VONOVIA SE
ANNUAL REPORT 2020

What Counts Next

Driving Residential Innovation

VONOVIA

Key Figures

Financial Key Figures in € million	2016	2017	2018	2019	2020
Total Segment Revenue	2,436.5	2,822.0	3,610.7	4,111.7	4,370.0
Adjusted EBITDA Total	1,186.5	1,319.7	1,554.8	1,760.1	1,909.8
Adjusted EBITDA Rental	1,046.2	1,148.7	1,315.1	1,437.4	1,554.2
Adjusted EBITDA Value-add	57.0	102.1	121.2	146.3	152.3
Adjusted EBITDA Recurring Sales		62.2	79.1	91.9	92.4
Adjusted EBITDA Development		6.7	39.4	84.5	110.9
EBITDA IFRS	1,083.7	1,271.8	1,534.4	1,579.6	1,822.4
Group FFO		975.0	1,132.0	1,218.6	1,348.2
thereof attributable to Vonovia shareholders		920.4	1,069.7	1,165.6	1,292.0
thereof attributable to Vonovia hybrid capital investors		40.0	40.0	40.0	40.0
thereof attributable to non-controlling interests		14.6	22.3	13.0	16.2
Group FFO per share in €*		2.01	2.18	2.25	2.38
Income from fair value adjustments of investment properties	3,236.1	3,434.1	3,517.9	4,131.5	3,719.8
EBT	3,859.8	4,007.4	3,874.3	3,138.9	5,014.4
Profit for the period	2,512.9	2,566.9	2,402.8	1,294.3	3,340.0
Cash flow from operating activities	828.9	946.0	1,132.5	1,555.9	1,430.5
Cash flow from investing activities	416.4	-1,350.1	-3,892.5	-2,505.7	-1,729.9
Cash flow from financing activities	-2,812.4	-870.5	3,041.5	902.8	402.6
Total cost of maintenance, modernization and new construction	792.4	1,124.8	1,569.4	1,971.1	1,935.9
thereof for maintenance expenses and capitalized maintenance	320.1	346.2	430.4	481.6	592.0
thereof for modernization	458.4	712.9	904.7	996.5	908.4
thereof for new construction	13.9	65.7	234.3	493.0	435.5

Key Balance Sheet Figures in € million	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2019**	Dec. 31, 2020
Fair value of the real estate portfolio	27,115.6	33,436.3	44,239.9	53,316.4	58,910.7
Adjusted NAV	14,328.2	18,671.1	23,262.6	28,199.6	33,651.8
Adjusted NAV per share in €*	30.75	38.49	44.90	52.00	59.47
LTV (%)	41.6	39.8	42.8	43.1	39.4

Non-financial Key Figures	2016	2017	2018	2019	2020
Number of units managed	392,350	409,275	480,102	494,927	489,709
thereof own apartments	333,381	346,644	395,769	416,236	415,688
thereof apartments owned by others	58,969	62,631	84,333	78,691	74,021
Number of units bought	2,815	24,847	63,706	23,987	1,711
Number of units sold	26,631	11,780	15,102	4,784	3,677
thereof Recurring Sales	2,701	2,608	2,818	2,607	2,442
thereof Non-core Disposals	23,930	9,172	12,284	2,177	1,235
Number of new apartments completed	40	250	1,108	2,092	2,088
thereof own apartments	40	250	638	1,301	1,442
thereof apartments for sale	–	–	470	791	646
Vacancy rate (in %)	2.4	2.5	2.4	2.6	2.4
Monthly in-place rent in €/m²	6.02	6.27	6.52	6.93	7.16
Organic rent increase (in %)	3.3	4.2	4.4	3.9	3.1
Number of employees (as of Dec. 31)	7,437	8,448	9,923	10,345	10,622

EPRA Key Figures in € million	2016	2017	2018	2019**	2020
EPRA NAV	17,047.1	21,284.6	26,105.0	29,592.5	35,146.5
EPRA NAV per share in €*	36.58	43.88	50.39	54.57	62.11
EPRA NNNAV	12,034.4	14,657.5	17,669.5	18,554.8	22,038.1
EPRA NTA				29,762.2	35,488.6
EPRA NTA per share in €*				54.88	62.71
EPRA NRV per share in €*				37,065.9	43,677.3
EPRA NRV				68.35	77.18
EPRA NDV				17,161.9	20,543.4
EPRA Earnings	675.6	838.2	932.5	1,075.8	1,196.9
EPRA Net initial yield in %	4.1	3.7	3.5	3.3	3.0
EPRA Topped-up net initial yield in %	4.1	3.7	3.5	3.3	3.0
EPRA Vacancy rate in %	2.2	2.3	2.3	2.4	2.3
EPRA Cost ratio (incl. direct vacancy costs) in %	28.4	26.3	25.9	25.8	26.8
EPRA Cost ratio (excl. direct vacancy costs) in %	27.0	24.8	24.6	24.5	25.6

* Based on the shares carrying dividend rights on the reporting date.
** Adjusted (see note [A2] Adjustment to Prior-year Figures).

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Where the Future is Made

Climate change, digitalization, urbanization and demographic change are the megatrends that will shape the future of Vonovia. The Innovation & Business Building (I&BB) department at Vonovia takes a customer-centric and data-driven approach to the challenges of tomorrow, with a particular focus on carbon-neutral neighborhood housing.

New Ideas:
Innovation management (Generation and Initial Analysis of New Ideas for Products and Services)

New Business Areas:

> **Business Building**
Development of Product and Service Ideas for Clients through to New Business

> **Neighborhood Systems**
Research and Development of Solutions for Neighborhoods (e.g. heat, electricity, mobility)

> **Energy Production**
Development of Solutions Focusing on Renewable Energies and Carbon Reduction

Verification & Acceleration:

> **Advanced Analytics**
Advancing Data-driven User Cases with In-house Digital Data Science Expertise

A Responsibility and an Opportunity

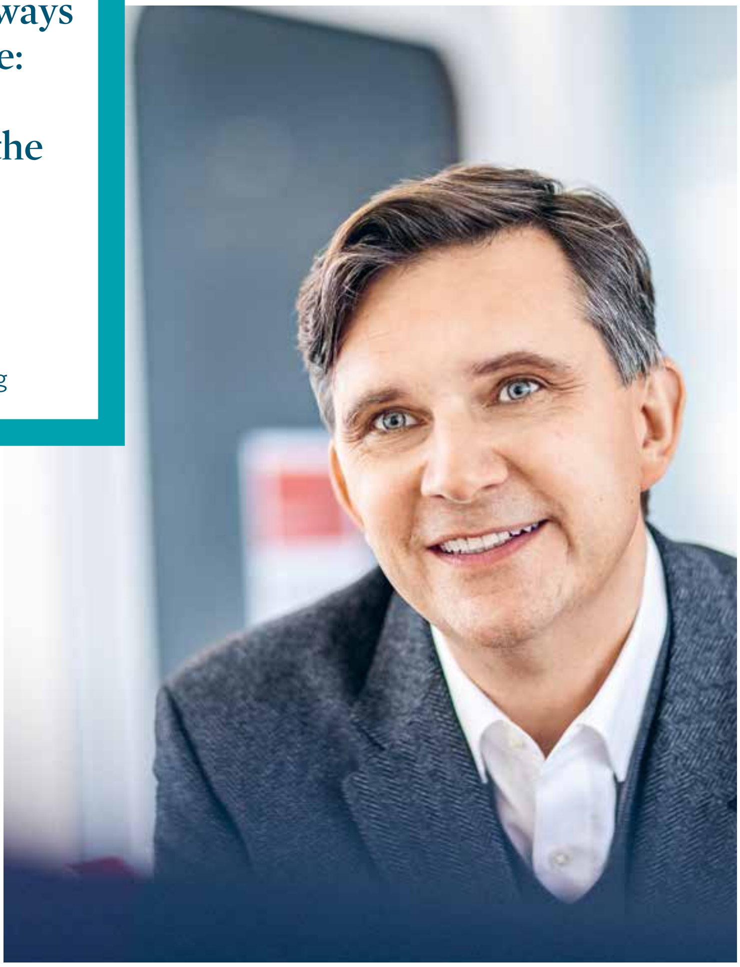
Long-term social, technological and environmental changes are having a significant impact on the housing industry. Customer requirements are changing, and so is the role of residential real estate companies going forward. Vonovia focuses on the neighborhood in everything it does. The neighborhood will play a decisive role in decentralized energy transition.

Vonovia has set itself a binding goal of making its building stock climate-neutral by 2050 as part of its climate action plan. At the first Climate Conference, held in partnership with the Fraunhofer Energy Alliance and the German Energy Agency (dena), Vonovia identified five action areas for the energy self-sufficient neighborhood of the future: renovation rates, renewable energy, systemic change, the power supply and mobility and tenants. We need to shore up our efforts in all of these areas with additional research and funding. And Vonovia needs good ideas for how it should shape the housing of tomorrow.

This is where the new Innovation & Business Building department comes in. Alexander

"We don't use technology just because we find it so fascinating, but in order to create useful services for our customers. Whenever we develop innovations, we always follow the same principle: customer-centric on the outside, data-driven on the inside."

Alexander Weihe
Head of Innovation & Business Building



Weihe and his team of 20 use a rigorous and clearly organized innovation process to develop new solutions that will deliver real added value in the future: for people, for society, and above all for the climate. For the employees involved, this means that their day-to-day work is as varied as it is inspiring. In order to find efficient answers to future challenges, they are looking beyond the company's current core business and developing completely new business models.

Innovation Neighborhood in Bochum-Weitmar

One of I&BB's most innovative research and development projects can be found in Bochum-Weitmar. With 1,540 apartments dating from the mid-twentieth century, the neighborhood is an innovative example of ecologically and economically efficient energy supply in action in an urban context. The project combines different technologies in novel and intelligent ways to reduce energy consumption and advance sector coupling, i.e., the integration of electricity, district heating and mobility. This neighborhood will also be home to the Power House of the Future, a transparent technology center that will supply energy for 81 apart- >

"1,000 roofs" Program

The innovation project we launched in 2019 is being rolled out. Vonovia will be installing photovoltaic systems on every suitable roof in the future. The intention is to use the energy generated by these systems as electricity for tenants in our neighborhoods.

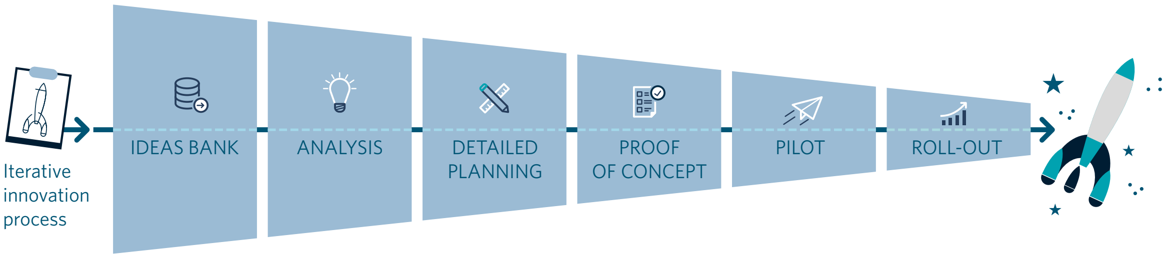
Support for the “Energiesprong” Initiative

> New refurbishment standard that represents a high level of living comfort, minimal refurbishment times and an innovative financing model
> Target: refurbishment to net zero (energy produced = energy consumed)
> First few pilot projects started
> Extensive involvement in dena’s “Volume Deal”, a statement of intent by the housing and construction industry formulating its commitment to the serial refurbishment of more than 11,600 apartments over the coming four years

ments. It uses a wide range of innovative technologies, including an electrolyzer which uses electricity to produce hydrogen, fuel cells and heat pumps which cover 60% of the heating needs of buildings and households in the area with carbon-free heat from a local source. Vonovia generates 25% of the power required locally using its own rooftop photovoltaic systems. This pilot project is being carried out under the aegis of the Open District Hub, a research initiative headed up by a number of Fraunhofer Institutes. Vonovia is a founding member of the ODH.

Transparent technology center supplies energy for 81 units

From idea to roll-out: the innovation process



Data Preparing the Way

Advanced data analytics facilitates innovation and speeds up the innovation process. The Advanced Analytics department was founded within I&BB for precisely this purpose. It uses cutting-edge algorithms to develop innovative methods for making more out of existing data. These methods include use cases, which make the process of managing moderniza-

Start-up Challenge

Vonovia and the Ruhr Founders Alliance called on start-ups to present their ideas for innovative, data-based solutions in April 2020. Participating start-ups had the chance to win prize money of up to € 20,000 and a three-month partnership with the company.

“Sometimes we also treat internal ideas like start-ups or new ventures. And once they’re far enough down the line, we manage them as if they were a whole new business area.”

Dr. Isabel Ohlies
Head of Innovation Management
Innovation & Business Building

tion work in the neighborhoods even more efficient, and new scoring models that match the needs and individual situations of customers to available housing with greater precision and improve satisfaction levels. Of course, none of these would mean anything without our data protection and privacy system, which guarantees a high level of information security and is the key to broad acceptance.

Open Innovation – Developing the Future Together

From flat fee housing through to daycare services, I&BB has a wide range of ideas up its sleeve. But where do these ideas come from? And how do you make them into a reality? Dr. Isabel Ohlies is the Head of the Innovation Management team, and so primarily responsible for the iterative innovation process that begins with a targeted search for relevant trends and issues. Open innovation is the team’s guiding principle. Inspiration and suggestions from outside the company are not only welcome; they are absolutely essential if Vonovia is going to come up with genuinely new and independent ideas.

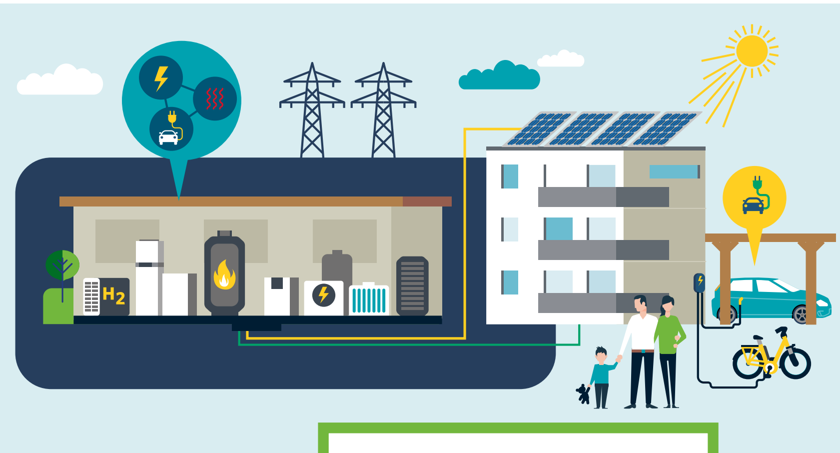
Climate conference in Berlin with Vonovia, dena, and the Fraunhofer Energy Alliance

One of the four methods used to generate ideas involves scouting the current start-up scene. The team frequently identifies potential collaborations with interesting start-ups in a variety of different sectors. These can range from simply using the services they provide all the way through to strategic partnerships or equity investments. Some partnerships go even further than that. Dynamic Components was a start-up with an exciting solution for monitoring lifts. We found them so impressive that the entire team was brought on board to continue driving this project and others as part of Vonovia Engineering.

New ideas also come from working closely with universities, research institutions and open ideation workshops. Employees from other departments are expressly invited to take part. Regional teams are playing an increasingly large role in these workshops due to their keen awareness of the needs and problems of their customers. Of course, the I&BB department also investigates strategic issues and topics which are suggested by other areas of the company.

Ideas for projects that make the grade are managed until they are ready to be put into practice. They are analyzed, worked out in detail and trialled. This is followed by a roll-out, where any final teething troubles are solved and products and services are continuously optimized until they work smoothly in practice. Then it’s time to let go and hand them over to one of the operating departments. This is how our energy sales were successfully brought to market, for example.

Setting a good example - many Vonovia employees use a traditional bike or an electric bike. More than 200 company bikes are already on the roads.



E-mobility as Part of Sector Coupling

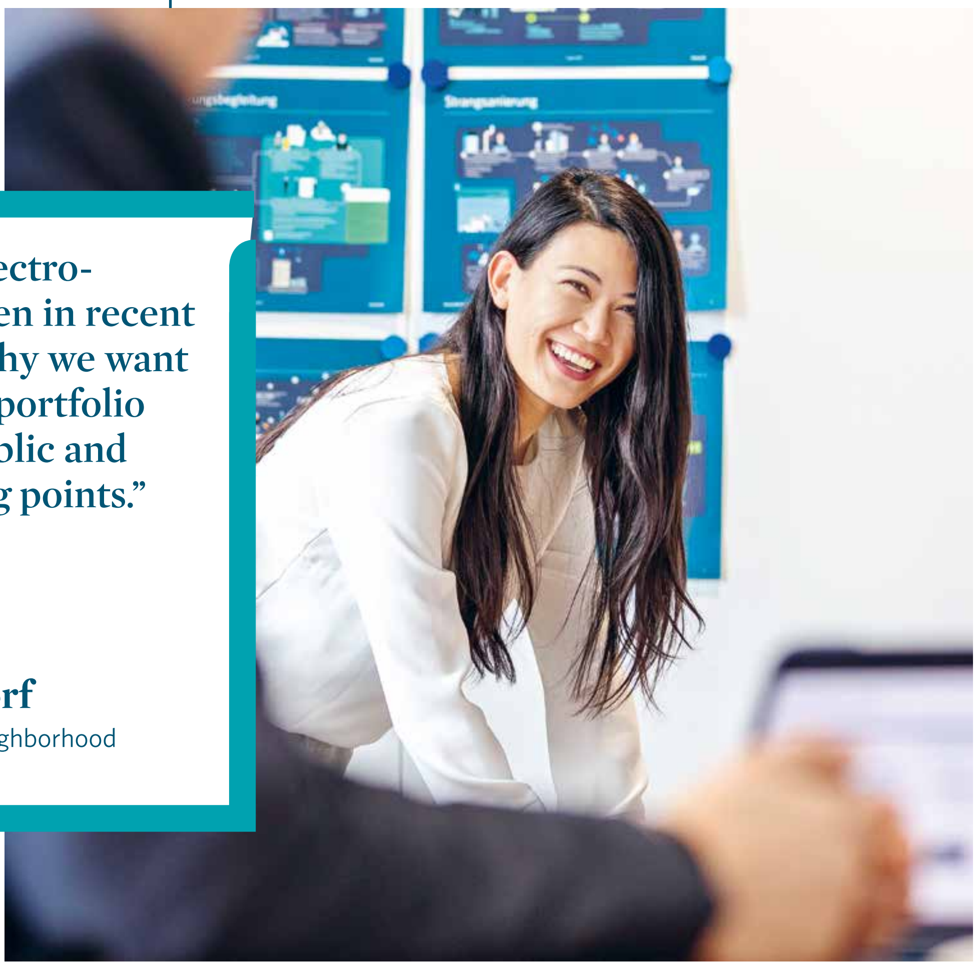
The Power House of the Future pilot project in Bochum-Weitmar shows how electromobility can be linked intelligently with an energy management system. Vonovia is using its own research center to test how different energy sectors can be integrated together to distribute green energy to tenants when and where they need it. This includes powering charging points and wallbox chargers.

Mobility Concepts – Full Speed Ahead on Climate Action

Neighborhoods are a vital part of the mobility transition. I&BB wants to develop, test and implement mobility concepts for existing neighborhoods with municipalities and local stakeholders. One of its aims is to install 10,000 wallbox chargers for tenants by 2030.

For Jana Tischendorf, the innovation manager at I&BB responsible for mobility, it is particularly important to develop solutions tailored to the needs of individual neighborhoods. Each neighborhood has a unique set of challenges and features. She and her team are developing a range of scalable mobility concepts from which the regions can choose the one that fits them best, depending on their local needs. Concepts are implemented in close coordination with regional decision-makers. Local authorities also provide their input in some cases. All of the team's solutions have to be

In addition to private wallbox chargers, Vonovia is also installing public charging points.



> "Demand for electromobility has risen in recent years – this is why we want to electrify our portfolio quickly with public and private charging points."
>
> **Jana Tischendorf**
> Innovation Manager Neighborhood Systems

Alexander Weihe and his team also make use of outside inspiration to find new ideas.

“We want to develop simple digital services based on a proprietary platform. But in terms of hardware we are thinking about open systems and streamlined processes. Because too much smart home can often have the opposite effect.”

Maximilian Breß
Innovation Manager Business Building

- affordable and eco-friendly because the transport system of the future needs to be sustainable and accessible to all.

Wallbox on Request

Electromobility is an essential part of the energy revolution. Electric mopeds, electric scooters and electric cargo bikes: One important way of getting environmentally friendly transport into local neighborhoods is to provide simple car and bike-sharing models. I&BB is already trailing some cutting-edge schemes in this area in partnership with service providers.

The targeted expansion of our charging infrastructure also has a crucial role to play. In addition to driving the installation of fixed charging points available to the general public, Jana Tischendorf is also committed to making private solutions easier to access.

Tenants with their own parking space can get a wallbox on request and pay for their electricity through Vonovia. But I&BB is already thinking about how to take the whole concept of mobility one step further. The long-term goal is to use electricity generated in the neighborhood for charging. Vonovia is due to run a trial scheme in Bochum-Weitmar to research efficient ways to integrate electricity, heat and electromobility.

New Business Models – No Shortage of Ideas

Maximilian Breß appreciates how varied every day is at the Vonovia Business Building department, and how his work frequently deals with issues which you wouldn't normally associate with the real estate sector. As an innovation manager, he is responsible for the content and organization of projects which focus on digitalization, smart homes and health. And it is no coincidence that they are all connected to one another.

His vision is for tenants to be able to manage all kinds of things in their household or the neighborhood using a single Vonovia app or platform in future. Like the digital parcel box, for example.

