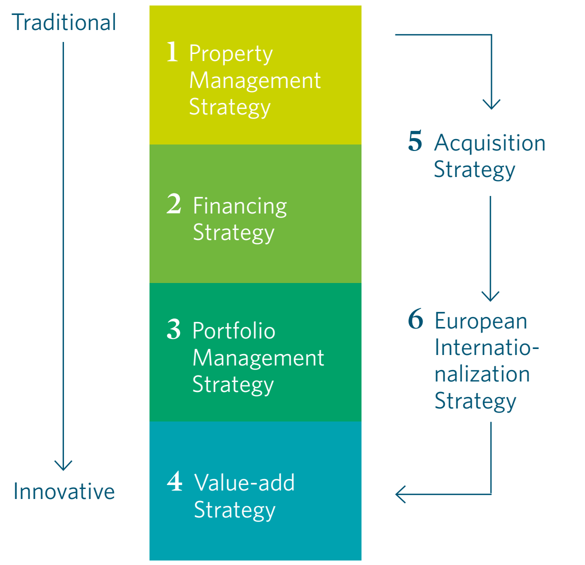
Vonovia's core operating rental business in Germany is currently divided into six business areas. These are, in turn, split into business units (BUs), each of which is responsible for an average of around 10,500 housing units on location as part of a decentralized structure. The caretaker, craftsmen's and residential environment organization is also based on a regional structure.

Responsibility for the other activities that belong to the Value-add segment, i.e., product management, data and energy services, vertical expansion and modernization, is centralized. This also applies to activities relating to sales and acquisition.

The development business is also managed centrally for both Austria and Germany.

The management of the business is based on the company's strategic approaches and is conducted via the four segments: Rental, Value-add, Recurring Sales and Development. Details on the management of our business can be found in the chapter on our management system.

The 4+2 Pillars of our Strategy



Strategy

The 4+2 Strategy

Our reputation and customer satisfaction remain the cornerstones of our strategy. Since 2013, our strategy has been based on four pillars, to which a fifth related strategic approach, our acquisition strategy, was added. These **four basic strategic approaches** include traditional property management, portfolio management, the financing strategy and the innovative aspect of the Value-add strategy. These four basic strategic approaches entail an increasing proportion of innovative elements for the market. The fifth pillar, our acquisition strategy, is designed to strengthen the impact of the first four strategic approaches as the opportunity arises.

This strategy has proved to be extremely successful in previous years. A comparison of the specific situation in Germany with European neighboring countries has shown that Germany has an efficient real estate market. This has led to the decision to use the expertise we have acquired in Germany in other parts of Europe, too. This is why the "4+1 strategy" was turned into a **"4+2 strategy"** in 2017. The 4+2 strategy involves internationalization as a further **opportunistic approach** that is also designed to strengthen the four basic approaches.

In detail, our 4+2 strategy elements can be described as follows:

Property Management Strategy

The core element of the property management strategy is the sophisticated, scalable **management platform,** which benefits primarily from its customer-oriented local business units, the Group-wide bundling of services in shared service centers, the appropriate automated systems, and cost-efficient operations. The aim of continuous improvements to the management platform is to improve the quality and efficiency of customer service. Mastering the complexity of Vonovia's large nationwide real estate portfolio is the top priority within this context. The cost per unit (cpu) is our benchmark. We use our management platform to manage the maintenance and modernization process, as well as procurement. As part of the further development of the platform and its processes, we keep a constant eye on digitization developments to generate further optimization potential for our platform and our customer service. The Austrian and Swedish portfolios are managed by their own respective country-specific organizations. Both organizations aim to rival the standards set by the successful management platform that has already been established in Germany.

Financing Strategy

The financing strategy pursues various yet complementary goals: These are centered on ensuring adequate, but also optimized, liquidity at all times, a balanced structure and maturity of debt capital, optimization of financing costs and credit rating maintenance. Our aim is to maintain an ideal level of debt of between around 40% and 45% measured in terms of the loan-to-value ratio key figure.

Thanks to its broad range of equity and debt capital providers and the BBB+/Stable/A-2 long-term corporate credit ratings awarded tor our company by S&P, our company has excellent access to the international debt and equity capital markets. This gives us flexible access to capital based on favorable financing conditions at all times, securing Vonovia's liquidity on a permanent basis.

This comprehensive access to the international debt and equity capital markets gives a German residential real estate company a clear strategic competitive edge. This was recently evident time and again in the context of our acquisitions and the modernization measures that have been implemented. Without fast and free access to the equity and debt capital markets, it would not have been possible to carry out these measures.

The latest acquisitions expose Vonovia to country risks, and it is also exposed to a currency risk due to the acquisition of the stake in Victoria Park in Sweden. The new challenges arising from this have been incorporated into the financing strategy.

Portfolio Management Strategy

We continue to split our overall real estate portfolio into the **"Strategic"** portfolio, which focuses on value-enhancing property management using the "Operate" and "Invest" approaches on the one hand and, on the other, into the "Recurring Sales" portfolio, which is intended to be sold to tenants, owner-occupiers and capital investors, and the "Non-core Disposals" portfolio, which includes locations and properties that are not absolutely essential to the Group's further strategic development.

In the "Operate" subportfolio of the "Strategic" portfolio, we aim to further increase the value of the properties by carrying out sustainable maintenance measures, increasing rents and reducing vacancy levels. In the "Invest" subportfolio, we are generating additional added value by implementing an extensive program of investments that responds to climate protection concerns and focuses on investments in energy-efficient renovation. Most of our investments are in heat insulation for facades and roofs, as well as in new windows and heating systems. When it comes to investing in our apartments, our measures to improve residential standards are based on our customers' needs. As well as modernizing or renovating bathrooms, installing new flooring and offering modern electrical installations, this also includes the demand for senior-friendly fittings.

We want to continue to create new living space in our portfolio in the future as part of our densification strategy. The first set of new construction projects has already been successfully completed and others are in the planning stages. These also include moves to add extra stories to existing buildings. **New construction and vertical expansion projects** are frequently realized using a standardized series construction system with the help of pre-configured segments, making them much quicker to complete. Modular construction using pre-configured elements allows standardization and scaling at a low cost, while ensuring reliable project implementation at the same time.

Thanks to the acquisition of BUWOG, the portfolio management strategy also includes the activities of the development business in Germany and Austria on land purchased specifically for this purpose, adding another profitable element to Vonovia's value chain. The acquisition also results in the transfer of substantial expertise between the **development business** and Vonovia's established new construction and vertical expansion activities. The development business includes the construction of owner-occupied apartments for sale to private investors and owner-occupiers, as well as the construction of rented apartments to be managed by the company itself. These activities will continue to be performed under the established BUWOG brand in the future.

In the **"Recurring Sales"** portfolio, our focus is on generating additional added value by selling owner-occupied apartments and single-family houses at a premium compared with their fair value.

The **"Non-core Disposals"** portfolio includes locations and properties that are not earmarked for privatization, are likely to have below-average development potential in terms of rent growth in the medium term and are located in areas that can be described as peripheral compared with Vonovia's overall portfolio and in view of future acquisitions. Properties in this portfolio are reviewed on a regular basis and offer further sale potential.

The properties in Austria and Sweden are combined in the "Vonovia Austria" and "Vonovia Sweden" portfolios respectively.

Value-add Strategy

The Value-add strategy supplements our core business to include customer-oriented services, e.g., services that are closely related to and/or influence the rental business. As part of this strategy, we continually evaluate additional service ideas to boost customer satisfaction and add the corresponding services to our offering. Those areas of the Value-add strategy 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 expanding our services are into the area of energy supplies and home automation.

The capability of having our own craftsmen's organization cover the entire portfolio, in particular the maintenance and modernization services, allows us to make the units more attractive in general and help to boost customer satisfaction. In addition, our residential environment organization consisting of our own employees is responsible for looking after outdoor areas, green spaces, playgrounds and refuse collection points within our properties, particularly in conurbations. We have also established our own caretaker organization in recent years, with employees on hand to provide on-site support for our existing properties. This systematic insourcing allows us to increase the proportion of services we provide ourselves on an ongoing basis, allowing us to ensure that our own employees are on site in the various property locations. In addition, this improves reaction times to customer inquiries and makes it easier to coordinate services – especially in such a large nationwide portfolio like Vonovia's. Therefore, the effective increase in craftsmen's availability and the improved quality of repair work ultimately lead to an increase in customer satisfaction.

The Value-add strategy also includes the condominium administration business, property insurance and the management of properties for third parties.

Acquisition Strategy

The Vonovia Group has been growing in recent years thanks to a large number of acquisitions. Our scalable operational management system has allowed us to achieve harmonization and generate economies of scale from the full and swift integration of newly acquired companies and portfolios. Over the past few years, we have been able to prove, time and again, that this strategy pays off.

Making the most of this competitive advantage and using the expertise that has been built up within our organization over many years, we are constantly analyzing portfolios that could constitute potential takeover targets. In accordance with our portfolio management strategy and our Value-add strategy, we do not consider acquisitions to be the only way in which to achieve growth, but rather see them as key additional strategic levers that help to strengthen the impact of the core strategies.

We pursue our acquisitions as and when opportunities present themselves. Acquisitions have to be expected to increase value before they are conducted. Such increases in value are generally assessed in terms of strategic suitability, increases in FFO per share and a neutral impact on the NAV per share; these are funded by 50% equity and 50% debt. Furthermore, an acquisition must not pose any risk to the company's stable BBB+ long-term corporate credit rating.

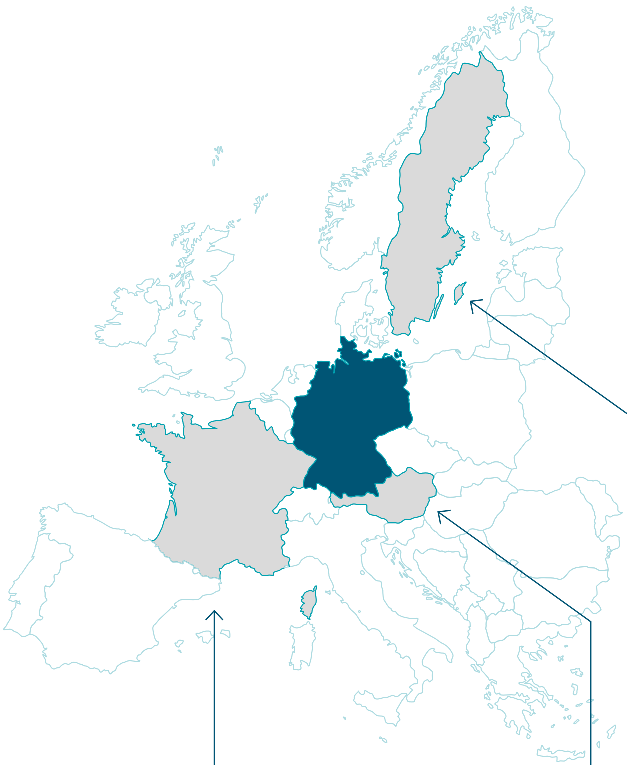
Despite a shorter supply of attractive portfolios, Vonovia remains committed to the implementation of its acquisition strategy, as there are still opportunities for successful takeovers and integration measures available.

European Internationalization Strategy

The German real estate market has become a lot more professional over the last 20 years since measures were taken to liberalize it. Most European markets are still organized in a way that resembles the German market 20 years ago. The transfer of expertise is expected to result in professionalization in other European countries. Our experience and expertise as a leading German real estate company serves as a reference in order to generate added value by tapping into other European markets. The potential target markets include those that are not yet as professional as the German real estate market, and those that offer attractive overall conditions in terms of rental market growth and household growth.

Any activities on other European markets are performed by making targeted direct investments, such as in Austria and Sweden, but also, as an alternative, via high-profile and reliable joint venture partners in the first instance, which is the approach pursued on the French market. This will involve making contact with European partner companies, corresponding investors or political institutions in order to help accurately assess investment opportunities, cooperation options and opportunities for market entry. Vonovia will pursue its internationalization strategy as and when opportunities present themselves. Our activities on other European markets must not impact on our domestic business and must entail risk potential that can be controlled or limited.

European Activities – Current Steps



The challenges in many European metropolitan areas are comparable.

- Affordable apartments
- Demographic change
- Migration
- Urbanization (population influx tow. cities)
- Energy efficiency (CO_2 reduction)
- Scarcity of housing space
- Residential environment services

CDC habitat

Biggest landlord in France: 348,000 apartments; exchange of expertise and identifying joint investment opportunities.

BUWOG

48,000 apartments; of which 27,000 in Germany.

Victoria Park

On the stock exchange in Sweden; about 14,000 apartments in the areas of Stockholm, Gothenburg and Malmö.

Non-financial Declaration

Explanatory Information on the Content of the Report and the Framework

Corporate reporting at Vonovia SE has already been subject to a process of ongoing enhancement for several years now to include matters extending beyond mere financial reporting and to broaden the perspective to include comprehensive reporting on developments within the company. This process is designed to take account of the key role that Vonovia plays in society at large and to address, and provide information for, numerous stakeholder groups. The most recent enhancement to corporate reporting relates to the Non-financial Declaration resulting from the entry into force of the CSR Directive Implementation Act (CSR-RUG) in 2017.

This chapter includes the required disclosures for the Non-financial Declaration pursuant to Section 289 a-e of the German Commercial Code (HGB) in conjunction with Section 315 b-c HGB (combined Non-financial Declaration). In order to avoid data redundancy, reference is made, where appropriate, to other sections of the management report that contain non-financial information.

As with other sections of this Annual Report, reporting in the Non-financial Declaration is also on a consolidated basis. This means that the company activities in Austria and Sweden – resulting from the acquisitions of (the former) BUWOG AG and Victoria Park AB in 2018 – are also covered by this Non-financial Declaration. In the first stage, this concerns the qualitative presentation of the non-financial information of the acquired companies. As the integration of the corresponding processes is still ongoing, however, the key performance indicators cannot be fully consolidated as yet. We will refer to the extent to which the key figures have been integrated in the following chapters.

The Non-financial Declaration is largely based on the structure of Vonovia's Sustainability Report. This is, in turn, structured based on the GRI Standards of the Global Reporting Initiative (as valid in 2016) in accordance with the "core" option. The Sustainability Report is also based on the EPRA Best Practice Recommendations on Sustainability (in its third version from 2017).

The Non-financial Declaration has to report on the main relevant non-financial performance indicators, their individual target values and the underlying concepts. This information is set out in the individual chapters, which are structured by content. Not all of the performance indicators included in this Declaration correspond to the GRI set of standards. Rather, some of them have been adapted to reflect the specific circumstances prevailing in the housing industry.

The Non-financial Declaration will be reviewed by the internal auditor of Vonovia SE on behalf of the Supervisory Board.

The Sustainability Report of Vonovia SE contains further extensive information on individual non-financial topics, as well as corresponding project examples and key figures. The Sustainability Report for the 2018 reporting year will be published in June 2019.

Business Model and Risk Assessment

A Sustainable Business Model

A home is a basic human need. The fundamental availability of living space, needs-based and good living standards, an environment in which we feel comfortable and intact neighborhoods are of crucial importance when it comes to determining whether we feel at home in an apartment in the long run. The object of our business – namely the renting of high-quality, modern and affordable homes combined with housing-related services and the construction of new living space – meets this basic need. As we are aware of the tense situation on numerous regional residential property markets, we are constantly on the lookout for the best solutions so that we can offer all of our tenants homes that meet these very standards in the long term. A home should not be a question of social status.

Within this context, Vonovia is creating new homes as part of its development, new construction and vertical expansion program in order to meet the growing demand. The company is also, however, investing in the maintenance and upgrading of its existing properties. These efforts include, in particular, measures to improve energy efficiency. This allows us to make a significant contribution to protecting our climate. At the same time, well-insulated apartments increase efficiency and simultaneously reduce ancillary expenses for our customers. Compliance with the regulatory requirements of environmental, energy and rental law is always a material component of our business processes. We seek to find mutually agreeable solutions that strike a balance between fair rents, effective climate protection and rising construction prices.

For Vonovia, housing does not end at the front door. A nice, stable and ecologically valuable environment is part of a good residential atmosphere. Therefore, together with other social actors, we become involved beyond our buildings and set trends with cities, companies and city planners, as well as with associations, initiatives and, last but not least, with our local customers for the sustainable and ecological development of entire neighborhoods.

In order to keep the service promise we have made to our customers and provide them with good quality over the long term, we perform as many tasks as possible on our own – via well-trained and committed service employees, caretakers, technicians and gardeners.

In all of our processes, we pay due attention to the impact that our business model has on society and the environment and seek to achieve developments and improvements that are as sustainable as possible.

The corporate strategy and structure of Vonovia SE has been further explained in the section entitled "Fundamental Information About the Group." → p. 60 The corresponding non-financial performance indicators are set out in more detail under "Corporate Governance." → p. 94 et seq.

An Extensive Risk Assessment

According to CSR-RUG, material risks associated with the corporation's own business activities which are very likely to occur and which could have challenging negative effects on non-financial topics and, as a result, on the business model must be reported. We identify potential risks relating to areas such as corporate governance, society and the environment as part of our comprehensive risk management system. These risks are identified in both gross and net terms.

In the opinion of Vonovia's management, there are no risks that meet the materiality criteria pursuant to Section 289c (3) Nos. 3 and 4 HGB in net terms. We have provided detailed information on other risks in the opportunity and risk report of the combined management report.
→ p. 131 et seq.

Key Sustainability Aspects at Vonovia

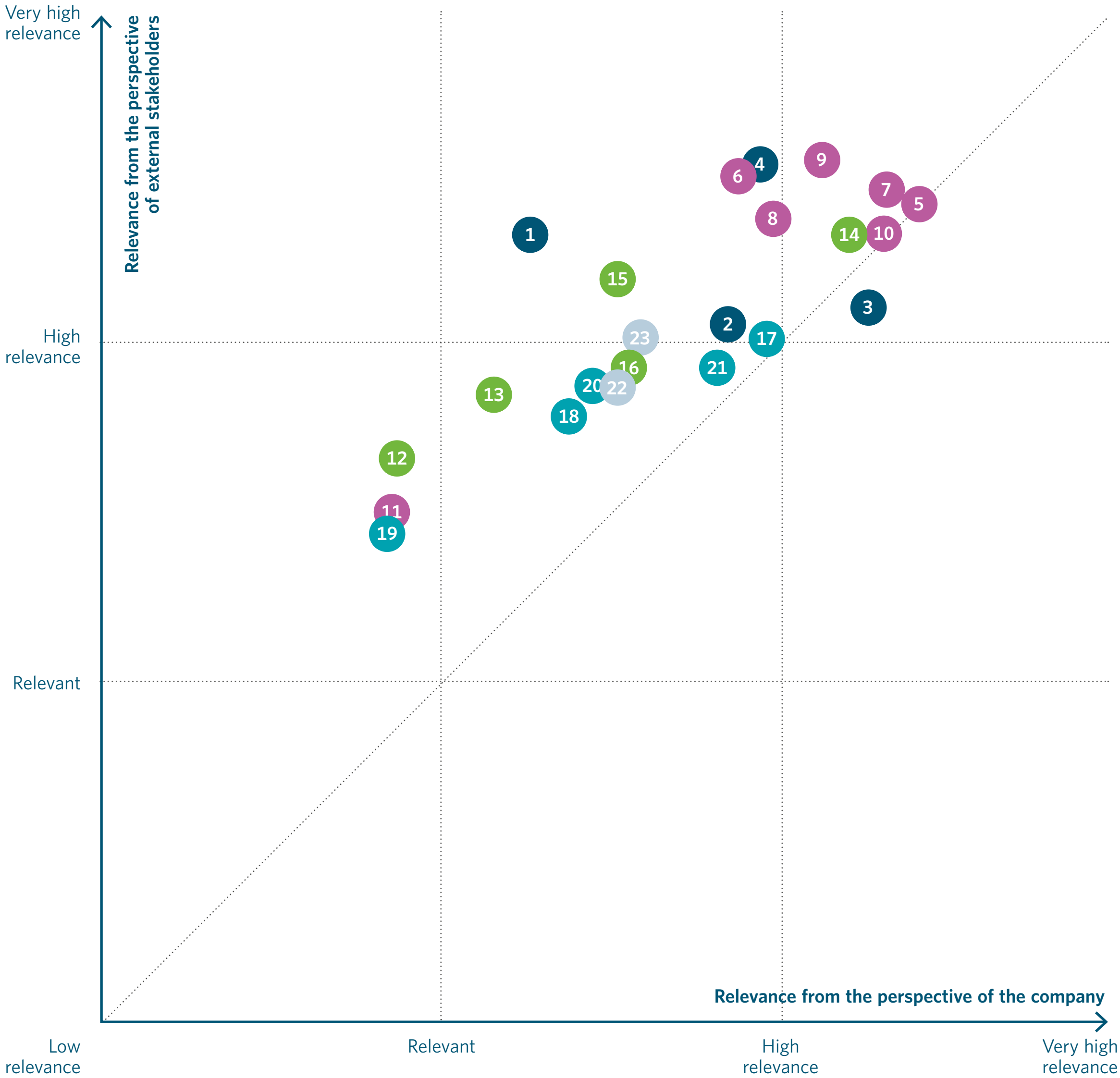
Definition of the Key Topics

Vonovia deals in a continuous and structured manner with foreseeable developments in German real estate markets and within society and analyzes how they will affect Vonovia's business and its value creation. We also address topics that we can use our business model to influence. We involve our stakeholders in identifying issues that we consider important sustainability topics.

As a result, Vonovia has identified the key topics that it wants to focus on in its sustainability reporting. The focus was on ensuring that the topics selected have a direct link to Vonovia's business success and financial development, as well as an impact on our company's value creation. At the beginning of 2017, we conducted a stakeholder survey to validate these topics as part of a materiality analysis. The survey participants included representatives of the capital market, tenants, employees, suppliers and service providers of Vonovia, as well as representatives from authorities, the world of politics, associations, NGOs and academia.

The results of this analysis were translated into a materiality matrix and the topics were split into four areas: sustainable corporate governance, society and customers, the environment and employees. These four clusters illustrate the categories which we will use to subsequently report on the key topics. SR 2017, section entitled "Material Topics" → p. 12

Materiality Matrix



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 Opportunity
21 Work-Life Balance

They comprise the general aspects covered by the CSR-RUG law: Combating corruption and bribery and respecting human rights (sustainable corporate governance), social issues (society and customers), environmental issues (the environment) and employee issues (employees).

Vonovia has not identified any other relevant aspects.

Both the BUWOG companies in Austria and Victoria Park AB in Sweden have conducted their own materiality analyses. While both analyses reveal common ground regarding the selection of the key aspects, the weightings attached to these aspects differ in some cases. The next stakeholder survey in Germany is scheduled to be conducted in 2020.

Establishing Sustainability Within the Company

At the highest level, the chief executive officer of Vonovia SE is responsible for sustainability. The Audit Committee in particular handles sustainability on behalf of the Supervisory Board. The operational processing of sustainability-related issues is performed via the staff positions and line functions of Vonovia SE. Those who share responsibility ensure that the agreed measures are implemented in the course of day-to-day business.

In order to ensure that sustainability issues can be tackled in a more structured, cross-departmental manner and to expand our dialog 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.

In addition, Vonovia launched a project to further improve its reporting on key environmental figures at the end of 2018. This project is the responsibility of a staff function that forms part of the central controlling department.

There are similar staff functions in Austria and Sweden – the function at the BUWOG companies involves responsibility for the Austrian market and the development business, while the function at Victoria Park AB focuses on HR & CSR.

Aspects of the Non-financial Declaration

Sustainable Corporate Governance

This section is dedicated to the topics of long-term growth, compliance and anti-corruption as well as open dialog with society. Our position regarding adjustments to reflect climate change can be found in the opportunity and risk report → **p. 131 et seq.** as well as in the chapter about the environment → **p. 78 et seq.** (see Materiality Matrix).

Long-term Growth

Long-term, stable growth forms the basis of Vonovia's business model. It is legitimized by its social acceptance, by the demand among customers and by its room for maneuver within the overall political framework. Responsible and transparent corporate governance is an absolute must within this context.

Vonovia is a trusted and reliable partner – and would like to be seen as such by its customers, shareholders, business partners and employees, and by society and the general public at large. With a Code of Conduct, we provide the ethical and legal framework within which we act. It describes the conduct guidelines that apply with binding effect to Vonovia's employees and managers and forms the basis for an open, appreciative and legally compliant corporate culture. The Code of Conduct features provisions on issues including environmental and health protection, respect for employee rights, dealing with conflicts of interest, and interacting with governments and public-sector agencies. Similar tools are also used at the BUWOG companies and Victoria Park AB and are tailored to reflect the specific requirements that apply in Austria and Sweden.

In order to be successful in the long run as a residential real estate company with an established place in society, Vonovia needs management and control bodies that can address and reflect the diverse nature of social interests. The corresponding diversity concept for the composition of the management and control bodies is set out in greater detail in the "Declaration on Corporate Governance" (see also chapter on corporate governance, → p. 44 et seq.).

Key performance indicator

Proportion of women in management and control bodies	
Management Board	25%
Supervisory Board	33.3%

Compliance and Anti-corruption

Systematic adherence to all of the provisions and laws that apply to the company is essential in order for Vonovia to act as and be accepted as a reliable and trusted partner. A good compliance organization also makes a key contribution to a company's sustainable development and value creation.

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. These internal rules and Group guidelines – for example, to protect the capital market, ensure data protection, secure information, manage risks, fight corruption or set out guidelines on how to deal with donations and sponsoring – are 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 Group employees under the Group works council agreement.

Similar provisions are also in place at our subsidiaries of BUWOG in Germany and Austria and Victoria Park AB in Sweden. As a result of Vonovia's expansion to include these companies – and to include the area of development – the internationalization and adjustment of our compliance rules forms a key part of our integration efforts. Our Compliance Committee, which meets multiple times a year (typicially once every quarter), is responsible for the ongoing further development of Vonovia's compliance management system and its timely adjustment to reflect the latest requirements. Along with the compliance officer, the compliance managers and the ombudsperson, other members of the Compliance Committee include representatives from the areas of internal audit, risk management, HR management and the works council.

Vonovia's employees undergo regular training on compliance issues. Procurement, for which the issue is particularly relevant, receives special training on corruption and criminal law pertaining to corruption. Managers can book compliance courses at the Vonovia Academy. A particular focal point in 2018 was the implementation of the EU General Data Protection Regulation. Extensive training sessions were conducted on this topic as well.

Key performance indicator

Number of compliance training sessions	12*

* Covering different topics, such as Capital Market Compliance, AML, Anti-corruption, Data Protection, Code of Conduct, Compliance for Managers.
All employees undergo online training covering the contents of the Code of Conduct. There is also classroom training in blocks for employees in related functions (for example, in the procurement department, sales, construction management, finance, etc.).

The Supervisory Board is also regularly and comprehensively briefed on the issues of compliance, corruption and existing guidelines and procedures. The Audit Committee receives a corresponding compliance report, which reports on suspected cases, measures and training offered on the issue of corruption.

In the 2018 fiscal year, there were isolated suspected cases of corruption, which we investigated diligently. None of the cases were confirmed. There were also several other non-material compliance violations or suspected cases. This clearly shows, however, that the system we have put in place is proving effective. Cases are reported and addressed and corresponding consequences ensue.

Key performance indicator

Total number of confirmed cases of corruption	0

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

Vonovia is aware of the potential sustainability risks in the supply chain. The challenges primarily relate to compliance with labor and social standards in construction companies and their subcontractors. Since Vonovia conducts considerable trade-related construction work on its own through the technical service, most of the risks that could arise with external suppliers can be reduced from the outset. As it is less dependent on the offerings of external construction firms, Vonovia is able to exclude service providers that violate certain sustainability criteria.

Our Business Partner Code for subcontractors and suppliers sets out clear expectations regarding integrity, legal compliance and ethical conduct. It stipulates, among other things, 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 must be observed. These obligations also apply to third parties – i. e. subcontractors of our contractual partners. The Code of Conduct performs the very same function at our subsidiary Victoria Park AB in Sweden. The BUWOG companies select their suppliers and service providers carefully, assess them and aim to establish long-term relationships to facilitate continuous improvement.

Construction managers in Germany maintain direct contact with subcontractors and have a clear picture of the persons 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.

In case of repeated violations of the Code or other legal provisions, we take appropriate steps, either significantly reducing the sales volume with the affected supplier or terminating the business relationship entirely. Vonovia did not learn of any significant cases of noncompliance in the reporting year.

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. As a result, no key performance indicator is available for this topic as yet. The aim is to develop this 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. Consequently, there is no explicit performance indicator for this topic. The procurement department, however, acts as a watchdog in this regard by selecting suppliers accordingly (see above) in order to ensure the protection of fundamental rights and adherence to the law. In the future, however, Vonovia will be making a voluntary commitment to the Federal Government's national action plan and will be taking corresponding action.

Open Dialog With Society

Vonovia's aim is to provide transparent reporting on the company and its activities and to maintain intensive dialog with its stakeholder groups. We seek to use ongoing, open and mutual dialog with society to help find common solutions to foster a good sense of community spirit within the properties that make up our portfolio.

The most important aspect in this respect is dialog with our customers (see the section entitled "Society and Customers"→ p. 76 et seq.). We aim to establish dialog on location – be it via our caretakers, our rental offices as local ports of call, tenant meetings or parties – so that we can respond to our customers' questions, concerns and requests as directly as possible.

In those cities in which we have a large portfolio and in which large-scale projects such as extensive modernization measures are on the horizon/underway, early communication and involvement is particularly relevant. We play a proactive role and talk to the local mayors – also at Management Board level. We involve residents by entering into dialog with renters' associations and by getting involved in citizens' forums and meetings with tenants.

Vonovia is involved in housing and real estate industry associations such as the German Association of German Housing and Real Estate Companies (Bundesverband deutscher Wohnungs- und Immobilienunternehmen [GdW]), the German Property Federation (Zentralen Immobilienausschuss e. V. [ZIA]) or the German Association for Housing, Urban and Spatial Development (Deutscher Verband für Wohnungswesen [DV]), allowing it to make a contribution to a strong real estate industry in Germany. We are also involved in a whole number of initiatives such as the "climate discourse" project of the state of North Rhine-Westphalia, KlimaDiskurs.NRW, or the dialog forum "Wirtschaft macht Klimaschutz" (Business for Climate Protection). In addition to these lobbies, we also engage in direct dialog with policymakers at municipal, state and federal level.

We maintain an ongoing and effective dialog with our investors and shareholders as well. In 2018, for example, we organized a Corporate Governance Road Show involving our new Chairman of the Supervisory Board Jürgen Fitschen and our largest investors. We also participate in a whole range of sustainability benchmarks and ratings, for example the EPRA Best Practices Recommendations on Sustainability Reporting, in respect of 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.

We also want to strengthen dialog at international level. Both BUWOG Group GmbH in Austria – for example via its involvement in the Austrian climate protection initiative "klimaaktiv pakt2020" – and Victoria Park AB in Sweden attach just as much importance to open and transparent dialog with stakeholders as Vonovia does in Germany. We will continue to expand, and forge ahead with, cross-country dialog within this context.

Due to the diverse nature of the topics presented, it does not make sense to focus on a single performance indicator. On the contrary, this would restrict the management of the topic to an unnecessary degree. As a result, we have opted not to report a corresponding key performance indicator.

Society and Customers

This section looks at the issues of satisfaction, portfolio maintenance, tenant health and safety, affordable rents and the creation of living space, as well as neighborhood development and social commitment (see Materiality Matrix). You can also find other key information on these aspects in the chapter entitled "Our Service Promise." → p. 88 et seq.

Customer Satisfaction

Customers are Vonovia's top priority. It is their satisfaction with, and appreciation of, our products and services that contribute to the company's success in the long term. This is reflected in the CSI, the Customer Satisfaction Index, and is an element used in determining Management Board remuneration as a direct, non-financial control parameter. BUWOG Group GmbH in Austria also uses an annual customer satisfaction survey as a tool, although it is not consistent with the CSI – while customer satisfaction is a fundamental benchmark for all business processes at Victoria Park AB as well. In 2019, we want to establish an even stronger regional presence for Vonovia on location in order to bring us even closer to our customers.

Portfolio Maintenance, Health, Safety and Quality of Life

We offer our tenants attractive and livable homes by making extensive investments – encompassing our entire portfolio in Germany, Austria and Sweden – in maintenance and modernization. We employ modern standards in our corresponding measures and select the building materials carefully. When it comes to modernization measures, for example, we only use selected and tested materials and explicitly subject the companies performing the measures to the obligation to use them. We are also constantly keeping an eye on product innovations in order to create the best product for our customers. We offer conversion measures to meet specific tenant needs via our housing-related services – for example senior-friendly apartment conversions – and make mobility and security solutions available.

Affordable Rents and Creation of Homes

One aspect that is of fundamental importance to Vonovia is being able to offer all tenants the prospect of being able to stay in their homes in the long term. Nobody should have to move out of a Vonovia apartment due to their financial resources. As much as costly energy-efficient modernization measures are necessary in order to ensure appropriate climate protection as well as increase the appeal and comfort of our apartments on the one hand, on the other hand, they rely on acceptance among and affordability for our tenants. This motivated our decision not to realize the costly modernization projects planned for Germany as part of the 2019/2020 program if they increase rents by more than two euros per square meter. As far as our ongoing modernization projects are concerned, we have promised all tenants reporting social or economic hardship that we will evaluate their cases carefully and pursue a fair approach. Significant funds have been made available for this purpose. In 2018, 20 additional employees were appointed nationwide to deal exclusively with the management of personal hardship cases on location. In Sweden, on the other hand, Vonovia will be expanding its modernization work via Victoria Park AB.

New construction also plays a key role when it comes to making affordable living space available. This is where the BUWOG companies' development program, in particular, comes into play in both Germany and Austria.

Detailed information on relevance, functioning, concepts, due diligence processes and measures, targets and performance indicators relating to the topics referred to in the sections above are detailed further in the chapter entitled "Our Service Promise." → p. 88 et seq.

Neighborhood Development

Vonovia believes that all areas in which it has large contiguous groups of buildings offer particular opportunities. Holistic neighborhood development is one of the areas that offers the greatest development potential for our company. Neighborhood development includes key measures extending beyond modernization and maintenance to include the creation of homes using new construction and vertical expansion measures, as well as measures to shape the residential environment within neighborhoods. In the current fiscal year, eleven neighborhood development projects encompassing a total of around 6,800 residential units are already in the operational implementation stage across Germany as part of the neighborhood development investment program. With a planned investment volume of more than € 400 million alone for the neighborhood development projects already being implemented, we believe that we are making sustainable improvements to our neighborhoods and expect further neighborhood development measures to be launched in the future, too.

Key performance indicator	
Investment volume in the 2018 fiscal year for neighborhood development projects	€ 46.9 million

Development measures take into account both economic and social criteria and are implemented in tandem with the city and municipal authorities. Making sure that the measures taken suit the target group in question is absolutely essential. The aim is to achieve a long-term increase in the value of our property portfolio, which is reflected in visible improvements for our customers in the quality of the living space and the attractiveness of the neighborhood alike.

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 in the neighborhoods, which allows us to deal with special issues that come up as needed.

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 for any demolition measures that have to be taken, the realization of holistic energy concepts and urban development issues. These components are already given due consideration during the planning phase of the development projects of the BUWOG companies.

“Soft” factors are also of fundamental importance when it comes to implementing neighborhood development measures. We often have to take conflicting interests into account. The active involvement of residents, public interest groups and other stakeholders in the neighborhood, as well as in cooperation with federal states and municipalities will help identify solutions to create livable neighborhoods. In this way, our tenants are involved in designing the residential environment (for example, in tenant workshops, measures 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 use collaboration with social projects to foster community spirit and dialog within neighborhoods, for example by also giving our older tenants the opportunity to remain in their familiar environment for as long as possible (e.g. by establishing a shared residential facility for individuals suffering from dementia). Needs-based and functional cooperation projects with social agencies are a key component of the concept neighborhood development process. Other components can include promoting educational and cultural projects. We have various instruments for implementation at our disposal in this regard, for example providing financial support via our foundations or making premises available. We focus on providing support in three areas “Education,” “Culture” and “Community Spirit.” Our donations and sponsorship guidelines allow this topic to be tackled in a structured manner. We are also constantly looking into potential neighborhood development innovations in order to pick up on trends and opportunities early on, for example in the area of electromobility, photovoltaics, rainwater recycling or digitization.

In Sweden, Victoria Park AB has already been pursuing a special approach for some years now: Victoria Park’s programs get unemployed people involved in the company’s neighborhood development projects. They take on the role of residential coaches or environment wardens, acting as role models and a point of contact on location.

Terms such as “living neighborhoods” or “livable neighborhoods” show that quality of living is increasingly being associated with life at 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.

Social Commitment

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.

The **Vonovia Foundation** is a charitable foundation under German civil law. The foundation is committed to social affairs, community life, helping others to help themselves and vocational training. Its mission is to provide help in cases of social hardship to individuals who need assistance, and to promote intact neighborhoods and vocational training. In this respect, the foundation makes a key contribution to shaping and ensuring social and neighborhood cohesion in Vonovia's properties. It expressly supports active citizenship, personal responsibility and individual initiative within a residential context.

Vonovia Mieterstiftung e. V. comprises an equal number of representatives from tenant associations and Vonovia employees. It aims to foster a sense of community spirit between people from different generations by offering support for young people and senior citizens in the various regions in which the Vonovia Group owns or manages properties.

With its work, the **"Mensch und Wohnen"** (people and living) Foundation set up by the former GAGFAH focuses on promoting a residential environment that brings young and old people together, and fosters a sense of community spirit between these groups in Vonovia's housing developments. The foundation finances meeting places, playgrounds and other assistance and support services with a focus on social activities. The foundation only supports charitable work.

The **Stiftung Pro Bochum** is a cooperation project involving numerous companies based in Bochum to assume responsibility, within the city boundaries, for the city itself and the place where the company has its registered headquarters. The project provides support to cultural, academic and sports-related projects within Bochum, in particular.

Key performance indicator	
Funds distributed by foundations in 2018 in which Vonovia SE is significantly involved	€ 407,133

In addition, numerous other funding approaches are pursued both by Vonovia SE in Germany, and by BUWOG Group GmbH in Austria and Victoria Park AB in Sweden.

Climate and Environmental Protection

Climate and Environmental Protection in Our Properties

Climate and environmental protection in our properties includes issues such as energy efficiency and reducing greenhouse gas emissions in the portfolio, environmental protection in the portfolio and environmental protection in connection with renovation and new construction measures (see Materiality Matrix).

The real estate industry makes a significant contribution to greenhouse gas emissions via the construction and operation of buildings. For a real estate company of our size, this gives rise to a special ecological responsibility. As a result, the 2015 Paris Agreement – and the German federal government's associated climate protection plan for 2050 – is a particularly relevant target system for Vonovia. The path to achieving a virtually climate-neutral building stock by 2050 set out in this plan is an ambitious one and cannot afford to disregard aspects such as the cost-effectiveness and affordability of construction and housing.

Although we can only influence energy and resource consumption levels in our properties to a certain degree in our capacity as the landlord – ultimately, tenants are free to decide how much electricity, water and heating they want to use – energy-efficient modernization, modern heating boilers or solutions such as digital metering technology, for example, can contribute to a marked reduction in energy consumption and, as a result, emissions. In this respect, much higher standards apply to new buildings than to the existing portfolio – which takes into account low-emission construction and energy-efficient operational management as early as the planning and construction stages. Owing to the very size of the real estate portfolio, it is clear that this is the biggest lever Vonovia has in order to make an active contribution to climate protection.

Despite the social policy debate in Germany regarding a reduction in the modernization allocation from eleven to eight percent and the capping of the allocation at three euros per m^2 (or two euros for rents of less than seven euros per m^2), Vonovia still aims to perform energy-efficient renovation measures on three percent of its own buildings in Germany every year. The energy-efficient modernization measures focus on heat insulation for facades, basement ceilings and attics, the replacement of windows and the installation of new heating boilers. At the same time, modernization measures are being expanded in Sweden, in particular. Public-sector subsidy programs are being used for many of the energy-efficient modernization projects.

Key performance indicator	
Vonovia SE's renovation rate in Germany in 2018	5%

Vonovia is also involved in numerous research and development projects to improve energy efficiency and cut greenhouse gas emissions in existing buildings. The aim is to develop more cost-effective measures to take account of the dwindling acceptance of building upgrading work in Germany and thus relieve the affected tenants of the financial burden.

Over and above energy-efficient building upgrades, we are also focusing more on ensuring that our new buildings are optimized from an energy efficiency perspective and use construction methods aimed at preserving resources. The Group can benefit from further expertise in this regard thanks to BUWOG Group GmbH, a long-standing partner of the ambitious "klimaaktiv pakt2020" launched by the Austrian Federal Ministry for Sustainability and Tourism. BUWOG 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.

We are also making ongoing efforts to improve the energy efficiency of our portfolio in ways not related to structural measures: when we install new electrical appliances, for example, we make sure that we use efficient solutions – the majority of kitchens installed, for example, meet energy category A standards at the very least.

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. Vonovia currently has a photovoltaic portfolio of 208 facilities with an installed total output of 5.7 MWp. Tenant electricity concepts are designed to significantly increase the number of plants over the next few years. The tenant electricity approach in particular, does not, however, offer a sufficient degree of predictability as yet, as the statutory provisions currently in force do not provide any reliable framework for corresponding business area development.

Vonovia is offering its customers the opportunity to purchase electricity from renewable energy sources via its own energy distribution company. This offer is aimed primarily at new customers when they sign a lease agreement. By supplying certified green electricity, Vonovia is further expanding the options available to it for promoting climate protection and is helping its customers to avoid greenhouse gas emissions.

Key performance indicator	
Number of photovoltaic plants in Germany	208

Climate and Environmental Protection in Our Own Business Activities

This section looks at company environmental protection and the impact of transportation/logistics (see Materiality Matrix).

Compared with the lever that climate and environmental protection measures relating to our existing buildings have, changes to our business processes have much less of a potential impact. Nevertheless, we continuously seek out opportunities to increase our level of resource efficiency and reduce our impact on the climate and the environment in our internal processes as well.

In 2018, Vonovia moved into a new corporate headquarters in Bochum. The building, which was completed in the middle of the year, provides space for around 1,000 employees and has been awarded DGNB Gold Standard certification. In addition to the positive changes regarding workplace design, this translates into potential for considerable savings with regard to energy requirements and emissions.

Due to the large number of technicians in the technical service and gardeners in the residential environment service, Vonovia maintains an extensive fleet in Germany of around 5,200 vehicles. This means that fleet management plays an important role in climate and environmental protection.

While our fleet will continue to grow in tandem with our business over the next few years, we aim to use scheduling and route planning, as well as lower-consumption vehicles, to ensure that the increase in fuel consumption and, as a result, in our CO_2 emissions is less pronounced than the increase in the fleet itself. Pilot projects are also being used to test alternative drive models for their suitability for day-to-day use in long-term field trials.

All of these measures aim not only to reduce costs, but also to reduce the energy that needs to be used. This applies both to average fuel consumption and to the total energy used in our business operations. These are to remain at least constant, but ideally drop, in 2019.

Environmental Key Figures as a Challenge

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. Due to the delayed billing periods, reliable data for the 2018 fiscal year cannot be calculated until a later point in time. As a result, this data will be published in the Sustainability Report, which is scheduled for publication at the end of April 2019.

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.

Employees

Within the Non-financial Declaration, the section on employees groups the topics of initial and further training, health management and occupational health and safety, co-determination, diversity and equal opportunities, work-life balance and the balancing of family and career needs (see Materiality Matrix).

An HR Strategy Focusing on Performance, Responsibility and Growth

Vonovia is a growing brand. Thanks to its insourcing strategy, the company is creating jobs with varying requirements with regard to qualifications and involving a large range of duties. There is particular demand for staff to join the technical service and residential environment organization. This means that, in an era in which the labor markets can be described as precarious, Vonovia offers stable and reliable employment with fair wages. The number of employees working for the Vonovia Group in 2018, for example, rose from 8,448 (December 31, 2017) to 9,923 (December 31, 2018). Of these, 89.3 percent have a permanent employment contract.

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

Category	Number
Total number of employees	9,923
thereof women	2,386
thereof permanent	8,863 (= 89.3%)
Number of nationalities	78
Average age (total)	41.4
Number of people with disabilities	330 (not including Victoria Park)
Total number of trainees	485 (= 4.9% of the total workforce)
thereof commercial/technical trade	152/333

Vonovia needs well-trained, qualified employees to achieve its mission and pursue its growth strategy. Ever since 2016, the central Recruitment & HR Marketing department has been tasked with finding these employees, getting them enthusiastic about Vonovia and ensuring that they remain loyal to the company in the long run. The aim is to meet the mounting and constantly changing requirements, exploit synergy potential and find employees who are a perfect fit for the positions on offer. In this respect, Vonovia uses both in-house and external recruitment, using targeted initial and further training measures to supplement these efforts. This factor plays a crucial role in ensuring the company's success. In order to make sure that qualified staff remain loyal to us and to remain an attractive employer in the future, we offer various health programs to promote our employees' well-being, help them to strike a balance between their work and family lives and offer them the opportunity to participate in the company's success.

The 2018 fiscal year was characterized by the integration of the BUWOG companies and Victoria Park AB from an HR management perspective as well.

Training and Education

Vocational training is a key pillar of Vonovia's recruitment strategy. We offer a wide range of vocational training programs and are currently offering training in 22 locations in 14 different occupations, as well as offering dual-degree programs. We offer young parents, as well as trainees who are responsible for caring for someone in their family, the opportunity to complete their training on a part-time basis, thereby helping them to obtain professional qualifications.

Our company employed a total of 485 trainees as of December 31, 2018 (December 31, 2017: 462), of whom 152 were commercial trainees and 333 were technical trade trainees. This means that trainees account for 4.9% of the total workforce. This makes us one of the few companies in the DAX 30 that has further increased its training rate.

Key performance indicator	
Training rate	4.9%

Vonovia has set itself the objective of keeping employees within the company and developing their potential. This is why targeted further training and personnel development programs form a key component of our HR management strategy. Training courses and programs are tailored to suit our needs. Vonovia's in-house Vonovia Academy offers training sessions and specialist seminars, management development courses, as well as certified qualification schemes. It offers our employees a whole range of opportunities for specialist, methodological and personal further development. This allows Vonovia to recruit internally wherever 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. Victoria Park AB in Sweden has also made the further training of its employees a focal topic of its HR management strategy.

Health Management and Occupational Health and Safety

Preserving the well-being and boosting satisfaction among our employees 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 while carrying out their work. This applies, in particular, to those departments and trades that are involved in the construction process. Here, the central task is to avoid work-related accidents. The management of occupational safety is conducted through operational coordinators, who are regularly in communication with one another. The occupational safety committees responsible are supported by external specialists in occupational safety and occupational medicine. Threat assessments carried out regularly and reviewed for effectiveness show possible risks and, if necessary, recommend measures to reduce their impact or avoid them altogether.

Furthermore, the company offers health-promoting measures, for example, partnerships with fitness centers, company sports, preventive healthcare programs or health-promoting seminars.

Work-Life Balance

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. Vonovia's cooperation with external service providers includes, among other things, childcare services and assistance finding a day care center or care services. Flexible working time models – also for trainees – ensure the required flexibility. A harmonious balance between family and professional life 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.

Diversity and Equal Opportunities at All Levels

Vonovia is explicitly committed to a plural society in which diversity is respected and applied in practice. This means that we also give all of our employees equal support. They all benefit from a work environment in which appreciation, tolerance and respect are fundamental values and which is free from prejudice. For us, diversity is also a competitive advantage. We employ people from all age groups, genders, various nationalities and cultures and with a whole range of educational backgrounds. We also employ people with varying levels of disability. The nationalities within our workforce, which represents nearly 80 different countries, alone highlight our commitment to diversity. This is consistent with the diversity of our tenants and also has a positive impact on our contact with customers.

We take it for granted that all people are treated equally and their individuality is respected. This allows us to benefit from the different perspectives and ways of thinking which result from our employees' social, cultural and linguistic backgrounds in a respectful and open atmosphere.

In order to further promote equal opportunities, Vonovia is aiming to further increase the proportion of women in management. At present, approximately 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" and in the Corporate Governance Report. **https://investors.vonovia.de → p. 44 et seq.**

Key performance indicator	
Proportion of women in leadership positions	37%

Giving employees equal opportunities is also a matter of course at Victoria Park AB in Sweden and BUWOG Group GmbH in Austria.

Co-determination

Works councils have been established in all Vonovia Group companies in order to represent employees. This enables employees and employer's representatives to pursue a trust-based and constructive dialog. In case of significant changes within the company, Vonovia informs its workers within the legally prescribed notice periods.

Portfolio Structure

As of December 31, 2018, Vonovia had a total real estate portfolio comprising 395,769 residential units, 117,885 garages and parking spaces and 5,144 commercial units. Our locations span 709 cities, towns and municipalities in Germany, Austria and Sweden. 84,333 residential units are also managed for other owners. Most of the properties in the Group's portfolio are multifamily residences.

In terms of fair value, most of the properties (around 90%) are located in Germany. The Austrian portfolio accounts for around 6% of the fair value, while the Swedish share of the portfolio comes to around 4%.

As of December 31, 2018, the Group's real estate portfolio across Germany comprised 358,451 residential units, 93,030 garages and parking spaces and 4,022 commercial units distributed across 526 cities, towns and municipalities. The total living area amounted to 22,364,651 m², with the average apartment size coming in at around 62 m². With a vacancy rate of 2.4%, Vonovia generated an average monthly in-place rent of € 6.55 per m² in Germany. The annualized in-place rent came to € 1,715.6 million for apartments, € 52.2 million for commercial units and € 28.4 million for garages and parking spaces.

In the Austrian portfolio, which is largely located in Vienna, Vonovia achieved an annualized in-place rent of € 89.6 million, with a vacancy rate of 4.4%, in the residential portfolio, which comprises 23,030 units covering total living space of 1,720,579 m². The monthly in-place rent amounted to € 4.53 per m² with an average apartment size of around 75 m².

Our Group's portfolio also includes the Swedish real estate portfolio, consisting of 14,288 units with a total living space of 1,015,134 m². With a vacancy rate of 1.2%, the residential portfolio generated annualized in-place rent of € 109.7 million. The apartments, which average 71 m² in size, generate monthly in-place rent of € 9.11 per m². Most of them are located in the Gothenburg, Stockholm and Malmö regions.

Changes in the Portfolio

At the beginning of the fiscal year, the takeover of BUWOG AG saw our portfolio increase by an additional 48,320 apartments, the majority of which are located in Lübeck, Berlin and Vienna. Later on in the year, we incorporated an additional 14,052 residential units into our portfolio when we took over Victoria Park AB, whose properties are mostly located in the Gothenburg, Stockholm and Malmö regions.

The acquisition portfolios were as follows at the time of the takeovers:

	Residential units	Living area (in thou. m²)	Vacancy (in %)	In-place rent (p. a. in € million)	In-place rent (€/m²/month)
BUWOG	48,320	3,251	3.4	192	5.10
thereof in Germany	26,978	1,645	2.3	115	5.96
thereof in Austria	21,342	1,606	4.6	77	4.21
VICTORIA PARK	14,052	997	1.4	104	8.83

In the course of 2018, properties in the "Sell" portfolio were disposed of in several sales during the implementation of the portfolio management strategy.

At the time of the sale, the statistics for the portfolios sold were as follows:

	Residential units	Living area (in thou. m²)	Vacancy (in %)	In-place rent (p. a. in € million)	In-place rent (€/m²/month)
2018 disposal portfolios	11,221	688	8.2	38.7	5.11

In addition to the acquisition and sale of larger housing stocks, Vonovia's portfolio changed in 2018 as a result of additions arising from tactical acquisitions, the construction of new apartments and attic extensions on the one hand, and disposals of condominiums and multifamily residences from the portfolio earmarked for sale on the other. Furthermore, our regular portfolio reviews due to strategic reassessments resulted in certain housing stocks being reallocated within the overall portfolio. As part of the review, we also made an adjustment to the structure of our portfolio in addition to the strategic reassessment:

The "Recurring Sales" subportfolio now combines all units for which preparatory measures for individual sale have already been taken and which are now set to be sold off on an ongoing basis over the next few years. This new definition increases the number of apartments in this category to 29,563 compared with the former "Privatize" portfolio. Likewise, the designation of further subportfolios was also adjusted; however, this did not result in content changes for the respective strategies.

Following the implementation of the annual structured reassessment of all potential, as of December 31, 2018, Vonovia's residential portfolio is as follows:

Dec. 31, 2018	**Fair value* (in € million)**	**Fair value* (in €/m²)**	**In-place rent multiplier**	**Residential units**	**Living area (in thou. m²)**
Strategic	34,360.5	1,676	21.4	323,056	19,980
Operate	8,594.2	1,669	20.1	74,775	4,714
Invest	25,766.3	1,678	21.9	248,281	15,266
Recurring Sales	3,670.0	1,811	22.8	29,563	1,981
Non-core Disposals	597.9	1,184	18.1	5,832	404
Vonovia Germany	38,628.4	1,677	21.5	358,451	22,365
Vonovia Austria	2,517.0	1,346	23.6	23,030	1,721
Vonovia Sweden	1,737.7	1,563	14.6	14,288	1,015
Total	**42,883.0**	**1,648**	**21.2**	**395,769**	**25,100**

* Fair value of the developed land excluding € 1,356.8 million, of which € 405.1 million for undeveloped land and inheritable building rights granted, € 302.5 million for assets under construction, € 492.6 million for development and € 156.6 million for other.

In order to boost transparency among the portfolios, we showed our extended portfolio in **15 regional markets** for the first time in our reporting in 2016. The regional market classification is orientated toward the residential real estate market regions in Germany. These markets are core towns/cities and their surroundings, mainly metropolitan areas. Our decision to focus on these regional markets that are particularly relevant to Vonovia is our way of looking ahead to the future and provides an overview of our strategic core portfolio in Germany.

In relation to the fair value, 91% of our German portfolio is located in 15 defined regional markets. Only a small part of our strategic stock is located outside of these 15 markets. We have referred to this group as "Other strategic locations" (around 7% of the total fair value). The regional market breakdown does not include our housing stocks from the "Non-core Disposals" and "Recurring Sales" subportfolios in locations that do not include any strategic stocks.

	In-place rent				
Vacancy (in %)	Total (p.a. in € million)	Residential (p.a. in € million)	Residential (in €/m²)	Organic change (in %)	Average market rent growth rating (in % p.a.)
2.3	1,602	1,533	6.55	4.4	1.7
3.2	428	372	6.83	6.8	1.7
2.0	1,174	1,161	6.47	3.7	1.7
2.8	161	155	6.70	3.7	1.6
5.1	33	28	6.04	0.5	1.8
2.4	1,796	1,716	6.55	4.3	1.7
4.4	107	90	4.53	9.5	0.9
1.2	119	110	9.11	–	2.0
2.4	**2,022**	**1,915**	**6.52**	**4.4**	**1.6**

As of December 31, 2018, the strategic core portfolio is as follows, broken down into regional markets:

Regional market	Fair value* (in € million)	Fair value* (in €/m²)	In-place rent multiplier	Residential units	Living area (in thou. m²)
Berlin	6,535.9	2,370	29.7	41,943	2,667
Rhine Main Area	3,949.6	2,199	22.8	27,673	1,766
Rhineland	3,424.5	1,743	20.8	28,839	1,915
Southern Ruhr Area	3,354.0	1,240	17.8	43,498	2,661
Dresden	3,104.1	1,360	19.1	38,424	2,184
Hamburg	2,456.2	1,915	22.9	19,842	1,253
Munich	2,050.6	3,132	31.7	9,679	637
Stuttgart	1,935.6	2,166	23.3	13,840	871
Kiel	1,909.9	1,371	18.7	23,376	1,345
Hanover	1,622.7	1,549	20.1	16,322	1,029
Northern Ruhr Area	1,566.8	956	14.3	26,277	1,623
Bremen	1,071.2	1,451	21.6	11,846	715
Leipzig	867.6	1,395	19.9	9,191	589
Westphalia	783.2	1,257	17.9	9,495	616
Freiburg	602.4	2,162	24.5	4,036	276
Other strategic locations	2,604.6	1,508	19.4	26,670	1,692
Total strategic locations Germany	**37,838.9**	**1,689**	**21.6**	**350,951**	**21,837**

* Fair value of the developed land excluding € 1,356.8 million, of which € 405.1 million for undeveloped land and inheritable building rights granted, € 302.5 million for assets under construction, € 492.6 million for development and € 156.6 million for other.

A look at the largest regional markets, from Berlin to the Rhine-Main region, the Rhineland, the southern Ruhr region, Dresden, Hamburg and Munich, already shows our balanced presence in strong markets across Germany. In addition to these focal points, we also have properties primarily in very prosperous regions, such as Hanover, Leipzig and Freiburg.

The fact that our portfolio is spread nationwide means that we are independent of the circumstances prevailing on individual regional markets.

	In-place rent				
Vacancy (in %)	Total (p. a. in € million)	Residential (p. a. in € million)	Residential (in €/m²)	Organic change (in %)	Average market rent growth rating (in % p. a.)
1.4	220	209	6.62	4.1	1.8
1.3	173	168	8.05	4.4	1.8
2.4	165	157	7.02	3.7	1.7
3.2	189	183	5.93	5.5	1.5
2.9	163	153	6.02	3.9	1.7
1.3	107	103	6.93	3.9	1.6
0.7	65	61	8.04	4.4	1.8
1.7	83	80	7.78	3.2	1.8
1.9	102	97	6.14	4.7	1.6
2.8	81	78	6.49	4.9	1.7
3.1	110	106	5.63	4.7	1.2
3.3	49	47	5.67	3.8	1.8
2.8	44	41	5.96	3.9	1.7
3.3	44	43	5.96	6.0	1.5
1.3	25	24	7.31	4.6	1.7
2.6	135	129	6.55	4.9	1.6
2.3	**1,754**	**1,679**	**6.56**	**4.4**	**1.7**

Our Service Promise

Our customers, the tenants, expect to have an affordable home offering contemporary living standards, combined with a corresponding package of services. At the same time we want to secure reliable, adequate yields for our investors and be a reliable partner to our suppliers. Our employees play a key role in helping us to achieve these objectives. We want to use the holistic development of residential neighborhoods and new construction to create a pleasant residential environment for the public and the environment, and to make our contribution to preserving our habitat in the long run.

Customer Service

For us, systematically making the highest possible level of customer satisfaction one of the company's top priorities forms the key pillar of top-quality customer service. We want to achieve this primarily by maintaining proximity to our customers and making it convenient for them to contact us.

Customer Satisfaction as a Priority

In addition to the financial performance indicators, **customer satisfaction** is of particular importance to Vonovia as a non-financial performance indicator. Our company's economic success is directly linked to the satisfaction level of our customers. We compare our service orientation and customer focus with the level of service provided by our competitors, and not only our competitors from within the industry. Rather, we also take sectors such as telecommunications or Internet trading as a benchmark, making the necessary adjustments to reflect our product promise. Since 2016, we have been available to answer all tenant questions and concerns by extending our opening hours from 7 a.m. until 8 p.m. from Monday to Friday, and from 8 a.m. until 4 p.m. on Saturdays. In emergencies, we are available 24 hours a day, 365 days a year.

Comprehensive Availability of the Central Customer Service Team

Although Vonovia provides its services at local level in principle, it has centralized all tasks that can be provided based on uniform quality standards and in a more cost-efficient manner at a nationwide level. The Group's property management platform is characterized overall by a high degree of automation and full integration.

The **central customer service** center serves Vonovia customers across Germany from two customer service departments that are identical in terms of both the infrastructure used and the content of the work they perform. The department operates across two locations in Duisburg and Dresden and can be reached by tenants with questions or concerns using a regional service hotline as well as by email, fax, app or post. The central customer service center is responsible for processing all matters relating to lease agreements, energy consumption and ancillary expense bills, among others. This process is managed according to defined service levels in order to ensure that customers receive a swift and binding response to their inquiries. The customer service structure is tailored as closely as possible to suit the needs of our customers and offers multilingual support. Two employees, for example, are currently responsible for the inquiries made by, and the concerns of, our Arabic-speaking customers. The customer service team resolves around 85% of all incoming telephone inquiries directly.

Our **customer portal** and the "self-services" that it offers allow tenants to access functions that meet the expectations of today's customers in terms of interaction and communication around the clock. Customers can use these functions, for example, to download or consult contract details or important forms such as tenancy agreement certificates or ancillary expense bills themselves. As far as new rentals are concerned, a messenger service also allows potential tenants to arrange their own apartment viewing appointments. The plan is to expand these services further in the future.

The technical customer support center is responsible for scheduling the tenant visits to be made by the local craftsperson. This is done in close cooperation with our technical service, the on-site technicians' organization. Here, too, Vonovia will be allowing tenants to arrange their own appointments using the self-service function in the future.

We conduct regular customer satisfaction surveys and measure customer satisfaction based on the Customer Satisfaction Index **(CSI)**, which is reflected in the remuneration system.

Customer Support Aimed at Local Service

Vonovia considers the management and rental of homes to be a local business that requires in-depth knowledge of the specific local market conditions, the company's own properties and customer needs. Local customer service is provided by the Group's **local business units**. The close interaction of the departments providing local customer service – New Rentals, Property Management, Technical Service, Residential Environment and Caretaking – permits high flexibility and fast response times in the on-site handling of customers' inquiries.

Our concept of maintaining a local presence with our own **residential environment, caretaker and craftsmen's organizations** makes us **less reliant on external service providers**. Having our own on-site organizations brings Vonovia closer to its customers and improves the quality of our customer service. By way of example, Vonovia gardeners can work with Vonovia caretakers to better judge which measures need to be taken on the site to maintain the residential environment to the tenants' satisfaction and develop it further, based on high quality standards and with an eye on efficiency considerations, in the long term.

On-site rental points are operated at an organizational level via the business units as a point of contact for customers interested in new rentals. These points play a key role in the reletting of units and can be opened and closed in a flexible manner in response to changes in the demand for local marketing.

Caretaker Organization

In order to become less reliant on external service providers, Vonovia has incorporated on-site services into its offering by setting up its own caretaker organization. This brings Vonovia closer to its customers and improves the quality of its customer service. The Group's caretakers support around 500 units each and respond to tenant inquiries and requests that cannot be handled on the phone by the central customer service department. The Group's caretakers are entrusted with everyday tasks, such as customer management, smaller maintenance jobs and supervising service providers. Vonovia's customers are given the address and telephone number of the caretaker responsible for their unit. Depending on the local demand, caretakers offer weekly or monthly local drop-in sessions, allowing customers to discuss and clarify their concerns with their caretaker face-to-face. Caretakers may be able to handle smaller maintenance jobs themselves and pass more complex repair jobs on to the company's own craftsmen's organization.

Craftsmen's Organization

Vonovia has established its own efficient **craftsmen's organization (Vonovia Technical Service)** which assumes responsibility for almost all repair and maintenance work for those companies in the Vonovia Group with real estate holdings. This craftsmen's organization realizes a large part of the Upgrade Buildings and Upgrade Apartments investment programs or coordinates the use of subcontractors. Taking into account the current shortage of specialists, in particular for technical trades, our own craftsmen's organization ensures a reliable supply and prompt service that could not exclusively be offered by an external provider.

As well as saving costs, the purpose of Vonovia's own craftsmen's organization is to ensure that the customer service that the Group offers adheres to uniform quality standards and increases these standards on an ongoing basis, as well as to exploit the procurement advantages resulting from bundling and standardization. The fact that the Group is able to influence quality and scheduling directly also helps to improve customer satisfaction.

In the 2018 fiscal year, the craftsmen's organization performed around 634,000 (2017: 586,000) smaller repairs and renovated around 40,000 (2017: 40,000) vacant units.

As of December 31, 2018, the craftsmen's organization as a whole employed a workforce of 4,986 (thereof 338 trainees; 2017: 4,943 employees, thereof 328 trainees), including 3,836 craftsmen (2017: 3,640) in 20 locations across Germany.

Vonovia also ensures compliance with the environmental, health and safety (EHS) regulations by scheduling regular safety inspections that are performed in all units. The specialized department plans the implementation of corrective measures without delay as and when required and monitors amendments to EHS legislation.

Residential Environment Organization

We systematically continued with our insourcing efforts relating to the residential environment in the form of the **gardening and landscaping service**, particularly in conurbations, in 2018. More than 660 employees are now responsible for managing and designing the outdoor areas. As far as maintenance is concerned, Vonovia also 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 be increasingly generated within the company itself in the field of gardening and landscaping as well. The development of standardized residential environment modules (such as playgrounds and refuse collection points) 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.

The residential environment organization is responsible for the management and maintenance of around 40 million m^2 of outdoor areas, 14 million m^2 of lawns, 310 km of hedges and 217,000 trees.

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. In turn, developments like these have proven long-term advantages in terms of property management costs.

Housing-related Services

As far as our housing-related services are concerned, we used 2018 to continually expand our initiatives further and also started to explore other offerings for our customers.

Value-add

Vonovia Mess Service GmbH (VMSG) considerably expanded its portfolio of smart sub-metering devices, which can be read remotely, and can now monitor remotely the consumption figures for approximately 130,000 apartments. This company bundles all activities relating to the Group's own meter reading service and the provision of energy services.

Furthermore, **Vonovia Energie Service GmbH (VESG)** started operations. This company is a registered energy supply company, which supplies our buildings and customers with electricity and gas.

In order to address the changing mobility requirements of the future, we continue to pilot new ideas with our partners, for example, **car sharing** (currently around 40 active vehicles in 18 locations) and the construction and operation of charging infrastructure for electric vehicles.

We are tapping into further potential by investing in **decentralized power generation**. The entry into force of the Act on the Promotion of Landlord-to-Tenant Electricity (Mieterstromgesetz) in 2017 created a legal basis for allowing electricity generated locally to be used by our tenants directly on site. We believe that this area offers considerable growth potential and we will be further stepping up our efforts to allow our customers to participate even more directly in the energy transition. Further photovoltaic projects are being planned for 2019. The electricity generated by the facility will be used almost in full to supply Vonovia itself.

Cogeneration (CHP) units also allowed electricity to be generated on a decentralized basis. The heat generated in the process is used to heat the drinking water and support heating systems within residential buildings.

One service that is already well-established is Vonovia's **cable TV business**. This business area was launched at the end of 2011 in the form of a strategic partnership with Deutsche Telekom. Further partnerships with other cable network operators followed and mean that, today, our multimedia subsidiary already supplies more than 80% of Vonovia's properties with TV signals. These properties feature telecommunications connections offering bandwidths of 50 Mbit/s and more. We plan to gradually expand the existing service business to include further service offerings.

Modernization in Response to Tenant Request

We are also expanding the support we provide to our older tenants in the Value-add segment: In particular, **senior-friendly apartment conversions** and bathroom design based on our tenants' wishes respond to the needs of our tenants.

In 2018, the offering for **kitchen modernization in response to tenant requests** was rolled out across the board. The offering includes customized kitchen modules that are a perfect fit for each type of building, as well as added extras that tenants can select themselves. Individual plans can also be taken into account as part of the product standard.

The issue of **burglary protection** is also relevant for many tenants. Together with the State Criminal Police Agency of North Rhine-Westphalia, we have developed an offering that will significantly increase customer security. The product line includes window and balcony security devices, door protection in the form of reinforced bolts and the installation of resistance class WK2/RC2 apartment entrance doors with or without a digital spyhole.

Condominium Administration

Vonovia offers **condominium administration** via its wholly-owned subsidiary Vonovia Immobilien-Treuhand GmbH (VIT). The subsidiary operates in six regional teams distributed across 22 office locations throughout Germany. VIT is one of Germany's biggest property managers. It now also works for external homeowners' associations in order to manage communal property in line with the German Condominium Act (Wohnungseigentumsgesetz) and offers full property management services for self-contained properties.

As of December 31, 2018, VIT supported 2,040 homeowners' associations (2017: 2,170) accounting for 65,158 residential and commercial units (2017: 72,483), 14,589 units (2017: 16,442) of which belonged to Vonovia, and also managed 50,569 units for third parties (2017: 56,041).