Smart Parcel Service for the Neighborhood

Maximilian Breß ran a pilot project in Berlin, Aachen and Dortmund to see how Vonovia could make it even more convenient for tenants to have parcels delivered to their home. This pilot scheme involved setting up open-system digital parcel boxes in neighborhoods which can be accessed by both big logistics companies and smaller delivery services. This also means that parcels are just the beginning. Taking the idea a step further, the local community could also use the boxes as a digital system for exchanging goods. A car repair shop could use them to return car keys, or neighbors could use them to lend each other books. Or Vonovia could put tools there for new tenants to use as part of a moving-in service.

Digital parcel boxes could be used as an exchange platform for everyone in future.

WeWash

Another Idea: a Digital Laundry Room

Anyone who doesn't have their own washing machine in their apartment can use an app, web browser or telephone hotline to book a time slot to use a communal washing machine, with the fee being billed automatically. All made possible through a partnership with WeWash.

Assistance for the Elderly

Vonovia is also looking at ways to encourage assisted living and senior-friendly apartments in neighborhoods. A digital assistance service could use a voice-user interface to give elderly people the security of knowing that they are not alone in an emergency. This system would automatically notify a nominated contact or the emergency services if the tenant had a fall or something else unexpected happened. It is exciting to think that, at some point in the future, tenants could use the same platform to control their heating, open or close their digital door lock and enjoy games and quizzes to keep their minds alert and have fun. And all in such a user-friendly package that is easily accessible, even for the over-80s. <

The Company and Its Shares

We can help to master the challenges facing society because we are a company with solid financial resources. We can also pay you, our shareholders, an attractive dividend again this year. This is something we can manage to do because our business model is built on a broad-based, solid foundation, and because it is successful as a whole.

Dear Shareholders, Dear Readers,

At first glance, it is easy to think that little good can come from a crisis – especially when the impact on our day-to-day lives is as profound as it is in the current coronavirus pandemic. On closer inspection, however, every crisis also has something constructive to offer. It allows us to shift our perspective and focus our attention on what is really important. Researchers across the globe, for example, have focused on developing a vaccine in the shortest space of time possible. We are seeing social cohesion within society and neighbors that are ready to help each other.

We need to focus on the things that really matter. Confidence. Mutual trust. In politics and business. In our personal and professional dealings with each other.

I took up my work at Vonovia eight years ago. **The task of living up to our corporate responsibility has been part of my work every day ever since then;** the need to strike a balance between the interests of our tenants, employees, society and an appropriate profit share for our shareholders.

If you are financially stable and balanced, you are in a position to fulfill your social responsibilities and work on finding solutions to the challenges of our time. This is something we did once again in 2020.

We have shown our tenants that we are there for them. We stepped up our communication activities during the lockdown periods and continue to assure our tenants that none of them must worry about losing their homes due to the pandemic. We have cushioned the blow of social hardship by deciding not to increase rents, suspending all terminations and providing other forms of assistance. Whatever task we faced in these extraordinary times, we were usually able to find a solution.

This could only be achieved with the help of our employees. They showed a particular commitment to keeping our business operations up and running. On site with appropriate protection. Digitally from home. Despite the increased workload. Together, we have been able to demonstrate just how much can be achieved by working together. And we have witnessed an increasing sense of trust: Our communication has become more direct, and employees have become more independent in performing their duties. This new sense of responsibility will remain.

What I am particularly pleased about is the fact that our Customer Satisfaction Index (CSI) rose considerably, by an average of more than eight percent over the year, despite the crisis. This shows that tenants perceive our commitment positively.

Our strategy has been successful since our IPO in 2013. In the 2020 fiscal year, we took a good look at what we have been doing for years now to improve sustainability and climate protection. We also asked stakeholders such as tenants' associations, academics and politicians what they expect of us with regard to the topics of climate protection, affordable housing and demographic change.

We used the results of this analysis to restructure our management system: **The new Sustainability Performance Index (SPI) is linked to specific objectives, allowing us to measure our performance every year.** This central non-financial key figure takes into account factors such as the carbon savings achieved annually in the housing stock, energy efficiency levels in newly-built properties, employee satisfaction, diversity and the progress made in senior-friendly refurbishments. Customer satisfaction is also incorporated into the SPI.

In our communications with you, our shareholders, the issue of transparency was particularly important to us last year. We calculated the costs associated with the Berlin rent freeze early on. And it only took us a few days after the lockdown was imposed in response to the coronavirus to start calculating the possible income losses. In both cases, the information will have helped you put things into the appropriate context.

The Berlin rent freeze is testimony to how the shortage of housing can create challenges for a society. In the first half of 2021, we expect the German Constitutional Court to rule

Rolf Buch

Chairman of the Management Board (CEO)

Arnd Fittkau

Member of the Management Board (CRO)

Helene von Roeder

Member of the Management Board (CFO)

Daniel Riedl

Member of the Management Board (CDO)

on whether the Berlin rent freeze is compatible with the law. Regardless of the outcome, our challenges will remain. That's why we need concepts that will allow us to offer new and affordable housing to people living in conurbations as quickly as possible.

Our company focuses on the development of these very concepts. And we are continuing to build new homes. Last year, we once again completed more than 1,500 apartments. With an average rent of € 6.95 per m², Vonovia continues to stand for affordable housing in Germany.

We have the capacity to build more homes – and to build them more quickly. In order to do so, however, we need more rapid construction planning and approval processes as well as sensible changes to building regulations and construction planning law. As is currently the case in all sectors and industries, increased use of digital options can also play a considerable role in helping to speed things up.

Sustainability is a top priority on the financial markets. Our climate is also one of the aspects that guides us in our actions. Over the past few years, we have renovated around 3% of our buildings annually to make them more energy-efficient, allowing us to reduce our carbon footprint significantly.

The progress we have made has also been recognized in sustainability ratings. By way of example, Vonovia climbed to a position in the top percentile of the more than 12,000 companies across the globe that are rated by Sustainalytics and was included in the renowned Dow Jones Sustainability Index Europe.

It is now time for us to take the next step: last year, we became the first residential real estate company to draw up a clear climate roadmap. **We are aiming to have reduced our carbon emissions to almost zero by 2050, making us a climate-neutral company. We have set ourselves binding interim targets for each year in order to achieve this.**

This is an ambitious plan, and achieving it will require more than simply modernizing building shells and purchasing regenerative forms of energy, which is why we are working with renowned institutes on new cross-sector energy solutions that can be implemented at neighborhood level.

In 2020, we picked up where we had left off in the previous years in terms of continuing with our positive operational and financial performance.

We have improved our business processes again – also with the help of digitalization – and expanded our Value-add Service. Hembla's Swedish portfolio has been integrated. We acquired small portfolios in Germany and also acquired a stake in a portfolio in the Netherlands for the first time. The acquisition of Bien-Ries also allowed us to strengthen our development business in the Rhine-Main region.

Thanks to our successful business development, we were able to meet, and in some cases exceed, our forecasts. The main factors behind our growth were our acquisitions and organic growth, especially through new construction and modernization measures.

We revised the key reporting figures we use to reflect our performance last year, allowing us to be more transparent in our reporting and adopt a more holistic approach to how we manage our company.

One new aspect is the disclosure of the revenue generated in our four segments, Total Segment Revenue, in this year's annual financial statements. This value is essentially the total revenue achieved by our Group. It increased by 6.3% year-on-year to € 4.4 billion. The Adjusted EBITDA Total increased by 8.5% to € 1.9 billion. Our operating earnings, Group FFO, improved by 10.6% to approximately € 1.35 billion. Expressed per share, it rose by 6.0% to € 2.38. In an environment dominated by the coronavirus pandemic, the vacancy rate fell by a further 0.2 percentage points to a very low level of 2.4%.

The portfolio value disclosure is made according to the best practice recommendations of the European Public Real Estate Association (EPRA). This is why we are reporting the EPRA Net Tangible Assets (EPRA NTA) for the first time to express the net asset value of our real estate properties. This figure will replace Adjusted Net Asset Value (Adjusted NAV). The new figure focuses on the calculation of tangible assets, providing you, as a shareholder, with data of even greater relevance on the value of our long-term holding portfolio. EPRA NTA per share, which measures the value development of our residential portfolio climbed by 14.43% to € 62.71. The adjusted NAV per share rose by 14.4% to € 59.47 in the same period. We are also reporting the Net Reinstatement Value (NRV) which, at € 77.18 per share, represents the asset value that would be required to rebuild the company from scratch. This value is higher than the adjusted NAV and the EPRA NTA because it also takes account of our activities in the Value-add and Development segments, in addition to our real estate portfolio.

The fair value of the portfolio increased in the reporting period to € 58.9 billion. This includes the increase of around € 4.9 billion resulting from the valuation of our properties, in particular thanks to investments in modernization and new construction and to the increased demand for residential property in major cities.

On the financing side, we raised capital totaling € 2.7 billion on the bond market last year. All issues were several times oversubscribed. We have a proven track record of excellent access to the international capital markets, even in challenging times. This is also reflected in our stable ratings. Our first fully digital registered bond, which we issued in January 2021 on the established Stellar blockchain, is an innovation.

Dear shareholders,

We expect to successfully move forward on the path we have carved out in 2021. In doing so, we will continue to strike a good balance between your interests, the interests of our tenants and those of society. I am grateful that, hand-in-hand with my Management Board team, I am able to lead a company built on a solid foundation with a highly committed management team. This also gives rise to certain obligations. And we will continue to fulfill these obligations.

In only a few weeks' time, on April 16, we will come together for a virtual Annual General Meeting as we did last year. At this event, together with the Supervisory Board, we will be proposing a dividend of € 1.69 per share. Our business model is resilient even in difficult times and is helping to stabilize the overall environment.

Together with my Management Board colleagues, Helene von Roeder, Arnd Fittkau and Daniel Riedl, I would like to thank you, our shareholders, our partners and our employees for the trust you have placed in us over the past year. We look forward to having you by our side as we progress through the current year. We are counting on your support!

Bochum, Germany, March 2021

Sincerely,

Rolf Buch
Chairman of the Management Board

Rolf Buch (CEO)

Report of the Supervisory Board

Dear Readers,

2020 presented major challenges not only for the corporate sector but for society as a whole. In the wake of the pandemic, “home” once again took on a new meaning. Homes became a central place of retreat and protection, and for many of us, also became our mobile offices overnight.

Vonovia’s Management Board and employees were aware of their responsibility for the company’s tenants from the very start of the pandemic. They maintained the infrastructure in our residential developments throughout the crisis and ensured that our customers did not have to go without key services. The company also ensured that residents facing difficult situations received support.

The Management Board lived up to its responsibility for the health of Vonovia’s employees at all times. Health protection for high-risk groups and for those employees working on-site in customers’ homes or in the corporate headquarters and offices was always a top priority. The company implemented all of the protective measures that could be taken to allow employees to work safely under the conditions created by the pandemic. In order to reduce the risk of infection, Vonovia allowed employees to work from home from the very start of the pandemic.

Following the outbreak of the pandemic, two special conference calls were organized by the Management Board on March 20, 2020, and April 2, 2020, followed by further video conferences, to provide the Supervisory Board with information on the current situation, the task force that had been established, the measures taken and the impact of the spread of the coronavirus as well as the implications for the company’s operating business.

The Supervisory Board supported the Management Board in its decisions on the individual measures and also provided support in their further implementation. The Supervisory Board and the Management Board were aware of the particularly sensitive nature of the situation. The restrictions and lockdowns were, and indeed remain, necessary. At the same time, they are creating considerable financial difficulties for parts of the population. As a result, the Supervisory Board supported the Management Board in its decision to find solutions for tenants who had run into financial difficulties or hardship as a result of the pandemic, and to rule out terminating their tenancies.

Even when faced with these special overall conditions, the company continued successfully with its business development in 2020. Our operational projects were continued successfully and our key figures reached the forecast values.

In the 2020 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 notified us regularly, promptly and comprehensively, both in writing and verbally, of all circumstances and measures that were relevant to the company. The Management Board fulfilled its information obligations to an appropriate extent at all times.

At our plenary meetings and in our committees, 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.

Meetings of Supervisory Board and Committees in the 2020 fiscal year

Member	Supervisory Board	Audit Committee	Executive and Nomination Committee	Finance Committee	Participation rate in %
Jürgen Fitschen	8/8	–	7/7	7/7	100
Burkhard Ulrich Drescher	7/8	3/4	–	–	83
Vitus Eckert	8/8	4/4	–	–	100
Prof. Dr. Edgar Ernst	7/8	4/4	–	–	92
Dr. Florian Funck	8/8	4/4	–	–	100
Dr. Ute Geipel-Faber	8/8	–	–	7/7	100
Daniel Just	8/8	–	–	6/7	93
Hildegard Müller	8/8	–	7/7	–	100
Prof. Dr. Klaus Rauscher	8/8	–	7/7	–	100
Dr. Ariane Reinhart	5/8	–	6/7	–	73
Clara-Christina Streit	8/8	–	7/7	7/7	100
Christian Ulbrich	8/8	–	–	6/7	93

Cooperation Between the Management Board and the Supervisory Board

In the last fiscal year, our Supervisory Board consisted of twelve members. We were on hand to support the Management Board in the various meetings held and also in its key decisions. We also kept a close eye on the company's business development outside of meetings. The Management Board regularly informed us about key events and the company's strategic direction as part of a collaboration based on trust.

As Chairman of the Supervisory Board, I maintained regular and close dialogue with the Chairman of the Management Board in particular, but also with the other Management Board members, even outside of the Supervisory Board meetings. The employee representative bodies were involved in communications on key company matters via the Management Board. The Chairman of the Management Board informed me on company-related topics emerging from the Management Board's discussions with representatives of the Group works council, going into an appropriate level of detail. Within this context, the Chairman of the Management Board also reported on the very good and constructive cooperation between the works council and the Management Board in dealing with the challenges created by the coronavirus pandemic. 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.

Main Remit

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 in the 2020 fiscal year. The key focal points were the realignment of investments due to the modified statutory regulations affecting the modernization of our residential real estate, neighborhood development and the undertaking of investments in new homes, the exploitation of opportunities resulting from digitalization, the portfolio strategy, internationalization and the evaluation and provision of support with regard to opportunities for further portfolio expansion.

In addition, we looked at the new remuneration and governance requirements resulting from the entry into force of the "Act Implementing the second shareholders' rights directive" (ARUG II) and the new version of the German Corporate Governance Code (GCGC 2020). We discussed these requirements in depth and implemented them in a revamped remuneration system for the Management Board and the Supervisory Board.

In addition, we took an in-depth look at the future management structure and the succession plan for the Management Board of the company.

Meetings

The necessary coronavirus protection measures and the contact restrictions imposed to reduce the risk of COVID-19 infection meant that only one face-to-face meeting of the

Supervisory Board was held in the 2020 fiscal year. All other meetings were held via conference call and video conference.

The Supervisory Board met a total of eight times to consult and pass resolutions: once in a face-to-face meeting in March, once in a conference call held in May, and six times at meetings organized as video conferences (June, September, October, November, and December). The Supervisory Board made decisions using the written procedure in two cases (March and June). Any individual members absent from the eight meetings had always been excused.

No member of the Supervisory Board took part in less than half of the meetings during their term of office. Participation in the eight Supervisory Board meetings averaged around 95% in the past fiscal year. 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

On **March 4, 2020,** the Supervisory Board met to adopt the statement of financial position. It approved the company's annual and consolidated financial statements as of December 31, 2019. The agenda and the resolution proposals for the Annual General Meeting were discussed and adopted. The Supervisory Board approved the proposal for the appropriation of profit to be made to the Annual General Meeting as well as the proposal that the dividend be paid either in cash or in the form of shares. Furthermore, the Supervisory Board approved the Non-financial Declaration and decided to engage KPMG to review the CSR Report and the Non-financial Declaration for the 2020 fiscal year. In its reporting on business performance in the individual segments, the Management Board also presented the newly launched Vonovia customer app, among other things. Digitalization within the company and in customer services was the subject of discussion within this context.

Under the "HR-related matters" agenda item, the Supervisory Board discussed remuneration issues relating to the Management Board (including target agreements, short-term and long-term incentive plans, the target achievement level under the 2019 short-term incentive plan, payment of the 2019 long-term incentive plan tranche) and passed corresponding resolutions. The Supervisory Board continued to discuss the issue of succession planning for Management Board positions in general.

On March 30, 2020, the Supervisory Board used the written procedure to approve the Management Board's decision to hold the Annual General Meeting on June 30, 2020, and to organize it as a virtual event if necessary.

In the video conference held on **May 12, 2020**, the Supervisory Board addressed the current situation and the impact of the coronavirus pandemic at Vonovia. Within this context, the Supervisory Board confirmed the Management Board's resolution to hold a virtual Annual General Meeting based on the statutory provisions on the coronavirus pandemic and the requirements defined by the Management Board. Other topics included financial performance, operational performance in the Rental, Development and Value-add segments, and developments at the Swedish Group companies.

In its discussions on HR-related matters, the Supervisory Board once again looked at the succession arrangements for the Management Board. With Daniel Riedl's Management Board appointment set to expire in May 2021, the Supervisory Board passed a resolution on its intention to reappoint Mr. Riedl as a member of the Management Board for the period leading up to May 31, 2026, which was implemented by a reappointment resolution passed at the meeting held on November 27, 2020.

On **June 22, 2020**, we approved a resolution passed by the Management Board on the issue of a bond worth up to € 1.5 billion under the EMTN program using the written procedure.

In a video conference held on **June 29, 2020**, the Supervisory Board approved the Management Board's fundamental resolution on the partial use of the 2018 authorized capital in connection with the 2020 scrip dividend in the amount of up to € 18 million.

In the video conference held on **September 3, 2020**, we addressed a resolution passed by the Management Board on a cash capital increase, excluding subscription rights, using accelerated bookbuilding (ABB), and delegated the required decisions on approval to the Finance Committee.

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 2020, the focal points of the audit and fee for the auditor of the annual financial statements for the 2020 fiscal year. We also approved a procedure proposed by the Management Board for monitoring related party transactions. In addition to the reports on operating business development in the individual segments, discussions also focused on the presentation of the company's strategy.

In a video conference held on **October 23, 2020**, and based on the requirements set out in the ARUG II legislation and the new recommendations made in the GCGC 2020, we passed a fundamental resolution on adjustments to the remuneration system for the Management Board and the Supervisory Board, and to the Management Board employment contracts, to take effect on January 1, 2021. We made the decisions on the amendments and supplements after consulting legal experts on the drafting of contracts for members of executive bodies and an independent and experienced remuneration consultant.

After reviewing the remuneration paid to the Management Board in the context of recent evaluations of market data, we decided to make adjustments to the remuneration paid to the ordinary Management Board members.

In line with the adjustments made to the Management Board remuneration system, agreements amending the Management Board employment contracts were reached with the Management Board members. Among other things, all Management Board members agreed to the establishment of malus and clawback provisions.

The rules of procedure for the Supervisory Board and the Management Board were revised and the amended versions adopted.

In the video conference held on **November 27, 2020**, the Supervisory Board discussed, and passed a resolution on, the necessary amendment agreements to implement the revised Management Board remuneration system with effect from January 1, 2021, in the Management Board employment contracts. It also defined the maximum remuneration taking into account the remuneration structure and the company pension obligations.

The Supervisory Board also discussed a change in the company pension scheme and offered the ordinary members of the Management Board the option of receiving pension remuneration, to be put towards their own personal provision for retirement, instead of using the current deferred compensation scheme.

The Supervisory Board adopted the Declaration of Conformity to the GCGC in the version published on March 20 and, in this Declaration, declared a deviation from the recommendation made in G.13 sentence 2 and, as a precaution, also a deviation from the recommendation made in G.13 sentence 1 GCGC 2020 for reasons relating to vested rights and in order to be able to take account of the particular circumstances of the individual case.

In a video conference held on **December 4, 2020**, we addressed topics including financial issues. We held a digital session on **December 15, 2020**, and adopted the budget for 2021 submitted by the Management Board. We approved the budget and discussed the medium-term planning for the next five years. For the STIP (short-term incentive plan) Management Board remuneration component, we adopted the corporate targets for the 2021 fiscal year and also adopted the target values for the Management Board members in the 2021 performance period for the purposes of the 2021–2024 LTIP (long-term incentive plan).

We passed a resolution finalizing the remuneration system for the Management Board and the Supervisory Board developed in accordance with Section 87a of the German Stock Corporation Act (AktG).

Other topics included the reports on operating business performance in the individual segments, financial performance and capital market performance.

The Management Board also provided information on the introduction of the Sustainability Performance Index (SPI) as part of Vonovia's management system, which is also a target parameter used in the revised Management Board remuneration system.

Duties of the Committees

The Supervisory Board made use of the existing committees (Audit Committee, Finance Committee and Executive and Nomination Committee) to effectively perform its work. 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. The Chairman was Prof. Dr. Edgar Ernst. The other members were Burkhard Drescher, Vitus Eckert and Dr. Florian Funck. In 2020, the Audit Committee met four times (March, May, August, November).

At the meeting held on **March 4, 2020**, the Committee reviewed the annual and consolidated financial statements as of December 31, 2019, as well as the combined management report for the 2019 fiscal year. Its review took account of both the company's reports and the reports prepared by the auditor KPMG. The auditor considered the main points of the audit of the consolidated financial statements to be the valuation of investment properties located in Germany and Austria, the value of the goodwill as well as the identification and measurement of assets acquired in the context of the acquisition of Hembla. 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 2020 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. Further topics included the company's CSR reporting and the outcome of the audit of the Non-financial Declaration conducted by Internal Audit. The Committee recommended that the Supervisory Board approve the Non-financial Declaration. Within this context, the Audit Committee decided that the audit of the Non-financial Declaration as part of the company's CSR reporting and of the sustainability report would be conducted by the auditor of the annual financial statements in the future.

Other topics of discussion included the compliance report and the Internal Audit status report, which confirmed the effectiveness of the internal control system (ICS), among other things.

In the conference call held on **May 4, 2020**, the Committee looked at the condensed consolidated interim financial statements as of March 31, 2020. It discussed the company's report and the auditor's report. No financial implications of the coronavirus pandemic were identified.

The Committee also took an in-depth look at the risk management and compliance reports, as well as the Internal Audit status report. In addition, the committee members looked at the report on the company's tax situation and, within this context, the status of the ongoing company tax audits.