Through the acquisition of BUWOG, an additional 21,113 residential and commercial units from homeowners' associations were managed at the end of the year, of which 15,225 are in Austria and 5,888 in Germany. Of these, 8,321 residential units were owned by Vonovia – 8.101 in Austria and 220 in Germany.

In addition to these services, Vonovia offers its customers access to nationwide framework agreements with craftsmen and other service providers at special conditions. VIT also offers services relating to technical building evaluation for external owners.

Furthermore, as of December 31, 2018, Vonovia managed an additional 21,751 apartments for third parties – 7,581 of them from VIT (2017: 7,550), 13,826 from BUWOG in Germany and 344 from BUWOG in Austria.

Investment

The quality of our real estate portfolio plays a particularly large role. Accordingly, it is important that our properties are in good structural condition. We also strive to expand our portfolio through new construction, targeted modernization measures to improve energy efficiency and holistic neighborhood development projects, as well as acquisitions and sales.

Maintenance and Modernization

Through **maintenance**, we preserve and take care of our building stock. We include the corresponding expenses under routine and partially long-term planned economic expenses. Continuity helps to prevent order peaks and to distribute capacities evenly.

Modernization measures are long-term and sustainable value-enhancing investments in housing and building stocks. Upgrade Apartments measures involve upgrading facilities within a self-contained living area. Where required, the floor plans are altered to meet changed housing needs.

We use modernization and maintenance measures to make ongoing investments in our portfolio. As a leading residential real estate company, we have specific opportunities open to us when it comes to using standardized procedures and materials to achieve economies of scale in our investment activities. Wherever it is appropriate and technically feasible, we use standard products for our maintenance and modernization measures. The volumes we can generate as a result enable us to agree on special conditions with our suppliers, allowing us to either receive higher-quality goods for the same price, or to purchase the material to be used at a lower price. The fact that the construction work is executed almost exclusively by our technical service also allows us, thanks to the large number of recurring orders, to shape the service processes in such a way that the necessary measures can be performed with shorter construction times and optimum resource use. This saves additional costs or increases revenue because apartments can be relet more quickly.

Investments in the "Invest" subportfolio relate to measures designed to improve the standard of comfort of our properties, a process that often also involves senior-friendly conversion work. As a result, we implemented modernization measures accounting for a volume of more than € 265 million in this subportfolio in 2018. If technically feasible, conversions were carried out according to the standards of the KfW program 159 "Senior-friendly Conversions."

We make decisions about portfolio investments for both operating and strategic reasons. The investments cover the entire stock in the corresponding subportfolios and the whole of Germany. As far as its technical measures are concerned, Vonovia endeavors not only to adhere to the latest technical standards and the applicable requirements at all times, but also to anticipate future developments, and to implement them where possible.

Maintenance and modernization (incl. new construction) worth around € 1.5 billion was carried out in 2018. The focus was on energy-efficient modernization and the creation of new living space. The funds provided by KfW-Bank or the European Investment Bank (EIB) provide key support when it comes to refinancing the energy-efficient modernization measures.

Maintenance and Modernization

in € million	2017	2018	Change in %
Expenses for maintenance	258.0	289.7	12.3
Capitalized maintenance	88.2	140.7	59.5
Modernization work*	778.6	1,139.0	46.3
Total cost of modernization and maintenance	**1,124.8**	**1,569.4**	**39.5**

* Incl. new construction 2018: € 234.3 million, 2017: € 65.7 million.

New Construction and Development

The most pressing challenge facing the real estate industry in Germany is the creation of affordable living space in central locations. Vonovia is playing an active role in creating this new affordable living space.

As far as its **new construction activities** are concerned, Vonovia makes a distinction between undeveloped and developed land on the one hand, and between new land to be acquired and acquired land on the other.

New Construction

On developed land, we create new living space by adding extra stories to existing buildings. On undeveloped land, we create new living space by constructing new buildings. What both of these measures have in common is that we always focus on series production based on modular construction.

The term "modular" means that the building is erected using standardized elements produced in the factory that are then transported directly to the construction site. The modules only need to be assembled on site. Vonovia uses three approaches in this regard: Precast concrete construction, wood hybrid and steel skeleton. The company has concluded a framework agreement with a major manufacturer in the area of precast concrete construction. This standardized construction allows both the costs of new residential construction and the construction period to be reduced considerably. This allows Vonovia to create new living space more quickly. What is more, the costs are not only lower – they are also easier to calculate than with other forms of construction. The main advantage is that this more efficient construction method allows the new apartments to be offered at affordable rents as a result.

All in all, the construction of 1,000 new apartments began in 2018, part of which has already been completed. The experience gleaned in recent years will serve as an important foundation for significant expansion of the new construction volume over the next few years. Following Bremen and Dresden, upcoming projects include new construction in Dortmund, Cologne, Berlin, Oberursel and Augsburg.

Development – New Construction on Land acquired by the Company itself

The acquisition of BUWOG allowed Vonovia to expand its value chain to include BUWOG's long-standing experience in the real estate development business. This business model, in which BUWOG is one of the German market leaders, involves developing properties, either for the company's own use or for sale to investors or owner-occupiers, by purchasing suitable land at the start of the location development project. The BUWOG brand stands for a high level of customer satisfaction in the real estate development business over a period spanning many years. It stands for trust in the expertise regarding the feasibility of the projects and in reliable quality standards. The strategic target locations are metropolitan regions including Berlin, Hamburg and Vienna in particular. The current project pipeline includes around 11,800 projected residential units with a planned total volume of approx. € 3.5 billion and an expected realization period of roughly 5–6 years. These are broken down into around 6,800 units that are earmarked for sale and around 5,000 to be managed by the company itself. The availability of suitable land is a key prerequisite for the success of the real estate development project. Vonovia's strategically advantageous financing options can have a positive impact on the real estate development business. These development projects are often tied to urban development contracts and the requirements set out in these contracts. With plans to complete around 2,200 apartments under development every year, Vonovia is making a considerable contribution to easing the shortage of apartments overall.

Procurement

Vonovia's procurement activities are split primarily into construction services, construction material and material costs (indirect materials and services).

When it comes to construction services, the supplier qualification process is a very careful one based on clearly defined criteria. One important aspect from our perspective is that our suppliers and subcontractors not only accept our Business Partner Code, which we revised and expanded in 2018, as binding, but also put the principles set out in the Code into practice on a daily basis at Vonovia's construction sites. The Code stipulates, in particular, that corruption must be combated, that illicit employment must be ruled out, that the legal minimum wage must be paid and that valid German regulations on occupational safety, employee rights and the environment must be observed. We also make sure that demolition materials and rubble are disposed of in a professional and environmentally friendly manner and that construction periods are kept as short as possible.

By predominantly purchasing construction materially centrally via Vonovia's procurement department, we can keep the risk of hazardous or poisonous substances being used at a minimum. In order to protect our employees and tenants alike, we ensure material safety using the systematic TÜV Rhineland Toxic Materials Management System (TOGs®). All information is recorded, evaluated and documented centrally in an online toxic materials register. This provides us with an ideal basis within our own craftsmen's organization for conducting risk assessments and developing operating and handling instructions. We are also collaborating with our suppliers to further develop our standard materials on an ongoing basis in order to ensure both their safety and the provision of comfortable homes for our customers. The introduction of a flush-to-floor shower area in 2018 is one successful example of this.

The procurement team is working hard on efforts to standardize materials and services in order to optimize supply and ordering channels. More than 80% of Vonovia's indirect materials are supplied using an e-catalog system and delivered to the various Vonovia locations after being bundled. Efforts are made to raise awareness among all partners with which framework agreements have been concluded for indirect materials and services regarding the handling of confidential or inside information, data protection aspects or conflicts of interest.

Management System

Management Model

Our corporate governance is based on our corporate strategy and our **sustainable business activities**. In the 2018 fiscal year, we expanded our business activities outside of Germany with the purchase of BUWOG AG and Victoria Park AB, with the acquisition of BUWOG adding development activities to the scope of our business. Details on this can be found in the previous chapters.

As part of the expansion of our business activities, we made adjustments to our management system with effect from the fourth quarter 2018 to include the Development segment. The segment formerly known as the Sales segment was also renamed Recurring Sales, and the sale of buildings and properties where these relate to "Non-core Disposals" is now shown as a separate business activity.

This means that, for the purposes of managing the company, we make a distinction between four segments: **Rental, Value-add, Recurring Sales and Development**.

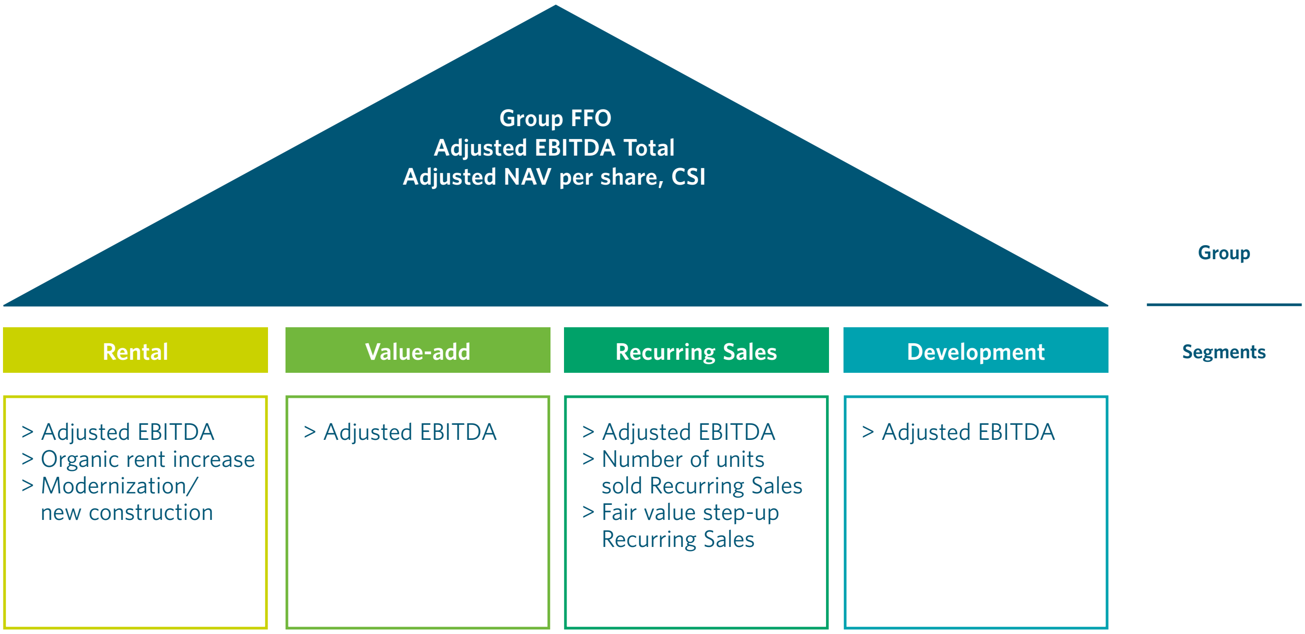
The **Rental segment** combines all of the business activities that are aimed at the value-enhancing management of our own residential real estate. It includes our property management activities in Germany, Austria and Sweden.

The **Value-add segment** (formerly known as "Value-add Business") bundles all of the housing-related services that we have expanded our core rental business to include. These services include both the maintenance and modernization work on our properties and services that are closely related to the rental business. We allocate the activities relating to the craftsmen's and residential environment organization, the condominium administration business, the cable TV business, metering services, energy supplies and our insurance services to the Value-add segment.

The **Recurring Sales segment** (formerly part of the "Sales" segment) includes the regular and sustainable disposals of individual condominiums and single-family houses from our portfolio. It does not include the sale of entire buildings or land (Non-core Disposals). These properties are only sold as and when the right opportunities present themselves, meaning that the sales do not form part of the Recurring Sales segment. We report these opportunistic sales in the **Other** column of the segment report. In the previous reporting period, Recurring Sales and Non-core Disposals were shown combined in the Sales segment. As a result, the prior-year figures have been adjusted accordingly for the current reporting period.

The **Development segment** encompasses the project development of new residential buildings. This covers the value chain starting with the purchase of land without any development plan/dedicated purpose and ending with the completion of new buildings and new construction measures on our own properties. These properties are either incorporated into our own portfolio or sold to third parties. The Development segment deals with projects in selected attractive locations. Project development work is currently focusing on Berlin, Hamburg and Vienna. The value creation from the valuation of the properties at market prices will be allocated to the Development segment when these properties are incorporated into our own portfolio.

We have also redefined our **Funds from Operations (FFO)**. The new **Group FFO** now includes the earnings contributions made by all four segments: Rental, Value-add, Recurring Sales and Development.



Performance Indicators

We make a distinction between **financial and non-financial performance indicators**.

Our management system has a modular structure and makes a distinction between performance indicators at Group level (most meaningful performance indicators within the meaning of DRS 20) and those at segment level.

We have an integrated Group-wide planning and controlling system in place that is based on central performance indicators. Based on the medium-term plans derived from our strategy, which are subject to an annual review and are updated during the year in the event of significant transactions, we prepare a budget for all areas of the Group. In the course of the fiscal year, current business developments are compared with these targets and the current forecasts on a regular basis for all key figures that are relevant to control. The business is then steered accordingly in a targeted manner, with any necessary countermeasures being initiated and tracked. At Group level, **Group FFO**, the **Adjusted EBITDA Total**, the **Adjusted NAV per share** and the **CSI** are our most meaningful financial performance indicators.

Financial Performance Indicators

Group FFO is key for managing the sustained operational earnings power of our business. It is calculated as follows:

Performance Indicators Group FFO

	Rental income
(-)	Maintenance expenses
(-)	Operating expenses Rental
=	Adjusted EBITDA Rental
	Income Value-add
	thereof internal income
	thereof external income
(-)	Operating expenses
=	Adjusted EBITDA Value-add
	Income from disposal of Recurring Sales
(-)	Fair value of properties sold adjusted to reflect effects not relating to the period from assets held for Recurring Sales
=	Adjusted profit from disposal of Recurring Sales
(-)	Selling costs Recurring Sales
=	Adjusted EBITDA Recurring Sales

Performance Indicators Group FFO

	Income from disposal of development properties to sell
(-)	Construction costs Development to sell
=	Net profit Development to sell
(+)	Fair value Development to hold
(-)	Construction costs Development to hold
=	Net profit Development to hold
(-)	Operating expenses Development
=	Adjusted EBITDA Development
	Adjusted EBITDA Total
(-)	Interest expense FFO
(-)	Current income taxes FFO
(-)	Consolidation
=	Group FFO

The individual EBITDA figures, after adjustments to reflect effects that do not relate to the period, recur irregularly or are atypical for business operation, form the basis for the operational management of the segments.

The **Adjusted EBITDA Rental** reflects the operating profit from residential property management. It can be broken down into three central components: rental income from the Rental segment, expenses for maintenance and operating expenses in the Rental segment. The latter include all expenses and income that do not relate to expenses for maintenance or rental income in the Rental segment.

In addition to the expenses for **maintenance**, we make large-scale investments in our real estate portfolios, with a distinction being made between **capitalized maintenance** and **value-enhancing investment** in modernization and new construction measures for our own portfolio. The total amount of all **maintenance, modernization and new construction measures** includes the services performed by the Group's own craftsmen's organization, valued at the market price, and any third-party services that have been purchased, including the development activities for the company's own portfolio.

The Value-add segment encompasses all of the business activities relating to the expansion of our core business to include services that are closely related to and/or influence the rental business. We manage these business activities using the **Adjusted EBITDA Value-add**.

In addition to the management of our residential real estate portfolio and the services that are closely related to our rental business, another business segment relates to the privatization of individual apartments. We measure the success of our sales activities using Adjusted EBITDA Recurring Sales. The **Adjusted EBITDA Recurring Sales** compares the proceeds generated from privatization business with the fair values of assets sold and also deducts the related costs of sale. In order to disclose profit and revenue in the period in which they are incurred and to report a sales margin, the fair value of properties sold, valued in accordance with IFRS 5, have to be adjusted to reflect realized/unrealized changes in value.

We bundle all business activities aimed at the development of attractive real estate projects both for our own portfolio and for direct sale in the Development segment. In addition to the revenue from the sale of residential properties built in the reporting year to third parties and the associated costs, we also record the fair value that newly constructed properties create for our own portfolio, as well as the associated costs, as a means of measuring the success of the Development segment. We manage these business activities using the **Adjusted EBITDA Development**.

The **Adjusted EBITDA Total** is calculated as the sum total of the Adjusted EBITDA figures for our four segments. This means that it expresses the overall performance of our sustainable operating business before interest, taxes, depreciation and amortization.

As financing is a fundamental component for the success of our business activities, we deduct the current interest expense, adjusted for special circumstances (**FFO interest expense**), from the Adjusted EBITDA Total. Taking current income taxes and consolidation effects into account, this allows us to calculate **Group FFO**, the key figure for the sustained earnings power of our business.

In addition to our operational earnings power, the value of our property assets and our modernization and new construction measures are decisive for the further development of our company. The **Net Asset Value (NAV)** is used to manage the company's value. Our NAV calculations are based on the best practice recommendations of the EPRA (European Public Real Estate Association). The **Adjusted NAV per share**, after corrections for goodwill, is the relevant performance indicator.

Calculation of NAV

	Equity attributable to Vonovia's shareholders
(+)	Deferred taxes on investment properties
(+/-)	Fair value of derivative financial instruments
(-/+)	Deferred taxes on derivative financial instruments
=	EPRA NAV
(-)	Goodwill
=	**Adjusted NAV**
/	Number of shares on the reporting date
=	**Adjusted NAV per share**

An additional non-operational key financial figure, the **loan-to-value ratio (LTV ratio)**, is also used for monitoring the degree to which debt is covered by the value of the properties. This key figure helps the real estate sector ensure a sustainable ratio of borrowings to the fair values of our properties.

All of the key financial figures shown here are so-called **non-GAAP measures or alternative performance measures (APMs)**, i. e., key figures which cannot be taken directly from the figures in the consolidated financial statements according to IFRS. The financial performance indicators can, however, all be reconciled to the closest-possible key figure in the consolidated financial statements.

Non-financial Performance Indicators

We also focus on non-financial operating performance indicators as drivers for our key financial figures and supporting control parameters.

Our business activities focus on our customers. We aim to offer them affordable homes that meet their needs together with housing-related services and reliable customer support. As a result, the fourth most meaningful performance indicator at overall Group level, in addition to the financial performance indicators Group FFO, Adjusted EBITDA Total and Adjusted NAV per share, is the **Customer Satisfaction Index** (CSI). It is determined at regular intervals in systematic customer surveys conducted by an external service provider and shows the effectiveness and sustainability of our services for the customer. Our company's economic success and, in particular, the success of our Value-add strategy are directly linked to the satisfaction level of our customers. We are aware of this fact and implement a wide variety of measures with the goal of improving our services in the interest of our tenants.

The **organic rent increase** refers to the increase in the monthly in-place rent for the residential portfolio that was already held by Vonovia twelve months previously, plus the increase in rent resulting from the construction of new apartments and the addition of stories to existing properties. The monthly in-place rent per square meter gives information on the average rental income from the rented properties. In particular, over the course of time, the average rent increase achieved in the rented properties can be derived from this figure.

The **vacancy rate** also shows the proportion of units in our own portfolio that are not rented and therefore generate no rental income. It can serve as an early-warning indicator, e.g. to identify non-marketable apartments.

The **vacancy rate** and the **average rent** are key drivers for the development of our key figures related to the management of rental income. Together with the CSI they serve as essential **early warning indicators**.

The **number of units sold** from **Recurring Sales** shows our ongoing efforts in the privatization business. In addition to this, we report the "Non-core Disposals".

The **fair value step-up** represents the difference between the income from the sale of a residential unit and its fair value. It shows the percentage increase in value for the company on the sale of a unit before further costs of sale.

Report on Economic Position

Key Events During the Fiscal Year

Takeover of Victoria Park AB, Sweden

On May 3, 2018, Vonovia SE (subsequently Vonovia) announced its intention, as part of its internationalization strategy, to make a public cash offering via a subsidiary to the shareholders of Victoria Park AB (subsequently Victoria Park), a Swedish listed company, for the purchase of all shares at a price of 38.00 Swedish kronor (SEK) for each class A and class B share, and SEK 316.00 for each preference share.

Victoria Park is a leading residential real estate company in Sweden and operates in an environment that is very similar to the German housing market. As does Vonovia, Victoria Park pursues a long-term company strategy guided by social criteria with the aim of offering its tenants attractive homes and thereby creating value. The company owns and manages a high-quality real estate portfolio of approximately 14,000 apartments with a focus in the metropolitan regions of Stockholm, Malmö and Gothenburg. The shares of Victoria Park are listed in the mid-market segment of the Nasdaq Stockholm stock exchange.

As of June 18, 2018, the last day of the acceptance deadline, the shareholders of Victoria Park had accepted the offer for a total of 34,056,463 class A shares, 97,962,486 class B shares and 663,172 preference shares. This is equal to 54.4% of the share capital or 46.5% of the voting rights. Vonovia was furthermore granted two call options totaling 10.0% of the capital, or 12.4% of the voting rights. These call options can be exercised between May 15 and May 29, 2019. The offer was completed on June 28, 2018.

During the extended tender period until July 3, 2018, an additional 1.8% of the share capital or 2.0% of the voting rights were tendered to Vonovia. In addition, Vonovia acquired shares in the market at up to the offer price amounting to 0.6% of the share capital or 0.3% of the voting rights.

At the end of the extended tender period and the acquisitions on the market, Vonovia possessed 56.6% of the share capital and 48.9% of the voting rights. Including the two call options, the share of total equity equaled 66.7% or 61.2% of the voting rights. Although Vonovia had less than 50% of the voting rights as of June 28, 2018, in accordance with IFRS 10. B41–B43, de facto control had to be assumed, since it held a de facto majority of votes present at the Annual General Meeting.

By way of the agreement dated September 5, 2018, and with the execution of this agreement on September 7, 2018, Vonovia acquired a further 59,560,701 class A and B shares based on the same conditions as in the public takeover offer. This corresponds to a further 30.3 million voting rights. This means that, as of December 31, 2018, the percentage of the share capital comes to 81.4%, while the share of the voting rights amounts to 81.1%. Including the call options in the amount of 12.4%, the share of voting rights comes to 93.5%.

As a result of the completion of the transaction at the end of June 2018 and the resulting assumption of control, Victoria Park is included in the consolidated financial statements as of December 31, 2018, with an earnings contribution for the second half of 2018. The purchase price allocation and, as a result, the calculation of goodwill are still provisional.

Takeover of Austrian company BUWOG AG

On December 18, 2017, Vonovia published notice of its intention to make a voluntary public takeover offer, in accordance with the Austrian Takeover Act (ÜbG), to the shareholders of BUWOG AG (subsequently BUWOG), Vienna, Austria, for the acquisition of all shares in BUWOG. As part of this offer, all BUWOG shareholders were offered € 29.05 in cash for each share in BUWOG.

The stated goal of the BUWOG takeover is to consolidate the complementary real estate portfolios of both companies and merge Vonovia's housing stock with that of BUWOG (around 48,300 apartments). The integration of BUWOG is expected to allow synergy potential to be harnessed, in particular by way of the joint administration and management of the German and Austrian residential units, the development process know-how, the expansion of the value chain and the optimization of cost structures.

The Vonovia and BUWOG portfolios are a good geographical fit for each other and also complement each other strategically. The successful takeover of conwert Immobilien Invest SE in March 2017 allowed Vonovia not only to expand its real estate portfolio in Germany, but also to add properties in Austria for the first time to what had, to date, been a purely German portfolio. The takeover of BUWOG allowed Vonovia to acquire further properties that not only complement the real estate portfolio in Germany, but also include intelligent additions to the real estate portfolio in Austria. The merger strengthened the joint German and Austrian real estate portfolio of Vonovia and BUWOG considerably.

At the end of the first tender phase on March 12, 2018, the majority of the shares in BUWOG, namely 82,844,967 shares or 73.8% of shares, had been tendered to Vonovia. The takeover of the shares from the first tender phase and, as a result, the assumption of control were completed on March 26, 2018, in return for payment of € 2,752.5 million.

The second obligatory tender phase, in accordance with the Austrian Takeover Act (ÜbG), started on March 16, 2018, and ended at 5 p.m. CEST on June 18, 2018. In addition, Vonovia acquired BUWOG shares on the market at up to the offer price. With the conclusion of this second mandatory tender period, a further 15,281,786 shares were tendered to Vonovia, meaning that, with the completion of the transaction and the purchases, as well as the exchange of convertible bonds, Vonovia possessed more than 90.7% of the share capital of BUWOG as of June 30, 2018. On June 20, 2018, Vonovia requested a squeeze-out according to the Austrian Act on the Squeeze-out of Minority Shareholders (Gesellschafterausschlussgesetz). A corresponding resolution was passed at the Annual General Meeting held on October 2, 2018.

Due to the assumption of control on March 26, 2018, BUWOG is included in Vonovia's consolidated financial statements as of December 31, 2018, with an earnings contribution of nine months.

Investment in France

In October 2018, Vonovia acquired 80% of a portfolio of 4,000 residential units from the French state rail operator, SNCF, as part of a consortium comprising Ampere Gestion, SwissLife and French pension funds. Vonovia's stake corresponds to the equivalent of 10% and represents another key step on the French residential property market.

Vonovia SE Carries Out Capital Increase Against Cash Contributions in the Form of Accelerated Bookbuilding

On May 3, 2018, with the agreement of the Supervisory Board's Finance Committee, the Management Board of Vonovia SE passed a resolution on an increase in its share capital in return for a cash contribution, partially using the 2016 authorized capital and excluding a subscription right, by € 26,000,000.00 from € 485,100,826.00 to € 511,100,826.00.

The 26,000,000 new no-par-value registered shares were placed with institutional investors in the scope of a private placement by means of an accelerated bookbuilding procedure and carry dividend rights as of January 1, 2018.

The shares were granted at a placement price of € 38.30 per share, delivering issue proceeds to Vonovia SE in the amount of € 995.8 million before commission and expenses. The net issue proceeds from the capital increase were used, among other things, for the purchase price payments in connection with the takeover offer made to the shareholders of Victoria Park AB.

Development of the Economy and the Industry

Germany

With growth in gross domestic product (GDP) of 1.5%, the German economy experienced its ninth consecutive year of growth in 2018. The upswing did, however, start edging increasingly close to its limits and recently lost momentum after GDP contracted by 0.2% in the third quarter of the year – the first contraction seen since the beginning of 2015. Although, according to the Kiel Institute for the World Economy (IfW), the economy bounced back again in the fourth quarter of the year with GDP growth of 0.4%, GDP was, on the whole, weaker than expected in 2018.

The damper in the third quarter of the year was due primarily to the serious problems faced by the German automobile industry regarding the certification of new vehicles based on the new exhaust emissions test procedure, WLTP. High levels of macroeconomic capacity utilization along with supply chain delays, also due to low river water levels, and a severe shortage of labor also, however, stood in the way of the marked increase in production that had been predicted at the beginning of the year. This applies, in particular, to the construction industry. Although immigrant workers have increased the supply of labor, which is now scarce, and are making the biggest contribution to employment growth, the immigration figures are gradually starting to fall again and the employment potential remaining within the German population is limited.

What is more, the global trade conflicts and gradual global economic slowdown are starting to leave more of a mark. While the foreign trade balance showed a surplus at the end of the year, imports have been rising at a much faster rate since the start of the year than exports, which have lost momentum primarily due to the production losses in the automotive industry. Although the European sales markets would appear to have been the main culprits behind the export slump to date, the future development of the German economy is exposed, in this environment, to risks emanating from the latent protectionist tendencies of the U.S. government, problems in key emerging markets, concerns over a hard Brexit, a Chinese economic slowdown and political uncertainty in the eurozone. By contrast, corporate investment is proving robust – having received a boost from the capacity bottlenecks and favorable financing conditions – and contributed to growth, albeit with lower rates of growth than a year earlier.

The ifo business climate index slipped further to 101.0 points in December 2018, the lowest level seen in more than two years. Particularly in the service and manufacturing sectors, companies assessed the current situation as having deteriorated, whereas sentiment in the construction industry remained stable at a high level. It would appear that companies had started to feel more of an impact of the trade conflicts and associated deterioration in the export climate towards the turn of the year.

The positive trend on the labor market and income growth fueled brisk private consumer demand, which was one of the forces driving growth. The Federal Statistical Office reported an average of 562,000 more people employed in 2018 as a whole, up by 1.3% year-on-year. All in all, this marked the continuation of an increase in employment that has been ongoing for 13 years now. The German Federal Employment Agency (Bundesagentur für Arbeit) published an unemployment rate of 5.2% for 2018, down by 0.5 percentage points against the previous year. Consumer price performance has already been on a slight upward trajectory since the end of last year. In 2018, the average rate of inflation came in at 1.9% based on the consumer price index. Inflation was primarily driven by developments in the price of heating oil and fuel, although food prices and the prices of alcoholic drinks and tobacco products also increased significantly again.

Whereas the U.S. implemented an interest rate turnaround in its monetary policy some time ago, the European Central Bank (ECB) is still keeping the key interest rate at the record low of 0.0%, where it has been since March 2016, announcing that it would remain unchanged at least until the fall of 2019. By contrast, the ECB's purchases of additional government and corporate bonds came to an end at the turn of 2018/2019.

Further Increase in Rent and Apartment Prices

Home prices continued to rise in 2018, as the research and consulting institute empirica reported based on an analysis of their price database. Across Germany, the empirica real estate price index for average rents over all years of construction increased by 3.2% in the fourth quarter of 2018 compared to the previous year (for new construction, the increase was 2.9%). The increase in rent was, however, less pronounced than in 2017. The increase in the quoted prices for condominiums was once again more pronounced than the increase in rents. The price index for condominiums (all years of construction) increased by 9.0% during the same period (new construction 7.7%). Due to ongoing immigration, particularly from the European Union, and the very positive situation on the labor market, the demand for apartments (and offices) remains high, according to reports by Deutsche Bank Research (DB Research). According to a preliminary estimate released by the German Federal Statistical Office (Statistisches Bundesamt), the German population continued to grow in 2018. The situation on the residential property market is not tight across the board. According to the German Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), growing cities and regions are experiencing significant growth in demand, together with housing shortages and rising rents and prices. On the other hand, other cities and, in many cases, rural regions in various parts of Germany are faced with a dwindling population. Given the supply bottlenecks, the slightly lower rental growth momentum in a year-on-year comparison is likely to be no more than a temporary blip, according to DB Research. DB Research expects 300,000 apartments to have been completed in 2018, while the annual demand for living space comes to at least 350,000 apartments. This means that the subdued growth in apartment completions is likely to have continued in 2018. A lack of land available for construction and the increasingly pressing shortage of skilled workers are expected to stand in the way of any rapid increase in completions. Supply is now lagging more than 1 million apartments behind demand in total, particularly in the country's large and very large cities. Since, according to DB Research, it will take a good few years for the real estate boom to reach the end of its cycle, the risk of a bubble forming in the current cycle has increased considerably. In its country report on Germany, for example, the International Monetary Fund (IMF) reports that prices in some German cities are above the level that would be expected given the fundamental data, which points to an overvaluation. In these cities, the purchase prices for residential real estate have experienced an unusually significant increase over recent years in relation to income and rents, and also compared to other large European cities. According to DB Research, the price pressure can be expected not to ease for now, with the bottlenecks on the residential real estate market expected to drive further price increases in the future. In 2018, residential portfolios and complexes of 50 units or more accounted for a total transaction volume of around € 17.2 billion in the German residential investment market, according to the real estate service provider CBRE. Compared to the previous year, the transaction volume increased by 10%. Thanks to the promising macroeconomic fundamental data and the sustained low interest rates, CBRE reports that the German real estate market as a whole remains one of the most important target markets for domestic and foreign investors. According to BNP Paribas Real Estate (BNPPRE), project developments, which are in high demand both on the particularly tight real estate markets in A cities and in many smaller locations, but also the asset class comprising student apartments and "microapartments" have been gaining in popularity for some years now.

As part of a housing initiative, the German federal government reached an agreement in 2018 on the implementation of a number of housing policy measures to promote more housing, affordable rents and residential property ownership. The housing subsidy for families with children, which aims to offer support to families looking to buy residential property, was already introduced in September 2018. The German Tenancy Law Amendment Act (Mietrechtsanpassungsgesetz), which is designed to ensure greater transparency with regard to the rent ceiling and to limit and simplify the modernization allocation, came into force on January 1, 2019.

Austria

The Austrian economy is in the latter stage of a marked economic upswing. Bolstered by strong domestic demand and solid export performance, real GDP growth will come in at 2.7% according to the Austrian Institute of Economic Research (WIFO), on a par with the previous year and significantly outperforming the eurozone average. The current boom is being driven by industrial production, as well as by construction and services, in particular. The ongoing positive economic development is also reflected in the labor market: Job vacancies and employment are expanding at a rapid rate, with the unemployment rate falling below the 8% threshold (as a percentage of the workforce excluding the self-employed), namely to 7.7%, for the first time since 2013. According to the WIFO, inflation is still unusually restrained and is comparable to the prior-year level. The Austrian Economic Chambers (WKO) are reporting a rate of inflation, based on the consumer price index, averaging 2.0% year-on-year in 2018.

Given that the overall conditions remain very positive for the Austrian real estate market, the demand for real estate remains high, according to experts from Bank Austria. Thanks to strong population growth and accelerated by the boom in the demand for investment properties, residential real estate prices have increased considerably in recent years. The values of the current DSS OeNB residential real estate price index – the price index of the Austrian central bank (OeNB) on the basis of new and used condominiums and single-family residences – show an increase in Austria in the third quarter of 2018 of 8.0% compared to the previous year's period. In Vienna, prices increased compared to the previous year by 6.5%. In the rest of Austria, price development was higher; excluding Vienna, the increase in Austria in the same period was 9.7%. According to the consumer price index published by the Austrian statistical office, Statistik Austria, apartment rents rose by 3.7% in 2018 compared with 2017. The OeNB reports that the residential construction segment overcame a prolonged period of weakness in 2017, making further gains in the first half of 2018. Production in the building construction segment was up by 7.6% in a year-on-year comparison and the development in building permits points towards a further acceleration in residential construction activity. Bank Austria expects more than 62,000 new apartments to have been built in Austria in 2018. Although this would reduce the existing excess demand on the Austrian residential property market, it would not close all supply gaps at regional level – particularly not in the country's conurbations. According to CBRE, the amendment to the Viennese building regulations is likely to considerably reduce the supply of newly built privately financed residential properties in the medium term. The real estate service provider EHL reports that construction costs and the price of land are increasing considerably. According to its figures, transactions accounting for a total volume of around € 4 billion were executed on the Austrian real estate investment market in 2018. 20% of these investments relate to institutional residential investments. EHL considers the Austrian market to still be attractive to national and international investors alike, pointing to a good level of acceptance for the current price levels despite a drop in yields.

Sweden

After the Swedish economy faltered in the third quarter of 2018, with GDP down by 0.2%, GDP is expected to have bounced back again in the fourth quarter of 2018 – largely thanks to a recovery in consumption among private households – with growth of 0.6%, according to the National Institute of Economic Research (NIER). A decline in residential property investments and a temporary drop in private consumption were the main factors behind the temporary slump. The sale of new cars alone plummeted as a temporary result of the new bonus-malus system for road tax that came into force in July 2018 in an attempt to boost the proportion of low-emission cars. GDP growth is tipped to come in at 1.9% for 2019 as a whole. Most indicators suggest that the economy reached its peak in 2018. Both the consumer and business climate indicators on economic development have fallen in recent months. The demand for labor, however, remains brisk as employment levels continue to increase. The foreign trade balance remains positive, in particular due to a drop in imports. As Sweden exports around three-quarters of its goods to other EU countries, the slowdown in European economic growth is having a direct impact on Swedish exports. Capital investment has also made a positive contribution to GDP, whereas the growth in residential construction investment has slowed slightly. Seasonally adjusted and smoothed data shows an unemployment rate of 6.2% in December 2018. Compared with the same month a year earlier, the inflation rate as measured by the consumer price index came to 2.0%. This prompted the Swedish Central Bank – for the first time in seven years – to raise its key interest rate in December, lifting it by 0.25 percentage points to -0.25% now that the inflation target of around 2.0% has been reached.

In the meantime, the wait for a new government is over: now, more than four months after the election, a minority government consisting of Social Democrats and the Green Party has been running the country since January 2019.

According to SABO, the Swedish Association of Public Housing Companies, the housing market is under significant pressure. Much of Sweden is facing a housing shortage, primarily in its metropolitan regions. The population has seen strong growth in recent years and is expected to continue expanding rapidly. New construction has not been able to keep up with this population growth. In its forecast of June 2018, the Swedish National Board of Housing, Building and Planning (Boverket) therefore expects an annual construction demand of 93,000 units by 2020. In this environment, the increases on the Swedish rental housing market continued. According to data supplied by Statistics Sweden, rents rose by an average of 1.1% in 2018, as against 0.8% in 2017. By contrast, prices on the market for residential property ownership came under pressure at the end of 2017. Stricter mortgage rules governing real estate financing – in response to the high levels of household debt accumulated during the real estate boom – contributed to a downward price trend which, according to the European Commission, was driven mainly by weakness in the tenant-owned apartment ("Bostadsrätt") market. The term "tenant-owned apartments" refers to the cooperative property ownership of apartment buildings that is common in Sweden. Each resident owns a share in the overall building together with a legal right to occupy a specific residential unit. While house prices have stabilized in the country as a whole, new build owner-occupied flats are still under pressure in the metropolitan areas, according to Swedbank. Although the Valueguard HOX price index, which reflects the price development of typical condominiums and single-family homes, was up by 2.0% year-on-year in December 2018, it is important to remember, when drawing comparisons with December 2017, that the housing market had reached a low point following a slump in the fall of the same year. In addition to higher mortgage restrictions, the increase in the supply of new homes coming on to the market is also likely to have contributed to the cooling prices. However, Newsec says that these homes are often being built in a market segment that is too expensive. According to SABO, the Swedish construction market is suffering from very high prices. After several years of brisk construction activity, home construction started to slow down in 2018. Due to the falling prices and the high supply of expensive tenant-owned apartments, SEB expects construction starts in 2018 to have dropped to 57,000 (2017: 65,000). Savills is still reporting keen interest in real estate investments in Sweden. The volume of investment on the transaction market came to SEK 159 billion in 2018 (+ SEK 5 billion year-on-year). With a total investment volume of SEK 51.5 billion, residential real estate accounted for around one-third of the transaction volume, with growing interest in Swedish residential real estate among foreign investors.

Group's Business Development

Business Development in 2018 – An Overview

The 2018 fiscal year was very successful for Vonovia on the whole. We were systematic in the implementation of our corporate strategy. With the acquisitions of BUWOG and Victoria Park, we were able to further expand our leading market position and make our business more international.

The table below provides an overview of the development of our forecast performance indicators and the target achievement level for these indicators in the 2018 fiscal year. It also shows the new performance indicators, Adjusted EBITDA Total and Group FFO.

	Actual 2017	Last forecast for 2018 in the 2018 Q3 Report	Actual 2018
Adjusted NAV/share	€ 38.49	approx. € 45	€ 44.90
EPRA NAV/share	€ 43.88	approx. € 52	€ 50.39
FFO 1*	€ 919.5 million	€ 1,050–1,070 million	€ 1,064.7 million
FFO 1/share**	€ 1.90	€ 2.03–2.07	€ 2.06
Adjusted EBITDA Total	€ 1,319.7 million		€ 1,554.8 million
Group FFO	€ 975.0 million		€ 1,132.0 million
Group FFO/share	€ 2.01		€ 2.18
CSI	Increase of 1.6%	Down slightly year-over-year	Decrease of 2.6%

* FFO1 2017 adjusted incl. transaction holding costs.
** Based on the current number of shares in each case, 2018: 518.1 million.

The **Adjusted NAV** per share came in at € 44.90 in 2018, up by 16.7% on the prior-year value of € 38.49. This corresponds to an EPRA NAV per share of € 50.39 (2017: € 43.88). This increase was due primarily to the net income from fair value adjustments of investment properties of € 3,517.9 million (2017: € 3,434.1 million).

FFO 1 rose by € 145.2 million to € 1,064.7 million in 2018 (2017: € 919.5 million in line with the current definition) and was therefore within the forecast range of € 1,050–1,070 million. This corresponds to FFO1 per share of € 2.06 (2017: € 1.90, most recent forecast € 2.03–2.07). The improvement in Adjusted EBITDA Rental was the main factor behind the increase in FFO 1, which rose from € 1,148.7 million in 2017 to € 1,315.1 million in 2018, primarily because of acquisitions. The interest expense excluding non-recurring items (FFO 1 interest expense) came to € 317.4 million in 2018, up by 10.4% on the prior-year value of € 287.5 million.

The Customer Satisfaction Index **(CSI)** was slightly down on the prior-year value.

Statement of the Management Board on the Economic Situation

The net assets, financial position and results of operations of the Group are extremely positive, particularly given the solid financing, the resulting balanced maturity profile and the financing flexibility gained through the rating-backed bond financings with a view to both organic and external growth. The ongoing improvements to the property management processes, the expansion of the Value-add segment, the steady Recurring Sales and a successful development business promote ongoing improvement in profitability.

Results of Operations

The following key figures provide an overview of how Vonovia's results of operations and their drivers developed in 2018. When comparing the figures with the prior year, it is important to remember that BUWOG is included in the 2018 figures with an earnings contribution for the months from April to December, and that Victoria Park is included with an earnings contribution for the months from July to December. The key figures are shown based on the new management system. The prior-year figures are shown based on the new definitions.

Key Figures on Earnings Development

in € million	2017	2018	Change in %
Income from property management	2,391.6	2,708.2	13.2
thereof rental income in the Rental segment	1,667.9	1,894.2	13.6
Income from disposal of properties	1,206.4	1,097.5	-9.0
Income from disposal of real estate inventories (Development)	–	225.1	-
Adjusted EBITDA Total	1,319.7	1,554.8	17.8
Adjusted EBITDA Rental	1,148.7	1,315.1	14.5
Adjusted EBITDA Value-add	102.1	121.2	18.7
Adjusted EBITDA Recurring Sales	62.2	79.1	27.2
Adjusted EBITDA Development	6.7	39.4	>100
Group FFO	975.0	1,132.0	16.1
EBITDA IFRS	1,271.8	1,534.4	20.6
Monthly in-place rent (€/m²)	6.27	6.52	4.0
Average area of own apartments in the reporting period (in thou. m²)	22,056	24,293	10.1
Average number of own units (number of units)	352,848	384,777	9.0
Vacancy rate in %	2.5	2.4	-0.1 pp
Maintenance expenses and capitalized maintenance (€/m²)	15.70	17.72	12.9
thereof maintenance expenses (€/m²)	11.70	11.92	1.9
thereof capitalized maintenance (€/m²)	4.00	5.79	44.8
Number of units bought	24,847	63,706	>100
Number of units sold	11,780	15,102	28.2
thereof Recurring Sales	2,608	2,818	8.1
thereof Non-core Disposals	9,172	12,284	33.9
Number of employees (as of December 31)	8,448	9,923	17.5

Income from property management came to € 2,708.2 million, 13.2% higher than the value of € 2,391.6 million seen in the previous year. This increase was due primarily to the acquisitions made in the 2018 fiscal year. All in all, rental income in the Rental segment rose by 13.6%, from € 1,667.9 million to € 1,894.2 million. Of the rental income in the Rental segment, € 1,751.4 million is attributable to rental income in Germany (2017: € 1,639.3 million), € 83.1 million to rental income in Austria (2017: € 25.8 million) and € 58.4 million in Sweden.

As of the end of 2018, Vonovia managed a portfolio comprising 395,769 of its own residential units (2017: 346,644). We sold a total of 15,102 units in the course of 2018 (Recurring Sales and Non-core Disposals) (2017: 11,780) and acquired 63,706 units (2017: 24,847).

BUWOG's portfolio contributed € 242.1 million to the income from property management in 2018, and Victoria Park's portfolio contributed € 59.5 million.

Income from disposal of properties came to € 1,097.5 million, 9.0% below the value of € 1,206.4 million seen in the previous year.

The **Adjusted EBITDA Total** rose by € 235.1 million from € 1,319.7 million in the 2017 fiscal year to € 1,554.8 million in 2018. All segments contributed to this development. The Adjusted EBITDA Rental increased by 14.5% from € 1,148.7 million in 2017 to € 1,315.1 million. Adjusted EBITDA Value-add rose by 18.7% from € 102.1 million in the 2017 fiscal year to € 121.2 million in 2018. The Adjusted EBITDA Recurring Sales came in at € 79.1 million, up by around 27.2% on the value of € 62.2 million seen in the previous year. The Adjusted EBITDA Development amounted to € 39.4 million in 2018 (2017: € 6.7 million own new construction VTS).

Group FFO rose by 16.1% from € 975.0 million in 2017 to € 1,132.0 million in 2018. The FFO interest included in Group FFO came to € 328.8 million in 2018 (2017: € 287.5 million), while current FFO taxes came to € 36.5 million (2017: € 22.6 million).

At the end of 2018, Vonovia employed a workforce of 9,923 (2017: 8,448).

Group FFO

The following key figures provide an overview of the development in Group FFO and other value drivers in the reporting period.

in € million	2017	2018	Change in %
Rental income in the Rental segment	1,667.9	1,894.2	13.6
Expenses for maintenance	-258.0	-289.7	12.3
Operating expenses in the Rental segment*	-261.2	-289.4	10.8
Adjusted EBITDA Rental	**1,148.7**	**1,315.1**	**14.5**
Revenue Value-add	1,170.5	1,462.2	24.9
thereof external revenue	161.6	203.9	26.2
thereof internal revenue	1,008.9	1,258.3	24.7
Operating expenses Value-add	-1,068.4	-1,341.0	25.5
Adjusted EBITDA Value-add	**102.1**	**121.2**	**18.7**
Income from disposals Recurring Sales	305.9	356.1	16.4
Fair value of properties sold adjusted to reflect effects not relating to the period from assets held for sale in the Recurring Sales segment	-230.6	-262.8	14.0
Adjusted result Recurring Sales	**75.3**	**93.3**	**23.9**
Selling costs Recurring Sales	-13.1	-14.2	8.4
Adjusted EBITDA Recurring Sales	**62.2**	**79.1**	**27.2**
Income from disposal of “Development to sell” properties	–	225.1	–
Cost of Development to sell	–	-181.8	–
Gross profit Development to sell	**–**	**43.3**	**–**
Fair value Development to hold	23.3	98.0	>100
Cost of Development to hold	-16.6	-79.3	>100
Gross profit Development to hold**	**6.7**	**18.7**	**>100**
Operating expenses in the Development segment	–	-22.6	–
Adjusted EBITDA Development	**6.7**	**39.4**	**>100**
Adjusted EBITDA Total	**1,319.7**	**1,554.8**	**17.8**
FFO interest expense	-287.5	-328.8	14.4
Current income taxes FFO	-22.6	-36.5	61.5
Consolidation***	-34.6	-57.5	66.2
Group FFO	**975.0**	**1,132.0**	**16.1**

* Prior-year value adjusted incl. transaction holding costs.
** Prior-year value new construction VTS.
*** thereof intragroup profits in 2018: € 38.8 million (2017: € 27.9 million), valuation result new construction/development to hold in 2018: € 18.7 million (2017: € 6.7 million).

As of the end of December 2018, our apartments were still virtually fully occupied. The apartment vacancy rate of 2.4% was down slightly on the value of 2.5% seen at the end of 2017. Rental income in the Rental segment rose by 13.6% from € 1,667.9 million in 2017 to € 1,894.2 million in 2018. BUWOG's contribution accounted for a volume of € 155.5 million, while Victoria Park contributed a volume of € 58.4 million. Out of the total rental income in the **Rental segment** of € 1,894.2 million, € 1,751.4 million is attributable to the portfolio in Germany, € 83.1 million to the portfolio in Austria and € 58.4 million to the portfolio in Sweden. All in all, rent increases more than compensated for the disposals due to portfolio adjustments. The increase in rent due to market-related factors came to 1.3%. We were also able to achieve an increase in rent of 2.9% thanks to property value improvements achieved as part of our modernization program. The corresponding like-for-like increase in rent came to 4.2% in the 2018 reporting period. If we also include the increase in rent due to new construction measures and measures to add extra stories, then we arrive at an organic increase in rent of 4.4% in total. The average monthly in-place rent at the end of December 2018 came to € 6.52/m² compared to € 6.27/m² at the end of 2017. At the end of 2018, the monthly in-place rent in the Austrian portfolio came to € 4.53/m², and a value of € 9.11/m² for the Swedish portfolio. The rental income from the Austrian property portfolio additionally includes maintenance and improvement contributions (EVB). The rental income from the portfolio in Sweden reflects inclusive rents, meaning that the amounts contain operating and heating costs.

In the 2018 reporting period, we continued to successfully implement our modernization and maintenance strategy. The total volume rose from € 1,124.8 million in 2017 to € 1,569.4 million in 2018. This was driven by an increase in the modernization volume including new construction, which rose by 46.3% from € 778.6 million in 2017 to € 1,139.0 million in 2018.

Maintenance and Modernization

in € million	2017	2018	Change in %
Expenses for maintenance	258.0	289.7	12.3
Capitalized maintenance	88.2	140.7	59.5
Modernization work*	778.6	1.139.0	46.3
Total cost of modernization and maintenance	**1,124.8**	**1,569.4**	**39.5**

* Incl. new construction 2018: € 234.3 million, 2017: € 65.7 million.

Operating expenses in the Rental segment in the 2018 reporting period were up by 10.8% on the figures for 2017, from € 261.2 million to € 289.4 million. This development is due primarily to the larger portfolio thanks to the acquisitions of BUWOG and Victoria Park. All in all, Adjusted EBITDA Rental rose by 14.5%, from € 1,148.7 million in 2017 to € 1,315.1 million in 2018.

We expanded the **Value-add segment** further in the 2018 fiscal year. The increase in the output of our craftsmen's organization once again significantly contributed to this trend and allowed us to continue our investments in improving our portfolio. In addition, we also continued to expand our business activities in the areas of condominium administration, the provision of cable television to our tenants, metering services and insurance and residential environment services in the 2018 reporting period. As a leading real estate service provider, Vonovia Immobilien Treuhand now provides services to a total of around 107,000 units, of which approximately 84,000 are apartments managed for third parties. We also established a new service: energy supply. We supplied a total of 8,500 households with energy directly.

External revenue from our Value-add activities with our end customers rose by 26.2%, from € 161.6 million in 2017 to € 203.9 million in 2018. Group revenue rose by 24.7%, from € 1,008.9 million to € 1,258.3 million in the same period. Overall, this results in a 24.9% increase in the revenue from the Value-add segment from € 1,170.5 million in the 2017 fiscal year to € 1,462.2 million in 2018. The Adjusted EBITDA Value-add was up 18.7% year-on-year to € 121.2 million in 2018.

The EBITDA margin of the core business, calculated based on the Adjusted EBITDA Operations (total of the Adjusted EBITDA Rental and the Adjusted EBITDA Value-add incl. consolidation effects) in relation to rental income within the Group, once again showed positive development in the reporting period. For Vonovia, it increased from 73.2% in 2017 to 73.6% in 2018.

We continued to pursue our selective sales strategy in the 2018 fiscal year. In the Recurring Sales segment, we report all business activities relating to the sale of single residential units (Privatize).

In the **Recurring Sales segment**, the income from disposal of properties came to € 356.1 million in 2018, up by 16.4% on the value of € 305.9 million reported in 2017; of this, € 268.7 million are attributed to sales in Germany (2017: € 269.2 million) and € 87.4 million to sales in Austria (2017: € 36.7 million). We privatized 2,818 apartments in 2018 (2017: 2,608), thereof 2,393 in Germany (2017: 2,444) and 425 in Austria (2017: 164). Adjusted EBITDA Recurring Sales came in at € 79.1 million in the 2018 reporting period, up by 27.2% on the value of € 62.2 million seen in 2017. The fair value step-up for Recurring Sales came in at 35.5% in the 2018 reporting period, up against the comparative value of 32.6% for 2017. This was due to the higher property values.

Outside of the Recurring Sales segment, we made 12,284 Non-core Disposals as part of our portfolio adjustment measures (2017: 9,172). At 23.0%, the fair value step-up for Non-core Disposals was higher than for the same period in the previous year (7.9%). This increase was primarily due to block sales in northern Germany and Zwickau with above-average margins.

The earnings contributions made by the **Development segment** were reported for the first time in the 2018 fiscal year. In the "Development to sell" area, the income from disposal of properties came to € 225.1 million, with € 107.8 million attributable to project development in Germany and € 117.2 million attributable to project development in Austria. This produced a gross profit from "Development to sell" of € 43.3 million. In the "Development to hold" area, a fair value of € 98.0 million was reported, with € 66.0 million attributable to project development in Germany and € 32.0 million attributable to project development in Austria. The resulting gross profit for "Development to hold" amounted to € 18.7 million, with € 12.9 million attributable to project development in Germany and € 5.8 million attributable to project development in Austria. The Adjusted EBITDA for the Development segment amounted to € 39.4 million in the 2018 fiscal year. A total of 470 units were completed in the "Development to sell" area, 128 in Germany and 342 in Austria. A total of 478 units were completed in the "Development to hold" area, 297 in Germany and 181 in Austria. All in all, 11,786 units were listed in the development pipeline at the end of 2018.

In the 2018 fiscal year, the primary key figure for the sustained earnings power of the core business, Group FFO, increased by 16.1%, from € 975.0 million to € 1,132.0 million. This trend was fueled primarily by the positive development in Adjusted EBITDA Total, which rose by 17.8% from € 1,319.7 million to € 1,554.8 million during the reporting period.

In the 2018 fiscal year, the **non-recurring items** eliminated in the Adjusted EBITDA Total came to € 106.6 million, up 22.7% on the prior-year value of € 86.9 million. The acquisition costs including integration costs for 2018 include € 20.0 million for acquisitions in earlier years, which are offset against tax income in the same amount, meaning that they are not compensated for in the profit for the period. Taking this into account, the non-recurring items in the fiscal year came to € 86.6 million, on a par with the prior-year value of € 86.9 million. The following table gives a detailed list of the non-recurring items.

Non-recurring Items

in € million	2017	2018	Change in %
Acquisition costs incl. integration costs*	48.9	87.8	79.6
Severance payments/pre-retirement part-time work arrangements	13.9	18.3	31.7
Business model optimization/development of new fields of business	22.5	0.8	-96.4
Refinancing and equity measures	1.6	-0.3	–
Total non-recurring items	**86.9**	**106.6**	**22.7**

* Including takeover costs and one-time expenses in connection with acquisitions, such as HR measures relating to the integration process. Figures for the previous year shown in line with the current reporting structure for 2018.

The **financial result** changed from € -326.3 million in 2017 to € -440.1 million in 2018. FFO interest expense is derived from the financial result as follows:

Reconciliation of Financial Result/FFO Interest Expense

in € million	2017	2018	Change in %
Income from loans	1.6	2.2	37.5
Interest income	25.1	6.8	-72.9
Interest expense	-353.0	-449.1	27.2
Financial result*	**-326.3**	**-440.1**	**34.9**
Adjustments:			
Transaction costs	7.9	14.2	79.7
Prepayment penalties and commitment interest	16.4	8.4	-48.8
Effects from the valuation of non-derivative financial instruments	-8.8	14.9	–
Derivatives	-3.9	14.3	–
Interest accretion to provisions	9.0	9.1	1.1
Accrued interest	3.1	43.4	>100
Interest on prior-year tax	–	20.3	–
Other effects	2.6	13.5	>100
Net cash interest	**-300.0**	**-302.0**	**0.7**
Deferred interest adjustment	-3.1	-43.4	>100
Adjustments income from investments in other real estate companies	13.0	14.0	7.7
Adjustment of interest paid due to taxes	2.6	2.6	–
Interest expense FFO**	**-287.5**	**-328.8**	**14.4**

* Excluding income from other investments.
** Thereof in the 2018 fiscal year: FFO 1 interest € 317.4 million, interest Development segment € 11.4 million.

The FFO interest expense came to € -328.8 million in 2018, up by 14.4% on the prior-year value of € -287.5 million, primarily due to the 100% debt financing of the BUWOG acquisition. The acquisitions of BUWOG and Victoria Park also resulted in additional non-derivative interest from the operating business in the amount of € 38.8 million.

The profit for the period came to € 2,402.8 million in the 2018 reporting period, down by 6.4% on the previous year's value of € 2,566.9 million. BUWOG contributed total Adjusted EBITDA of € 221.9 million to the Group's profit for the period in the 2018 reporting period, with Victoria Park contributing Adjusted EBITDA of € 33.7 million.

The previous key figure FFO 1 is derived from the profit for the period as follows:

Reconciliation of Profit for the Period/FFO

in € million	2017	2018	Change in %
Profit for the Period	2,566.9	2,402.8	-6.4
Financial result*	326.3	440.1	34.9
Income taxes	1,440.5	1,471.5	2.2
Depreciation and amortization	372.2	737.9	98.3
Net income from fair value adjustments of investment properties	-3,434.1	-3,517.9	2.4
= EBITDA IFRS	1,271.8	1,534.4	20.6
Non-recurring items	86.9	106.6	22.7
Total period adjustments from assets held for sale	-10.7	-0.5	-95.3
Financial income from investments in other real estate companies	-13.0	-14.0	7.7
= Adjusted EBITDA	1,335.0	1,626.5	21.8
Adjusted EBITDA Sales	-112.1	-208.3	85.8
Adjusted EBITDA Development (excl. gross profit to hold)	–	-20.7	–
= Adjusted EBITDA OPERATIONS	1,222.9	1,397.5	14.3
Interest expense FFO 1**	-287.5	-317.4	10.4
Current income taxes FFO 1	-15.9	-15.4	-3.1
= FFO 1	919.5	1,064.7	15.8
Capitalized maintenance	-85.7	-137.7	60.7
= AFFO	833.8	927.0	11.2
Current income taxes Sales	-19.2	-53.9	>100
FFO 2 (FFO 1 incl. Adjusted EBITDA Sales/current income taxes Sales)	1,012.4	1,219.1	20.4
FFO 1 per share in €***	1.90	2.06	8.4
AFFO per share in €***	1.72	1.79	4.1

* Excluding income from investments.
** Incl. financial income from investments in other real estate companies.
*** Based on the shares carrying dividend rights on the reporting date Dec. 31, 2018: 518,077,934, Dec. 31, 2017: 485,100,826.

As part of the change in the management system, the reconciliation of profit for the period will from now on take place in Group FFO:

Reconciliation of Profit for the Period/Group FFO

in € million	2017	2018	Change in %
Profit for the Period	2,566.9	2,402.8	-6.4
Financial result*	326.3	440.1	34.9
Income taxes	1,440.5	1,471.5	2.2
Depreciation and amortization	372.2	737.9	98.3
Net income from fair value adjustments of investment properties	-3,434.1	-3,517.9	2.4
= EBITDA IFRS	**1,271.8**	**1,534.4**	**20.6**
Non-recurring items	86.9	106.6	22.7
Total period adjustments from assets held for sale	-10.7	-0.5	-95.3
Financial income from investments in other companies	-13.0	-14.0	7.7
Other (Non-core Disposals)	-49.9	-129.2	>100
Intragroup profits	27.9	38.8	39.1
Valuation result New construction/development to hold	6.7	18.7	>100
= Adjusted EBITDA Total	**1,319.7**	**1,554.8**	**17.8**
Interest expense FFO**	-287.5	-328.8	14.4
Current income taxes FFO	-22.6	-36.5	61.5
Consolidation	-34.6	-57.5	66.2
= Group FFO	**975.0**	**1,132.0**	**16.1**
Group FFO per share in €***	2.01	2.18	8.7

* Excluding income from investments.
** Incl. financial income from investments in other real estate companies.
*** Based on the shares carrying dividend rights on the reporting date Dec. 31, 2018: 518,077,934, Dec. 31, 2017: 485,100,826.

Assets

Consolidated Balance Sheet Structure

	Dec. 31, 2017		Dec. 31, 2018	
	in € million	in %	in € million	in %
Non-current assets	36,719.6	97.9	47,639.6	96.5
Current assets	796.7	2.1	1,748.0	3.5
Assets	**37,516.3**	**100.0**	**49,387.6**	**100.0**
Total equity	16,691.2	44.5	19,664.1	39.8
Non-current liabilities	18,585.2	49.5	25,577.8	51.8
Current liabilities	2,239.9	6.0	4,145.7	8.4
Equity and Liabilities	**37,516.3**	**100.0**	**49,387.6**	**100.0**

The Group's total assets increased by € 11,871.3 million as against December 31, 2017, rising from € 37,516.3 million to € 49,387.6 million. This increase results primarily from a € 10,308.1 million increase in investment properties from € 33,182.8 million to € 43,490.9 million, of which € 6,537.5 million results from the integration of the BUWOG Group and the Victoria Park Group and € 3,517.9 million results from the real estate valuation. In addition, assets rose as a result of an increase in goodwill of € 228.9 million from € 2,613.5 million to the current total of € 2,842.4 million due to the first-time consolidation of the BUWOG Group and Victoria Park. For the BUWOG Group brand name, a value of € 66.6 million was recognized in connection with its development business as part of the purchase price allocation. Goodwill and trademark rights comprise 5.9% of the total assets. Total current assets increased mainly through an increase in trade receivables and real estate inventories due to the integration of BUWOG's development business. Furthermore, cash and cash equivalents increased by € 281.5 million.

The € 3,517.9 million increase in the value of the real estate portfolio in the 2018 fiscal year increased the carrying amount of the groups of cash-generating units (regions) affected by the valuation, which in turn led to impairment losses being recognized on the goodwill allocated to the regions in the amount of € 681.2 million.

As of December 31, 2018, the **gross asset value (GAV)** of Vonovia's property assets came to € 44,226.9 million, which corresponds to 89.6% of total assets compared with € 33,424.9 million or 89.1% at the end of 2017.

The € 2,972.9 million increase in total equity from € 16,691.2 million to € 19,664.1 million results in particular from the capital increase in the amount of € 1,257.4 million, from the profit for the period for the 2018 fiscal year in the amount of € 2,402.8 million and from the distribution of € 640.3 million. The change in minority interests in the amount of € 173.5 million is due, on the one hand, to the profit share attributable to minority shareholders of € 96.3 million and, on the other, to the integration of Victoria Park.

This brings the equity ratio to 39.8%, compared with 44.5% at the end of 2017.

Liabilities rose by € 8,898.4 million from € 20,825.1 million to € 29,723.5 million. The amount of non-derivative financial liabilities thereby rose by € 6,075.5 million, of which € 2,896.3 million were due to the integration of Victoria Park and BUWOG, and € 3,179.21 million resulted primarily from the net increase in acquisition financing. Moreover, liabilities include financing contributions from tenants – a liabilities position in relation to tenants that is typical for Austria and is based on fixed earlier payments tenants have made toward maintenance and financing.

Net Asset Value

Vonovia's net asset value (NAV) figures are based on the best practice recommendations of the EPRA (European Public Real Estate Association). At the end of the fiscal year, the EPRA NAV came to € 26,105.0 million, up by 22.6% on the prior-year value of € 21,284.6 million. EPRA NAV per share increased from € 43.88 at the end of 2017 to € 50.39 at the end of 2018. At the end of 2018, the Adjusted NAV amounted to € 23,262.6 million, 24.6% higher than the € 18,671.1 million seen at the end of the previous year. This represents an increase in the Adjusted NAV per share from € 38.49 to € 44.90 at the end of 2018. The revaluation of the property portfolio had a significant impact on the NAV. Net income from fair value adjustments amounted to € 3,517.9 million in the 2018 fiscal year (2017: € 3,434.1 million).

Net Asset Value (NAV)

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
Total equity attributable to Vonovia shareholders	15,080.8	17,880.2	18.6
Deferred taxes on investment properties	6,185.7	8,161.1	31.9
Fair value of derivative financial instruments*	26.9	87.2	>100
Deferred taxes on derivative financial instruments	-8.8	-23.5	>100
EPRA NAV	21,284.6	26,105.0	22.6
Goodwill	-2.613.5	-2.842.4	8.8
Adjusted NAV	**18,671.1**	**23,262.6**	**24.6**
EPRA NAV per share in €**	**43.88**	**50.39**	**14.8**
Adjusted NAV per share in €**	**38.49**	**44.90**	**16.7**

* Adjusted for effects from cross currency swaps.
** Based on the number of shares on the reporting date Dec. 31, 2018: 518,077,934, Dec. 31, 2017: 485,100,826.

Over a period of five years, Vonovia has continually created value and increased NAV and GAV (gross asset value) every year.

in € million	EPRA NAV	GAV
2018	26,105.0	44,226.9
2017	21,284.6	33,424.9
2016	17,047.1	27,106.4
2015	13,988.2	24,153.9
2014	6,578.0	12,757.1

Fair Values

Major market developments and valuation parameters that have an impact on the fair values of Vonovia are assessed regularly. In addition to the revaluation performed as of June 30, 2018, the entire portfolio was revalued at the end of the year.

As in 2017, Vonovia's portfolio has shown very positive development. The demand for apartments in metropolitan areas remains stronger than the supply, pushing rent levels up considerably. Rental growth is also being helped along by the extensive investments made in the energy-efficient modernization of our buildings and improvements to the fittings in our apartments. At the same time, the residential real estate market remains particularly dynamic. Since the return expectations of property buyers have dropped further, the increase in market values is ahead of rent developments (yield compression). The positive effects resulting from the increased demand, modernization and yield compression have resulted in a considerable 13.0% increase in the value of our property portfolio compared with the previous year, after adjustments for acquisitions and sales. In addition to the internal valuation, the property assets are also assessed by the independent property appraiser CBRE GmbH and Savills Sweden AB in cooperation with Malmöbryggan Fastighetsekonomi AB. The market value resulting from the CBRE expert opinion deviates from the internal valuation result by less than 0.1%. The net income from the external valuation was adopted for the Swedish, Austrian and German portfolios of BUWOG.

The fair values for each strategic real estate portfolio cluster are as follows:

	Residential units		Fair value* (in € million)	
	Dec. 31, 2017	Dec. 31, 018	Dec. 31, 2017	Dec. 31, 2018
Strategic	319,014	323,056	30,508.0	34,360.5
Operate	101,697	74,775	10,252.9	8,594.2
Invest	217,317	248,281	20,255.1	25,766.3
Recurring Sales	14,099	29,563	1,509.7	3,670.0
Non-core disposals	11,473	5,832	535.6	597.9
Vonovia Germany	344,586	358,451	32,553.3	38,628.4
Vonovia Austria	2,058	23,030	551.6	2,517.0
Vonovia Sweden		14,288		1,737.7
Total	**346,644**	**395,769**	**33,104.9**	**42,883.0**

* Fair value of the developed land excluding € 1,356.8 million (previous year: € 331.4 million), of which € 405.1 million for undeveloped land and inheritable building rights granted, € 302.5 million for assets under construction, € 492.6 million for development and € 156.6 million for other.

Regular Determination of the Fair Values Creates a Transparent Valuation of the Company's Properties

Calculating and showing the fair values provides a control parameter inside the company and also helps to make the development of the value of our assets transparent to people outside the company.

The fair value of the portfolio of residential properties was determined, in accordance with IAS 40 and IFRS 13, on the basis of the International Valuation Standard Committee's definition of market value.

The valuation methodology used by Vonovia is based on the discounted cash flow (DCF) methodology. Under the DCF methodology, the fair values are derived from the income and costs associated with a property. Under the DCF methodology, the expected future income and costs of a property are forecast over a period of ten years and discounted to the date of valuation as the net present value. The income mainly comprises expected rental income (current in-place rent, market rents as well as their development) taking vacancy losses into account. These are derived for each location from the latest rent indices and rent tables (empirica and IVD), as well as from studies on spatial prosperity (Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Prognos, empirica, Bertelsmann Stiftung, etc.).

On the cost side, maintenance expenses and management costs, as well as other cost items such as ground rent, non-allocable ancillary costs and rent losses, have been taken into account and inflated in the reporting period. Modernization measures carried out in the housing stocks are factored in by decreasing the current maintenance expenses and adjusting market rents. The commercial properties in the portfolio are mainly small commercial units for the supply of the local residential area. Different cost approaches were used to those for residential properties, and the capitalized interest rates were adjusted to reflect the market specifics.

As far as the foreign portfolios and BUWOG's German portfolio are concerned, the fair values determined by external and independent appraisers have been used in the annual financial statements. The Austrian portfolio and BUWOG's German portfolio were valued by CBRE GmbH, while the Swedish portfolio was valued by Savills Sweden AB in collaboration with Malmöbryggan Fastighetsekonomi AB.

The recognition and valuation of investment properties are explained in detail in the Notes to the consolidated financial statements (note [23]).

The fair value of the real estate portfolio of Vonovia comprising residential buildings, commercial properties, garages and parking spaces as well as project developments, undeveloped land and any inheritable building rights granted was € 44,239.9 million as of December 31, 2018 (previous year: € 33,436.3 million). The determination of fair values led overall to net income from fair value adjustments of investment properties of € 3,517.9 million.

Financial Position

Cash Flow

The following table shows the Group cash flow:

Key Data from the Statement of Cash Flows

in € million	2017	2018
Cash flow from operating activities	946.0	1,132.5
Cash flow from investing activities	-1,350.1	-3,892.5
Cash flow from financing activities	-870.5	3,041.5
Net changes in cash and cash equivalents	**-1,274.6**	**281.5**
Cash and cash equivalents at the beginning of the period	1,540.8	266.2
Cash and cash equivalents at the end of the period	**266.2**	**547.7**

The cash flow from **operating activities** rose from € 946.0 million in 2017 to € 1,132.5 million in 2018. The increase is mainly due to the improvement in the operating result, which itself in turn increased because of the first-time inclusion of BUWOG and Victoria Park. The low payouts in net current assets continued to have a positive effect on operating cash flow.

The cash flow from **investing activities** shows a payout balance of € 3,892.5 million for 2018, which is mainly due to the net purchase price payments for the shares in BUWOG and Victoria Park in the total amount of € 3,387.7 million within the process of initially acquiring control. The additional payouts for acquisitions and modernization of the real estate portfolio came to € 1,358.8 million. On the other hand, income from portfolio sales in the amount of € 1,054.2 million was collected. In addition, cash flow from investment activities includes payouts for the construction of Vonovia's new head office and its furniture and office equipment.

Cash flow from **financing activities** includes cash inflows from the cash capital increase in the amount of € 995.8 million. The additional proceeds in a total amount of € 5,064.2 million result primarily from EMTN drawdowns in connection with the takeover of BUWOG. On the other hand, payouts were made through scheduled and unscheduled repayments in the amount of € 1,901.6 million. Payouts for transaction and financing costs amounted to € 77.2 million. Interest paid in 2018 amounted to € 305.8 million with dividend payments amounting to € 401.1 million, as against figures of € 303.5 million and € 277.9 million in 2017, respectively. In addition, cash flow from financing activities includes payouts for the acquisition of shares in non-controlling interests in the amount of € 309.0 million, € 217.7 million of which was attributable primarily to the stake that Vonovia acquired in Victoria Park from the Starwood Capital Group and € 60.7 million of which was attributable to further BUWOG shares.

The net increase in **cash and cash equivalents** came to € 281.5 million.

Financing

According to publications dated May 7, 2018, and August 2, 2018 (which already include the acquisitions of BUWOG and Victoria Park), Vonovia's credit rating as awarded by the agency Standard & Poor's is unchanged at BBB+ with a stable outlook for the long-term corporate credit rating and A-2 for the short-term corporate credit rating. At the same time, the credit rating for the issued and unsecured bonds is BBB+.

A European medium-term notes program (EMTN program) has been launched for the Group via Vonovia Finance B. V., allowing funds to be raised quickly at any time using bond issues, without any major administrative outlay. The prospectus for the EMTN program has to be updated annually and approved by the financial supervisory authority of the Grand Duchy of Luxembourg (CSSF).

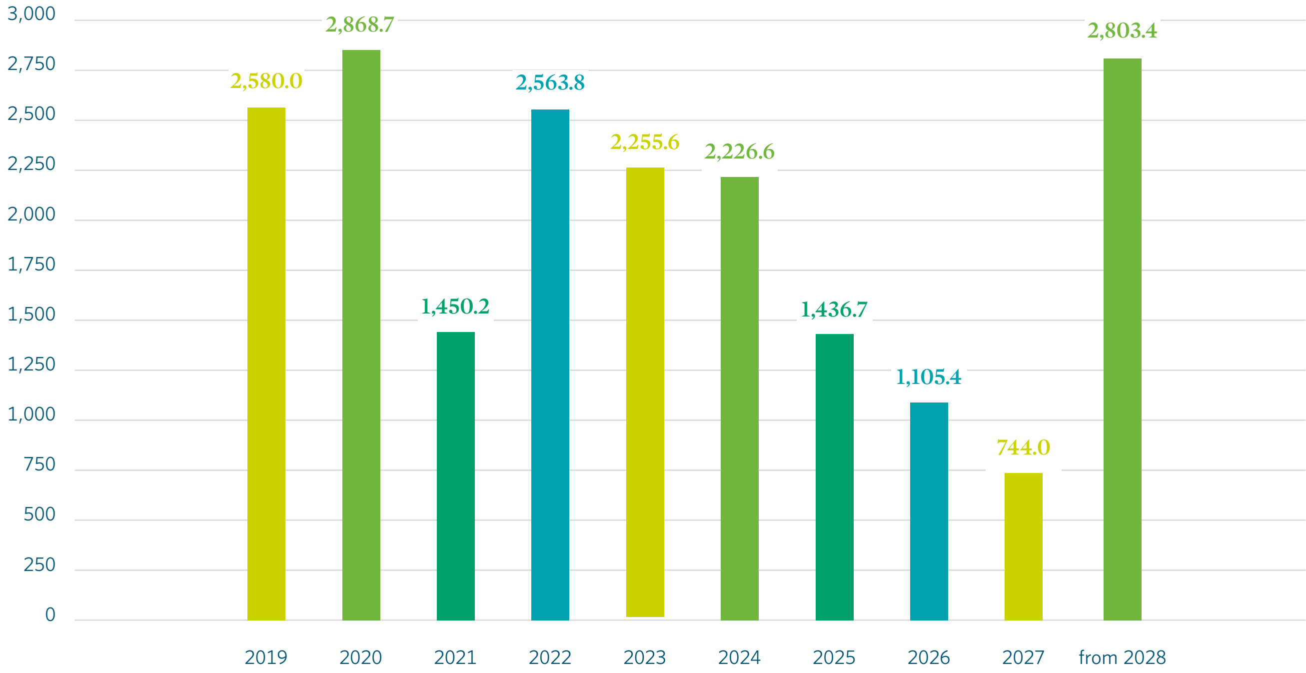
Vonovia Finance B. V. has currently placed a total bond volume of € 14.3 billion, € 11.8 billion of which relates to the EMTN program on the reporting date of December 31, 2018. The total volume also includes € 1.7 billion in hybrid bonds, € 1.0 billion of which is reported as equity.

In November 2017, Vonovia concluded a master commercial paper agreement via its Dutch financing company with a total volume of € 500 million with Commerzbank AG as lead arranger and several banks as traders. This master program was increased to a total volume of € 1,000 million in September 2018. Issues in the amount of € 420 million were outstanding under this program as of December 31, 2018.

The **debt maturity profile** of Vonovia's financing was as follows as of December 31, 2018:

Maturity Profile

as of December 31, 2018, in € million



The 2018 fiscal year was characterized by the financing of the cash component of the BUWOG and Victoria Park takeovers. At the same time, financing with a volume of € 341.8 million was repaid prematurely.

Scheduled repayments were made in the amount of € 1,559.9 million, with € 803.0 million of this amount attributable to the repayments part of the commercial paper program, and € 500 million to the repayment of EMTN tranches. In return, Vonovia Finance B. V. issued bonds with a total volume of € 3,600 million as part of the EMTN program. These bonds have a term from 4.75 to 20 years and a coupon rate between 0.750% and 2.750%, whereby issues exceeding € 600 million represent floating rate bonds.

Vonovia Finance B. V. also issued short-term commercial papers in the amount of € 813 million as part of the commercial paper program with a volume of € 1,000 million.

The working capital facility was drawn down in the amount of € 100.0 million during the year.

Bridge financing worth € 2.65 billion was agreed with J.P. Morgan as part of the BUWOG takeover; however, no use was made of it. In addition, the financing provided by Berlin-Hannoversche Hypothekenbank which falls due in 2018 was extended early in January 2018 until 2028 in the amount of € 500 million.

For more detailed information on financing, please refer to the relevant explanations in the Notes under "Non-derivative Financial Liabilities."

In connection with the issue of unsecured bonds by Vonovia Finance B. V., Vonovia has undertaken to comply with the following standard market covenants:

> Limitations on incurrence of financial indebtedness
> Maintenance of consolidated coverage ratio
> Maintenance of total unencumbered assets

The existing structured and secured financing arrangements also require adherence to certain standard market covenants. Any failure to meet the agreed financial covenants could have a negative effect on the liquidity status.

The LTV (loan to value) is as follows as of the end of the year:

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
Non-derivative financial liabilities	14,060.5	20,136.0	43.2
Foreign exchange rate effects	-23.5	-33.5	42.6
Cash and cash equivalents	-266.2	-547.7	105.7
Net debt	13,770.8	19,554.8	42.0
Sales receivables	-201.2	-256.7	27.6
Adjusted net debt	13,569.6	19,298.1	42.2
Fair value of the real estate portfolio	33,436.3	44,239.9	32.3
Shares in other real estate companies	642.2	800.3	24.6
Adjusted fair value of the real estate portfolio	**34,078.5**	**45,040.2**	**32.2**
LTV	**39.8%**	**42.8%**	**3.0 pp**

The financial covenants have been fulfilled as of the reporting date.

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
Non-derivative financial liabilities	14,060.5	20,136.0	43.2
Total assets	**37,516.3**	**49,387.7**	**31.6**
LTV bond covenants	**37.5%**	**40.8%**	**3.3 pp**

Economic Development of Vonovia SE

(Reporting on the basis of the German Commercial Code (HGB))

Fundamental Information

Vonovia SE has been entered in the commercial register of Bochum Local Court under HRB 16879 since 2017. Vonovia SE was established as Deutsche Annington Immobilien GmbH on June 17, 1998, with its registered headquarters in Frankfurt am Main, to serve as an acquisition vehicle for the purchase of residential properties by financial investors. Following further successful acquisitions over the course of time, it now forms the Vonovia Group together with its subsidiaries and is Germany's leading residential real estate management company.

Vonovia SE performs the function of the management holding company within the Vonovia Group. In this role, it is responsible for determining and pursuing the overall strategy and for implementing this strategy by setting the company's goals. It also performs property management, financing, service and coordination tasks for the Group. Furthermore, it is responsible for the management, control and monitoring system as well as risk management. To carry out these management functions, Vonovia SE also maintains service companies to which it has outsourced selected functions, allowing it to realize corresponding harmonization and standardization effects, as well as economies of scale.

The description of the company's net assets, financial position and results of operations is based largely on the reporting of the Vonovia Group. The net assets, financial position and results of operations of Vonovia SE as the management holding company are ultimately determined by the assets of the Group companies and their ability to make sustainable positive contributions to earnings and generate positive cash flows. The company's risk profile is therefore largely the same as the Group's.

The preceding reporting for the Group of Vonovia SE therefore also expresses the company's position.

The Vonovia SE annual financial statements have been prepared in accordance with the provisions of the German Commercial Code (HGB) taking into account the supplementary regulations of the German Stock Corporation Act (AktG). As a listed company, Vonovia SE is classed as a large corporation.

The annual and consolidated financial statements as well as the combined management report are published in the Federal Gazette (Bundesanzeiger).

Development of Business in 2018

Results of Operations of Vonovia SE

The company regularly generates **income** from the charging of the services it provides, from income from investments in the form of dividend distributions from Group companies and from the transfer of profits. Profit-and-loss transfer agreements exist with, among other entities, the service companies, which themselves generate income by charging the real estate companies for the services they have provided. The income from investments collected is based on the net profit of the subsidiaries that is eligible for distribution, which is, in turn, calculated based on the accounting standards set out in the German Commercial Code. The main difference between these standards and the IFRS accounting principles lies in the fact that, under IFRS accounting, the fair value principle has more of an impact than the cost principle does under HGB accounting. In the consolidated financial statements under the IFRS, the properties are remeasured at periodic intervals. Under the HGB, the fixed assets are stated at amortized cost, taking depreciation into account. The capitalization regulations also vary.

Expenses relate largely to personnel expenses and administrative expenses associated with the management holding function, as well as to losses to be compensated for in connection with profit-and-loss transfer agreements.

The **financial result** is governed by the Group financing.

Business developments in 2018 were characterized, among other things, by the acquisition of Victoria Park and the takeover of BUWOG, as well as the integration and structuring work that followed.

The main factor impacting the **result for 2018**, however, was the **income** from profit transfer, in particular relating to Deutsche Annington Acquistion Holding GmbH, Düsseldorf, in the amount of € 1,448.1 million. In addition to that, other operating income was positively affected by a reversal of impairments amounting to € 42.3 million from receivables from affiliated companies and the disclosure of hidden reserves in the amount of € 247.8 million. These extraordinary earnings contributions all result from a structuring measure under company law implemented at the conwert Immobilien Invest GmbH Group (hereinafter: conwert), which was acquired in 2017, as part of its integration into the Vonovia Group. This structuring measure transferred the shares in the German conwert companies from Austria to Germany using a series of conversion-related steps. The previous year had also been characterized by significant non-recurring items due to the company law structuring of the GAGFAH companies, which had a positive impact on the previous year's other operating income.

Personnel expenses came to € 31.7 million in 2018, down on the prior-year figure of € 36.6 million due primarily to lower allocations to the long-term profit-sharing model and a drop in the number of employees.

Depreciation and amortization increased due to volume-related aspects.

Net financial expenses to affiliated companies improved considerably, from € 25.5 million to € 63.3 million, due to volume-related aspects. The extremely positive financial result of € 1,474.5 million is characterized by the profit transfer made by Deutsche Annington Acquisition Holding GmbH in the amount of € 1,448.1 million.

Tax expenses came to € 3.8 million as against € 8.9 million in the previous year. As the controlling company in a VAT group, Vonovia SE owes the corresponding income taxes. The tax expenses relate exclusively to previous years.

Vonovia SE closed the 2018 fiscal year with **net income** of € 1,673,317,417.29 (2017: € 398,830,574.65). Pursuant to Section 58 (2) of the German Stock Corporation Act (AktG), the Management Board may allocate up to one half of net income to retained earnings. As a result of this authorization, the Management Board has allocated € 800,000,000.00 to other retained earnings with a partial appropriation of profit. Taking into account the profit carried forward from the previous year in the amount of € 36,325,964.33, the profit for the 2018 financial year amounts to € 909,643,381.62.

The Management Board and the Supervisory Board propose to the Annual General Meeting that, of the profit of Vonovia SE for the 2018 fiscal year of € 909,643,381.62, an amount of € 135,000,000.00 be added to other revenue reserves and an amount of € 746,032,224.96 on the 518,077,934 shares of the share capital as of December 31, 2018, be paid as a dividend, corresponding to € 1.44 per share, to the shareholders and the remaining amount of € 28,611,156.66 be carried forward to the new account or be used for other dividends on shares carrying dividend rights at the time of the Annual General Meeting and which go beyond those of the share capital as of December 31, 2018.

As with the 2017 financial year, the dividend for the 2018 fiscal year, payable after the Annual General Meeting in May 2019, will again include the election of a non-cash dividend in shares, to the extent deemed economically sensible by the Supervisory Board.

Income Statement

in € million	2017	2018
Revenues	127.1	138.1
Other operating income	540.3	325.7
Cost of purchased services	-46.2	-50.6
Personnel expenses	-36.6	-31.7
Other administrative expenses	-206.4	-178.9
Profit before Financial Result and Tax	**378.2**	**202.6**
Income from profit transfer	69.0	1,523.4
Income from investments	66.0	101.2
Write-downs of long-term financial assets	-	-0.3
Interest and similar income	9.3	5.2
Expense from the assumption of losses	-64.0	-66.9
Interest and similar expenses	-50.8	-88.1
Financial Result	**29.5**	**1,474.5**
Tax	-8.9	-3.8
Net Income	**398.8**	**1,673.3**

Net Assets and Financial Position of Vonovia SE

The company's non-current assets of € 15,289.9 million are naturally characterized by **financial assets** in the amount of € 15,259.6 million. The increase in 2018 is due primarily to the acquisition of the shares in BUWOG, as well as to the adjustments made to the statement of the equity investments in conwert Invest GmbH and Deutsche Annington Acquisition Holding GmbH as a result of the company law structuring measures relating to the conwert Group.

Intangible assets and **property, plant and equipment** increased as a result of the investments to equip the Group's new head office.

Net current assets (current assets less current liabilities) including net liquidity are governed by the Group financing structure, in which Vonovia SE assumes the function of the cash pool leader. The Group's net lending/borrowing position led to charges of a total of € 1,106.3 million to Vonovia SE in 2018. The company was also hit by a change in the amount of € 187.3 million in the "net liquidity from cash and cash equivalents and bank liabilities," which corresponds to an overall change in Vonovia SE's net financial position of € 1,293.6 million. The change in the Group's net lending/borrowing position is mainly due to the payment of the BUWOG shares and the payment of the cash component of the dividend. The integration of the conwert and BUWOG companies into the Group cash pool also results in a net investment. As of December 31, 2018, the Group's net lending/borrowing position also includes the amounts already credited from the profit-and-loss transfer agreements, with the profit transfer of € 1,448.1 million made by Deutsche Annington Acquisition Holding GmbH reducing the Group's net lending/borrowing position considerably.

The increase in liabilities to financial institutions relates to the subsidized development loans taken out with the European Investment Bank (EIB) and the German government-owned development bank Kreditanstalt für Wiederaufbau (KfW) that Vonovia SE passes on to its subsidiaries.

Provisions came to € 134.9 million at the end of the year (2017: € 119.8 million), with € 59.7 million of this amount attributable to provisions for pensions, € 16.4 million to income tax provisions and € 5.6 million to HR-related provisions. Provisions increased by € 15.1 million in total, largely driven by the rise in provisions for pensions.

Total equity increased in 2018 as a result of the profit for the period, the capital increase for the stock dividend and the cash capital increase implemented on May 11, 2018, as part of accelerated bookbuilding. The 26,000,000 new no-par-value registered shares were placed with institutional investors in the scope of a private placement by means of an accelerated bookbuilding procedure and carry dividend rights as of January 1, 2018. The cash dividend distribution had the opposite effect of reducing total equity.

The **profit for the period** 2018, which increased considerably compared to 2017, is also reflected in the **net income** for the year in 2018. For the 2018 fiscal year, a **dividend distribution** of € 746,032,224.96 is to be resolved at the Annual General Meeting to be held on May 16, 2019. This corresponds to € 1.44 per share. A further € 135 million will be allocated to **other retained earnings** in addition to the € 800 million already allocated here according to Section 58 (2) of the AktG.

Assets

in € million	Dec. 31, 2017	Dec. 31, 2018
Assets		
Financial assets	11,402.0	15,259.6
Other assets	19.5	30.3
Receivables from affiliated companies	2,514.2	4,675.6
Other receivables and assets	12.8	80.1
Cash and cash equivalents	184.8	166.4
Total Assets	**14,133.3**	**20,212.0**

in € million	Dec. 31, 2017	Dec. 31, 2018
Equity and liabilities		
Total equity	7,231.8	9,522.1
Provisions	119.8	134.9
Liabilities to banks	515.5	684.3
Liabilities to affiliated companies	6,252.1	9,519.9
Other liabilities	14.1	350.8
Total Equity and Liabilities	**14,133.3**	**20,212.0**

Cash flow from operating activities is characterized by the income and expenses relating to the performance of the management holding functions. Vonovia SE only has appreciable **cash flows from investing activities** when acquisitions are made. **Cash flows from financing activities** regularly result from changes in Group financing, selective borrowing and the repayment of debt financing, mainly subsidized development loans and/or promissory note loans, as well as the corresponding interest payments. **Liquidity** dropped from € 184.8 million to € 166.4 million in 2018.

Employees of Vonovia SE

At the end of the 2018 fiscal year, an average of 179 people were employed by Vonovia SE (2017: 198 employees).

Opportunities and Risks for Vonovia SE

The likely development of Vonovia SE in the 2019 fiscal year depends to a considerable extent on the development of the Group as a whole and its opportunity and risk situation. This situation is set out in the Group's opportunity and risk report, meaning that the statements set out there in regard to the opportunity and risk situation of the Group also apply to the annual financial statements of Vonovia SE prepared in accordance with German commercial law, where the risks can have an impact on the valuation of long-term financial assets and on the amount of the results of subsidiaries collected/compensated for.

Forecast for Vonovia SE

Since the company's net assets, financial position and results of operations are determined solely by the ability of the Group companies to make positive earnings contributions and generate positive cash flows in the long term, we refer at this point to the Forecast Report for the Group. The most important financial performance indicator for the annual financial statements of Vonovia SE is the annual result.

The company's earnings for 2018 are exceptionally positive and were influenced primarily by positive earnings contributions made by company law structuring measures. Leaving these special effects out of the equation, the company's earnings for the 2018 fiscal year would be well in the red, on a par with the level seen in previous years, as predicted.

The results for the 2019 fiscal year will in turn be characterized by the results of subsidiaries collected/compensated for on the basis of income from investments and profit-and-loss transfer agreements, income from services, personnel and administrative expenses and the financial result. Looking ahead to the 2019 fiscal year, we expect to see expenses increase again due to the integration and structuring measures associated with the BUWOG takeover. By contrast, the extraordinary special effects seen in 2018 will cease to apply.

All in all, we expect the result for the 2019 fiscal year to again be on a par with the figure seen in the previous year without special effects.

It is still generally planned for Vonovia SE to distribute 70% of the Group FFO to the shareholders as a dividend, which would correspond to a dividend of € 1.44 per share for the 2018 fiscal year.

Further Statutory Disclosures

Corporate Governance

In the corporate governance declaration, we report, in accordance with No. 3.10 of the German Corporate Governance Code (GCGC) and Section 289a of the German Commercial Code (HGB) on the principles of management and corporate governance. The declaration contains the Declaration of Conformity, information on corporate governance practices, a description of how the Management Board and Supervisory Board work and key corporate governance structures. The corporate governance declaration has been published on the website **www.vonovia.de** under Investor Relations and does not form part of the management report.

Corporate governance is the responsible management and supervision of a company.

With balanced corporate governance, the Management Board and the Supervisory Board wish to safeguard Vonovia SE's competitiveness, strengthen the trust of the capital market and the general public in the company and sustainably increase the company's value.

As a major housing company, we are aware of the particular significance of our entrepreneurial actions for society at large. As a result, we are also committed to the main aims and principles of the corporate governance initiative of the German housing industry. The initiative supplements the corporate governance principles to include housing-specific aspects and is committed to even greater transparency, an improved image and a more competitive real estate sector.

Remuneration Report

The remuneration report describes the principles of the remuneration system for members of the Management Board of Vonovia SE and explains the structure, as well as the amount, of the income received by each Management Board member. Furthermore, the remuneration report contains information on the principles and the amount of remuneration for the members of the Supervisory Board. The total remuneration received by each Management Board member, including the names of the members, is shown in the notes.

The remuneration report takes account of the applicable regulations of the German Commercial Code (HGB), the German Accounting Standards (DRS 17), the laws on disclosure and appropriateness of Management Board remuneration (VorstAG, VorstOG) as well as the principles of the German Corporate Governance Code (GCGC).

Remuneration of the Management Board

Remuneration System

The remuneration system and the amount of remuneration of the Management Board are determined by the Supervisory Board on the proposal of the Executive and Nomination Committee. They are discussed yearly, for the last time in March 2018, and adjusted according to the framework found as adequate. The Annual General Meeting approved the basic principles of the remuneration system on May 9, 2014, and its last amendment on April 30, 2015.

The criteria used to assess whether the remuneration is appropriate include the duties of the individual Management Board member, his or her personal performance, the economic situation, the company's success and future outlook and the extent to which such remuneration is standard practice. When determining whether the level of remuneration is standard practice, the company looks at its peer group and the remuneration structure that applies in the rest of the company. Furthermore, we compare ourselves with other listed companies of a similar size. The remuneration structure is oriented towards the sustainable growth of the company.

In addition to fixed remuneration, the members of the Management Board receive variable short-term as well as variable long-term remuneration which takes account of both positive and negative developments. The Supervisory Board can, at their own due discretion, award Management Board members a discretionary bonus for particular achievements, even without a prior agreement. There is no entitlement to these bonuses. In the event that a discretionary bonus is paid, the underlying decision-making criteria are published. Furthermore, the members of the Management Board receive fringe benefits in the form of insurance premiums, as well as the private use of means of communication and company vehicles. In addition to his Management Board contract with Vonovia, Management Board member Daniel Riedl has another Management Board contract with the Austrian company BUWOG. This means that, in Daniel Riedl's case, the remuneration amounts listed below include the remuneration components from both Management Board contracts.

Fixed Remuneration and Fringe Benefits

The fixed remuneration, which contains not only the basic remuneration but also, in varying amounts, the remuneration for assuming mandates at Vonovia Group companies, subsidiaries and participating interests, is paid to the Management Board members in twelve equal monthly installments. In addition to their fixed remuneration, the Management Board members are given the opportunity to pay an annual pension contribution into a deferred compensation scheme, with the exception of Daniel Riedl, whose annual pension contribution is paid by BUWOG into an external pension fund. The contribution for Rolf Buch comes to € 355,000, while the contribution for Klaus Freiberg, Dr. A. Stefan Kirsten, Gerald Klinck, Daniel Riedl and Helene von Roeder amounts to € 160,000 in each case. Alternatively, the amount is paid out as cash remuneration. Due to the termination of the contracts of employment concluded with Dr. A. Stefan Kirsten and Gerald Klinck with effect from May 9, 2018 and the commencement of the contracts of employment concluded with Daniel Riedl and Helene von Roeder on May 9, 2018, the contributions are on a pro rata basis.

The fringe benefits include 50% of health and nursing care insurance contributions, albeit up to the amount of the maximum statutory employer's share at the most, and, in one case, a term life insurance policy. In the event of illness, salaries continue to be paid for a period of twelve months, but until the end of the employment contract at the latest. In the event of death, the company continues to pay the salary to the employee's surviving dependents for up to six months. The members of the Management Board are provided with a company car as well as communication means, which they have the right to use for private purposes. Travel expenses are reimbursed in line with the Vonovia/BUWOG Travel Expense Policy. An agreement was reached in Daniel Riedl's contract of employment with Vonovia that the company would reimburse the costs associated with travel from Vienna to Bochum and back, as well as any overnight accommodation in Bochum.

In addition, the contract of employment concluded with Helene von Roeder includes an agreement that, upon presentation of corresponding proof furnished by her previous employer, Helene von Roeder will receive compensation payments for all entitlements to variable remuneration that are not satisfied by her previous employer because the contractual relationship between her and that previous employer ended as a result of her move to Vonovia.

Based on the evidence presented, this results in a gross compensation payment of € 194,621.00 that will fall due for payment in three equal tranches: the first tranche will fall due in 2018, the second following the adoption of the annual financial statements for the 2018 fiscal year and the third following the adoption of the annual financial statements for the 2019 fiscal year.

Should the Management Board members be held liable for financial losses while executing their duties, this liability risk is, in principle, covered by the D&O insurance for Management Board members of the company. Vonovia follows the statutory requirements, which provide for a deductible of 10% of any claim up to an amount of one-and-a-half times the fixed annual remuneration for all claims in one fiscal year.

Bonus

The variable short-term remuneration is based on success criteria set in advance by the Supervisory Board as well as personal targets. The variable short-term remuneration is capped at € 700,000 for Rolf Buch as the Chairman of the Management Board, and at € 440,000 for Klaus Freiberg, Dr. A. Stefan Kirsten, Gerald Klinck, Daniel Riedl and Helene von Roeder. The Supervisory Board is authorized to increase or reduce the arithmetical entitlement to the variable short-term remuneration by up to 20% at its own due discretion. The variable short-term remuneration payable to Klaus Freiberg was increased by 20% (€ 88,000) on the basis of a one-off discretionary adjustment to the variable short-term remuneration approved by the Supervisory Board and was paid out in 2018. Due to the termination of the contracts of employment concluded with Dr. A. Stefan Kirsten and Gerald Klinck with effect from May 9, 2018, and the commencement of the contracts of employment concluded with Helene von Roeder and Daniel Riedl on May 9, 2018, the amounts for 2018 are granted on a pro rata basis. The success criteria state that 40% of the variable short-term remuneration depends on the achievement of the Group FFO target, 15% on the achievement of the Group Adjusted NAV/share target and a further 15% on the achievement of the Group EBITDA sales target. A further 30% of the variable short-term remuneration is related to the achievement of the personal targets agreed with the Supervisory Board.

The targets for the three quantitative success criteria and the target achievement levels for the 2018 calendar year are set out below:

STIP target achievement level	FFO 1	Adjusted NAV/share	EBITDA Sales
85% = budget	970.6	39.79	55.6
100%	999.6	40.74	63.9
Actual target achievement level	100%	100%	100%

The Management Board members receive the variable short-term remuneration one month after the adoption of the annual financial statements of Vonovia.

Long-term Incentive Plan

The variable long-term remuneration (long-term incentive plan, LTIP plan) is a plan which meets the requirements set out in the German Stock Corporation Act (AktG) and the German Corporate Governance Code and aims to ensure that the remuneration structure focuses on sustainable corporate development. The LTIP plan was introduced in 2015 and replaced the previous plan, which was launched at the time of the successful IPO.

The members of the Management Board are offered an annual remuneration component with a long-term incentive effect and a balanced risk-return profile in the form of notional shares ("performance shares") in line with the provisions of the LTIP plan.

The Supervisory Board offers the Management Board members a prospective target amount ("grant value") in EUR for each performance period, which corresponds to four years as a general rule. Rolf Buch is awarded performance shares with a grant value of € 1,900,000 a year respectively. Klaus Freiberg, Dr. A. Stefan Kirsten, Gerald Klinck, Daniel Riedl and Helene von Roeder are each awarded performance shares with a grant value of € 800,000 a year. Due to the termination of the contracts of employment concluded with Dr. A. Stefan Kirsten and Gerald Klinck with effect from May 9, 2018, and the commencement of the contracts of employment concluded with Helene von Roeder and Daniel Riedl on May 9, 2018, the grant values for 2018 are granted on a pro rata temporis basis in line with the contractual provisions.

The actual payout amount is calculated based on this grant value, the target achievement level during the performance period and the performance of Vonovia's shares, including dividends paid during the performance period. If the share price remains the same and the target achievement level comes to 100%, then the actual payout amount corresponds to the grant value (plus any dividends paid to the shareholders during the performance period).

The initial number of performance shares for the performance period in question corresponds to the grant value divided by the initial share price, rounded up to the next full share.

The overall target achievement level for a performance period is determined based on the following success targets:

a) Relative Total Shareholder Return (RTSR)
b) Development of NAV per share
c) Development of FFO 1 per share
d) Customer Satisfaction Index (CSI)

Each of the four success targets is assigned a weighting of 25%.

At the start of each performance period, the Supervisory Board sets an objective for each of the four success targets. If all of these objectives are reached, the target achievement level comes to 100%. It also sets a minimum value for each of the four success targets as the lower target corridor threshold. If this value is reached, the target achievement level comes to 50% ("minimum value"). The Supervisory Board also sets a maximum value. If this value is reached or exceeded, the target achievement level comes to 200% ("maximum value").

The Supervisory Board has the right and the obligation to appropriately adjust the calculation modalities if there are significant changes in the comparator group.

The reporting on the new LTIP plan is based on actuarial reports of an independent actuary.

At the end of each performance period, the initial number of performance shares is multiplied by the overall target achievement level and rounded up to the next full share. This multiplication produces the final number of performance shares.

The final number of performance shares is multiplied by the final share price, which, by definition, includes the total dividends paid per share during the performance period in relation to the final number of performance shares. This multiplication produces the cash payout amount.

The payout amount is limited to 250% of the grant value ("cap").

As far as Klaus Freiberg, Dr. A. Stefan Kirsten and Gerald Klinck are concerned, the performance period for 50% of the performance shares granted as part of the 2015 tranche ended on December 31, 2017, marking the end of a three-year period. The payment made in line with the contractual provisions, totaling € 1,000,000 (gross) for Klaus Freiberg and Dr. A. Stefan Kirsten and € 750,000 (gross) for Gerald Klinck, was made in the 2018 fiscal year.

The targets for the four success criteria for the 2015 tranche and the target achievement levels following the end of the performance period on December 31, 2018, are set out below:

Targets	Minimum value	Target value (100%)	Maximum value (200%)	Target Achievement
Relative Total Shareholder Return	-30%	0%	30%	94.95%
Growth of NAV per share (NAV per share on Dec. 31, 2014 = € 24.22)	1% growth rate p. a.	4% growth rate p. a.	6% growth rate p. a.	200%
Growth of FFO 1 per share (FFO 1 per share in the 2014 fiscal year = € 1.06)	4% growth rate p. a.	8% growth rate p. a.	10% growth rate p. a.	200%
Customer satisfaction (CSI in the 2014 fiscal year = 55 points)	+2 points	+6 points	+8 points	98.44

In 2013, Rolf Buch was granted 400,000 notional shares (SAR = stock appreciation rights) as part of the LTIP in force at that time. These shares were earned over five annual tranches of equal size. The notional shares were converted into payout amounts for each annual tranche on the basis of a formula laid down in the LTIP agreement. The fifth, and consequently the last, tranche under this LTIP was paid out to Rolf Buch in the 2018 fiscal year.

Due to the commencement of his contract of employment with Vonovia on May 9, 2018, Daniel Riedl was granted a one-off payment of € 15,111.11 to settle the LTI award made by BUWOG AG "LTIP March 2017" for the period from May 1–May 8, 2018, in full.

Upper Remuneration Thresholds

In addition to the provisions governing variable remuneration, upper thresholds have been contractually agreed for the remuneration paid to the Management Board as a whole in line with the recommendations set out in the German Corporate Governance Code (GCGC). As a result, the total remuneration for Rolf Buch is capped at a total of € 6,970,000 a year, excluding the claims under the LTIP dated June 14, 2013. The total remuneration for Klaus Freiberg, Dr. A. Stefan Kirsten, Gerald Klinck and Helene von Roeder is capped at € 3,500,000.00 respectively. The total remuneration for Daniel Riedl is capped at € 2,500,000.00 year in his Vonovia contract. The Austrian BUWOG contract concluded with Daniel Riedl does not include any corresponding provision. Due to the termination of the contracts of employment concluded with Dr. A. Stefan Kirsten and Gerald Klinck with effect from May 9, 2018, and the commencement of the contracts of employment concluded with Helene von Roeder and Daniel Riedl on May 9, 2018, the upper remuneration thresholds have been set on a pro rata basis.

Share Holding Provision

The Management Board members are obliged, for the duration of their appointment as members of Vonovia's Management Board, to hold shares in the company (restricted shares) in the amount of the annual fixed remuneration and to furnish evidence showing that this obligation has been met at the end of each fiscal year by presenting suitable documents to the Chairman of the Supervisory Board. The value of the shares to be held is to be redefined in the event of changes to the annual fixed remuneration/a share split. In the first four fiscal years after an individual's initial appointment as a Management Board member, the restricted shares can be accumulated on a pro rata basis.

Retirement Provision/Deferred Compensation Scheme

The pension entitlements of the Management Board members are based on the opportunity to pay an annual pension contribution into a deferred compensation scheme. Rolf Buch, Dr. A. Stefan Kirsten (with the exception of May 2018), Gerald Klinck and Helene von Roeder make use of this opportunity, whereas Klaus Freiberg opts for a payout as cash remuneration. In Daniel Riedl's case, the annual pension contribution made by BUWOG is paid into an external pension fund.

For each calendar year, the contractually agreed pension contribution is converted in accordance with the in-house "Pension Instead of Cash Remuneration" model and is converted into an annuity based on actuarial principles depending on the age of the individual in question.

In 2018, the pension contribution was € 966,356 for Rolf Buch, € 265,457 for Helene von Roeder, € 116,396 for Dr. A. Stefan Kirsten, € 192,180 for Gerald Klinck and an amount of € 103,188 for Daniel Riedl, corresponding to the pension fund contribution made.

Payments in the Event of Premature Termination of Management Board Duties

Payments to a Management Board member on premature termination of his or her contract, including fringe benefits, are contractually regulated to not exceed the value of two years' remuneration and are paid for no more than the remaining term of the employment contract (severance pay cap). Payments in the event of premature termination of a Management Board member's contract due to a change of control are limited to 150% of the severance pay cap.

After the collaboration with Dr. A. Stefan Kirsten was terminated prematurely by way of an amicable agreement, Dr. A. Stefan Kirsten received a gross severance payment of € 5,822,000 in accordance with the provisions set out in his contract of employment.

Following the termination of their contracts of employment, Rolf Buch and Daniel Riedl are subject to a twelve-month non-competition clause. The ex gratia payment for Rolf Buch corresponds to 75% of the contractual payments most recently received by him (incl. STI and LTIP) over a period of 12 months, while the ex gratia payment for Daniel Riedl amounts to a gross total of € 1,700,000 over the same period. The other Management Board members are not subject to any non-competition regulation.

Loans/Advances

The Management Board members were not granted any loans or advances.

Remuneration of the Management Board Within the Meaning of the German Corporate Governance Code

	Rolf Buch CEO				Klaus Freiberg COO			
Grants allocated in €	**2017**	**2018**	**2018 (Min)**	**2018 (Max)**	**2017**	**2018**	**2018 (Min)**	**2018 (Max)**
Fixed remuneration	1,150,000	1,150,000	1,150,000	1,150,000	600,000	600,000	600,000	600,000
Compensation payment	–	–	–	–	–	–	–	–
Cash remuneration	–	–	–	–	160,000	160,000	160,000	160,000
Fringe benefits	24,006	26,651	26,651	26,651	27,603	27,600	27,600	27,600
Total	1,174,006	1,176,651	1,176,651	1,176,651	787,603	787,600	787,600	787,600
Annual variable remuneration (bonus)	700,000	700,000	0	700,000	440,000	440,000	0	440,000
Multi-year variable remuneration (LTIP plan)								
2017–2020	2,040,633	–	–	–	859,224	–	–	–
2018–2021	–	1,902,392	0	4,750,000	–	801,007	0	2,000,000
Total	2,740,633	2,602,392	0	5,450,000	1,299,224	1,241,007	0	2,440,000
Pension expenses	949,253	966,356	966,356	966,356	–	–	–	–
Total remuneration	**4,863,892**	**4,745,399**	**2,143,007**	**6,970,000***	**2,086,827**	**2,028,607**	**787,600**	**3,500,000***

* This is the total contractually agreed upper threshold.
** This is the total contractually agreed upper threshold for the Vonovia contract.

	Dr. A. Stefan Kirsten CFO until May 9, 2018				Gerald Klinck CCO until May 9, 2018			
Grants allocated in €	**2017**	**2018**	**2018 (Min)**	**2018 (Max)**	**2017**	**2018**	**2018 (Min)**	**2018 (Max)**
Fixed remuneration	600,000	215,217	215,217	215,217	600,000	215,217	215,217	215,217
Compensation payment	–	–	–	–	–	–	–	–
Cash remuneration	–	4,058	4,058	4,058	–	–	–	–
Fringe benefits	32,723	24,105	24,105	24,105	24,503	7,317	7,317	7,317
Total	632,723	243,380	243,380	243,380	624,503	222,534	222,534	222,534
Annual variable remuneration (bonus)	440,000	157,826	0	157,826	440,000	157,826	0	157,826
Multi-year variable remuneration (LTIP plan)								
2017–2020	859,224	–	–	–	859,224	–	–	–
2018–2021	–	333,753	–	834,383	–	333,753	0	834,383
Total	1,299,224	491,579	0	992,209	1,299,224	491,579	0	992,209
Pension expenses	367,388	116,396	116,396	116,396	491,198	192,180	192,180	192,180
Total remuneration	**2,299,335**	**851,355**	**359,776**	**1,458,333***	**2,414,925**	**906,293**	**414,714**	**1,458,333***

* This is the total contractually agreed upper threshold.

	Helene von Roeder CFO since May 9, 2018				Daniel Riedl CDO since May 9, 2018		
2017	**2018**	**2018 (Min)**	**2018 (Max)**	**2017**	**2018**	**2018 (Min)**	**2018 (Max)**
–	386,957	386,957	386,957	–	386,957	386,957	386,957
–	64,874	64,874	64,874	–	15,111	15,111	15,111
–	–	–	–	–	103,188	103,188	103,188
–	13,157	13,157	13,157	–	18,932	18,932	18,932
–	**464,988**	**464,988**	**464,988**	**–**	**524,188**	**524,188**	**524,188**
–	283,768	0	283,768	–	283,768	0	283,768
–	–	–	–	–	–	–	–
–	516,592	0	1,291,480	–	516,592	0	1,291,480
–	**800,360**	**0**	**1,575,248**	**–**	**800,360**	**0**	**1,575,248**
–	265,457	265,457	265,457	–	–	–	–
–	**1,530,805**	**730,445**	**2,257,246***	**–**	**1,324,548**	**524,188**	**2,099,436****

Inflow in €	Rolf Buch CEO 2017	Rolf Buch CEO 2018	Klaus Freiberg COO 2017	Klaus Freiberg COO 2018
Fixed remuneration	1,150,000	1,150,000	600,000	600,000
Compensation payment	–	–	–	–
Cash remuneration	–	–	160,000	160,000
Fringe benefits	24,006	26,651	27,603	27,600
Total	**1,174,006**	**1,176,651**	**787,603**	**787,600**
Annual variable remuneration (bonus)	694,750	700,000	433,400	528,000
Multi-year variable remuneration (LTIP)				
4. 2017 tranche	2,855,444	–	2,150,265	–
5. 2018 tranche	–	3,568,511	–	–
Multi-year variable remuneration (LTIP plan)				
2015–2017	–	–	–	1,000,000
Total	**3,550,194**	**4,268,511**	**2,583,665**	**1,528,000**
Pension expenses	949,253	966,356	–	–
Total remuneration	**5,673,453**	**6,411,518**	**3,371,268**	**2,315,600**

Remuneration of the Supervisory Board

The remuneration of the Supervisory Board is determined by the shareholders at the Annual General Meeting and is regulated in Article 13 of the Articles of Association of Vonovia.

The current Supervisory Board remuneration system is based on the resolution passed by the Annual General Meeting on June 9, 2013.

Each member of the Supervisory Board receives annual fixed basic remuneration of € 100,000. The Chairman of the Supervisory Board receives double this amount and a Deputy Chairman receives one-and-a-half times this amount.

The members of the Audit Committee receive additional annual fixed remuneration of € 40,000; the Audit Committee Chairman receives double this amount. Supervisory Board members who are members of one or more other Supervisory Board committees that have acted at least once a year receive additional annual remuneration of € 20,000 per committee; in the case of the Committee Chairman € 40,000.

The sum total of all aforementioned remuneration plus remuneration for membership of Supervisory Boards and comparable supervisory bodies of Group companies must not exceed an amount of € 300,000 per calendar year and Supervisory Board member.

The company reimburses the Supervisory Board members for appropriate expenses incurred due to the exercising of their office. VAT is reimbursed by the company to the extent that the Supervisory Board members are eligible to separately invoice VAT and have exercised such right.

Helene von Roeder CFO since May 9, 2018		Daniel Riedl CDO since May 9, 2018		Dr. A. Stefan Kirsten CFO until May 9, 2018		Gerald Klinck CCO until May 9, 2018	
2017	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**
–	386,957	–	386,957	600,000	215,217	600,000	215,217
–	64,874	–	15,111	–	–	–	–
–	–	–	103,188	–	4,058	–	–
–	13,157	–	18,934	32,723	24,105	24,503	7,317
–	**464,988**	**–**	**524,190**	**632,723**	**243,380**	**624,503**	**222,534**
–	283,768	–	283,768	423,500	146,667	403,700	157,826
–	–	–	–	2,150,265	–	–	–
–	–	–	–	–	–	–	–
	-		-		1,000,000	-	750,000
-	283,768	-	283,768	2,573,765	1,146,667	403,700	907,826
-	265,457	-	-	367,388	116,396	491,198	192,180
-	**1,014,213**	**-**	**807,958**	**3,573,876**	**1,506,443**	**1,519,401**	**1,322,540**

The remuneration of the Supervisory Board of Vonovia breaks down as follows for each member – on a pro rata basis according to the length of service on the Supervisory Board:

	Fixed remuneration		Remuneration for committee work		Total remuneration	
in €	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**
Supervisory Board members in office as of December 31, 2018						
Jürgen Fitschen [3, 6] (since May 9, 2018) Chairman since May 9, 2018	–	133,333	–		–	
Prof. Dr. Edgar Ernst [1, 3, 6] (since June 18, 2013) Deputy Chairman since May 9, 2018, Chairman until May 9, 2018	166,667	170,833	100,000	105,000	266,667	275,833
Burkhard Ulrich Drescher [2] (since December 12, 2014)	100,000	100,000	40,000	40,000	140,000	140,000
Vitus Eckert [2] (since May 9, 2018)	–	66,667	–	26,667	–	93,334
Dr. Florian Funck [2] (since August 21, 2014)	100,000	100,000	40,000	40,000	140,000	140,000
Dr. Ute Geipel-Faber [6] (since November 1, 2015)	100,000	100,000	20,000	20,000	120,000	120,000
Daniel Just [6] (since June 2, 2015)	100,000	100,000	20,000	20,000	120,000	120,000
Hildegard Müller [4] (since June 18, 2013)	100,000	100,000	20,000	20,000	120,000	120,000
Prof. Dr. Klaus Rauscher [4] (since August 1, 2008) Deputy Chairman until May 9, 2018	116,667	120,833	20,000	20,000	136,667	140,833
Dr. Ariane Reinhart [4] (since May 13, 2016)	100,000	100,000	20,000	20,000	120,000	120,000
Clara-Christina Streit [4, 5] (since June 18, 2013)	100,000	100,000	60,000	60,000	160,000	160,000
Christian Ulbrich [6] (since August 21, 2014)	100,000	100,000	20,000	20,000	120,000	120,000
Former Supervisory Board members						
Hendrik Jellema [2] (until May 9, 2018)	100,000	41,667	40,000	16,667	140,000	58,334
Dr. Wulf H. Bernotat [2, 3, 6] (until August 26, 2017) Chairman	166,667	–	33,333	–	200,000	–
Total					**1,783,334**	**1,781,667**

(1) Chairman of the Audit Committee
(2) Member of the Audit Committee
(3) Chairman of the Executive and Nomination Committee
(4) Member of the Executive and Nomination Committee
(5) Chairman of the Finance Committee
(6) Member of the Finance Committee

All remuneration is payable after the expiry of each fiscal year. Supervisory Board members who are Supervisory Board members or members of a committee of the Supervisory Board for only part of a fiscal year receive corresponding pro rata remuneration rounded up to the full month.

Furthermore, Vonovia has taken out a liability insurance (D&O insurance) for the members of the Supervisory Board. Vonovia follows the statutory requirements, which provide for a deductible of 10% of any claim up to an amount of one-and-a-half times the fixed annual remuneration for all claims in one fiscal year.

Opportunities and Risks

Structure and Instruments

Vonovia has implemented a comprehensive risk management system that is designed to identify, measure and manage all of the opportunities and risks that are relevant to the company. This reduces risk potential, secures the company's survival, promotes its strategic further development and supports sustainable action.

Whereas **risks** are defined as possible developments or events in the future that could result in a negative forecast/deviation from targets for the company, **opportunities** are seen as positive deviations from an expected outcome.

In the 2018 fiscal year, the risk management system that applied in 2017 was continued. The companies acquired in 2018 were incorporated into the risk process. The reporting threshold for individual risks was increased from € 10,000 to € 500,000.

In organizational terms, risk management is still assigned directly to the Management Board. The Management Board has overall responsibility for the risk management system. It decides on the organizational structures and workflows of risk management and provision of resources. It approves the documented risk management findings and takes account of them in steering the company. The Audit Committee of the Supervisory Board monitors the effectiveness of the risk management system. The risk manager (who is also the Head of Controlling at the same time) reports to the Chief Financial Officer (CFO). Executives belonging to the first level below Management Board level are appointed as **risk owners** and, in this role, assume responsibility for the identification, assessment, documentation and communication of all material risks in their area of responsibility.

Risk management is responsible for:

> Raising/increasing risk awareness,
> Identifying and assessing risks early on,
> Communicating risks to the relevant decision-makers within the Group,
> Supporting the budget process by supplying information that is relevant to risk,
> Taking suitable measures to manage risks and, where appropriate, taking appropriate counteraction and
> Meeting the statutory requirements by putting the risk management principles into practice and ensuring appropriate documentation.

In the interests of the key stakeholders, customers, employees, suppliers, investors and society, the Management Board pursues a conservative, security-focused risk strategy that also takes the sustainability of our actions into account.

Each and every Vonovia employee is encouraged to act in a risk-conscious manner, i. e., to fully clarify the risk situation in their area of responsibility on the one hand and to handle any risks identified in a responsible manner on the other. Unreasonably high risks are to be avoided.

The risk manager coordinates the recording, assessment, documentation and communication of the risks as part of the risk management process. They trigger the risk management process, consolidate the risk reports of the risk owners and prepare the report for the Management Board and the Supervisory Board. This system helps to ensure the continued existence of the company and to achieve the company's goals. This allows the Management Board to identify and assess material risks within the company and in the company's environment systematically and in good time at all times, as well as to take appropriate counteraction.

In order to take the opportunities and risks into account, the company uses an integrated management approach based on five key pillars.

5 Pillars of Risk Management at Vonovia

Management Board

(Strategy, Requirements/Goals, Control Environment, Monitoring)

1 Performance	2 Compliance	3 Risk Management	4 Internal Control System	5 Internal Audit
Controlling > Budget > Forecast > Results	**Compliance Officer** > Guidelines, regulations > Contracts > Capital market compliance > Data protection	**Controlling** > Risk management process > Risk reporting	**IT/Internal Audit** > Process documentation **Accounting** > Accounting-based internal control system	**Internal Audit** > Process-oriented audits > Risk-oriented audits
Operational Areas > Performance management > Technical integrity	**Operational Areas** > Ensuring compliance	**Operational Areas** > Risk identification and evaluation > Risk control	**Operational Areas** > Documentation of core processes > Control activities > Control self assessment	**Operational Areas** > Process improvements

(1) Performance Management

Differentiated and high-quality corporate planning and appropriate reporting on deviations between the actual and target operational and financial key figures from Controlling constitute the backbone of the early warning system used at the company. Analyses are made of the business performance compared with the plans approved by the Supervisory Board and the previous year. Furthermore, a forecast is prepared regularly which takes appropriate account of the effect of any potential risks and opportunities on the development of business. Reporting includes detailed monthly controlling reports to the Management Board and the Supervisory Board. The operational business is described in regular reports on key figures, some of which are drawn up on a weekly basis. On the basis of these reports and the deviations that they highlight between the actual and target figures, countermeasures are implemented and then checked in subsequent reporting periods to ensure they are effective.

(2) Compliance Management

Compliance describes the lawful action of the company, its bodies and employees. For the Management Board, compliance with statutory law and the observance of internal guidelines are the basis of corporate management and culture. Compliance is to ensure the integrity of employees, customers and business partners and avoid possible negative consequences for the company.

The management and monitoring of Vonovia is based on the relevant statutory requirements, the Articles of Association and the rules of procedure for the Supervisory Board and the Management Board. They form the basis for the company's internal rules and guidelines, adherence to which is monitored by a central compliance management system and administered by a guideline management team that forms part of the Legal department.

The guidelines describe clear organizational and monitoring structures with specified responsibilities and appropriately installed checks. The legally compliant behavior of all employees in the business processes is ensured by suitable control procedures and supervision by managers. The company has also put in place a compliance management system based on IDW (Institute of Public Auditors in

Germany) standard PS 980 and has appointed a central compliance officer, whose remit focuses on identifying compliance risks, taking suitable measures to avoid and detect these risks and taking appropriate action in response to compliance risks (compliance program).

In terms of specific content, the main features of the compliance management system are Vonovia's Code of Conduct, which focuses on ethical values and statutory requirements and reinforces the personal responsibility of employees, Vonovia's Compliance Guidelines and a Business Partner Code setting out requirements that the company's contractual partners have to meet. An external ombudsman is available to all employees and business partners as a confidant in respect of compliance issues.

(3) Risk Management

Vonovia's risk management system ensures the early identification, assessment, control and monitoring of all material risks within the Group that exceed the short-term financial risks dealt with by the Performance Management pillar and could pose a risk not only to the company's results of operations and net assets, but also to intangible assets such as the company's reputation. This means that potential risks which might impair the value and/or development of the company can be identified at an early stage. Early warning indicators that are specific to the environment and the company are taken into account, as are the observations and regional knowledge of our employees across Germany. The range of early warning indicators is extensive and includes, by way of example, the technical monitoring of the condition of our buildings and the residential environment, the monitoring of the socioeconomic composition of our tenant structure, the analysis of demographic trends and recording of regional migration patterns, the monitoring of adherence to overall regulatory requirements, the monitoring of quoted rents and quoted prices, as well as their development in the portfolio and in newly built properties in our regional residential real estate submarkets, the analysis of developments relating to the regulations governing rental prices, the monitoring of our peers and their business activities, the observation of construction technology trends and developments in the field of building optimization, modernization and new construction, demand analyses on the development of property-related services, monitoring environmental influences, analyses and forecasts relating to the development of the financial markets as well as of interest and exchange rates.

The risk owners use the systematic risk inventory process described above to identify and update the risks in their respective areas of responsibility on a regular basis. Once validated by the risk manager, these risks are split into **five risk categories**: "economic environment and market-related risks," "regulatory and legal risks," "risks related to business," "financial risks" and "other risks." The potential amount of loss and the probability of occurrence are classified within set ranges before action (gross) and after action (net) for each risk and documented in a Group-wide risk register. As with the period used for medium-term corporate planning, the observation period used is five years. Based on the probability of occurrence and the amount of loss arising from the gross and net risk assessments, a score is established for each risk and the risks are prioritized accordingly. The ten risks with the highest score make up the "Top 10 risks."

Risk Classification

Category	Probability of occurrence	in %	Amount of loss	in € million
I	Unlikely	< 20	Low	< 5
II	Possible	21 to 50	Moderate	5 to 25
III	Likely	51 to 80	Considerable	25 to 250
IV	Very likely	> 80	High	> 250

The risk management system and the risk register are updated and refined on a regular basis and are also adjusted to reflect changes at the company. The effectiveness of the risk management system is examined in regular audits.

Risk management is documented regularly in a half-yearly risk report, which is made available to the Management Board. The Audit Committee of the Supervisory Board is informed twice a year at its regular meetings about the risk situation. The risk management system is described in a risk reporting policy that is updated on an annual basis.

This reporting system ensures that both managers and supervisory bodies are comprehensively informed and provides relevant operational early warning indicators. In this way, misguided developments can be recognized in good time and counteraction taken at an early stage. Should material risks occur unexpectedly, they are reported directly to the Management Board on an ad hoc basis.

(4) Internal Control System

The Internal Control System (ICS) comprises the basic principles, procedures and regulations aimed at supporting the effectiveness and cost-effectiveness of our business activities, ensuring due and proper and reliable internal and external accounting and ensuring compliance with the legal provisions that apply to the company.

All key processes at Vonovia are recorded and documented centrally with the help of a process management software solution. In addition to the relevant process steps, this documentation highlights key risks and controls in the interests of a process-oriented internal control system. It provides the binding basis for subsequent evaluations, audits and reporting to the executive bodies of Vonovia SE on the effectiveness of the ICS within the meaning of Section 107 (3) sentence 2 of the German Stock Corporation Act (AktG).

Overall responsibility for structuring and implementing the ICS lies with Vonovia's Management Board. The Management Board delegates this responsibility to process and control owners. The Internal Audit department provides support in the establishment and further technical development of the ICS in addition to performing its primary audit duties in full. IT is responsible for providing technical and administrative support for the documentation software.

The aim of the accounting-related internal control and risk management system is to ensure due and proper and legally compliant financial reporting pursuant to the relevant regulations. The accounting-related internal control and risk management system is embedded in the overarching Group-wide risk management system.

Organizationally, responsibility for preparing the financial statements lies with the Chief Financial Officer's department and, in particular, with the Accounting department. Therefore, the Accounting department exercises the authority to lay down guidelines for the application of relevant accounting standards as well as for the content and timing of the steps in the financial statements preparation process.

From the organizational and systems side, the preparation of the financial statements for all companies included in the consolidated financial statements as well as the preparation of the consolidated financial statements themselves are performed in the central shared service center functions of the Accounting department, which ensures consistent and continual application of accounting policies in a uniform financial statement preparation process. Furthermore, through the shared service center functions it is ensured that both content and organizational changes in the requirements are incorporated in the financial statement preparation process.

The financial statements of the companies included in the consolidated financial statements – with the exception of Sweden and France – are located in an IT SAP environment. They are subject largely to uniform charts of account, accounting guidelines, processes and process controls. The requirement of separation of functions and the four-eye principle are taken appropriate account of with preventive and also subsequent checks. The subsidiaries in Sweden and France report their data as part of a structured data recording process.

The relevant financial statement data of the individual companies are made available to the SAP consolidation module via an integrated, automated interface with comprehensive validation rules for further processing and preparation of the consolidated financial statements. An authorization concept is in place granting access to the financial statements in line with the respective job profile of the employee.

Newly acquired companies are incorporated into the internal control environment as part of a structured integration process, which includes integration in terms of both IT systems and processes relating to financial statements.

Once the financial statements have been drawn up, the annual and consolidated financial statements, including the consolidated management report, are submitted to the Audit Committee of the Supervisory Board. The Committee then makes a recommendation for the Supervisory Board to adopt or approve them. This examination may include the auditor's presence at the committee meeting and is subject to the auditor's report. The Audit Committee is continually involved in the establishment and refinement of the accounting-related internal control and risk management system.

(5) Internal Audit

The system and control environment, business processes and the internal control system are audited on a regular basis by Vonovia's Group Audit department. The annual audit plan is based on a risk-oriented evaluation of all relevant audit areas of the Group (audit universe) and is approved by the Management Board/the Supervisory Board's Audit Committee.

The audits conducted throughout the year focus on assessing the effectiveness of the control and risk management systems, identifying process improvements in order to minimize risks and ensuring the sustainability of Vonovia's business activities. Corresponding ad hoc reviews are also performed in consultation with the compliance officer and the Management Board. The internal reports are presented to the Management Board, the individuals responsible for the area reviewed, the risk manager and the compliance officer on a regular basis. The Audit Committee receives a quarterly summary of the audit results and measures. The implementation status of the agreed measures is monitored on an ongoing basis after the relevant due dates and is reported to the Management Board and the Audit Committee on a quarterly basis. A follow-up audit is conducted to ensure that any serious findings have been remedied.

The Internal Audit department also reviews the Sustainability Report and the Non-financial Declaration.

Current Risk Assessment

Overall Assessment of the Risk Situation by the Management

A scheduled risk inventory was taken in both the first and second half of the 2018 fiscal year based on a risk scoring system in line with the internal risk guidelines. The risk scoring model used in the previous year was applied unchanged in 2018. The resulting risk report was presented to the Management Board and the Audit Committee. There were no unscheduled ad hoc risk reports in 2018. The risk situation of the companies acquired in the 2018 fiscal year, BUWOG and Victoria Park, was reviewed as part of the risk inventory taken in the second half of the year and was incorporated into the reporting system.

A total of 141 individual risks were identified for Vonovia in the second half of 2018, 14 more than in 2017. The increase is largely due to the specific risks associated with the new business activities in Austria relating to project development for newly constructed residential properties (Development) as a result of the BUWOG acquisition. As far as the overall assessment of the risk situation is concerned, there was a slight year-on-year increase in the risk assessment for Vonovia in the 2018 fiscal year. From today's point of view, Vonovia's Management Board has not identified any risks which the company cannot suitably combat or which may jeopardize the Group's results of operations, net assets and/or financial position. Both our business model and our diversified capital market instruments ensure that we have the greatest possible degree of independence from economic fluctuations.

At its ordinary meeting for the fourth quarter of 2018, the Audit Committee approved the risk report submitted by the Management Board.

The following overview shows the top 10 risks in 2018:

No.	Risk	Risk category	Net potential impact
1	Changes to the regulatory framework	Regulatory and legal risks	High
2	Recoverability of goodwill	Economic environment and market-related risks	High
3	Public image/reputation and customer satisfaction	Economic environment and market-related risks	Considerable
4	Incorrect determination of the fair value of our properties	Risks related to business	High
5	Incorrect acquisition decisions	Risks related to business	Considerable
6	Unfavorable interest rate development	Financial risks	Considerable
7	Unfavorable refinancing	Financial risks	Considerable
8	Development risks	Risks related to business	Considerable
9	Tax risks due to regulatory changes/operational tax risks	Regulatory and legal risks	Moderate
10	Construction risks (e.g. fire protection, building materials, etc.)	Risks related to business	Moderate

The number of risks within the top 10 risks with a high potential net impact came to three risks at the end of 2018, as in 2017. The number of risks with a material potential net impact came to five risks at the end of 2018, as in 2017. The number of risks with a moderate potential net impact came to two risks at the end of 2018, as in 2017.

Overall, Vonovia's Management Board continues to see no risks to the Group's survival.

Regulatory and Legal Risks

Risk 1: Vonovia keeps a very close eye on planned changes in the legal framework, particularly with regard to tenancy, construction and environmental law, so that it can react to any binding changes in a timely manner. Any changes in the legal environment that are relevant to our business activities, such as regulations regarding rental amounts/developments, provisions regarding modernization measures as well as restrictions on modernization opportunities or provisions, that result in the incurrence of costs in the event of a property sale may be detrimental to Vonovia's business activities.

Risk 9: Changes in the overall tax law environment relating to Vonovia's operating business or its acquisition strategy, or the incorrect application/implementation of tax law regulations and provisions within the operating business could have an adverse impact on the development of the company's results. This also includes the tax groups for income tax and VAT purposes established by Vonovia. The fulfillment of the individual tax group requirements is part of regular company tax audits. If these tax groups are not recognized in the last instance, this could result in a significant or high tax burden, plus interest.

In order to be able to pick up on potential changes in the overall statutory framework early on, Vonovia is involved in active dialog with policymakers and other stakeholders. Vonovia is also represented in associations and monitors the legislative procedure and recent court decisions on a regular basis.

Economic Environment and Market-related Risks

Risk 2: The acquisitions made have resulted in considerable stated goodwill for Vonovia, which may be associated with certain risks. The value of this stated goodwill depends largely on the development of market interest rates, average market and sector developments as well as the cash flow from the Group that can be generated in the future by the cash-generating units. Any impairment in this goodwill would be recognized in the income statement. This means that it would have a direct impact on the net assets and results of operations, but no direct impact on the company's liquidity. With regard to possible "triggering events," we monitor interest rate and real estate value developments in particular, and perform an annual impairment test.

Risk 3: Reputation is an aspect that is crucially important to Vonovia. A poor image is not consistent with Vonovia's mission statement and could hinder our business activities in local markets. This is why we are committed, at all times, to timely and open communication and direct dialog with all groups who have legitimate interests with regard to conflicts such as the affordability of living space or modernization or new construction projects in the neighborhoods in which our properties are located. We react to justified objections accordingly. Furthermore, on the financing side, there is the risk that the raising of capital could be impaired. Vonovia takes reputation and customer satisfaction very seriously and counteracts this risk with a large number of measures. For example, customer satisfaction is measured on a quarterly basis and is monitored using the performance indicator CSI in order to identify potential problems at an early stage. Improvements to the process workflows and quality initiatives increase customer satisfaction. Active public relations work helps to communicate the efforts made to improve customer satisfaction and enhance Vonovia's reputation.

Risks Related to Business

A whole range of risks can arise for Vonovia in connection with the performance of its business activities.

Risk 4: Vonovia applies the fair value measurement model. The determination of the fair values of our housing stocks, for example, is subject to assumptions that may deviate from our current expectations. Should, for example, the estimate of the microlocation of the buildings and the quality of the macrolocation deteriorate or the current low interest rate level start to increase, the fair value of our entire real estate portfolio would decrease. As far as our investment properties are concerned, changes in value are recognized in the income statement as increases or decreases in value. This means that they have a direct impact on the company's net assets, financial position and results of operations. We counter the associated risk of error with a separate department for internal determination of fair value. This department works in line with the standards that apply to professional property appraisers. Furthermore, our fair values are checked or calculated on neutral terms by professional, external and independent valuation companies that, in turn, work in line with professional rules and regulations. In the 2018 fiscal year, the appraisal of the German and Austrian properties was performed by CBRE GmbH, while the Swedish properties were assessed by Savills Sweden AB. The results of the internal appraisal have been reported for the portfolio in Germany, excl. BUWOG. The results of the external property appraiser deviate from the internal valuation result by less than 0.1%. The results of the external property appraiser have been applied to the balance sheet for the portfolio in Austria and Sweden, as well as for BUWOG's portfolio in Germany. These results were reviewed by the in-house valuation department beforehand.

Risk 5: Risks can arise for Vonovia in connection with acquisition decisions. These risks can include, for example, excessive purchase prices, unexpected cases of liability, greater indebtedness, higher interest expenses, and challenges with respect to integrating acquisitions into the procedural landscape and achieving anticipated synergies. Furthermore, portfolios or real estate companies that can be acquired in the future may not develop as favorably as expected.

By applying complex, quality-assured investment models during the investment decision process, we counter the risk of uneconomic real estate acquisitions. These models not only take the purchase price and the financing cost into consideration but also regional scenarios for regular maintenance and the development of rents. We also use the in-depth market knowledge of our local regional managers to assess potential acquisition portfolios. Vonovia's response to the risk associated with procedural integration is a systematic, structured and tried and test integration process.

Risk 8: The integration of BUWOG could result in additional project development risks for Vonovia due to the development business. Project development work is focusing on Berlin, Hamburg and Vienna. Real estate development activities are associated with significant risks as a matter of course. These risks are manifold. By way of example, incorrect market and competitive assessments, delays in the planning approval process, incorrect location and project development plans, contamination risks, requirements linked to preservation orders or environmental requirements, subcontractor default risks, warranty issues, construction defects or defective construction materials or structural components can give rise to further risks.

In projects involving the extensive use of general contractors and subcontractors, default scenarios can result in financial risks and legal liability. To counterbalance this, corresponding master agreements are signed with the general contractors and subcontractors, and the market and subcontractors are monitored continuously. Cost, performance and deadline checks are also performed on a regular basis for the development projects in order to identify risks in a timely manner and counteract their effects.

Risk 10: Insufficient information regarding the materials used in the construction of the residential properties or the implementation of new or updated structural regulations, e.g. fire protection measures, could give rise to business risks, especially in connection with the acquisition of real estate portfolios. This is because a full appraisal and integration of larger real estate portfolios, in particular, requires time. Vonovia counters this risk by performing inspections on its properties, conducting regular building safety checks taking all of the construction law provision into account, checking for any hazardous materials and developing fire protection concepts for gradual implementation in large-scale projects, involving experts to optimize the structural measures and performing regular assessments on special buildings. Implementation is based on clearly defined instructions and responsibilities, and as a standardized integration process.

We do not believe that climate change gives rise to any significant direct risks at the moment, e.g. caused by extreme weather conditions with heavy rain and the potential for floods.