In the video conference held on **August 4, 2020**, the Committee approved the consolidated interim financial statements as of June 30, 2020 and passed a resolution on the commissioning of KPMG AG Wirtschaftsprüfungsgesellschaft to audit the annual and consolidated financial statements as of December 31, 2020. The Committee obtained information on the implementation of the General Data Protection Regulation (GDPR) within the Vonovia Group. Other topics included the Internal Audit and compliance management status reports.

The Committee met via video conference on **November 3, 2020**, and discussed the condensed consolidated interim financial statements as of September 30, 2020, 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 the report on the major legal disputes. It also discussed the report prepared by the Internal Audit department on the status of its audits and set the audit plan and audit budget for the Internal Audit department for the 2021 fiscal year.

Finance Committee

In 2020, the Finance Committee consisted of five members. The Chairperson was Clara-Christina Streit.

The other members were Jürgen Fitschen, Dr. Ute Geipel-Faber, Daniel Just and Christian Ulbrich. The Finance Committee met seven times in the reporting year, once at a face-to-face meeting (March) and five times using conference calls (twice in June, three times in September) and one video conference (December). The Committee made decisions using the written procedure in two cases (July, August).

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 meeting held on **March 4, 2020**, the Finance Committee approved the issue of bonds worth up to € 1 billion under the EMTN program.

In a conference call held on **June 21, 2020**, the Committee discussed a bond issue of up to € 1.5 billion as part of the EMTN program planned by the Management Board, and recommended that the Supervisory Board approve the issue.

In a video conference held on **June 30, 2020**, the Finance Committee approved the Management Board's fundamental resolution on the partial use of the 2018 authorized capital in connection with the 2020 scrip dividend and used a written circular on July 24, 2020, to approve the more detailed resolution passed by the Management Board on the implementation of the non-cash capital increase.

On **August 12, 2020**, the Committee approved the early extension of the existing RCF line of € 1.0 billion by one year using the written procedure.

In a video conference held on **September 2, 2020**, and a conference call held on **September 3, 2020**, the Finance Committee approved the passing of a resolution by the Management Board on a cash capital increase, excluding subscription rights, using accelerated bookbuilding. At a second conference call held on September 3, 2020, the Finance Committee approved the modified resolution submitted by the Management Board to increase the company's share capital, using the authorized capital, by € 17 million in return for cash contributions by issuing the same number of no-par-value shares, and to undertake their placement. On **December 4, 2020**, we dealt with topics such as financial matters in the Committee.

Executive and Nomination Committee

In the fiscal year under review, the Executive and Nomination Committee consisted of five members. The Committee was headed up by Jürgen Fitschen as Chairman of the Supervisory Board. The other members were Hildegard Müller, Prof. Dr. Klaus Rauscher, Dr. Ariane Reinhart and Clara-Christina Streit. The Executive and Nomination Committee met seven times in 2020, twice using conference calls (January, February) and five times at meetings organized as video conferences (August, September, October, November, December). The Committee made one decision by written circular.

At a conference call held on **January 31, 2020**, the Committee discussed and approved the structure of the long-term incentive plan, tranche 2020–2023, for the 2020 performance period and the corporate objectives for the 2020 short-term incentive plan as a recommendation to be made to the Supervisory Board. At the meeting held on **February 19, 2020**, the Committee developed resolution proposals for the Supervisory Board on the 2019 short-term incentive plan (target achievement), the 2020 short-term incentive plan (target agreements) and the long-term incentive plan for the Management Board (2020 tranche), as well as the payout of the long-term incentive plan tranche from 2019. The Committee reviewed the appropriateness of the remuneration paid to the Management Board and recommended that a further discussion be held given the upcoming regulatory and statutory changes. The Committee also discussed staff planning within the Management Board and, among other things, used the written procedure to approve an advisory board mandate to be assumed by a Management Board member on May 27, 2020.

At video conferences held on **August 17, 2020, September 15, 2020, October 15, 2020 and November 24, 2020**, the Executive Committee discussed necessary adjustments to the remuneration system for the Management Board and the Supervisory Board. It also discussed adjustments to the Management Board employment contracts to reflect the provisions set out in the ARUG II legislation and in the GCGC 2020. The Committee adopted corresponding recommendations on decisions to be made by the Supervisory Board.

In its discussions, the Committee addressed topics including malus and clawback provisions in the remuneration system and in the Management Board employment contracts. The Executive Committee also reviewed the appropriateness of the Management Board remuneration and recommended adjustments to the remuneration paid to ordinary Management Board members. The recommendations also related to the agreements amending the Management Board employment contracts and the maximum compensation to be defined.

The Committee discussed the current and future structure of the company pension scheme for Management Board members.

In its discussions, the Executive Committee drew on the expertise of an experienced law firm and an independent remuneration consultant. In the context of the adjustments to the remuneration, the remuneration consultant supplied comparative market data.

The Executive Committee also looked at the issue of staff planning within the Management Board. Among other things, the Committee recommended that Mr. Riedl be reappointed as a Management Board member until 2026.

On December 15, 2020, the Committee discussed the final version of the remuneration system for the Management Board and the Supervisory Board. The Executive Committee recommended the corporate targets for the Management Board's short-term incentive plan (STIP) for 2021 and the target values for the 2021- 2024 performance period for the purposes of the long-term incentive plan (LTIP).

The Executive Committee also approved the Management Board's decision to introduce a new deferred compensation scheme for company pension provision for employees of the Vonovia Group.

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 November 27, 2020, 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 June 30, 2020, to audit financial statements for the 2020 fiscal year, KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, has duly audited the annual financial statements and consolidated financial statements of Vonovia SE as of December 31, 2020, and the combined management report for the 2020 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, 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 2020 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 3, 2021, 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 his independent mandate in the second half of 2020, and had already been discussed and agreed upon with the Audit Committee in advance.

In the 2020 fiscal year, with regard to the consolidated financial statements, particularly key audit matters included the value of goodwill and the valuation of investment properties.

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 3, 2021, 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 2020 fiscal year, a dividend of € 1.69 per share or € 956,349,535.31 in total on the shares of the share capital as of December 31, 2020, 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, 2020.

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

There were no staff changes within the company's management team during the reporting period.

Concluding Remarks

We would like to thank the Management Board for its successful management of the company in the challenging pandemic year of 2020. We also want to thank the company's employees for the particular commitment shown by them in difficult conditions as a result of the coronovirus pandemic. We would like to thank the employee representative bodies for another year of constructive collaboration.

Bochum, March 3, 2021

For the Supervisory Board

Jürgen Fitschen

Management Board

The Management Board of Vonovia SE consisted of four members as of December 31, 2020.

Rolf Buch
Chairman of the Management Board (CEO)

As Chief Executive Officer, Rolf Buch is responsible for transactions, Value-add, general counsel, investor relations, IT, HR management, auditing, corporate communications and sustainability/strategy. Rolf Buch joined the company in 2013 and led Vonovia to its listing on the stock exchange. Prior to his move to the company, he spent 22 years in various leadership positions at Bertelsmann, ultimately as a Management Board member at Bertelsmann SE and Chairman of the Management Board at Arvato AG. He is a member of the executive board of the German Association of German Housing and Real Estate Companies (GdW), vice president of the German central real estate committee Zentraler Immobilien Ausschuss (ZIA) and the German Association for Housing, Urban and Spatial Development, and member of the Board of the European Public Real Estate Association (EPRA) in Brussels. He studied mechanical engineering and business management at RWTH Aachen University.

Arnd Fittkau
Member of the Management Board

In his role as Chief Rental Officer, Arnd Fittkau is responsible for the property management business in the North, East, South and West business areas, as well as for customer service and portfolio and tenant management. Following completion of a management training program at MAN Gutehoffnungshütte AG (1992–1996), Arnd Fittkau started his career in various controlling functions. After holding positions at MAN AG in Munich and Hochtief AG in Essen, he joined the company now known as Vonovia in 2002. He spent three years as Head of Controlling for the GAGFAH Group starting in 2005. Since 2008, Arnd Fittkau has held several managing directorships at Vonovia subsidiaries in various locations such as Bochum, Munich, Frankfurt and Gelsenkirchen. Most recently, he held the position of chief representative of Vonovia SE from the beginning of March 2018 and chaired the regional management teams.

Helene von Roeder
Member of the Management Board

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. She is a member of the Government Commission on the German Corporate Governance Code. Before being appointed to the Management Board of Vonovia SE, 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

In his 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.

Jürgen Fitschen
Chairman
Senior Advisor at Deutsche Bank AG

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

Burkhard Ulrich Drescher
Managing Director of Innovation City Management GmbH

Vitus Eckert
Attorney, Shareholder and Managing Director of Eckert Fries Carter 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
President of the German Association of the Automotive Industry (VDA)

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
President and Chief Executive Officer Jones Lang LaSalle Incorporated

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, Chairwoman
Dr. Ute Geipel-Faber
Jürgen Fitschen
Daniel Just
Christian Ulbrich

Corporate Governance

In this corporate governance declaration (also known as the Corporate Governance Report), we report on the principles of management and corporate governance for the last fiscal year in accordance with Sections 289f and 315d of the German Commercial Code (HGB) and Principle 22 of the German Corporate Governance Code (GCGC, as published on December 16, 2019). 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/en**. Pursuant to Section 317 (2) (6) HGB, the disclosures pursuant to Sections 289f and 315d HGB are not included in the audit performed by the auditor of the annual financial statements.

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 ensure 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 real estate 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 institute 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 customers, business partners 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 are 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 most recent Declaration of Conformity is valid for at least the next five years and the Declarations of Conformity that are no longer valid can be found on the company's website.

The Management Board reports in its declaration, also on behalf of the Supervisory Board, on important aspects of corporate governance pursuant to Section 289f of the German Commercial Code (HGB) and Principle 22 of the German Corporate Governance Code (GCGC) 2020.

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, since the last declaration of conformity was made in November 2019, the company has complied with the recommendations made by the Government Commission on the German Corporate Governance Code in the version published in the official section of the federal gazette by the German Federal Ministry of Justice on February 7, 2017 (GCGC 2017).

In the future, the company will comply with the recommendations set out in the German Corporate Governance Code in the version published on March 20, 2020 (GCGC 2020), with the following restrictions.

Pursuant to G.13 sentence 1 GCGC 2020, any payments made to a Management Board member due to early termination of their Management Board activity shall not exceed twice the annual remuneration (severance pay cap) and shall not constitute remuneration for more than the remaining term of the employment contract. No. 4.2.3 (5) GCGC 2017 recommended that benefit commitments made in connection with the early termination of a Management Board member's activity due to a change of control did not exceed 150% of the severance cap. The GCGC 2020 no longer contains any explicit recommendation for benefits resulting from a change of control. It is unclear whether the general recommendation made in G.13 sentence 1 GCGC 2020 on the severance amount applies in this regard. The existing Management Board employment contracts already largely comply with the recommendation set out in G.13 sentence 1 GCGC 2020. The Supervisory Board reserves the right, however, when contracts are extended or future contracts are concluded, to reach agreements that are consistent with the recommendation set out in No. 4.2.3 (5) GCGC 2017 to take account of interests relating to vested rights and the particular circumstances of the individual case. As a result, we declare as a precaution that the recommendation made in G.13 sentence 1 GCGC 2020 is not complied with.

Pursuant to G.13 sentence 2 GCGC 2020, if post-contractual non-competition clauses apply, the severance payments shall be taken into account in the calculation of any compensation payments. Even before the GCGC 2020 entered into force, post-contractual non-competition clauses were agreed with individual Management Board members. These do not provide for severance payments to be taken into account in the calculation of any compensation payments. When contracts are extended or future contracts are concluded, the Supervisory Board reserves the right, in the interests of flexibility or for reasons relating to vested rights, to make decisions on agreeing to take severance payments into account in the calculation of any compensation payments on a case-by-case basis. As a result, we declare that the recommendation made in G.13 sentence 2 GCGC 2020 is not complied with.

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 the 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 previous remuneration system for Management Board members have been approved by the Annual General Meeting. The Chairman of the Supervisory Board will now present the enhanced remuneration system to the Annual General Meeting in line with the German Stock Corporation Act and the GCGC for approval.

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 four fiscal years 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.

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 2020 fiscal year, the Supervisory Board had eight 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, did 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 Conflicts of Interest → p. 33).

Supervisory Board Self-Assessment

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 evaluation, supported by a moderator and conducted in the fourth quarter of 2019, revealed that the Supervisory Board performs its work efficiently (see Report of the Supervisory Board → **p. 16 et seqq.**).

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 members of the Executive and Nomination Committee are Mr. Jürgen Fitschen (Chairman), Ms. Hildegard Müller, Prof. Dr. Klaus Rauscher, Dr. Ariane Reinhart and Ms. Clara-Christina Streit.

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 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 members of the Audit Committee are Prof. Dr. Edgar Ernst (Chairman), Mr. Burkhard Ulrich Drescher, Mr. Vitus Eckert and Dr. Florian Funck.

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 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** consists of the Supervisory Board Chairman or the latter's Deputy Chairman and four other members, namely Ms. Clara-Christina Streit (Chairwoman), Mr. Jürgen Fitschen, Dr. Ute Geipel-Faber, Mr. Daniel Just and Mr. Christian Ulbrich.

The Finance Committee 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, the handling of credit risks and the implementation of external financing principles, and also on important transactions regarding the acquisition and disposal of properties and shares in companies as well as corporate 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 Arnd Fittkau, Helene von Roeder and Daniel Riedl. Further information can be found on → p. 23. 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 in good time to the Supervisory Board, or to one of its committees where particular powers are delegated to them.

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. The internal procedure put in place by the Supervisory Board to evaluate these transactions is set out in the Report 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, and criteria defined in the GCGC that applied in the fiscal year under review, 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 two 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 twelve 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.

Supervisory Board Qualifications Profile

					Key skills & areas of experience*							
Name	Independent	Year of birth	Year appointed	Nationality	Finance, accounting, financial planning and analysis	Real estate	Strategy	Legal and regulation	International experience, M&A, capital markets	Investment expertise	Digitalization	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		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/U.S.	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 experience.

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 now comprises 20% women, with the second level comprising 26% due to normal staff turnover. The aim is to use ongoing systematic succession planning to achieve the target ratio of 30% by December 31, 2021 at both levels of management.

Succession planning: The Supervisory Board addresses long-term succession planning for the Management Board on an ongoing basis. Last year, the Supervisory Board once again discussed positions to be filled in the Management Board and long-term workforce planning.

Cooperation Between the Management Board and the Supervisory Board

The Management Board develops the strategy of the company in cooperation with the Supervisory Board and discusses the current status of its implementation with the Supervisory Board 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 as well as compliance management at Vonovia SE. 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) (information on grounds for exclusion and disqualification due to impairment of the auditor's independence) and 7.2.3 (report on major findings) 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 (4) and 315 (4) of the German Commercial Code.

Overview

> Positive business performance in the 2020 pandemic year thanks to stable business model
> Focus on maintaining business operations and on protecting employees and tenants
> Significant improvement in customer satisfaction
> Strategy recalibrated to include sustainability aspects and Sustainability Performance Index introduced as a control parameter
> Successful implementation of the new Construction and Modernization Strategy, around 2,100 new apartments created

Vonovia can report positive growth in the pandemic year of 2020. Total Segment Revenue increased by 6.3% to around € 4.4 billion in 2020.

The Adjusted EBITDA Total came to € 1,909.8 million, an increase of 8.5% as against the 2019 figure. Group FFO improved by 10.6% from € 1,218.6 million to € 1,348.2 million.

The Adjusted NAV per share came in at € 59.47, up by 14.4% on the prior-year value of € 52.00. At around € 1.9 billion, investments in 2020 were almost on a par with the previous year.

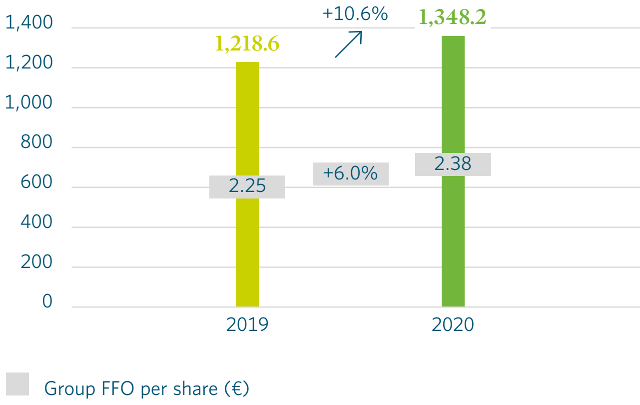
This means that, all in all, the coronavirus pandemic only had a minor impact on the company's operating business and investment projects, with some postponements to 2021.

Customer satisfaction, as measured using the CSI, improved significantly, by 8.6%, in the 2020 fiscal year.

Sustained Earnings

Group FFO

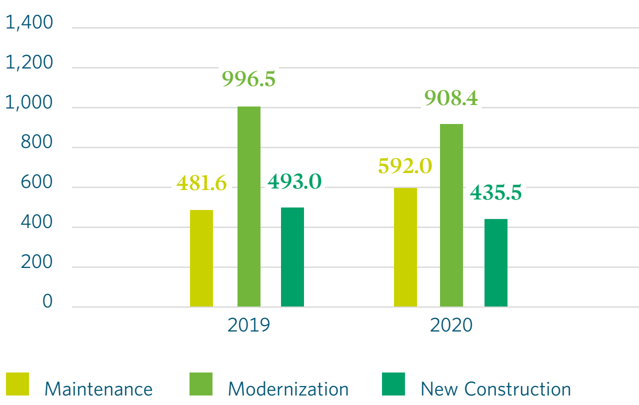
in € million



Maintenance, Modernization and New Construction

Investments

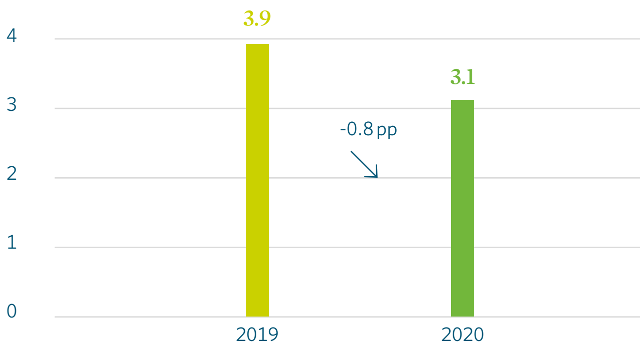
in € million



Organic Rent Growth

Organic Rent Growth

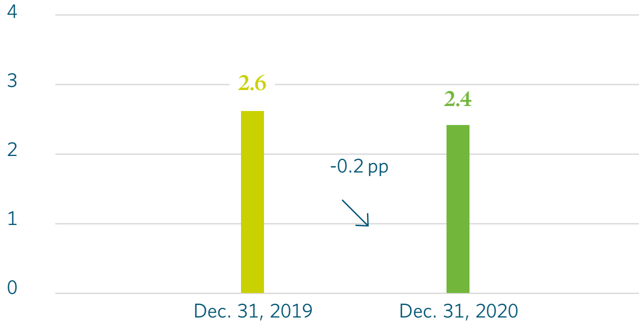
in %



Vacancy

Vacancy Rate

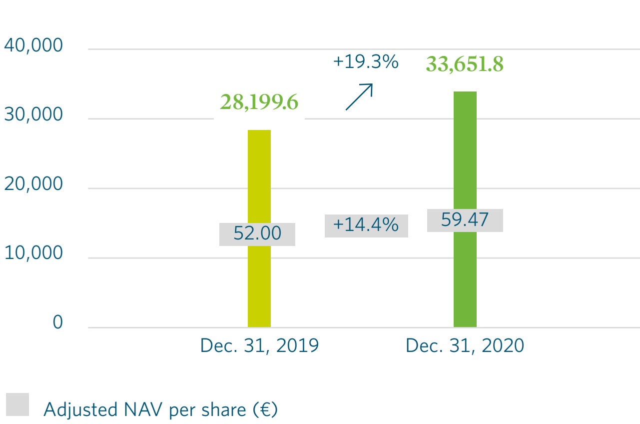
in %



Net Assets

Adjusted NAV

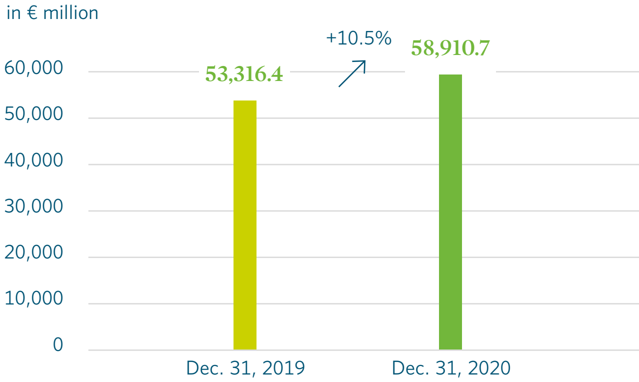
in € million



Fair Value of the Real Estate Portfolio

Fair Value of the Real Estate Portfolio

in € million



Vonovia SE on the Capital Market

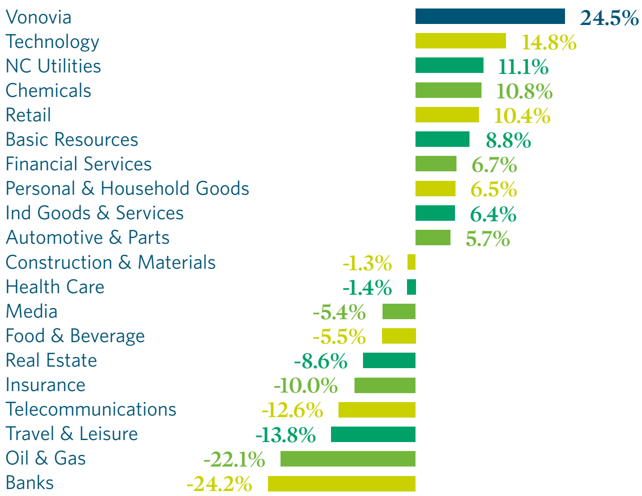
> Dividend increased for the seventh time in a row
> Share price performance in 2020: +24.5%
> Admission to DAX 50 ESG and DJSI Europe indices underscores Vonovia's successful focus on sustainability
> Membership of EURO STOXX 50 illustrates international significance and perception of Vonovia's shares

Developments on the International Capital Markets

The global coronavirus pandemic had a huge impact on the international capital markets from February 2020 onwards. At the end of 2020, the capital markets, as well as the German leading index DAX, were showing clear signs of a recovery. While the DAX shed around 25% in the first quarter of 2020, the loss incurred by the DAX as against December 31, 2019, came to only 3% by September 30, 2020. The DAX moved largely sideways in the fourth quarter of 2020, closing the year up by 3.5%.