Financial Risks

Risk 6/7: The expansive monetary policy pursued by the European Central Bank (ECB) and the decision made by the United Kingdom (UK) to leave the European Union (EU) mean that there is still increased demand for bonds issued by continental European issuers. As a result, refinancing conditions and property valuations remain attractive.

The outcome and implications of the UK's exit from the EU are impossible to forecast at the moment. In particular, however, the less favorable economic outlook could have a negative impact on both general credit demand and the quality of existing credit exposures. Both could encumber the banking sector and, as a result, on the financial system as a whole. We concur with a large number of analysts and market participants and expect receptive borrowing markets and attractive financing conditions to continue due to an economic outlook that remains attractive, albeit slightly less so than in the previous year, and based on the levels of liquidity that are still available. Given the global nature of the borrowing markets, we do not currently expect the ongoing Brexit negotiations to have any long-term impact in this regard either. With a level of debt that is consistently in the Pfandbrief-eligible range and their investment grade rating, Vonovia's debt instruments will remain a sought-after investment even if liquidity levels drop.

An escalation in the potential trade wars could put a damper on the macroeconomic climate and the global growth outlook, possibly leading to negative repercussions on the capital markets. The reputation of German real estate stocks as a safe haven could be enhanced as a result of Brexit if investors opt to pull capital out of real estate stocks in the UK and seek alternative investment opportunities.

To limit the financial risks, we continuously monitor the financial markets and are also in constant contact with many different market players. Furthermore, we continually evaluate all financing options available on the capital and banking markets. We expect to be able to refinance the necessary volumes by making use of all financing instruments in the future as well. This is based on our investment grade rating, the balanced maturity profile of the financial liabilities, the versatility of the financing instruments that we can use and our standing as a regular and reliable issuer on the capital market.

Our external loans are normally subject to loan conditions that are customary on the market (covenants) which, on the one hand, require adherence to defined key financial ratios but can also, for example, restrict the sale of properties or prescribe minimum selling prices. Vonovia also has to adhere to the conditions required to maintain the credit rating awarded by rating agencies, which also relate mainly to compliance with certain key financial ratios. As a result, adherence to the relevant conditions is monitored and reported on an ongoing basis.

Some of our borrowings are loans granted by promotional banks, which limit rent increases and thus our business options. Here, we pay strict attention to compliance with all covenants but use any scope available to us.

As part of the financial risks, we are also exposed to a liquidity risk. Our liquidity management is based on daily cash management of our bank accounts, a weekly financial flexibility status and rolling liquidity planning on a monthly basis, allowing for the relevant restrictions. The regular positive cash flows from our core business do not indicate any particular liquidity risk in the forecast period.

Overall, as of the reporting date, Vonovia SE has sufficient liquid funds and potential financing options to guarantee the Vonovia Group's ability to pay at all times.

The liabilities with variable interest rates expose the Group to a cash-effective interest rate risk. The company uses derivative financial instruments in order to limit or eliminate these risks. The purpose of these financial instruments is to hedge interest rate risks in connection with existing loans and they may never be used for speculation. For a description of the derivative financial instruments, we refer to the Notes to the consolidated financial statements, specifically note [44] (Cash Flow Hedges and Stand-alone Interest Rate Swaps).

Other Risks

Vonovia could be affected by other risks that do not fall into the categories described above. By way of example, Vonovia could be exposed to risks resulting from residual pollution, including mining subsidence damage, soil conditions or wartime ordnance. Moreover, Vonovia is the owner and/or property manager of a large number of buildings in the Ruhr area which are situated in the area of near-surface mine workings where the overburden layers are only thin. These properties are predominantly located in the Essen/Bochum/Dortmund region. These mine workings may represent risks of damage to the surface and/or structures (e.g., traffic routes, buildings, etc.). Vonovia counters this economic and liability risk by having inspections of all buildings in the area of near-surface mining works systematically conducted by external experts. On the basis of the inspection findings and the opinions of external experts, the properties classified as subject to risks are examined for mining damage, which is immediately rectified where necessary. Proof of stability and public safety is then confirmed in an expert opinion.

At the time this report was drawn up, there were no risks in connection with future development that were identified as potentially posing a risk to the survival of Vonovia SE, a major company included in the scope of consolidation or the Group as a whole. Compared with the previous year, the estimated probability of occurrence and/or possible financial impact of some risk areas/some opportunity areas has increased slightly. Nevertheless, there are no fundamental changes to the risk or opportunity situation on the whole.

Current Assessment of the Main Opportunities

Economic Environment and Market-related Opportunities

The demand for accommodation is largely determined by demographic factors and the economic climate. In general, households in Germany are becoming increasingly smaller. One- to two-person households have made up the largest group for several decades now, and their combined share has increased almost continuously. According to the 2017 household forecast performed by the Federal Statistical Office (DESTATIS), the number of private households will continue to increase between 2015 and 2035. In the future, this development will also be driven by an increase in one- to two-person households, while the number of households in Germany with three or more members will drop on the whole between 2015 and 2035. Given recent trends towards more marriages and births, the sharp decline witnessed to date in the number of households with three or more members is likely to slow in the future. This development will vary considerably from region to region: While the number of households in the western German federal states is likely to increase by 7%, and by as much as 13% in the city states, between 2015 and 2035, the number of households in the eastern German federal states is set to drop by around 3%. In view of these trends, demand and market opportunities are likely to increase for existing small- and medium-sized apartments, which represent Vonovia's core product.

The German population has been growing for several years now, albeit with different growth rates from region to region. At local level, population growth fueled by migration from abroad is being supplemented by internal migration within Germany. Major cities and large metropolitan areas, as well as the areas surrounding them, are the winners of this trend. According to information supplied by the German Association of German Housing and Real Estate Companies (GdW), Germany's 66 large independent cities grew by a total of 1.35 million inhabitants between 2010 and 2016. Despite a recent drop in internal migration, population levels in Germany's major cities are still increasing considerably, bolstered by migration from abroad. The trend towards the reurbanization of the country's major cities continues unabated, but as the capacities available to absorb the increasing influx of people are becoming increasingly scarce, individuals looking for a home are turning to areas on the outskirts. As a result, migration to areas located just outside of major cities has increased considerably in recent years.

As large parts of Vonovia's residential real estate portfolio are located in major cities and metropolitan areas, Vonovia could also benefit from these trends.

In addition, the continued strained situation on the housing market in certain conurbations may lead to government decisions to extend housing or rent subsidies. This may have positive effects on Vonovia's business activities in some regions.

Opportunities Arising From the Business

With the acquisition of BUWOG and Victoria Park in 2018, Vonovia started to expand its business activities to include attractive markets in other European countries. The continuation of this corporate strategy could open up further growth opportunities in these and other European countries. Our acquisition strategy is aimed at observing the markets, evaluating specific acquisition opportunities and tapping into new markets. We pursue our acquisitions as and when opportunities present themselves. Acquisitions have to be expected to increase value before they are conducted. Such increases in value are generally assessed in terms of strategic suitability, increases in FFO per share and a neutral impact on the NAV per share. Furthermore, an acquisition must not pose any risk to the stable BBB+ long-term corporate credit rating.

Our new Development segment creates further expansion opportunities for the company. With the long-standing project development experience of the BUWOG team, we will be developing more contemporary apartments with a promising future in high-growth locations, further expanding our development business. As part of these efforts, we will be forging ahead with both project developments for sale to third parties and construction for our own portfolio. We also believe that new construction on our own properties using modular construction or conventional construction methods, as well as measures to add extra stories, offer additional opportunities for further expanding our portfolio.

We provide a significant proportion of the repair and maintenance services for our residential properties with our own craftsmen's organization. We are also continually increasing the proportion of building and apartment upgrading services we provide ourselves via our craftsmen's organization. We intend to extend the scope of these services to all kinds of technical work and to our entire residential portfolio and thus bring added value from these services to Vonovia. We are also coordinating our new construction activities via our craftsmen's organization and working on new construction concepts such as modular construction solutions.

In addition, we have expanded the range of services provided by our own employees to cover upkeep and the modernization of a building's surroundings. We plan to continually increase the proportion of work we carry out ourselves in this area, too.

By offering our tenants the option of targeted modernization measures in their own homes, we can boost customer satisfaction and help promote longer-term loyalty to the company. This also allows us to further improve the quality of the homes we offer.

At the end of 2018 we had supplied around 297,000 households with a direct cable TV signal. We expect to further extend this business in the coming years and also provide broadband data access.

The expansion of smart submetering, the radio-based recording of heating costs, is progressing as planned. By the end of 2018, the retrofitting of more than 130,000 apartments had been commissioned. We plan to further expand these business activities in our portfolio over the next few years.

Our initial experience in the field of energy supplies, i. e. the distribution of electricity and gas to our customers, was positive in the 2018 fiscal year. The market response to our offering has been positive. We expect further opportunities to arise in this area as we expand the business volume.

Vonovia manages its housing stocks throughout Germany using standardized systems and processes. The acquisition of further residential real estate portfolios offers the opportunity to generate additional value through economies of scale on the property management side by reducing the costs per residential unit. Therefore, we watch the market very closely for acquisition portfolios and assess them on the basis of our strict success criteria.

We also see targeted small-scale "tactical" acquisitions of single or multiple buildings in specific locations as well as targeted measures in the residential environment as an opportunity to improve the nature and quality of whole residential districts and thus increase the appeal of our apartments for our customers and the value of our residential properties. There is also the option of constructing new buildings on land that we own and adding additional floors to existing buildings in order to expand Vonovia's housing supply in metropolitan areas, which also allows us to help reduce the short supply of housing in urban locations. Targeted monitoring, the early involvement of tenants and cooperation projects with social, cultural and city institutions allow Vonovia to make ideal use of the economies of scale available to it in order to achieve sustainable neighborhood development and maintain/increase the value of its properties in these neighborhoods.

Financial Opportunities

Vonovia's financing depends on the conditions on the capital market, which are very favorable at the moment due to the low interest rates. Furthermore, we strive to improve the financing costs while maintaining our credit rating performance indicators and the desired financing structure. The internal determination of the fair values of our residential properties not only takes account of building-specific parameters but also location features in the valuation. Given the possibility, described above, of a further increase in demand with the supply of affordable accommodation remaining virtually the same, our fair values could increase further beyond the increase in the value of our properties seen in this fiscal year. This would have a direct positive impact on the results of operations and our company's stated level of debt.

Forecast Report

Expected Development of the Economy as a Whole and the Industry

Germany

According to the German Institute for Economic Research (DIW), the German economy has made a strong start to 2019. The economy is still growing and the research institutes continue to predict a sustained recovery, albeit with a slower pace of growth. They do not believe that a recession is on the cards given that the domestic economic forces appear to remain intact. While the Kiel Institute for the World Economy (IfW) and the German Institute for Economic Research (DIW) expect GDP to increase by 1.8% and 1.6% respectively in 2019, the ifo institute believes that the period of weakness triggered by the automotive industry and the manifold uncertainty surrounding the global economy are part of a longer-term trend and has made a more pronounced downward correction to its growth forecast for 2019, bringing it down to 1.1%, with the German federal government predicting growth to the tune of 1.0%. This means that the economy would appear to have reached the latter stage of the upswing, which has been ongoing for nine years now. Nevertheless, the general consensus is that the German economy is still in relatively good shape. The IfW expects to see considerable impetus again now that the production and supply problems affecting the automotive industry due to the transition to the new WLTP testing regime have been resolved and also thanks to the end of the low water levels that had hindered inland waterway transport and, as a result, logistical supplies and production.

Various fiscal measures that will provide a significant boost to household purchasing power came into force at the start of 2019, such as the reduction in the rate of contribution to unemployment insurance, the 50/50 financing of health insurance by employers and employees and the "mothers' pension." As a result, private consumption is likely to benefit from strong impetus. Industry is unlikely to be one of the main driving forces behind the economy as foreign sales markets are losing momentum and, in addition, many areas are operating at their capacity limit. This is also likely to result in a slowdown in job creation, also due to the short supply of labor. Those consumer-related sectors that are not export-oriented, on the other hand, including the construction industry and the trades segment in particular, still expect to achieve growth. The economic institutes expect inflation based on consumer prices of 2.1% (IfW)/2.2% (Ifo). The unemployment rate is expected to slip to below the 5.0% mark (IfW: 4.9%, Ifo: 4.8%).

The international trade conflicts are cause for concern. The disputes between the U.S. and China are already putting a damper on growth in the key Chinese economy. German exporters, automotive manufacturers and other investors will have to brace themselves for lower sales in China, one of their major export destinations. The trade dispute could also fuel a more rapid increase in inflation due to higher import prices. The situation is further exacerbated by the uncertainty surrounding Brexit. In the event of a "hard Brexit," the reintroduction of customs duties and border controls would likely have a huge impact on the British economy and, as a result, on the eurozone. Italy's debt policy also has the potential to usher in turbulent times on the financial markets, as the high risk premiums on Italian government bonds pose a risk to economic development. Although the ECB is not likely to implement an initial rate hike in 2019 in response to the weaker developments, it remains extremely vigilant.

Looking ahead to 2020, the IfW and the ifo insitute predict growth of 1.8%/1.6%, inflation based on consumer prices of 1.8%/2.0% and an unemployment rate of 4.7%/4.6%.

Housing Market: Rent and Prices Expected to Rise Again in 2019

The upswing on the real estate market is entering its tenth year, meaning that it has reached a mature phase, according to experts at Helaba Landesbank Hessen-Thüringen. Continued low interest rates and robust economic growth – Helaba predicts GDP growth of 1.5% in its outlook for 2019 – will keep the real estate sector in excellent order in 2019. According to Helaba, the increase in rents and purchase prices on the German residential property market is primarily due to the widening gap between supply and demand in the country's conurbations in particular – a situation that is unlikely to change to any considerable degree in 2019.

Experts from Deutsche Bank Research (DB Research) expect to see only a slight drop in price and rent momentum at the very most in 2019, with residential real estate prices once again likely to increase at a faster rate than consumer prices. The German Tenants' Association (Deutscher Mieterbund) expects the standard local comparative rent to rise by between 3% and 5% in Germany's cities in 2019. Bolstered by positive wage and income development, price developments are, according to DB Research, only likely to put a slight damper on demand, and even a further increase in the 5- to 10-year mortgage rates would only push demand down ever so slightly. While residential property remains affordable on the interest side of things according to DB Research, this affordability will presumably decrease further in 2019 and the market is characterized by considerable differences from region to region. Although a turnaround in interest rates appears to be a very likely prospect in 2019, Immobilienscout 24 does not expect to see an immediate turnaround in the price trend at a nationwide level. Rather, the property "supercycle" is expected to taper off slowly. The subdued growth in completed apartments will continue in 2019. DB Research expects 315,000 (Helaba 320,000) apartments to be completed in 2019 as against around 300,000 in 2018. This is likely to widen the gap between supply and demand even further. Based on the subdued growth momentum, DB Research does not expect the additional annual supply to exceed the additional annual demand for living space of at least 350,000 apartments until 2022. As DB Research believes that it will take a good few years for the real estate boom to reach the end of its cycle, the risk of a bubble forming in the current cycle has increased considerably. The IMF and Deutsche Bundesbank report that, following the dynamic increase witnessed over the last few years, prices for apartments in some German cities are above the level that would be expected given the fundamental data, which points to an overvaluation. The empirica bubble index for Germany had already surpassed the "zero threshold" back in the third quarter of 2017, as against the "bubble-free" reference year of 2004. The index as a whole increased further as against the prior-year quarter in the fourth quarter of 2018. Rents and purchase prices in 278 out of 402 administrative districts and self-governing cities are no longer developing in tandem. According to empirica, too many apartments are being built in 18 districts. The bubble index indicates a medium to high risk for 223 districts.

In addition to the overall housing policy goal to build 1.5 million apartments, the German federal government has planned, and in some cases already taken, various measures as part of a housing initiative. Whereas the housing subsidy for families with children was introduced in September 2018 and the German Tenancy Law Amendment Act (Mietrechtsanpassungsgesetz) came into force on January 1, 2019, the draft bill on the introduction of special write-downs for the construction of rented apartments had not yet been passed by the German upper house (Bundesrat) in December 2018.

As far as the planned changes to real estate transfer tax in cases involving share deals are concerned, the finance ministers of the federal states have now, according to the Ministry of Finance of the federal state of Hesse, agreed on legislative texts that are to be included in the legislative procedure at federal level. The intention is to create greater hurdles for share deals. Other legislative projects that are relevant to the real estate sector and will be discussed in 2019, according to the German Association of Real Estate Consultants, Agents, Managers and Experts (IVD), include a reform of both the rent indices and the land tax system.

Austria

After exports and the domestic economy, driven by high consumer momentum and strong investment, resulted in the highest rate of GDP growth since 2011, at 2.7%, a slowdown in the pace of growth had already emerged in 2018. The Austrian economy is in the latter stage of a boom. In 2019, the Austrian Institute of Economic Research (WIFO) predicts slower, but still robust, economic growth of 2.0%, with GDP growth still tipped to come in at 1.8% in 2020. Bank Austria predicts lower economic growth of 1.9% in 2019 and 1.5% in 2020. Austria is countering the global slowdown and associated mounting demands for the export industry with solid domestic demand, in particular sustained strong private consumption, which will play a key role in cushioning the blow dealt by the unfavorable external factors influencing the domestic economy both this year and next. By contrast, investment growth is only likely to be moderate going forward. As the positive development on the labor market looks set to continue, the WIFO predicts a further drop in the unemployment rate, based on the national definition, to 7.3% in 2019 (Bank Austria: 7.5%) and 7.2% in 2020 (Bank Austria 7.5%). The WIFO predicts that inflation will stabilize at 2.0%. Austria is exposed to the same risks as those facing Germany, as described above. These include, in particular, the impact of the trade conflict between the US and China and the political uncertainty in the eurozone, such as the implications of Brexit and the global economic slowdown.

Overall conditions on the real estate market remain positive after 2018 was characterized by low interest rates, an ongoing good supply of properties despite a slight drop and very high demand for real estate among owner-occupiers and investors alike. Experts from the real estate service provider RE/MAX Austria do not expect to see any significant change in these conditions in 2019 either. According to the RE/MAX Real Estate Future Index – which consolidates the expert opinions of around 560 real estate professionals throughout Austria – the demand for real estate is expected to increase at a faster rate than supply in 2019, meaning that real estate prices will continue to increase slightly overall, although the rate of increase will be lower than in previous years. Apartment purchase prices are likely to increase at a faster rate than rents that can be freely agreed. The biggest increase in demand and prices is expected to relate to land to build on. The RE/MAX experts estimate that rents and prices for condominiums will continue to increase both in city centers and on the outskirts of cities, whereas the prices for condominiums in country municipalities will remain virtually unchanged and rents will falter. They describe the market for townhouses and apartment complexes as moving towards an equilibrium and expect to see price growth in this segment, too. According to the real estate service provider EHL, rents in Vienna are expected to increase by around 1.5% in 2019, with purchase prices for properties in average locations expected to rise by between around 2.75% and 4%. EHL believes that the Viennese residential property market will be hit by the new building regulations, e.g. including requirements relating to a higher proportion of subsidized apartments in cases in which areas are rezoned for residential development, and a judgment passed by the Austrian Supreme Court (OGH) on location surcharges. In the short and medium term, the impact on the supply of apartments will be a negative one, which could also put an end to the slight easing of the situation regarding apartment prices and rents. Looking at the residential investment market, EHL believes that demographic change – in particular the forecast of population growth – and the ongoing trend towards urbanization will result in the sort of long-term stable development that appeals to buyers that place particular emphasis on security, creating an extremely sustainable investment scenario. The fundamental price indicator of the OeNB for residential real estate shows a further increase in possible overvaluation for Vienna and Austria overall in the second quarter of 2018, compared with the previous quarter.

Sweden

Economic researchers at NIER believe that the Swedish economy is currently in the midst of a slowdown. After predicted GDP growth of 1.9% in 2018, the NIER expects GDP growth at market prices of 1.4% in 2019 and 1.6% in 2020. Growth in domestic demand will soften in 2019, especially as a result of a sustained decline in housing investment. Swedbank takes a more positive view of expected economic growth in its outlook and expects to see growth of just under 2.0% in both 2019 and 2020. While real estate investment and private consumption will continue to slow, the outlook for public-sector investment remains fairly solid and the business climate still appears to be stable despite mounting uncertainty. Although the Swedish economy is close to its capacity limit, inflation and wage growth are still relatively subdued. Given the trend towards increasing protectionism, however, the export risks are increasing for Sweden, too, also due to growing uncertainty on the country's main sales market, Europe, as a result of Brexit and Italy's budget woes. The predicted population growth will increase the working-age population as well. As only low employment growth appears to be on the cards, unemployment is expected to increase slightly in 2019. NIER has also made a slight downward adjustment to its forecast for wage growth in 2019. The Swedish Riksbank is planning further rate hikes in steps of 0.5% – with the next increase to 0.25% scheduled for December 2019 and a further increase to 0.75% likely to come a year later. All in all, while the economy is expected to flatten out due to lower domestic demand, the drop in exports and the weak Swedish krona, a marked downturn does not appear to be likely.

There is still a housing shortage in most parts of the country. The National Board of Housing, Building and Planning's 2018 Housing Market Survey reveals that 243 of Sweden's 290 municipalities have a housing shortage and 195 municipalities also predict a shortage of housing in three years. According to Riksbank's Business Survey (November 2018), property companies are reporting a strong market for both premises and rental housing. However, as regards sales of tenant-owned apartments, a clear decrease is visible and housing developers are being particularly impacted by the declining demand for newly produced tenant-owned apartments. According to the European Commission, it appears that the recent surge in construction activity may be overly skewed towards high-end developments including in some regional markets where end-user demand for such properties tends to be especially limited. As a result, there is a risk of oversupply in specific segments of the housing market, while a chronic shortage of affordable housing near major economic hubs remains. Sweden's rental market is regulated with restrictions on rent increases, although rents can be increased if investments are made in measures to increase the standard of the properties. After housing investment climbed to historically high levels at the beginning of 2018, it is decreasing again. According to NIER, this is partly due to housing prices falling in late 2017 and early 2018. The drop in housing prices has meant that construction starts have fallen sharply, and housing investment is expected to decline in 2019. Meanwhile, Helaba expects residential real estate prices to stabilize due to the continued low interest rates and positive situation on the labor market. Despite the recent drops, the European Commission believes that some indicators point towards prices that remain above the level that appears justified based on the fundamental data. While CBRE reports that the growth outlook remains broadly positive, according to NIER there is a risk of further decreases in house prices. According to Swedbank, newly built condominiums for owner-occupiers are still under pressure in the metropolitan areas.

Expected Development of the Group

Comparison of the Forecast with the Results from the 2018 Fiscal Year

The 2018 fiscal year was very successful for Vonovia on the whole. We were systematic in the implementation of our corporate strategy. With the acquisitions of BUWOG and Victoria Park, we were able to further expand our leading market position and make our business more international. We also implemented our investment program aimed at modernizing our portfolio as planned and made further improvements to efficiency when managing our properties. We expanded our Value-add segment further, in particular by expanding our craftsmen's and residential environment organization. We also set up our energy supply business in 2018. We offer our tenants across Germany electricity and gas supplies via Vonovia Energie Service GmbH.

In the 2018 fiscal year, we achieved a significant Group-wide improvement in our most meaningful performance indicators (according to our management system 2017), namely DRS 20, Adjusted NAV per share and FFO 1. We outperformed the forecast for Adjusted NAV per share and FFO 1 that we published in the 2017 Annual Report considerably and adhered to the forecast most recently published in the interim statement for the third quarter of 2018, while the CSI was down slightly year-on-year.

The table below provides an overview of the development of our forecast performance indicators and the target achievement level for these indicators in the 2018 fiscal year. It also shows the 2019 forecast for the new performance indicators, Adjusted EBITDA Total and Group FFO.

	Actual 2017	Forecast for 2018*	Forecast for 2018 in the 2018 Q3 Report	Actual 2018	Forecast 2019
Adjusted NAV/share	€ 38.49	suspended	approx. € 45	€ 44.90	suspended
FFO 1*	€ 919.5 million	€ 960–980 million	€ 1,050–1,070 million	€ 1,064.7 million	–
FFO 1/share	€ 1.90	€ 1.98–2.02	€ 2.03–2.07	€ 2.06	–
Adjusted EBITDA Total	€ 1,319.7 million			€ 1,554.8 million	€ 1,650–1,700 million
Group FFO	€ 975.0 million			€ 1,132.0 million	€ 1,140–1,190 million
Group FFO/share	€ 2.01			€ 2.18	€ 2.20–2.30
CSI	Increase of 1.6%	Similar CSI as 2017	Down slightly year-on-year	Decrease of 2.6%	Up slightly year-on-year
Rental income	€ 1,667.9 million	€ 1,660–1,680 million	€ 1,890–1,910 million	€ 1,894.2 million	€ 2,020–2,070 million
Organic rent increase	4.2%	Increase of 4.6–4.8%	Increase of approx. 4.4%	4.4%	Increase of approx. 4.4%
Vacancy rate	2.5%	< 2.5%	< 2.5%	2.4%	–
Maintenance incl. capitalized maintenance	€ 346.2 million	approx. € 360 million	approx. € 410 million	€ 430.4 million	–
Modernization and new construction	€ 778.6 million	approx. € 1,000 million	approx. € 1,000 million	€ 1,139.0 million	€ 1,300–1,600 million
Number of units sold Recurring Sales	2,608	approx. 2,300	approx. 2,800	2,818	approx. 2,500
Step-up Recurring Sales	32.6%	approx. 30%	approx. 35%	35.5%	approx. 30%
Number of units sold Non-core Disposals	9,172	Continue opportunistic sales	approx. 13,000	12,284	–
Step-up Non-core Disposals	7.9%	>0%	> 20%	23.0%	–

* FFO 1 adjusted incl. transaction holding costs; prognosis according to the Group management report for 2017 without BUWOG, Victoria Park.
** Based on the current number of shares in each case, 2019: 518.1 million.

Our **Adjusted NAV** per share came in at € 44.90 in 2018, up by 16.7% on the prior-year value of € 38.49. This includes effects from fair value adjustments of investment properties in the amount of € 3.5 billion in total. The distribution of the dividend – taking into account the scrip dividend (acceptance rate 40.9%) of € 378.8 million to our shareholders in 2018 had the opposite effect. Our EPRA NAV increased by 22.6%, from € 21,284.6 million at the end of 2017 to € 26,105.0 million as of December 31, 2018.

FFO 1 rose by 15.8% to € 1,064.7 million in 2018 (2017: € 919.5 million), putting it within the most recent forecast range value of between € 1,050 million and € 1,070 million, and well ahead of the forecast range value of between € 960 million and € 980 million announced at the beginning of the year in the 2017 Annual Report. This is largely due to the acquisition of BUWOG and Victoria Park, and business developments that were, in general, better than expected at the time the 2017 Annual Report was published.

Mainly due to acquisitions, the **Adjusted EBITDA Total** rose from € 1,319.7 million in 2017 to € 1,554.8 million.

In the 2018 fiscal year, **Group FFO** increased by 16.1%, from € 975.0 million to € 1,132.0 million.

Customer satisfaction measured using the performance indicator CSI was slightly lower than the level we were aiming for. The CSI for 2018 was down slightly as against the 2017 fiscal year.

Forecast for the 2019 Fiscal Year

Our forecast for the 2019 fiscal year is based on the corporate planning for the Vonovia Group as a whole described in the chapter on our management system. Our plans for 2019 have taken appropriate account of possible opportunities and risks associated with the company's future development, meaning that these plans reflect realistic expectations regarding portfolio development and Vonovia's development. The forecast data below is based on Vonovia's portfolio as it stood when the plans for 2019 were drawn up in the fall of 2018.

Furthermore, the Group's further development remains exposed to general opportunities and risks. These have been described in the chapter on opportunities and risks.

The forecast for the main performance indicators was based on the accounting principles used in the annual financial statements, with the adjustments described elsewhere in the management report being made.

The planning for 2019 is based on the above-mentioned assumptions on the development of the overall economy and on the development of the real estate market in Germany.

In the 2019 fiscal year, we plan to further expand our leading position on the German residential real estate market and continue with our successful business strategy. In particular, we will be further expanding our investment program in the areas of modernization and new construction, as well as our activities in the Value-add segment. In 2019, we will remain faithful to the sales strategy of apartment privatization that we have been pursuing to date.

We plan to further improve our sustained operational earnings power in the 2019 fiscal year. The modernization measures taken in the 2018 fiscal year will also help us to achieve this. We expect our **adjusted EBITDA total** to increase to between € 1,650 million and € 1,700 million in 2019. We predict that **Group FFO** will increase to somewhere in the range of € 1,140 million and € 1,190 million in 2019. This corresponds to a Group FFO per share – based on an unchanged number of shares – of € 2.20 to € 2.30. The forecast does not take account of any further larger acquisitions of real estate portfolios. In the 2019 fiscal year, we will continue to forge ahead with our efforts to improve our customer service. We expect the **CSI** to increase slightly in 2019 as against the customer satisfaction index for 2018. We expect the value of our company to increase further in 2019 and predict a moderate increase in Adjusted NAV/share.

We will continue to invest a considerable amount in our real estate portfolio in 2019. In the 2019 fiscal year, we plan to spend around € 1,300 million to € 1,600 million on modernization measures, including new construction.

As far as rental development is concerned, we expect the monthly in-place rent per square meter to increase organically by around 4.4% in 2019. All in all, we expect rental income in the Rental segment to come to between € 2,020 million and € 2,070 million in 2019.

In the Recurring Sales segment, we have concentrated on sustainable disposals of condominiums. In the privatization business, we expect around 2,500 apartments to be sold in 2019 with a step-up on the fair value of these apartments of around 30%.

We again plan to allow our shareholders to participate adequately in our company's success in 2018 and intend to propose a dividend of € 1.44 per share.

Bochum, Germany, February 25, 2019

Management Board

Rolf Buch
(CEO)

Klaus Freiberg
(COO)

Helene von Roeder
(CFO)

Daniel Riedl
(CDO)

FINANCIAL STATEMENTS

As of the reporting date, the Group had a stable financial and net assets situation. With total assets up by € 11.9 billion to € 49.4 billion, the equity ratio comes to 39.8%. The property assets, including owner-occupied properties and assets held for sale, amount to € 44.2 billion. Cash and cash equivalents came to € 0.5 billion at the end of the year.

Consolidated Income Statement

January 1 until December 31

in € million	Notes	2017	2018
Income from property letting		2,344.0	2,647.9
Other income from property management		47.6	60.3
Income from property management	7	**2,391.6**	**2,708.2**
Income from disposal of properties		1,206.4	1.097.5
Carrying amount of properties sold		-1,136.0	-933.7
Revaluation of assets held for sale		81.1	68.5
Profit on disposal of properties	8	**151.5**	**232.3**
Income from the disposal of properties (Development)		–	225.1
Cost of sold properties		–	-181.8
Profit on the disposal of properties (Development)	9	**–**	**43.3**
Net income from fair value adjustments of investment properties	10	3,434.1	3,517.9
Capitalized internal expenses	11	458.1	608.2
Cost of materials	12	-1,176.4	-1,381.0
Personnel expenses	13	-416.0	-513.1
Depreciation and amortization	14	-372.2	-737.9
Other operating income	15	110.7	132.2
Impairment losses on financial assets		-23.0	-21.6
Gains/losses resulting from the derecognition of financial assets measured at amortized cost		2.0	1.0
Other operating expenses	16	-246.8	-300.0
Net income from investments accounted for using the equity method		0.0	1.8
Financial income	17	46.8	32.1
Financial expenses	18	-353.0	-449.1
Earnings before tax		**4,007.4**	**3,874.3**
Income taxes	19	-1,440.5	-1,471.5
Profit for the period		**2,566.9**	**2,402.8**
Attributable to:			
Vonovia's shareholders		2,410.7	2,266.5
Vonovia's hybrid capital investors		40.0	40.0
Non-controlling interests		116.2	96.3
Earnings per share (basic and diluted) in €	20	**5.06**	**4.48**

Consolidated Statement of Comprehensive Income

January 1 until December 31

in € million	2017	2018
Profit for the period	2,566.9	2,402.8
Cash flow hedges		
Change in unrealized gains/losses	-168.0	0.4
Taxes on the change in unrealized gains/losses	57.3	3.0
Net realized gains/losses	199.8	3.1
Taxes due to net realized gains/losses	-64.7	-1.0
Total	24.4	5.5
Available-for-sale financial assets		
Changes in the period	133.4	–
Taxes on changes in the period	-2.4	–
Total	131.0	–
Currency translation differences		
Changes in the period	0.9	16.3
Net realized gains/losses	–	-0.7
Total	0.9	15.6
Items which will be recognized in profit or loss in the future	156.3	21.1
Equity instruments at fair value in other comprehensive income		
Changes in the period	–	60.0
Taxes on changes in the period	–	-0.9
Total	–	59.1
Actuarial gains and losses from pensions and similar obligations		
Change in actuarial gains/losses, net	5.1	-7.7
Tax effect	-1.8	2.7
Total	3.3	-5.0
Items which will not be recognized in profit or loss in the future	3.3	54.1
Other comprehensive income	159.6	75.2
Total comprehensive income	**2,726.5**	**2,478.0**
Attributable to:		
Vonovia's shareholders	2,570.2	2,340.3
Vonovia's hybrid capital investors	40.0	40.0
Non-controlling interests	116.3	97.7

Consolidated Balance Sheet

Assets

in € million	Notes	Dec. 31, 2017	Dec. 31, 2018
Intangible assets	21	2,637.1	2,943.2
Property, plant and equipment	22	177.6	250.4
Investment properties	23	33,182.8	43,490.9
Financial assets	24	698.0	888.8
Other assets	25	13.8	12.2
Deferred tax assets		10.3	54.1
Total non-current assets		36,719.6	47,639.6
Inventories	27	6.2	8.8
Trade receivables	28	234.9	493.1
Financial assets	24	0.5	0.8
Other assets	25	98.4	114.4
Income tax receivables	26	47.9	170.2
Cash and cash equivalents	29	266.2	547.7
Real estate inventories	30	–	307.1
Assets held for sale	31	142.6	105.9
Total current assets		796.7	1,748.0
Total assets		**37,516.3**	**49,387.6**

Equity and liabilities

in € million	Notes	Dec. 31, 2017	Dec. 31, 2018
Subscribed capital		485.1	518.1
Capital reserves		5,966.3	7,183.4
Retained earnings		8,471.6	9,942.0
Other reserves		157.8	236.7
Total equity attributable to Vonovia's shareholders		**15,080.8**	**17,880.2**
Equity attributable to hybrid capital investors		1,001.6	1,001.6
Total equity attributable to Vonovia's shareholders and hybrid capital investors		**16,082.4**	**18,881.8**
Non-controlling interests		608.8	782.3
Total equity	32	**16,691.2**	**19,664.1**
Provisions	33	607.2	616.7
Trade payables	34	2.4	4.4
Non-derivative financial liabilities	35	12,459.4	17,437.5
Derivatives	36	8.7	69.8
Liabilities from finance leases	37	94.7	94.7
Liabilities to non-controlling interests	38	24.9	24.2
Financial liabilities from tenant financing	39	–	56.1
Other liabilities	40	65.3	42.5
Deferred tax liabilities		5,322.6	7,231.9
Total non-current liabilities		**18,585.2**	**25,577.8**
Provisions	33	376.5	450.5
Trade payables	34	130.7	239.1
Non-derivative financial liabilities	35	1,601.1	2,698.5
Derivatives	36	4.4	41.4
Liabilities from finance leases	37	4.6	4.7
Liabilities to non-controlling interests	38	9.0	9.0
Financial liabilities from tenant financing	39	7.7	104.7
Other liabilities	40	105.9	597.8
Total current liabilities		**2,239.9**	**4,145.7**
Total liabilities		**20,825.1**	**29,723.5**
Total equity and liabilities		**37,516.3**	**49,387.6**

Consolidated Statement of Cash Flows

January 1 until December 31

in € million	Notes	2017	2018
Profit for the period		2,566.9	2.402.8
Net income from fair value adjustments of investment properties	10	-3,434.1	-3,517.9
Revaluation of assets held for sale	8	-81.1	-68.5
Depreciation and amortization	14	372.2	737.9
Interest expenses/income		326.3	440.1
Income taxes	19	1,440.5	1,471.5
Results from disposals of investment properties		-70.4	-163.8
Results from disposals of other non-current assets		0.2	0.2
Other expenses/income not affecting net income		0.6	–
Change in working capital		-123.7	-3.4
Income tax paid		-51.4	-166.4
Cash flow from operating activities		**946.0**	**1,132.5**
Proceeds from disposals of investment properties and assets held for sale		1,165.2	1,054.2
Proceeds from disposals of other assets		16.4	7.4
Payments for acquisition of investment properties	23	-1,043.0	-1,358.8
Payments for acquisition of other assets	23/25	-80.2	-211.5
Payments for acquisition of shares in consolidated companies, in due consideration of liquid funds	4	-1,412.0	-3,387.7
Interest received		3.5	3.9
Cash flow from investing activities		**-1,350.1**	**-3,892.5**

in € million	Notes	2017	2018
Capital contributions on the issue of new shares (including premium)	32	–	995.8
Cash paid to shareholders of Vonovia SE and non-controlling interests	32	-277.9	-401.1
Payments to hybrid capital investors	32	-40.0	-40.0
Proceeds from issuing financial liabilities	35	2,920.5	5,064.2
Cash repayments of financial liabilities	35	-3,248.7	-1,901.6
Payments for transaction costs in connection with capital measures	35	-12.5	-54.9
Payments for other financing costs		-47.9	-22.3
Payments for the acquisition of shares in non-controlling interests		-137.1	-309.0
Proceeds for the sale of shares of consolidated companies		276.6	16.2
Interest paid		-303.5	-305.8
Cash flow from financing activities		**-870.5**	**3,041.5**
Net changes in cash and cash equivalents		**-1,274.6**	**281.5**
Cash and cash equivalents at the beginning of the period		1,540.8	266.2
Cash and cash equivalents at the end of the period*	29	**266.2**	**547.7**

* Thereof restricted cash € 57.2 million (Dec. 31, 2017: € 36,3 million).

Consolidated Statement of Changes in Equity

in € million	Subscribed capital	Capital reserves	Retained earnings	Other reserves: Cash flow hedges	Other reserves: Equity instruments at fair value in other comprehensive income
As of Jan. 1, 2017	466.0	5,334.9	6,665.4	-93.2	94.7
Profit for the period			2,410.7		
Other comprehensive income					
Changes in the period			3.2	-110.7	131.0
Reclassification affecting net income				135.1	
Total comprehensive income			2,413.9	24.4	131.0
Capital increase	19.1				
Premium on the issue of new shares		634.3			
Transaction costs in connection with the issue of shares		-2.9			
Dividend distributed by Vonovia SE			-525.1		
Acquisition of conwert					
Changes recognized directly in equity			-82.6		
As of Dec. 31, 2017	**485.1**	**5,966.3**	**8,471.6**	**-68.8**	**225.7**
As of Jan. 1, 2018	485.1	5,966.3	8,471.6	-68.8	225.7
Profit for the period			2,266.5		
Other comprehensive income					
Changes in the period			-5.1	3.4	59.1
Reclassification affecting net income				2.1	
Total comprehensive income			2,261.4	5.5	59.1
Capital increase	33.0				
Premium on the issue of new shares		1,224.4			
Transaction costs in connection with the issue of shares		-7.5			
Dividend distributed by Vonovia SE			-640.3		
Acquisitions (mainly Victoria Park and BUWOG)					
Changes recognized directly in equity		0.2	-150.7		
As of Dec. 31, 2018	**518.1**	**7,183.4**	**9,942.0**	**-63.3**	**284.8**

Currency translation differences	Total	Equity attributable to Vonovia's shareholders	Equity attributable to Vonovia's hybrid capital investors	Equity attributable to Vonovia's shareholders and hybrid capital investors	Non-controlling interests	Total equity
	1.5	12,467.8	1,001.6	13,469.4	419.0	13,888.4
		2,410.7	40.0	2,450.7	116.2	2,566.9
0.9	21.2	24.4		24.4	0.1	24.5
	135.1	135.1		135.1		135.1
0.9	156.3	2.570.2	40.0	2,610.2	116.3	2,726.5
		19.1		19.1		19.1
		634.3		634.3		634.3
		-2.9		-2.9		-2.9
		-525.1		-525.1		-525.1
					127.3	127.3
		-82.6	-40.0	-122.6	-53.8	-176.4
0.9	**157.8**	**15,080.8**	**1,001.6**	**16,082.4**	**608.8**	**16,691.2**
0.9	157.8	15,080.8	1,001.6	16,082.4	608.8	16,691.2
		2,266.5	40.0	2,306.5	96.3	2,402.8
15.0	77.5	72.4		72.4	1.4	73.8
-0.7	1.4	1.4		1.4		1.4
14.3	78.9	2,340.3	40.0	2,380.3	97.7	2,478.0
		33.0		33.0		33.0
		1,224.4		1,224.4		1,224.4
		-7.5		-7.5		-7.5
		-640.3		-640.3		-640.3
					554.0	554.0
		-150.5	-40.0	-190.5	-478.2	-668.7
15.2	**236.7**	**17,880.2**	**1,001.6**	**18,881.8**	**782.3**	**19,664.1**

Notes

Accounting Policies

1 Principles of the Consolidated Financial Statements

Vonovia SE is incorporated and domiciled in Germany. Its registered office is located in Bochum.

The consolidated financial statements as of and for the year ended December 31, 2018, have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted in the EU. In addition, the supplementary commercial law provisions under Section 315e (1) of the German Commercial Code (HGB) have been observed. These are the first consolidated financial statements to which IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" have been applied. Changes to key accounting methods are set out in note [2] Adjustment to Prior-year Figures.

The consolidated financial statements have been prepared on the basis of amortized cost except for investment properties, assets held for sale, derivative financial instruments, equity instruments at fair value under other comprehensive income, plan assets and financial liabilities arising from binding share purchase offers to minority shareholders. These are measured at their fair value or, in the case of financial liabilities arising from binding share price offers, at the minimum purchase price if it is higher than the fair value. The income statement has been prepared using the nature of expense method.

These consolidated financial statements are presented in euros, which is the Group's functional currency. Unless stated otherwise, all figures are shown in million euros (€ million).

The Management Board of Vonovia SE drew up the consolidated financial statements on February 25, 2019.

2 Adjustment to Prior-year Figures

Changes were made to segment reporting in the 2018 fiscal year due to changes in the company's internal organization and reporting structure. The prior-year figures were adjusted accordingly as a result of these changes. For further information, we refer to Chapter [48] "Segment Reporting."

In the fiscal year, the income statement shows impairment losses on financial assets and gains and losses resulting from the derecognition of financial assets measured at amortized cost separately in accordance with IFRS 9. The previous year was adjusted accordingly.

Financial liabilities from tenant financing are shown separately in the balance sheet in the fiscal year. The previous year was adjusted accordingly.

3 Consolidation Principles

Business Combinations

An entity shall account for each business combination by applying the acquisition method if it obtains control. All hidden reserves and charges of the company acquired are disclosed as part of the necessary remeasurement. Any excess of the cost of a business combination over Vonovia's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities, following the disclosure of hidden reserves and charges, is recognized as goodwill in the balance sheet. The consideration transferred at the time of the acquisition and the identifiable net assets that are acquired are measured at fair value as a general rule. Transaction costs are recognized as an expense immediately insofar as they do not relate to capital procurement costs or costs relating to the issue of debt capital.

Subsidiaries

Subsidiaries are companies that are controlled by the Group. The Group controls an investee if it is exposed to risks or has rights to variable returns from its involvement with the investee and has the ability to use its power of control over the investee to influence the level of these returns. In the process of full consolidation, the assets and liabilities of a subsidiary are included in the consolidated financial statements in their entirety. Subsidiaries are included in the consolidated financial statements from the date on which Vonovia SE obtains control until the day control ceases.

Non-controlling Interests

The equity of a subsidiary that is not attributable to Vonovia is shown as a separate component of equity under non-controlling interests. Non-controlling interests are measured based on their share of the identified net assets of the acquired company at the time of acquisition.

Changes in a parent ownership's interest in a subsidiary that do not result in the parent's losing control of the subsidiary are equity transactions.

Loss of Control

If Vonovia loses control over a subsidiary, the assets and liabilities of the subsidiary in question, as well as any corresponding non-controlling interests, are derecognized. The result is recognized in the income statement. Any investment retained is recognized at fair value when control is lost.

Associates and Joint Arrangements

Associates and joint arrangements classified as joint ventures are accounted for using the equity method. An associate is an entity over which the investor has significant influence. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. If the arrangement involves rights to the assets and obligations for the liabilities of a joint arrangement instead, then these are recognized using quota consolidation.

Business Transactions Eliminated on Consolidation

The effects of the business transactions between the entities included in the Vonovia consolidated financial statements are eliminated.

Results from business transactions with companies accounted for using the equity method are only eliminated in line with the Group's share in the investee.

The financial statements of Vonovia SE and all subsidiaries are consistently prepared according to uniform accounting policies.

4 Scope of Consolidation and Business Combinations

All in all, and including Vonovia SE, 520 companies (Dec. 31, 2017: 350) – thereof 318 (Dec. 31, 2017: 259) domestic companies and 202 (Dec. 31, 2017: 91) foreign companies – have been included in the consolidated financial statements as of December 31, 2018. In addition, joint activities were performed with two domestic companies (Dec. 31, 2017: none). In addition, four (Dec. 31, 2017: four) domestic companies and two (Dec. 31, 2017: one) foreign companies were included as joint ventures and two (Dec. 31, 2017: none) foreign companies were included as associated companies valued using the equity method.

For all subsidiaries included in the consolidated financial statements, the reporting date is December 31.

The list of Vonovia shareholdings is appended to the Notes to the consolidated financial statements as an integral part thereof.

Companies that have made use of the exemption provision set out in Section 264 (3) of the German Commercial Code (HGB) are marked accordingly in the list of shareholdings.

The changes as of December 31, 2018, compared with the previous year result from the acquisition of the BUWOG Group (128 companies, of which two have joint activities), the Victoria Park Group (71 companies, of which two are associated companies) and 14 further acquisitions, including one joint venture, four newly established companies, 31 mergers, seven accruals, two liquidations and two sales.

Acquisition of BUWOG

In connection with the voluntary public takeover offer that Vonovia SE made on December 18, 2017, to the shareholders of BUWOG AG, Vienna, Austria (BUWOG), a total of 82,844,967 shares had been tendered after the end of the acceptance deadline on March 12, 2018, at a price of € 29.05 per Vonovia share. In addition, 2,988 BUWOG convertible bonds, which account for 99.6% of the total par value of the convertible bonds, were tendered at a price of € 115,753.65 each.

The acquisition date at which Vonovia SE obtained control of the BUWOG Group is March 26, 2018. This was the date on which the offer was settled. This transaction shall be treated as a business combination in accordance with IFRS 3.

The second extended tender phase started in accordance with Section 19 (3) 3 of the Austrian Takeover Act (ÜbG) on March 16, 2018, and ended at 5 p.m. CEST on June 18, 2018. With the conclusion of this second extended tender period, a further 15,281,786 shares were tendered to Vonovia. Furthermore, the 2,988 convertible bonds that were tendered during the first tender period, in addition to ten that were tendered in the second tender period, were converted into 11,904,382 shares. Since the acquisition of shares and the conversion were effected under exactly the same conditions as in the first acceptance deadline and the two actions were related in terms of content and timing, a linked transaction can be assumed. Taking the second acceptance period into account along with the 550,000 shares acquired on the market as of March 26, 2018, Vonovia possessed 89.1% of the share capital of BUWOG at the end of the second extended tender phase.

As of September 30, 2018, Vonovia acquired another 2,091,517 shares on the market at a purchase price which was below the offer price. This transaction is presented as a separate acquisition. Overall, Vonovia thus possessed more than 90.7% of the share capital of BUWOG as of December 31, 2018.

On June 20, 2018, Vonovia requested a squeeze-out at the next Annual General Meeting according to the Austrian Squeeze Out Act (Gesellschafterausschlussgesetz). The Annual General Meeting held on October 2, 2018, in Vienna passed a resolution on the transfer of the shares held by the minority shareholders to the main shareholder, Vonovia SE, in return for a cash settlement of € 29.05 per share. The squeeze-out became effective on November 16, 2018.

The consideration transferred comprises the following:

in € billion	
Net cash purchase price component	2.9
Convertible bonds	0.3
Total consideration	**3.2**

The allocation of the total purchase price to the acquired assets and liabilities (PPA) of the BUWOG Group as of the date of first-time consolidation is based on the updated quarterly figures of BUWOG as of January 31, 2018, and on the necessary adjustments to the fair values of the assets and liabilities.

The measurement period for the first-time recognition of the merger with BUWOG ended on December 31, 2018.

The assets and liabilities assumed in the course of the business combination had the following fair values as of the date of first-time consolidation:

in € billion	
Investment properties	4.6
Cash and cash equivalents	0.3
Real estate inventories	0.3
Trade receivables	0.2
Fair value of other assets	0.1
Total assets	5.5
Non-controlling interests	0.3
Non-derivative financial liabilities	1.9
Deferred tax liabilities	0.3
Fair value of other liabilities	0.5
Total liabilities	3.0
Fair value net assets	2.5
Consideration	3.2
Goodwill	**0.7**

The goodwill represents synergies from the future integration of the BUWOG Group, in particular by way of the joint administration and management of the German and Austrian residential units, the development of process know-how, the expansion of the value chain and the optimization of cost structures.

Since April 2018, the BUWOG Group has recognized income from property management in the amount of € 242.1 million, as well as an earnings contribution in terms of earnings before fair value adjustments of investment properties, interest, taxes, depreciation and amortization (EBITDA IFRS) of € 186.2 million. If the BUWOG Group had already been fully included in the consolidated Group as of January 1, 2018, it would have contributed to the income from property management in the amount of € 322.7 million and to EBITDA IFRS in the amount of € 204.5 million.

Out of the trade receivables that were acquired, an amount of € 6.1 million is likely to have been uncollectible at the time of acquisition. The gross amount of the acquired trade receivables was € 163.1 million. The net carrying amount, which corresponds to the fair value, was € 157.0 million.

In the 2018 fiscal year, transaction costs related to the acquisition of the BUWOG Group in the amount of € 35.1 million were recognized in other operating expenses affecting net income. € 29.0 million of this amount was recognized in other operating expenses and € 6.1 million in financial expenses.

A total of 89 domestic and 39 foreign companies of the BUWOG Group were newly included in the scope of consolidation as of the date of acquisition.

Acquisition of Victoria Park

In connection with the voluntary public takeover offer that Vonovia SE made on May 3, 2018, via its subsidiary Deutsche Annington Acquisition Holding GmbH (DA Acquisition) to the shareholders of Victoria Park AB (publ), Malmö, Sweden (Victoria Park), a total of 34,056,463 class A shares, 97,962,486 class B shares and 663,172 preference shares had been tendered to Vonovia after the end of the acceptance deadline on June 18, 2018. The offer price for the class A and class B shares was SEK 38.00, and for preference shares SEK 316.00. The settlement of the offer for shares tendered through June 18, 2018, occurred on June 28, 2018. In addition, a further 158,035 class A and 965,494 class B shares had been acquired on the market by June 28, 2018.

Although Vonovia had less than 50% of the voting rights as of June 28, 2018, in accordance with IFRS 10.B41–B43, de facto control must be assumed as of this point in time, since it held a majority of votes present at the Annual General Meeting. This is why June 28, 2018, is considered the date of acquisition on which Vonovia SE obtained control over the Victoria Park Group. This transaction shall be treated as a business combination in accordance with IFRS 3.

On June 18, 2018, DA Acquisition announced that it would extend the offer period until July 3, 2018, at 5 p.m. (CEST) in order to give shareholders who had not accepted the offer the possibility of doing so. A total of 1,649,385 class A shares, 2,542,719 class B shares and 108,891 preference shares were tendered. Since the acquisition of the shares as part of the extended acceptance period was effected under exactly the same conditions as in the first acceptance period and the two aspects were related in terms of content and timing, a linked transaction can be assumed.

Furthermore, call options were granted to DA Acquisition by the shareholders during the original offer period. They allow Vonovia to purchase 10,235,198 class A shares and 14,264,946 class B shares in Victoria Park ("call option shares") at a fixed price between May 15 and May 29, 2019.

Including the shares acquired by June 28, 2018, the shares tendered during the extended offer period leading up to July 3, 2018, and the call option shares, the stake acquired corresponds to around 66.7% of the share capital and 61.1% of all voting rights in Victoria Park.

On September 5, 2018, Vonovia also acquired the entire interest held by Starwood Capital Group in Victoria Park. This interest, comprised of 27,074,397 class A shares and 32,486,304 class B shares, was held by a company controlled by the Starwood Capital Group. On the basis of the separate agreement reached with the company selling the interest, the acquisition is to be viewed separately from the tender period and the extended tender period and constitutes a separate acquisition transaction.

In addition, a further 103,501 class A and 663,870 class B shares had been acquired on the market by December 31, 2018. As the purchase was at the valid market price in each case and due to the fact that the purchase date fell after June 28, 2018, these additional purchases are also presented as separate acquisitions.

All in all, this means that, including the call options, Vonovia holds 91.4% of the share capital and 93.5% of all voting rights in Victoria Park as of December 31, 2018.

As part of the provisional purchase price allocation using the anticipated acquisition method, the consideration transferred for the business combination comprises the following:

in € billion	
Net cash purchase price component	0.5
Purchase price liability from call-option shares	0.1
Consideration for the acquisition of shares	**0.6**

The provisional allocation of the total purchase price to the acquired assets and liabilities (PPA) of the Victoria Park Group as of the date of first-time consolidation is based on the quarterly figures of Victoria Park as of June 30, 2018, and on the adjustments to the fair values of the acquired assets and liabilities that are necessary.

The assets and liabilities assumed in the course of the business combination had the following preliminary fair values as of the date of first-time consolidation:

in € billion	
Investment properties	1.6
Cash and cash equivalents	0.1
Total assets	**1.7**
Non-controlling interests	0.2
Non-derivative financial liabilities	0.9
Deferred tax liabilities	0.1
Fair value of other liabilities	0.1
Total liabilities	**1.3**
Fair value net assets	**0.4**
Consideration	0.6
Goodwill	**0.2**

Goodwill represents benefits from the future cooperation between the Victoria Park Group and Vonovia through the partial transfer of Vonovia's business strategy, in particular regarding its property and portfolio management strategy for the administration and management of the residential units, the utilization of Vonovia's modernization know-how to further modernize the portfolio and the Value-add strategy with a focus on expanding the value chain.

Since July 2018, the Victoria Park Group has recognized income from property management in the amount of € 59.5 million, as well as an earnings contribution in terms of earnings before fair value adjustments of investment properties, interest, taxes, depreciation and amortization (EBITDA IFRS) of € 33.7 million. If the Victoria Park Group had already been fully included in the consolidated Group as of January 1, 2018, it would have contributed to the income from property management in the amount of € 117.2 million and to EBITDA IFRS in the amount of € 59.3 million.

Out of the trade receivables that were acquired, an amount of € 0.9 million is likely to have been uncollectible at the time of acquisition. The gross amount of the acquired trade receivables was € 3.3 million. The net carrying amount, which corresponds to the fair value, was € 2.4 million.

In the 2018 fiscal year, transaction costs related to the acquisition of the Victoria Park Group in the amount of € 22.0 million were recognized in other operating expenses affecting net income. € 11.8 million of this amount was recognized in other operating expenses and € 10.2 million in financial expenses.

A total of 71 foreign companies, thereof two associated companies, were newly included in the scope of consolidation as of the date of acquisition. Two of these companies were valued using the equity method.

5 Currency Translation

Vonovia applies the concept of functional currency translation in accordance with IAS 21 Effects of Changes in Foreign Exchange Rates to its consolidated financial statements. The functional currency of Vonovia SE and the reporting currency of the Vonovia Group is the euro.

Foreign currency transactions involving Group companies are converted into the functional currency, in accordance with the temporal method, at the exchange rate that applies on the day of the transaction. Monetary balance sheet items denominated in a foreign currency are converted at the exchange rate that applies on each reporting date. Any exchange differences are recognized affecting net income. Non-monetary items that are measured in terms of historical cost are recorded on the reporting date at the exchange rate on the date they were first recognized. Non-monetary items that are measured at fair value are translated on the reporting date using the exchange rate on the date the fair value was determined. Exchange differences relating to non-monetary items are recognized affecting net income insofar as a profit or loss on the corresponding line item is also recognized affecting net income. Otherwise, they are disclosed in other comprehensive income.

The main foreign subsidiaries included in the consolidated financial statements operate their business independently in line with functional theory. The annual financial statements of those subsidiaries whose functional currency is not the euro are converted into the reporting currency using the modified closing rate method. The functional currency of individual foreign units is always the respective local currency. Any resulting exchange differences are disclosed as a separate item in other comprehensive income. When a foreign subsidiary leaves the scope of consolidation, the cumulative exchange differences are reversed and recognized in profit or loss.

The exchange rates of the currencies relevant to the Vonovia Group have developed as follows:

	Closing rate		Average for period	
Basis: € 1	Dec. 31, 2017	Dec. 31, 2018	2017	2018
HUF – Hungarian forint	310.33	320.98	309.19	318.89
SEK – Swedish kronor	9.84	10.25	9.64	10.36*
UAH – Ukrainian hryvnia	33.58	32.79**	30.00	32.18**
USD – US dollar	1.20	1.15	1.13	1.18

* The average for the period for the Swedish kronor for 2018 is calculated for the period from July 1 to December 31, as Vonovia's Swedish subsidiary was only included in the consolidated financial statements as of June 30, 2018.

** The exchange rate at the end of the reporting period and the average value for the period for Ukrainian hryvnia is fixed at the value for 2018 or up to September 30 as the company was sold as of September 30.

6 Accounting Policies

a) Recognition of Income and Expenses

Income from property management includes income from the rental of investment properties and assets held for sale which is recognized, net of discounts, over the duration of the contracts when the remuneration is contractually fixed or can be reliably determined and collection of the related receivable is probable.

In Vonovia's financial statements, the corresponding income for all the services for ancillary costs performed by the end of the year is also recognized in the year in which the service is performed. This amount is recognized on a not netted basis using the principal method, in particular due to Vonovia's business model, which provides for a large proportion of services relevant to ancillary costs being performed by Vonovia itself as Vonovia is considered by the tenant to be the primary party responsible for providing the service. For all services that it does not perform itself, Vonovia also bears an inventory risk due to the settlement method (based on rentable area) as is standard practice in the real estate sector.

Income from real estate sales is recognized as soon as the material risks and rewards of ownership have been transferred to the buyer and Vonovia has no substantial further obligations. As far as any remaining obligations are concerned, a provision is recognized for the probable risk.

Expenses are recognized when they arise or at the time they are incurred. Interest is recognized as income or expense in the period in which it is incurred using the effective interest method.

b) Income from Disposal of Properties (Development)

Income from disposal of properties (Development) is realized either over time or at a specific point in time as soon as the customer obtains control over the asset in question. No separate agreements are reached, in the contracts on the sale of apartments as part of the development business, on extraordinary rights of return or rescission, meaning that such rights are based on the relevant legal provisions. The same applies to warranty commitments, which are not to be treated as a separate contractual component within the meaning of IFRS 15 as a result. Existing warranty claims are always accounted for in line with the provisions of IAS 37.

In cases involving revenue recognition over time, the percentage of completion/progress made has to be assessed. Vonovia uses the cost-to-cost method, as an input-based procedure, for this purpose. The progress made is determined based on the ratio of the capitalized contract costs incurred up until the reporting date to the estimated total contract costs that can be capitalized.

c) Goodwill

Goodwill results from a business combination and is defined as the amount by which the acquisition costs for shares in a company or group of companies exceed the pro rata net assets acquired. The net assets are the total of the identifiable assets acquired that are valued at fair value in accordance with IFRS 3 as well as the assumed liabilities and contingent liabilities.

Goodwill is not subject to amortization, but rather is subjected to impairment testing on an annual basis. It is also tested for impairment whenever events or circumstances indicating an impairment arise.

The impairment loss testing of goodwill is performed at the level of cash-generating units (CGUs) or a group of cash-generating units. A cash-generating unit is the smallest group of assets which generates cash inflows that are largely independent of the cash inflows generated by other assets or other groups of assets. Goodwill purchased as part of a business combination is allocated to the CGUs or groups of CGUs that are expected to produce benefits resulting from the synergy effects of the combination.

At Vonovia, each property meets the requirements for classification as a CGU as a general rule. As part of operational management, these properties are grouped first of all to form geographically structured business units and then to form regional business areas. Since the regional business areas are the lowest level within the company at which goodwill is monitored for internal management purposes, the impairment test is performed at business area level and, as a result, in accordance with IAS 36.80 for a group of CGUs. The acquired assets are allocated to the business areas based on the geographical location of the properties. A further group of CGUs for which goodwill is monitored for internal management purposes relates to the Value-add segment (formerly "Value-add Business"). The third group of CGUs to which goodwill is allocated and for which goodwill is monitored for management purposes relates to the Development segment.

The group of CGUs to which goodwill has been allocated are tested for impairment on a regular basis. This involves comparing the recoverable amount with the carrying amount of the group of CGUs. The recoverable amount of the group of CGUs is either its value in use or fair value less costs of sale, whichever is higher. When calculating the value in use, the estimated future cash flows are discounted to their cash value. Discount rates before tax are used that reflect the current market assessment of the interest rate effect and the specific risks associated with the business areas/the Value-add segments and Development segments.

If goodwill has been allocated to a group of CGUs and its carrying amount exceeds the recoverable amount, the goodwill is to be written down in the amount of the difference in the first instance. Any need for impairment in excess of this amount is distributed among the other assets in the group of CGUs in proportion to their carrying amount. The individual fair value less costs to sell must not be undercut in this regard.

Impairment losses that have been realized as part of the valuation of goodwill are not reversed in the following years.

d) Other Intangible Assets

Acquired other intangible assets are stated at amortized cost. Internally generated other intangible assets are stated at amortized cost provided that the requirements of IAS 38 for the capitalization of internally generated intangible assets are met. Acquired trademark rights that are identified have an indefinite useful life and are subject to regular impairment testing. All of Vonovia's miscellaneous other intangible assets have definite useful lives and are amortized on a straight-line basis over their estimated useful lives. Software and licenses are amortized on the basis of a useful life of three years.

e) Property, Plant and Equipment

Items of property, plant and equipment are carried at amortized cost less accumulated depreciation and are depreciated over their respective estimated useful lives on a straight-line basis.

Subsequent costs of replacing part of an item of property, plant and equipment are capitalized provided it is probable that future economic benefits associated with the item will flow to Vonovia and the cost can be estimated reliably.

Real estate used by the company itself (owner-occupied properties) is depreciated over 50 years; equipment, fixtures, furniture and office equipment are depreciated over periods of between three and thirteen years.

f) Impairment of Other Intangible Assets and Property, Plant and Equipment

In accordance with IAS 36 "Impairment of Assets," other intangible assets as well as property, plant and equipment are tested for impairment whenever there is an indication of an impairment. Impairment testing is performed at least once a year. An impairment loss is recognized when an asset's recoverable amount is less than its carrying amount. If the recoverable amount cannot be determined for the individual asset, the impairment test is conducted on the CGU to which the asset belongs. Impairment losses are recognized as expenses in the income statement with effect on net income.

An impairment loss recognized for prior periods is reversed if there has been a change in the estimates used to determine the asset's (or the CGU's) recoverable amount since the last impairment loss was recognized. The carrying amount of the asset (or the CGU) is increased to the newly estimated recoverable amount. The carrying amount is limited to the amount that would have been determined if no impairment loss had been recognized in prior years for the asset (or the CGU).

g) Investment Properties

When Vonovia acquires properties, whether through a business combination or as part of a separate transaction, the intended use determines whether such properties are classified as investment properties or as owner-occupied properties.

Investment properties are properties that are held for the purpose of earning rental income or for capital appreciation or both and are not owner-occupied or held for sale in the ordinary course of business. Investment properties include undeveloped land, land and land rights including buildings and land with inheritable building rights of third parties. Properties that are capitalized under a finance lease in accordance with IAS 17 "Leases" and covered by the definition of investment properties are also classified as investment properties.

Investment properties are initially measured at cost. Related transaction costs, such as fees for legal services or real estate transfer taxes, are included in the initial measurement. If properties are purchased as part of a business combination and if the transaction relates to a "business," then IFRS 3 applies as far as recognition is concerned. Transaction costs are recognized as an expense. Property held under a finance lease is recognized at the lower of the fair value of the property and the present value of the minimum lease payments upon initial recognition.

Following initial recognition, investment properties are measured at fair value. Any change therein is recognized as affecting net income in the income statement.

For a description of the determination of the fair values of investment properties, see Chapter [23] Investment Properties.

Investment properties are transferred to property, plant and equipment when there is a change in use evidenced by the commencement of owner-occupation. The properties' deemed cost for subsequent measurement corresponds to the fair value at the date of reclassification.

h) Leases

Leases where all material risks and rewards associated with ownership are transferred to the lessee are accounted for as finance leases.

All leases where not all material risks and rewards associated with ownership are transferred are accounted for as operating leases.

The leased asset and corresponding liability are recognized at an amount equal to the lower of the fair value of the leased asset and the present value of the minimum lease payments. Subsequently, the leased asset is accounted for in accordance with the standards applicable to that asset. The minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability.

The lease payments under an operating lease in which Vonovia is the lessee are recognized as an expense on a straight-line basis over the lease term.

The lease payments under an operating lease in which Vonovia is the lessor are recognized as income on a straight-line basis over the lease term.

i) Financial Assets

Financial assets are recognized in the balance sheet when Vonovia becomes a contracting party of the financial instrument. A financial asset is derecognized when the contractual rights to the cash flows from a financial asset expire, or the financial asset is transferred and Vonovia neither retains control nor retains material risks and rewards associated with ownership of the financial asset.

In accordance with IFRS 9, the classification of financial assets takes into account both the business model in which financial assets are held and the characteristics of the cash flows of the assets in question. These criteria determine whether the assets are measured at amortized cost using the effective interest method or at fair value.

The following table shows the quantitative impact of classification in accordance with IFRS 9 compared with IAS 39:

Measurement category as of Jan. 1, 2018 in € million	IAS 39	IFRS 9
At amortized cost	14,766.4	14,766.4
At fair value through profit and loss	4.2	4.2
At fair value directly in equity under other comprehensive income (OCI) with reclassification to the income statement	648.3	
At fair value directly in equity under other comprehensive income (OCI) without reclassification to the income statement		648.3

With regard to the business model criterion, all financial investments at Vonovia are to be assigned to the "Hold" model pursuant to IFRS 9.4.1.2(a). Whenever financial investments are categorized as equity instruments, Vonovia has exercised the irrevocable option to state future changes to the fair value under other comprehensive income in equity. Gains and losses recognized in other comprehensive income are never reclassified from total equity to the income statement on their disposal.

Impairment losses on financial assets are determined based on the expected credit loss model. The guiding principle of the model is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments, taking losses that are already expected into account.

The IFRS 9 approach includes the following measurement levels:

> Level 1: Twelve-month expected credit losses (ECLs), which applies to all items (from initial recognition) as long as there is no significant deterioration in credit quality.
> Level 2: Lifetime ECLs (homogeneous debtor portfolios): which applies, when a significant increase in credit risk has occurred on an individual or collective basis of financial instruments.
> Level 3: Lifetime ECLs (based on an individual assessment): If an individual assessment of assets produces objective indications of a need for impairment, then an assessment of the entire maturity of the financial instrument is decisive.

The simplified impairment approach is used with regard to trade receivables (e.g. rent receivables, receivables from ancillary costs, receivables from the sale of properties) and for contract assets pursuant to IFRS 15. This means that there is no need to track the changes in credit risk. Instead, Vonovia has to set up loan loss provisions in the amount of the lifetime expected credit losses both at the time of initial recognition and on each following reporting date.

Cash and cash equivalents are measured using the general impairment approach.