Developments varied very considerably from sector to sector in the course of 2020. The tourism, leisure and events industries as well as the aircraft manufacturing sector suffered the heftiest losses. Varying developments also emerged within the real estate sector: The EPRA index, for example, which serves as a barometer for European real estate stocks, slid by 11% in 2020. This negative development can be attributed primarily to the drastic share price losses affecting commercial, hotel and office real estate companies, which were dealt a particularly hefty blow by income losses. German residential real estate stocks, on the other hand, once again proved to be stable.

Sector Development in 2020



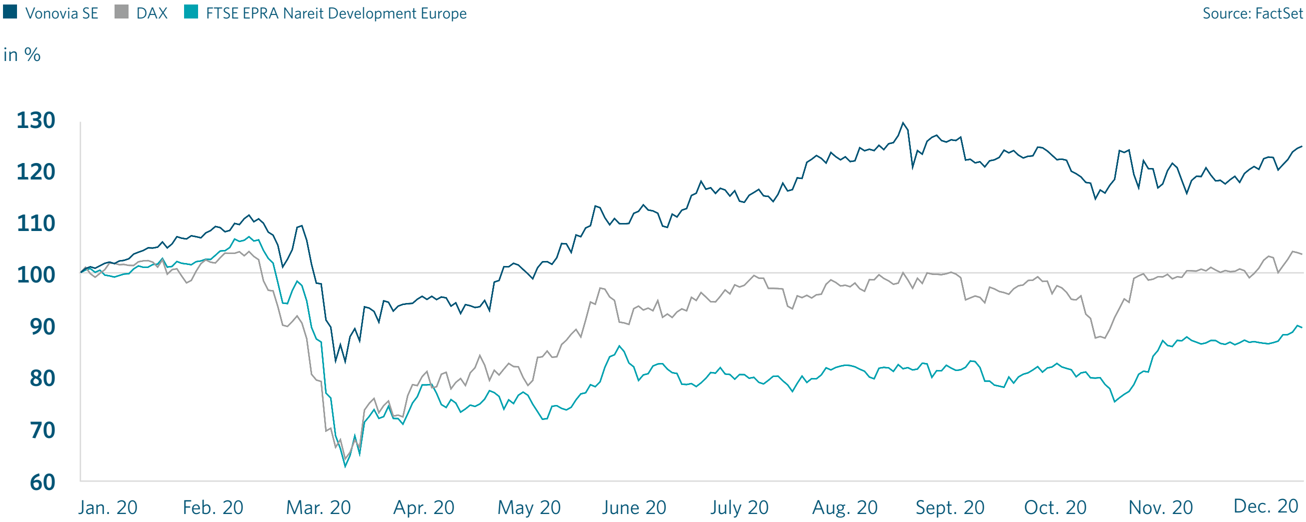
Shares in Vonovia

After a volatile first quarter and a low of € 38.60 reached on March 18, 2020, the price of Vonovia's shares rose by a total of 24.5% in 2020 to € 59.76. On September 2, 2020, Vonovia reached a new all-time high of € 62.74 (intraday). At the end of the year, the company's shares had gained 24.5% year-on-year, clearly outperforming the relevant benchmark indices such as the DAX 30, FTSE EPRA/NAREIT Europe, MSCI Germany and EURO STOXX 50, which closed the year either with slight gains, as with the DAX (3.5%) and the MSCI Germany (0.1%), or with losses, as with the EPRA (-10.7%) and the EURO STOXX 50 (-4.7%).

Vonovia's shares reached their highest closing price of € 62.22 on September 2, 2020, and their annual low of € 38.60 on March 18, 2020.

Vonovia's market capitalization amounted to around € 33.8 billion as of December 31, 2020.

Share Price Development



As a residential real estate company, Vonovia's operating business is only marginally affected by the coronavirus pandemic. Particularly on the demand and the resulting income side, we still do not expect the crisis to have any impact to speak of. Rather, the main long-term megatrends will remain the dominant forces driving our business: urbanization and the resulting imbalance between supply and demand as well as climate change and the reduction of CO_2 emissions in the housing stock. Other key factors include demographic change and senior-friendly apartment conversion. We are optimistic as we look ahead to the future and are confident that we will remain financially successful.

The average trading volume for shares in Vonovia SE, expressed as the number of shares traded on XETRA, rose from an average daily trading volume of 1.46 million shares in 2019 to 1.64 million shares in 2020. Expressed in euros, shares in Vonovia worth € 86 million were traded every day on average in 2020, a figure that was up by 30% on 2019.

New Index Memberships: Vonovia SE Member of the EURO STOXX 50, DAX 50 ESG and DJSI Europe

Vonovia SE was included in the European blue chip stock index EURO STOXX 50 effective September 18, 2020. Vonovia is the only real estate asset currently in Europe's leading index, as well as the first residential real estate asset overall.

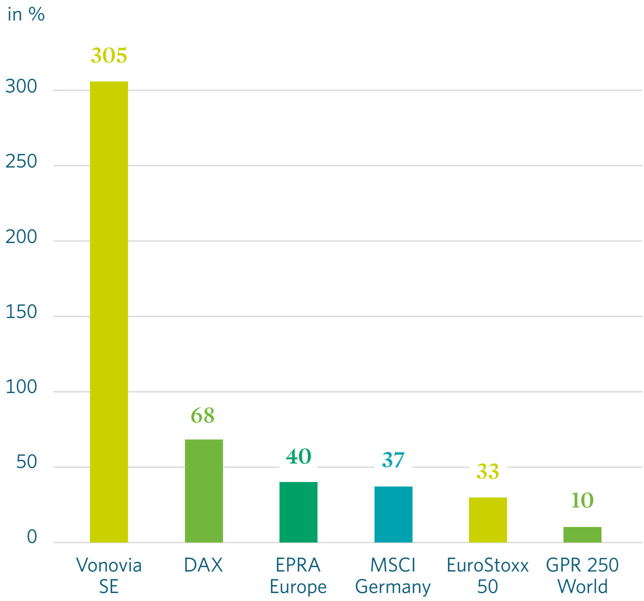
The basis for the classification is the free float market capitalization based on the closing price at the end of August 2020. Seven years after its initial listing in July 2013 (approximately € 0.4 billion) and five years after its promotion to the DAX 30 (approximately € 13 billion), Vonovia's free float market capitalization has increased to more than € 30 billion.

Vonovia has been a member of various sustainability indices since 2020, in particular the DAX 50 ESG and the Dow Jones Sustainability Index (DJSI Europe), which confirms Vonovia's ESG activities and the progress made in this area.

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 their securities deposit account increase by 305% by December 31, 2020, achieving a result that far outstrips the performance of a corresponding investment in the benchmark indices.

Yield since Vonovia IPO

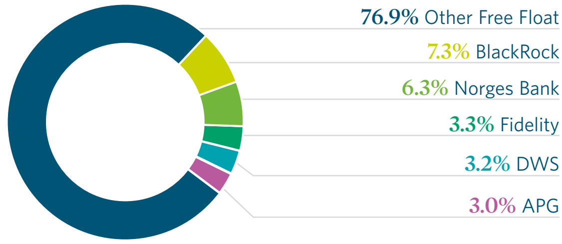


VNA and DAX performance are total shareholder return (share price plus dividends reinvested); EuroStoxx50 and EPRA Europe are share price performance only.

Shareholder Structure

The following chart 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. It is important to note that the number of voting rights reported could have changed within the respective thresholds without triggering an obligation to notify the company.

Major Shareholders (as of December 31, 2020)



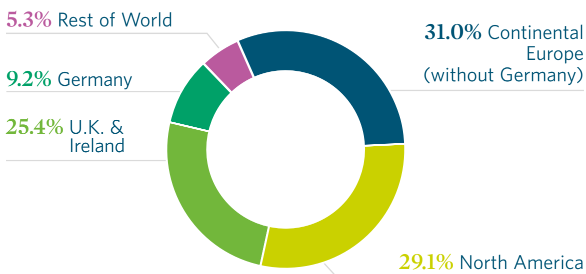
Based on the German stock exchange's definition of free float, only the interest held by Norges Bank (Ministry of Finance on behalf of Norway) does not count towards the free float. This means that 93.7% of Vonovia's shares were in free float on December 31, 2020. The underlying voting rights notifications and corresponding financial instruments reported by shareholders or other instruments pursuant to Sections 38 and 39 WpHG can be found online at:

https://investoren.vonovia.de/en/news-and-publications/disclosure-of-voting-rights/

In line with Vonovia's long-term strategic focus, the majority of its investors also have a long-term focus. The company's investors include pension funds, sovereign wealth funds and international asset managers in particular. We determine/update the shareholder structure once a quarter. We determined approximately 95% of our shareholder base as of the end of 2020. 91% of our shareholders are institutional investors and around 4% are private investors. The breakdown of the company's shareholders by region is roughly as follows:

Regional Distribution of Institutional Investors of Vonovia SE

Source: Own survey by NASDAQ



2020 Annual General Meeting

Vonovia conducted its very first virtual Annual General Meeting on June 30, 2020. Given the health-related risks and official requirements imposed as a result of the coronavirus pandemic, it was impossible to hold an Annual General Meeting allowing participants to be physically present. The Annual General Meeting was chaired by Jürgen Fitschen, Chairman of the Supervisory Board of Vonovia SE. Together with Rolf Buch, CEO of Vonovia SE, he spoke to the company's shareholders from a studio set up at the corporate headquarters in Bochum. The Annual General Meeting, which also featured sign language interpretation, was streamed live in the Investor Portal on the Investor Relations website.

Shareholders had submitted their questions for the general debate electronically in advance. Their voting rights could be exercised before and during the Annual General Meeting electronically, per postal vote or by authorizing the company's proxies.

With 700 participants representing 79% of the share capital present at the same time, all resolution proposals were approved with a large majority. The dividend of € 1.57 per share proposed to the company's shareholders for the 2019 fiscal year also found broad support among Vonovia's shareholders. This corresponds to a dividend yield of 3.3% based on the cut-off date of December 31, 2019, and an increase of 9% compared to the previous year. Shareholders were once again able to choose either a conventional cash dividend or payment in the form of shares. 40.7% of shareholders opted for the scrip dividend.

The dividend for the 2019 fiscal year was paid out from a contribution account for tax purposes. It was therefore paid out without capital gains tax or the solidarity surcharge being deducted.

Since 2018, the investor portal has given our shareholders the option to conveniently attend to all formalities relating to registering for and voting at the Annual General Meeting online. **http://investors.vonovia.de/investorportal**

Investor Relations Activities

In 2020, Vonovia participated in a total of 31 investors' conference days and organized 27 roadshow days. In addition, Vonovia took part in various investor forums and numerous one-on-one meetings with investors and analysts to keep them informed of current developments and special issues. In 2020, we spoke to around 410 analysts and investors. In addition to the coronavirus pandemic and its impact on Vonovia's business model, our talks with the capital market covered the topics of sustainability, rent

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

	2013	2014	2015	2016	2017	2018	2019	2020
Annual closing price (€)	17.13*	26.75*	28.55	30.91	41.39	39.59	48.00	59.76
High (€)	18.79*	26.75*	33.23	36.81	41.88	44.70	48.84	62.74
Low (€)	16.75*	17.13*	24.19	24.99	29.96	36.20	40.00	36.71
No. of shares as of Dec. 31 (in million)	224.2	271.6	466.0	466.0	485.1	518.1	542.3	565.9
Market cap as of Dec. 31 (€ billion)	3.84*	7.3*	13.3	14.4	20.1	20.5	26.0	33.8
Average transaction volume per day (VWAP in € million)	1.3*	12.3*	45.2	41.2	47.6	55.8	66.0	85.7
Dividend per share (€)	0.67*	0.74*	0.94	1.12	1.32	1.44	1.57	1.69**
Dividend yield (%)	3.9	2.8	3.3	3.6	3.2	3.6	3.3	2.8

* Values are TERP-adjusted.
** Planned dividend proposed to the Annual General Meeting 2021.
Source of share prices: FactSet

regulation in Germany and national and international acquisition targets particularly frequently.

After we were forced to suspend our annual Capital Markets Day for institutional investors and analysts in 2020, our upcoming Capital Markets Day is expected to take place as a hybrid event on September 29, 2021. You can find more details on our website: **https://investoren.vonovia.de/en/news-and-publications/capital-markets-day**

We will also continue to communicate openly with the capital market in 2021. Various roadshows, conferences and investor forums have already been planned. Information can be found in the Financial Calendar on our Investor Relations website: **https://investoren.vonovia.de/en**

Positive Analyst Assessments

As of December 31, 2020, 28 analysts were publishing studies on Vonovia on a regular basis (figure as of December 31, 2020). The average target share price was € 62.10 per share as of December 31, 2020, with 67.9% of analysts issuing a "buy" recommendation, 28.6% issuing a "hold" recommendation and 3.6% issuing a "sell" recommendation.

For the current consensus as well as information on the banks that report on Vonovia and value its shares, please visit our website: **https://investoren.vonovia.de/en/share-information/analysts-and-consensus**

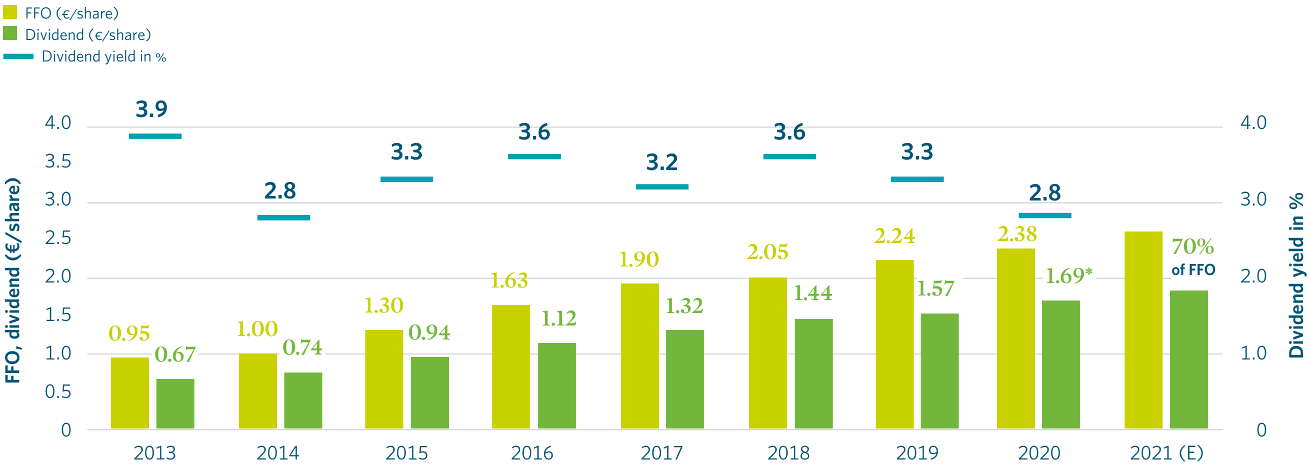
Share Information (as of December 31, 2020)

First day of trading	July 11, 2013
Subscription price	€ 16.50
Total number of shares	565,887,299
Share capital	€ 565,887,299
ISIN	DE000A1ML7J1
WKN	A1ML7J
Ticker symbol	VNA
Common Code	94567408
Share class	Registered shares with no par value
Stock exchange	Frankfurter Stock Exchange
Market segment	Regulated market
Indices	DAX, Euro Stoxx 50, DAX 50 ESG, Dow Jones Sustainability Index Europe, STOXX Global ESG Leaders, EURO STOXX ESG Leaders 50, STOXX Europe ESG Leaders 50, FTSE EPRA/NAREIT Developed Europe and GPR 250 World.

Attractive Dividend

The continuity of our business model 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 2020 fiscal year is concerned, we plan to propose a dividend per share of € 1.69 to the Annual General Meeting, which represents an increase of € 0.12 per share as against 2019 and corresponds to a dividend yield of 2.8% based on the closing price of the company's shares of € 59.76 as of December 31, 2020. Our shareholders have the option of choosing between being paid the dividend in cash or being granted shares. Last year, 40.7% of our shareholders opted for the scrip dividend,

Attractive Dividend



FFO: 2013–2018: "FFO" corresponds to FFO 1; as of 2019: "FFO" corresponds to Group FFO. The years 2013 and 2014 are TERP-adjusted.
* Planned dividend proposed to the Annual General Meeting 2021.

which we interpret as evidence that our shareholders also want to participate in Vonovia's success in the long run.

Financing Environment

The global economy and the financial markets were dominated by the coronavirus pandemic in 2020. The outbreak of the coronavirus and the necessary lockdown measures resulted in severe restrictions on economic activity in all regions of the world in the first six months of the year. Overall, the global economy contracted by 7.8% compared to the previous quarter in the second quarter of 2020 according to the German Federal Ministry of Economic Affairs and Energy. The third quarter of 2020, however, was once again characterized by a marked global economic revival. The growth rate of 7.4% compared to the second quarter of 2020 almost matched the decline witnessed in the previous period. This recovery came under threat again when renewed restrictions were imposed in the fourth quarter. At the same time, the prospect of vaccine success stories fueled hopes of further normalization.

In contrast to the global financial crisis of 2007/2008, the shock did not originate from the financial system, but the sector has nevertheless been hit hard indirectly. This is largely because it was impossible to predict either how long the pandemic would last, or what sort of impact it would have on the economy. Equities and corporate bonds slumped considerably at the end of February 2020 as market participants increasingly scrambled for liquidity and fled to safer investments. Liquidity requirements in the corporate sector, too, increased significantly in the spring as a result of the lockdown measures. Due to the looming shortage of liquidity, the Bundesbank rated the threat to financial stability as being exceptionally high.

In response to the spread of the coronavirus and in a quest to stabilize the financing markets, the European Central Bank ("ECB") launched the Pandemic Emergency Purchase Programme ("PEPP") in March as a special monetary policy measure. The PEPP was launched as an additional temporary program aimed at the purchase of private and public-sector securities with a total volume of € 750 billion. In June, the ECB increased the volume of the PEPP to € 1,350 billion, before increasing it by a further € 500 billion in December to a total of € 1,850 billion. The ECB has said that it intends to continue with this temporary measure until it considers the critical coronavirus phase to be over, but at least until June 2021.

Purchases in connection with the PEPP are in addition to, and separate from, the Asset Purchase Programme ("APP") launched back in 2015. In March 2016, the ECB had expanded the APP to include purchases of non-financial corporate bonds (Corporate Sector Purchase Programme; "CSPP"). After having already suspended the net purchases between January and October 2019, the volume of the APP was temporarily expanded to € 120 billion in March 2020 in response to the pandemic. The ECB does not expect to end the program until it is just about to raise key interest rates.

At the same time, the ECB is providing commercial banks with further favorable long-term loans and is easing the conditions for those long-term loans that are already in place. The deposit rate in the euro area has been unchanged at -0.5% since September 2019, while the main refinancing rate is 0.0%. The yield on ten-year German Federal bonds fluctuated in 2020 and has been in negative since May 2019.

The U.S. Federal Reserve System ("FED"), the world's largest central bank, also remains on an expansionary course. At the beginning of the year, the FED confirmed its monetary policy course and opted to stick with its interest rate corridor for the key rate of between 1.50% and 1.75%. In March 2020, the FED then cut the key rate twice in a short time as a consequence of the coronavirus pandemic. Since then, it has been in the range of 0.00% to 0.25%.

In addition, a new bond purchase program worth approximately USD 700 billion was launched in the United States as well. Since June, the FED has been buying USD 80 billion in government bonds and USD 40 billion in mortgage bonds every month. In December, it also announced that it intends to keep the volume of its monthly asset purchases at USD 120 billion until substantial further progress toward full employment and price stability has been achieved.

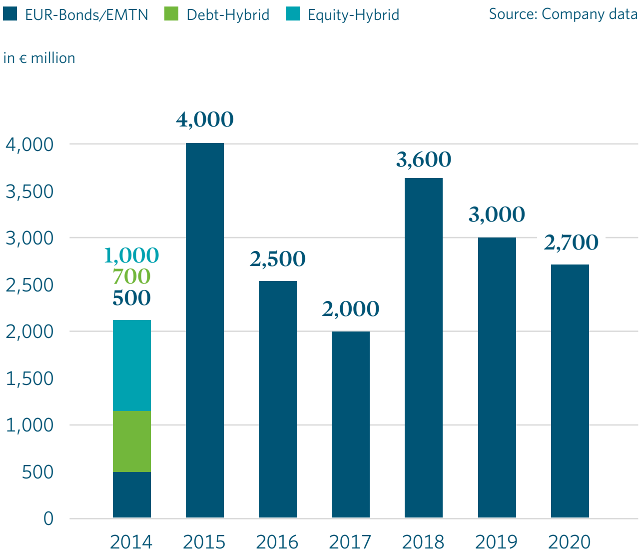
One of the World's Biggest Capital Market Issuers

The rating agency Standard & Poor's has assigned Vonovia SE a long-term corporate credit rating of BBB+ with a stable outlook and a short-term credit rating of A-2. In 2020, it upgraded Vonovia's business risk profile from "strong" to "excellent" for the very first time. The Berlin-based Scope Group has also issued Vonovia SE a rating of A- with a stable outlook.

Vonovia's first-class credit rating continues to give the company unrestricted access to the international capital markets. In February 2020, for example, the volume of a bond maturing in 2026 was increased by € 200 million. Vonovia issued another two bonds with a total volume of € 1 billion in April. The very high demand for these issues despite considerable coronavirus-related uncertainty on the financial markets bears testimony to Vonovia's exceptionally good access to the capital market. Two further bonds totaling € 1.5 billion were placed successfully in July.