Loans and Receivables

Loans and receivables are first recognized as incurred, other non-derivative financial assets as of the day of trading. The day of trading is the date on which Vonovia becomes a contracting party of the financial instrument. All financial instruments are initially measured at fair value, taking account of transaction costs. A financial asset is derecognized when the contractual rights to the cash flows from the financial asset expire, or the financial asset is transferred and Vonovia neither retains control nor retains material risks and rewards associated with ownership of the financial asset.

Loans and receivables are stated at amortized cost using the effective interest method.

Vonovia determines whether there is an objective indication of an impairment at the level of individual financial instruments if they are material, and, for financial instruments for which no impairments have been identified at the level of the individual financial instruments or such impairments are immaterial, grouped according to risk profile. Impairments are identified for individual financial instruments when the counterparty has defaulted or breached a contract or there are indications of risks of impairments due to a rating downgrade and general information (loss event). For groups of financial instruments with similar risks, historical default probabilities in relation to the time overdue are drawn upon (loss event). An impairment is calculated after the occurrence of a loss event as the difference between the carrying amount and the value of the discounted estimated future cash flow. The original effective interest rate is taken as the discount rate. Impairment losses are recognized with effect on net income and offset directly with the carrying amount of the financial instrument. Any interest income on impaired financial instruments is still recognized. If there are indications that the amount of the impairment loss will be smaller, this reduction is credited to the financial instrument affecting net income to the extent that the sum does not exceed the amortized cost that would have been recognized if the impairment had not occurred.

Available-for-sale Financial Assets (IAS 39)

Available-for-sale financial assets are initially stated at their fair value, plus the directly attributable transaction costs. Subsequent measurement is at fair value as a general rule. Changes in the fair value are, if not an impairment loss, recognized in other comprehensive income. Impairments are reclassified from other comprehensive income to the income statement. Reversals of impairments are recognized in accordance with IAS 39.67f.

The fair value of available-for-sale financial assets is based on quoted market prices as of the reporting date. When an available-for-sale financial asset is derecognized, the cumulative gain or loss recognized in other comprehensive income is transferred to the income statement with an impact on net income. Interest on interest-bearing financial instruments of this category is calculated using the effective interest method. Dividends on equity instruments in this category are shown in the income statement.

Equity Instruments at Fair Value Under Other Comprehensive Income

Equity instruments to be recognized at fair value under other comprehensive income are initially stated at their fair value, plus the directly attributable transaction costs. Subsequent measurement is at fair value as a general rule. Changes in the fair value are recognized in other comprehensive income.

The fair value of equity instruments to be recognized at fair value under other comprehensive income is based on quoted market prices as of the reporting date. If these equity instruments are derecognized, the cumulative gain or loss recognized in other comprehensive income is transferred to retained earnings, without affecting net income. Interest on interest-bearing financial instruments of this category is calculated using the effective interest method. Dividends on equity instruments in this category are shown in the income statement.

j) Inventories

Inventories are valued at cost or at their net realizable value, whichever is lower.

k) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, checks and deposits at banking institutions as well as marketable securities with an original term of up to three months.

l) Real Estate Inventories and Contract Assets

Real Estate Inventories

The development business intended for sale refers to subsidized or independently financed condominiums that are under construction or have already been completed. These properties are not held with the aim of generating rental income or achieving increases in value within the meaning of IAS 40, but rather are developed and constructed to be sold at a later date.

These development projects are recognized depending on whether there is a customer contract for the residential units that are intended for sale. If this is not the case, the valuation is performed, due to the intention to sell, according to IAS 2 at amortized cost or at net realizable value, whichever is lower, with a corresponding disclosure under real estate inventories.

Contract Assets

In cases involving development properties for which control, within the meaning of IFRS 15.35(c), already passes to the customer at the time at which the certified purchase agreement is concluded, revenue is to be recognized as of this point in time based on the degree of completion of the construction project. Disclosure of the contract assets that fall within the scope of IFRS 15 occurs on a net basis with the corresponding advance payments received under trade receivables.

The contract asset item also includes capitalized costs for the initiation of the contracts with customers. These relate, in particular, to brokerage commission, which is calculated differently in Germany and Austria. In Germany, the commission corresponds to 1.50% of the purchase price of the unit, while in Austria the percentage is 0.22%. The costs associated with the contract initiation process are amortized depending on how the goods or services to which the costs relate are transferred to the customer.

Contractual balances with an expected term of less than one year are not adjusted to reflect the time value of money.

m) Assets Held for Sale

To be classified as held for sale, the assets must be available for immediate sale in their present condition subject only to terms that are usual and customary for sales of such assets, and it must be highly probable that a sale will take place.
A sale is deemed to be highly probable if there is a commitment to a plan to sell the asset, an active program to locate a buyer and complete the plan has been initiated, the asset is being actively marketed for sale at a reasonable price, and a sale is expected to be completed within one year of the date on which the asset is classified as held for sale.

Vonovia accounts for investment properties as assets held for sale when notarized purchase contracts have been signed or a declaration of intent to purchase has been signed by both parties as of the reporting date but transfer of title will, under the contract, not take place until the subsequent reporting period. Initially they are recognized at the contractually agreed selling price and subsequently at fair value following deductions for costs to sell, if the latter is lower.

n) Income and Expense Recognized Directly in Other Comprehensive Income

Other comprehensive income includes changes in total comprehensive income not affecting net income except that resulting from capital transactions with equity holders (e.g. capital increases or dividend distributions). Vonovia includes under this item unrealized gains and losses from the fair value measurement of equity instruments and derivative financial instruments that are designated as cash flow hedges. The item also includes actuarial gains and losses from defined benefit pension commitments, as well as certain currency translation differences.

o) Tax

Current Income Taxes

Income taxes for the current and prior fiscal years are recognized as current income tax liabilities to the extent that they have not yet been paid.

A dividend payment to the shareholders does not trigger any tax obligation at Vonovia SE.

Deferred Taxes

Deferred tax assets and liabilities are recognized using the liability method under the temporary concept, providing for all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax assets are only recognized for temporary differences and on loss carryforwards to the extent that there are deferred tax liabilities that can be offset against them – regarding deferred tax assets on loss carryforwards taking the minimum taxation into account – or, based on the predictable profits in the foreseeable future, it can be verified that they will be realized.

Deferred tax assets and liabilities are not recognized where the temporary difference arises from initial recognition of goodwill in connection with a business combination or the initial recognition (other than a business combination) of other assets and liabilities in a transaction that neither affects taxable income nor net income.

The carrying amount of a deferred tax asset is reviewed at each reporting date. If necessary, the carrying amount of the deferred tax asset is reduced to the extent that it is no longer probable that sufficient taxable profit will be available in the future.

Deferred taxes are measured at the tax rates that apply, or are expected to apply, to the period when the tax asset is realized or the liability is settled based on the current legislation in the countries in question. As in 2017, the combined tax rate of corporate income tax and trade tax of 33.1% was used to calculate domestic deferred taxes for 2018. The corporate income tax rate for the companies based in Austria is 25.0%, while the rate for companies based in Sweden is 20.6%.

Deferred tax assets and liabilities are offset against each other only if Vonovia has a legally enforceable right to set off the recognized amounts, when the same tax authority is involved and when the realization period is the same. In accordance with the regulations of IAS 12 "Income Taxes," deferred tax assets and liabilities are not discounted.

p) Earnings per Share

The basic earnings per share are calculated by dividing the profit for the period attributable to the shareholders by the weighted average number of ordinary shares in circulation during the reporting period. The diluted earnings per share are obtained by adjusting the profit for the period and the number of outstanding shares on the basis of the assumption that convertible instruments will be converted, options or warrants will be exercised or ordinary shares will be issued under certain conditions. Potential ordinary shares will only be included in the calculation if the conversion into ordinary shares would reduce the earnings per share.

q) Provisions

Provisions for Pensions and Similar Obligations

When valuing the provisions for pensions, the company pension obligations are determined using the projected unit credit method pursuant to IAS 19 "Employee Benefits," whereby current pensions and vested pension rights as of the reporting date, as well as expected future increases in salaries and pensions, are included in the valuation. An actuarial valuation is performed at every reporting date.

The amount shown in the balance sheet is the total present value of the defined benefit obligations (DBO) after offsetting against the fair value of the plan assets.

Actuarial gains and losses are accounted for in full in the period in which they occur and recognized in retained earnings as a component of other comprehensive income and not in profit or loss. The actuarial gains and losses are also no longer recognized with effect on net income in subsequent periods.

Service cost is shown in personnel expenses. The service cost is the increase in the present value of a defined benefit obligation resulting from employee service in the reporting period.

The interest expense is recognized in the financial result. Interest expense is the increase during a period in the present value of a defined benefit obligation that generally arises due to the fact that the benefit obligation is one period closer to being discharged.

Reinsurance contracts that qualify as plan assets have been taken out to cover the pension obligations toward particular individuals. Where the value of those reinsurance contracts exceeds the related pension obligations, the excess is recognized as an asset and shown under other assets.

Obligations from joint defined benefit multi-employer plans at Versorgungsanstalt des Bundes und der Länder (VBL), a pension scheme operated by the German federal government and the German states, are stated, in line with IAS 19.34, in the same way as obligations from defined contribution plans, insofar as the information required for the statement of defined benefit plans is not available. The obligations are based on the amounts to be paid for the current period.

Other Provisions

Other provisions are recognized when there is a present obligation, either legal or constructive, vis-à-vis third parties as a result of a past event, if it is probable that a claim will be asserted and the probable amount of the required provision can be reliably estimated. Provisions are discounted if the resulting effect is material. The carrying amount of discounted provisions increases in each period to reflect the passage of time and the unwinding of the discount is recognized within interest expense. The discount rate is a pre-tax rate that reflects current market assessments.

Provisions for restructuring expenses are recognized when the Group has set up and communicated a detailed formal plan for restructuring and has no realistic possibility of withdrawing from these obligations.

Provisions for onerous contracts are recognized when the expected benefits from a contract are lower than the unavoidable cost of meeting the obligations under the contract. The provision is stated at the lower of the present value of the fulfillment obligation and the cost of terminating the contract, i. e., a possible indemnity or fine for breach or non-fulfillment of contract.

Provisions are reviewed regularly and adjusted to reflect new information or changed circumstances.

The provisions for pre-retirement part-time work arrangements are basically to be classified as other long-term employee benefits that are to be accrued over the employees' service periods.

The assets of the insolvency policy to secure fulfillment shortfalls arising from pre-retirement part-time work arrangements are offset against the amounts for fulfillment shortfalls contained in the provisions for pre-retirement part-time work arrangements.

r) Financial Liabilities

Vonovia recognizes non-derivative financial liabilities, which mainly include liabilities to banks and to investors, at their fair value on the day of trading, less the directly attributable transaction costs (this generally corresponds to the acquisition cost). These liabilities are subsequently measured at amortized cost using the effective interest method. Financial liabilities are derecognized when Vonovia's obligations specified in the contract expire or are discharged or canceled.

Liabilities bearing no interest or interest below market rates in return for occupancy rights at rents below the prevailing market rates are recorded at present value.

Derivative financial instruments are stated at their fair value on the day of trading when they are recognized for the first time. The fair values of the derivative financial instruments are calculated using standard market valuation methods for such instruments on the basis of the market data available on the valuation date.

With derivatives that are not designated as a hedging instrument in the balance sheet, changes in the fair value are recognized in profit or loss with effect on net income.

The changes to IFRS 9 relating to hedge accounting include, among other things, an expanded range of eligible hedged items, changes regarding the posting approach for certain undesignated value components of hedging instruments, the abolition of the fixed effectiveness ranges for retrospective effectiveness testing and the first-time introduction of "recalibration." The less restrictive provisions compared with IAS 39 make it easier to reflect economic risk management in the balance sheet, which can, in turn, reduce artificial volatility in the income statement.

In general, the new provisions set out above will not have any impact on the Vonovia Group.

At the time of initial application of IFRS 9, Vonovia will opt to continue to apply the hedge accounting provisions set out in IAS 39 as opposed to the provisions of IFRS 9. Vonovia will apply this accounting method to all hedge relationships.

With derivatives designated as hedging instruments, the recognition of changes in the fair value depends on the type of hedge:

With a fair value hedge, the changes in the fair value of the derivative financial instruments and of the underlying hedged items attributable to the hedged risk are recognized affecting net income.

With a cash flow hedge, the unrealized gains and losses are initially recognized in other comprehensive income to the extent that the hedge is effective. Amounts accumulated in other comprehensive income are reclassified to the income statement at the same time the underlying hedged item affects net income. To the extent that the hedge is ineffective, the change in fair value is immediately recognized in net interest.

Embedded derivative financial instruments that are combined with a non-derivative financial instrument (host contract) to form a hybrid financial instrument are to be separated from the underlying contract pursuant to IAS 39 as a general rule and accounted for separately if (i) its economic risks and characteristics are not closely related to those of the host contract, (ii) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and (iii) the hybrid instrument is not measured at fair value affecting net income with changes in fair value recognized in the income statement. As soon as the derivative is to be separated from its host contract, the individual components of the hybrid financial instrument are to be accounted for based on the provisions that apply to the individual financial instruments.

In order to measure interest rate swaps, future cash flows are calculated and then discounted. The calculated cash flows result from the contract conditions. The contract conditions regularly refer to the EURIBOR/STIBOR reference rates (3M and 6M EURIBOR/STIBOR). Discounting is based on market interest rate data as of the reporting date for comparable instruments (EURIBOR/STIBOR rate of the same tenor). The fair value contains the credit risk of the interest rate swaps and therefore allows for adjustments for the company's own credit risk or for the counterparty credit risk.

To measure the cross currency swaps, future cash flows are calculated and then discounted. The calculated cash flows result from the contract conditions and the USD forward rates (development of exchange rates expected by the market). Discounting is based on market interest rate data as of the reporting date for comparable instruments (EURIBOR rate of the same tenor). The fair value contains the credit risk of the cross currency swaps and therefore allows for adjustments for the company's own credit risk or for the counterparty credit risk.

Liabilities from finance leases are initially recognized at the fair value of the leased object or the lower present value of the minimum lease payments. For the purposes of subsequent measurement, the leased asset is accounted for in accordance with the standards applicable to that asset. The minimum lease payments are split into an interest and a principal repayment component in respect of the residual debt.

Liabilities to non-controlling interests, which include obligations from the guaranteed dividend agreements, in particular, are stated at fair value when they are recognized for the first time. The fair value is, in principle, determined by the value of the respective company; if a contractually agreed minimum purchase price is higher than this amount, this purchase price is recognized.

s) Financial Liabilities from Tenant Financing
Financial liabilities from tenant financing include tenant financing contributions. The financing contributions relate to the contributions collected from tenants in Austria for subsidized apartments. These are reimbursed upon the termination of the rental contract following the deduction of a depreciation amount. The amount refunded can be collected again relating to new tenants. As these are generally rental contracts that can be terminated at any time, these liabilities are reported as current liabilities.

Financial liabilities from tenant financing also include maintenance and improvement contributions deposited by tenants (EVB). These contributions are paid by tenants in Austria to finance the costs associated with modernization work. The payment depends on the age of the building and must be used up for modernization work within 20 years of their receipt. Otherwise, the contributions have to be refunded to the tenant.

First-time recognition is at fair value. Subsequent measurement is at amortized cost.

t) Share-based Payment
The obligations arising from share-based payments are calculated using standard valuation methods based on option pricing models.

Equity-settled share-based payments are recognized at the grant date at the fair value of the equity instruments vested by that date. The fair value of the obligation is therefore recognized as personnel expenses proportionally over the vesting period and is offset directly against the capital reserves.

The cash-settled share-based payments are shown under other provisions and remeasured at fair value at each reporting date. The expenses are also recognized as personnel expenses over the vesting period (see notes [33] Provisions and [50] Share-based Payment).

u) Government Grants
The companies that belong to the Group receive grants from public authorities in the form of construction subsidies, expenses subsidies, expenses loans and low-interest loans.

Government grants are recognized when there is reasonable assurance that the relevant conditions will be fulfilled and that the grants will be awarded.

Government grants that do not relate to investments are regularly recognized as income in the periods in which the relevant expenses are incurred.

Expenses subsidies granted in the form of rent, interest and other expenses subsidies are recorded as income in the periods in which the expenses are incurred and shown within other income from property management.

The low-interest loans are grants from public authorities that – insofar as the company received them as part of a business combination – are recorded at present value. The difference between face value and present value is recognized with an effect on net income over the maturity term of the corresponding loans.

New expenses loans or low-interest loans are initially recognized at their present value within the non-derivative financial liabilities on the basis of the market interest rate at the time the loans are taken out. The difference between the face value and the present value of the loan is recognized as deferred income. Reversal occurs, in principle, with an effect on net income in line with the length of the fixed-interest-rate period of the relevant loans. In cases where the low-interest loans are issued as part of capitalized modernization measures, the difference between the face value and the present value of the loan is deducted from the capitalized acquisition cost. In subsequent measurements, the loans are measured at amortized cost. In the 2018 fiscal year, Vonovia was granted low-interest loans of € 171.1 million (2017: € 494.6 million).

v) Contingent Liabilities
A contingent liability is a possible obligation towards third parties that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events or a present obligation that arises from past events for which an outflow of resources is not probable or the amount of which cannot be estimated with sufficient reliability. According to IAS 37, contingent liabilities are not generally recognized.

w) Estimates, Assumptions, Options and Management Judgment

Estimates and Assumptions

To a certain extent, the preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the reporting date, as well as reported amounts of income and expenses during the reporting year. The actual amounts may differ from the estimates as the business environment may develop differently than assumed. In this case, the assumptions and, where necessary, the carrying amounts of the assets or liabilities affected are prospectively adjusted accordingly.

Assumptions and estimates are reviewed on an ongoing basis and are based on experience and other factors, including expectations regarding future events that appear reasonable under the given circumstances.

The estimates and assumptions that may have a material risk of causing an adjustment to the carrying amounts of assets and liabilities mainly relate to the determination of the fair value of investment properties.

The best evidence of fair value of investment properties is current prices in an active market for comparable properties. As such information is not completely available, however, Vonovia uses standard valuation techniques.

A detailed description of the discounted cash flow (DCF) method used can be found in note [23] Investment Properties.

In accordance with IAS 40 in conjunction with IFRS 13, the respective market values of the investment properties owned by Vonovia are determined for accounting purposes. Changes in certain market conditions such as prevailing rent levels and vacancy rates may affect the valuation of investment properties. Any changes in the fair value of the investment portfolio are recognized as part of the profit for the period in the Group's income statement and can thus substantially affect Vonovia's results of operations.

The statement of financial liabilities at amortized cost using the effective interest method takes the expected contractual cash flows into account. In some cases, the agreements do not have any fixed maturity terms. As a result, the cash flows included in the valuation are subject to management assumptions in terms of amount and term.

As explained in the accounting policies, Vonovia checks for goodwill impairments on an annual basis, or if there is any reason to suspect such impairments. The next step involves estimating the recoverable amount of the group of cash-generating units (CGU). This corresponds to either the fair value less costs of sale or the value in use, whichever is higher. Determining the value in use includes adjustments and estimates regarding the forecast and discounting of the future cash flow. Although the management believes that the assumptions used to determine the recoverable amount are appropriate, any unforeseeable changes in these assumptions could result in impairment losses, with a detrimental impact on the net assets, financial position and results of operations.

When determining the volume of current and deferred taxes, the Group takes into account the effects of uncertain tax items and whether additional taxes and interest may be due. This assessment is made on the basis of estimates and assumptions and may contain a number of judgments about future events. New information may become available that causes the Group to change its judgments regarding the appropriateness of existing tax liabilities; such changes to tax liabilities will affect the tax expense in the period in which such a change is made.

Deferred tax assets are recognized to the extent that it can be demonstrated that it is probable that future taxable profits will be available against which the temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that there will be sufficient future taxable profits to realize the tax benefit in the future.

As part of the application of IFRS 15, the determination of the time at which a performance obligation is satisfied, the determination of the progress made in cases involving revenue recognition over time and the assumptions used to determine the amount of the capitalized contract initiation costs may involve discretionary judgment.

Additional estimates and assumptions mainly relate to the uniform definition of useful lives, the assumptions made on the value of land and buildings, the recognition and measurement of provisions, as well as the realization of future tax benefits.

Options and Judgments

Options exercised and judgments made by Vonovia's management in the process of applying the entity's accounting policies that may have a significant effect on the amounts recognized in the consolidated financial statements include the following:

> Determining whether the acquisition of investment properties as part of a business combination constitutes the acquisition of a "business" or the acquisition of an individual asset or group of assets can involve discretionary judgments.
> Vonovia measures investment properties at fair value. If management had opted to use the cost model as permitted under IAS 40, the carrying amounts of the investment properties, as well as the corresponding income and expense items in the income statement, would differ significantly.
> The criteria for assessing in which category a financial asset is to be classified may involve discretionary judgments.
> The need to include information concerning the future in the valuation of expected defaults results in discretionary decisions regarding the impact that changes in economic factors will have on the expected defaults.
> The decision on how to define a group of cash-generating units to which goodwill is allocated may involve discretionary judgments.
> Allocating the goodwill to the group of individual cash-generating units may also involve discretionary judgments. The parameters used in the impairment test, such as the determination of undiscounted cash flows, the weighted average cost of capital and the growth rate, may also involve discretionary judgments. Due to a lack of any detailed definition of the term "operation" (IAS 36.86), the disposal of goodwill within the context of real estate sales may involve discretionary decisions.
> Due to a lack of any detailed definition of the term "a separate major line of business or geographical area of operations" (IFRS 5), a disposal group within the context of real estate sales may involve discretionary decisions.
> At the moment, there are no definitive provisions on how to reflect a mandatory acquisition of non-controlling interests following the acquisition of control as part of a voluntary public takeover offer. In general, the acquisition of shares as part of a public offer during the second offer period is based on exactly the same conditions as those that applied in the first offer period, and the two acquisitions are closely related in terms of content and timing. This means that, even if it is executed in two offer periods, the acquisition constitutes one and the same transaction (linked transaction). Following the completion of the later acquisition, the original purchase price allocation is to be adjusted with retroactive effect from the acquisition date, resulting in a change in the consideration transferred, the fair value of net assets transferred and, consequently, the resulting goodwill.

x) Changes in Accounting Policies due to new Standards and Interpretations

The application of numerous new standards, interpretations and amendments to existing standards became mandatory for the 2018 fiscal year.

The following new or amended standards and interpretations became mandatory for the first time in the 2018 fiscal year. The application of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" is explained in the relevant sub-sections of the chapter on accounting policies. Neither of the new standards resulted in any adjustments being made to total equity at the time of the transition. The changes in classification pursuant to IFRS 9 are shown in the "Financial Assets" section of the chapter on accounting policies. None of the other new or amended standards listed below had a material impact.

> IAS 40: "Investment Properties"
> IFRS 2: "Share-based Payment"
> IFRS 4: "Insurance Contracts"
> IFRS 9 "Financial Instruments"
> IFRS 15 "Revenue from Contracts with Customers"
> IFRIC 22 "Foreign Currency Transactions and Advance Consideration"

y) New Standards and Interpretations not yet Applied

Application of the following standards, interpretations and amendments to existing standards was not yet mandatory for the 2018 fiscal year. Vonovia also did not choose to apply them in advance. Their application will be mandatory for the fiscal years following the dates stated in the following table:

Relevant New Standards, Interpretations and Amendments to Existing Standards and Interpretations		Effective date for Vonovia
Improvements and supplements to a selection of IFRS 2015-2017		Jan 1, 2019*
Amendment to References to the Conceptual Framework in IFRS Standards		Jan 1, 2020*
Amendments to Standards		
IAS 1 and IAS 8	"Presentation of Financial Statements" and "Accounting Policies, Changes in Accounting Estimates and Errors"	Jan 1, 2020*
IAS 28	"Investments in Associates and Joint Ventures"	Jan 1, 2019*
IAS 19	"Employee Benefits"	Jan 1, 2019*
IFRS 3	"Business Combinations"	Jan 1, 2020*
IFRS 9	"Financial Instruments"	Jan 1, 2019
New Standards		
IFRS 16	"Leases"	Jan 1, 2019
IFRS 17	"Insurance Contracts"	Jan 1, 2021*
IFRIC 23	"Uncertainty over Income Tax Treatments"	Jan 1, 2019

* not yet endorsed

IFRS 16

In January 2016, the IASB published the new leasing standard IFRS 16 "Leases." It was adopted by the European Union for application in Europe on November 9, 2017. IFRS 16 specifies how a company measures, presents and discloses leases according to IFRS and is to be applied for the first time, as a mandatory requirement, for fiscal years beginning on or after January 1, 2019.

In particular, IFRS 16 replaces the previous leasing standard, IAS 17 "Leases," and introduces only one accounting model (right-of-use) for lessees, based on which all leases are to be recognized in the balance sheet as a matter of principle. There is an accounting option available for short-term leases and leases of low value assets. Vonovia will be making use of this option, meaning that such leases will not be recognized. The previous distinction between operating and finance leases will only remain in place for accounting at the level of the lessor.

As of January 1, 2019, all contracts that give the Vonovia Group the right to control the use of an asset over a certain period of time in return for consideration are considered leases within the meaning of IFRS 16.

In respect of those leases previously classified as operating leases, Vonovia will be recognizing lease liabilities as of January 1, 2019, equal to the present value of the future lease payments, discounted to reflect the term-specific incremental borrowing rate at the time of initial application. Right-of-use assets are recognized accordingly. The initial measurement of the right-of-use assets as of January 1, 2019, is based on the amount of the lease liabilities plus any advance payments that have already been made.

The right-of-use assets are generally recognized at amortized cost, taking amortization and write-downs into account. Right-of-use assets that meet the definition of investment properties (IAS 40) are already recognized at fair value as of the time of initial application in line with the recognition and measurement rules set out in IAS 40.

The lease liabilities are adjusted in line with financial principles. They are increased by the periodic interest expenses and reduced by the lease payments made.

Leases ending/expiring within the 2019 fiscal year are treated as short-term leases, meaning that they are not recognized. As far as rented IT equipment is concerned, portfolios have been set up for leases with similar terms and a single discount rate has been applied to these portfolios. As part of the transition to IFRS 16, Vonovia also takes scenarios pursuant to IAS 37 into account and adjusts the valuation of the right-of-use assets to reflect provisions for onerous contracts recognized on the reporting date.

The present value of the future lease obligations, pursuant to IAS 17, reported in the Notes to the consolidated financial statements as of December 31, 2018, deviates from the present value of the lease liabilities to be recognized as of January 1, 2019, pursuant to IFRS 16. This is due to leases that will expire in 2019 (short-term) and particularly due to those lease agreements that are not classified as leases under the control model within the meaning of IFRS 16.

Impact on the Consolidated Balance Sheet, Income Statement and Statement of Cash Flows

Vonovia is applying the new leasing standard for the first time as of January 1, 2019, based on the modified retrospective method provided for in the transitional provisions. Based on these provisions, the cumulative effect resulting from the initial application of IFRS 16 is recognized as an adjustment to the value of retained earnings in the opening balance sheet. Comparative information is not adjusted.

Vonovia expects the recognition of lease liabilities and right-of-use assets to increase its total assets by around € 311.4 million as of January 1, 2019, based on current calculations. This includes a reduction in retained earnings of around € 34.2 million resulting mainly from differences in the discounting of right-of-use assets and lease liabilities in connection with leasehold contracts. Due to the fair value measurement of the right-of-use assets under leasehold contracts, the right-of-use assets are calculated using property-specific discount rates. The lease liabilities from leasehold contracts, on the other hand, are calculated with the help of term-specific incremental borrowing rates. The equity ratio within the Group will fall accordingly. The weighted average incremental borrowing rate for all lease liabilities to be recognized amounts to 2.3% as of January 1, 2019.

In the consolidated income statement, leasing expenses from operating leases that were recognized on a straight-line basis in the past will be replaced, as of January 1, 2019, with amortization/earnings effects of the fair value measurement (for right-of-use assets relating to assets within the meaning of IAS 40) and interest expenses. This will result, all other things being equal, in an improvement in Adjusted EBITDA Total, EBITDA IFRS and an increase in the cash flow from operating activities. The cash flow from financing activities will be burdened due to the unwinding of discounting for the lease liabilities.

The application of IFRS 16 is not expected to have any impact on Vonovia's ability to adhere to the financial covenants that are relevant to it.

As far as lessors are concerned, the accounting model that IFRS 16 provides for does not differ significantly from the requirements set out in IAS 17. As a result, no significant changes are expected for leases in which the Vonovia Group is the lessor. Rental income still falls within the scope of the accounting standard for leases (as of January 1, 2019: IFRS 16). IFRS 16 distinguishes not only between separate lease components, but also between other services (non-lease components, covered by IFRS 15) and other components of the contract that do not result in the lessor providing a service. The condition for identifying a separate non-lease component is the lessor's obligation to provide a service pursuant to the contract (IFRS 16.B33). This means that the income from land tax and buildings insurance, as types of ancillary costs, fall within the scope of IFRS 16 (previously: IAS 17), as the tenants do not receive any additional service in return.

Notes to the Consolidated Income Statement

The figures from the previous year are only comparable to a limited extent due to acquisitions made during the fiscal year.

7 Income from Property Management

in € million	2017	2018
Rental income	1,672.1	1,897.8
Ancillary costs	671.9	750.1
Income from property letting	2,344.0	2,647.9
Other income from property management	47.6	60.3
	2,391.6	**2,708.2**

8 Profit on Disposal of Properties

in € million	2017	2018
Income from disposal of investment properties	466.9	761.4
Carrying amount of investment properties sold	-396.5	-597.6
Profit on disposal of investment properties	70.4	163.8
Income from sale of assets held for sale	739.5	336.1
Retirement carrying amount of assets held for sale	-739.5	-336.1
Revaluation of assets held for sale	81.1	68.5
Profit on disposal of assets held for sale	81.1	68.5
	151.5	**232.3**

The fair value adjustment of investment properties held for sale, for which a purchase contract had been signed but for which transfer of title had not yet taken place, led to a gain of € 68.5 million as of December 31, 2018 (2017: € 81.1 million).

9 Profit on Disposal of Real Estate Inventories (Development)

Income from the disposal of real estate inventories (Development) in the amount of € 225.1 million (2017: € 0.0 million) comprises € 167.0 million (2017: € 0.0 million) in income from the disposal of real estate inventories recognized over time together with € 58.1 million (2017: € 0.0 million) income from the disposal of real estate inventories recognized at a point in time. As of the reporting date, contract assets of € 112.5 million (2017: € 0.00 million) are recognized within trade receivables in connection with the period-related revenue recognition.

A transaction price of € 59.4 million (2017: € 0.0 million) has been allocated to the remaining performance obligations that had not yet been satisfied (in full) at the end of the current reporting period. These amounts are expected to be recognized, affecting net income, within the next two fiscal years, with an amount of € 57.1 million attributable to 2019 and an amount of € 2.3 million to 2020.

10 Net Income from Fair Value Adjustments of Investment Properties

Investment properties are measured by the in-house valuation department according to the fair value model. Any gains or losses from a change in fair value are recognized in the income statement. The measurement of the investment properties led to a net valuation gain during the 2018 fiscal year of € 3,517.9 million (2017: € 3,434.1 million). The high valuation result for 2018 is mainly due, in addition to the investment activity and strong development of Vonovia's operating business, to the dynamic market conditions for residential properties at the moment. These are reflected both in rental price developments and, in particular, also in an increase in real estate purchase prices triggered, among other things, by yield compression on the demand side.

11 Capitalized Internal Expenses

Capitalized internal expenses in the fiscal year amount to € 608,2 million (2017: € 458,1 million) and mainly relate to the expenses of the Group's own craftsmen's organization contained in the capitalized modernization costs as well as the management costs for major modernization projects.

12 Cost of Materials

in € million	2017	2018
Expenses for ancillary costs	625.6	702.9
Expenses for maintenance and modernization	446.8	572.3
Other cost of purchased goods and services	104.0	105.8
	1,176.4	**1,381.0**

13 Personnel Expenses

in € million	2017	2018
Wages and salaries	342.1	423.3
Social security, pensions and other employee benefits	73.9	89.8
	416.0	**513.1**

The personnel expenses include expenses for severance payments in the amount of € 6.8 million (2017: € 10.3 million), allocations to the provisions for pre-retirement part-time work arrangements in the amount of € 3.0 million (2017: € 6.0 million) and expenses for the long-term incentive plan (LTIP) at € 7.2 million (2017: € 12.0 million) (see Chapter [33] Provisions).

In the fiscal year under review, employers' contributions to statutory pension insurance amounted to € 33.2 million (2017: € 28.9 million).

As of December 31, 2018, Vonovia had 9,923 employees (Dec. 31, 2017: 8,448), with the annual average coming to 9,757 employees (2017: 8,300). Vonovia also employed 485 trainees as of December 31, 2018 (Dec. 31, 2017: 462).

14 Depreciation and Amortization

With regard to developments in depreciation, amortization and impairment, we refer to the information set out in notes [21] Intangible Assets and [22] Property, Plant and Equipment.

15 Other Operating Income

in € million	2017	2018
Compensation paid by insurance companies	35.4	49.5
Reversal of provisions	15.9	27.6
Compensation for damages and cost reimbursements	9.6	10.7
Dunning and debt collection fees	7.0	7.4
Reversal of impairment losses	3.0	3.7
Miscellaneous	39.8	33.3
	110.7	**132.2**

16 Other Operating Expenses

in € million	2017	2018
Consultants' and auditors' fees	58.5	80.1
Vehicle and traveling costs	41.1	42.2
Rents, leases and ground rents	22.0	28.8
Communication costs and work equipment	16.0	24.7
Additions to provisions	22.4	10.8
Administrative services	15.6	10.8
Advertising costs	8.1	10.8
Insured losses	3.2	5.0
Dunning and debt collection fees	5.6	4.8
Non-capitalizable expenses from real estate development	–	3.8
Costs of sale associated with real estate inventories	–	3.1
Sales incidentals	4.4	2.8
Legal and notary costs	6.5	2.3
Impairment losses	1.6	1.8
Miscellaneous	41.8	68.2
	246.8	**300.0**

17 Financial Income

in € million	2017	2018
Income from other investments	20.1	23.1
Income from non-current securities and non-current loans	1.6	2.2
Other interest and similar income	25.1	6.8
	46.8	**32.1**

The income from other investments comprises financial income from investments in other real estate companies in the amount of € 14.0 million (2017: € 13.0 million) and also € 7.6 million (2017: € 6.3 million) in financial income from the collection of the profit share in AVW GmbH & Co. KG, Hamburg, for the previous fiscal year in each case.

18 Financial Expenses

The financial expenses mainly relate to interest expense on financial liabilities measured at amortized cost as well as transaction costs and prepayment penalties for financing measures.

in € million	2017	2018
Interest expense from non-derivative financial liabilities	299.0	350.9
Swaps (current interest expense for the period)	5.3	15.4
Effects from the valuation of non-derivative financial instruments	-8.8	14.9
Effects from the valuation of swaps	9.9	15.3
Transaction costs	7.9	14.2
Prepayment penalties and commitment interest	16.4	8.4
Interest expenses purchase price liabilities from put options/ rights to reimbursement	8.4	2.2
Interest accretion to provisions	9.2	9.1
Other financial expenses	5.7	18.7
	353.0	**449.1**

The prepayment penalties include the fees for the unscheduled repayment of loans during the fixed interest period.

A reconciliation of net interest to net interest to be classified in accordance with IFRS 9 is shown in the following table:

in € million	2017	2018
Interest income	25.1	6.8
Interest expense	-353.0	-449.1
Net interest	-327.9	-442.3
Less:		
Net interest from provisions for pensions in acc. with IAS 19	8.7	8.6
Net interest from other provisions in acc. with IAS 37	0.3	0.5
Net interest from finance leases in acc. with IAS 17	5.6	5.6
Net interest to be classified	**-313.3**	**-427.6**

The net interest classified pursuant to IFRS 9 is as follows:

in € million	2017	2018
Financial assets measured at (amortized) cost	2.5	3.5
Derivatives measured at FV through P&L	-1.3	-29.7
Financial liabilities measured at (amortized) cost	-314.5	-401.4
Classification of net interest	**-313.3**	**-427.6**

19 Income Taxes

in € million	2017	2018
Current income tax	35.1	75.1
Prior-year current income tax	3.1	-15.2
Deferred tax – temporary differences	1,449.3	1,436.8
Deferred tax – unutilized loss carryforwards	-47.0	-25.2
	1,440.5	**1,471.5**

The current tax expense is determined on the basis of the taxable income for the fiscal year. For the 2018 fiscal year, the combined tax rate of corporate income tax and solidarity surcharge for domestic companies is 15.8% (2017: 15.8%). Including trade tax at a rate of about 17.3% (2017: 17.3%), the combined domestic tax rate is 33.1% in 2018 (2017: 33.1%). The corporate income tax rate for the companies based in

Austria is 25.0% (2017: 25.0%), while the rate for companies based in Sweden is 22.0%. The income generated by Vonovia Finance B. V. is subject to Dutch tax law; current taxes of € 3.1 million were incurred there (2017: € 2.3 million). The other companies that hold properties and are based in the Netherlands have limited corporation tax liability in Germany. These companies, together with the other foreign companies, pay tax that is of a negligible amount from the Group's perspective in the countries in which they are domiciled.

Anticipated effects of the so-called extended trade tax exemption on trade tax are taken into account when the deferred taxes are determined. Due to the discontinuation of the extended trade tax exemption due to sales, triggering commercial real estate trading at four BUWOG companies, deferred tax liabilities are also subject to trade tax there, unlike in the previous year. This effect causes a deferred tax expense of € 29.5 million.

For domestic deductible temporary differences (excl. loss carryforwards) in the amount of € 15.2 million (Dec. 31, 2017: € 18.4 million), no deferred corporate income taxes or deferred trade taxes were recognized, because they are not likely to be used in the future. For Austrian and Swedish deductible differences (excl. loss carryforwards) in the amount of € 0.0 million (Dec. 31, 2017: € 15.8 million), no deferred corporate income taxes were recognized as a result.

As of December 31, 2018, there were domestic corporate income tax loss carryforwards amounting to € 3,949.5 million (Dec. 31, 2017: € 3,840.8 million), as well as trade tax loss carryforwards amounting to € 2,122.5 million (Dec. 31, 2017: € 2,040.1 million), for which deferred tax assets have been recognized to the extent that their realization is sufficiently probable. As of December 31, 2018, there were corporate income tax loss carryforwards in Austria and Sweden amounting to € 245.0 million (Dec. 31, 2017: € 165.4 million) and € 108.1 million (Dec. 31, 2017: € 0.0 million) respectively for which deferred tax assets have also been recognized to the extent that their realization is sufficiently probable. The increase in tax loss carryforwards resulted from current tax losses at individual companies and from the business combinations with the BUWOG and the Victoria Park Group.

No deferred taxes were recognized in the balance sheet for domestic and foreign corporate income tax loss carryforwards amounting to € 1,010.1 million (Dec. 31, 2017: € 968.4 million). Of this amount, € 30.6 million arose for the first time in the 2018 fiscal year (2017: € 29.0 million). Under current tax law, these loss carryforwards are not subject to restrictions either with regard to time or the amount of the loss carryforward. The fact that no deferred tax assets were recognized on the new corporate income tax loss carryforwards results in a tax effect of € 5.4 million (2017: € 4.6 million). In addition, there are further trade tax loss carryforwards subject to no restrictions with regard to how they can be carried forward in the amount of € 660.6 million in total (Dec. 31, 2017: € 623.2 million). These did not give rise to any deferred tax assets. Of this amount, € 29.4 million arose for the first time in the 2018 fiscal year (2017: € 25.0 million) and the resulting tax effect is € 4.6 million (2017: € 4.3 million).

The remeasurement of deferred tax assets on temporary differences and loss carryforwards from the previous year led to tax income amounting to € 10.0 million in the 2018 fiscal year (2017: € 27.7 million).

Deferred taxes on interest carryforwards are recognized if the interest carryforward is likely to be able to be used in the future. Due to the Group's capital structure, no interest carryforwards are likely to be able to be used in the future. As a result, no deferred tax assets have been recognized on interest carryforwards in the amount of € 820.2 million (Dec. 31, 2017: € 675.5 million). In the 2018 fiscal year, non-deductible interest increased the interest carryforward by € 144.7 million (2017: € 104.6 million). The fact that no deferred tax assets were recognized on the new interest carryforward generated a tax effect of € 47.9 million (2017: € 34.6 million).

A reconciliation between actual income taxes and expected tax expense, which is the product of the accounting profit for the period multiplied by the average tax rate applicable in Germany, is shown in the table below.

in € million	2017	2018
Earnings before tax	4,007.4	3,874.4
Income tax rate in %	33.1	33.1
Expected tax expense	1,326.4	1,282.4
Trade tax effects	-16.0	-7.6
Non-deductible operating expenses	23.5	18.4
Tax-free income	-19.0	-19.8
Change in the deferred tax assets on loss carryforwards and temporary differences	-27.7	-10.0
New loss and interest carryforwards not recognized	43.5	57.8
Prior year current income tax and taxes on guaranteed dividends	7.4	-10.8
Tax effect goodwill impairment	111.7	225.5
Differing foreign tax rates	-15.4	-30.8
Other tax effects (net)	6.1	-33.6
Effective income taxes	**1,440.5**	**1,471.5**
Effective income tax rate in %	**35.9**	**38.0**

The deferred taxes refer to temporary differences in balance sheet items and unutilized loss carryforwards as follows:

in € million	Dec. 31, 2017	Dec. 31, 2018
Intangible assets	2.9	3.6
Investment properties	8.9	4.3
Assets held for sale	0.9	0.6
Property, plant and equipment	0.4	1.3
Financial assets	5.4	8.7
Other assets	52.2	89.0
Provisions for pensions	82.2	82.6
Other provisions	11.9	17.5
Liabilities	100.3	183.1
Loss carryforwards	731.8	789.5
Deferred tax assets	**996.9**	**1,180.2**

in € million	Dec. 31, 2017	Dec. 31, 2018
Intangible assets	5.0	22.4
Investment properties	6,171.6	8,165.1
Assets held for sale	23.9	16.2
Property, plant and equipment	6.9	11.1
Financial assets	0.0	0.0
Other assets	12.6	41.2
Other provisions	52.0	54.9
Liabilities	37.2	47.1
Deferred tax liabilities	**6,309.2**	**8,358.0**
Excess deferred tax liabilities	**5,312.3**	**7,177.8**

Deferred tax assets and liabilities are netted against each other when the same company and the same tax authority are involved and the realization period is the same. As a result, the following deferred tax assets and liabilities are stated:

in € million	Dec. 31, 2017	Dec. 31, 2018
Deferred tax assets	10.3	54.1
Deferred tax liabilities	5,322.6	7,231.9
Excess deferred tax liabilities	**5,312.3**	**7,177.8**

The increase in deferred tax assets is mainly due to deferred taxes on loss carryforwards of the Swedish companies that were not netted, while the increase in deferred tax liabilities is primarily attributable to investment properties.

The change in deferred taxes is as follows:

in € million	2017	2018
Excess deferred tax liabilities as of Jan. 1	3,749.9	5,312.3
Deferred tax expense in income statement	1,402.3	1,411.7
Deferred tax due to first-time consolidation	149.1	459.0
Change recognized in other comprehensive income in deferred taxes due to equity instruments measured at fair value	2.4	0.9
Change recognized in other comprehensive income in deferred taxes on actuarial gains and losses from pensions and similar obligations	1.8	-2.7
Change recognized in other comprehensive income in deferred taxes on derivative financial instruments	7.4	-2.0
Deferred taxes recognized in equity on accrued capital procurement costs resulting from the issuance of a hybrid bond with an indefinite term	-0.2	-0.5
Deferred taxes recognized in the capital reserve on capital procurement costs of capital increases	–	-3.6
Currency translation differences	–	2.4
Other	-0.4	0.3
Excess deferred tax liabilities as of Dec. 31	**5,312.3**	**7,177.8**

No deferred tax liabilities are recognized for profits accumulated at subsidiaries of € 22,416.7 million (Dec. 31, 2017: € 15,108.4 million), as these profits are to remain invested for an indefinite period or are not subject to taxation. In the event of distribution or disposal of the subsidiaries, 5% of the distributed amounts or the capital gains would be subject to German taxation so that there would normally be an additional tax obligation.

20 Earnings per Share

The earnings per share are calculated by dividing the profit for the period attributable to the shareholders by the weighted average number of ordinary shares in circulation during the reporting period.

	2017	2018
Profit for the period attributable to Vonovia shareholders (in € million)	2,410.7	2,266.5
Weighted average number of shares	476,462,903	505,720,971
Earnings per share (basic and diluted) in €	**5.06**	**4.48**

At the end of the reporting period, no diluting financial instruments were in circulation. The basic earnings per share correspond to the diluted earnings per share.

Notes to the Consolidated Balance Sheet

21 Intangible Assets

in € million	Concessions, industrial property rights, licenses and similar rights	Self-developed software	Customer relationships and non-competition clause	Trademark rights	Goodwill	Total
Cost						
As of Jan. 1, 2018	37.3	6.5	12.1	–	2,950.8	3,006.7
Additions due to business combinations	19.6	–	–	66.6	906.4	992.6
Additions	17.5	1.0	–	–	–	18.5
Disposals	-9.6	-0.8	-3.6	–	–	-14.0
Changes in value from currency translation	–	–	–	–	3.7	3.7
Transfers	3.5	–	–	–	–	3.5
As of Dec. 31, 2018	68.3	6.7	8.5	66.6	3,860.9	4,011.0
Accumulated amortization						
As of Jan. 1, 2018	23.7	3.3	5.3	–	337.3	369.6
Additions due to business combinations	9.1	–	–	–	–	9.1
Amortization in reporting year	15.7	2.4	1.1	–	–	19.2
Impairment	–	–	–	–	681.2	681.2
Disposals	-9.3	-0.8	-3.6	–	–	-13.7
Transfers	2.4	–	–	–	–	2.4
As of Dec. 31, 2018	41.6	4.9	2.8	–	1,018.5	1,067.8
Carrying amounts						
As of Dec. 31, 2018	26.7	1.8	5.7	66.6	2,842.4	2,943.2
Cost						
As of Jan. 1, 2017	31.2	4.7	12.1	–	2,718.9	2,766.9
Additions due to business combinations	8.2	–	–	–	231.9	240.1
Additions	7.6	1.8	–	–	–	9.4
Disposals	-9.7	–	–	–	–	-9.7
As of Dec. 31, 2017	37.3	6.5	12.1	–	2,950.8	3,006.7
Accumulated amortization						
As of Jan. 1, 2017	19.8	1.6	2.4	–	–	23.8
Additions due to business combinations	4.7	–	–	–	–	4.7
Amortization in reporting year	8.9	1.7	2.9	–	–	13.5
Impairment	–	–	–	–	337.3	337.3
Disposals	-9.7	–	–	–	–	-9.7
As of Dec. 31, 2017	23.7	3.3	5.3	–	337.3	369.6
Carrying amounts						
As of Dec. 31, 2017	13.6	3.2	6.8	–	2,613.5	2,637.1

Customer relationships and similar values

The brand name "BUWOG Group" for the development business was identified within the framework of the purchase price allocation for BUWOG as a material asset with indefinite useful life and recognized at a value of € 66.6 million.

Goodwill

Goodwill came to € 2,842.4 million as of December 31, 2018. Compared with December 31, 2017, goodwill has increased by € 228.9 million. The change is due, first, to an increase resulting from the acquisition of BUWOG in 2018 in the amount of € 713.6 million, the addition from the Victoria Park acquisition and associated currency effects of € 196.5 million in total. Second, the € 3,517.9 million increase in the value of the real estate portfolio in the 2018 fiscal year increased the carrying amount of the groups of cash-generating units (regions) affected by the valuation, which in turn led to impairment losses being recognized on the goodwill allocated to the regions in the amount of € 681.2 million.

The allocation of goodwill to the regional business areas and to the Value-add and Development segments was performed based on the two indicators that reflect the synergy effects expected to be generated as a result of the business combination: "direct planned synergies" and "fair values."

In the fourth quarter, the mandatory annual impairment test was performed. As part of the impairment test and in accordance with IAS 36.19, first the value in use was calculated based on the Management Board-approved detailed plan with a planning period of five years. This was derived from the five-year plan at Group level approved by the Management Board and the Supervisory Board. With regard to the regional business areas of the Rental segment, the main drivers behind the results of the five-year plan are the increase in gross rental income by an average of 4.0% every year, as well as the planned vacancy rate on the level of 2018 at the end of the detailled planning period.

Developments in the Value-add segment are characterized primarily by the extension of existing business areas (craftsmen's organization, multimedia, management of residential property, smart metering, etc.). On the other hand, there is an increase in operating expenses, taking into account the rate of inflation. The development in these values is in line with past experiences of business model development. The cash flows from the last detailed planning year were derived to calculate the perpetual annuity.

For the Development segment, which is still being set up, a six-year plan was derived from the five-year plan approved by the Management Board and the Supervisory Board at Group level to reflect a "steady state." The main drivers of the results in the Development segment are the investment costs, the number of units sold and the sales margin that can be generated.

The growth rate for the CGUs of the rental segment was calculated regionally on the basis of actual rents and limited to 1% for the segment as a whole. A constant growth rate of 1% was assumed for the Value-add and Development segments.

The main parameters for calculating the value in use are the sustainable growth rate, the weighted average cost of capital (WACC) and the expected cash flows.

The weighted average cost of capital before tax is based on the risk-free interest rate calculated as a three-month average using the Svensson method, a market risk premium and a levered beta. The levered beta and the equity ratios used are determined on the basis of a peer comparison. In addition, country-specific cost surcharges were calculated for the Austria business area, the Sweden business area and the Development business area. The main parameters are shown in the following table:

Dec. 31, 2018	Rental Germany	Rental Austria	Rental Sweden	Value-add	Development
Risk-free interest rate in %	1.1	1.1	1.1	1.1	1.1
Market risk premium in %	7.0	7.0	7.0	7.0	7.0
Levered beta	0.53	0.53	0.53	0.53	0.91
Country-specific premium in %	–	0.2	0.2	–	0.1

Dec. 31, 2017	Rental Germany	Rental Austria	Rental Sweden	Value-add	Development
Risk-free interest rate in %	1.3	–	–	1.3	–
Market risk premium in %	6.8	–	–	6.8	–
Levered beta	0.54	–	–	0.54	–
Country-specific premium in %	–	–	–	–	–

Groups of Cash-generating Units

	Segment Rental											
in € million	North area	East area	South-east area	West area	Middle area	South area	Central area	Austria Business Area	Sweden Business Area	Segment Value-add	Segment Develop-ment	Group
Goodwill 2017	521.0	–	370.0	576.0	432.3	488.3	13.8	–	–	212.1	–	2,613.5
Additions due to business combina-tions	111.8	75.3	70.6	104.8	69.0	72.5	5.4	31.6	196.6	66.4	106.1	910.1
Disposal due to depreciation	-299.3	-75.3	-5.0	–	–	-270.0	–	-31.6	–	–	–	-681.2
Goodwill 2018	333.5	–	435.6	680.8	501.3	290.8	19.2	–	196.6	278.5	106.1	2,842.4
WACC before tax 2018 in %	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5	4.7	5.1	6.6	–
WACC before tax 2017 in %	4.5	4.5	4.5	4.6	4.5	4.5	4.5	n. a.	n. a.	4.7	n. a.	–
Sustainable rate of increase 2018 in %	1.0	1.1	1.0	0.8	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
Sustainable rate of increase 2017 in %	1.0	1.1	1.0	0.8	1.0	1.1	0.9	n. a.	n. a.	1.0	n. a.	1.0

The results of the assessment confirm the value of the goodwill for the areas West, Central, Development, Sweden and the Value-add segment. Any need for impairment of € 681.2 million was calculated for the North, East, Southeast, South and Austria business areas. In these regions, the further increase in property values due to noticeable yield compression resulted in carrying amounts for the relevant group of CGUs that exceed the recoverable amount.

The impairment loss was recognized in the consolidated income statement under “depreciation and amortization.” The value in use for the North area amounts to € 6.4 billion, with a value of € 4.9 billion for the East area, € 3.7 billion for the Southeast area, € 6.1 billion for the South area and € 1.9 billion for the Austria area.

An increase in the cost of capital will result in the following need for impairment:

	Segment Rental								
	North area	Southeast area	West area	Middle area	South area	Central area	Sweden area	Segment Value-add	Segment Develop-ment
Goodwill 2018 in € million	333.5	435.6	680.8	501.3	290.8	19.2	196.6	278.5	106.1
Amortization in € million based on an increase in WACC by 0.1%	259.6	155.8	–	225.6	257.5	–	–	–	–
Inpairment starts with an increase of the WACC in percentage points	–	–	0.2	–	–	0.6	0.3	8.4	1.6
Full write-off in the event of an increase in the WACC in %	0.2	0.3	0.6	0.3	0.2	0.8	0.7	20.4	2.4

Any negative deviation of the values planned for the key assumptions would lead to a further impairment in the North, South and Southeast business areas. If the planned sustainable growth rate were to decline by 0.25 percentage points, the goodwill remaining would be written off entirely in the North, Central and South business areas, while impairment losses of up to € 350 million would be incurred in the Southeast business area.

22 Property, Plant and Equipment

in € million	Owner-occupied properties	Technical equipment, plant and machinery	Other equipment, fixtures, furniture and office equipment	Total
Cost				
As of Jan. 1, 2018	104.5	43.1	77.4	225.0
Additions due to business combinations	21.3	0.1	5.4	26.8
Additions	22.4	3.0	66.2	91.6
Capitalized modernization costs	1.6	–	–	1.6
Disposals	-1.8	-0.2	-19.8	-21.8
Transfer from investment properties	6.5	–	–	6.5
Transfer to investment properties	-10.7	–	–	-10.7
Other transfers	–	–	1.1	1.1
As of Dec. 31, 2018	143.8	46.0	130.3	320.1
Accumulated depreciation				
As of Jan. 1, 2018	5.0	14.8	27.6	47.4
Additions due to business combinations	0.2	–	3.4	3.6
Depreciation in reporting year	2.2	6.0	29.5	37.7
Reversal of impairments	-0.5	–	–	-0.5
Disposals	-0.6	-0.2	-18.9	-19.7
Other transfers	–	–	1.2	1.2
As of Dec. 31, 2018	6.3	20.6	42.8	69.7
Carrying amounts				
As of Dec. 31, 2018	137.5	25.4	87.5	250.4
Cost				
As of Jan. 1, 2017	70.6	36.5	46.9	154.0
Additions due to business combinations	–	0.2	2.9	3.1
Additions	40.2	7.1	39.2	86.5
Capitalized modernization costs	1.1	–	–	1.1
Disposals	-2.3	-0.7	-11.6	-14.6
Transfer from investment properties	12.9	–	–	12.9
Transfer to investment properties	-18.0	–	–	-18.0
As of Dec. 31, 2017	104.5	43.1	77.4	225.0
Accumulated depreciation				
As of Jan. 1, 2017	6.1	9.7	22.5	38.3
Additions due to business combinations	–	0.1	1.8	1.9
Depreciation in reporting year	0.7	5.7	14.3	20.7
Impairment	0.7	–	–	0.7
Reversal of impairments	-0.6	–	–	-0.6
Disposals	-1.9	-0.7	-11.0	-13.6
As of Dec. 31, 2017	5.0	14.8	27.6	47.4
Carrying amounts				
As of Dec. 31, 2017	99.5	28.3	49.8	177.6

As of December 31, 2018, the item “Owner-occupied properties” includes € 63.3 million (Dec. 31, 2017: € 49.2 million) which mainly consists of production costs for the construction of the new Vonovia headquarters.

Furthermore, carrying amounts of owner-occupied properties amounting to € 35.1 million as of December 31, 2018 (Dec. 31, 2017: € 18.0 million), are encumbered with land charges in favor of various lenders.

23 Investment Properties

in € million	
As of Jan. 1, 2018	33,182.8
Additions due to business combinations	6,214.7
Additions	365.8
Capitalized modernization costs	1,006.0
Grants received	-2.6
Transfer from property, plant and equipment	10.7
Transfer to property, plant and equipment	-6.5
Transfer from assets held for sale	24.4
Transfer to assets held for sale	-323.9
Disposals	-597.6
Disposals due to changes in scope of consolidation	-2.3
Net income from fair value adjustments of investment properties	3,517.9
Revaluation of assets held for sale	68.5
Revaluation from currency effects	33.0
As of Dec. 31, 2018	**43,490.9**
As of Jan. 1, 2017	26,980.3
Additions due to business combinations	2,469.6
Additions	307.2
Capitalized modernization costs	771.8
Grants received	-0.6
Transfer from property, plant and equipment	18.0
Transfer to property, plant and equipment	-12.9
Transfer from assets held for sale	2.5
Transfer to assets held for sale	-471.4
Disposals	-396.5
Net income from fair value adjustments of investment properties	3,434.1
Revaluation of assets held for sale	81.1
Revaluation from currency effects	-0.4
As of Dec. 31, 2017	**33,182.8**

The additions in 2018 include € 86.9 million (Dec.31, 2017: € 65.7 million) in production costs for new construction activities.

In the amount of € 71.0 million (Dec. 31, 2017: € 59.9 million), the investment properties contain leased assets that are defined as finance leases according to IAS 17 and are treated as if they were the Group's economic property. These relate to the Spree-Bellevue (Spree-Schlange) property in Berlin. The property has been leased from DB Immobilienfonds 11 Spree-Schlange von Quistorp KG until 2044. The lease agreement includes an obligation to pay compensation for loss of use as agreed by contract. At the end of 2028, each fund subscriber is entitled to return his share to the property fund at a fixed redemption price. If all of the fund investors make use of this option, Vonovia is obliged to acquire the property at a fixed purchase price after deduction of borrowings. If more than 75% of the shares are returned in this way, Vonovia has a call option for the purchase of all fund shares. Details of minimum lease payments are given under note [37] Non-derivative Financial Liabilities.

For the investment properties encumbered with land charges in favor of various lenders, see note [35] Non-derivative Financial Liabilities.

Directly Attributable Operating Expenses

Rental income from investment properties amounted to € 1,897.8 million during the fiscal year (2017: € 1,672.1 million). Operating expenses directly relating to these properties amounted to € 195.1 million during the fiscal year (2017: € 200.8 million). These include expenses for maintenance, ancillary costs that cannot be passed on to the tenants, personnel expenses from the caretaker and craftsmen's organizations, and income from the capitalized internal expenses. The capitalized internal expenses relate to the work performed by the Group's own craftsmen's organization and the management costs for major modernization projects.

Long-term Leases

Vonovia as a lessor has concluded long-term leases on commercial properties. These are non-cancelable operating leases. The minimum future lease receipts from these leases are due as follows:

in € million	Dec. 31, 2017	Dec. 31, 2018
Total minimum lease payments	82.2	82.1
Due within 1 year	26.0	25.8
Due in 1 to 5 years	50.7	50.7
Due after 5 years	5.5	5.6

Fair Values

The value of the entire portfolio of residential properties was determined on the basis of the International Valuation Standard Committee's definition of market value. Portfolio premiums and discounts, which can be observed when portfolios are sold in market transactions, were not included. Nor were time restrictions in the marketing of individual properties. Vonovia determines fair value in accordance with the requirements of IAS 40 in conjunction with IFRS 13.

Vonovia, in principle, measures its portfolio on the basis of the discounted cash flow (DCF) procedure. Under the DCF methodology, the expected future income and costs of a property are forecast over a period of ten years and discounted to the date of valuation as the net present value. The income mainly comprises expected rental income (current in-place rent, market rents as well as their development) taking vacancy losses into account. These are derived for each location from the latest rent indices and rent tables (empirica and IVD), as well as from studies on spatial prosperity (Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Prognos, empirica, Bertelsmannstiftung, etc.).

On the cost side, maintenance expenses and administrative costs are taken into account in accordance with the II. Berechnungsverordnung and inflated in the reporting period (II. BV; German Regulation on Calculations for Residential Buildings in accordance with the Second Housing Construction Law, stipulating how economic viability calculations for accommodation are to be performed). Further cost items are, for example, ground rents, non-allocable ancillary costs and rent losses. Modernization measures carried out in the housing stocks are factored in by decreasing the current maintenance expenses and adjusting market rents.

On this basis, the forecast cash flows are calculated on an annual basis and discounted to the date of valuation as the net present value. In addition, the terminal value of the property at the end of the ten-year period is determined using the expected stabilized net operating income and again discounted to the date of valuation as the net present value. The discount rate applied reflects the market situation, location, type of property, special property features (e.g. inheritable building rights, rent restrictions), the yield expectations of a potential investor and the risk associated with the forecast future cash flows of the property. The present value calculated in this way is reconciled to the market value by deducting standard market transaction costs, such as real estate transfer taxes, agent and notary costs.

The commercial properties in the portfolio are mainly small commercial units for the supply of the local residential area. Different cost approaches were used to those for residential properties, and discount rates were adjusted to reflect the market specifics.

The valuation is, in principle, performed on the basis of homogeneous valuation units. These meet the criteria of economically cohesive and comparable land and buildings. They include:

> Geographical location (identity of the microlocation and geographical proximity)
> Comparable types of use, building class, construction year class and condition of property
> Same property features such as rent restrictions, inheritable building rights and full or part ownership

The Vonovia portfolio also contains project developments, development areas and land areas with inheritable building rights. Project developments are measured at the capitalized construction costs until the construction work is complete. If the project is then to be managed within Vonovia's own portfolio, it is measured at fair value using the DCF procedure described above. Development areas are valued using a comparable method on the basis of the local standard land value evaluated. Deductions are taken into account in particular for the readiness for construction and potential use as well as for likelihood of development and the development situation. Inheritable building rights granted are valued in the same way as the property portfolio using a DCF method. The input parameters here are the duration and amount of ground rent and the value of the land.

Vonovia determined the fair values of Vonovia's real estate portfolio in Germany (excl. the BUWOG German subportfolios) as of December 31, 2018, in its in-house valuation department on the basis of the methodology described above. The property assets are also assessed by the independent property appraiser CBRE GmbH. The contractually fixed remuneration for the valuation report is not linked to the valuation results. The market value resulting from the external review deviates from the internal valuation result by less than 0.1%.

As far as the portfolio of BUWOG and the portfolio of non-German real estate of conwert is concerned, the result of the valuation of the external appraiser CBRE GmbH was applied. For the portfolio of Victoria Park, the result of the external appraiser Savills Sweden AB in cooperation with Malmöbryggan Fastighetsekonomi AB was applied. The fair values of the BUWOG, conwert and Victoria Park portfolio were also calculated using a DCF procedure that is comparable to the procedure used by Vonovia explained above. In addition, the valuation of the BUWOG portfolio in Austria was based on the assumption of sales strategies for the recurring sales of apartments for a subportfolio. Attainable income was recognized in line with the calculation procedure and reported in the appropriate period in the DCF model. In order to take the sales potential into account, the DCF detailed period was extended to 80 years for the Austrian properties and no terminal value was used.

The real estate portfolio of Vonovia is to be found in the items investment properties, property, plant and equipment (owner-occupied properties), real estate inventories, contractual assets and assets held for sale. The fair value of the portfolio comprising residential buildings, commercial properties, garages and parking spaces, project developments, as well as undeveloped land and any inheritable building rights granted was € 44,239.9 million as of December 31, 2018 (Dec. 31, 2017: € 33,436.3 million). This corresponds to a net initial yield for the developed land of 3.4%* (December 31, 2017: 3.6%). For Germany, this results in an in-place-rent multiplier of 21.5 for the portfolio (Dec. 31, 2017: 19.7) and a fair value per m² of € 1,677 (Dec. 31, 2017: € 1,475). For the portfolio in Austria, the in-place-rent multiplier and fair value is 23.6 and € 1,346 per m²; for Sweden it is 14.6 and € 1,563 per m².

* Overall portfolio including Austria and Sweden.

The material valuation parameters for the investment properties (level 3) in the real estate portfolio are as follows as of December 31, 2018, broken down by regional markets:

Dec. 31, 2018 Regional market	Valuation results* Fair value (in € million)	thereof Assets held for sale (in € million)	thereof Owner-occupied properties (in € million)	thereof Investment properties (in € million)
Berlin	6,535.9	2.5	5.4	6,527.9
Rhine Main Area	3,949.6	20.9	6.3	3,922.4
Rhineland	3,424.5	2.8	7.9	3,413.8
Southern Ruhr Area	3,354.0	5.4	4.2	3,344.3
Dresden	3,104.1	0.0	5.5	3,098.6
Hamburg	2,456.1	0.3	3.0	2,452.8
Munich	2,050.6	9.8	3.1	2,037.7
Stuttgart	1,935.6	4.8	1.8	1,929.0
Kiel	1,909.9	0.0	2.5	1,907.4
Hanover	1,622.7	0.4	1.8	1,620.5
Northern Ruhr Area	1,566.8	12.1	4.5	1,550.2
Bremen	1,071.2	0.0	2.6	1,068.6
Leipzig	867.6	0.1	1.0	866.5
Westphalia	783.2	0.0	1.1	782.1
Freiburg	602.4	0.2	2.0	600.2
Other strategic locations	2,604.6	6.1	3.9	2,594.7
Total strategic locations	**37,838.9**	**65.3**	**56.9**	**37,716.7**
Non-strategic locations	789.5	29.0	1.4	759.2
Vonovia Germany	**38,628.4**	**94.3**	**58.2**	**38,475.8**
Vonovia Austria**	2,517.0	0.0	0.0	2,517.0
Vonovia Sweden**	1,737.7	0.0	0.0	1,737.7

* Fair value of the developed land excluding € 1,356.8 million in development, undeveloped land, inheritable building rights granted and other, thereof € 760.4 million in investment properties.
** The valuation methods for the properties in Austria and Sweden provided only partially comparable valuation parameters. Administrative and maintenance expenses are not shown separately.

Valuation parameters investment properties (Level 3)						
Management costs residential (€per residential unit p.a.)	Maintenance costs total residential (€ per m² p.a.)	Market rent residential (€ per m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
251	14.29	7.38	1.8%	1.3%	4.4%	2.7%
274	14.20	8.81	1.8%	1.2%	5.1%	3.5%
271	13.81	7.68	1.7%	2.0%	5.3%	3.8%
267	12.78	6.42	1.5%	2.5%	5.4%	4.1%
239	14.36	6.73	1.7%	2.0%	5.6%	4.2%
259	14.50	8.03	1.6%	1.4%	5.0%	3.6%
262	13.88	10.66	1.8%	0.6%	4.8%	3.1%
272	14.41	8.73	1.8%	1.3%	5.2%	3.5%
259	14.62	6.80	1.6%	1.7%	5.2%	3.9%
260	14.14	7.03	1.7%	2.0%	5.4%	3.9%
269	13.33	6.06	1.2%	3.4%	5.7%	4.8%
264	13.25	6.33	1.8%	2.1%	5.2%	3.6%
255	14.65	6.33	1.7%	3.6%	5.3%	3.8%
264	13.41	6.65	1.5%	1.8%	5.5%	4.2%
270	14.86	7.96	1.7%	0.9%	4.8%	3.2%
268	14.46	7.20	1.6%	2.3%	5.4%	4.0%
262	**13.98**	**7.29**	**1.7%**	**1.9%**	**5.2%**	**3.6%**
259	14.50	6.90	1.7%	2.8%	5.5%	3.9%
262	**13.99**	**7.28**	**1.7%**	**2.0%**	**5.2%**	**3.6%**
n.a.	n.a.	5.87	0.9%	n.a.	5.2%	n.a.
n.a.	n.a.	9.20	2.0%	0.7%	6.1%	4.2%

Dec. 31, 2017 Regional market	Valuation results* Fair value (in € million)	thereof Assets held for sale (in € million)	thereof Owner-occupied properties (in € million)	thereof Investment properties (in € million)
Berlin	5,181.9	12.6	7.0	5,162.3
Rhine Main Area	3,525.1	3.2	5.7	3,516.2
Rhineland	3,240.3	2.2	7.6	3,230.5
Southern Ruhr Area	2,884.2	2.8	3.7	2,877.7
Dresden	2,875.2	0.0	5.1	2,870.1
Hamburg	1,940.1	2.5	2.9	1,934.7
Munich	1,820.2	6.6	2.4	1,811.2
Stuttgart	1,742.0	1.7	2.5	1,737.8
Northern Ruhr Area	1,417.5	2.3	3.8	1,411.5
Hanover	1,297.5	1.1	1.3	1,295.1
Kiel	992.3	4.5	2.8	985.1
Bremen	913.9	0.0	3.5	910.3
Leipzig	763.3	0.0	5.1	758.2
Westphalia	667.0	0.0	1.0	666.0
Freiburg	545.0	0.2	1.9	542.9
Other strategic locations	2,102.8	4.3	4.5	2,094.0
Total strategic locations	**31,908.2**	**44.0**	**60.8**	**31,803.5**
Non-strategic locations	645.1	68.9	1.0	575.2
Vonovia Germany	**32,553.3**	**112.9**	**61.7**	**32,378.6**
Vonovia Austria **	551.6	3.3	0	548.3

* Fair value of the developed land excluding € 331.4 million in development, undeveloped land, inheritable building rights granted, assets under construction and other, thereof € 255.9 million in investment properties.
** The gross rental method for the portfolio in Austria uses valuation parameters that are only partially comparable.

The inflation rate applied to the DCF procedure is 1.6%. Net income from the valuation of investment properties amounted to € 3,517.9 million in the 2018 fiscal year (Dec. 31, 2017: € 3,434.1 million). For the Austrian portfolio, a sales strategy with an average selling price of € 1,953 per m² was assumed for 49.4% of the properties.

Sensitivity Analyses

The sensitivity analyses performed on Vonovia's real estate portfolio show the impact of the value drivers influenced by the market. Those influenced in particular are the market rents and their development, the amount of recognized administrative and maintenance expenses, cost increases, the vacancy rate and interest rates. The effect of possible fluctuations in these parameters is shown separately for each parameter according to regional market in the following.

Interactions between the parameters are possible but cannot be quantified owing to the complexity of the interrelationships. The "vacancy" and "market rent" parameters, for example, can influence each other. If rising demand for housing is not met by adequate supply developments, then this can result in lower vacancy rates and, at the same time, rising market rents. If, however, the rising demand is compensated for by a high vacancy reserve in the location in question, then the market rent level does not necessarily change.

Changes in the demand for housing can also impact the risk associated with the expected payment flows, which is then reflected in adjusted amounts recognized for discounting and capitalized interest rates. The effects do not, however, necessarily have to have a favorable impact on each other, for example, if the changes in the demand for residential real estate are overshadowed by macroeconomic developments.

Valuation parameters investment properties (Level 3)						
Management costs residential (€per residential unit p. a.)	Maintenance costs total residential (€ per m² p. a.)	Market rent residential (€ per m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
251	14.02	6.98	1.5%	1.4%	4.3%	2.9%
271	14.05	8.43	1.4%	1.3%	5.1%	3.7%
267	13.58	7.52	1.3%	2.0%	5.3%	4.0%
263	12.96	6.18	1.1%	2.6%	5.5%	4.5%
236	14.59	6.47	1.3%	2.1%	5.4%	4.3%
257	14.22	7.76	1.3%	1.3%	4.9%	3.8%
258	13.79	10.69	1.5%	0.6%	4.9%	3.4%
269	14.21	8.41	1.4%	1.5%	5.2%	3.8%
266	13.31	5.79	0.9%	3.6%	5.8%	5.1%
256	13.89	6.70	1.3%	1.9%	5.3%	4.0%
255	14.39	6.37	1.2%	1.7%	5.3%	4.3%
259	13.28	6.09	1.3%	2.4%	5.1%	3.9%
252	14.34	6.16	1.4%	4.0%	5.3%	4.0%
259	13.44	6.17	1.2%	2.0%	5.5%	4.4%
266	14.36	7.72	1.4%	1.0%	4.8%	3.4%
267	13.82	6.96	1.2%	2.1%	5.3%	4.1%
259	**13.82**	**7.01**	**1.3%**	**2.0%**	**5.2%**	**3.8%**
269	13.43	5.51	1.0%	5.6%	5.7%	5.0%
259	**13.81**	**6.96**	**1.3%**	**2.1%**	**5.2%**	**3.9%**
n.a.	n.a.	9.15	n.a.	n.a.	n.a.	3.3%

In addition, factors other than demand can have an impact on these parameters. Examples include changes in the housing stock, in seller and buyer behavior, political decisions and developments on the capital market.

The table below shows the percentage impact on values in the event of a change in the valuation parameters. The absolute impact on values is calculated by multiplying the percentage impact by the fair value of the investment properties.

Dec. 31, 2018	Change in value as a percentage under varying parameters		
	Management costs residential	**Maintenance costs residential**	**Cost increase/ inflation**
Regional market	**-10% / +10%**	**-10% / +10%**	**-0.5% / +0.5% points**
Berlin	0.5 / -0.5	1.7 / -1.7	4.7 / -4.8
Rhine Main Area	0.5 / -0.5	1.5 / -1.5	2.9 / -3.0
Rhineland	0.5 / -0.5	1.8 / -1.8	3.4 / -3.6
Southern Ruhr Area	0.8 / -0.8	2.4 / -2.3	4.4 / -4.5
Dresden	0.7 / -0.7	2.1 / -2.1	3.9 / -4.0
Hamburg	0.6 / -0.6	1.8 / -1.8	3.4 / -3.5
Munich	0.4 / -0.4	1.2 / -1.2	3.4 / -3.5
Stuttgart	0.5 / -0.5	1.5 / -1.5	3.0 / -3.2
Kiel	0.8 / -0.8	2.1 / -2.1	2.7 / -2.9
Hanover	0.6 / -0.6	2.0 / -2.0	3.5 / -3.7
Northern Ruhr Area	1.0 / -1.0	2.8 / -2.8	4.4 / -4.6
Bremen	0.8 / -0.7	2.2 / -2.2	4.9 / -5.0
Leipzig	0.7 / -0.7	2.3 / -2.3	4.8 / -4.9
Westphalia	0.7 / -0.7	2.4 / -2.4	4.0 / -4.1
Freiburg	0.5 / -0.5	1.8 / -1.7	3.7 / -3.8
Other strategic locations	0.6 / -0.7	2.0 / -2.0	3.3 / -3.4
Total strategic locations	**0.6 / -0.6**	**2.1 / -2.0**	**3.0 / -3.1**
Non-strategic locations	0.6 / -0.6	1.9 / -1.9	3.8 / -3.9
Vonovia Germany	**0.6 / -0.6**	**1.9 / -1.9**	**3.8 / -3.9**
Vonovia Austria*	n. a.	n. a.	n. a.
Vonovia Sweden*	n. a.	n. a.	1.5 / -1.5

* The valuation methods for the portfolio in Austria and Sweden use valuation parameters that are only partially comparable. Administrative and maintenance expenses are not shown separately.

	Change in value as a percentage under varying parameters			
	Market rent residential	**Market rent increase residential**	**Stabilized vacancy rate residential**	**Discounting and capitalized interest rates total**
	-2.0% / +2.0%	**-0.2% / +0.2% points**	**-1% / +1% point**	**-0.25% / +0.25% points**
	-2.3 / 2.3	-8.7 / 10.4	1.7 / -1.7	10.6 / -8.8
	-2.3 / 2.3	-6.4 / 7.3	1.2 / -1.6	7.7 / -6.7
	-2.3 / 2.3	-6.3 / 7.1	1.7 / -1.8	7.3 / -6.4
	-2.4 / 2.5	-6.4 / 7.2	2.1 / -2.1	6.8 / -6.0
	-2.5 / 2.5	-6.1 / 6.9	1.9 / -1.9	6.8 / -6.0
	-2.1 / 2.1	-6.6 / 7.6	1.3 / -1.7	8.0 / -6.9
	-2.1 / 2.1	-7.4 / 8.7	0.8 / -1.5	9.5 / -8.0
	-2.2 / 2.2	-6.4 / 7.3	1.4 / -1.6	7.6 / -6.6
	-2.1 / 2.0	-5.8 / 6.6	1.8 / -1.8	6.9 / -6.1
	-2.3 / 2.2	-6.2 / 7.0	1.8 / -1.8	7.1 / -6.3
	-2.6 / 2.6	-5.7 / 6.3	2.3 / -2.3	5.6 / -5.1
	-2.3 / 2.3	-6.9 / 8.0	1.9 / -1.9	7.7 / -6.6
	-2.5 / 2.5	-6.8 / 7.8	2.0 / -2.0	7.5 / -6.5
	-2.3 / 2.3	-6.0 / 6.8	1.9 / -2.0	6.5 / -5.8
	-2.3 / 2.3	-7.2 / 8.5	1.3 / -1.7	8.6 / -7.3
	-2.2 / 2.2	-6.0 / 6.8	1.7 / -1.8	6.9 / -6.0
	-2.2 / 2.4	**-6.6 / 7.7**	**2.1 / -1.8**	**8.0 / -7.0**
	-2.3 / 2.3	-6.8 / 7.8	1.7 / -1.8	7.9 / -6.8
	-2.3 / 2.3	**-6.8 / 7.8**	**1.7 / -1.8**	**7.9 / -6.8**
	-0.1 / 0.1	n. a.	n. a.	4.2 / -3.8
	-3.0 / 3.0	-1.3 / 1.3	1.2 / -1.7	5.3 / -4.7

Dec. 31, 2017	Change in parameters		
	Management costs residential	Maintenance costs residential	Cost increase/inflation
Regional market	-10% / +10%	-10% / +10%	-0.5% / +0.5% points
Berlin	0.6 / -0.6	2.1 / -2.0	5.3 / -5.4
Rhine Main Area	0.6 / -0.5	1.7 / -1.7	3.2 / -3.3
Rhineland	0.6 / -0.6	1.9 / -1.9	3.5 / -3.6
Southern Ruhr Area	0.9 / -0.9	2.6 / -2.6	4.4 / -4.5
Dresden	0.8 / -0.8	2.4 / -2.4	4.2 / -4.3
Hamburg	0.6 / -0.6	2.0 / -2.0	3.9 / -4.0
Munich	0.4 / -0.4	1.3 / -1.3	3.3 / -3.4
Stuttgart	0.5 / -0.5	1.7 / -1.7	3.3 / -3.4
Northern Ruhr Area	1.1 / -1.1	3.1 / -3.1	4.7 / -4.8
Hanover	0.7 / -0.7	2.3 / -2.3	4.1 / -4.2
Kiel	0.9 / -0.9	2.6 / -2.6	4.4 / -4.5
Bremen	0.9 / -0.9	2.7 / -2.7	5.4 / -5.5
Leipzig	0.8 / -0.8	2.5 / -2.5	5.0 / -5.0
Westphalia	0.9 / -0.9	2.8 / -2.8	4.6 / -4.7
Freiburg	0.6 / -0.6	1.9 / -1.9	3.9 / -4.0
Other strategic locations	0.7 / -0.7	2.2 / -2.2	3.8 / -4.0
Total strategic locations	**0.7 / -0.7**	**2.2 / -2.1**	**4.2 / -4.3**
Non-strategic locations	1.1 / -1.1	3.4 / -3.4	5.5 / -5.5
Vonovia Germany	**0.7 / -0.7**	**2.2 / -2.2**	**4.2 / -4.3**
Vonovia Austria *	n. a.	n. a.	n. a.

* The gross rental method for the portfolio in Austria uses valuation parameters that are only partially comparable.

Contractual Obligations

In connection with major acquisitions, Vonovia entered into contractual obligations or assumed such obligations indirectly via acquired companies, among other things in the form of Social Charters, which could limit its ability to freely sell parts of its portfolio, increase rents or terminate existing rent agreements for certain units and which, in the event of a breach, could give rise to substantial contractual penalties in some cases. Moreover, when acquiring and financing some of the properties in the portfolio, Vonovia also entered into an obligation to spend a certain average amount per square meter on maintenance and improvements.

After a certain period of time, these obligations often cease to apply either in full or in part. As of December 31, 2018, around 133,000 units in Vonovia's portfolio were subject to one or several contractual restrictions or other obligations.

- **Sale restrictions:** As of December 31, 2018, around 62,000 units were subject to sale restrictions (excl. occupancy rights). Around 18,000 of these units cannot be freely sold before a certain date. Sale restrictions like these include a full or partial ban on the sale of units and provisions requiring the consent of certain representatives of the original seller prior to sale.
- **Preemptive rights on preferential terms:** Around 7,000 units from the "Recurring Sales" subportfolio can only be sold if the tenants are offered preemptive rights on preferential terms. This means that Vonovia is obliged to offer these tenants the units at a price that is up to 15% below the price that could be achieved by selling the units in question to third parties.
- **Restrictions on the termination of rent agreements:** Around 97,000 units are affected by restrictions on the termination of rent agreements. These restrictions include notice to vacate for personal use and notice to vacate for appropriate commercial utilization. In some cases, units are covered by a lifelong ban on the termination of rent agreements.
- **Expenses for minimum maintenance and restrictions on maintenance and modernization measures:** Due to the expiry of minimum maintenance obligations in several portfolios, the number of residential units affected by minimum maintenance obligations has fallen to around 54,000. As several minimum maintenance obligations in varying amounts no longer apply, the weighted average of

Change in parameters			
Market rent residential	Market rent increase residential	Stabilized vacancy rate residential	Discounting and capitalized interest rates total
-2.0%/+2.0%	-0.2%/+0.2% points	-1%/+1% point	-0.25%/+0.25% points
-2.4/2.4	-8.5/10.1	1.9/-1.9	10.0/-8.3
-2.2/2.3	-6.2/7.1	1.3/-1.7	7.4/-6.4
-2.2/2.3	-6.0/6.8	1.8/-1.8	6.9/-6.1
-2.4/2.4	-5.8/6.5	2.1/-2.2	6.0/-5.4
-2.3/2.3	-6.0/6.7	2.0/-2.0	6.5/-5.8
-2.2/2.2	-6.5/7.5	1.4/-1.8	7.6/-6.7
-2.0/2.0	-6.8/7.9	0.8/-1.6	8.6/-7.4
-2.2/2.2	-6.1/6.9	1.6/-1.7	7.1/-6.2
-2.6/2.6	-5.5/6.1	2.4/-2.4	5.3/-4.8
-2.3/2.3	-6.1/6.9	1.9/-1.9	6.8/-6.0
-2.4/2.4	-6.1/6.9	2.1/-2.0	6.4/-5.7
-2.3/2.3	-6.7/7.8	2.1/-2.1	7.2/-6.3
-2.5/2.5	-6.5/7.5	2.1/-2.1	7.0/-6.1
-2.4/2.3	-6.0/6.7	2.1/-2.2	6.2/-5.5
-2.4/2.3	-7.1/8.1	1.4/-1.8	8.1/-7.0
-2.3/2.4	-6.0/6.9	1.9/-1.9	6.6/-5.9
-2.3/2.3	**-6.5/7.5**	**1.8/-1.9**	**7.4/-6.4**
-2.6/2.6	-5.9/6.6	2.5/-2.5	5.7/-5.1
-2.3/2.3	**-6.5/7.5**	**1.8/-1.9**	**7.4/-6.4**
-1,6/1,6	n. a.	n. a.	7,3/-6,7

the annual necessary spending on maintenance and modernization has changed to € 15.94 per m². Furthermore, around 53,000 units are affected by restrictions relating to modernization and maintenance measures, which are designed to prevent changes in socio-economic tenant composition (i. e., to limit luxury modernization). Some of the restrictions to prevent luxury modernization have been agreed on a permanent basis.

> **Restrictions on rent increases:** Restrictions on rent increases (including provisions stating that "luxury modernization" measures are subject to approval) affect around 60,000 units. These restrictions could prevent Vonovia from realizing the rent that could potentially be generated from the units in question.

In many cases, in the event that all or part of a portfolio is transferred or individual units are sold, the aforementioned obligations are to be assumed by the buyers, who are in turn subject to the obligation to pass them on to any future buyers.

Under structured financing programs, Vonovia is subject to fundamental restrictions on the use of excess property disposal proceeds, such restrictions being particularly in the form of mandatory minimum capital repayments. Excess cash from property management is also restricted to a certain extent.

Due to their structure and content, the aforementioned contractual obligations have no significant effect on the valuation of the investment properties.

24 Financial Assets

in € million	Dec. 31, 2017 non-current	Dec. 31, 2017 current	Dec. 31, 2018 non-current	Dec. 31, 2018 current
Joint venture investments valued at equity	7.0	–	29.1	–
Other investments	644.7	–	792.1	–
Loans to other investments	33.4	–	33.4	–
Securities	3.6	–	4.0	–
Other non-current loans	4.3	–	10.2	–
Derivatives	5.0	0.5	20.0	0.8
	698.0	**0.5**	**888.8**	**0.8**

The carrying amount of financial assets corresponds to maximum risk of loss as of the reporting date.

The other investments include € 672.8 million (Dec. 31, 2017: € 613.3 million) in shares in Deutsche Wohnen SE and € 87.0 million (Dec. 31, 2017: 0,0 million) in shares in OPPCI Juno, Paris, at fair value.

The loans to other investments not yet due relate to a loan to the property fund DB Immobilienfonds 11 Spree-Schlange von Quistorp KG.

Derivatives include positive market values from cross currency swaps in the amount of € 15.7 million (Dec. 31, 2017: € 5.0 million), together with positive market values in the amount of € 4.3 million (Dec. 31, 2017: € 0.0 million) from embedded derivatives and other interest rate derivatives of Victoria Park.

25 Other Assets

in € million	Dec. 31, 2017 non-current	Dec. 31, 2017 current	Dec. 31, 2018 non-current	Dec. 31, 2018 current
Right to reimbursement for transferred pensions	5.3	–	4.7	–
Receivables from insurance claims	1.6	17.8	1.2	16.6
Miscellaneous other assets	6.9	80.6	6.3	97.8
	13.8	**98.4**	**12.2**	**114.4**

The right to reimbursement for transferred pensions is in connection with the indirect obligation shown under provisions for pensions arising from pension obligations transferred to former affiliated companies of the Viterra Group.

The receivables from insurance claims include the recognition of the excess of the fair value of plan assets over the corresponding pre-retirement part-time work arrangement obligations amounting to € 0.2 million (Dec. 31, 2017: € 0.5 million).

26 Income Tax Receivables

The income tax receivables disclosed relate to corporate income tax and trade tax receivables for the current fiscal year and prior years as well as capital gains tax. The increase in the financial year 2018 mainly results from reimbursement claims referring to paid capital gains tax including solidarity surcharge in the amount of € 65.5 million.

27 Inventories

The raw materials and supplies recognized relate to repair materials for our craftsmen's organization.

28 Trade Receivables

The trade receivables break down as follows:

in € million	Impaired		Not impaired						Carrying amount
	Gross amount	Impairment losses	Neither impaired nor past due at the end of the reporting period	less than 30 days	between 30 and 90 days	between 91 and 180 days	between 181 and 360 days	more than 360 days	Corresponds to maximum risk of loss*
Receivables from the sale of investment properties	5.6	-3.1	186.7	18.8	2.6	34.6	3.0	10.4	258.6
Receivables from the sale of real estate properties	–	–	71.0	–	–	–	–	–	71.0
Contract assets	–	–	107.7	3.4	1.2	0.2	–	–	112.5
Receivables from property letting	80.7	-36.3	–	–	–	–	–	–	44.4
Receivables from other management	–	–	0.5	–	–	–	–	–	0.5
Receivables from other supplies and services	6.0	-0.1	–	–	–	–	–	–	5.9
As of Dec. 31, 2018	**92.3**	**-39.5**	**365.9**	**22.2**	**3.8**	**34.8**	**3.0**	**10.4**	**492.9**
Receivables from the sale of investment properties	4.9	-4.2	79.1	82.3	8.6	20.6	7.2	2.7	201.2
Receivables from the sale of real estate properties	–	–	–	–	–	–	–	–	–
Contract assets	–	–	–	–	–	–	–	–	–
Receivables from property letting	69.6	-37.4	–	–	–	–	–	–	32.2
Receivables from other management	–	–	0.5	–	–	–	–	–	0.5
Receivables from other supplies and services	1.2	-0.2	–	–	–	–	–	–	1.0
As of Dec 31, 2017	75.7	-41.8	79.6	82.3	8.6	20.6	7.2	2.7	234.9

* The maximum default risk on the receivables from the sale of properties is limited to the margin and the transaction unwinding costs as the title to the properties remains with Vonovia as security until receipt of payment.

The carrying amounts of current trade receivables correspond to their fair values.

The receivables from the sale of real estate inventories and the contract assets reported in the current fiscal year result entirely from the takeover of BUWOG.

In principle, all impaired trade receivables are due and payable. As regards the trade receivables that are neither impaired nor past due, there was no indication on the reporting date that the debtors would not meet their payment obligations.

Receivables from the sale of properties arise on economic transfer of ownership. The due date of the receivable may, however, depend on the fulfillment of contractual obligations. Some purchase contracts provide for the purchase price to be deposited in an escrow account. Impairment losses for doubtful debts are recorded up to the amount of the posted proceeds from sales.

Vonovia's receivables from property letting generally arise at the beginning of the month, are of a short-term nature and result from claims in relation to tenants relating to operating business activities. Due to the (subsequent) measurement at amortized cost, an impairment test has to be performed. The receivables fall under the scope of the calculation of expected credit losses.

In accordance with the general provisions set out in IFRS 9, expected credit losses are to be recognized using the simplified approach for current trade receivables without any significant financing component.

Irrespective of their term, Vonovia initially assigns receivables to level 2 of the impairment model. In the further course, they need to be moved to level 3 of the impairment model if there is objective evidence of impairment. The transfer from level 2 to level 3 is to be made at the latest when the contractual payments have been overdue for more than 90 days. This assumption can, however, be refuted in individual cases if there are no other objective indications pointing towards a default. Receivables always have to be transferred to the next level if a legally enforceable instrument has been obtained against the tenant as part of a dunning procedure. If the objective evidence of impairment ceases to apply, the receivable is transferred (back) to level 2 of the impairment model.

If Vonovia becomes aware of any major changes in market conditions and/or a debtor's circumstances, it reevaluates the expected credit losses without delay. This procedure ensures that receivables are transferred to the right level in the impairment model as soon as possible.

Vonovia uses a credit loss matrix when calculating expected credit losses for trade receivables. The matrix is based on historical default rates and takes current expectations into account, including macroeconomic indicators (e.g. GDP). The matrix can be used to calculate the expected credit losses for various homogeneous portfolios.

In order to create portfolios for the purpose of assessing the probability of default, the individual clusters of receivables need to have homogeneous credit risk characteristics. As far as receivables from its operating business activities are concerned, i. e. the rental of residential properties, Vonovia makes a distinction between receivables from existing tenants and receivables from former tenants. Both portfolios include current receivables that are exposed to a low level of volatility, as the company's core operating business is hardly exposed to any major fluctuations. Main effects on receivables in the past are attributable to corporate takeovers by Vonovia.

Calculation Method for Receivables from Former Tenants

The calculation of the probability of default is based on the results of an analysis of the historical probability of default. Cash flows relating to outstanding receivables over the last three years have been analyzed and an average amount of incoming payments for the year in question was calculated on a monthly basis. The average monthly incoming payments were compared against the average monthly receivables for the year in question. Ultimately, Vonovia has been able to collect approx. 4.5% of the average receivables over the last three years. This means that Vonovia sets up risk provisions corresponding to a rounded total of 95% for its receivables from former tenants.

The loss given default comprises the following:

The receivables of former tenants that are being analyzed (amount of the receivable at the time of default) are corrected to reflect retained deposits that serve as security for Vonovia. This is already taken into account as part of the calculation method used for the probability of default.

The underlying average receivables portfolio excludes individually impaired receivables that were fully depreciated.

Receivables from Existing Tenants

When it comes to determining the probability of default with regard to receivables associated with ongoing lease agreements, Vonovia analyzes those receivables that have actually been derecognized over the last three years. Receivables from property letting were already subject to corresponding impairments under IAS 39.

This is performed systematically by way of a receivables management system according to the aspects receivables relating to ancillary expenses, net rent, rent adjustments and payment difficulties.

Impairment losses on trade receivables developed as follows:

in € million	
Impairment losses as of Jan. 1, 2018	41.8
Addition	24.1
Addition due to business combinations	6.9
Utilization	-30.8
Reversal	-2.5
Impairment losses as of Dec. 31, 2018	**39.5**
Impairment losses as of Jan. 1, 2017	27.0
Addition	22.2
Addition due to business combinations	20.0
Utilization	-27.3
Reversal	-0.1
Impairment losses as of Dec. 31, 2017	41.8

Within the impairment losses on receivables from property letting, the risk provisions are generally taken into account as follows: For existing tenants, a risk provision corresponding to between 18% and 40% of the receivables, in a total amount of € 8.1 million, was set up depending on the lease term. In cases involving payment difficulties, the provision corresponded to between 40% and 95% of the receivables and amounted to € 4.9 million in total. The risk provisions for former tenants correspond to 95% of the receivables and amount to € 13.4 million in total.

For contracts with customers who are assigned to Vonovia's development business, the payment terms pursuant to Section 3 (2) of the Real Estate Agent and Commercial Contractor Regulation (MaBV) generally apply in Germany. Customers also have a contractual obligation to present a financing commitment issued by a credit institution for the entire purchase price. Otherwise, Vonovia is entitled to withdraw from the agreement. In Austria, the installment plan pursuant to Section 10 (2) of the Austrian Property Development Contract Act (BTVG) is normally applied, with customers obliged to pay the entire purchase price into an escrow account. Due to the structure of the standard payment terms in the development business, no separate impairment losses are taken into account on corresponding receivables from customer contracts.

For example, receivables are derecognized if tenants die and have no heirs, if they move to an unknown location or move abroad, if execution is impossible for the court bailiff, in cases involving bankruptcy or if a settlement was reached.

The following table shows the expenses for the full derecognition of receivables, as well as income from the receipt of derecognized receivables:

in € million	2017	2018
Expenses for the derecognition of receivables	3.4	2.8
Income from the receipt of derecognized receivables	5.4	3.8

29 Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, checks and deposits at banking institutions totaling € 547.7 million (Dec. 31, 2017: € 266.2 million).

€ 57.2 million (Dec. 31, 2017: € 36.3 million) of the bank balances are restricted with regard to their use.

30 Real Estate Inventories

Recognized real estate inventories in the amount of € 307.1 million (December 31, 2017: € 0.0 million) mainly concern all development projects that result from the inclusion of the BUWOG Group. These are projects to construct residential units planned for sale that are currently being built or that have been completed but have not yet been sold. The item also includes undeveloped land that will be used for future project developments. Because of the intention to sell, valuation is not made in accordance with IAS 40 but according to IAS 2 at amortized cost less accumulated depreciation or at net realizable value, whichever is lower.

31 Assets Held for Sale

The assets held for sale include properties totaling € 105.9 million (Dec. 31, 2017: € 142.6 million) for which notarized purchase contracts had already been signed as of the reporting date.

32 Total Equity

Development of the Subscribed Capital

in €

As of Jan. 1, 2018	485,100,826.00
Capital increase against cash contributions on May 11, 2018	26,000,000.00
Capital increase against non-cash contributions on June 12, 2018 (scrip dividend)	6,977,108.00
As of Dec. 31, 2018	**518,077,934.00**

Development of the Capital Reserves

in €

As of Jan. 1, 2018	5,966,315,814.06
Premium from capital increase on May 11, 2018	969,800,000.00
Premium from capital increase for scrip dividend on June 12, 2018	254,580,716.70
Transaction costs on the issue of new shares (after allowing for deferred taxes)	-7,436,753.64
Other changes not affecting net income	163,397.27
As of Dec. 31, 2018	**7,183,423,174.39**

On May 11, 2018, Vonovia SE increased the share capital in return for a cash contribution, partially using the 2016 authorized capital and excluding a subscription right, by € 26,000,000.00 from € 485,100,826.00 to € 511,100,826.00.

The 26,000,000 new no-par-value registered shares were placed with institutional investors in the scope of a private placement by means of an accelerated bookbuilding procedure and carry dividend rights as of January 1, 2018.

The shares were granted at a placement price of € 38.30 per share, delivering issue proceeds to Vonovia SE in the amount of € 995.8 million before commission and expenses.

Authorized Capital

The 2016 and 2017 authorized capital was canceled by way of a resolution passed by the Annual General Meeting on May 9, 2018, in Bochum, and a new 2018 authorized capital was created in the amount of € 242,550,413.00. Shareholder subscription rights for the 2018 authorized capital can be excluded.

Retained Earnings

As of December 31, 2018, retained earnings of € 9,942.0 million (Dec. 31, 2017: € 8,471.6 million) were recognized. This figure includes actuarial gains and losses of € -69.0 million (Dec. 31, 2017: € -64.0 million), which cannot be reclassified and therefore may no longer be recognized in profit or loss in subsequent reporting periods. The changes not affecting net income in the amount of € -150.7 million mainly include additional purchases of shares in BUWOG and Victoria Park, which are not classified as a linked transaction.

Other reserves

The other reserves contain cumulative changes in equity not affecting income. At Vonovia, the effective portion of the net change in the fair value of cash flow hedging instruments, the equity instruments at fair value under other comprehensive income as well as the balance resulting from currency translation are recognized within this reserve.

The other reserves from cash flow hedges and from currency translation differences can be reclassified. When the underlying hedged item of the cash flow hedge affects net income, the reserves attributable thereto are reclassified to profit or loss. If a foreign business is disposed of, the reserves attributable thereto are reclassified.

Dividend

The Annual General Meeting held on May 9, 2018, resolved to pay a dividend for the 2017 fiscal year in the amount of € 1.32 per share.

As in the previous year, Vonovia offered its shareholders the option of choosing between being paid the dividend in cash or being granted new shares. During the subscription period, 40.9% of shareholders opted for the stock dividend as opposed to the cash dividend. As a result, 6,977,108 new shares were issued using the company's authorized capital pursuant to Section 5b of the Articles of Association ("2016 authorized capital") at a subscription price of € 37.488 per share, i. e. a total amount of € 261,557,824.70. The total amount of the dividend distributed in cash came to € 378,775,265.62.

Equity Attributable to Hybrid Capital Investors

In December 2014, Vonovia issued a hybrid bond with a nominal volume of € 1.0 billion via a subsidiary, Vonovia Finance B. V., Amsterdam/Netherlands (issuer). This subordinated hybrid bond is of unlimited duration and can only be terminated by Vonovia on certain contractually fixed dates or occasions.

Up until the first termination date in December 2021, the hybrid bond shall bear interest at a rate of 4.0% p. a. If the bond is not terminated, then the coupon for the next five-year period increases automatically (step-up clause). The bond terms and conditions do not provide for any unconditional legal obligations to pay interest. Interest that is not paid out is carried forward to the new account and accumulated. If a resolution is passed on a dividend, or if a voluntary payment is made in connection with comparable subordinated bonds, then this triggers an interest payment obligation for this bond.

Pursuant to IAS 32, the hybrid bond is to be classified as equity in full. The interest payments to be made to the bondholders are recognized directly in equity.

Non-controlling Interests

Shares of third parties in Group companies are recognized under non-controlling interests.

Development of non-controlling interests in 2018

in € million	
As of Jan. 1, 2018	608.8
Non-controlling interests in profit for the period	96.3
Changes in other comprehensive income during the period	1.4
First-time consolidations (mainly BUWOG and Victoria Park)	554.0
Further purchases of shares in BUWOG	-47.9
Further purchases of shares in Victoria Park	-155.4
BUWOG squeeze-out	-249.8
Dividends paid to minority shareholders	-10.7
Other changes not affecting net income	-14.4
As of Dec. 31, 2018	**782.3**

The further purchases of shares in BUWOG and Victoria Park are no longer to be considered a linked transaction, meaning that they are reported under non-controlling interests with a neutral impact.

33 Provisions

	Dec. 31, 2017		Dec. 31, 2018	
in € million	non-current	current	non-current	current
Provisions for pensions and similar obligations	513.7	–	520.6	–
Provisions for taxes (current income taxes excl. deferred taxes)	–	155.3	–	180.3
Other provisions				
Environmental remediation	16.7	0.2	14.8	0.2
Personnel obligations	61.7	65.8	60.2	66.6
Outstanding trade invoices	–	50.0	–	61.7
Miscellaneous other provisions	15.1	105.2	21.1	141.7
Total other provisions	93.5	221.2	96.1	270.2
Total provisions	**607.2**	**376.5**	**616.7**	**450.5**

Provisions for Pensions and Similar Obligations

Vonovia has pension obligations towards various employees which are based on the length of service. Defined benefit and defined contribution obligations – for which Vonovia guarantees a certain level of benefit – are financed through provisions for pensions. Vonovia has taken out reinsurance contracts for individual people.

Generally, they are pension benefits that depend on the final salary with percentage increases depending on the number of years of service.

The pension commitments cover 4,003 (Dec. 31, 2017: 4,030) eligible persons.

Executives currently working for companies belonging to Vonovia have the opportunity to participate in the "Pension Instead of Cash Remuneration" model (Versorgungsbezüge anstelle von Barbezügen) in the version dated October 2003. Retirement, invalidity and surviving dependent benefits in the form of a lifelong pension are offered under this deferred compensation model. The retirement benefits can also be paid out as a one-time capital sum.

The 2002 pension scheme (VO 2002) for Vonovia employees replaces the pension systems that existed until December 31, 2001. For employees who joined the company prior to 1991, existing claims arising from the previous pension commitment as of December 31, 2001, are protected in the form of a status of possession. After this point, these employees acquire rights to future pension benefits in accordance with VO 2002. With the introduction of VO 2002, the pension regulations for employees joining the company after 1990 was updated with regard to changes in legislation and court rulings. Pension components acquired before the date VO 2002 replaced the previous pension systems remain in existence. As part of VO 2002, retirement, invalidity and surviving dependent benefits are provided in the form of lifelong pensions. The pension is calculated as the sum of annually acquired pension components that form a fixed percentage of salary. Salary components exceeding the income limit for the assessment of contributions to statutory pension insurance are weighted in a quadruple manner. For new pension commitments beginning in 2002, a pension guarantee of 1.0% p.a. is provided. For all other employees, the provisions of Section 16 of the German Occupational Pensions Improvement Act (BetrAVG) apply.

The following overview summarizes the most important basic data of the closed pension plans:

	VO 1 Veba Immobilien	VO 91 Eisenbahnges.	Bochumer Verband
Type of benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Final salary	Final salary	Not applicable
Max. pension level			
Remuneration up to state pension assessment limit	25%	27%	Depends on individual grouping
Remuneration in excess of state pension assessment limit	25%	72%	
Total pension model based on final salary	Yes	Yes	No
Net benefit limit incl. state pension	None	90%	None
Gross benefit limit	70%	None	None
Adjustment of pensions	Section 16, (1,2) BetrAVG	Section 16, (1,2) BetrAVG	Adjustment every 3 years by Bochumer Verband (Management Board resolution)
Supplementary periods	Age of 55	None	Age of 55 (half)
Legal basis	Works agreement	Works agreement	Commitment to executives in individual contracts
Number of eligible persons	310	381	442

	VO 60 Eisenbahnges.	Viterra commitment to Management Board members (with plan assets)	Deferred compensation until 1999
Type of benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Final salary	Final salary	Not applicable
Max. pension level			
Remuneration up to state pension assessment limit	48%	75%	Not applicable
Remuneration in excess of state pension assessment limit	48%	75%	Not applicable
Total pension model based on final salary	Yes	No	No
Net benefit limit incl. state pension	None	None	None
Gross benefit limit	75%	None	None
Adjustment of pensions	Section 16, (1,2) BetrAVG	Annual according to development of cost of living	Section 16, (1,2) BetrAVG, min. 8% every 3 years
Supplementary periods	None	None	Age of 55
Legal basis	Works agreement	Commitment to Management Board members in individual contracts	Commitment to executives in individual contracts
Number of eligible persons	142	6	29

	VO guideline Gagfah M	VO 2017 VBL-Ersatzversorgung
Type of benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Final salary	Yes
Max. pension level		Yes
Remuneration up to state pension assessment limit	No	No
Remuneration in excess of state pension assessment limit	No	No
Total pension model based on final salary	Yes	No
Net benefit limit incl. state pension	None	None
Gross benefit limit	75%	None
Adjustment of pensions	Section 16, (1,2) BetrAVG	1%
Supplementary periods	Age of 55	None
Legal basis	Works agreement	Individual agreement
Number of eligible persons	372	112

The current pensions according to the classic pension benefit regulations of Bochumer Verband are adjusted in line with Section 20 of those regulations. Section 20 is a rule which is based on Section 16 (1,2) of the German Occupational Pensions Improvement Act (BetrAVG) but which, according to a ruling of the Federal Labour Court of Germany, is an independent rule. Other company pensions are reviewed and adjusted under the terms of the agreement according to Section 16 (1,2) BetrAVG. On every review date, the development of the cost of living since the individual retirement date is reviewed and compensated for. Only in the aforementioned deferred compensation model is the option, available since January 1, 1999, used to raise the current pensions every year by 1% (Section 16 (3) No. 1 BetrAVG). No further risks are seen.

The company has decided to use the internal financing effect of the provisions for pensions and only to back a relatively small portion of the pension obligations with plan assets. Reinsurance policies have been taken out for former Management Board members against payment of a one-time insurance premium in order to provide additional protection against insolvency; these reinsurance policies were pledged to the eligible persons. They constitute plan assets, which are offset against the gross obligation. The fair value of the reinsurance policies for individual persons is higher than the extent of the obligations towards the respective person. This surplus of the fair values of the assets over the obligation is shown under non-current other assets. The conclusion of further reinsurance policies is not planned.

Pension plan obligations and the expenses necessary to cover these obligations are determined using the projected unit credit method prescribed by IAS 19. Both pensions known on the reporting date and vested rights, as well as expected future increases in salaries and pensions, are included in the measurement. The following actuarial assumptions were made at the reporting date – in each case related to the end of the year and with economic effect for the following year.

Actuarial Assumptions

in %	Dec. 31, 2017	Dec. 31, 2018
Actuarial interest rate	1.70	1.70
Pension trend	1.75	1.75
Salary trend	2.75	2.75

The new 2018 G mortality tables of Prof. Dr. Klaus Heubeck published in 2018 have been applied for the first time to the biometric assumptions. The Heubeck 2005 G mortality tables were taken as a basis in the 2017 fiscal year. The application resulted in a changeover effect in the amount of € 5.3 million.

The defined benefit obligation (DBO) developed as follows:

in € million	2017	2018
DBO as of Jan. 1	544.0	535.0
Additions due to business combinations	2.4	4.3
Interest expense	9.1	8.9
Current service cost	9.4	10.6
Actuarial gains and losses:		
Changes in the biometric assumptions	-4.7	8.5
Transfer	0.1	-
Benefits paid	-25.3	-25.5
DBO as of Dec. 31	**535.0**	**541.8**

The present value of the defined benefit obligation is divided among the groups of eligible persons as follows:

in € million	Dec. 31, 2017	Dec. 31, 2018
Active employees	115.1	111.6
Former employees with vested pension rights	88.3	96.6
Pensioners	331.6	333.6
DBO as of Dec. 31	**535.0**	**541.8**

Plan assets comprise solely reinsurance contracts. The fair value of the plan assets has developed as follows:

in € million	2017	2018
Fair value of plan assets as of Jan. 1	22.5	22.4
Additions due to business combinations	0.3	0.3
Return calculated using the actuarial interest rate	0.4	0.4
Actuarial gains:		
Changes in the financial assumptions	0.4	0.5
Benefits paid	-1.2	-1.3
Fair value of plan assets as of Dec. 31	**22.4**	**22.3**

The actual return on plan assets amounted to € 0.8 million during the fiscal year (2017: € 0.8 million).

The following table shows a reconciliation of the defined benefit obligation to the pension obligation recognized in the balance sheet:

in € million	Dec. 31, 2017	Dec. 31, 2018
Present value of funded obligations*	36.1	36.4
Present value of unfunded obligations	498.9	505.4
Total present value of defined benefit obligations	535.0	541.8
Fair value of plan assets*	-22.4	-22.3
Net liability recognized in the balance sheet	512.6	519.5
Other assets to be recognized	1.1	1.1
Provisions for pensions recognized in the balance sheet	**513.7**	**520.6**

* Largely attributable to the "Viterra Management Board commitment" and "Gagfah Management Board commitment" pension plans.

In 2018, actuarial losses of € 8.0 million (excluding deferred taxes) were recognized in other comprehensive income.

The weighted average term of the defined benefit obligations is 15.0 years.

The following table contains the projected, undiscounted pension payments of the coming five fiscal years and the total of those in the subsequent five fiscal years:

in € million	Projected pension payments
2019	26.1
2020	25.3
2021	25.1
2022	24.7
2023	24.4
2024–2028	121.5

Sensitivity Analyses

An increase or decrease in the material actuarial assumptions would have led to the following DBO as of December 31, 2018, providing the other assumptions did not change:

in € million		DBO
Actuarial interest rate	Increase by 0.5%	504.3
	Decrease by 0.5%	584.2
Pension trend	Increase by 0.25%	553.7
	Decrease by 0.25%	529.9

An increase in life expectancy of 5.0% would have resulted in an increase in the DBO of € 24.0 million as of December 31, 2018.

If several assumptions are changed simultaneously, the cumulative effect is not necessarily the same as if there had been a change in just one of the assumptions.

The provisions for pensions include € 4.7 million (Dec. 31, 2017: € 5.3 million) for pension obligations which were transferred to third parties as part of an assumption of debt and which relate to vested rights and the payment of current pensions. A corresponding non-current receivable is shown under miscellaneous other assets.

Development of Other Provisions During the Fiscal Year

in € million	**As of Jan. 1, 2018**	Additions due to changes in scope of consolidation	Additions	Reversals	Interest accretion to provisions	Netting plan assets	Utilization	**As of Dec. 31, 2018**
Other provisions								
Environmental remediation	16.9	–	–	–	0.1	–	-2.0	15.0
Personnel obligations	127.5	3.7	47.4	-9.3	0.3	0.3	-43.1	126.8
Outstanding trade invoices	50.0	–	54.6	-8.7	–	–	-34.2	61.7
Miscellaneous other provisions	120.3	38.8	58.8	-21.6	0.1	–	-33.6	162.8
	314.7	**42.5**	**160.8**	**-39.6**	**0.5**	**0.3**	**-112.9**	**366.3**

Development of Other Provisions in the Previous Year

in € million	**As of Jan. 1, 2017**	Additions due to changes in scope of consolidation	Additions	Reversals	Interest accretion to provisions	Netting plan assets	Utilization	**As of Dec. 31, 2017**
Other provisions								
Environmental remediation	20.3	–	–	-1.0	0.2	–	-2.6	16.9
Personnel obligations	138.4	13.5	55.1	-9.9	0.2	0.4	-70.2	127.5
Outstanding trade invoices	60.0	7.7	41.7	-4.5	–	–	-54.9	50.0
Miscellaneous other provisions	91.9	29.2	32.6	-13.8	-0.1	–	-19.5	120.3
	310.6	**50.4**	**129.4**	**-29.2**	**0.3**	**0.4**	**-147.2**	**314.7**

Reversals of provisions are generally offset against the expense items for which they were originally established.

The provisions for environmental remediation primarily refer to site remediation of locations of the former Raab Karcher companies. Remediation has either already begun or an agreement has been reached with the authorities as to how the damage is to be remedied. The cost estimates are based on expert opinions detailing the anticipated duration of the remediation work and the anticipated cost.

The personnel obligations are provisions for pre-retirement part-time work arrangements, provisions for bonuses, severance payments not relating to restructuring and other personnel expenses. The other personnel expenses include a provision for the long-term incentive plan (LTIP) of € 17.8 million (Dec. 31, 2017: € 18.3 million) (see note [50] Share-based Payment).

The material individual cost items under miscellaneous other provisions include costs associated with legal disputes in the amount of € 18.7 million (2017: € 9.4 million), allocations to the provisions for pre-retirement part-time work arrangements in the amount of € 14.0 million (2017: € 7.4 million) and € 0.1 million (2017: € 6.6 million) in costs in connection with tax returns.

34 Trade Payables

	Dec. 31, 2017		Dec. 31, 2018	
in € million	non-current	current	non-current	current
Liabilities				
from property letting	–	68.2	–	68.8
from other supplies and services	2.4	62.5	4.4	170.3
	2.4	**130.7**	**4.4**	**239.1**

35 Non-derivative Financial Liabilities

	Dec. 31, 2017		Dec. 31, 2018	
in € million	non-current	current	non-current	current
Non-derivative financial liabilities				
Liabilities to banks	2,602.3	602.7	4,893.5	306.6
Liabilities to other creditors	9,857.1	921.6	12,544.0	2,272.0
Deferred interest from non-derivative financial liabilities	–	76.8	–	119.9
	12,459.4	**1,601.1**	**17,437.5**	**2,698.5**

Deferred interest is presented as current in order to show the cash effectiveness of the interest payments transparently. In principle, the deferred interest is part of the non-derivative financial liability. Of the deferred interest from non-derivative financial liabilities, € 113.9 million (Dec. 31, 2017: € 75.8 million) is from bonds reported under non-derivative financial liabilities to other creditors.

The non-derivative financial liabilities developed as follows in the fiscal year under review:

in € million	**As of Jan. 1, 2018**	First-time consoli-dation	New loans	Scheduled repay-ments	Unsche-duled repayments	Adjusted for effective interest method	Other ad-justments	exchange rate diffe-rences	**As of Dec. 31, 2018**
Bond	598.9					0.7			599.6
Bonds (USD)	204.8					10.3			215.1
Bonds (EMTN)	8,688.6		3,600.0	-500.0		-28.3			11,760.3
Bond (Hybrid)	697.3					1.9			699.2
Commercial Paper	410.2		813.0	-803.0		-0.2			420.0
Portfolio loans									
Berlin-Hannoversche Hypothekenbank (Landesbank Berlin)	489.3		50.5	-2.1	-38.5	0.2			499.4
Berlin-Hannoversche Hypothekenbank, Landesbank Berlin and Landesbank Baden-Württemberg	341.3			-4.2	-17.3	0.7			320.5
Deutsche Hypothekenbank	176.8			-5.0		-2.7			169.1
Nordrheinische Ärzteversorgung	31.6			-0.7	-1.2				29.7
Norddeutsche Landesbank	116.7			-3.4		0.1			113.4
Mortgages	2,228.2		207.1	-50.4	-94.5	7.2			2,297.6
Working capital facility			100.0	-100.0					-
BUWOG:									
Mortgages		1,958.9	203.9	-39.3	-190.3	4.9			1,938.1
Victoria Park:									
Bonds		101.6		-38.3		-2.0		1.1	62.4
Mortgages		804.2	89.7	-13.4		-5.4		16.6	891.7
Other deferred interest	76.8	2.5					40.6		119.9
	14,060.5	**2,867.2**	**5,064.2**	**-1,559.8**	**-341.8**	**-12.6**	**40.6**	**17.7**	**20,136.0**

The non-derivative financial liabilities developed as follows in the previous year:

in € million	**As of Jan. 1, 2017**	First-time consoli-dation	New loans	Scheduled repayments	Unschedu-led repay-ments	Adjusted for effective interest method	Other adjust-ments	**As of Dec. 31, 2017**
Bond	598.3					0.6		598.9
Bonds (USD)	943.7			-554.9			-184.0	204.8
Bonds (EMTN)	7,437.8		2,000.0	-750.0		0.8		8,688.6
Bond (Hybrid)	695.4					1.9		697.3
Commercial Paper			410.2					410.2
Taurus	1,055.9			-2.7	-1,017.7	-35.5		–
Portfolio loans								
Berlin-Hannoversche Hypothekenbank (Landesbank Berlin)	500.5			-8.4	-3.5	0.7		489.3
Berlin-Hannoversche Hypothekenbank, Landesbank Berlin and Landesbank Baden-Württemberg	398.9			-4.2	-54.5	1.1		341.3
Corealcredit Bank AG	147.1			-1.8	-145.9	0.6		–
Deutsche Hypothekenbank	186.4			-4.8	-1.9	-2.9		176.8
HSH Nordbank	17.3			-16.4	-0.7	-0.2		–
Nordrheinische Ärzteversorgung	33.3			-0.6	-1.1			31.6
Norddeutsche Landesbank	119.9			-3.3		0.1		116.7
Mortgages	1,163.9	16.6	490.7	-33.1	-156.2	3.0		1,484.9
Conwert:								
Bond		65.0		-65.0				–
Mortgages		1,152.7	19.6	-59.5	-362.5	-7.0		743.3
Other deferred interest	72.6	2.9					1.3	76.8
	13,371.0	**1,237.2**	**2,920.5**	**-1,504.7**	**-1,744.0**	**-36.8**	**-182.7**	**14,060.5**

The U.S. dollar bond issued in 2013 is translated at the exchange rate at the end of the reporting period in line with applicable IFRS provisions. Allowing for the hedging rate prescribed through the interest hedging transaction entered into, this financial liability would be € 33.5 million lower than the recognized value (Dec. 31, 2017: € 23.5 million).

The maturities and average interest rates of the nominal obligations of the liabilities to banks and the liabilities to other creditors are as follows during the fiscal year:

in € million	Nominal obligation Dec. 31, 2018	Maturity	Average interest rate	Repayment of the nominal obligations is as follows: 2019	2020	2021	2022	2023	from 2024
Bond*	600.0	2019	3.13%	600.0	–	–	–	–	–
Bond (US dollar)*	184.9	2023	4.58%	–	–	–	–	184.9	–
Bond (EMTN)*	500.0	2021	3.63%	–	–	500.0	–	–	–
Bond (EMTN)*	500.0	2022	2.13%	–	–	–	500.0	–	–
Bond (EMTN)*	500.0	2020	0.88%	–	500.0	–	–	–	–
Bond (EMTN)*	500.0	2025	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	1,250.0	2020	1.63%	–	1,250.0	–	–	–	–
Bond (EMTN)*	1,000.0	2023	2.25%	–	–	–	–	1,000.0	–
Bond (EMTN)*	500.0	2022	0.88%	–	–	–	500.0	–	–
Bond (EMTN)*	500.0	2026	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	1,000.0	2024	1.25%	–	–	–	–	–	1,000.0
Bond (EMTN)*	500.0	2022	0.75%	–	–	–	500.0	–	–
Bond (EMTN)*	500.0	2027	1.75%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2025	1.13%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2019	0.03%	500.0	–	–	–	–	–
Bond (EMTN)*	500.0	2024	0.75%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2028	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	600.0	2022	0.79%	–	–	–	600.0	–	–
Bond (EMTN)*	500.0	2026	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2030	2.13%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2038	2.75%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2023	0.88%	–	–	–	–	500.0	–
Bond (Hybrid)*	700.0	2019	4.63%	700.0	–	–	–	–	–
Commercial paper*	420.0	2019	-0.23%	420.0	–	–	–	–	–
Portfolio loans									
Berlin-Hannoversche Hypothekenbank (Landesbank Berlin) (1)*	499.4	2028	1.64%	–	–	–	–	–	499.4
Berlin Hannoversche Hypothekenbank, Landesbank Berlin and Landesbank Baden-Württemberg*	321.4	2020	3.71%	4.2	317.2	–	–	–	–
Deutsche Hypothekenbank*	162.7	2021	3.98%	5.2	5.5	152.0	–	–	–
Nordrheinische Ärzteversorgung	29.7	2022	3.49%	0.7	0.8	0.8	27.4	–	–
Norddeutsche Landesbank (2)*	32.8	2020	3.99%	2.3	30.5	–	–	–	–
	80.9	2023	3.76%	1.2	1.2	1.3	1.3	75.9	–
Mortgages	2,328.9	2043	1.49%	129.6	481.2	383.7	199.7	291.0	843.7
BUWOG:									
Mortgages	1,892.9	2029	1.97%	184.4	57.9	84.5	71.7	203.4	1,291.0
Victoria Park	82.0	2023	3.76%	1.1	1.2	1.2	1.3	1.3	75.9
Bond	58.5	2020	4.50%	–	58.5	–	–	–	–
Mortgages	872.3	2023	1.79%	32.4	165.9	327.9	163.7	0.4	182.0
	20,034.4			**2,580.0**	**2,868.7**	**1,450.2**	**2,563.8**	**2,255.6**	**8,316.1**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfil certain financial covenants.

In the previous year, the maturities and average interest rates of the nominal obligations were as follows:

in € million	Nominal obligation Dec. 31, 2017	Maturity	Average interest rate	Repayment of the nominal obligations is as follows: 2018	2019	2020	2021	2022	from 2023
Bond*	600.0	2019	3.13%	–	600.0	–	–	–	–
Bond (US dollar)*	184.9	2023	4.58%	–	–	–	–	–	184.9
Bond (EMTN)*	500.0	2021	3.63%	–	–	–	500.0	–	–
Bond (EMTN)*	500.0	2022	2.13%	–	–	–	–	500.0	–
Bond (EMTN)*	500.0	2020	0.88%	–	–	500.0	–	–	–
Bond (EMTN)*	500.0	2025	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	1,250.0	2020	1.63%	–	–	1,250.0	–	–	–
Bond (EMTN)*	1,000.0	2023	2.25%	–	–	–	–	–	1,000.0
Bond (EMTN)*	500.0	2022	0.88%	–	–	–	–	500.0	–
Bond (EMTN)*	500.0	2026	1.50%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2018	0.14%	500.0	–	–	–	–	–
Bond (EMTN)*	1,000.0	2024	1.25%	–	–	–	–	–	1,000.0
Bond (EMTN)*	500.0	2022	0.75%	–	–	–	–	500.0	–
Bond (ENTM)*	500.0	2027	1.75%	–	–	–	–	–	500.0
Bond (EMTN)*	500.0	2025	1.13%	–	–	–	–	–	500.0
Bond (ENTM)*	500.0	2019	-0.15%	–	500.0	–	–	–	–
Bond (Hybrid)	700.0	2019	4.63%	–	700.0	–	–	–	–
Commercial Paper	410.2	2018	-0.20%	410.2	–	–	–	–	–
Portfolio loans									
Berlin-Hannoversche Hypothekenbank (Landesbank Berlin)*	489.5	2018	3.10%	489.5	–	–	–	–	–
Berlin Hannoversche Hypothekenbank, Landesbank Berlin und Landesbank Baden-Württemberg*	342.9	2020	3.65%	4.2	4.2	334.5	–	–	–
Deutsche Hypothekenbank*	167.7	2021	3.98%	5.0	5.2	5.5	152.0	–	–
Nordrheinische Ärzteversorgung	31.6	2022	3.49%	0.7	0.7	0.7	0.8	28.7	–
Norddeutsche Landesbank*	35.1	2020	3.99%	2.3	2.3	30.5	–	–	–
	82.0	2023	3.76%	1.1	1.2	1.2	1.3	1.3	75.9
Mortgages	2,266.6	2046	1.65%	164.1	164.8	149.8	253.6	172.6	1,361.7
	14,060.5			**1,577.1**	**1,978.4**	**2,272.2**	**907.7**	**1,702.6**	**5,622.5**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfil certain financial covenants.

The loan repayments shown for the following years contain contractually fixed minimum repayment amounts.

Of the nominal obligations to creditors, € 4,907.8 million (Dec. 31, 2017: € 2,898.9 million) are secured by land charges and other collateral (account pledge agreements, assignments, pledges of company shares and guarantees). In the event of a breach of the covenants, failure to repay or insolvency, the securities provided are used to satisfy the claims of the creditors.

The nominal interest rates on the financial liabilities to banks and other creditors are between -0.2% and 8.0% (average approx. 1.9%). The financial liabilities as a whole do not contain any significant short-term interest rate risks as they relate either to loans with long-term fixed interest rates or variable-interest liabilities that are hedged using suitable derivative financial instruments (see Chapter [42] Financial Risk Management).

Issue of Bonds Under the European Medium-Term Notes Program (EMTN)

Based on the tap issuance master agreement dated April 20, 2017, with supplements dated August 30, 2017, November 9, 2017, and January 5, 2018 (€ 15,000,000,000 debt issuance program), Vonovia issued two bonds worth € 500 million each via its Dutch financing company in January 2018. The bonds were issued at an issue price of 99.330%, a coupon of 0.75% and with a maturity of six years for one tranche, and at an issue price of 99.439%, a coupon of 1.50% and with a maturity of ten years for the other.

Based on the updated tap issuance master agreement dated March 14, 2018 (€ 20,000,000,000 debt issuance program), Vonovia issued bonds in four tranches worth € 2,100 million in total via its Dutch financing company in March 2018. The bonds were issued (1) in an amount of € 600 million at an issue price of 100.00%, with a coupon at three-month EURIBOR plus margin and a maturity of 4.75 years, (2) in an amount of € 500 million at an issue price of 99.188%, with a coupon of 1.50% and a maturity of eight years, (3) in an amount of € 500 million at an issue price of 98.967%, with a coupon of 2.125% and a maturity of twelve years and (4) in an amount of € 500 million at an issue price of 97.896%, with a coupon of 2.75% and a maturity of twenty years.

Vonovia also issued a bond worth € 500 million via its Dutch financing company on July 3, 2018. The bond was issued at an issue price of 99.437%, with a coupon of 0.875% and a maturity of five years.

Commercial Paper Program

In November 2017, Vonovia concluded a master commercial paper agreement via its Dutch financing company with a total volume of € 500 million with Commerzbank AG as lead arranger and several banks as traders. This master program was increased to a total volume of € 1,000 million in September 2018. Issues in the amount of € 420 million were outstanding under this program as of December 31, 2018.

36 Derivatives

	Dec. 31, 2017		Dec. 31, 2018	
in € million	non-current	current	non-current	current
Derivatives				
Purchase price liabilities from put options/rights to reimbursement		4.2		36.8
Cash flow hedges	8.7		15.2	
Stand-alone derivatives			54.6	
Deferred interest from derivatives		0.2		4.6
	8.7	**4.4**	**69.8**	**41.4**

Regarding derivative financial liabilities please refer to notes [41] Additional Financial Instrument Disclosures and [44] Cash Flow Hedges and Stand-alone Interest Rate Swaps.

37 Liabilities from Finance Leases

The following table shows the total minimum lease payments and the reconciliation to their present value for the Spree-Bellevue property in the amount of € 94.6 million (Dec. 31, 2017: € 94.1 million) and the finance leases for heat generation plants in the amount of € 4.8 million (Dec. 31, 2017: € 5.2 million).

	Dec. 31, 2017			Dec. 31, 2018		
in € million	Total minimum lease payments	Interest portion	Present value	Total minimum lease payments	Interest portion	Present value
Due within 1 year	4.9	0.3	4.6	5.0	0.3	4.7
Due in 1 to 5 years	26.4	4.3	22.1	26.2	4.1	22.1
Due after 5 years	204.3	131.7	72.6	198.9	126.3	72.6
	235.6	**136.3**	**99.3**	**230.1**	**130.7**	**99.4**

As part of finance leases, expenses of € 5.3 million (2017: € 5.3 million) were recognized for the Spree-Bellevue property and expenses of € 0.6 million (2017: € 0.6 million) for finance leases for heat generation plants in the fiscal year under review. As of the reporting date, there were no significant non-cancellable subtenancies on the Spree-Bellevue property.

38 Liabilities to Non-controlling Interests

The liabilities to non-controlling interests relate especially to the obligations to pay a guaranteed dividend under the valid profit-and-loss transfer agreements.

39 Financial Liabilities from Tenant Financing

The financial liabilities from tenant financing as of the reporting date include € 118.3 million (Dec. 31, 2017: € 7.7 million) in tenant financing contributions. In addition, the financial liabilities from tenant financing include € 42.5 million (Dec. 31, 2017: € 0.0 million) in maintenance and improvement contributions deposited by tenants (EVB).

40 Other Liabilities

	Dec. 31, 2017		Dec. 31, 2018	
in € million	non-current	current	non-current	current
Advance payments received	–	32.8	–	23.2
Miscellaneous other liabilities	65.3	73.1	42.5	574.6
	65.3	**105.9**	**42.5**	**597.8**

The advance payments received include on-account payments of € 18.9 million (Dec. 31, 2017: € 24.2 million) from tenants for ancillary costs after offsetting against the corresponding trade receivables.

The Annual General Meeting of BUWOG AG held on October 2, 2018, in Vienna passed a resolution on the transfer of the shares held by the minority shareholders to the main shareholder, Vonovia SE, in return for a cash settlement of € 29.05 per share (squeeze-out). As of December 31, 2018, this results in a liability in the amount of € 335.6 million.

The miscellaneous other liabilities include purchase price liabilities in the amount of € 139.1 million (Dec. 31, 2017: € 62.6 million) for the acquisition of further shares in companies that are already consolidated.

Other Notes and Disclosures

41 Additional Financial Instrument Disclosures

Measurement categories and classes: in € million	**Carrying amounts Dec. 31, 2018**
Assets	
Cash and cash equivalents	
Cash on hand and deposits at banking institutions	547.7
Trade receivables	
Receivables from the sale of properties	258.6
Receivables from property letting	44.4
Other receivables from trading	6.4
Receivables from sale of real estate inventories (Development)	183.7
Financial assets	
Investments valued at equity	29.1
Loans to other investments	33.4
Other non-current loans	10.2
Non-current securities	4.0
Other investments	792.1
Derivative financial assets	
Cash flow hedges (cross currency swaps)	16.3
Stand-alone interest rate swaps and interest rate caps as well as embedded derivatives	4.5
Liabilities	
Trade payables	243.5
Non-derivative financial liabilities	20,136.0
Derivative financial liabilities	
Purchase price liabilities from put options/rights to reimbursement	36.8
Stand-alone interest rate swaps and interest rate caps	54.6
Other swaps	19.8
Liabilities from finance leases	99.4
Liabilities from tenant financing	160.8
Liabilities to non-controlling interests	33.2

	Amounts recognized in balance sheet in accordance with IFRS 9						
	Amortized cost	Fair value affecting net income	Fair value recognized in equity with reclassification	Fair value recognized in equity without reclassification	Amounts recognized in balance sheet in acc. with IAS 17/IAS 28	Fair value Dec. 31, 2018	Fair value hierarchy level
	547.7					547.7	1
	258.6					258.6	2
	44.4					44.4	2
	6.4					6.4	2
	183.7					183.7	2
					29.1	29.1	n. a.
	33.4					48.1	2
	10.2					15.8	2
				4.0		4.0	1
				792.1		792.1	2
		-11.0	27.3			16.3	2
		4.5				4.5	2
	243.5					243.5	2
	20,136.0					20,471.2	2
		36.8				36.8	3
		54.6				54.6	2
		-2.6	-17.2			19.8	2
					99.4	198.0	2
	160.8					160.8	2
	33.2					33.2	2

Measurement categories and classes: in € million	Measurement category in acc. with IAS 39	Carrying amounts Dec. 31, 2017
Assets		
Cash and cash equivalents		
Cash on hand and deposits at banking institutions	LaR	266.2
Trade receivables		
Receivables from the sale of properties	LaR	201.2
Receivables from property letting	LaR	32.2
Other receivables from trading	LaR	1.5
Financial assets		
Investments valued at equity	n. a.	7.0
Loans to other investments	LaR	33.5
Other non-current loans	LaR	4.3
Non-current securities	AfS	3.6
Other investments	AfS	644.7
Derivative financial assets		
Cash flow hedges (cross currency swaps)	n. a.	5.5
Liabilities		
Trade payables	FLAC	133.1
Non-derivative financial liabilities	FLAC	14,060.5
Derivative financial liabilities		
Purchase price liabilities from put options/rights to reimbursement	FLHfT	4.2
Other swaps	n. a.	8.9
Liabilities from finance leases	n. a.	99.3
Liabilities to non-controlling interests	FLAC	33.9

Loans and Receivables	LaR
Available-for-Sale financial assets	AfS
Financial Liabilities Held-for-Trading	FLHfT
Financial Liabilities measured at Amortized Cost	FLAC

Amounts recognized in balance sheet in accordance with IFRS						
Amortized cost	Fair value affecting net income	Fair value recognized in equity with reclassification	Fair value recognized in equity without reclassification	Amounts recognized in balance sheet in acc. with IAS 17/IAS 28	Fair value Dec. 31, 2017	Fair value hierarchylevel
266.2					266.2	1
201.2					201.2	2
32.2					32.2	2
1.5					1.5	2
				7.0	7.0	n. a.
33.5					54.0	2
4.3					4.3	2
			3.6		3.6	1
			644.7		644.7	2
	-11.3	16.8			5.5	2
133.1					133.1	2
14,060.5					14,713.7	2
	4.2				4.2	3
	-1.7	10.6			8.9	2
				99.3	203.5	2
33.9					33.9	2

The section below provides information on the financial assets and financial liabilities not covered by IFRS 9:

> Employee benefits in accordance with IAS 19: Gross presentation of right to reimbursement arising from transferred pension obligations in the amount of € 4.7 million (December 31, 2017: € 5.3 million).
> Amount by which the fair value of plan assets exceeds the corresponding obligation: € 1.1 million (December 31, 2017: € 1.1 million).
> Provisions for pensions and similar obligations: € 520.6 million (December 31, 2017: € 513.7 million).

IFRS 13 defines fair value as a price that would be received by selling an asset or paid to transfer a liability in the principal market for the asset or liability or, in the absence of a principal market, in the most advantageous market. The fair value is to be determined using valuation parameters that are as market-based as possible as inputs. The valuation hierarchy (fair value hierarchy) categorizes the inputs for the measurement technique in three levels, giving the highest priority level to the most market-based inputs:

Level 1 inputs: quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2 inputs: valuation parameters other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs: unobservable valuation parameters for the asset or liability.

When inputs used to measure the fair value are categorized within different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is material to the entire measurement.

Should the level of the input parameters used for a financial instrument change in a period subsequent to initial recognition, the financial instrument is reclassified to the new hierarchy level as of the end of that reporting period. No financial instruments were reclassified to different hierarchy levels during the reporting period.

The following table shows the assets and liabilities that are recognized in the balance sheet at fair value and their classification according to the fair value hierarchy:

in € million	Dec. 31, 2018	Level 1	Level 2	Level 3
Assets				
Investment properties	43,490.9			43,490.9
Financial assets				
Non-current securities	4.0	4.0		
Other investments	792.1	672.8	119.3	
Assets held for sale				
Investment properties (contract closed)	105.9		105.9	
Derivative financial assets				
Cash flow hedges (cross currency swaps)	20.8		20.8	
Liabilities				
Derivative financial liabilities				
Purchase price liabilities from put options/rights to reimbursement	36.8			36.8
Cash flow hedges	19.8		19.8	
Stand-alone derivatives	54.6		54.6	

in € million	Dec. 31, 2017	Level 1	Level 2	Level 3
Assets				
Investment properties	33,182.8			33,182.8
Financial assets				
Non-current securities	3.6	3.6		
Other investments	644.7	613.3	31.4	
Assets held for sale				
Investment properties (contract closed)	142.6		142.6	
Derivative financial assets				
Cash flow hedges (cross currency swaps)	5.5		5.5	
Liabilities				
Derivative financial liabilities				
Purchase price liabilities from put options/rights to reimbursement	4.2			4.2
Cash flow hedges	8.9		8.9	

In general, Vonovia measures its investment properties on the basis of the discounted cash flow (DCF) methodology (Level 3). The material valuation parameters and valuation results can be found in note [23] "Investment Properties."

The investment properties classified as assets held for sale are recognized at the time of their transfer to assets held for sale at their new fair value, the agreed purchase price (Level 2).

No financial instruments were reclassified to different hierarchy levels as against the comparative period.

Non-current securities are measured using the quoted prices in active markets (Level 1).

For the measurement of financial instruments, cash flows are initially calculated and then discounted. In addition to the tenor-specific EURIBOR/STIBOR rates (3M; 6M), the respective credit risk is taken as a basis for discounting. Depending on the expected cash flows, either Vonovia's own credit risk or the counterparty risk is taken into account in the calculation.

For the consolidated financial statements, Vonovia's own credit risk, in principle, was relevant for interest rate swaps. This credit risk is derived for material risks from rates observable on the capital markets and ranges of between 40 and 180 basis points, depending on the residual maturities of financial instruments. Regarding the positive market values of the cross currency swaps, a counterparty risk of 90 basis points was taken into account.