With an issue volume of € 2.7 billion (2019: € 3.0 billion), Vonovia once again ranks among the top 20 euro-investment grade issuers in 2020 based on analyses performed by Dealogic. The volume-weighted average interest cost of the new bonds is 1.28% (2019: 1.13% p.a.) with a weighted average maturity of 7.5 years (2019: 10.5 years). We made active use of the difficult market environment in 2020 to further optimize our capital structure.

Vonovia's Issue Volume Per Year

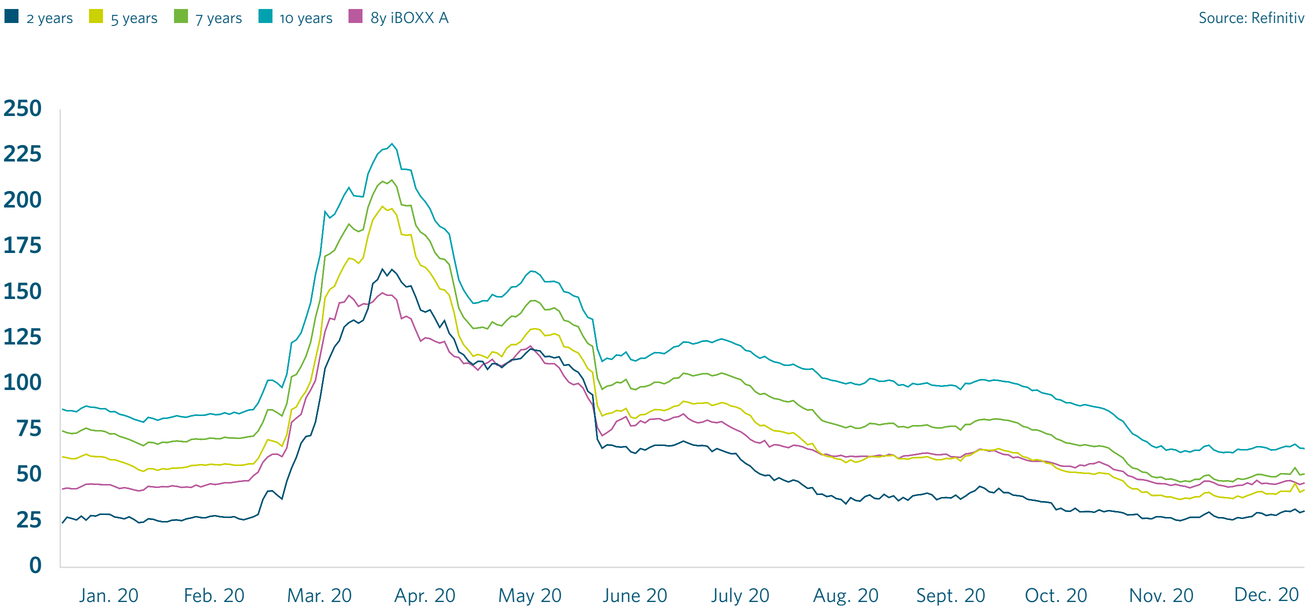


Capital Market Outlook

2020 was a year full of challenges. The coronavirus pandemic severely affected society at large, the global economy and, at times, also the capital markets. How the economy and financial markets will fare in 2021 will again rely to a large extent on how the coronavirus pandemic develops.

As the newly elected President Joe Biden takes office in the United States, the country is expected to return to a more

Spread Development (in Basis Points)



predictable and reliable foreign trade policy. Trade conflicts are likely to ease.

The topic of sustainability is also playing an increasingly important role. Society, politicians and investors are attaching increasing importance to ecological criteria, in particular. The rescue and fiscal stimulus programs launched by governments and central banks are partly linked to criteria relating to environmental, social and governance aspects.

In line with a large number of analysts and market participants and we expect very receptive borrowing markets and attractive financing conditions to continue in the medium term due to an outlook that remains attractive, albeit less than in the past, and thanks to the ongoing high levels of liquidity.

With a moderate level of debt that allows us to acquire a significant volume of financing eligible for the collateral pool and our investment grade rating as proof of our exceptionally stable business model, Vonovia's debt instruments will remain a sought-after investment. 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 the 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 Business, which is unrelated to interest rates.

We expect central banks to continue to pursue loose monetary policies, meaning that we do not predict any significant changes in key interest rates within the next 12 months. Provided that the coronavirus crisis does not escalate again, we do not expect to see any significant increase in risk premiums either, thanks to an improved economic outlook and sustained demand from the European Central Bank's asset purchase program.

Combined Management Report

Our sustainable and robust business model forms the basis for positive business performance, even in the pandemic year of 2020. The strategy, which has been refined with regard to sustainability and innovation, will secure Vonovia's continued positive development going forward. Aim: Climate-neutral housing stock by 2050.

Fundamental Information About the Group

Overall Conditions on the Residential Real Estate Market and Societal Megatrends

2020 will remain etched in our memories as the year of the coronavirus pandemic. Across the globe, the pandemic had an unforeseen negative impact on individual economies, plunging them into a deep recession. While both the EU and the German government have launched aid packages of historic proportions to counteract the crisis, it is impossible to make any reliable statements on when and how the economy will bounce back. It is now becoming clear that the coronavirus crisis is leaving more of a mark on the German economy than assumptions in the spring of 2020 suggested.

The Federal Statistical Office has calculated that economic output in Germany dropped by 5.0% in 2020. The greatest uncertainty factor when it comes to future forecasts for this figure remains how the pandemic will progress. The institutes expect that, with the progress of vaccinations, it will be possible to scale down the infection control measures in the six months from the start of spring to the start of fall 2021 such that they no longer have any significant impact on economic activity. The extent to which companies in Germany and abroad will become insolvent is uncertain.

The extent to which the coronavirus pandemic is changing working life and accelerating the pace of **digitalization** is already coming to light. This is not only having an impact on business travel behavior but is also creating new requirements that **commercial and office properties as well as residential properties** have to meet. It is only thanks to the digitalization progress made to date that extensive use of working from home was able to stop the pandemic from having even more devastating consequences on the economy. This experience will change working life, commuting patterns and also the requirements that many people will want their housing situation to meet in the future, too.

In addition to the coronavirus pandemic, extreme weather phenomena were also apparent which are believed – as is the largely unanimous consensus – to have been caused by **global climate change** driven by the man-made increase in average temperatures. Weather phenomena such as heat, drought and fire on the one hand and heavy rainfall, flooding, melting glaciers and rising sea levels on the other cause or aggravate negative economic consequences and the associated global migration movements. The protests organized by young people alone show, as expressed in the Fridays for Future movement, that companies can no longer focus exclusively on stakeholders in the equity and debt markets, but now have to respond to **the needs of multiple stakeholders** and to the demands being placed on companies as social protagonists. The shareholder value approach is increasingly evolving into a **stakeholder value approach** in which a company has to demonstrate its license to operate.

The framework for future action has been defined both by the United Nations with its **Sustainable Development Goals (SDGs)**, and by the European Union, whose **Green Deal** has already put initiatives and directives in place for a more sustainable world. Vonovia is working to find answers to these questions of tomorrow, particularly with regard to **climate-neutral housing**. Around one third of carbon emissions in Germany are caused by operating buildings. Buildings require energy primarily to provide hot water and heating. Energy consumption levels, and thus emissions, depend particularly on a building's condition in terms of its energy efficiency and the efficiency of the heating system.

The coronavirus pandemic and climate change have exposed just how **sustainable** and **future-proof** individual business models really are. In addition to climate change, other **megatrends such as urbanization** and the shortage of housing as well as **demographic change** will play a decisive role in determining Vonovia's entrepreneurial activities in the future.

Forecasting errors made in the recent past at the regional and national levels in Germany have resulted in a **structural undersupply of housing**. For Vonovia, this means using climate-neutral housing to continue to provide affordable housing in a socially responsible manner, also by pursuing its own new construction projects. This includes, in particular, targeted **neighborhood development** as one of the main levers for moving towards a sustainable and future-fit housing industry.

In 2020, misconduct on the part of individual decision-makers in the German business world dealt a blow to civil society's confidence in reliable, trustworthy and transparent corporate governance. Among other measures, this prompted the German government to present the draft bill for a Financial Market Stabilization Act on December 16, 2020. Particularly in the wake of 2020, it is more important than ever before for companies to adopt **stringent corporate governance standards** and put them into practice with credibility.

This is why Vonovia explicitly addressed these very megatrends as part of the most recent **revision of its corporate strategy**. The corporate strategy was clearly focused on future requirements resulting from sustainability, and explicitly climate protection, as well as social responsibility for tenants, customers and employees. Trustworthy, reliable and transparent corporate governance will be used to ensure that future decisions are always evaluated in terms of their sustainability.

Vonovia has made a clear and explicit commitment to climate protection targets and a CO_2-neutral building stock by 2050 as well as to reliable and transparent corporate governance.

The Company

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, energy services, automated meter reading and the senior-friendly modernization of apartments. This is supported by our caretakers and by our established craftsmen's and residential environment organization.

To date, Vonovia's business model has proven to be robust and largely **resilient** in these times of the coronavirus pandemic. There was no material impact on the net assets, financial position and results of operations. The focal point of Vonovia's work of late has been the quest to successfully maintain its business processes and to protect customers and employees. The already high **level of digitalization** inherent in our business processes allowed us to transition almost seamlessly to working from home for back office functions. Interruptions on our building sites were not significant.

Our business model is also **future-fit in the long run**, as it can use sustainable new construction and refurbishment approaches, CO_2 reduction in the real estate portfolio and innovations relating to the energy mix, materials, biodiversity, emissions and waste to contribute to solutions for climate protection objectives. Our **neighborhoods, the main areas of action** for creating a socially responsible housing industry, are to provide housing that responds to tenants' needs as part of a process aimed at tenant participation so as to boost customer satisfaction and also contribute to the integration of our increasingly diverse society. Vonovia aims to be an attractive employer that ensures equal opportunities and supports staff members in their personal and professional development. Trustworthy, reliable and transparent corporate governance will lay the foundation for this.

Vonovia manages a housing stock of around **355,300 of its own apartments** in almost all of Germany's attractive cities and regions. It also manages a portfolio of around 38,200 units in Sweden and approximately 22,200 in Austria. The total fair value comes to around € 58.9 billion, with net assets based on the EPRA definition coming to approximately € 35.1 billion (European Public Real Estate Association; EPRA). In addition to its own apartments, Vonovia manages around 74,000 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 previously held by the French railway operator SNCF and in the Dutch company VESTEDA.

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 neighborhoods 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 approximately 600 **neighborhoods** that the company has today are one of Vonovia's USPs and a focal point of the solutions to the megatrends facing us.

The **age structure** of Vonovia's 355,300 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. Just under 1% of the current portfolio was built after 2000.

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, 2020, 588 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.

Vonovia's Scalable Organizational Model: Strong Regional Presence and Efficient Central Shared Services

Central

Portfolio Management

> Invest program management
> Rent calculation & management
> Rent performance management

Central Property Management

> 24/7 customer service
> Rental contract management
> Field service disposition
> Property-related accounting services

Regional

Asset Management

> Strategic development of local portfolio
> Stakeholder management

Property Management

> Field services
> Caretaker organization
> Letting organization

Value-add Management

> Technical service
> Modernization
> Residential environment

Development

> Integrated development platform
> Development to sell/to hold

Shared Services

> Purchasing
> Finance/tax
> Accounting
> Controlling
> Legal
> IT
> HR
> Communication

In order to carry out 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 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 efficient and effective management of a portfolio of more than 415,000 apartments and also provides the basis for the successful digitalization of Vonovia's process chains. In addition, the development business is largely managed via project companies.

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

A balanced mix of services provided by the **central service center, regional caretakers working on-site** and our company's own technical and residential environment organization ensures that our tenants' concerns can be 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 neighborhoods.

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 portfolio acquisitions include strengthening its overall regional presence, realizing operational and financial economies of scale and optimizing structures. In addition, Vonovia will be using **new construction and 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. The integration of the development organization operating under the **BUWOG** name has allowed Vonovia to acquire extensive product and process expertise in the field of construction and in the development of residential construction projects. This means that Vonovia has not only a **management platform** but also an end-to-end **development platform** spanning the entire value chain.

The management of the operating 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.

In addition to Vonovia SE, the **Vonovia Group** includes a total of 587 subsidiaries, 284 of them based in Germany.

Strategy

Inclusion of Sustainability Aspects

The **strategy** Vonovia **introduced at the time of its IPO** has reached a high degree of maturity and has proven its viability and flexibility. It achieved sustainable improvements in customer satisfaction, addressed new demands and successfully established new business models. This strategy still consists of the **four basic approaches**: the property management strategy, the financing strategy, the portfolio management strategy and the Value-add strategy. The **two additional approaches**, making acquisitions as and when opportunities present themselves and pursuing internationalization, continue to support and round off the four basic approaches.

Not only the increasingly dynamic development of **megatrends**, but also the ever louder call by various stakeholder groups for a sustainable business model, prompted Vonovia to scrutinize its strategy, which has proved so successful to date. In particular, it has addressed **sustainability aspects**, supplemented the company's sustainability strategy in a

Dimensions of Sustainability at Vonovia

E Environmental	S Social	G Governance
Contribution to climate protection and reducing CO_2.	Social responsibility for our tenants, customers and employees.	Reliable, transparent and trust-based corporate governance.

targeted manner, thus ensuring the **future viability of both the strategy** and the business model.

As part of this ongoing strategic development process, Vonovia analyzed the dynamic development in megatrends and stakeholder expectations, assessing the impact that they could have on the business model in the future. As a result, the topic of sustainability was completely repositioned in terms of its content and organization. The aim is to forge ahead with the incorporation of sustainability into the company's strategy and processes across the board.

This refined strategy also specifically addresses the UN's Sustainable Development Goals (SDGs) as well as the specific ESG targets set by European and national standard setters. The integration of sustainability into the strategy is reflected in the expansion of the management system to include non-financial key figures, in particular in the form of the introduction of the Sustainability Performance Index from 2021 onwards.

The updated strategy, which will continue to have a **commercially successful business model at its core** in the future as well, explicitly addresses the following sustainability issues:

1. Voluntary commitment to climate protection objectives and reducing CO_2 (E)

2. Social responsibility for our tenants, customers and employees (S)

3. Trustworthy, reliable and transparent corporate governance based on the best-practice guidelines set out in the Corporate Governance Code (G).

With regard to the objective of achieving a **climate-neutral housing stock**, the current efforts relating to energy-efficient building shell refurbishment and the renovation of heating systems are not, however, sufficient in order to achieve the climate targets that have been set. We will need to embark on more extensive refurbishment measures, combined with a mix of renewable energies to move away from carbon-based energy supply via optimized sector coupling. Sustainable new construction using sustainable construction materials and paying attention to the responsible handling of effluents and waste are other important aspects. In **Bochum-Weitmar**, the first **energy research and development center** for the portfolio is being established with the **Powerhouse of the Future**.

Solutions for climate protection in the housing industry using innovations and new technologies will be implemented in our **neighborhoods** in a cost-effective manner to allow us to continue to design urban, environmentally-friendly and affordable housing in a socially responsible manner. Another way in which Vonovia lives up to its social responsibility is via its neighborhood development projects.

In the future, trustworthy, reliable and transparent **governance** will be supplemented to include ESG risk management that also takes the recommendations made by the Task Force on Climate-related Financial Disclosure (TCFD) into account. In the future, all decisions will be evaluated with regard to their impact on sustainability aspects before they are made.

Vonovia had already set up an **organizational unit** reporting to the CEO to coordinate and promote sustainability aspects in the context of the strategy and the business model, as well as being responsible for external sustainability reporting. A steering group, the Sustainability Committee, has also been set up. It includes the entire Management Board as well as the individuals responsible for sustainability, corporate communications, controlling, accounting and business innovation. In order to calibrate its sustainability endeavors correctly, Vonovia conducted a new **materiality analysis**, defining areas for action and developing a sustainability roadmap based on the results. In addition, opportunities and risks resulting from the various areas for action are monitored as part of the risk management system. All future decisions will be made taking sustainability into account.

Highly Developed 4+2 Strategy

The (4+2) strategic approaches already in place can be briefly summarized as follows. More detailed information is available in previous management reports.

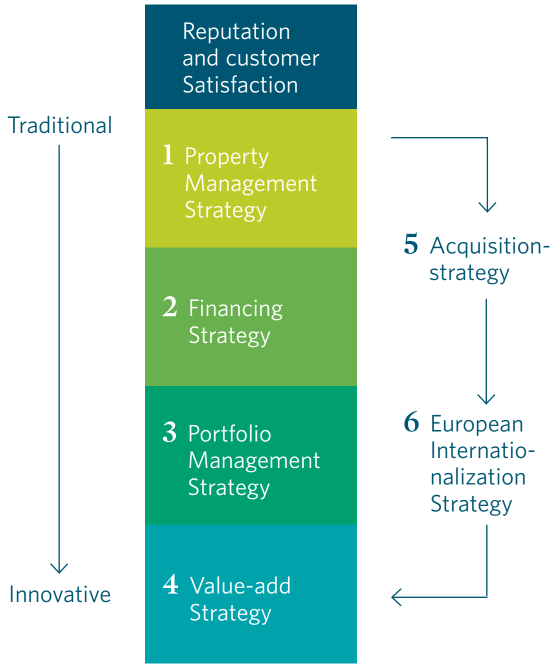
The **property management strategy** is based on the sophisticated **management platform**, which allows for the efficient management of the portfolio and the successful scaling of the property management business. In this respect, Vonovia makes use of a mix of regional and local services and the Group-wide bundling of services in central service centers. Vonovia also applies this expertise to the property management business in Austria and Sweden in line with the requirement profiles that apply in those markets. The property management strategy is being enhanced, in particular, by digitalization measures in the underlying business processes and at the customer interface. The tenant app is one of the lighthouse projects in this area.

The **financing strategy** has essentially been implemented in full. Vonovia's debt, measured in terms of the loan-to-value (LTV) ratio, is stable within the target range of 40% to 45%. Thanks to the broad range of equity and debt capital providers and the BBB+/Stable/A-2 issuer credit rating awarded to our company by the rating agency S&P as well as the A- rating received from the rating agency Scope, Vonovia has excellent access to the international debt and equity capital markets. As a result, our current focus is on maintaining these credit ratings and optimizing the financing structure and maturity profile as well as financial risk management.

The **portfolio management strategy** focuses on **optimizing the portfolio**. The portfolio is refined in a targeted manner using privatization measures and the sale of Non-Core properties. On the other hand, tactical acquisitions, modernization, new construction and development measures are used to increase the value of the portfolio in a targeted manner. In the "Operate" subportfolio, 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, senior-friendly and contemporary living. We want to create new living space in our portfolio in the future as part of our densification strategy, using a combination of vertical expansion and new construction on existing land. The portfolio management strategy also includes the activities of the development business on land purchased specifically for this purpose, adding another profitable element to Vonovia's value chain. The development business, operated under the BUWOG brand, 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. 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 **Value-add strategy** supplements our core business to include **customer-oriented services**, e.g., services that are closely related to 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 craftsmen's organization, the residential environment organization, multimedia services, energy services and metering services, and insurance services. The capability of having our own craftsmen's and residential environment organization cover the entire portfolio, in particular the maintenance and modernization services, allows us to make the residential units more attractive in general and help to boost customer satisfaction.

The 4+2 Pillars of Our Strategy

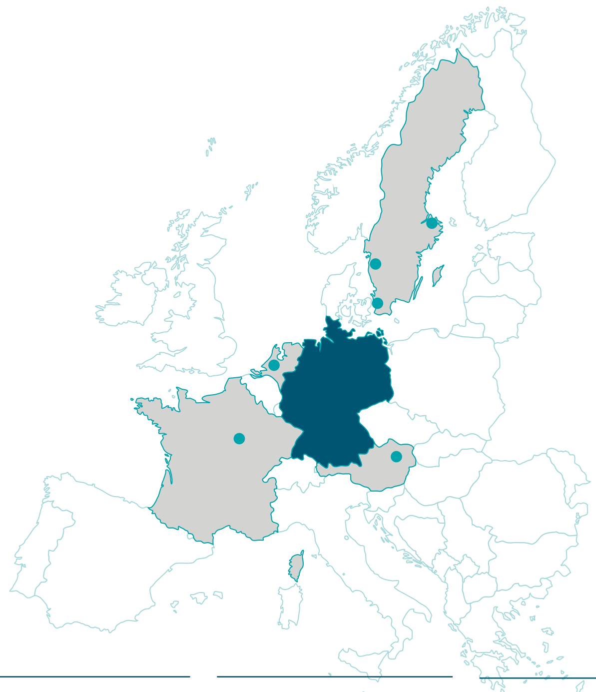


1 Management platform/Austrian client/digitalization
2 LTV/financing strategy/financial risk management
3 Portfolio management/recurring sales and Non-core Disposals/investment strategy/development and new construction
4 Housing and property-related services/business development/digitalization
5 Opportunistic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

Vonovia pursues **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 EBITDA Rental yield per share and a neutral impact on the Adjusted 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 the 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. Vonovia has been growing in recent years thanks to a large number of acquisitions. Our scalable operational management system allows us to achieve harmonization and generate economies of scale from the full and swift integration of newly acquired companies and portfolios. Making the most of this competitive advantage and using the expertise that has been built up within our organization over time, 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 our core strategies. The successful takeover of the project developer Bien-Ries, for example, complemented the regional coverage of our development business.

Our experience and expertise as a leading real estate company on three European markets (Germany, Sweden and Austria) serves as a reference that allows us to invest as part of our **internationalization strategy** 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 Sweden and Austria, 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 and Dutch markets. 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 affect our domestic business and must entail risk potential that can be controlled or limited.

European Markets



France	Germany	Austria	Sweden	The Netherlands
Île-de-France (greater Paris)	15 urban growth regions	Vienna (mainly)	Stockholm, Gothenburg, Malmö	Randstad (greater Amsterdam/Rotterdam)

Vonovia Innovation Platform

In addition to the demands already created by the social megatrends, the current impact of the coronavirus pandemic has raised additional questions regarding the **future viability, sustainability and durability of business models**. This is also closely linked to the fact that today's stakeholders are more diverse and to what they expect of companies as good corporate citizens.

This makes it all the more pressing to review and revamp business models with a view to their future viability and acceptance. As the leading housing and development company in Germany, Austria and Sweden, Vonovia sees itself as a **driving force for renewal**. The new strategy developed in the summer of 2020 explicitly addresses the future viability, sustainability, durability and ultimately, as a result, the acceptance of the business model.

Innovation at Vonovia focuses on the following areas for action: climate and the environment, neighborhoods and society and, of course, customers and processes. This comes hand-in-hand with the ongoing evaluation of entrepreneurial decisions in terms of their impact on the sustainability and future viability of the business model (outside-in perspective) and their implications for the environment, climate and society (inside-out perspective). Neighborhoods are the focal point for the implementation of innovation measures at Vonovia. It is not only neighborhoods in the existing portfolio that are put under the microscope. In development projects, a firmly established neighborhood concept is taken into account right from the design phase. The large number of neigborhoods that Vonovia has is a USP of the company and the ideal platform for rising to the challenges posed by megatrends and issues of tomorrow. Vonovia has the innovative capacity needed to respond to these challenges.

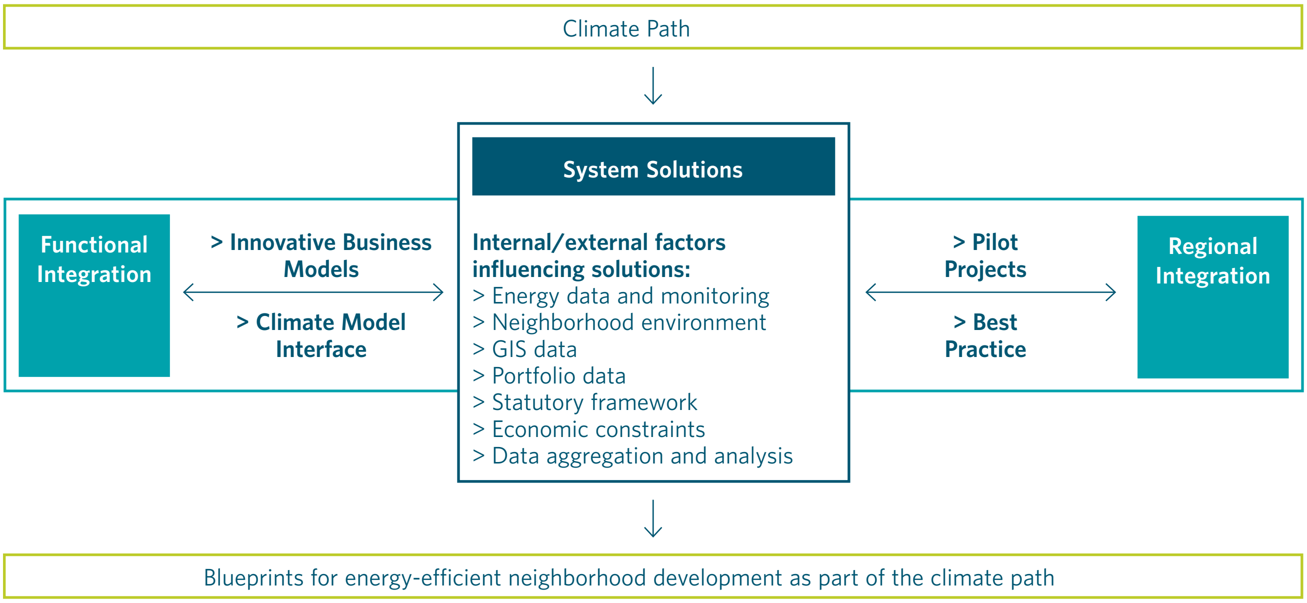
Environment and Climate

Innovation is a must if we want to achieve our strategic objective of a climate-neutral housing stock. As the building shell renovation measures and the replacement of conventional heating systems that have proven effective to date will not be sufficient to allow us to achieve our ambitious climate protection objectives, the focus has to be on using more renewable energies and on corresponding **neighborhood systems**. In the interests of achieving a holistic supply concept, we will also need to take electricity into the equation in the future. The energy revolution will be shaped by decentralized generation and local consumption.

The efficiency potential that a neighborhood offers as well as the degree of self-sufficiency that it can achieve can be increased significantly by creating a targeted network of electricity, heat and transport. As a result, future neighborhood development projects will pursue the approach of generating green electricity and green heating in the neighborhood itself and consuming it again at a later date as and when required. The energy concept is supported by infrastructure for sustainable mobility solutions.

The climate path that Vonovia has mapped out therefore includes, in addition to an increase in the refurbishment rate and the replacement of conventional heating systems with state-of-the-art heating systems using renewable energy, switching to district heating and cogeneration units, sector coupling and stepping up the use of renewable energies (fuel switch). In the long run, the aim of neighborhood systems is to achieve as high a degree of self-sufficiency in energy supplies as possible. Fuel cell technology, the sort of technology that is being tested in our Bochum-Weitmar innovation lab neighborhood, is another potential candidate in this regard.

Energy-efficient Neighborhood Development



The Bochum-Weitmar Neighborhood as an Innovation Lab for the Housing Industry

In Bochum-Weitmar, Vonovia established the first energy research center for its portfolio with the Powerhouse of the Future. More than half of the heat required and up to one quarter of the electricity required is being generated on location using **innovative technologies** (e.g., electrolyzer, fuel cell, hydrogen storage facility). The research aims to identify scalable, ecological business models and technology combinations for our some 600 neighborhoods.

Decentralized energy supply thanks to the use of renewable energies, sector coupling, the right energy mix and, last but not least, energy storage are the main areas of development being used to identify economical and ecological technologies, the aim being to slash CO_2 emissions dramatically. As a result, the research laboratory is focusing on the practical use of innovative technologies, the aim being to test and enhance the interaction between various different energy systems.

Technologies such as solar and geothermal energy as well as methanization are to be researched with a view to sustainability and practical approaches. Electricity from solar power that is not required when it is generated is converted into hydrogen using an electrolyzer so that it can be stored and converted back into electricity and heat at any time.

Customers and Processes

The Innovation & Business Building (I&BB) department is Vonovia's central innovation unit for developing new, customer-centric products and services that take the relevant megatrends into account. I&BB focuses in particular on the global megatrends that are also significantly affecting the housing industry. Inspired by the process of technological change, these products and services have the potential to satisfy customer needs in the long term. The main topics addressed are:

> Customer satisfaction and service quality
> Expanding the range of products and services
> Digital transformation.

The following key tasks have been defined as the department's remit:

> Identifying relevant market trends and customer needs as well as collecting ideas across various departments
> Developing new ideas, e.g., using trend and start-up scouting
> Iterative development of new fields of business
> Managing the innovation process and further developing new ideas until they are ready to go into production.

Innovations go through six stages and five decision gates before they are rolled out. I&BB uses agile project structures and digital collaboration tools that involve the individual departments as part of this process.

> Generating and validating ideas (e.g., design thinking)
> Customer-centric product development (e.g., rapid prototyping).

Innovation Funnel

Innovations go through six stages and five decision gates before they are rolled out

Ideas pool
New ideas based on relevant trends & topics that would appear to be interesting for Vonovia in general but are not being actively addressed at present.

Stage-Gate

Analysis
Trends & ideas that are to be addressed in the near future due to their strategic relevance – regardless of whether they have already been subjected to a rough analysis as part of the ideas generation process or have not been addressed to date.

Stage-Gate

Development of details
Only those ideas that have been actively addressed, have been found to be relevant after an initial rough analysis and are therefore to be investigated in greater detail and evaluated in the Vonovia context.

Stage-Gate

Proof of concept
Ideas that have been analyzed in detail and approved, and are now being critically evaluated with regard to their feasibility and commercial viability.

Stage-Gate

Pilot
Ideas that are being tested in real-life conditions over a prolonged period in order to test the postulated assumptions and the extent to which they can be rolled out in practice as well as to identify any problems.

Stage-Gate

Rollout
Ideas that are being rolled out after a successful pilot phase and incubated as new businesses, including an independent team and independent processes, structures and P&L.

Neighborhoods and Society

Definition: "A neighborhood has a visually coherent urban development structure, it is seen by its residents as a distinct area and represents an area for action in which the residential real estate company can make a difference and see positive effects. It comprises at least 150 apartments. A large housing estate can, in itself, also describe a neighborhood." (German Association of German Housing and Real Estate Companies (GdW))

Environmentally friendly urban redevelopment is a complex challenge and calls for sophisticated solution strategies. In order to implement its climate strategy, Vonovia seeks to achieve engagement on the part of other owners, residents, municipal policymakers and administrative bodies, local utility companies and other social organizations. Focusing on neighborhoods and looking at them as part of holistic concepts has the potential to promote business area development and create added value for tenants. One positive aspect for Vonovia in this respect is that policymakers, too, have recognized just how important neighborhoods are for the energy revolution.

Vonovia has developed the innovative B2Q (Business to Quartier [the German word for neighborhood]) perspective within this context. In order to develop this perspective even further, Vonovia has also developed plans for the further development and expansion of its Neighborhood Academy. Thinking in terms of the neighborhood is at the forefront of all of the measures we take.

The **program offered by the Academy** in cooperation with the EBZ Business School in Bochum includes modules covering practical case studies and the following training content:

> Megatrends
> People & housing concepts
> Cost-effectiveness
> Technical solutions
> Communication and participation.

Non-financial Declaration

Changing Overall Conditions – Explanatory Information on the Content of the Report

The last two decades have brought significant changes in the overall economic, ecological and social framework in which companies operate. While, on the one hand, companies have been able to benefit from continued growth, globalization and an increase in resource consumption, they have also, on the other hand, taken an increasingly critical look at their business models with regard to climate protection, how they use resources and their social and ethical responsibility. The concept of a **license to operate** as a basis for viewing business activities in an ecological and social context has become the order of the day. Nowadays, people want to understand the impact that a company's activities have on the environment and on society. Conversely, there is a need for transparency regarding the impact that the demands made by civil society and created by climate change have on a company at the same time. These changing overall conditions are having an increasing impact on financing and investment decisions.

They have also given rise to entirely novel and far-reaching information requirements to support the decision-making process. As a result, corporate reporting no longer focuses exclusively on equity and debt investors, but uses **ESG reporting** (ESG: Environmental, Social, Governance) to respond to the diverse interests of multiple stakeholders today. The large number of references made in this Non-financial Declaration to other chapters of the annual report reflect the ever-increasing integration of sustainable aspects into our business processes.

Vonovia SE's corporate reporting includes a **Non-financial Group Declaration**, which has its legal basis in Sections 315b, 315c in conjunction with Section 289c to 289e HGB. The framework provided by the GRI Standards for sustainability reporting and the UN Global Compact was taken into account when preparing this declaration. These standards also serve as a guide for the sustainability report. We have also started to implement the recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD), which we consider to be important. The table below shows how the corresponding content relates to the individual standards.

TCFD – Task Force on Climate-related Financial Disclosures

TCFD elements	Content of the recommendations	Chapter	Page
Governance	Organizational structure of the company regarding climate-related risks and opportunities	> The Company > Corporate Structure > Sustainability Management at Vonovia > Management System > Environmental Issues > Latest Sustainability Report	→ p. 47 et seq. → p. 48 et seq. → p. 58 → p. 83 et seqq. → p. 61 et seqq.
Strategy	Actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	> Strategy > Sustainable Business Model > Materiality Analysis > Environmental Issues > Latest Sustainability Report	→ p. 49 et seqq. → p. 57 → p. 59 → p. 61 et seqq.
Risk management	How the organization identifies, assesses, and manages climate-related risks	> Risk Assessment Based on Sustainability Aspects > Opportunities and Risks > Latest Sustainability Report	→ p. 58 → p. 124 et seqq.
Metrics and targets	Metrics and targets used to assess and manage relevant climate-related risks and opportunities	> Strategy > Management System > Environmental Issues > Forecast Report > Latest Sustainability Report	→ p. 49 et seqq. → p. 83 et seqq. → p. 61 et seqq. → p. 138 et seqq.

The main relevant non-financial performance indicators are reported – together with information on the underlying concepts and objectives – in the individual chapters covering the content in question, which are structured based on the aspects that the company has to report by law. Specifically, these aspects are environmental issues, social issues, employee issues, combating corruption and bribery and respecting human rights. In order to avoid data redundancy, reference is made, where appropriate, to other sections of the management report that contain non-financial information. All references to content outside the Non-financial Declaration are further information and are not covered by the audit performed by KPMG. This limitation does not apply to references to the chapter entitled "Fundamental Information About the Group". These are covered by the audit. With the exception of the CSI, which is used to measure customer satisfaction, the key figures listed in the Non-financial Declaration are not non-financial performance indicators within the meaning of German Accounting Standard (GAS) 20 paragraph 101 in conjunction with paragraph 106. This is an area in which the company plans to make changes for 2021 with the introduction of the Sustainability Performance Index (SPI), which is addressed in greater detail in the chapter "Management System: non-financial performance indicators". → p. 87 Further information on the relevant non-financial key performance indicators in accordance with GAS 20 can be found in the chapter on the "Management Model".

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's activities in Austria and Sweden are also covered by this Non-financial Declaration. This initially concerns the qualitative presentation of the non-financial information of the acquired groups of companies. Due to the ongoing integration of the corresponding processes, the full consolidation of the key performance indicators is still in the implementation phase. We will refer to the extent to which the key figures have been integrated in the following chapters.

This **Non-financial Declaration** supplements our comprehensive sustainability reporting, which has also already been firmly established, in the form of our dedicated **Sustainability Report**. The Sustainability Report contains further extensive information on individual non-financial topics as well as further examples of implementation and key figures. The Sustainability Report for the 2020 reporting year will be published in the second quarter of 2021.

Both the Non-financial Declaration and the Sustainability Report are **audited** by the auditor of the annual financial statements. → p. 259 et seq.

Sustainable Business Model

Vonovia is part of society. Our business is geared toward providing people with homes as a basic human need. As a sustainable and responsible residential real estate company, Vonovia believes that it has a particular obligation towards its more than one million customers in Germany, Austria and Sweden, but at the same time also towards society, the environment and its shareholders.

Our business model is integrated into social and ecological change processes. Since we went public in 2013, we have been developing our successful strategy further to achieve a high level of sophistication, enhancing it to take account of current megatrends and sustainability aspects. We align our business activities with these changes (for details on social trends and challenges: chapter entitled "Fundamental Information About the Group: Overall Conditions on the Residential Real Estate Market and Societal Megatrends" → p. 46 et seq.).

We know that the decisions we make as a company always have an impact on people and neighborhoods, on the environment and our climate. We weigh these impacts up carefully, particularly when it comes to modernizing buildings and designing neighborhoods. After all, protecting the environment and our climate should go hand-in-hand with our responsibility for safe and good-quality housing at fair prices. This is what **sustainable living** means to us. As a real estate company with a long-term focus, we aim to strike a balance between commercial activity on the one hand, and social responsibility and ecological objectives on the other. We are committed to the principles of the social market economy and profitability. Vonovia takes responsibility as a provider of affordable housing and as a service provider, building contractor and developer as well as in its role as a corporate citizen. For us, sustainability means managing our business activities in a way that generates the greatest possible long-term benefit for society as a whole. This is the principle we want to be measured against and the principle that we want each and every employee to put into practice.

Sustainability is becoming an increasingly firm component of our business processes. Extensive and in-depth information can be found in the chapter entitled "Fundamental Information About the Group". → p. 46 et seqq. This is also where we provide information on the corporate structure of Vonovia SE. → p. 48 et seq.

Risk Assessment Based on Sustainability Aspects

Assessing risk based on sustainability aspects takes the increasing scale of their impact into account and is becoming increasingly important in the list of requirements that investors and analysts look at. This is reflected, by way of example, in the recommendations made by the TCFD, which call upon companies to disclose the direct and indirect financial impact of climate change on their businesses.

Vonovia revised its risk management system again in 2020 to include additional sustainability-related risk aspects in the management system. → p. 124 et seqq.

In the Non-financial Declaration, material risks associated with the corporation's own business activities which are very likely to occur and which could have very challenging negative effects on non-financial topics and, as a result, on the business model must be reported. 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.

Sustainability Management at Vonovia

At Vonovia, sustainability lies at the top level of management: It is the responsibility of Rolf Buch, Chairman of the Management Board.

The new Sustainability/Strategy department was set up in the reporting year to bundle and forge ahead with sustainability-related activities within the Group. These include the further development of the sustainability strategy and roadmap, the definition and monitoring of sustainability objectives and the implementation of sustainability projects. The department is also responsible for driving initiatives and providing impetus. Its remit also includes preparing reports, also in the area of sustainability, and actively processing and participating in ESG ratings. Our understanding of sustainability illustrates Vonovia's approach to sustainability.
https://investoren.vonovia.de/en/vonovia-at-a-glance/sustainability

A sustainability committee meets three to four times a year – as required – to discuss the overall strategic direction and to evaluate the company's sustainability performance. The committee comprises the entire Management Board as well as the heads of Sustainability, Corporate Communications, Controlling, Accounting and Business Innovation. This allows us to ensure the systematic implementation of our sustainability strategy in all business areas right down to our local neighborhoods. The operational implementation of sustainability aspects is the responsibility of all relevant departments and the regions. On the Supervisory Board side, the Audit Committee has a particular responsibility for sustainability.

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

Materiality Analysis

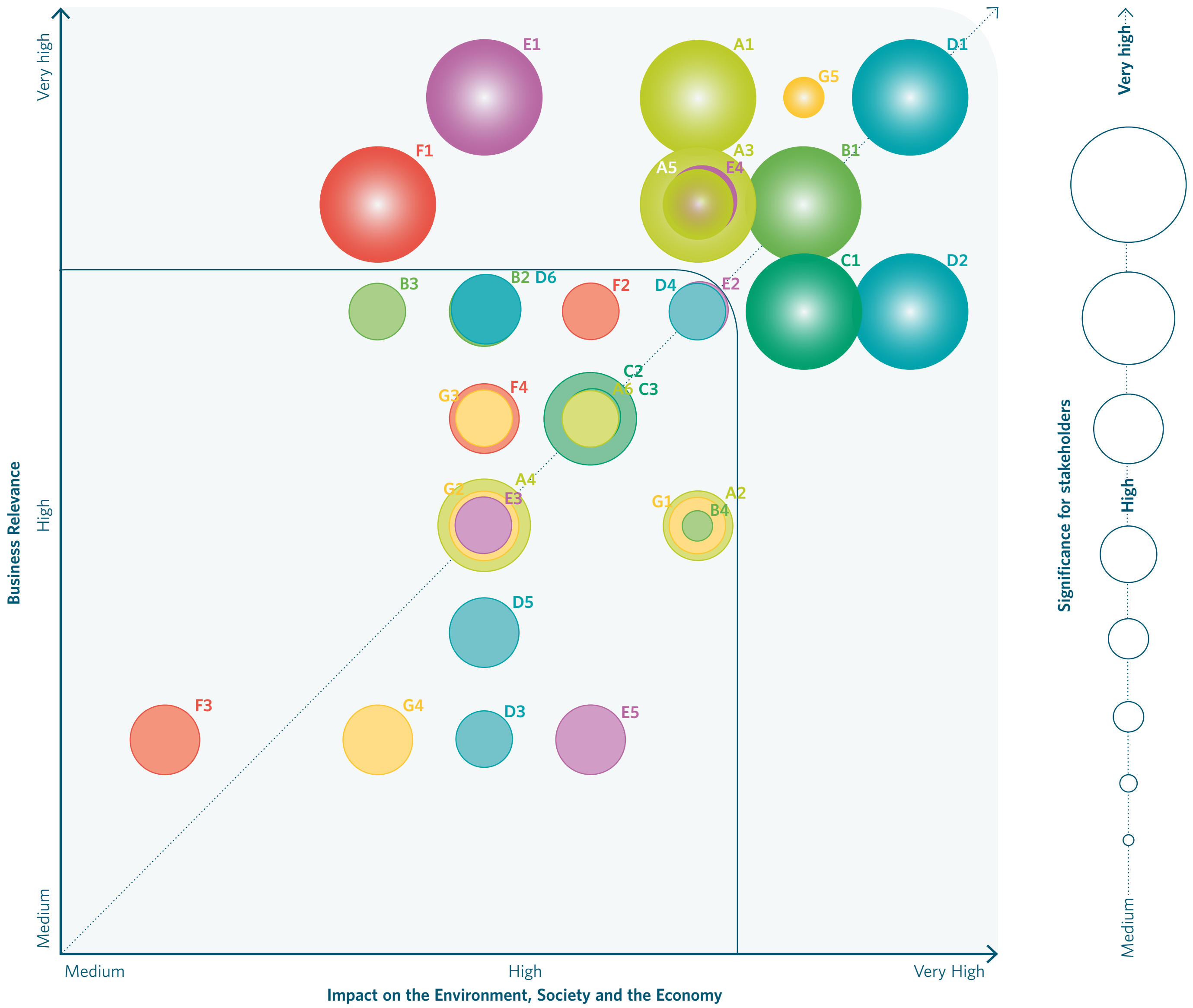
Vonovia addresses the processes of social and ecological change on an ongoing basis and in a structured manner, and analyzes how these changes impact Vonovia's business and its value creation (outside-in perspective). At the same time, our decision-making processes look at the impact that our business model has on the environment and society (inside-out perspective). Taking account of the perspective of our relevant stakeholder groups is a key third dimension when it comes to identifying the sustainability issues that we consider to be material.

We redefined the material topics in 2020 as part of an extensive **materiality analysis**. The materiality matrix that emerged from this process replaces the list of material topics that has been in place since 2017. This new definition was prompted by changing overall social conditions, the mounting importance of climate protection issues and internal changes resulting from the company's internationalization and its new development business activities.

As part of the materiality analysis, internal and external stakeholders reviewed and assigned weightings to **33 selected sustainability topics** in seven areas of activity from three angles – impact on the environment, society and the economy; impact on business relevance; importance for external stakeholders. A total of two in-house workshops were held as part of this process with specialist and management levels as well as with the Management Board. An online survey was also conducted with 142 participants from Germany, Austria and Sweden, and 42 expert interviews were conducted to validate the results. Among others, the survey participants included representatives of the capital market, tenants' associations, employees, business partners, suppliers and service providers of Vonovia as well as representatives from authorities, the world of politics, associations, civil society and academia.