The calculated cash flows of the cross currency swap result from the forward curve for USD/EUR. The cash flows are discounted on the basis of the reference interest rate of each currency (LIBOR and EURIBOR) and translated into euros at the current exchange rate (Level 2).

The fair values of the cash and cash equivalents, trade receivables as well as other financial receivables approximate their carrying amounts at the reporting date owing to their mainly short maturities. The amount of the estimated impairment loss on cash and cash equivalents was calculated based on the losses expected over a period of twelve months. It was determined that the cash and cash equivalents have a low risk of default due to the external ratings and short residual maturities and that there is no need for any material impairment of cash and cash equivalents.

The fair value of the purchase price liabilities from put options/rights to reimbursement granted to minority shareholders is generally based on the going concern value of the respective company; if a contractually agreed minimum purchase price is higher than this amount, this purchase price is recognized (Level 3). The unobservable valuation parameters may fluctuate depending on the going concern values of these companies. However, a major change in value is not likely, as the business model is very predictable.

The following table shows the development of the put options recognized at fair value:

		Change in	Change			
in € million	As of Jan. 1	Scope of consolidation	affecting net income	cash effective	not affecting net income	As of Dec. 31
2018						
Purchase price liabilities from put options/ rights to reimbursement	4.2	35.2	-1.1	-	-1.5	**36.8**
2017						
Purchase price liabilities from put options/ rights to reimbursement	**57.2**	10.1	-13.9	-1.3	-47.9	**4.2**

The change in the scope of consolidation relates to put options for shares held by minority shareholders as part of the first-time consolidation of BUWOG.

For further information, we refer to note [4] "Scope of Consolidation and Business Combinations."

The sensitivity analysis has shown that if the value of the company deviates by 10% in each case, the purchase price liability from put options granted as of the reporting date would differ by € +3.7 million or € -3.6 million (Dec. 31, 2017: € +0.4 million or € -0.4 million). The changes would be recognized in full in net interest.

in € million	From interest	Income from other non-current loans	Dividends from other investments	From subsequent measurement			Financial result affecting income 2018	Measurement cash flow hedges	Measurement financial instruments categorized as equity instruments	Total financial result 2018
				Impairment losses	Derecognized receivables	Derecognized liabilities				
2018										
Debt instruments carried at (amortized) cost	3.5	2.2	–	21.6	18.9	–	46.2			46.2
Debt instruments measured at FV through P&L	–	–	23.1	–	–	–	23.1			23.1
Derivatives measured at FV through P&L with reclassification	-29.7	–	–	–	–	–	-29.7			-29.7
Debt instruments measured at FVOCI with reclassification	–	–	–	–	–	–	–	3.5		3.5
Equity instruments measured at FVOCI without reclassification	–	–	–	–	–	–	–		60.0	60.0
Financial liabilities measured at (amortized) cost	-401.4	–	–	–	–	0.9	-400.5			-400.5
	-427.6	**2.2**	**23.1**	**21.6**	**18.9**	**0.9**	**-360.9**	**3.5**	**60.0**	**-297.4**

in € million	From interest	Income from other non-current loans	Dividends from other investments	From subsequent measurement			Financial result affecting income 2017	Measurement cash flow hedges	Measurement financial instruments categorized as equity instruments	Total financial result 2017
				Impairment losses	Derecognized receivables	Derecognized liabilities				
2017										
Debt instruments carried at (amortized) cost	2.5	1.6	–	-22.2	1.3	–	-16.8			-16.8
Debt instruments measured at FV through P&L	-1.3	–	20.1	–	–	–	18.8			18.8
Derivatives measured at FV through P&L with reclassification	–	–	–	–	–	–	–	31.8		31.8
Debt instruments measured at FVOCI with reclassification	–	–	–	–	–	–	–		133.4	133.4
Equity instruments measured at FVOCI without reclassification	-314.5	–	–	–	–	0.9	-313.6			-313.6
Financial liabilities measured at (amortized) cost	**-313.3**	**1.6**	**20.1**	**-22.2**	**1.3**	**0.9**	**-311.6**	**31.8**	**133.4**	**-146.4**

42 Financial Risk Management

In the course of its business activities, Vonovia is exposed to various financial risks. The Group-wide financial risk management system aims to identify any potentially negative impact on the financial position of the Group early on and take suitable measures to limit this impact. For the structure and organization of financial risk management, we refer to the management report (chapter "Structure and Instruments of the Risk Management System"). This system was implemented on the basis of Group guidelines, which were approved by the Management Board and which are continually reviewed. The risks associated with financial instruments and the corresponding risk management are described in detail as follows:

Market Risks

a) Currency Risks

The cash-effective currency risks arising in connection with the still existing USD bond were eliminated by the simultaneous contracting of cross currency swaps. Fixed and expected purchase price payments in connection with the acquisition of Victoria Park were secured through the conclusion of foreign currency forwards. In addition, currency fluctuations from the operating business in Swedish kronor (SEK) are to be expected. Vonovia is subject to no further material currency risks in the scope of its usual business activities.

b) Interest Rate Risks

In the course of its business activities, Vonovia is exposed to cash-effective interest rate risks as a result of floating-rate debt as well as new and follow-on loans. Within this context, the interest markets are continually monitored by the Finance and Treasury department. Its observations are incorporated into the financing strategy.

As part of its financing strategy, Vonovia uses derivative financial instruments, in particular EUR interest rate swaps and caps, to limit or manage interest rate risks. Vonovia's policies permit the use of derivatives only if they are associated with underlying assets or liabilities, contractual rights or obligations and planned, highly probable transactions.

Preceding this chapter, there is a sensitivity analysis with regard to purchase price liabilities from put options. A sensitivity analysis for cash flow hedges is provided under note [44] Cash Flow Hedges and Stand-alone Interest Rate Swaps.

Credit Risks

Vonovia is exposed to a default risk resulting from the potential failure of a counterparty to fulfill its part of the contract. In order to minimize risks, financial transactions are only executed with banks and partners whose credit rating has been found by a rating agency to be at least equivalent to Vonovia's. These counterparties are assigned volume limits set by the Management Board. The counterparty risks are managed and monitored centrally by the Finance and Treasury department.

Liquidity Risks

The companies of Vonovia are financed by borrowings to a notable degree. Due to their high volume, the loans are in some cases exposed to a considerable refinancing risk. The liquidity risks arising from financing transactions with high volumes (volume risks) have become apparent in the financial sector, especially in the wake of the financial crisis. In order to limit these risks, Vonovia is in constant contact with many different market players, continuously monitors all financing options available on the capital and banking markets and uses these options in a targeted manner. Moreover, Vonovia subjects its existing financings to an early review prior to the respective final maturity date in order to ensure refinancing.

Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants such as the debt service coverage ratio or debt-equity ratio. If financial covenants are violated, the breach is not rectified within so-called cure periods and no mutually acceptable agreement can be reached with the lenders, the financing may be restructured and the cost structure changed. Should all commonly practiced solutions be unsuccessful, the lenders could call in the loan. The fulfillment of these financial covenants is continually monitored by Finance and Treasury on the basis of current actual figures and budgetary accounting.

In order to ensure its ability to pay at all times, Vonovia has put a system-supported cash management system in place. This system monitors and optimizes Vonovia's cash flows on an ongoing basis and provides the Management Board with regular reports on the Group's current liquidity situation. Liquidity management is supplemented by short-term rolling, monthly liquidity planning for the current fiscal year, of which the Management Board is also promptly notified.

The following table shows the forecast for undiscounted cash flows of the non-derivative financial liabilities and derivative financial instruments for the 2018 reporting year.

The loan repayments shown for the following years contain only contractually fixed minimum repayment amounts:

in € million	Carrying amount as of Dec. 31, 2018	2019 Interest	2019 Repayment	2020 Interest	2020 Repayment	2021 to 2025 Interest	2021 to 2025 Repayment
Non-derivative financial liabilities							
Liabilities to banks	5,200.1	94.2	325.0	88.7	1,026.3	263.8	2,960.5
Liabilities to other creditors	14,816.0	134.6	2,255.0	195.2	1,842.4	616.8	6,972.4
Deferred interest from other non-derivative financial liabilities	119.9	119.9	–	–	–	–	–
Liabilities from finance leases	99.4	5.8	–	9.8	–	26.9	–
Financial liabilities from tenant financing	–	–	104.7	–	1.9	–	9.5
Derivative financial liabilities							
Purchase price liabilities from put options/rights to reimbursement	36.8	–	0.7	–	2.2	–	33.9
Cash flow hedges stand-alone interest rate derivatives	65.6	22.7	–	22.0	–	67.8	–
Cash flow hedges (cross currency swap) USD in €	-15.7	-10.4	–	-10.4	–	-31.3	-185.0
€		8.5	–	8.5	–	25.4	185.0
Deferred interest from swaps	3.8	3.8					

in € million	Carrying amount as of Dec. 31, 2017	2018 Interest	2018 Repayment	2019 Interest	2019 Repayment	2020 to 2024 Interest	2020 to 2024 Repayment
Non-derivative financial liabilities							
Liabilities to banks	3,205.0	62.6	655.5	58.3	157.1	156.3	1,426.5
Liabilities to other creditors	10,778.7	102.7	921.4	178.3	1,821.3	600.3	6,018.2
Deferred interest from other non-derivative financial liabilities	76.8	76.8	–	–	–	–	–
Liabilities from finance leases	99.3	5.9	–	5.9	–	31.3	–
Derivative financial liabilities							
Purchase price liabilities from put options/rights to reimbursement	4.2	–	–	–	–	–	4.2
Cash flow hedges (interest)	8.7	3.8	–	3.0	–	10.2	–
Cash flow hedges (cross currency swap) USD in €	-5.0	-10.3	–	-10.0	–	-38.0	-183.0
€		8.5	–	8.5	–	33.9	184.9
Deferred interest from swaps	-0.3	-0.3	–	–	–	–	–

In April 2014, Vonovia issued a subordinated hybrid bond with terms and conditions stating that the issuer has its first special right of termination after five years. In line with the principle of prudence, the nominal value of these bonds has been recognized in the repayments from the year 2019, although the contractual term extends well beyond this period.

Credit Line

The framework loan agreements with Commerzbank and Société Générale concluded in December 2017, each with a volume of € 250 million, were terminated with effect from October 4, 2018. Vonovia has concluded a syndicated revolving credit facility of € 1,000 million with several banks, led by Commerzbank AG, via its Dutch financing company to replace these loan agreements. This unsecured credit line runs until October 2021 and is subject to interest on the basis of EURIBOR plus a mark-up. This credit line had not been used as of December 31, 2018.

Within the BUWOG subsidiaries, project-specific credit lines with various credit institutions were available in the amount of € 316.6 million on the reporting date, with € 62.3 million available for alternative use as a guarantee line. The nominal amount of these agreements totals € 609.7 million. These credit lines can be utilized based on the progress of the construction work, provided that corresponding evidence is furnished, taking the contractually agreed payment requirements into account.

Furthermore, there are two guarantee lines in place between Vonovia and Commerzbank, one for € 10 million, from which bills of exchange of approximately € 4.3 million had been drawn as of the end of the fiscal year, and one for € 50 million, from which bills of exchange had been drawn in the full amount. There are further guarantee credit lines within the conwert subgroup, namely with Raiffeisen Bank International AG in the amount of € 5 million and with Landesbank Baden-Württemberg in the amount of € 0.75 million. Approximately € 0.15 million of the latter had been drawn as of December 31, 2017. In addition, Commerzbank has issued Vonovia a bank guarantee of around € 334.4 million to secure the cash settlement entitlements of the minority shareholders of BUWOG AG as part of the squeeze-out.

Within the BUWOG subportfolio, there are four guarantee lines that can be used on a revolving basis and that correspond to a total amount of € 48 million with UniCredit Bank Austria AG, Atradius Credit Insurance N.V., Swiss Re International SE and VHV Allgemeine Versicherung AG. As of December 31, 2018, € 17.8 million of these guarantee lines had been used. In addition, four project-specific development financing arrangements with Berliner Volksbank eG, Berliner Sparkasse AG, HypoVereinsbank UniCredit Bank AG and UniCredit Bank Austria AG allow for the possibility of making use of bills of exchange, bonds and/or guarantees. On the reporting date, bills of exchange of € 6.6 million had been used. In addition, there are lines in the amount of € 18.6 million available at at least one of the credit institutions referred to above for project-specific payment guarantees, € 18.0 million of which had been used by the balance sheet date.

In November 2017, Vonovia concluded a master commercial paper agreement via its Dutch financing company with a total volume of € 500 million with Commerzbank AG as lead arranger and several banks as traders. This master program was increased to a total volume of € 1,000 million in September 2018. Issues in the amount of € 420 million were outstanding under this program as of December 31, 2018.

All in all, Vonovia has cash on hand and deposits at banking institutions of € 547.7 million on the reporting date (Dec. 31, 2017: € 266.2 million). The master credit agreements/the commercial paper program, together with the cash on hand, guarantee Vonovia's ability to pay at all times.

We refer to the information on financial risk management in the management report.

43 Capital Management

Vonovia's management aims to achieve a long-term increase in value in the interests of customers, employees and investors. Within this context, maintaining a degree of financial flexibility in order to be able to pursue the company's growth and portfolio optimization strategy is crucial. This is why Vonovia's capital management focuses on ensuring our investment grade rating. The priority is to ensure sufficient liquidity resources and maintain an efficient ratio between secured and non-secured capital components.

As part of the opportunities and risk management of Vonovia, the members of the Management Board are given monthly reports on the development of results and their potential effects on the capital structure.

The equity situation of the subsidiaries is regularly examined.

Vonovia's equity developed as follows:

in € million	Dec. 31, 2017	Dec. 31, 2018
Total equity	16,691.2	19,664.1
Total assets	37,516.3	49,387.6
Equity ratio	44.5%	39.8%

Vonovia plans to continue funding possible acquisitions by an optimal mix of debt capital and equity.

In order to protect itself against changes in exchange rates and interest rates, Vonovia regularly contracts derivative hedging transactions in the case of liabilities with variable interest rates or liabilities in foreign currencies. The Finance and Treasury department is responsible for implementing the approved financing strategy.

44 Cash Flow Hedges and Stand-alone Interest Rate Swaps

On the reporting date, the nominal volume of cash flow hedges held in euros amounts to € 680.9 million (Dec. 31, 2017: € 582.0 million). The interest rates on the two remaining hedging instruments are 0.793% and 3.760% with original swap periods of 4.75 and 10 years.

In connection with the € 600 million bond with a variable coupon issued in March 2018, the company has used a corresponding interest rate hedging transaction to fix the interest rate at 0.793% for 4.75 years.

In line with the planned early repayment of the corporate bond that fell due in September 2018 with a variable coupon of € 500 million, the corresponding interest rate hedge was also terminated.

For the three hedging instruments that are maintained within a so-called passive hedge account, € 9.6 million was reclassified to profit or loss in the reporting year in line with the expected cash flows from the underlying hedged items. This reduced the value recognized under other comprehensive income to € 47.6 million.

All derivatives are included in netting agreements with the issuing banks. Whereas the cross currency swaps were all recognized with positive market values, basically the euro interest rate swaps have an inherently negative market value as of the reporting date. No economic or accounting offsetting was performed in the reporting year.

Key parameters of the interest rate swaps were as follows:

in € million	Face value	Beginning of term	End of term	Current average interest rate (incl. margin)
Bonds (EMTN)				
Hedged items	600.0	Mar. 22, 2018	Dec. 22, 2022	3-M-EURIBOR margin 0,45%
Interest rate swaps	600.0	Mar. 22, 2018	Dec. 22, 2022	0.793%
Norddeutsche Landesbank (2)				
Hedged items	80.9	June 28, 2013	June 30, 2023	3-M-EURIBOR margin 1.47%
Interest rate swaps	80.9	June 28, 2013	June 30, 2023	2.290%

In 2013, two cross currency swaps were contracted in equal amounts with each of J.P. Morgan Limited and Morgan Stanley Bank International Limited; these hedging instruments (cross currency swaps/CCS) became effective on the issuance of two bonds for a total amount of USD 1,000 million. The CCS, each for an amount of USD 375 million, fell due in October 2017 in line with the bonds. The hedging instruments, each for an amount of USD 125 million, originally had a term of ten years. This means that the EUR/USD currency risk resulting from the coupon and capital repayments was eliminated for the entire term of the bonds.

Key parameters of the cross currency swaps were as follows:

in € million	Face value US-$	Face value €	Beginning of term	End of term	Interest rate US-$	Interest rate €	Hedging rate US-$/€
J.P. Morgan Securities plc Morgan Stanley & Co. International plc							
Hedged items	250.0	184.9	Oct. 2, 2013	Oct. 2, 2023	5.00%		
CCS	250.0	184.9	Oct. 2, 2013	Oct. 2, 2023		4.58%	1.3517

In connection with the acquisition of the BUWOG Group as of March 26, 2018, 22 stand-alone interest rate swaps with a nominal volume of € 918.9 million were assumed. In the course of the reporting year, one hedging instrument with a volume of € 24.2 million was terminated at due date, while another with a volume of € 3.5 million was terminated prematurely. As of December 31, 2018, the hedged nominal volume was € 880.2 million.

In connection with the acquisition of the Victoria Park Group as of June 28, 2018, 13 stand-alone interest rate swaps and 6 interest rate caps with a nominal volume of € 415.7 million were assumed. In the course of the reporting year, one interest rate cap (€ 24 thousand) was terminated on the one hand while, on the other, respectively two new interest rate swaps and interest rate caps (in a total amount of about € 0.1 million) were concluded. In addition, at the time of first-time consolidation, 14 embedded derivatives (loan termination rights) with a positive fair value of € 4.5 million had still been identified. The nominal value hedged in Swedish kronor corresponds to a volume of € 497.0 million as of the reporting date.

The designation of the cash flow hedges as hedging instruments is prospectively determined on the basis of a sensitivity analysis, retrospectively on the basis of the accumulated dollar offset method. The fair value changes of the hedged items are determined on the basis of the hypothetical derivative method. In the reporting year – as in the prior year – the impact of default risk on the fair values is negligible and did not result in any adjustments of the balance sheet item.

In the reporting year, the cash flow hedges held in euros were shown at their negative clean fair values totaling € -15.2 million as of December 31, 2018 (Dec. 31, 2017: € -8.7 million). The corresponding deferred interest amounted to € -4.6 million (Dec. 31, 2017: € -0.2 million). At the same time, positive market values from cross currency swaps in the amount of € 15.7 million (Dec. 31, 2017: € 5.0 million), together with positive market values in the amount of € 4.3 million from embedded derivatives and other interest rate derivatives of Victoria Park were disclosed. The corresponding deferred interest amounted to € 0.8 million (Dec. 31, 2017: € 0.5 million).

The impact of the cash flow hedges (after income taxes) on the development of other reserves is shown below:

in € million	As of Jan. 1	Changes in the period: Changes CCS	Changes in the period: Other	Reclassification affecting net income: Currency risk	Reclassification affecting net income: Interest risk	As of Dec. 31
2018	-68.9	7.0	-3.6	-6.7	8.8	**-63.3**
2017	-93.2	-117.4	6.6	126.1	9.0	**-68.9**

The impact of the cash flow hedges (including income taxes) on total comprehensive income is shown below:

In the reporting year, after allowing for deferred taxes, negative cumulative ineffectiveness amounts to € 2.7 million (2017: € 4.6 million), improving net interest by € 1.9 million.

Cashflow Hedges

in € million	2017	2018
Change in unrealized gains/losses	-168.0	0.4
Taxes on the change in unrealized gains/losses	57.3	3.0
Net realized gains/losses	199.8	3.1
Taxes on net realized gains/losses	-64.7	-1.0
Total	**24.4**	**5.5**

On the basis of the valuation as of December 31, 2018, Vonovia used a sensitivity analysis to determine the change in equity given a parallel shift in the interest rate structure of 50 basis points in each case:

in € million	Change in equity Other reserves not affecting net income	Ineffective portions affecting net income	Total
2018			
+ 50 basis points	8.1	23.4	**31.5**
- 50 basis points	-5.9	-41.1	**-47.0**
2017			
+ 50 basis points	2.2	–	**2.2**
- 50 basis points	-2.2	–	**-2.2**

A further sensitivity analysis showed that a change in the foreign currency level of -5% (+5%) would lead, after allowance for deferred taxes, to a change in the other reserves not affecting net income of € -1.5 million (or € +1.3 million), while ineffectiveness affecting net income in the amount of € +1.0 million (or € -1.0 million) would result at the same time. In the previous year, a change in the other reserves not affecting net income of € -1.6 million (or € +0.6 million) was recognized in connection with ineffectiveness affecting net income in the amount of € +1.4 million (or € -0.6 million).

45 Information on the Consolidated Statement of Cash Flows

The statement of cash flows shows how Vonovia's cash has changed during the reporting year as a result of cash inflows and outflows. In accordance with IAS 7 (Statement of Cash Flows), a distinction is made between changes in cash flow from operating activities, investing activities and financing activities.

The cash flow from operating activities is determined from the profit for the period using the indirect method, the profit for the period being adjusted for effects of transactions that are not cash-effective, any deferrals or accruals of past or future operating cash receipts or payments as well as items of income or expense associated with investing or financing cash flows.

The effects of changes in the scope of consolidation are shown separately. Therefore, direct comparison with the corresponding changes in the items of the consolidated balance sheet is not possible.

The proceeds from the disposal of intangible assets, property, plant and equipment and investment properties are shown in cash flow from investing activities.

Exercising the IAS 7 option, interest received is shown under cash flow from investing activities and interest paid is shown under cash flow from financing activities.

The item "Payments for acquisition of investment properties" mainly shows expenses for modernization measures.

46 Contingent Liabilities

Contingent liabilities exist for cases in which Vonovia SE and its subsidiaries give guarantees to various contractual counterparts. The terms are in many cases limited to an agreed time. In some cases, the term is unlimited.

Contingent liabilities of Vonovia are as follows:

in € million	Dec. 31, 2017	Dec. 31, 2018
Guarantees in connection with Development	–	42.9
Payment guarantees	–	7.9
Rent surety bonds	0.9	1.3
Other	7.0	5.9
	7.9	**58.0**

The increase in contingent liabilities is primarily due to guarantees in connection with the Development business that was added to Vonovia's portfolio in connection with the acquisition of the BUWOG Group. These mainly relate to guarantees resulting from the ordinary course of business issued in accordance with corresponding national regulations.

Vonovia is involved in legal disputes resulting from normal business activities. These relate, in particular, to tenancy law, distribution law and construction law disputes, as well as company law proceedings relating to acquired participating interests. None of the legal disputes, taken in isolation, will have any material effects on the net assets, financial position or results of operations of Vonovia.

47 Other Financial Obligations

The future minimum lease payment obligations resulting from non-cancellable operating leases are due as follows:

Total minimum lease payments

in € million	End of contract term	Due within 1 year	Due in 1 to 5 years	Due after 5 years	Total
Dec. 31, 2018					
Rents	2019–2024	10.6	18.0	5.5	34.1
Lease contracts	2019–2022	10.5	7.7	–	18.2
Leasehold contracts	2019–2109	13.4	53.6	552.4	619.4
		34.5	**79.3**	**557.9**	**671.7**
Dec. 31, 2017					
Rents	2018–2022	3.9	7.0	–	10.9
Lease contracts	2018–2021	12.9	15.3	–	28.2
Leasehold contracts	2018–2206	9.4	37.8	399.5	446.7
		26.2	**60.1**	**399.5**	**485.8**

Payments of € 39.9 million (2017: € 29.7 million) under rental, tenancy and lease contracts were recognized as expenses in the reporting period.

The Vonovia leasehold contracts generally have a term of 99 years. The average remaining term of these contracts was approx. 43 years as of December 31, 2016. The owners of inheritable building rights are in particular the German state, church institutions, German federal states, municipalities and Deutsche Post AG, Bonn.

In addition to obligations under operating leases, other financial obligations include:

in € million	Dec. 31, 2017	Dec. 31, 2018
Other financial obligations		
Cable TV service contracts	323.7	295.7
IT service contracts	14.6	41.9
Supply contracts	–	13.9
Surcharges under the German Condominium Act	3.1	4.5
Other	–	4.0
	341.4	**360.0**

The obligations under cable TV service contracts are set against future income from the marketing of the cable TV service. The caretaker service contracts were gradually terminated and assumed by Vonovia's own craftsmen's organization.

48 Segment Reporting

Vonovia is an integrated residential real estate company with operations across Europe. The company's strategy is focused on sustainably increasing the value of the company. This is achieved by managing the company's own portfolio with a view to enhancing its value, investing in existing properties in order to create value, building new residential buildings and selling individual apartments, as well as by engaging in active portfolio management and offering property-related services. For the purposes of managing the company, we make a distinction between four segments: **Rental, Value-add, Recurring Sales and Development.** We also report the **Other segment,** which is not relevant from a corporate management perspective, in our segment reporting. This includes the disposal, only as and when the right opportunities present themselves, of entire buildings or land (Non-Core Disposals) that are likely to have below-average development potential in terms of rent growth in the medium term and are located in areas that can be described as peripheral compared with Vonovia's overall portfolio and in view of future acquisitions.

The **Rental segment** combines all of the business activities that are aimed at the value-enhancing management of our own residential real estate. It includes our property management activities in Germany, Austria and Sweden. The consolidation of our property management activities in Germany, Austria and Sweden to form one single reporting segment is based on the similarities that we see in the property management business in these three countries. This applies both to the way in which services are provided and the individual service processes that form part of the property management business, as well as to the customers in the residential rental market and the type of customer acquisition used. Overall, the residential rental market in all three countries is characterized by a shortage of housing and is regulated by statutory requirements, resulting in return expectations that are similar in the long term.

The **Value-add segment** (formerly known as "Value-add Business") bundles all of the housing-related services that we have expanded our core rental business to include. These services include both the maintenance and modernization work on our properties and services that are closely related to the rental business. We allocate the activities relating to the craftsmen's and residential environment organization, the condominium administration business, the cable TV business, metering services, energy supplies and our insurance services to the Value-add segment. Energy supply is a new service that we have been offering our tenants since 2018.

The **Recurring Sales segment** (formerly part of the "Sales" segment) includes the regular and sustainable disposals of individual condominiums and single-family houses from our portfolio. It does not include the sale of entire buildings or land (Non-Core Disposals). These properties are only sold as and when the right opportunities present themselves, meaning that the sales do not form part of the Recurring Sales segment. We report these opportunistic sales in the Other column of the segment report. In the previous reporting period, Recurring Sales and Non-Core Disposals were shown combined in the Sales segment. As a result, the prior-year figures have been adjusted accordingly for the current reporting period.

The **Development segment** encompasses the project development of new residential buildings. This covers the value chain starting with the purchase of land without any development plan/dedicated purpose and ending with the completion of new buildings and new construction measures on our own properties. These properties are either incorporated into our own portfolio or sold to third parties. The Development segment deals with projects in selected attractive locations. Project development work is currently focusing on Berlin, Hamburg and Vienna. The Adjusted EBITDA of the Development segment includes the fair value step-up for properties that were completed in the reporting period and have been added to our own portfolio. As far as the prior-year reporting period is concerned, a fair value step-up is shown for those new buildings that fell within the sphere of responsibility of the Value-add segment in organizational terms. The segment reporting for 2017 does not yet show any fair value step-ups for new buildings in the Adjusted EBITDA.

A Group-wide planning and controlling system ensures that resources are efficiently allocated and their successful use is monitored on a regular basis. Reporting to the chief decision-makers and thus the assessment of business performance as well as the allocation of resources are performed on the basis of this segmentation. Asset and liability items are not reported separately by segment. Internal reporting is based on the IFRS reporting standards in general.

The Management Board as chief decision-makers of Vonovia monitor the contribution made by the segments to the company's performance on the basis of the segment revenue as well as the Adjusted EBITDA. The **Adjusted EBITDA Total** represents the **Group's adjusted earnings** before interest, taxes, depreciation and amortization adjusted for items that are not related to the period, recur irregularly or that are atypical for business operation and excluding effects from adjustments in value of investment properties.

The following table shows the segment information for the reporting period:

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Segments total	Other*	Consolida-tion*	Group
Jan. 1 – Dec. 31, 2018								
Segment income	1,894.2	1,462.2	356.1	225.1	3,937.6	741.4	-648.2	4,030.8
thereof external income	1,894.2	203.9	356.1	225.1	2,679.3	741.4	610.1	4,030.8
thereof internal income		1,258.3			1,258.3	–	-1,258.3	
Carrying amount of assets sold			-298.5		-298.5	-635.2		
Revaluation from disposal of assets held for sale			35.7		35.7	32.3		
Expenses for maintenance	-289.7				-289.7			
Production costs development				-181.8	-181.8			
Operating expenses	-289.4	-1,341.0	-14.2	-22.6	-1,667.2	-9.3	609.4	
Net income from fair value adjustments of new construction/development to hold				18.7	18.7		-18.7	
Adjusted EBITDA Total	1,315.1	121.2	79.1	39.4	1,554.8	129.2	-57.5	1,626.5
Non-recurring items								-106.6
Period adjustments from assets held for sale								0.5
Income from investments in other real estate companies								14.0
EBITDA IFRS								1,534.4
Net income from fair value adjustments of investment properties								3,517.9
Depreciation and amortization								-737.9
Income from other investments								-23.1
Financial income								32.1
Financial expenses								-449.1
EBT								3,874.3
Income taxes								-1,471.5
Profit for the period								**2,402.8**

* The income for the Rental, Value-add, Recurring Sales and Development segments constitutes income that is regularly reported to the Management Board as the chief operating decision-maker and that reflects Vonovia's sustainable business. The income/costs in the "Other" and "Consolidation" columns do not form part of the Management Board's segment management.

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Segments total	Other*	Consolida-tion*	Group
Jan. 1 – Dec. 31, 2017								
Segment income	1,667.9	1,170.5	305.9	–	3,144.3	900.5	-446.8	3,598.0
thereof external income	1,667.9	161.6	305.9	–	2,135.4	900.5	562.1	3,598.0
thereof internal income	–	1,008.9	–	–	1,008.9	–	-1,008.9	
Carrying amount of assets sold			-265.7	–	-265.7	-870.3		
Revaluation from disposal of assets held for sale			35.1		35.1	35.4		
Expenses for maintenance	-258.0				-258.0			
Production costs development					–			
Operating expenses	-261.2	-1,068.4	-13.1	–	-1,342.7	-15.7	418.9	
Net income from fair value ad-justments of new construction/development to hold				6.7	6.7		-6.7	
Adjusted EBITDA Total	1,148.7	102.1	62.2	6.7	1,319.7	49.9	-34.6	1,335.0
Non-recurring items								-86.9
Period adjustments from assets held for sale								10.7
Income from investments in other real estate companies								13.0
EBITDA IFRS								1,271.8
Net income from fair value adjust-ments of investment properties								3,434.1
Depreciation and amortization								-372.2
Income from other investments								-20.1
Financial income								46.8
Financial expenses								-353.0
EBT								4,007.4
Income taxes								-1,440.5
Profit for the period								**2,566.9**

* The income for the Rental, Value-add, Recurring Sales and Development segments constitutes income that is regularly reported to the Management Board as the chief operating decision-maker and that reflects Vonovia's sustainable business. The income/costs in the "Other" and "Consolidation" columns do not form part of the Management Board's segment management. The Sales segment reported in the previous year has been split into Recurring Sales and Non-Core Disposals (shown under "Other") and the costs associated with the transaction holding area have been allocated to the Rental segment.

To show the development of operating performance and to ensure comparability with previous periods, we calculate Adjusted EBITDA for each of our segments: Rental, Value-add, Recurring Sales and Development. The total of these key figures produces the Group's Adjusted EBITDA Total. The adjustments made include items that are not related to the period, items that recur irregularly and items that are atypical for business operation. The non-recurring items include the expenses for pre-retirement part-time work arrangements and severance payments, the development of new fields of business and business processes, acquisition projects including integration costs and expenses for refi-nancing and equity increases (where not treated as capital procurement costs).

The following table gives a detailed list of the non-recurring items for the reporting period:

in € million	Jan. 1 – Dec. 31, 2017	Jan. 1 – Dec. 31, 2018
Severance payments/pre-retirement part-time work arrangements	13.9	18.3
Business model optimisation/development of new fields of business	22.5	0.8
Acquisition costs incl. integration costs*	48.9	87.8
Refinancing and equity measures	1.6	-0.3
Total non-recurring items	**86.9**	**106.6**

* Including takeover costs and one-time expenses in connection with acquisitions, such as HR measures relating to the integration process. Figures for the previous year shown in line with the current reporting structure for 2018.

In the 2018 fiscal year, the **non-recurring items** eliminated in the Adjusted EBITDA as a whole came to € 106.6 million, up 22.7% on the prior-year value of € 86.9 million. The acquisition costs including integration costs for 2018 include € 20.0 million for acquisitions in earlier years, which are offset against tax income in the same amount, meaning that they do not affect the profit for the period. Taking this into account, the non-recurring items in the fiscal year came to € 86.6 million, on a par with the prior-year value of € 86.9 million.

The breakdown of non-Group revenue from contracts with customers (pursuant to IFRS 15.114f) and its allocation to the segments referred to above is as follows:

in € million	Rental	Value-add	Recurring Sales	Development	Other	Total
Jan. 1 – Dec. 31, 2018						
Revenue from ancillary costs (IFRS 15)	685.2	0.9	–	–	–	686.1
Income from the disposal of investment properties	–	–	186.0	–	575.4	761.4
Income from disposal of real estate inventories (Development)	–	–	–	225.1	–	225.1
Other revenue from contracts with customers	14.6	45.7				60.3
Revenue from contracts with customers	**699.8**	**46.6**	**186.0**	**225.1**	**575.4**	**1,732.9**
thereof period-related				58.1		58.1
thereof time-related income	763.8	46.6	186.0	167.0	575.4	1,738.8
Income from rental income (IAS 17)	1,894.2	3.6	–	–	–	1,897.8
Revenue from ancillary costs (IAS 17)	64.0	–	–	–	–	64.0
Income from sale of assets held for sale (IFRS 5)	–	–	170.1	–	166.0	336.1
Other revenue	**1,958.2**	**3.6**	**170.1**	**–**	**166.0**	**2,297.9**
Revenues	**2,658.0**	**50.2**	**356.1**	**225.1**	**741.4**	**4,030.8**

in € million	Rental	Value-add	Recurring Sales	Development	Other	Total
Jan. 1 – Dec. 31, 2017						
Revenue from ancillary costs (IFRS 15)	610.5	0.1	–	–	–	610.6
Income from the disposal of investment properties	–	–	122.2	–	344.7	466.9
Income from disposal of real estate inventories (Development)	–	–	–	–	–	–
Other revenue from contracts with customers	15.4	32.2	–	–	–	47.6
Revenue from contracts with customers	**625.9**	**32.3**	**122.2**	**–**	**344.7**	**1,125.1**
thereof period-related	–	–	–	–	–	–
thereof time-related income	625.9	32.3	122.2	–	344.7	1,125.1
Income from rental income (IAS 17)	1,667.9	4.2	–	–	–	1,672.1
Revenue from ancillary costs (IAS 17)	61.3	–	–	–	–	61.3
Income from sale of assets held for sale (IFRS 5)	–	–	183.7	–	555.8	739.5
Other revenue	**1,729.2**	**4.2**	**183.7**	**–**	**555.8**	**2,472.9**
Revenues	**2,355.1**	**36.5**	**305.9**	**–**	**900.5**	**3,598.0**

External income and non-current assets, excluding financial instruments, deferred taxes, post-employment benefits and rights under insurance contracts, are distributed among Vonovia's country of origin and other countries as follows. The revenue is allocated based on the registered office of the unit providing the service.

	External income		Assets	
in € million	2018	2017	2018	2017
Germany	3,598.6	3,249.1	42,670.5	36,147.7
Austria	345.9	341.7	2,789.5	549.4
Sweden	59.5	0.0	1,977.0	0.0
France	0.0	0.0	87.0	0.0
Other countries	26.8	7.2	61.5	12.2
Total	**4,030.8**	**3,598.0**	**47,585.5**	**36,709.3**

49 Related Party Transactions

Vonovia had business relationships with unconsolidated subsidiaries in the 2018 fiscal year. These transactions generally resulted from the normal exchange of deliveries and services and are shown in the table below:

	Purchased services		Receivables		Liabilities	
in € million	2017	2018	2017	2018	2017	2018
Associated companies	–	0.6	–	0.4	–	1.5

At Vonovia, the individuals in key positions pursuant to IAS 24 include the members of the Management Board and the Supervisory Board of Vonovia SE.

The emoluments to key management personnel, which are subject to a disclosure requirement under IAS 24, include the remuneration paid to the active members of the Management Board and Supervisory Board.

The active members of the Management Board and Supervisory Board received the following remuneration:

in € million	2017	2018
Short-term employee benefits (without share-based payment)	7.0	6.5
Post-employment benefits	1.8	1.3
Share-based payment	10.5	3.2
	19.3	**11.0**

The service cost resulting from provisions for pensions for the active Management Board members is reported under post-employment benefits. The disclosure on share-based payments is based on the expenses in the fiscal year, which are also reported in note [50] Share-based Payment

The Management Board and Supervisory Board members were not granted any loans or advances.

Information on the individual remuneration of the Management Board and Supervisory Board members, as well as a description of the remuneration system, are given in the remuneration report, which is part of the combined management report, and in note [51] Remuneration.

50 Share-based Payments

Management Board

Under the long-term incentive plan (LTIP), the former Management Board members were granted a total of 931,030 notional shares (SARs = stock appreciation rights) in 2013. These were paid out in five annual tranches with a cliff vesting of 20% per calendar year of the total number of notional shares granted. In 2018, the last annual tranche was paid out to Rolf Buch, resulting in income pursuant to IFRS 2 of € 0.2 million (2017: € 2.5 million).

As part of the new LTIP plan, the Management Board members are granted annually on a fixed number of phantom stocks (performance share units or "PSU"), which are paid out at the end of a four-year performance period based on the extent to which a pre-defined target achievement level has been reached. The level of target achievement that determines the payout amount under the new LTIP plan is calculated based on the following parameters: Relative Total Shareholder Return (RTSR), Performance of NAV per Share, Performance of FFO I per Share and the Customer Satisfaction Index (CSI), which are all assigned an equal weighting of 25%. As a result, this new LTIP plan constitutes a form of cash-settled share-based payment pursuant to IFRS 2; in turn, the payout claim can be lost entirely if the defined target achievement level has not been reached.

The value of the total notional shares that had been granted but not paid out from the new LTIP plan as of December 31, 2018, was calculated by an external expert based on recognized actuarial principles. The obligation disclosed as of the reporting date breaks down as follows:

Tranche in €	End of vesting period	Rolf Buch	Klaus Freiberg	Helene von Roeder	Daniel Riedl	Dr. A. Stefan Kirsten	Gerald Klinck	Thomas Zinnöcker
2015–2018	Dec. 31, 2018	2,294,640	764,880	–	–	764,880	573,660	1,649,273
2016–2018	Dec. 31, 2018	–	318,221	–	–	318,221	318,221	–
2016–2019	Dec. 31, 2019	1,600,476	711,322	–	–	711,322	711,322	113,614
2017–2020	Dec. 31, 2020	1,338,004	563,370			563,370	563,370	–
2018–2021	Dec. 31, 2021	501,357	211,098	96,751	96,751	87,957	87,957	–

The LTIP plan program resulted in expenses pursuant to IFRS 2 totaling € 5.9 million in the 2018 reporting year (2017: € 8.0 million), with € 2.1 million attributable to Rolf Buch, € 1.2 million to Klaus Freiberg, € 0.1 million to both Helene von Roeder and Daniel Riedl, € 1.0 million to both Dr. A. Stefan Kirsten and Gerald Klinck and € 0.4 million to Thomas Zinnöcker.

For further information, please refer to the remuneration report.

Executives Below Management Board Level

In 2014, Vonovia resolved a virtual share program (LTIP) for executives at the highest level of management below the Management Board with effect from January 1, 2014. Notional shares were granted under this LTIP, subject to a waiting period of three calendar years, for the last time on January 1, 2015. The last tranche was paid out in 2018, with expenses of k € 19 being incurred for the last time in 2018 (2017: € 0.5 million).

In 2016, a new LTIP plan was launched for the first level of management, replacing the LTIP that was launched in 2014, to bring the targets for the Management Board and other employees in management positions below Management Board level even closer into line with shareholder interests.

The LTIP plan is based largely on the LTIP launched for the Management Board in 2015, also regarding the identical performance objectives and the calculation of the objective values with regard to the minimum value, the "target achievement value," and the maximum value.

The value of the total notional shares that had been granted but not paid out from the new LTIP plan as of December 31, 2018, was calculated by an external expert based on recognized actuarial principles. The obligation disclosed as of the reporting date breaks down as follows:

Tranche in €	End of vesting period	Dec. 31, 2018
2016	Dec. 31. 2019	1,485,478
2017	Dec. 31. 2020	996,735
2018	Dec. 31. 2021	371,620

The LTIP plan program results, in accordance with IFRS, in expenses of € 1.5 million in the 2018 reporting year (2017: € 1.0 million).

Employees

An employee share program was resolved on the basis of a works agreement in 2014. The program started in the first quarter of 2015 and the shares granted are subject to a vesting period of six months. The costs associated with the securities deposit account are borne by Vonovia. Shares with a value of between € 90.00 and € 360.00 at the most are granted to the eligible employees, depending on their gross annual salary, without the employees having to make any contribution of their own.

The new employee share program resulted in expenses totaling € 1.8 million in the 2018 reporting year (2017: € 1.5 million), which have been offset directly against the capital reserves.

51 Remuneration

Remuneration of the Supervisory Board

The members of the Supervisory Board received total remuneration of € 1.8 million during the 2018 fiscal year (2017: € 1.8 million) for their work.

Total Remuneration of the Management Board

The total remuneration paid to the individual members of the Management Board comprises the following:

Total remuneration of the Management Board in €	Rolf Buch, CEO		Klaus Freiberg, COO		Helene von Roeder, CFO since May 9, 2018	
	2017	**2018**	**2017**	**2018**	**2017**	**2018**
Fixed remuneration	1,150,000	1,150,000	600,000	600,000	–	386,957
Compensation payment	–	–	–	–	–	64,874
Cash remuneration/deferred compensation	355,000	355,000	160,000	160,000	–	103,188
Fringe benefits	24,006	26,651	27,603	27,600	–	13,157
Total	**1,529,006**	**1,531,651**	**787,603**	**787,600**	**–**	**568,176**
Annual variable remuneration (bonus)	700,000	700,000	440,000	528,000	–	283,768
Multi-year variable remuneration (LTIP plan)						
2017–2020	2,040,633	–	859,224	–	–	–
2018–2021	–	1,902,392	–	801,007	–	516,592
(number of shares)	(61,469)	(48,669)	(25,882)	(20,492)	–	(13,216)
Total	**2,740,633**	**2,602,392**	**1,299,224**	**1,329,007**	**–**	**800,360**
Total remuneration	**4,269,639**	**4,134,043**	**2,086,827**	**2,116,607**	**–**	**1,368,536**

Total remuneration of the Management Board in €	Daniel Riedl, CDO since May 9, 2018		Dr. A. Stefan Kirsten, CFO until May 9, 2018		Gerald Klinck, CCO until May 9, 2018		Total remuneration	
	2017	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**
Fixed remuneration	–	386,957	600,000	215,217	600,000	215,217	2,950,000	2,954,348
Compensation payment	–	15,111	–	–	–	–	–	64,874
Cash remuneration/deferred compensation	–	103,188	160,000	53,333	160,000	57,391	835,000	832,100
Fringe benefits	–	18,932	32,723	24,105	24,503	7,317	108,835	117,762
Total	**–**	**524,188**	**792,723**	**292,655**	**784,503**	**279,925**	**3,893,835**	**3,969,084**
Annual variable remuneration (bonus)	–	283,768	440,000	157,826	440,000	157,826	2,020,000	2,111,188
Multi-year variable remuneration (LTIP plan)								
2017–2020	–	–	859,224	–	859,224	–	4,618,305	–
2018–2021	–	516,592	–	333,753	–	333,753	–	4,404,089
(number of shares)	–	(13,216)	(25,882)	(8,539)	(25,882)	(8,539)	(139,115)	(112,671)
Total	**–**	**800,360**	**1,299,224**	**491,579**	**1,299,224**	**491,579**	**6,638,305**	**6,515,277**
Total remuneration	**–**	**1,324,548**	**2,091,947**	**784,234**	**2,083,727**	**771,504**	**10,532,140**	**10,484,361**

The remuneration paid to the Management Board members includes the remuneration for all mandates at Vonovia Group companies, subsidiaries and participating interests.

Pension Obligations to Members of the Management Board

Rolf Buch, Helene von Roeder, Dr. A. Stefan Kirsten and Gerald Klinck are/were paying their contractual share of € 355,000 (Rolf Buch), € 103,188 (Helene von Roeder), € 53,333 (Dr. A. Stefan Kirsten) and € 57,391 (Gerald Klinck) respectively, based on their fixed remuneration, into the deferred compensation scheme. Klaus Freiberg has opted for a cash payout for his entitlement of € 160,000. In Daniel Riedl's case, the annual pension contribution of € 103,188 made by BUWOG is paid into an external pension fund.

The pension obligations to members of the Management Board from deferred compensation comprise the following:

	Contribution total as of December 31,		Defined benefit obligation as of December 31,	
€	**2017**	**2018**	**2017**	**2018**
Rolf Buch	949,253	966,356	3,064,938	3,969,413
Helene von Roeder	–	265,457	–	265,677
Dr. A. Stefan Kirsten	367,388	116,396	2,179,047	–*
Gerald Klinck	491,198	192,180	1,257,330	–*

* For Dr. A. Stefan Kirsten and Gerald Klinck, these figures relate to the service cost up until May 9, 2018. In respect of Dr. A. Stefan Kirsten and Gerald Klinck, the pension obligations in accordance with the IFRS as of December 31, 2018, are recognized in pension obligations (DBO) to former members of the Management Board.

Remuneration of Former Management Board Members and Their Surviving Dependents

Total remuneration of former Management Board members and their surviving dependents amounts to € 6.2 million for the 2018 fiscal year (2017: € 2.0 million). The total remuneration includes the severance payment in accordance with the provisions set out in the contract of employment of Dr. A. Stefan Kirsten. This payment applies in connection with the amicable termination of his Management Board contract as of May 9, 2018.

The pension obligations (DBO) to former members of the Management Board and their surviving dependents amount to € 19.1 million (2017: € 14.3 million).

52 Auditor's Fees

In the fiscal year, the following fees (including expenses and excluding VAT) have been credited for the services rendered by the Group auditors KPMG Wirtschaftsprüfungsgesellschaft:

in € million	**2017**	**2018**
Audits	3.7	3.2
Other confirmation services	1.0	0.6
Tax consultancy services	0.3	–
	5.0	**3.9**

All of the services rendered were consistent with the activities performed as the auditor of the annual financial statements and consolidated financial statements of Vonovia SE. The fee paid for auditing services performed by KPMG AG Wirtschaftsprüfungsgesellschaft relates to the audit of the consolidated financial statements and annual financial statements of Vonovia SE, as well as to various audits of annual financial statements and a review of one set of annual financial statements of Group companies. Consolidated interim financial statements were also reviewed.

The other confirmation services include reviews of reconciliations on the interest threshold based on audit standard IDW PS 900, business audits performed in accordance with Section 2 of the Act on the Code of Professional Practice for German Public Auditors (WPO) on compliance with the regulations governing loans granted by the German government-owned development bank KfW, business audits pursuant to ISAE 3000 relating to various housing assistance reports and the voluntary business audits of tax compliance management systems in accordance with IDW PS 980. Other confirmation services also include services associated with the issue of comfort letters pursuant to audit standard IDW PS 910 of the Institute of Public Auditors in Germany, the issue of valuation certificates and project audits relating to IT migrations.

53 Subsequent Events

Vonovia SE successfully sold its roughly 16.8 million shares in Deutsche Wohnen SE ("Deutsche Wohnen") to institutional investors with effect as of February 1, 2019, by means of an accelerated bookbuilding procedure; the shares were sold for a price of € 41.50 per share. This corresponds to a customary market discount of 4.8% on the closing price of € 43.59 as of January 31, 2019. This results in total proceeds of € 698.1 million. The acquisition costs at the time amounted to € 405.5 million, resulting in a book gain of € 292.6 million from this disposal in the 2019 annual financial statements of Vonovia SE.

The IFRS consolidated financial statements included the shares in Deutsche Wohnen with a fair value of € 672.8 million as of December 31, 2018. This means that, over the course of time, € 267.3 million in fair value increases had been recognized under other comprehensive income directly in other reserves. This amount will be reclassified to retained earnings, not affecting net income, pursuant to the designation under IFRS 9 when the transaction is completed.

The increase in fair value between December 31, 2018, and the transaction date of January 31, 2019, in the amount of € 25.3 million will also be recognized in other comprehensive income. Transaction costs will be recognized affecting net income.

On February 12, 2019, Vonovia terminated the subordinated bond of € 700 million in due form with effect from April 8 via Vonovia Finance B. V. and announced the corresponding repayment.

With effect from January 29, 2019, and as part of its EMTN program, Vonovia placed a bond with a nominal volume of € 500 million and a coupon of 1.800% maturing on June 29, 2025, via its Dutch subsidiary Vonovia Finance B. V. The first interest payment date is June 29, 2019.

The conversion of BUWOG AG, Vienna/Austria, into BUWOG Group GmbH, Vienna/Austria, was entered in the Vienna/Austria commercial register with effect from January 25, 2019.

54 Declaration of Conformity with the German Corporate Governance Code

In February 2019, the Management Board and the Supervisory Board declared compliance with the recommendations of the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG) and made the declaration permanently available on the company's website (www.vonovia.de).

55 Management Board's Proposal for the Appropriation of Profit

"The Management Board and the Supervisory Board propose to the Annual General Meeting that, of the profit of Vonovia SE for the 2018 fiscal year of € 909,643,381.62, an amount of € 135,000,000.00 be added to other revenue reserves and an amount of € 746,032,224.96 on the 518,077,934 shares of the share capital as of December 31, 2018, be paid as a dividend, corresponding to € 1.44 per share, to the shareholders and the remaining amount of € 28,611,156.66 be carried forward to the new account or be used for other dividends on shares carrying dividend rights at the time of the Annual General Meeting and which go beyond those of the share capital as of December 31, 2018.

As with the 2017 financial year, the dividend for the 2018 fiscal year, payable after the Annual General Meeting in May 2019, will again include the election of a non-cash dividend in shares, to the extent deemed economically sensible by the Supervisory Board."

Bochum, Germany, February 25, 2019

Rolf Buch
(CEO)

Klaus Freiberg
(COO)

Helene von Roeder
(CFO)

Daniel Riedl
(CDO)

INFORMATION

In order to boost transparency, we also provide our target group with detailed information in line with the requirements of the European Public Real Estate Association, EPRA. The organization represents the interests of Europe's listed real estate companies and takes sector-specific features into account in its requirements.

List of Vonovia Shareholdings

as of December 31, 2018, according to Section 313 para. 2 HGB

Company	Company domicile	Country code	Interest %
Vonovia SE	Bochum	D	
Consolidated Companies			
AB Nerke Holding 211	Örebro	S	100.00
AB Nerke Holding 411	Örebro	S	100.00
Alboingärten Bauvorhaben Bessemerstraße GmbH	Schönefeld	D	100.00
alt+kelber Immobilienverwaltung GmbH	Berlin	D	100.00
Anton Baumgartner-Straße 125, 1230 Wien, Besitz GmbH	Vienna	A	100.00
Barmer Wohnungsbau GmbH	Wuppertal	D	91.39
Barmer Wohnungsbau Grundbesitz I GmbH	Wuppertal	D	100.00
Barmer Wohnungsbau Grundbesitz II GmbH	Wuppertal	D	100.00
Barmer Wohnungsbau Grundbesitz III GmbH	Wuppertal	D	100.00
Barmer Wohnungsbau Grundbesitz IV GmbH	Wuppertal	D	100.00
Barmer Wohnungsbau Grundbesitz V GmbH	Wuppertal	D	100.00
Bau- und Siedlungsgesellschaft Dresden mbH	Dresden	D	94.73
Baugesellschaft Bayern mbH	Munich	D	94.90
Beamten-Baugesellschaft Bremen Gesellschaft mit beschränkter Haftung	Bremen	D	94.90
Blitz B14-347 GmbH	Berlin	D	94.90
BOKRÉTA Management Kft.	Budapest	H	100.00
Börsenhof A Besitz GmbH	Bremen	D	94.00
Bremische Gesellschaft für Stadterneuerung, Stadtentwicklung und Wohnungsbau mit beschränkter Haftung	Bremen	D	94.90
Brunn am Gebirge Realbesitz GmbH	Vienna	A	100.00
Bundesbahn Wohnungsbaugesellschaft Kassel Gesellschaft mit beschränkter Haftung	Kassel	D	94.90
Bundesbahn-Wohnungsbaugesellschaft Regensburg mbH	Regensburg	D	94.90
BUWOG - Altprojekte GmbH	Vienna	A	100.00
BUWOG - Bauen und Wohnen Gesellschaft mbH	Vienna	A	100.00
BUWOG - Bauträger GmbH	Berlin	D	90.00
BUWOG - Berlin GmbH	Vienna	A	100.00 [2)]
BUWOG - Berlin I GmbH & Co. KG	Berlin	D	94.90
BUWOG - Berlin II GmbH	Kiel	D	94.90
BUWOG - Berlin Kreuzberg I GmbH & Co. KG	Berlin	D	94.90
BUWOG - Berlin Wohnen GmbH	Kiel	D	94.90
BUWOG - Berlin Wohnen III GmbH	Berlin	D	94.90
BUWOG - Brandenburg I GmbH & Co. KG	Berlin	D	94.90
BUWOG - Braunschweig I GmbH	Kiel	D	94.90

Company	Company domicile	Country code	Interest %
BUWOG - Breitenfurter Straße 239 GmbH	Vienna	A	100.00
BUWOG - Breitenfurterstraße Drei, GmbH & Co. KG	Vienna	A	100.00
BUWOG - Breitenfurterstraße Eins, GmbH & Co. KG	Vienna	A	100.00
BUWOG - Breitenfurterstraße Vier, GmbH & Co. KG	Vienna	A	100.00
BUWOG - Breitenfurterstraße Zwei, GmbH & Co. KG	Vienna	A	100.00
BUWOG - Brunnenstraße GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Brunnenstraße Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Chausseestraße 88 GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Chausseestraße 88 Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Demophon Immobilienvermietungs GmbH	Vienna	A	100.00
BUWOG - Deutschland GmbH	Vienna	A	100.00 [2)]
BUWOG - Deutschland II GmbH	Vienna	A	100.00 [2)]
BUWOG - Döblerhofstraße GmbH	Vienna	A	100.00
BUWOG - Gartenfeld Development GmbH	Berlin	D	94.90
BUWOG - Gartenfeld Wohnen GmbH	Kiel	D	94.90
BUWOG - Gerhard - Bronner Straße GmbH	Vienna	A	100.00
BUWOG - Gervinusstraße Development GmbH	Berlin	D	100.00
BUWOG - Gewerbeimmobilien Eins GmbH	Vienna	A	100.00
BUWOG - Gewerbeimmobilien Zwei GmbH	Vienna	A	100.00
BUWOG - Goethestraße GmbH	Berlin	D	94.90
BUWOG - Grundstücks- und Betriebs GmbH	Berlin	D	94.90
BUWOG - Hamburg Umland I GmbH	Kiel	D	94.90
BUWOG - Hamburg Umland II GmbH	Kiel	D	94.90
BUWOG - Hamburg Wohnen GmbH	Kiel	D	100.00
BUWOG - Hamburg-Süd GmbH	Kiel	D	94.90
BUWOG - Harzer Straße Develpment GmbH	Berlin	D	94.90
BUWOG - Hausmeister GmbH	Kiel	D	100.00
BUWOG - Heidestraße Development GmbH	Berlin	D	94.90
BUWOG - Herzogtum Lauenburg GmbH	Kiel	D	94.90
BUWOG - High-Deck Residential GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - High-Deck Verwaltungs GmbH	Berlin	D	94.90
BUWOG - Himbergerstraße GmbH	Vienna	A	100.00
BUWOG - Holding Niederlande B. V.	Amsterdam	NL	94.90
BUWOG - Humboldt Palais GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Immobilien Beteiligungs GmbH & Co. KG	Vienna	A	94.00
BUWOG - Immobilien Management GmbH	Kiel	D	100.00
BUWOG - Kassel I GmbH & Co. KG	Berlin	D	94.90
BUWOG - Kassel II GmbH & Co. KG	Berlin	D	94.90
BUWOG - Kassel Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Kiel I GmbH & Co. KG	Berlin	D	94.90
BUWOG - Kiel II GmbH	Kiel	D	94.90
BUWOG - Kiel III GmbH	Kiel	D	94.90
BUWOG - Kiel IV GmbH	Kiel	D	94.90
BUWOG - Kiel Meimersdorf GmbH	Kiel	D	94.90
BUWOG - Kiel V GmbH	Kiel	D	94.90
BUWOG - Lindenstraße Development GmbH	Berlin	D	100.00
BUWOG - Lübeck Hanse I GmbH	Kiel	D	94.90

Company	Company domicile	Country code	Interest %
BUWOG - Lübeck Hanse II GmbH	Kiel	D	94.90
BUWOG - Lübeck Hanse III GmbH	Hamburg	D	94.90
BUWOG - Lübeck Hanse IV GmbH	Kiel	D	94.90
BUWOG - Lückstraße Development GmbH	Berlin	D	94.90
BUWOG - Lüneburg GmbH	Berlin	D	94.90
BUWOG - Management GmbH	Berlin	D	100.00
BUWOG - Mariendorfer Weg Development GmbH	Berlin	D	94.90
BUWOG - NDL I GmbH	Kiel	D	100.00
BUWOG - NDL II GmbH	Kiel	D	100.00
BUWOG - NDL III GmbH	Kiel	D	100.00
BUWOG - NDL IV GmbH	Kiel	D	100.00
BUWOG - NDL IX GmbH	Kiel	D	100.00
BUWOG - NDL V GmbH	Kiel	D	100.00
BUWOG - NDL VI GmbH	Kiel	D	100.00
BUWOG - NDL VII GmbH	Kiel	D	100.00
BUWOG - NDL VIII GmbH	Kiel	D	100.00
BUWOG - NDL X GmbH	Kiel	D	100.00
BUWOG - NDL XI GmbH	Kiel	D	100.00
BUWOG - NDL XII GmbH	Kiel	D	100.00
BUWOG - NDL XIII GmbH	Kiel	D	100.00
BUWOG - Niedersachsen/Bremen GmbH	Hamburg	D	94.90
BUWOG - Norddeutschland GmbH	Vienna	A	100.00
BUWOG - Palais/Scharnhorststraße Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Penzinger Straße 76 GmbH	Vienna	A	100.00
BUWOG - Pfeiffergasse 3–5 GmbH	Vienna	A	100.00
BUWOG - Projektholding GmbH	Vienna	A	100.00
BUWOG - PSD Holding GmbH	Vienna	A	100.00
BUWOG - Rathausstraße GmbH	Vienna	A	100.00
BUWOG - Regattastraße Development GmbH	Berlin	D	100.00
BUWOG - Scharnhorststraße 26–27 Development GmbH	Berlin	D	100.00
BUWOG - Scharnhorststraße 4 Townhouse GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Scharnhorststraße 4 Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Scharnhorststraße 4 Wohnbauten GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Schleswig-Holstein GmbH	Kiel	D	94.90
BUWOG - Schulzestraße Development GmbH	Berlin	D	100.00
BUWOG - Seefeld GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Seefeld Verwaltungs GmbH	Berlin	D	100.00
BUWOG - Spandau 1 GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Spandau 2 GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Spandau 3 GmbH & Co. KG	Berlin	D	100.00 [4)]
BUWOG - Spandau Primus GmbH	Berlin	D	100.00
BUWOG - Süd GmbH	Villach	A	99.98
BUWOG - Syke GmbH	Berlin	D	94.90
BUWOG - Versicherungsmakler GmbH	Vienna	A	100.00
BUWOG - Weidenbaumsweg Development GmbH	Berlin	D	94.90
BUWOG - Westendpark Development GmbH	Berlin	D	100.00
BUWOG Berlin Wohnen II GmbH	Berlin	D	94.90

Company	Company domicile	Country code	Interest %
BUWOG Group GmbH	Vienna	A	100.00
BUWOG Immobilien Treuhand GmbH	Bochum	D	100.00 [3)]
BUWOG Jahnstraße Development GmbH	Berlin	D	94.90
Buwog Lux I S.à.r.l.	Esch-sur-Alzette	L	94.00
BUWOG Parkstraße Development GmbH	Berlin	D	94.90
BUWOG Schnirchgasse 11 Alpha GmbH	Vienna	A	100.00
BUWOG Schnirchgasse 11 Beta GmbH	Vienna	A	100.00
BUWOG Seeparkquartier GmbH	Vienna	A	100.00
BUWOG Seeparkquartier Holding GmbH	Vienna	A	100.00
BWG Frankfurt am Main Bundesbahn-Wohnungsgesellschaft mbH	Frankfurt/Main	D	94.90
CENTUM Immobilien GmbH	Vienna	A	100.00
Con Tessa Immobilienverwertung GmbH	Vienna	A	100.00
Con value one Immobilien GmbH	Vienna	A	100.00
Con Wert Handelsges. m. b. H.	Vienna	A	100.00
conwert & kelber Besitz 10/2007 GmbH	Berlin	D	94.80
conwert & kelber Besitz 11/2007 GmbH	Zossen	D	94.80
conwert & kelber Bestand 10/2007 GmbH	Berlin	D	94.80
conwert Alfhild II Invest GmbH	Berlin	D	94.90
conwert Alfhild Invest GmbH	Berlin	D	94.90
conwert alpha Invest GmbH	Zossen	D	94.90
conwert Aries Invest GmbH	Zossen	D	100.00
conwert Berlin 2 Immobilien Invest GmbH	Zossen	D	94.90
conwert beta Invest GmbH	Berlin	D	94.90
conwert Capricornus Invest GmbH	Zossen	D	100.00
conwert Carina Invest GmbH	Berlin	D	100.00
conwert Cassiopeia Invest GmbH	Berlin	D	94.90
conwert Centaurus Invest GmbH	Zossen	D	94.90
conwert Corvus Invest GmbH	Berlin	D	94.00
conwert delta Invest GmbH	Berlin	D	100.00
conwert Deutschland Beteiligungsholding GmbH	Berlin	D	100.00
conwert Deutschland GmbH	Berlin	D	100.00
conwert Deutschland Holding GmbH	Berlin	D	94.90
conwert Dienstleistung Holding GmbH	Vienna	A	100.00
conwert Dresden Drei Invest GmbH	Berlin	D	100.00
conwert Dresden Fünf Invest GmbH	Berlin	D	100.00
conwert Dresden Invest GmbH	Berlin	D	100.00
conwert Dresden Vier Invest GmbH	Berlin	D	100.00
conwert Dresden Zwei Invest GmbH	Berlin	D	100.00
conwert Eisa Invest GmbH	Zossen	D	94.90
conwert Elbflorenz Invest GmbH	Berlin	D	100.00
conwert Epitaurus Invest GmbH	Zossen	D	94.00
conwert epsilon Invest GmbH	Berlin	D	94.90
conwert Fenja Invest GmbH	Berlin	D	94.90
conwert gamma Invest GmbH	Berlin	D	94.90
conwert Gemini Invest GmbH	Zossen	D	100.00
conwert Grazer Damm Development GmbH	Zossen	D	94.90
conwert Grundbesitz Leipzig Besitz GmbH	Berlin	D	94.90

Company	Company domicile	Country code	Interest %
conwert Grundbesitz Leipzig Bestand GmbH	Zossen	D	94.90
conwert Immobilien Development GmbH	Berlin	D	94.90
conwert Immobilien Invest GmbH	Vienna	A	100.00
conwert Invest GmbH	Vienna	A	100.00
conwert lambda Invest GmbH	Berlin	D	100.00
conwert Leo Invest GmbH	Berlin	D	100.00
conwert Lepus Invest GmbH	Berlin	D	100.00
conwert Libra Invest GmbH	Berlin	D	100.00
conwert Management GmbH	Vienna	A	100.00
conwert Neubaubesitz GmbH	Vienna	A	100.00
conwert omega Invest GmbH	Zossen	D	94.90
conwert Pegasus Invest GmbH	Berlin	D	94.90
conwert Phoenix Invest GmbH	Berlin	D	100.00
conwert Sachsen Invest GmbH	Zossen	D	100.00
„CONWERT SECURITISATION" Holding GmbH	Vienna	A	100.00
conwert sigma Invest GmbH	Berlin	D	100.00
conwert Taurus Invest GmbH	Berlin	D	100.00
conwert Tizian 1 Invest GmbH	Berlin	D	94.90
conwert Tizian 2 Invest GmbH	Berlin	D	94.90
conwert Treasury OG	Vienna	A	100.00
conwert Viktoria Quartier Invest GmbH	Zossen	D	100.00
conwert Wali Invest GmbH	Berlin	D	94.90
conwert Wara Invest GmbH	Berlin	D	100.00
conwert Wohn-Fonds GmbH	Zossen	D	100.00
conwert Wölva Invest GmbH	Berlin	D	100.00
CWG Beteiligungs GmbH	Vienna	A	100.00
DA DMB Netherlands B. V.	Eindhoven	NL	100.00
DA EB GmbH	Nuremberg	D	100.00
DA Jupiter NL JV Holdings 1 B. V.	Amsterdam	NL	100.00
DA Jupiter Wohnanlage GmbH	Düsseldorf	D	94.00 [3)]
DAIG 1. Objektgesellschaft mbH	Düsseldorf	D	100.00 [3)]
DAIG 10. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 11. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 12. Objektgesellschaft mbH	Düsseldorf	D	94.00
DAIG 13. Objektgesellschaft mbH	Düsseldorf	D	94.00
DAIG 14. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 15. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 16. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 17. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 18. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 19. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 2. Objektgesellschaft mbH	Düsseldorf	D	100.00 [3)]
DAIG 20. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 21. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 22. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 23. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 24. Objektgesellschaft B. V.	Amsterdam	NL	94.00