The results were transferred to a **materiality matrix** covering all three dimensions. The process identified eleven topics

Materiality Matrix



Action Area A: Homes and Customers

A1 **Fairly priced housing**
A2 Contribution to new construction in conurbations
A3 **Homes that meet tenant needs and action in response to demographic change**
A4 Maintenance of investment properties
A5 **Customer satisfaction and service quality**
A6 Dialogue with tenants

Action Area B: Society and Contribution to Urban Development

B1 **Neighborhood development and contribution to infrastructure**
B2 Integration, diversity and social cohesion
B3 Investment and participation
B4 Participation in political dialogue

Action Area C: Sustainable Construction and Development

C1 **Sustainable new construction and refurbishment**
C2 Sustainable materials and products
C3 Social and environmental standards in the supply chain

Action Area D: Environment and Climate

D1 **Reduction of CO_2 in the real estate portfolio/energy-efficient modernization**
D2 **Renewable energies and energy mix**
D3 Energy efficiency and CO_2 reduction in business operations
D4 Innovations for the climate and environment
D5 Water, effluents and waste
D6 Biodiversity

Action Area E: Corporate Culture and Employees

E1 **Appeal as an employer**
E2 Training and personal development
E3 Performance-based and appreciative remuneration
E4 **Approach to diversity and equal opportunity**
E5 Promotion of health and safety

Action Area F: Corporate Governance and Responsible Business Practices

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

Action Area G: Future Viability and Capital Market

G1 Sustainable and long-term growth
G2 Management of opportunities and risks
G3 Digitalization of processes
G4 Sustainable relationships with business partners
G5 **Appeal on the capital market**

that are material for Vonovia. These are explained in greater detail in the following chapters of the Non-financial Declaration. The materiality matrix also includes another 22 key topics that are addressed outside the Non-financial Declaration, in particular in the Sustainability Report.

Sustainable Development Goals

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

Our sustainability strategy is geared toward international standards and frameworks such as the Sustainable Development Goals.

As a company with international operations, we aim to contribute to achieving these goals with our business in Germany, Austria and Sweden. We have used our materiality analysis to identify priorities in this respect as well. We have identified a total of **eight key SDGs** to which we, at Vonovia, aim to make a particular contribution (see also SDG philosophy under: **https://investoren.vonovia.de/en/vonovia-at-a-glance/sustainability**).

Key SDGs for Vonovia

Reporting on Aspects of the Non-financial Declaration

The Non-financial Declaration sets out the relevant concepts, the accompanying due diligence processes, the results of the concept and the status of implementation of the measures for each material topic.

Ten out of the eleven topics that are material for Vonovia can be allocated to the aspects covered by the German Commercial Code (HGB) in the context of the Non-financial Declaration:

> Environmental issues: Reducing CO_2 in the real estate portfolio & energy-efficient modernization/renewable energies and energy mix/sustainable new construction and refurbishment
> Social issues: Neighborhood development and contribution to infrastructure/fairly priced housing/homes that meet tenant needs and action in response to demographic change/customer satisfaction and service quality
> Employee issues: Appeal as an employer/approach to diversity and equal opportunities
> Combating corruption and bribery: Governance and compliance

“Attractiveness on the capital market” has been identified as an additional material topic for Vonovia. Information on the “Respect for Human Rights” aspect, which is a requirement under the German Commercial Code, is also reported in the Non-financial Declaration.

Environmental Issues

Within the context of the statutory requirements in the Non-financial Declaration, environmental issues include the following material topics for Vonovia: "Reducing CO_2 in the real estate portfolio/energy-efficient modernization," "Renewable energies and energy mix," "Sustainable new construction and refurbishment" (see materiality matrix → p. 59).

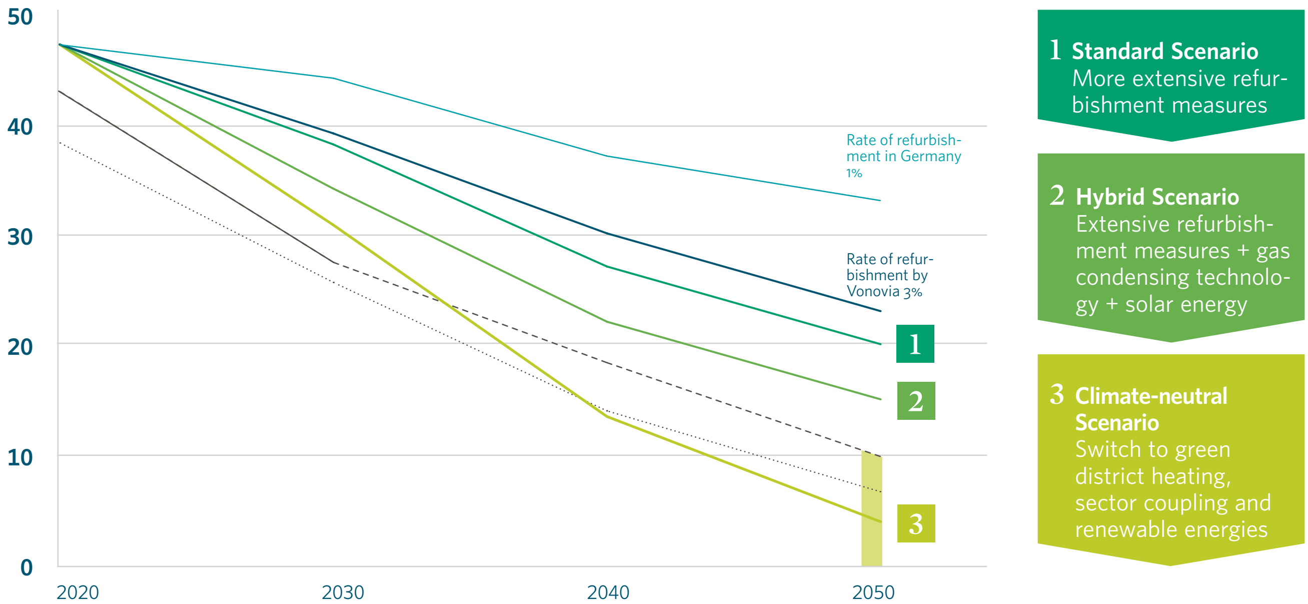
We believe that achieving the goals set out in the Paris Agreement is one of the greatest challenges of our time. Vonovia is living up to its responsibility in this area and supports both the global objective, and the German government's long-term objective, of achieving a **virtually climate-neutral housing stock** by 2050. → p. 47

Vonovia contributes to greenhouse gas emissions via the construction and operation of residential buildings. The overwhelming proportion of what are known as Scope 1 & 2 emissions are attributable to existing buildings, most of which are located in Germany. As the housing industry market leader in Germany, we aim to be a central driving force behind climate protection. With a portfolio of around 400,000 apartments in total, we have the potential to achieve a great deal in terms of protecting our climate. We are aiming to achieve a climate-neutral housing stock by 2050, allowing us to meet the Paris climate protection goals. In order to achieve this objective, Vonovia has developed a climate path as part of an interdisciplinary collaboration between various functional areas and with the support of the scientific community (Fraunhofer ISE). The fact is that the measures pursued to date – energy-efficient building upgrades and moves to replace inefficient heating systems – will not be sufficient in themselves to allow us to achieve this ambitious target. The required reduction in greenhouse gas emissions can only be achieved through a combination of greater energy efficiency, a significant increase in the use of renewable energies and other innovative technologies for decentralized energy generation and storage within neighborhoods.

Vonovia unveiled how it can achieve the objective of a climate-neutral housing stock at the "Outlook for Climate-Neutral Living" conference, an event that involved discussions with representatives from the world of politics, academia and civil society. **https://klimakonferenz.vonovia.de/en** In particular, the right subsidy instruments and the removal of legal hurdles are seen as crucial in fostering effective climate protection in the housing sector. Vonovia plans to

Modeling of Vonovia's climate paths 2020–2050

CO_2 intensity in kg CO_2e/m^2a



Actual figures for Germany: 1% rate of refurbishment; Vonovia base scenario: 3% rate of refurbishment, refurbishment intensity approx. 45% reduction; Rate of refurbishment 3% + increased refurbishment measures (approx. 60% reduction); Rate of refurbishment 3% + increased refurbishment measures (approx. 60% reduction) + gas condensing technology + solar energy; Rate of refurbishment 3% + increased refurbishment measures (approx. 60% reduction) + own district heating, sector coupling/or + heat pump/or + photovoltaics; German government's target for 2030/Climate-neutral housing; CRREM two degrees Celsius objective April 2020; Target corridor

Source: Scenario 1–3: Modelling of Vonovia portfolio starting end of 2019, Fraunhofer ISE; aim for 60% or 160 kWh reduction in energy requirements using the following measures: Building shell (windows, insulation), aim for KFW 100–70 standards; energy source change also simulated starting with scenario 2 step up its engagement in this area even further and to actively raise awareness of the energy revolution and how the necessary underlying conditions can be put in place. After all, we believe that for climate-neutral housing to be a success and also remain affordable, there is a need not only for commitments and investments but also for ambitious and long-term partnerships and, in particular, changes in the overall political conditions.

The development of our climate path is part of our systematic response to the impact of climate change on our business development.

The following **three material topics** contribute to Vonovia's overarching climate strategy:

Reducing CO_2 in the Real Estate Portfolio/Energy-efficient Modernization

As a major housing industry player, Vonovia aims to be a central driving force behind climate protection. Energy-efficiency refurbishments remain a key element of our climate strategy. As a result, Vonovia is aiming to maintain a high rate of refurbishment in its portfolio. The energy-efficient modernization measures focus on heat insulation for facades, basement ceilings and attics, the replacement of windows and the installation of new heating boilers. We pursue a needs-based approach to these measures and take care to choose the optimal degree of modernization for each building in the neighborhood. Looking at things from the perspective of the neighborhood also allows Vonovia to develop integrated solutions with regard to energy supply and CO_2 optimization for entire groups of buildings.

In addition to waning acceptance of energy-efficient modernization among the population and the rent freeze, we are confronted with the conflict between energy-efficient solutions and rising costs; something we are doing our best to navigate through. Vonovia is committed to using numerous (academically supported) cooperation projects and integrated approaches to find cost-efficient and innovative, effective solutions for energy efficiency and a climate-neutral housing stock.

One example of this sort of approach is the Energiesprong initiative, a novel serial refurbishment concept that represents a high level of living comfort, minimal refurbishment times and an innovative financing model. The aim is to conduct refurbishments to bring buildings to net zero, meaning that they generate as much energy in a year as they consume. Vonovia is also taking part in projects to optimize the operational management of heating systems and the interaction between, for example, system technology, user behavior and structural measures, so as to deliver further ideas for measures that can be implemented at a reasonable cost.

The Portfolio Management department, which reports to the Chief Rental Officer (CRO), is responsible for coordinating the energy-efficiency modernization activities. The properties/neighborhoods to be modernized are selected in a targeted manner in cooperation with the regions, and the optimal degree of modernization for each building is defined. The investments for the modernization programs are approved by the Management Board as a whole. Public-sector subsidy programs are being used for many of the modernization measures. This allowed a refurbishment rate of 2.9% to be achieved in the reporting year. The year-on-year drop (2019: 3.7%) is also attributable to the introduction of the rent freeze in Berlin. The refurbishment rate will be slightly lower next year due to the changeover to new subsidy conditions.

Material Performance Indicator

Category	Unit	2019	2020	Projection for 2021
Refurbishment rate (in Germany)	%	3.7	2.9	2.0–2.5%

Going forward, we will manage our energy-efficiency modernization activities taking even greater account of the impact on a building's CO_2 intensity. This means that, as well as optimizing the building shell, we will also be focusing increasingly on switching to lower-CO_2 energy sources. As part of our quest to achieve a climate-neutral housing stock in 2050, Vonovia is aiming to have reduced the CO_2 intensity of its housing stock in Germany to between 30 and 35 kg CO_2e/m^2 by 2030. The CO_2 intensity came to 43.9 kg CO_2e/m^2 in the reporting year, just below our target thanks not only to energy-efficiency modernization activities but also, and among other things, to the purchase of green electricity for general electricity and improved CO_2 intensity in district heating.

Material Performance Indicator

Category	Unit	2019	2020	Target for 2021
Carbon intensity of the existing portfolio (in Germany)*	kg CO_2e/ m² living area	47.2	43.9	Reduction of min. approx. 2%

* Total stock, based on final energy demand from energy performance certificates and related to rental space, partly incl. specific CO_2 factors of district heating suppliers.

Renewable Energies and Energy Mix

Another major lever that can be used to reduce greenhouse gas emissions is the use and expansion of renewable sources of energy. Vonovia is aiming to continuously increase the use and share of renewable energies, for example by expanding the use of hybrid heating systems and integrated neighborhood systems. We are also piloting innovative approaches such as the use of hydrogen technology in combination with electricity from renewable sources.

In 2019, Vonovia launched the "1,000 roofs" program, which we intend to use to equip at least 1,000 roofs with photovoltaic facilities over the next few years. The overall potential offered by suitable roofs is actually much higher still, meaning that we have the opportunity to expand this activity further in the future. This is also the objective for 2021, when we intend to continue with the scaling of this business area. Looking ahead, the plan is to use the energy generated directly as landlord-to-tenant electricity in the individual neighborhoods as soon as the overall legal conditions make this commercially feasible. The "1,000 roofs" program and other innovative approaches aimed at the CO_2 optimization of the real estate portfolio as part of the neighborhood concept are developed and managed by the Innovation & Business Building department. → p. 53 et seqq.

Vonovia is offering its customers the opportunity to purchase electricity from renewable energy sources via its own energy distribution company (VESG). By supplying certified green electricity, Vonovia is helping its customers to avoid greenhouse gas emissions. In the mid to long term, Vonovia is seeking to decentralize the energy supply to its own neighborhoods using self-sufficiency concepts. Our objective is to maximize the share of energy we produce ourselves for the benefit of our customers and the environment, and also to use it for our housing-related services, e.g., e-mobility. The purchase of certified green electricity to supply communal areas makes a further contribution to our climate strategy.

All activities relating to renewable energies and energy distribution are organized in the Value-add business area and are managed by a chief representative who reports directly to the CEO of Vonovia SE.

Material Performance Indicator

Category	Unit	2019	2020
Number of photovoltaic plants*	number	295	424

* Photovoltaic systems owned by Vonovia as of the reporting date Dec. 31.

Sustainable New Construction and Refurbishment

Vonovia's new construction activities are helping to create urgently needed new and affordable homes, especially in metropolitan areas. New living area is created by various areas and Group companies within Vonovia. In Germany, Vonovia's technical service (VTS) is responsible for new construction, focusing in particular on densification and the addition of extra stories to buildings. The development business operating under the BUWOG brand focuses on the development of high-quality residential neighborhoods for the company's own portfolio (to hold) and for direct sale (to sell) in Germany and Austria. This arm was strengthened further by the acquisition of the project developer Bien-Ries. The activities of the BUWOG development business in Germany and Austria are the responsibility of the CDO (Chief Development Officer), and the individual development projects are approved by the Management Board. VTS's new construction business is assigned to the Value-add Business and is the responsibility of the CEO.

BUWOG has been a partner of the "klimaaktiv pakt" climate protection initiative launched by the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology since 2011. Specific goals were also developed for the new construction activities and the success of the measures was reviewed as part of a regular monitoring process. The klimaaktiv pakt 2020 initiative was completed successfully and there are plans to continue the activities as part of the "klimaaktiv pakt 2030."

BUWOG has had a certified energy management system that is consistent with ISO 50001 standards in place in

Austria since 2013/14 and in Germany since 2018. The system is a tool used voluntarily to systematically manage energy performance and improve it continuously. The corresponding establishment of processes that reflect this policy in the company and clear objectives serve to increase energy efficiency, reduce energy consumption and cut energy costs. This reduces greenhouse gas emissions and allows the company to have a positive environmental impact.

In its new construction and refurbishment projects, Vonovia takes care to ensure optimized energy design, the use of renewable energies and environmentally-aware construction methods that conserve resources.

Low-emission construction and energy-efficient operation are also taken into account during the planning and realization phases in the form of life cycle assessments. Designing the residential environment and preserving biodiversity are top priorities for us. Numerous buildings feature green spaces that serve as natural habitats for flora and fauna at ground level, on roofs or on facades. In addition to the optical effects, these green spaces also offer a practical added value, for example, by slowing the flow of rainwater into the partially overburdened municipal sewage system and by making a considerable contribution to the microclimate, especially by preventing urban heat islands in built-up areas. Attention is also paid to conserving resources and protecting the environment during the construction phase, too.

The Group-wide strategy for sustainable new construction and refurbishment is being enhanced further as part of Vonovia's sustainability roadmap. As with the existing portfolio, particular attention is being paid to energy efficiency, low greenhouse gas emissions and building sustainability certificates such as those awarded by the German Sustainable Building Council (DGNB) or the Austrian Sustainable Building Council (ÖGNB) and the klimaaktiv climate protection initiative. All decisions made by the Management Board regarding new construction projects are always to be made transparent with regard to the target of efficiency class A/high KfW standards and reviewed to ensure they are consistent with Vonovia's climate and energy efficiency targets. The average primary energy requirements of newly constructed living area make up the most important key performance indicator. Our aim is to reduce this in the medium term. 2021 is initially assumed to bring a marked increase, also due to projects that were already planned and approved based on different overall conditions before we set ourselves this target.

Material Performance Indicator

Category	Unit	2019	2020
Average primary energy requirement – new construction*	kWh/m² p.a.	–**	35.7

* Based on energy certificates, excluding purely commercial spaces and extensions.
** Newly introduced in 2020.

Social Issues

Within the context of the statutory requirements in the Non-financial Declaration, social issues include the following material topics: "Neighborhood development and contribution to infrastructure," "Fairly priced housing," "Homes that meet tenant needs and action in response to demographic change" and "Customer satisfaction and service quality" – see materiality matrix. → p. 59

Neighborhood Development and Contribution to Infrastructure

Vonovia offers people a home in its neighborhoods. The company's aim is for them to be able to find a good neighborhood in which they feel comfortable and which brings different generations together. With this aim in mind, Vonovia develops infrastructure that is tailored to suit the individual challenges of each neighborhood, is geared toward the needs of the tenants and combines structural design, climate protection and services to meet social needs. Vonovia's neighborhoods are designed to comply with clear climate protection requirements. They use innovative concepts to offer a good platform to counter the challenges associated with megatrends and reduce CO_2 emissions. Vonovia designs its residential environments and green spaces to strengthen participation and urban community life and to be sustainable from an ecological perspective.

Vonovia attaches a great deal of importance to the development of contiguous groups of buildings, as they offer considerable potential for the company to make its mark in terms of both structural and social measures and for making a contribution to sustainable urban development. More than 70% of Vonovia's portfolio is located in areas that make up neighborhoods. It is precisely in areas like these that Vonovia can shape our tenants' living environments and adapt to the individual challenges associated with a particular neighborhood. Vonovia is equally committed to ecological and social aspects and to promoting social interaction in the local community. It uses various instruments and cooperation initiatives to achieve this, e.g., by making premises available, establishing services, neighborhood meet-ups and day care centers hand-in-hand with cooperation partners that focus on the greater good. With regard to its neighborhood approach, Vonovia has developed the innovative B2Q (Business to Quartier [the German word for neighborhood]) perspective and introduced a toolbox that is being developed further in the Vonovia Academy. → p. 55

The long-term viability of neighborhood development starts with responsibility for the people in the neighborhoods and is put into practice in Vonovia's innovative strength – cost-effective, technologically focused, sustainable, climate-friendly and social. Neighborhood development calls for complex teamwork and extensive innovative knowledge of all employees to ensure successful implementation on location. This is why Vonovia has come up with plans for the establishment of a Neighborhood Academy, which aims to transfer specific skill sets and innovative knowledge for successful and forward-looking neighborhood development. The Academy's program in cooperation with the real estate business school Europäisches Bildungszentrum der Wohnungs- und Immobilienwirtschaft (EBZ), includes modules featuring practical case studies and training content.

Vonovia has also endowed a professorship at the EBZ Business School – University of Applied Sciences in Bochum focusing on the topic of "Neighborhood Development and Living." Professor Jan Üblacker, a renowned urban sociologist and social scientist, has assumed the professorship endowed by Vonovia, firmly establishing the neighborhood perspective in the curriculum for the EBZ students.

In 2020, there were 14 neighborhood development projects in the operational implementation stage across Germany comprising approx. 8,000 residential units as part of the neighborhood development investment program. These include various key components, such as energy-efficiency refurbishments, the construction of new homes and measures to design an appealing residential environment – supported by additional social services, urban development aspects and necessary infrastructure measures. These projects generally run for a period spanning several years. The investment volume reported refers to the expenses associated with these measures in the fiscal year under review.

Material Performance Indicator

Category	Unit	2019	2020	Projection for 2021
Investment volume for community development in Germany (fiscal year)	in € million	57.9	42.3	around 85

Vonovia takes both financial and social criteria into account when assessing neighborhoods. This is a process involving city and municipal authorities as well as our tenants in order to jointly develop solutions for the neighborhood.

Neighborhood development is planned and managed on a decentralized basis via the regions. The CRO is the Management Board member responsible for the operating business. We are increasingly using our own neighborhood developers for on-site implementation. This allows us to address any specific issues as and when they arise.

The investment and participation formats are also the responsibility of, and are managed by, the regions, just like Vonovia's social commitment. This approach is supplemented, also from a quality assurance perspective, by centrally managed supporting measures via corporate communications.

Fairly Priced Housing

Vonovia meets the basic human need for housing with an offering that is geared toward the individual. As a result, our tenants are at the center of our corporate activities. Vonovia adapts its offering to reflect changing and varying housing requirements to ensure that it responds to different needs and living circumstances.