Company	Company domicile	Country code	Interest %
DAIG 25. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DAIG 3. Objektgesellschaft mbH	Düsseldorf	D	100.00 [3)]
DAIG 4. Objektgesellschaft mbH	Düsseldorf	D	100.00 [3)]
DAIG 9. Objektgesellschaft B. V.	Amsterdam	NL	94.00
DATAREAL Beteiligungsgesellschaft m.b.H. & Co. Gablenzgasse 60 KG	Vienna	A	100.00
DATAREAL Beteiligungsgesellschaft m.b.H. & Co. Heiligenstädter Straße 9 OG	Vienna	A	100.00
Defida Verwaltungs GmbH	Berlin	D	100.00
Deutsche Annington Acquisition Holding GmbH	Düsseldorf	D	100.00 [3)]
Deutsche Annington Beteiligungsverwaltungs GmbH	Düsseldorf	D	100.00
Deutsche Annington DEWG GmbH & Co.KG	Bochum	D	100.00 [4)]
Deutsche Annington DEWG Verwaltungs GmbH	Düsseldorf	D	100.00
Deutsche Annington DMB Eins GmbH	Bochum	D	100.00
Deutsche Annington Fundus Immobiliengesellschaft mbH	Cologne	D	100.00
Deutsche Annington Fünfte Beteiligungsgesellschaft mbH	Düsseldorf	D	100.00
Deutsche Annington Haus GmbH	Kiel	D	100.00
Deutsche Annington Heimbau GmbH	Kiel	D	100.00
Deutsche Annington Holdings Drei GmbH	Bochum	D	100.00
Deutsche Annington Holdings Eins GmbH	Düsseldorf	D	100.00
Deutsche Annington Holdings Fünf GmbH	Düsseldorf	D	100.00 [3)]
Deutsche Annington Holdings Sechs GmbH	Bochum	D	100.00 [3)]
Deutsche Annington Holdings Vier GmbH	Düsseldorf	D	100.00 [3)]
Deutsche Annington Holdings Vier GmbH & Co. KG	Bochum	D	100.00 [4)]
Deutsche Annington Holdings Zwei GmbH	Düsseldorf	D	100.00
Deutsche Annington Immobilien-Dienstleistungen GmbH	Düsseldorf	D	100.00
Deutsche Annington Interim DAMIRA GmbH	Düsseldorf	D	100.00
Deutsche Annington Kundenservice GmbH	Bochum	D	100.00 [3)]
Deutsche Annington McKinley Eins GmbH & Co. KG	Bochum	D	100.00 [4)]
Deutsche Annington McKinley Eins Verwaltungs GmbH	Düsseldorf	D	100.00
Deutsche Annington McKinley-Holding GmbH & Co. KG	Bochum	D	100.00 [4)]
Deutsche Annington Rhein - Ruhr GmbH & Co.KG	Bochum	D	100.00 [4)]
Deutsche Annington Rheinland Immobiliengesellschaft mbH	Cologne	D	100.00
Deutsche Annington Sechste Beteiligungs GmbH	Düsseldorf	D	100.00
Deutsche Annington WOGE Sechs Verwaltungs GmbH	Bochum	D	100.00 [3)]
Deutsche Annington WOGE Sieben Verwaltungs GmbH	Düsseldorf	D	100.00
Deutsche Annington WOGE Vier Bestands GmbH & Co. KG	Bochum	D	100.00 [4)]
Deutsche Annington WOGE Vier GmbH & Co. KG	Bochum	D	100.00 [4)]
Deutsche Annington Wohnungsgesellschaft I mbH	Essen	D	100.00
Deutsche Annington Zweite Beteiligungsgesellschaft mbH	Düsseldorf	D	100.00
Deutsche Eisenbahn-Wohnungs-Gesellschaft mbH	Leipzig	D	100.00
Deutsche Multimedia Service GmbH	Düsseldorf	D	100.00 [3)]
Deutsche TGS GmbH	Düsseldorf	D	51.00 [3)]
Deutsche Wohn-Inkasso GmbH	Bochum	D	100.00 [3)]
Diak-Nd Pflege-Altenheime Besitz GmbH	Berlin	D	100.00
Dinami GmbH	Berlin	D	100.00
EB Immobilien Invest GmbH	Vienna	A	100.00
EBI Beteiligungen GmbH	Vienna	A	100.00
EBI Beteiligungen GmbH & Co, 1190 Wien, Rampengasse 3–5, KG	Vienna	A	100.00

Company	Company domicile	Country code	Interest %
ECO Anteilsverwaltungs GmbH	Vienna	A	100.00
ECO Business-Immobilien Deutschland GmbH	Berlin	D	100.00
ECO Business-Immobilien GmbH	Vienna	A	100.00
ECO Business-Immobilien-Beteiligungen GmbH	Vienna	A	100.00
ECO CEE & Real Estate Besitz GmbH	Vienna	A	100.00
ECO Eastern Europe Real Estate GmbH	Vienna	A	100.00
ECO Fachmarktzentrum Tittling GmbH	Berlin	D	100.00
ECO Immobilien Verwertungs GmbH	Vienna	A	100.00
ECO Real Estate Deutschland GmbH	Berlin	D	100.00
Eisenbahn-Siedlungsgesellschaft Augsburg mbH (Siegau)	Augsburg	D	94.90
Eisenbahn-Siedlungsgesellschaft Stuttgart gGmbH	Stuttgart	D	94.87
Eisenbahn-Wohnungsbau-Gesellschaft Karlsruhe GmbH	Karlsruhe	D	94.90
Eisenbahn-Wohnungsbaugesellschaft Köln mbH	Cologne	D	94.90
Eisenbahn-Wohnungsbaugesellschaft Nürnberg GmbH	Nuremberg	D	94.90
"Epssilon" Altbau GmbH	Vienna	A	100.00
"Epssilon" Meidlinger Hauptstr. 27 Liegenschaftsverwaltungs GmbH	Vienna	A	100.00
Fastighets AB A-ten 6	Kristianstad	S	100.00
Fastighets AB A-ten 7	Kristianstad	S	100.00
Fastighets AB Brottaren 1	Kristianstad	S	100.00
Fastighets AB D-ken	Kristianstad	S	100.00
Fastighets AB G-en 4	Kristianstad	S	100.00
Fastighets AB H-ven 1	Kristianstad	S	100.00
Fastighets AB H-ven 2	Kristianstad	S	100.00
Fastighets AB K-backen 1	Kristianstad	S	100.00
Fastighets AB K-danden 7	Kristianstad	S	100.00
Fastighets AB K-ten 8	Kristianstad	S	100.00
Fastighets AB Löparen 2	Kristianstad	S	100.00
Fastighets AB M-tören 1	Kristianstad	S	100.00
Fastighets AB Mull 3 & 4	Kristianstad	S	100.00
Fastighets AB Näkt	Kristianstad	S	100.00
Fastighets AB Ostbrickan	Linköping	S	100.00
Fastighets AB Rasmus C3	Kristianstad	S	100.00
Fastighets AB S-ken 5	Kristianstad	S	100.00
Fastighetsbolaget VP AB	Malmö	S	100.00
Franconia Invest 1 GmbH	Düsseldorf	D	94.90
Franconia Wohnen GmbH	Düsseldorf	D	94.90
Frankfurter Siedlungsgesellschaft mbH	Düsseldorf	D	100.00 [3]
FSG-Holding GmbH	Düsseldorf	D	94.80
"G1" Immobilienbesitz GmbH	Vienna	A	100.00
GAG Grundstücksverwaltungs GmbH	Berlin	D	94.90
GAGFAH Acquisition 1 GmbH	Bochum	D	94.80
GAGFAH Acquisition 2 GmbH	Bochum	D	94.80 [3]
GAGFAH Asset Management GmbH	Bochum	D	100.00 [3]
GAGFAH Dritte Grundbesitz GmbH	Bochum	D	94.80 [3]
GAGFAH Erste Grundbesitz GmbH	Bochum	D	94.80 [3]
GAGFAH GmbH	Bochum	D	94.80
GAGFAH Griffin GmbH	Bochum	D	94.90 [3]

Company	Company domicile	Country code	Interest %
GAGFAH Griffin Holding GmbH	Bochum	D	100.00 [3)]
GAGFAH Hausservice GmbH	Essen	D	94.90 [3)]
GAGFAH Holding GmbH	Bochum	D	100.00 [3)]
GAGFAH M Immobilien-Management GmbH	Bochum	D	94.90
GAGFAH Zweite Grundbesitz GmbH	Bochum	D	94.80 [3)]
GBH Acquisition GmbH	Bochum	D	94.80
GBH Service GmbH	Heidenheim an der Brenz	D	100.00
Gena Sechs Immobilienholding GmbH	Vienna	A	100.00
Gena Zwei Immobilienholding GmbH	Vienna	A	100.00
Gewerbepark Urstein Besitz GmbH	Vienna	A	100.00
Gewerbepark Urstein Besitz GmbH & Co KG	Vienna	A	100.00
GGJ Beteiligungs GmbH	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Drei OG	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Eins OG	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Fünf OG	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Sieben OG	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Zehn OG	Vienna	A	100.00
GGJ Beteiligungs GmbH & Co Projekt Zwei OG	Vienna	A	100.00
GJ-Beteiligungs GmbH	Vienna	A	100.00
GJ-Beteiligungs GmbH & Co Projekt Fünf OG	Vienna	A	100.00
„GK“ Immobilienbesitz GmbH	Vienna	A	100.00
„GKHK“ Handelsgesellschaft m.b.H.	Vienna	A	100.00
Grundwert Living GmbH	Berlin	D	100.00
G-Unternehmensbeteiligung GmbH	Vienna	A	100.00
Handelskai 346 GmbH	Vienna	A	100.00
Haus- und Boden-Fonds 38	Essen	D	54.15
Heller Fabrik Liegenschaftsverwertungs GmbH	Vienna	A	100.00
Hertha-Firnberg-Straße 10, 1100 Wien, Immobilienbesitz GmbH	Vienna	A	100.00
HomeStar InvestCo AB	Stockholm	S	100.00
HPE Hausbau Beteiligungs GmbH	Zossen	D	100.00
HPE Hausbau GmbH	Zossen	D	94.90
HPE Sechste Hausbau Portfolio GmbH	Zossen	D	100.00
HPE Siebte Hausbau Portfolio GmbH	Berlin	D	100.00
HPE Zweite Hausbau Beteiligungsgesellschaft mbH	Berlin	D	100.00
HvD I Grundbesitzgesellschaft mbH	Berlin	D	100.00
IESA Immobilien Entwicklung Sachsen GmbH	Berlin	D	100.00
Immo Service Dresden GmbH	Dresden	D	100.00
Immobilienfonds Koblenz-Karthause Wolfgang Hober KG	Düsseldorf	D	92.71
IMMO-ROHR PLUSZ Kft.	Budapest	H	100.00
Indian Ridge Investments S.A.	Luxemburg	L	94.84
JANANA Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.90
KADURA Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.91
Kapital & Wert Immobilienbesitz GmbH	Vienna	A	100.00
Kieler Stadtentwicklungs- und Sanierungsgesellschaft mbH	Kiel	D	94.95
Kieler Wohnungsbaugesellschaft mit beschränkter Haftung	Kiel	D	94.90 [3)]
KKS Projektentwicklung GmbH	Berlin	D	94.80
KWG Grundbesitz CI GmbH & Co. KG	Berlin	D	99.90

Company	Company domicile	Country code	Interest %
KWG Grundbesitz CIII GmbH & Co. KG	Berlin	D	95.41
KWG Grundbesitz I Verwaltungs GmbH	Berlin	D	100.00
KWG Grundbesitz III GmbH	Berlin	D	100.00
KWG Grundbesitz VI GmbH	Berlin	D	100.00
KWG Grundbesitz VII GmbH	Berlin	D	100.00
KWG Grundbesitz VIII GmbH	Berlin	D	100.00
KWG Grundbesitz X GmbH	Berlin	D	100.00
KWG Immobilien GmbH	Berlin	D	100.00
KWG Kommunale Wohnen GmbH	Berlin	D	93.14
LEMONDAS Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.90
LEVON Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.90
Liegenschaften Weißig GmbH	Dresden	D	94.75
Lithinos Immobilien Invest GmbH	Vienna	A	100.00
Lövgärdet Business KB	Göteborg	S	100.00
Lövgärdet Residential HB	Göteborg	S	100.00
LW 280 Bauträger GmbH	Vienna	A	100.00
MAKANA Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.90
MANGANA Grundstücksgesellschaft mbH & Co.KG	Grünwald	D	94.90
Mariahilferstraße 156 Invest GmbH	Vienna	A	100.00
MARINA TOWER Holding GmbH	Vienna	A	51.00
MARINADECK Betriebs GmbH	Vienna	A	100.00
MELCART Grundstücks-Verwaltungsgesellschaft mbH	Grünwald	D	94.80
„MEZ" - Vermögensverwaltungs Gesellschaft m.b.H.	Vienna	A	100.00
MIRA Grundstücksgesellschaft mbH	Düsseldorf	D	94.90
MIRIS Grundstücksgesellschaft mbH & Co. KG	Grünwald	D	94.90
My-Box Debrecen Inglatian-Fejlesztö Kft Cg.	Budapest	H	100.00
Neptun Beteiligungsgesellschaft 1 GmbH i.L.	Berlin	D	100.00
Neptun Beteiligungsgesellschaft 2 GmbH i.L.	Berlin	D	100.00
Neptun Beteiligungsgesellschaft 3 GmbH i. L.	Berlin	D	100.00
Neptun Beteiligungsgesellschaft 4 GmbH i.L.	Berlin	D	100.00
Neues Schweizer Viertel Betriebs + Service GmbH & Co. KG	Berlin	D	94.99
NILEG Immobilien Holding GmbH	Hanover	D	100.00
NILEG Norddeutsche Immobiliengesellschaft mbH	Hanover	D	94.86
Osnabrücker Wohnungsbaugesellschaft mit beschränkter Haftung	Osnabrück	D	94.09
Parthica Immobilien GmbH	Vienna	A	100.00
PI Immobilien GmbH	Vienna	A	100.00
Prima Wohnbauten Privatisierungs-Management GmbH	Berlin	D	100.00 [3)]
Projektgesellschaft Kreiller Str.215 mbH	Berlin	D	100.00
RESAG Property Management GmbH	Vienna	A	100.00
REVIVA Immobilien GmbH	Vienna	A	100.00
RG Immobilien GmbH	Vienna	A	100.00
Roßauer Lände 47-49 Liegenschaftsverwaltungs GmbH	Vienna	A	100.00
RSTE Objektgesellschaft Wohnanlagen für Chemnitz mbH	Wuppertal	D	94.73
RVG Rheinauhafen Verwaltungsgesellschaft mbH	Cologne	D	74.00
Schweizer Viertel Grundstücks GmbH	Berlin	D	94.74
„SHG" 6 Besitz GmbH	Vienna	A	100.00
„Siege" Siedlungsgesellschaft für das Verkehrspersonal mbH Mainz	Mainz	D	94.90

Company	Company domicile	Country code	Interest %
Stubenbastei 10 und 12 Immobilien GmbH	Vienna	A	100.00
Süddeutsche Wohnen Gebäude GmbH	Stuttgart	D	100.00 [3)]
Süddeutsche Wohnen GmbH	Stuttgart	D	94.33 [3)]
Süddeutsche Wohnen Grundstücksgesellschaft mbH	Stuttgart	D	100.00 [3)]
Süddeutsche Wohnen Management Holding GmbH	Stuttgart	D	100.00 [3)]
SÜDOST WOBA DRESDEN GMBH	Dresden	D	94.90
SWG Siedlungs- und Wohnhausgesellschaft Sachsen GmbH	Berlin	D	100.00
Tempelhofer Feld GmbH für Grundstücksverwertung	Berlin	D	94.90
Themelios Immobilien Invest GmbH	Vienna	A	100.00
TP Besitz GmbH	Vienna	A	100.00
TPI Immobilien Holding GmbH	Vienna	A	100.00
TPI Tourism Properties Invest GmbH	Vienna	A	96.00
„TPW" Immobilien GmbH	Vienna	A	100.00
T-Unternehmensbeteiligung GmbH	Vienna	A	100.00
UC ACQ. IRELAND DESIGNATED ACTIVITY COMPANY i.L.	Clonee	IRL	100.00
Verein „Social City"	Vienna	A	100.00
Victoria Park AB	Malmö	S	91.40
Victoria Park Almen 17 AB	Malmö	S	100.00
Victoria Park Beethoven I AB	Malmö	S	100.00
Victoria Park Beethoven II AB	Malmö	S	100.00
Victoria Park Beethoven III AB	Malmö	S	100.00
Victoria Park Bergsjön AB	Göteborg	S	100.00
Victoria Park Boliger AB	Karlskrona	S	100.00
Victoria Park Borås AB	Borås	S	100.00
Victoria Park Bostäder Tensta AB	Stockholm	S	100.00
Victoria Park Bygg & Projekt	Malmö	S	100.00
Victoria Park Cedern 18 AB	Malmö	S	100.00
Victoria Park Eskil Ctr AB	Eskilstuna	S	100.00
Victoria Park Fastigheter AB	Malmö	S	100.00
Victoria Park Fastigheter Södra AB	Kristianstad	S	100.00
Victoria Park Fröslunda AB	Eskilstuna	S	100.00
Victoria Park Haren 10 AB	Malmö	S	100.00
Victoria Park Herrgården AB	Malmö	S	100.00
Victoria Park Holding AB	Nyköping	S	100.00
Victoria Park Holding Växjö S AB	Växjö	S	100.00
Victoria Park Karlskrona, Malmö AB	Karlskrona/Malmö	S	100.00
Victoria Park Living AB	Karlskrona	S	100.00
Victoria Park Lövgärdet AB	Göteborg	S	100.00
Victoria Park Lustgården AB	Kristianstad	S	100.00
Victoria Park Malmen 14 AB	Malmö	S	100.00
Victoria Park MalmöCentrum AB	Malmö	S	100.00
Victoria Park Markaryd AB	Markaryd	S	100.00
Victoria Park Mozart AB	Malmö	S	100.00
Victoria Park Mozart Fastighets AB	Malmö	S	100.00
Victoria Park Myran 30 AB	Malmö	S	100.00
Victoria Park Myrtorp AB	Eskilstuna	S	100.00
Victoria Park Nedogap AB	Eskilstuna	S	100.00

Company	Company domicile	Country code	Interest %
Victoria Park Nygård AB	Malmö	S	100.00
Victoria Park Nyköping AB	Nyköping	S	100.00
Victoria Park Örebro AB	Örebro	S	100.00
Victoria Park Råbergstorp AB	Eskilstuna	S	100.00
Victoria Park Rosengård AB	Malmö	S	100.00
Victoria Park Skiftinge AB	Eskilstuna	S	100.00
Victoria Park Söderby 23 AB	Malmö	S	100.00
Victoria Park Söderby 394 AB	Malmö	S	100.00
Victoria Park Stenby AB	Eskilstuna	S	100.00
Victoria Park Tallriset AB	Malmö	S	100.00
Victoria Park V21 AB	Stockholm	S	100.00
Victoria Park Valfisken Större 28 AB	Malmö	S	100.00
Victoria Park Växjö Magistern AB	Växjö	S	100.00
Victoria Park Växjö S AB	Växjö	S	100.00
Victoria Park Vivaldi I AB	Malmö	S	100.00
Victoria Park Vivaldi II AB	Malmö	S	100.00
Victoria Park Vivaldi III AB	Malmö	S	100.00
Victoria Park Vivaldi IV AB	Malmö	S	100.00
Victoria Park Vivaldi V AB	Malmö	S	100.00
Victoria Park Vivaldi VI AB	Malmö	S	100.00
Viterra Holdings Eins GmbH	Düsseldorf	D	100.00 3)
Viterra Holdings Zwei GmbH	Düsseldorf	D	100.00
Vonovia Eigentumsservice GmbH	Bochum	D	100.00 3)
Vonovia Eigentumsverwaltungs GmbH	Bochum	D	100.00 3)
Vonovia Elbe Berlin II GmbH	Nuremberg	D	94.90
Vonovia Elbe Berlin III GmbH	Nuremberg	D	94.90
Vonovia Elbe Berlin IV GmbH	Nuremberg	D	94.90
Vonovia Elbe Berlin VI GmbH	Nuremberg	D	94.90
Vonovia Elbe Dresden I GmbH	Nuremberg	D	94.90
Vonovia Elbe GmbH	Nuremberg	D	94.90
Vonovia Elbe Ost GmbH	Nuremberg	D	94.90
Vonovia Elbe Wannsee I GmbH	Nuremberg	D	94.90
Vonovia Elbe Wohnen GmbH	Bochum	D	100.00
Vonovia Energie Service GmbH	Bochum	D	100.00 3)
Vonovia Engineering GmbH	Bochum	D	100.00 3)
Vonovia Finance B. V.	Amsterdam	NL	100.00
Vonovia France SAS	Paris	F	100.00
Vonovia Immobilien Treuhand GmbH	Bochum	D	100.00 3)
Vonovia Immobilienmanagement GmbH	Bochum	D	100.00 3)
Vonovia Immobilienmanagement one GmbH	Frankfurt/Main	D	94.90 3)
Vonovia Immobilienmanagement two GmbH	Frankfurt/Main	D	94.90 3)
Vonovia Immobilienservice GmbH	Munich	D	100.00 3)
Vonovia Kundenservice GmbH	Bochum	D	100.00 3)
Vonovia Managementverwaltung GmbH	Nuremberg	D	100.00 3)
Vonovia Mess Service GmbH	Essen	D	100.00 3)
Vonovia Modernisierungs GmbH	Düsseldorf	D	100.00 3)
Vonovia Operations GmbH	Bochum	D	100.00 3)

Company	Company domicile	Country code	Interest %
Vonovia Pro Bestand Nord GmbH	Bochum	D	100.00
Vonovia Pro Bestand Nord Invest GmbH	Bochum	D	94.90
Vonovia Pro Bestand Nord Properties GmbH	Bochum	D	94.90
Vonovia Pro Bestand Nord Real Estate GmbH	Bochum	D	94.90
Vonovia Technischer Service Nord GmbH	Essen	D	100.00 [3]
Vonovia Technischer Service Süd GmbH	Dresden	D	100.00
Vonovia Wohnumfeld Service GmbH	Düsseldorf	D	100.00 [3]
VP Holding Karlskrona AB	Karlskrona	S	100.00
VP Holding Växjö Magistern AB	Växjö	S	100.00
WOBA DRESDEN GMBH	Dresden	D	100.00
WOBA HOLDING GMBH	Dresden	D	100.00
WOHNBAU NORDWEST GmbH	Dresden	D	94.90
Wohnungsbau Niedersachsen GmbH (WBN)	Hanover	D	94.85
Wohnungsgesellschaft Norden mit beschränkter Haftung	Hanover	D	94.88
Wohnungsgesellschaft Ruhr-Niederrhein mbH Essen	Essen	D	94.90
WZH WEG Besitz GmbH	Vienna	A	100.00
12. CR Immobilien-Vermietungsgesellschaft mbH & Co. SÜDOST WOBA Striesen KG	Leipzig	D	0.02 [1]
Companies with which joint activity is excercised			
Planungsgemeinschaft „Das-Neue-Gartenfeld" GmbH & Co. KG	Berlin	D	27.48
Planungsgemeinschaft „Das-Neue-Gartenfeld" Verwaltungs GmbH	Berlin	D	27.48
At equity consolidated joint ventures			
Goudsmitplein Beheer B. V. i. L.	Baarn	NL	20.00
MARINA CITY Entwicklungs GmbH	Vienna	A	50.00
Möser GbR	Essen	D	50.00
Schaeffler-Areal 1. Liegenschaften GmbH	Bad Heilbrunn	D	30.00
Schaeffler-Areal 2. Liegenschaften GmbH	Bad Heilbrunn	D	30.00
Wolmirstedt GbR	Essen	D	50.00
At equity consolidated associated companies			
Malmö Mozart Fastighets AB	Malmö	S	42.00
Rosengard Fastighets AB	Malmö	S	25.00

Company	Company domicile	Country code	Interest %	Equity € k Dec. 31, 2017	Net income for the year € k Dec. 31, 2017
Other investments with a share above 10%					
Hellerhof GmbH	Frankfurt/Main	D	13.17	82,814	8,145
VBW Bauen und Wohnen GmbH	Bochum	D	19.87	101,783	7,549

[1] Control on the basis of contractual and factual circumstances in accordance with IFRS 10.
[2] Company was merged on April 30, 2018, total equity and net income/loss are conform to date of merger.
[3] Exemption according to Section 264 (3) HGB.
[4] The unlimited liable shareholder of this company is a company which is integrated in the financial consolidated statement.

Further Information About the Bodies

Management Board

The Management Board of Vonovia SE consisted of four members as of December 31, 2018.

Rolf Buch, Chairman of the Management Board

Function: Chief Executive Officer
Responsible for transactions, general counsel, investor relations, HR management, auditing, corporate communications, Management and Supervisory Board offices, sustainability and land management.

Appointments:
> GSB Gesellschaft zur Sicherung von Bergmannswohnungen mbH (Member of the Supervisory Board)
> Kötter Group (Member of the Council of Shareholders)

Klaus Freiberg, Member of the Management Board

Function: Chief Operating Officer
Responsible for product management, IT, customer service, residential environment, technical service, engineering and the local rental business in the various regions (North, South, Southeast, East, Central, West).

Appointments:
> VBW Bauen und Wohnen GmbH (Deputy Chairman of the Supervisory Board)

Helene von Roeder, Member of the Management Board (since May 9, 2018)

Function: Chief Financial Officer
Responsible for controlling, finance, property evaluation, accounting, tax, insurance, central purchasing and Immobilien Treuhand.

Appointments:
> AVW Versicherungsmakler GmbH (Member of the Supervisory Board)

Daniel Riedl, Member of the Management Board (since May 9, 2018)

Function: Chief Development Officer
Responsible for development in Austria, development in Germany and operating business in Austria.

Dr. A. Stefan Kirsten, Member of the Management Board (until May 9, 2018)

Function: Chief Financial Officer
Responsibilities: finance, investor relations, accounting, tax affairs and insurance.

Appointments:
> AVW Versicherungsmakler GmbH (Member of the Supervisory Board)
> Jerónimo Martins SGPS, S.A. (Non-executive Director)
> MOVENDO CAPITAL B. V. (Non-executive Director)
> SOCIEDADE Francisco Manuel dos Santos B. V. (Non-executive Director)

Gerald Klinck, Member of the Management Board (until May 9, 2018)

Function: Chief Controlling Officer
Responsibilities: controlling, portfolio controlling, valuation, purchasing and condominium administration.

Supervisory Board

The Supervisory Board currently consists of twelve members, all of whom were elected for a statutory term of office by the Annual General Meeting held on May 9, 2018. The inaugural meeting of the new Supervisory Board was held following the Annual General Meeting of May 9, 2018.

Jürgen Fitschen, Chairman (since May 9, 2018)

Senior Advisor at Deutsche Bank AG

Appointments:
> CECONOMY AG (Chairman of the Supervisory Board)
>Kühne & Nagel International AG (Member of the Administrative Board)
> CURA Vermögensverwaltung GmbH & Co. KG (Member of the Administrative Board)
> Syntellix AG (Member of the Supervisory Board)

Prof. Dr. Edgar Ernst, Deputy Chairman (since May 9, 2018) Chairman (until May 9, 2018)

President of the German Financial Reporting Enforcement Panel

Appointments:
> METRO AG (Member of the Supervisory Board)
> TUI AG (Member of the Supervisory Board)

Burkhard Ulrich Drescher

Managing Director of InnovationCity Management GmbH

Appointment:
> STEAG Fernwärme GmbH (Member of the Advisory Board)

Vitus Eckert (since May 9, 2018)

Lawyer – Eckert Fries Prokopp Rechtsanwälte GmbH

Appointments:
> STANDARD Medien AG (Chairman of the Supervisory Board)
> Adolf Darbo Aktiengesellschaft (Chairman of the Supervisory Board)
> S. Spitz GmbH (Deputy Chairman of the Supervisory Board)
> Vitalis Food Vertriebs-GmbH (Chairman of the Supervisory Board, group company of S. Spitz GmbH)
> Simacek Holding GmbH (Chairman of the Supervisory Board)
> Simacek Facility Management Group GmbH (Chairman of the Supervisory Board, group company of Simacek Holding GmbH)

Dr. Florian Funck

Member of the Management Board of Franz Haniel & Cie. GmbH

Appointments:
> CECONOMY AG (Member of the Supervisory Board)
> METRO AG (Member of the Supervisory Board)
> TAKKT AG (Member of the Supervisory Board, group company of Franz Haniel & Cie. GmbH)

Dr. Ute Geipel-Faber

Self-employed management consultant

Appointment:
> Bayerische Landesbank (Member of the Supervisory Board)

Daniel Just

Chairman of Bayerische Versorgungskammer

Appointments:
> RREEF Investment GmbH (Deputy Chairman of the Supervisory Board)
> Universal Investment GmbH (Member of the Supervisory Board)
> GLL Real Estate Partners GmbH (Member of the Supervisory Board)

Hildegard Müller

Member of the Management Board of innogy SE

Appointments:
> Dortmunder Energie- und Wasserversorgung GmbH (Member of the Supervisory Board)*
> envia Mitteldeutsche Energie AG (Member of the Supervisory Board)*
> NEW AG (First Deputy Chair of the Supervisory Board)*
> rhenag Rheinische Energie AG (Deputy Chair of the Supervisory Board)*
> Süwag Energie AG (Member of the Supervisory Board)*
> Stadtwerke Essen AG (Second Deputy Chair of the Supervisory Board)*
> EWG – Essener Wirtschaftsförderungsgesellschaft mbH (Deputy Chair of the Supervisory Board)

(* Group company of innogy SE)

Prof. Dr. Klaus Rauscher, Deputy Chairman (until May 9, 2018)

Self-employed management consultant

Dr. Ariane Reinhart

Member of the Management Board of Continental AG

Clara-Christina Streit

Self-employed management consultant

Appointments:
> NN Group N.V. (Member of the Supervisory Board)
> Jerónimo Martins SGPS S.A. (Member of the Administrative Board)
> Vontobel Holding AG (Member of the Administrative Board)

Christian Ulbrich

Global CEO & President Jones Lang LaSalle Incorporated

Members Who Left the Supervisory Board

Hendrik Jellema (until May 9, 2018)

Chairman of Stiftung Berliner Leben

Appointment:
> Wohnraumversorgung Berlin – AöR (Member of the Specialist Advisory Board)

Independent Auditor's Report

To Vonovia SE, Bochum

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of Vonovia SE, Bochum, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as of December 31, 2018, and the consolidated income statement, consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report of Vonovia SE for the financial year from January 1 to December 31, 2018. In accordance with the German legal requirements we have not audited the content of the non-financial statement which is included in a separate section of the combined management report.

In our opinion, on the basis of the knowledge obtained in the audit,

> the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2018, and of its financial performance for the financial year from January 1 to December 31, 2018, and

> the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the combined management report does not cover the content of the non-financial statement mentioned above.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). We performed the audit of the consolidated financial statements in supplementary compliance with the International Standards on Auditing (ISAs). Our responsibilities under those requirements, principles and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Measurement of investment properties

Please refer to notes 6, 10 and 23 to the consolidated financial statements as well as the chapter on opportunities and risks in the combined management report.

The Financial Statement Risk

Investment properties in the amount of € 43.5 billion are reported in the consolidated financial statements of Vonovia as of December 31, 2018. Of this amount, € 39.0 billion is attributable to properties located in Germany. Vonovia measures investment properties at fair value in accordance with IAS 40 in conjunction with IFRS 13. In the year under review, increases in fair value of € 3.5 billion were recognized in the consolidated income statement.

Vonovia determines the fair values by using an internal valuation model. This does not apply for the property portfolios of BUWOG AG (since January 25, 2019 BUWOG Group GmbH, hereinafter referred to as 'BUWOG'), Vienna, Austria and Victoria Park AB (publ) (hereinafter referred to as 'Victoria Park'), Malmö, Sweden, acquired in fiscal year 2018 as well as properties of the conwert Group not located in Germany. The company-internal fair value calculations are determined by means of a discounted cash flow (DCF) method based on homogeneous valuation units of commercially related and comparable land and buildings. In addition, an independent valuer provides an appraisal, which is used to verify the internal measurements. For the property portfolios of BUWOG and Victoria Park as well as the non-German properties of conwert group the fair value is determined by independent valuers.

Numerous assumptions and parameters relevant to measurement are used for the measurement of investment properties, which is complex and subject to considerable estimation uncertainties and judgments. Even minor changes in the assumptions and parameters relevant to measurement may have a material effect on the resulting fair value. The most significant assumptions and parameters are market rents, including the expected trend in rental rates, and discount/capitalization rates. When determining the trend of discount/capitalization rates, Vonovia also takes into account the difference in dynamic of movements in real estate prices compared to rental rates (yield compression).

Due to existing estimation uncertainties and judgments, there is the risk for the consolidated financial statements that the fair values of properties are not within a reasonable range.

Moreover, there is the risk for the consolidated financial statements that the disclosures on investment properties in the notes required pursuant to IAS 40 and IFRS 13 are incomplete and inadequate.

Our Audit Approach

Through involvement of our own property valuation experts, we assessed the accuracy and completeness of the property portfolio data used in the intra-company valuation model by applying a control-based audit approach. In addition, we particularly assessed the internal measurement method with a view to compliance with IAS 40 in conjunction with IFRS 13, the homogeneity of defined valuation units and the appropriateness of the assumptions and parameters used for measurement. We also used external market data to assess the assumptions and parameters used for measurement, such as the discount/capitalization rates applied, market rents and expected trend in rental prices per square meter as well as planned maintenance per square meter.

Based on partially representative and partially selective sampling of German portfolio valuation units in accordance with risk, we conducted on-site visits to assess the condition of the various properties. We verified the valuations conducted by Vonovia by comparing them with our own calculations based on the standardized capitalization model pursuant to the German Real Estate Appraisal Regulation [ImmoWertV].

We were satisfied with the qualification and objectivity of the external valuers commissioned by Vonovia, audited the valuation method used for the appraisal with regard to compliance with IAS 40 in conjunction with IFRS 13, assessed the material assumptions and parameters for measurement and compared the internal valuation results with those of the corresponding external appraisals.

We also assessed the completeness and adequacy of disclosures on investment properties required in the notes to the consolidated financial statements pursuant to IAS 40 and IFRS 13.

Our Observations

The valuation method implemented by Vonovia is appropriate and suitable for measuring fair value in compliance with IFRS. The assumptions and parameters used for valuation of the investment properties are appropriate. The disclosures on investment properties in the notes to the consolidated financial statements pursuant to IAS 40 and IFRS 13 are complete and appropriate.

Impairment testing of goodwill

Please refer to notes 6 and 21 to the consolidated financial statements as well as the chapter on opportunities and risks in the combined management report.

The Financial Statement Risk

Goodwill in the amount of € 2.8 billion is reported in the consolidated financial statements of Vonovia as of December 31, 2018. Goodwill is allocated pursuant to IAS 36 to groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. At Vonovia, these are the regional business divisions in the Rental segment and the Value-add and Development segments.

Vonovia conducts impairment testing of the goodwill recognized annually in the fourth quarter. For each group of cash-generating units, the carrying amount of the unit (including the goodwill) is compared with the recoverable amount of the unit. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

Vonovia determines value in use by applying a complex calculation model based on a DCF method. In this regard, determination of the discount rate (WACC) is the primary source of judgment apart from cash flow forecasts. As even minor changes in WACC may have a material effect on the recoverable amount, the measurement of goodwill is associated with considerable estimation uncertainties.

In the Rental segment, yield compression (i. e. the difference in dynamic of real estate prices compared to rental rates) had a material effect on the value of goodwill, as the carrying amounts of investment properties (which rose faster relative to the projected cash flows) reduced the headroom between value in use and the carrying amounts of the groups of cash-generating units. In financial year 2018, the appreciation in value of investment properties and associated increase in the carrying amounts of all groups of cash-generating units of the Rental segment resulted in a reduction in headroom. In a total of five regions, this leads to impairments of goodwill in the amount of € 681,2 million.

There is the risk for the consolidated financial statements that the impairment loss as of the reporting date is not recognized in the amount required. There is also the risk that the disclosures in the notes to the consolidated financial statements are not appropriate.

Our Audit Approach

Through involvement of our own valuation experts, we also assessed the adequacy of Vonovia's calculation model and reconciled the expected future cash flows assigned to the model to the detailed plan. The detailed plan was derived from the five-year plan, has been adopted by the Executive Board and been noticed by the Supervisory Board. We have assessed the plausibility of the assumptions based on industry-specific market assessments. We also assessed the quality of forecasts used for planning in the past by comparing the target figures with actual figures and analyzing the deviations.

As value in use for the regional business divisions of the Rental segment is based to a considerable degree on cash flow forecasts beyond the five-year planning horizon (period of perpetuity), we particularly evaluated capitalized maintenance per square meter of living space as well as the sustainable growth rate used for the period of perpetuity with a view to regional differences in the various business divisions based on external market assessments.

With regard to the WACCs determined by Vonovia, we assessed the individual assumptions and parameters used in detail on the basis of available market data and also critically evaluated them as a whole compared to similar companies in the real estate sector. Due to the material effect of even minor changes in WACC, we focused in particular on the sensitivity analyses conducted by Vonovia as another key audit matter and verified whether impairment losses would arise with the change of individual WACC assumptions and parameters within an expected range.

We verified (recalculated) the values in use determined by Vonovia and compared them with the corresponding carrying amounts.

Finally, we assessed whether the disclosures in the notes regarding impairment of goodwill are appropriate. This also included an assessment of the appropriateness of disclosures in the notes on sensitivity in the event of reasonably possible changes in key assumptions and parameters used for measurement.

Our Observations

The calculation model used for impairment testing of goodwill is appropriate and in line with the accounting policies to be applied. The Company's assumptions and parameters used for measurement are within an acceptable range and are balanced as a whole. The disclosures in the notes on impairment-testing of goodwill are appropriate.

Identification and measurement of assets and liabilities acquired in the course of acquisition of BUWOG and Victoria Park

See notes 3, 4 and 6 to the consolidated financial statements.

The Financial Statement Risk

In financial year 2018, Vonovia acquired all shares in BUWOG as part of a public tender offer and other share purchases followed by a squeeze-out. The consideration transferred on the date of acquisition was € 3,212.4 million. Taking into account the acquired net assets of € 2,498.8 million, goodwill amounts to € 713.6 million.

Also in financial year 2018, Vonovia acquired 81.36% of the shares in Victoria Park as part of a public tender offer and other acquisitions of shares. In addition, call options for 10.04% of the shares were acquired in May 2018. The consideration transferred on the date of acquisition was € 611.8 million. Taking into account the acquired net assets of € 419.0 million and foreign currency translation differences of € 3,7 million, goodwill amounts to € 196.5 million.

The acquired identifiable assets and assumed liabilities are usually recognized at fair value pursuant to IFRS 3 on the date of acquisition. Vonovia consulted an independent expert for determining and measuring the identifiable assets acquired and liabilities assumed.

The identification and measurement of assets acquired and liabilities assumed is complex and based on assumptions of the Executive Board that require judgment. When determining fair value, there is considerable scope for judgment with regard to the measurement of investment properties, which requires judgments and estimates by management.

There is the risk for the consolidated financial statements that the assets acquired and liabilities assumed are identified improperly or measured inaccurately. There is also the risk that the disclosures in the notes to the consolidated financial statements are not complete and accurate.

Our Audit Approach
By involving our valuation experts, we have also assessed the appropriateness of key assumptions and parameters as well as the identification and calculation methods used. To that end, we first gained an understanding of the acquisition by consulting the Executive Board and relevant members of staff, both of Vonovia and of BUWOG and Victoria Park, and by assessing the public tender offer. To gain further insights into the business activities as well as economic and legal environment of BUWOG and Victoria Park, we had discussions with the respective local auditors. In addition, we assessed the process of identification of assets acquired and liabilities assumed in view of our sector knowledge for compliance with the requirements of IFRS 3.

We assessed the competence, professional skills and impartiality of the independent expert engaged by Vonovia. Our other audit procedures focused in particular on the identification of value determinants for the investment properties to be valued, mainly market rents and the expected trend in rental rates, the maintenance costs used and discount/capitalization rates, and also the complete recognition and measurement of non-derivative and derivative financial liabilities. We investigated the measurement methods used for their compliance with the accounting policies.

Finally, we assessed whether the disclosures in the notes regarding the acquisition of BUWOG and Victoria Park are complete and accurate.

Our Observations
The approach used for identifying and measuring the assets acquired and liabilities assumed is appropriate and in line with the accounting policies to be applied. The key assumptions and parameters are appropriate and they are properly presented in the notes to the consolidated financial statements.

Other Information

Management is responsible for the other information. The other information comprises:

> the non-financial statement and
> the remaining parts of the annual report, with the exception of the audited consolidated financial statements and combined management report and our auditor's report.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

> is materially inconsistent with the consolidated financial statements, with the combined management report or our knowledge obtained in the audit, or
> otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) and supplementary compliance with the ISAs will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

> Identify and assess the risks of material misstatements of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

> Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

> Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

> Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

> Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

> Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

> Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

> Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the annual general meeting on May 9, 2018. We were engaged by the Supervisory Board on December 5, 2018. We have been the group auditor of Vonovia SE without interruption since the Company's IPO in financial year 2013.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Martin C. Bornhofen.

Düsseldorf, Germany, March 1, 2019

KPMG AG
Wirtschaftsprüfungsgesellschaft

gez. Ufer
Wirtschaftsprüfer

gez. Bornhofen
Wirtschaftsprüfer

Responsibility Statement

Balance Sheet Oath

"To the best of our knowledge and belief, and in accordance with the applicable reporting principles, the annual financial statements give a true and fair view of the company's net assets, financial position and results of operations, and the combined management report includes a fair review of the business development and position of the company, including the results, together with a description of the principal opportunities and risks associated with the expected development of the company in the remainder of the fiscal year."

Bochum, Germany, February 25, 2019

Rolf Buch
(CEO)

Klaus Freiberg
(COO)

Helene von Roeder
(CFO)

Daniel Riedl
(CDO)

EPRA Reporting

Vonovia SE has been a member of EPRA since 2013. The eponymous European Public Real Estate Association (EPRA) is a non-profit organization that has its registered headquarters in Brussels and represents the interests of listed European real estate companies. Its mission is to raise awareness of European listed real estate companies as a potential investment destination that offers an alternative to conventional investments.

In order to make it easier to compare real estate companies and to reflect special features that apply to the real estate sector, EPRA has developed a framework for standardized reporting that goes beyond the scope of the IFRS.

As reported in the previous year, Vonovia reports the EPRA key figures based on the EPRA Best Practice Recommendations (BPRs). Vonovia only uses some of the EPRA key figures as performance indicators, which is why they are reported outside of the management report. They are non-GAAP measures or also APMs (Alternative Perfomance Measures).

We would like to point out that the EPRA BPRs refer generally to both residential and commercial real estate companies. Vonovia's business model is based primarily on renting out homes and offering housing-related services. Unlike companies with a commercial portfolio and, as a result, a relatively small number of properties, Vonovia's portfolio features a large number of fairly similar units. This means that it does not make sense for a company specializing in residential real estate to report much of the information recommended in the EPRA BPRs, which focus in particular on significant individual properties.

This is why, with regard to the current real estate portfolio, we have opted not to report an overview of lease agreement terms (the lease agreements tend to be concluded for an indefinite period), the estimated market rent upon the expiry of the lease or the ten biggest tenants in terms of rental income.

The new construction/Development business was expanded further in the fiscal year under review and has been additionally strengthened by the takeover of BUWOG. Furthermore almost exclusively residential units are built. As a result, we do not publish separate information on individual large properties.

EPRA Key Figures

in € million			2017	2018	Change in %
EPRA Performance Indicators	Definition	Target			
EPRA Earnings	Earnings from operational activities.	A key measure of a company's underlying operating results and an indication of the extent to which current dividend payments are supported by earnings.	572.6	685.3	19.7
EPRA NAV	Net Asset Value adjusted to include properties and other investment interests at fair value and exclude certain items not expected to crystallize in a long-term investment property business model.	Make adjustments to IFRS NAV to provide stakeholders with the most relevant information on the fair value of the assets and liabilities within a true real estate investment company with a long-term investment strategy.	21.284.6	26.105.0	22.6
EPRA NNNAV	EPRA NAV adjusted to include the fair values of financial instruments, debt and deferred taxes.	Make adjustments to EPRA NAV to provide stakeholders with the most relevant information on the current fair value of all the assets and liabilities within a real estate company.	14.657.5	17.669.5	20.5
EPRA net initial yield in %	Annualized rental income based on the cash rents passing at the balance sheet date, less non-recoverable property operating expenses, divided by the market value of the property, increased with (estimated) purchasers' costs.	A comparable measure for portfolio valuations. This measure should make it easier for investors to judge for themselves how the valuation of portfolio X compares with portfolio Y.	3.7	3.5	-0.2 pp
EPRA topped-up net initial yield in %	This measure incorporates an adjustment to the EPRA NIY in respect of the expiration of rent-free periods (or other unexpired lease incentives such as discounted rent periods and tiered rents).		3.7	3.5	-0.2 pp
EPRA vacancy rate in %	Estimated Market Rental Value (ERV) of vacant space divided by ERV of the whole portfolio.	A "pure" (%) measure of investment property space that is vacant, based on ERV.	2.3	2.3	-
EPRA cost ratio incl. direct vacancy costs in %	Administrative & operating costs (including costs of direct vacancy) divided by gross rental income.	A key measure to enable meaningful measurement of the changes in a company's operating costs.	26.3	25.9	-0.4 pp
EPRA cost ratio excl. direct vacancy costs in %	Administrative & operating costs (excluding costs of direct vacancy) divided by gross rental income.		24.8	24.6	-0.2 pp

EPRA Earnings

The EPRA Earnings is a measure of the operating result. It indicates the extent to which current dividend payments are supported by the operating result. Based on the profit for the period, adjustments are made to reflect changes in the value of assets and liabilities affecting net income, and to reflect sale effects and costs for acquisition/integration.

As far as company-specific adjustments are concerned, we include the earnings contributions made by the Development and Recurring Sales segments. Prior-year and non-recurring interest expenses, depreciation and amortization, other non-recurring items and taxes that do not correspond to current income taxes are also eliminated. The adjusted earnings correspond to Group FFO. This was up 16.1% in a year-on-year comparison.

As there were no diluting financial instruments on the reporting dates, the undiluted EPRA earnings equal the diluted figure.

in € million	2017	2018	Change in %
IFRS profit for the period	2,566.9	2,402.8	-6.4
Changes in value of investment properties, development properties held for investments and other interests	-3,434.1	-3,517.9	2.4
Profit or losses on disposal of investment properties, development properties held for investments and other interests	-151.5	-232.3	53.3
Profit and losses on sales of trading properties including impairment charges in respect of trading properties	–	-43.3	–
Selling costs*	28.8	46.0	59.7
Taxes on profits or losses on disposals	19.2	59.7	>100
Goodwill impairment	337.3	681.2	>100
Changes in fair value of financial instruments and associated close-out costs	20.4	36.9	80.9
Acquisition costs	48.9	87.8	79.6
Deferred tax in relation to EPRA adjustments	1,136.7	1,164.4	2.4
EPRA earnings	572.6	685.3	19.7
EPRA earnings per share in €**	1.18	1.32	8.3
Adjustments Development	–	20.7	–
Adjustments Recurring Sales	62.2	79.1	27.2
Adjustment other non-recurring items	38.0	18.8	-50.5
Adjustment depreciation and amortization	34.9	56.7	62.5
Adjustment of prior-year/one-time interest expense	5.4	60.4	>100
Adjustments for other/deferred/prior-year taxes	261.9	211.0	-19.4
Adjusted earnings (Group FFO)	975.0	1,132.0	16.1
Adjusted earnings (Group FFO) per share in €**	2.01	2.18	10.0

* Prior-year value adjusted incl. transaction holding costs.
** Based on the shares carrying dividend rights on the reporting date: Dec. 31, 2017: 485,100,826, Dec. 31, 2018: 518,077,934.

NAV/NNNAV

The presentation of the NAV based on the EPRA definition aims to show the net asset value in a long-term business model. The total equity attributable to Vonovia's shareholders is adjusted to reflect the deferred taxes on investment properties, the fair value of derivative financial instruments and the deferred taxes on derivative financial instruments. In order to boost transparency, an adjusted NAV, which involves eliminating goodwill in full, is also reported.

The EPRA NNNAV is designed to show the net asset value of a real estate company, taking the current market values of assets and liabilities into account.

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
Total equity attributable to Vonovia shareholders	15,080.8	17,880.2	18.6
Deferred taxes on investment properties	6,185.7	8,161.1	31.9
Fair value of derivative financial instruments*	26.9	87.2	>100
Deferred taxes on derivative financial instruments	-8.8	-23.5	>100
EPRA NAV	21,284.6	26,105.0	22.6
Goodwill	-2,613.5	-2,842.4	8.8
Adjusted NAV	18,671.1	23,262.6	24.6
EPRA NAV per share in €**	43.88	50.39	14.8
Adjusted NAV per share in €**	38.49	44.90	16.7

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
EPRA NAV	21,284.6	26,105.0	22.6
Fair value of derivative financial instruments*	-26.9	-87.2	>100
Fair value of financial liabilities	-632.7	-315.0	-50.2
Deferred taxes on derivative financial instruments	8.8	23.5	>100
Deferred taxes on fair value of financial liabilities	209.4	104.3	-50.2
Deferred taxes on investment properties	-6,185.7	-8,161.1	31.9
EPRA NNNAV	14,657.5	17,669.5	20.5
EPRA NNNAV per share in €**	30.22	34.11	12.9

* Adjusted for effects from cross currency swaps.
** Based on the shares carrying dividend rights on the reporting date: Dec. 31, 2017: 485,100,826, Dec. 31, 2018: 518,077,934.

EPRA Net Initial Yield

The EPRA net initial yield shows the ratio of annualized rental income minus property outgoings (annualized net rent) to the gross fair values of the properties. The fair values are increased by the estimated purchasers' costs.

The topped-up net initial yield eliminates the rental incentives in the annualized net rental income. Rental incentives are of only minor importance to a company specializing in residential properties.

in € million	2017	2018	Change in %
Investment properties	33,182.8	43,490.9	31.1
Assets held for sale	142.6	105.9	-25.7
Fair value of the real estate portfolio (net)	33,325.4	43,596.8	30.8
Allowance for estimated purchasers' costs	2,712.0	3,482.3	28.4
Fair value of the real estate portfolio (gross)	36,037.4	47,079.1	30.6
Annualized cash passing rental income	1,655.9	2,022.0	22.1
Property outgoings	-314.9	-388.6	23.4
Annualized net rents	1,341.0	1,633.3	21.8
Adjustments for rental incentives	2.6	2.8	7.7
Topped-up net annualized rent	1,343.6	1,636.1	21.8
EPRA net initial yield in %	3.7	3.5	-0.2 pp
EPRA 'topped-up' net initial yield in %	3.7	3.5	-0.2 pp

ERPRA Vacancy Rate

The calculation of the EPRA vacancy rate is based on the ratio of the estimated market rent for the vacant residential properties to the estimated market rent of the residential property portfolio, i. e., the vacancy rate shown in the management report is valued based on the market rent for the residential properties.

The EPRA vacancy rate came to 2.3% at the end of 2018, fully in line with the prior-year figure. A large part of the vacancy rate is still attributable to construction-related vacancies due to our extensive investment program.

in € million	Dec. 31, 2017	Dec. 31, 2018	Change in %
Market rent of vacant apartments	41.5	49.6	19.5
Market rent of residential property portfolio	1,805.3	2,181.4	20.8
EPRA vacancy rate in %	2.3	2.3	-

EPRA Cost Ratio

The EPRA cost ratio (EPRA costs to gross rental income) provides information on the cost efficiency of a real estate company. Adjustments are made to reflect ground rent and direct vacancy costs. This means that, in principle, the EPRA cost ratio expresses the same information as the EBITDA margin.

in € million	2017	2018	Change in %
Operating expenses*	261.2	289.4	10.8
Maintenance expenses	258.0	289.7	12.3
Adjusted EBITDA Value-add	-102.1	-121.2	18.7
Intragroup profits	27.9	38.8	39.1
Ground rent costs	-9.3	-9.4	1.1
EPRA costs (incl. direct vacancy costs)	435.7	487.3	11.8
Direct vacancy costs	-24.4	-23.6	-3.3
EPRA costs (excl. direct vacancy costs)	411.3	463.7	12.7
Rental income in the Rental segment	1,667.9	1,894.2	13.6
Ground rent costs	-9.3	-9.4	1.1
Gross rental income	1,658.6	1,884.8	13.6
EPRA cost ratio incl. direct vacancy costs in %	26.3	25.9	-0.4 pp
EPRA cost ratio excl. direct vacancy costs in %	24.8	24.6	-0.2 pp

* Prior-year value adjusted incl. transaction holding costs.

Property-Related Capital Expenditure

The table below provides an overview of the property-related capital expenditure made by the company throughout the fiscal year.

In the "acquisitions" category, the previous year was largely characterized by the conwert acquisition. In 2018, the main impact came from the BUWOG and Victoria Park takeovers.

Development considerably increased, due in part to the takeover of BUWOG. The increase in investments in the existing portfolio from € 771.8 million in 2017 to € 1,006.0 million in 2018 reflects our move to step up our modernization program.

in € million	2017	2018	Change in %
Acquisitions	2,711.1	6,346.2	>100
Development	65.7	234.3	>100
Like-for-like portfolio	771.8	1,006.0	30.3
Other	–	–	–
Property-related capital expenditure	3,548.6	7,586.5	>100

Like-for-like Rent Increases

The following tables provide an overview of the like-for-like rent increases in the company's residential property portfolio.

				Residential in-place rent like-for-like*		
Dec. 31, 2018	Residential units	Living area (in thou. m²)	Residential in-place rent (p.a. in € million)	Dec. 31, 2017 (in €/m²)	Dec. 31, 2018 (in €/m²)	Change (in %)
Strategic	300,452	18,605	1,433.1	6.30	6.57	4.3%
Operate	68,402	4,312	341.3	6.44	6.84	6.1%
Invest	232,050	14,292	1,091.8	6.26	6.49	3.7%
Recurring Sales	29,130	1,957	152.6	6.45	6.69	3.7%
Non-Core disposals	3,532	254	16.9	5.98	6.01	0.5%
Vonovia Germany	**333,114**	**20,816**	**1,602.5**	**6.31**	**6.57**	**4.2%**
Vonovia Austria	2,030	140	10.8	6.56	6.70	2.2%
Total	**335,144**	**20,955**	**1,613.3**	**6.31**	**6.58**	**4.2%**

* The underlying portfolio has a fair value of € 36,455.8 million.

				Residential in-place rent like-for-like*		
Regional market	Residential units	Living area (in thou. m²)	Residential in-place rent (p.a. in € million)	Dec. 31, 2017 (in €/m²)	Dec. 31, 2018 (in €/m²)	Change (in %)
Berlin	38,476	2,434	190.2	6.35	6.60	4.0%
Rhine Main Area	27,371	1,756	167.1	7.71	8.04	4.3%
Rhineland	28,829	1,914	157.2	6.77	7.02	3.6%
Southern Ruhr Area	43,361	2,651	182.4	5.64	5.92	5.1%
Dresden	38,381	2,182	153.0	5.79	6.02	3.9%
Hamburg	16,257	1,025	86.4	6.85	7.12	3.9%
Munich	9,646	635	60.7	7.72	8.03	4.0%
Stuttgart	13,835	870	79.8	7.53	7.78	3.2%
Northern Ruhr Area	26,257	1,622	106.1	5.38	5.63	4.6%
Hanover	14,543	924	70.1	6.21	6.51	4.9%
Kiel	13,626	791	56.8	5.81	6.08	4.7%
Bremen	11,635	702	45.8	5.44	5.63	3.6%
Leipzig	9,156	587	40.9	5.74	5.96	3.9%
Westphalia	9,465	613	42.3	5.64	5.94	5.5%
Freiburg	4,036	276	23.9	6.99	7.31	4.6%
Other strategic locations	23,040	1,455	113.6	6.41	6.70	4.5%
Total strategic locations Germany	**327,914**	**20,438**	**1,576.3**	**6.31**	**6.58**	**4.2%**
Austria	2,030	140	10.8	6.56	6.70	2.2%
Total strategic locations	**329,944**	**20,578**	**1,587.1**	**6.32**	**6.58**	**4.2%**

* The underlying portfolio has a fair value of € 35,939.5 million.

Glossary

Adjusted EBITDA Development
The Adjusted EBITDA Development includes the gross profit from the development activities of "to sell" projects (income from sold development projects less production costs) and the gross profit from the development activities of "to hold" projects (fair value of the units developed for own portfolio less incurred production costs) less the operating expenses from the Development segment.

Adjusted EBITDA Recurring Sales
The Adjusted EBITDA Recurring Sales compares the proceeds generated from privatization business with the fair values of assets sold and also deducts the related costs of sale. In order to disclose profit and revenue in the period in which they are incurred and to report a sales margin, the fair value of properties sold, valued in accordance with IFRS 5, have to be adjusted to reflect realized/unrealized changes in value.

Adjusted EBITDA Rental
The Adjusted EBITDA Rental is calculated by subtracting the operating expenses of the Rental segment and the expenses for maintenance in the Rental segment from the Group's rental income.

Adjusted EBITDA Total (Earnings Before Interest, Taxes, Depreciation and Amortization)
Adjusted EBITDA Total is the result before interest, taxes, depreciation and amortization (including income from other operational investments and intragroup profits) adjusted for effects that do not relate to the period, recur irregularly or that are atypical for business operation, and for net income from fair value adjustments to investment properties. These non-recurring items include the development of new fields of business and business processes, acquisition projects, expenses for refinancing and equity increases (where not treated as capital procurement costs), IPO preparation costs and expenses for pre-retirement part-time work arrangements and severance payments. The Adjusted EBITDA Total is derived from the sum of the Adjusted EBITDA Rental, Adjusted EBITDA Value-add, Adjusted EBITDA Recurring Sales and Adjusted EBITDA Development.

Adjusted EBITDA Value-add
The Adjusted EBITDA Value-add (formerly Adjusted EBITDA Value-add Business) is calculated by deducting operating expenses from the segment's income.

Cash-generating Unit (CGU)
The cash-generating unit refers, in connection with the impairment testing of goodwill, to the smallest group of assets that generates cash inflows and outflows independently of the use of other assets or other cash-generating units (CGUs).

Covenants
Requirements specified in loan agreements or bond conditions containing future obligations of the borrower or the bond obligor to meet specific requirements or to refrain from undertaking certain activities.

CSI (Customer Satisfaction Index)
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. The CSI is determined on the basis of points given by the customers for our properties and their neighborhood, customer service and commercial and technical support as well as maintenance and modernization management.

EPRA (European Public Real Estate Association)
The European Public Real Estate Association (EPRA) is a non-profit organization that has its registered headquarters in Brussels and represents the interests of listed European real estate companies. Its mission is to raise awareness of European listed real estate companies as a potential investment destination that offers an alternative to conventional investments. EPRA is a registered trademark of the European Public Real Estate Association.

EPRA Key Figures
For information on the EPRA key figures, we refer to the chapter on segment reporting according to EPRA on
→ **p. 264 et seq.**

EPRA NAV/Adjusted NAV

The presentation of the NAV based on the EPRA definition aims to show the net asset value in a long-term business model. The equity attributable to Vonovia's shareholders is adjusted to reflect deferred taxes on investment properties, the fair value of derivative financial instruments and the deferred taxes on derivative financial instruments. In order to boost transparency, an adjusted NAV, which involves eliminating goodwill in full, is also reported.

Fair Value

Valuation pursuant to IAS 40 in conjunction with IFRS 13. The estimated value of an asset. The fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

Fair Value Step-up

Fair value step-up is the difference between the income from selling a unit and its current fair value in relation to its fair value. It shows the percentage increase in value for the company on the sale of a unit before further costs of sale.

Group FFO

Group FFO reflects the recurring earnings from the sustained operating business. In addition to the Adjusted EBITDA for the Rental, Value-add, Recurring Sales and Development segments, Group FFO allows for recurring cash-effective net interest expenses from non-derivative financial instruments as well as income taxes. This key figure is not determined on the basis of any specific international reporting standard but is to be regarded as a supplement to other performance indicators determined in accordance with IFRS.

LTV Ratio (Loan-to-Value Ratio)

The LTV ratio shows the extent to which financial liabilities are covered. It shows the ratio of non-derivative financial liabilities pursuant to IFRS, less foreign exchange rate effects, cash and cash equivalents less advance payments received by Development (period-related), receivables from disposals, plus purchase prices for outstanding acquisitions to the total fair values of the real estate portfolio, fair values of the projects/land currently under construction as well as receivables from the sale of real estate inventories (period-related) plus the fair values of outstanding acquisitions and investments in other real estate companies.

Maintenance

Maintenance covers the measures that are necessary to ensure that the property can continue to be used as intended over its useful life and that eliminate structural and other defects caused by wear and tear, age and weathering effects.

Modernization Measures

Modernization measures are long-term and sustainable value-enhancing investments in housing and building stocks. Energy-efficient refurbishments generally involve improvements to the building shell and communal areas as well as the heat and electricity supply systems. Typical examples are the installation of heating systems, the renovation of balconies and the retrofitting of prefabricated balconies as well as the implementation of energy-saving projects, such as the installation of double-glazed windows and heat insulation, e.g., facade insulation, insulation of the top story ceilings and basement ceilings. In addition to modernization of the apartment electrics, the refurbishment work upgrades the apartments, typically through the installation of modern and/or accessible bathrooms, the installation of new doors and the laying of high-quality and non-slip flooring. Where required, the floor plans are altered to meet changed housing needs.

Monthly In-place Rent

The monthly in-place rent is measured in euro per square meter and is the current gross rental income per month for rented units as agreed in the corresponding rent agreements at the end of the relevant month before deduction of non-transferable ancillary costs divided by the living area of the rented units. The rental income from the Austrian real estate portfolio additionally includes maintenance and improvement contributions (EVB). The rental income from the Swedish real estate portfolio shows inclusive rents, meaning that the rental amounts include operating and heating costs.

The in-place rent is often referred to as the "Nettokaltmiete" (net rent excl. ancillary costs such as heating, etc.). The monthly in-place rent (in €/m²) on a like-for-like basis refers to the monthly in-place rent for the residential portfolio that was already held by Vonovia 12 months previously, i. e., portfolio changes during this period are not included in the calculation of the in-place rent on a like-for-like basis. If we also include the increase in rent due to new construction measures and measures to add extra stories, then we arrive at the organic increase in rent.

Non-Core Disposals
We also report the **Other** segment, which is not relevant from a corporate management perspective, in our segment reporting. This includes the sale, only as and when the right opportunities present themselves, of entire buildings or land (Non-core Disposals) that are likely to have below-average development potential in terms of rent growth in the medium term and are located in areas that can be described as peripheral compared with Vonovia's overall portfolio and in view of future acquisitions.

Rating
Classification of debtors or securities with regard to their creditworthiness or credit quality according to credit ratings. The classification is generally performed by rating agencies.

Recurring Sales
The **Recurring Sales** segment (formerly part of the "Sales" segment) includes the regular and sustainable disposals of individual condominiums from our portfolio. It does not include the sale of entire buildings or land (Non-Core disposals). These properties are only sold as and when the right opportunities present themselves, meaning that the sales do not form part of our operating business within the narrower sense of the term. Therefore, these sales will be reported under "Other" in our segment reporting.

Rental Income
Rental income refers to the current gross income for rented units as agreed in the corresponding lease agreements before the deduction of non-transferable ancillary costs. The rental income from the Austrian real estate portfolio also includes maintenance and improvement contributions (EVB). The rental income from the Swedish real estate portfolio shows inclusive rents, meaning that the rental amounts include operating and heating costs.

Vacancy Rate
The vacancy rate is the number of empty units as a percentage of the total units owned by the company. The vacant units are counted at the end of each month.

Financial Calendar

March 7, 2019
Publication of 2018 Annual Report

May 7, 2019
Publication of the key figures for the first three months of 2019

May 16, 2019
Annual General Meeting

August 2, 2019
Publication of the key figures for the first half of 2019

November 5, 2019
Publication of the key figures for the first nine months of 2019

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Note
This Annual Report is published in German and English. The German version is always the authoritative text. The Annual Report can be found on the website at www.vonovia.de.

EPRA is a registered trademark of the European Public Real Estate Association.

Disclaimer
This report contains forward-looking statements. These statements are based on current experience, assumptions and forecasts of the Management Board as well as information currently available to the Management Board. The forward-looking statements are not guarantees of the future developments and results mentioned therein. The future developments and results depend on a large number of factors. They involve certain risks and uncertainties and are based on assumptions that may prove to be inaccurate. These risk factors include but are not limited to those discussed in the risk report of the 2018 Annual Report. We do not assume any obligation to update the forward-looking statements contained in this report. This financial report does not constitute an offer to sell or the solicitation of an offer to subscribe for or buy any securities of Vonovia SE.

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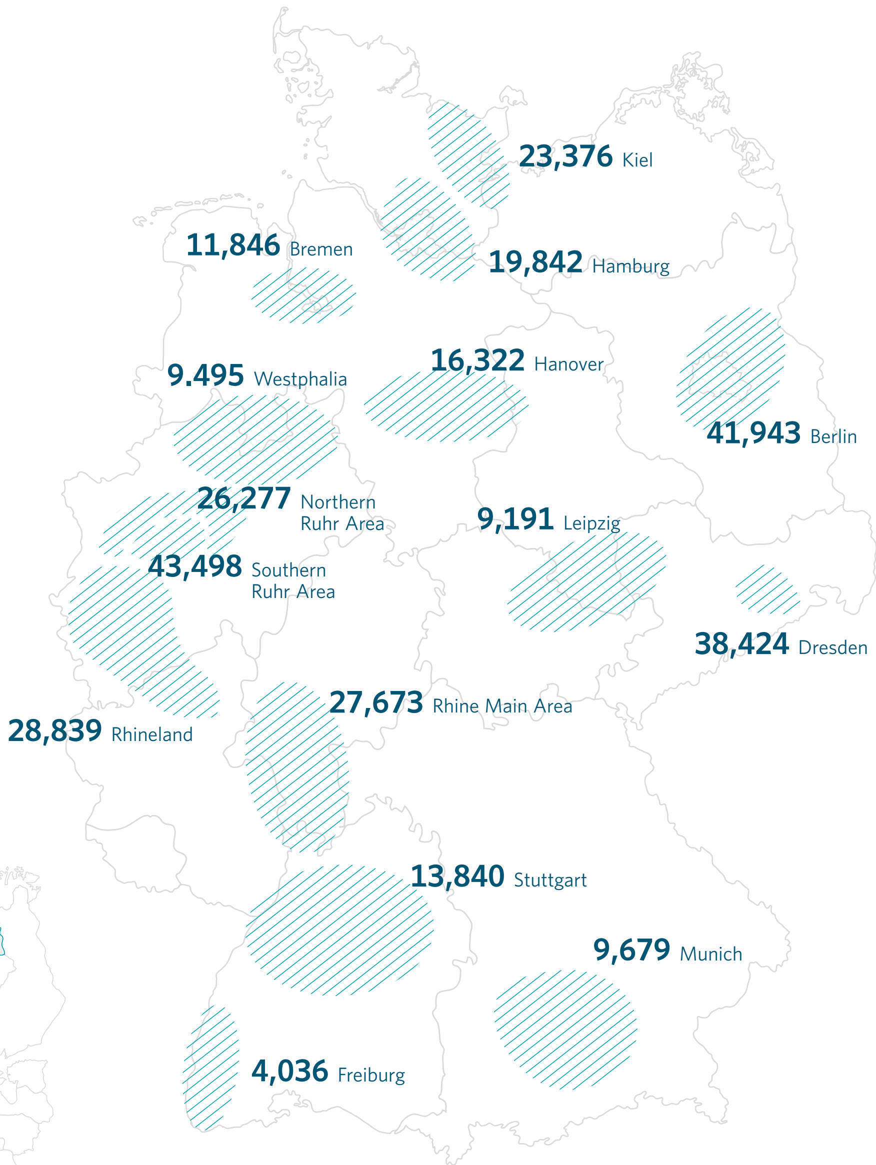
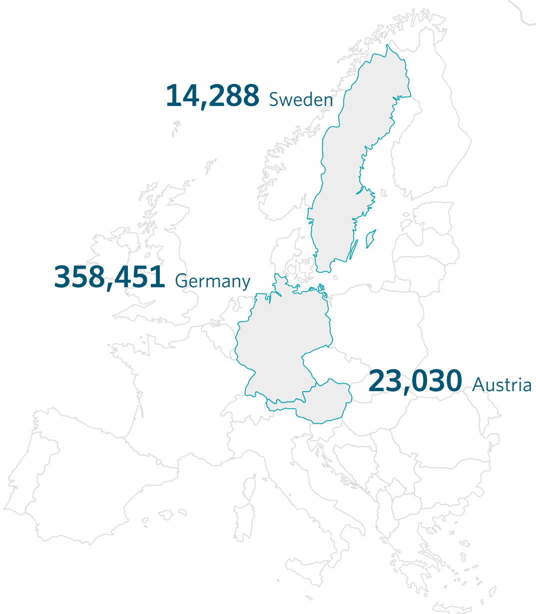
As of: March 2019

Housing Stock by Regional Market

Number of Units in Germany
(including 26,670 Units
at Other Strategic Locations)

350,951





Total Number of Units
Vonovia

395,769