The fundamental challenge involves safeguarding our supply of housing at fair and transparent prices while at the same time achieving a climate-neutral housing stock. Climate protection is a cost-intensive business, particularly in the building sector. A sensitive approach is required in order to strike a balance between moderate rent increases and climate protection measures, innovations to reduce costs and a suitable funding environment. This is why, particularly with modernization projects, it is key to bear in mind what individual tenants can actually afford in order not to end up losing customers. After all, one aspect that is of fundamental importance to us is being able to offer our tenants the prospect of being able to stay in their homes in the long term.

In light of the above, a moderate and transparent rent policy is a fundamental prerequisite for Vonovia. We work in collaboration with city and municipal authorities to offer subsidized and independently financed homes for people on low incomes. Our rental prices are based on the usual local rents and – if available – on the qualified rent indices. Regarding modernization measures, the company has entered into a voluntary commitment that caps the modernization costs that can be passed on to tenants at € 2/m².

Material Performance Indicator

Category	Unit	2019	2020
Average rent per m²	EUR	6.93	7.16

In addition, every tenant has the option of raising hardship case objections. Our hardship management team – which comprises employees working at the headquarters and neighborhood managers working on site – looks at each individual case and works with the tenant to find an individual solution. In addition, Vonovia gives people in Germany aged over 70 special vested rights. The hardship management team is also on hand to support our customers here – the aim always being to ensure that people can stay in their homes and that housing remains affordable.

In the context of the coronavirus pandemic, people who are particularly reliant on the security of their own four walls in uncertain times require special protection. This is another area in which Vonovia has guaranteed that nobody will have to lose their apartment if they encounter difficulties paying their rent due to the coronavirus crisis. In 2020, Vonovia helped customers living in around 1,600 apartments facing these very challenges by providing them with individual solutions.

Rent policy is managed on a decentralized basis via the regions. The CRO is the Management Board member responsible for the operating business. The individual measures are planned and coordinated in the Portfolio Management department.

New construction is playing an increasingly important role when it comes to making affordable housing available. This is the only way to respond to the growing demand – particularly in metropolitan areas and in central and urban locations – and take pressure off the housing markets. This is an area in which Vonovia is making a contribution with densification measures and projects to add extra stories to existing buildings. → p. 63 et seq.

Homes that Meet Tenant Needs and Action in Response to Demographic Change

Our society is changing – and so are our customers. We adapt our offering in response to changing and varying housing needs. This applies in particular with regard to demographic change. Our aim is to ensure that our tenants are safe and healthy in their homes and can plan their long-term future there. This customized offering allows Vonovia to access as broad a customer group as possible.

In Germany, the demand for senior-friendly housing will outstrip the supply by around two million by 2035. In an aging society, it is crucial to enable a large number of people to live independently in their own homes for as long as possible. Vonovia is also responding to this shortfall by equipping and refurbishing apartments for people with impaired mobility.

Homes that are completely barrier-free, according to German industry standard DIN 18040-2, are only necessary in very rare cases. Rather, a small number of measures, such as the fitting of non-slip flooring or flush-to-floor showers, are often sufficient to significantly increase the level of living comfort in old age. Vonovia has therefore set itself the target of modernizing 30% of its newly rented apartments every year to meet the demands of an aging society. Existing buildings are reviewed for their potential to be converted to make them more accessible on a regular basis. In 2020, 10,300 apartments were (partially) modernized to make them fully accessible.

Material Performance Indicator

Category	Unit	2019	2020	Target for 2021
Proportion of accessible (partially) modernized newly rented apartments (in Germany)*	%	32.9	30.1	around 30%

* Includes both measures in the event of a change of tenant and modernizations at the request of the tenant.

This systematic focus on senior-friendly extension and refurbishment is Vonovia's way of responding to the process of demographic change within our society.

In addition to structural measures, the social infrastructure also plays a key role. In addition to special forms of housing, such as senior-friendly apartments, Vonovia also works with cooperation partners that focus on the greater good to offer services and neighborhood meet-ups, for example.

Responsibility for the senior-friendly housing programs lies with the Management Board (CRO). The structure of the refurbishment program is managed centrally and is implemented via the regions.

Customer Satisfaction and Service Quality

We aim to support our customers as partners on an equal footing. As a result, their needs are at the center of our actions. Our customers' satisfaction with, and appreciation of, our products and services are directly linked to the company's success in the long term. They expect to have an affordable home offering contemporary living standards, which is why proximity to our customers and making it convenient for them to contact us are key elements of our customer service philosophy.

On site, caretakers and our own craftsmen take care of our tenants' concerns. This allows us to ensure fast and reliable service. Our multilingual central customer service center, which tenants can contact through a number of different channels, is responsible for all queries relating to lease agreements and consumption and ancillary expense bills, for example.

At the same time, we are working to further develop and improve our customer app, implementing a number of additional self-service functions. We are also launching customer satisfaction surveys and individual surveys that are placed through the app in a targeted manner. In 2021, the app will also be expanded to include a new customer group: prospective tenants. They will then be able to search for an apartment, book a viewing appointment and arrange for the conclusion, and also conclude their lease agreement digitally.

In addition to the customer app, the digital customer portal also offers extended availability and a full range of self-service functions that can be accessed around the clock.

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. The CSI is determined by means of regular customer surveys. In 2020, the CSI for Germany was significantly higher in a year-on-year comparison. BUWOG Group GmbH in Austria also uses an annual customer satisfaction survey as a tool, although it is not consistent with the CSI. Customer satisfaction is a fundamental benchmark for all business processes at Victoria Park AB as well. The aim is to achieve ongoing positive development in the CSI.

Material Performance Indicator

Category	Unit	2019	2020	Target for 2021
Customer Satisfaction Index, CSI (in Germany)*	%	-8.1	+8.6	Same level as the previous year

* Customer Satisfaction Index (CSI) in glossary.

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

Employee Issues

Within the context of the statutory requirements in the Non-financial Declaration, employee issues include the following material topics: "Appeal as an employer" and "Approach to diversity and equal opportunities" (see materiality matrix → p. 59).

Appeal as an Employer

The coronavirus pandemic dominated the 2020 fiscal year, also as far as Vonovia's employee issues are concerned. Protecting our employees was our utmost priority. Appropriate measures were taken early on when the pandemic first broke out, particularly for employees working on construction sites but also in the customer service centers or in administration. Over and above the provision of protective masks and disinfectant in all of our offices, regulations governing building access and workplace usage, the Management Board's appeal to employees to use the German coronavirus alert app and the high level of discipline and responsible and flexible commitment shown by all employees largely helped to prevent the virus from spreading among the workforce. The company rewarded its employees for these efforts at the end of the year by paying a tax-exempt special bonus of € 1,500 per employee in Germany and Austria. The measures taken to protect against the coronavirus were coordinated centrally in a coronavirus task force set up by the Management Board, which reviewed the pandemic situation within the company on a regular basis under the auspices of the Management Board and Supervisory Board office. This shows just how important protecting Vonovia's employees is.

The Group management team and the works council reacted to the changes in the overall conditions very early on in the year and extended the existing works agreement on mobile working. We have made working hours more flexible to allow employees to strike a balance between work and family life. Works agreements on company holidays, furlough and on measures to combat the coronavirus pandemic were concluded with the co-determination committees, although fortunately we did not have to make use of them.

It has become apparent that the impact of the crisis was cushioned by the considerable mobility shown by our employees and the high level of digitalization. We were able to implement remote working wherever possible. Other digitalization elements, such as options allowing employees to report absences due to illness via an app or record their working hours digitally, have created further benefits in terms of flexibility and allowed Vonovia to continue operating largely without restrictions.

Vonovia's continued economic stability is solidifying its position as a safe employer. More than 1,000 new employees have been hired since the spring of 2020, In addition to this, there are 200 trainees who started their training with us in the summer of this year. This is the largest number of trainees we have ever had at the start of a training year. Vonovia also offered young people working at companies struggling due to the coronavirus crisis the opportunity to continue their training at Vonovia. Promoting young talent and offering them prospects within the company is a key component when it comes to addressing the shortage of workers with the desired skills, a problem that is also relevant for Vonovia. 2020 has shown that Vonovia is a reliable and secure employer, even in uncertain times. After all, we need well-trained, qualified employees to achieve our mission and pursue our growth strategy.

Employee Key Figures

Category	Unit	2019	2020
Total number of employees*	number	10,345	10,622
of which female	number	2,398	2,626
of which permanent	number	9,155	9,669
Number of nationalities**	number	74	76
Average age (total)	number	42.5	42.5
Number of people with disabilities**	number	350	368
Total number of trainees***	number	473	510
of which commercial	number	145	153
of which technical trade	number	328	357
Training rate***	%	4.7	5.0

* Bien Ries included in total number of employees. All other values "except number of trainees and training ratio" excluding Bien Ries.
** Not including Sweden. Germany and Austria taken into account.
*** Based on Germany only incl. Bien Ries.

As well as offering flexible working options with a high degree of digitalization, the company specifically promotes outstanding specialists and managers, not only to offer attractive jobs to new hires, but also to ensure that they stay with the company. Therefore, targeted personnel development via further training measures forms a key component of our HR management strategy – both in Germany and in Austria and Sweden. Needs-based training courses and programs include training sessions and specialist seminars, management development courses and certified qualification schemes. We support the further development of our high-potential candidates through our own Vonovia Academy and our cooperation projects with EBZ Business School in Bochum, which focuses on property management, and other educational institutions. Talent management, keeping our top performers within the company and systematic succession planning are key elements of our HR management system. In order to reduce the administrative outlay involved and allow us to better monitor further training measures, we are aiming to take the next step in our digitalization process in 2021 by introducing the IT application Success Factors Talent and Learning. This program also has the potential to support the expansion and organization of online training sessions.

The satisfaction of our employees is a decisive indicator for allowing us to assess our appeal as an employer. In 2019, we conducted a comprehensive survey among our employees from all over Germany in this regard. To ensure that the results of the survey and the opinions expressed by our employees actually translate into improvements, Vonovia has decided to implement a structured bottom-up process: The results of the survey are discussed by the employees together with their direct managers and the team works together to identify the action to be taken. While the coronavirus pandemic slowed this process down, Vonovia has managed to present the feedback in digital format, and managers are gradually working on addressing the issues raised. Overriding measures requiring decisions at Group level are currently still being finalized with the Management Board.

Going forward, the change in the employee satisfaction value will be introduced as a key performance indicator. As a result, the employee survey will be repeated at regular intervals from 2021 onwards, conducted by an external service provider. The aim for 2021 is to achieve a slight increase in employee satisfaction as against the 2019 survey.

Vonovia is committed to the core labor standards of the International Labour Organization (ILO) in all areas, particularly with regard to freedom and rights of association (see **https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/attitude**). Works councils represent all Vonovia employees in Germany and Austria.

Approach to Diversity and Equal Opportunities

Appreciation, performance, responsibility and team spirit are at the center of our corporate culture. These are the values that will allow us to rise to the challenges facing our sector and achieve our corporate objectives.

We see the diversity of our workforce – Vonovia employs people from more than 70 different countries – as a huge strength and opportunity that we want to take targeted measures to promote. 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. This diversity has a positive impact in our dealings with customers, too, and gives us a competitive edge.

In 2020, we harmonized various works agreements on special employee benefits in order to strengthen equal opportunities and a sense of solidarity within the company. All areas of the Group in Germany now have access, for example, to the employee share program or tax-free employer grants for capital formation purposes (from 2021). By contrast, there is a need for harmonization in our efforts to expand the annual appraisals system. These appraisals are not yet available to all employees.

At Vonovia, women are significantly underrepresented in the workforce structure, accounting for a share of 24.7%, mainly because of technical occupations in the trades. In order to strengthen diversity and increase its potential supply of specialists, Vonovia promotes employment and promotion opportunities for women – particularly in management – with its systematic succession planning system. We select our employees based on their qualifications and abilities. We make sure that we take active measures to support women and to open up opportunities for them to assume management and technical roles.

In order to attach appropriate weight to the aspect of equal opportunities and diversity throughout the Group, the key figure "Proportion attributable to the underrepresented gender at the first and second levels of management below the Management Board" is being adjusted. Whereas in previous years, the 30% target applied exclusively to the Vonovia SE part of the Group, the new key figure applies to the Group as a whole. The target has also been adjusted to 26%, to be achieved by 2024.

Material Performance Indicator

Category	Unit	2019	2020	Target
Proportion of women in management positions (first and second levels below the Management Board)	%	23.9	25.9	Same level as the previous year

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 corporate governance declaration (see **https://investoren.vonovia.de/en/corporate-governance/corporate-governance-declaration**).

Establishment in the Company

At Management Board level, the CEO is responsible for the company's human resources work, which has been established centrally as a shared service within HR management. Austria and Sweden have their own HR departments. Austria reports to the HR department in Germany via dotted-line reporting, while Sweden has not been firmly established in the reporting line as it was listed separately until only recently. Rather, reports from Sweden are obtained as and when required.

The Head of HR discusses developments with the CEO on a regular basis. The objectives and focus of HR work are developed in collaboration with the Management Board and are then cascaded down throughout the organization.

Combating Corruption and Bribery

Within the context of the statutory requirements in the Non-financial Declaration, this aspect includes one material topic: "Governance and compliance" (see materiality matrix → p. 59).

Governance and Compliance

Reliable, transparent and trust-based corporate governance form the foundation stones of our business model. Securing the trust of our customers as well as the trust of our employees and all other key stakeholders is our top priority. This calls for a management level that leads and monitors the company independently and with a sense of responsibility. The "tone from the top" is crucial to establishing our credibility. The same applies to compliance with laws and regulations. Trust can only be built through reliability if all rules are followed systematically – both those set out by law and, in particular, also those that we impose on ourselves. If trust is abused, on the other hand, this can soon pose a threat to the company's reputation – and as a result to its commercial success.

As a result, our governance endeavors are geared toward the establishment and implementation of, and systematic compliance with, a transparent and modern system of rules. Group-wide policies and business principles serve as a framework: Our business philosophy, our Code of Conduct, the Business Partner Code and the Declaration of Respect for Human Rights act as the maxims guiding us in our actions. **https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/attitude**

We are also committed to the principles set out in the German Corporate Governance Code and ensure that our Supervisory Board is independent. **https://investoren.vonovia.de/en/corporate-governance/corporate-governance-declaration/**

A good compliance management system also makes a key contribution to a company's sustainable development and value creation. As a result, the Management Board (CEO) is responsible for the implementation of the Compliance Management System (CMS).

Vonovia's CMS is based on three pillars: the "prevention" and "identification" of and "reaction" to any misconduct. These pillars make up an extensive system of compliance measures and processes as part of the compliance program. Our Compliance Guidelines, which are consistent with the Principles for the Proper Performance of Reasonable Assurance Engagements Relating to Compliance Management Systems (IDW PS 980) and also take the implementation principles for the UK Bribery Act 2010 into account, form the basis. The focus of our appropriate and effective CMS is on preventing misconduct. The program, which has already been firmly implemented, is evaluated and enhanced on an ongoing basis. Regular training sessions support our preventative work. Procurement, for which the issue is particularly relevant, receives special training on corruption and criminal law pertaining to corruption.

In 2020, Vonovia focused on establishing a system to prevent and combat corruption: A new anti-corruption policy and a policy designed to protect whistleblowers form the basis for these efforts. The existing system featuring an independent ombudsman is to be supplemented and expanded to include a hotline that allows whistleblowers to remain anonymous. An additional anti-money laundering policy addresses the particular field of money laundering in the real estate sector and also supports efforts to combat abuse in this area. https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/compliance-anti-corruption

We need supplementary and more in-depth training in order to make the frameworks that have been put in place and the corresponding awareness of corruption issues an even more established part of our corporate culture. The coronavirus pandemic meant that it was not possible to conduct as many of these sessions as we would have liked in 2020. There is potential for improvement here that we intend to exploit in 2021.

The CMS is developed further by the Compliance Committee and is adapted to reflect the latest requirements. The Committee meets several times a year and its members are the compliance officer, compliance managers, the ombudsperson, and representatives from the internal audit, risk management and HR management departments and the works council. The Compliance Officer (from the Legal department) is the central point of contact for compliance matters and suspected cases. He reports to the CEO on a regular basis, and also on an ad hoc basis when special cases arise. His activities are supported by the compliance managers and specialists in the individual departments. The CMS applies to the entire Group.

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

In the 2020 fiscal year, there were isolated suspected cases of corruption, which we investigated diligently. None of the cases were confirmed. There were also several other nonmaterial compliance violations or suspected cases. This demonstrates that our established system functions well: Cases are reported and addressed and corresponding consequences ensue.

Material Performance Indicator

Category	Unit	2019	2020
Total number of proven cases of corruption (in Germany)	number	0	0

Respect for Human Rights

With its business model, Vonovia operates within a stringently regulated and controlled legal framework on the German, Austrian and Swedish markets. These legal frameworks mean that the company has to adhere to manifold binding requirements and place particular emphasis on respect for human rights as an aspect that is protected under constitutional law.

Respect for human rights is an extremely important issue for Vonovia – also independently of the legal framework – and it goes without saying that we not only respect human rights, but also actively promote them, e.g., through our measures to ensure equal opportunities (→ p. 67 et seqq.) or promote occupational health and safety. Since, even in highly regulated markets, breaches of labor law requirements can still occur – for example on construction sites – the Management Board published a Declaration of Respect for Human Rights in 2020 (see https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/attitude/). In this statement we clarify Vonovia's conviction for a pluralistic democratic society and zero tolerance of human rights violations and our commitment to respect human rights in all aspects of our business. We adhere to the ILO core labor standards and the principles of the UN Global Compact, which we signed up to in the summer of 2020.

Vonovia develops and builds homes itself, in particular via the subsidiaries of its BUWOG brand. Compliance with labor and social standards on construction sites is a challenge from a risk/human rights perspective. This challenge is, however, mitigated by the fact that the company performs around one-third of its trade/construction activities in Germany itself via its own technical service. This lessens dependency on external construction companies and therefore this risk, as Vonovia is in a position to exclude service providers and suppliers that do not comply with labor law requirements.

What is more, all contractual partners have to sign our Business Partner Code (see https://investoren.vonovia.de/en/corporate-governance/compliance-and-policies/attitude/) whenever a contract is concluded, in which they undertake to comply with certain sustainability criteria (Sweden has its own code). These criteria include clear expectations regarding integrity, legal compliance and ethical conduct, and stipulate, among other things, that illicit employment must be ruled out, that the legal minimum wage must be paid and that valid regulations on occupational safety and human rights must be observed.

These obligations also apply to third parties – i.e., subcontractors of our contractual partners. We also use long-term cooperation in the spirit of partnership to build a close relationship of trust with our contractual partners. This is largely the responsibility of the procurement department and allows any misconduct to be addressed. The procurement department reports to the CFO division of the Management Board with the intention of ensuring a high degree of neutrality and compliance both internally and externally. The Vonovia partner portal for service providers and suppliers, which was launched by the procurement department at the end of 2019, serves as another key component of system-supported risk and supplier management. When selecting service providers and suppliers, the procurement department uses the Vonovia partner portal to check that the provider in question has acknowledged its duty to respect human rights as set out in the Business Partner Code. In the event of any irregularities or scenarios in which these obligations are ignored, the cases are documented accordingly and sanctions are normally imposed. These processes use tools such as the blacklist and the SAP-supported storage of contract award and payment blocks.

In the future, the Management Board will review the Declaration of Respect for Human Rights adopted in 2020 at regular intervals and develop it accordingly so as to address changes in those areas of Vonovia that are relevant to human rights.

Appeal on the Capital Market

As a real estate company with a long-term focus, we aim to strike a balance between commercial activity on the one hand, and social responsibility and ecological objectives on the other. We are committed to the principles of the social market economy and profitability. We can only implement our sustainability policy successfully if we are also commercially successful with our business model. We want to increase the value of our company and make ourselves more attractive to investors in the long run, while also contributing to sustainable development in our sphere of influence. → p. 36 et seqq. This also makes us attractive to investors, who are attaching increasing importance to sustainability. Access to the capital market is crucial for us in this respect. This also applies to future financing instruments, such as green bonds, which Vonovia is also interested in issuing.

On the capital market, it is becoming increasingly important to take ESG criteria into account when making investment decisions. With its Action Plan for Financing Sustainable Growth, the European Union is picking up on these trends and driving them forward. Failure to meet ESG expectations can sometimes result in a company actually being excluded from an investor's investment portfolio. ESG performance is also reflected primarily in a company's standing in the relevant ratings and benchmarks. As a result, we aim to present our sustainability performance to the capital market in a transparent manner, also by participating in the ESG ratings that are relevant to our investors, and by being awarded consistently good ratings. As well as performing regular checks to see whether we are listed in the relevant indices, we also use the results of the rating process and peer group comparisons to further develop our sustainability measures in a targeted manner.

Vonovia was able to achieve a substantial improvement in a number of ratings in 2020. By way of example, Vonovia climbed to a position in the top percentile of the more than 12,000 companies across the globe that are rated by Sustainalytics, was awarded "Prime" status by ISS-oekom for the first time and was included in the renowned Dow Jones Sustainability Index Europe.

Material Performance Indicator: Performance in Relevant ESG Ratings

Ratings	2019	2020
Sustainalytics ESG risk rating	16.8	7.7
MSCI ESG	A	A
CDP Climate Change	B	B-
ISS-oekom	C-	C
SAM CSA (S&P Global)	23*	57

* Not actively edited.

Target for 2021 and the years to follow: Keeping results at a high level and achieving ongoing improvement.

Within the company, the Sustainability/Strategy department is responsible for actively managing our participation in ESG ratings, involving the operating departments in this process.

The Investor Relations department is, in consultation with the Management Board, responsible for capital market communications and dialogue with investors. Regular dialogue is held with capital market participants, also on ESG issues. The annual Capital Markets Day organized by the Investor Relations department (which did not take place in 2020 due to the coronavirus pandemic) serves as an important communication channel for putting individual topics under the spotlight and explaining them in greater detail. Sustainability will be the central topic addressed in 2021. Investor Relations also conducts additional roadshows and organizes face-to-face investor meetings on sustainability. A roadshow on corporate governance issues is usually held once a year with the Chairman of the Supervisory Board.

The Investor Relations department and the Sustainability/Strategy department report to the CEO. Decisions regarding ESG ratings are made in the sustainability committee, which also receives regular information on developments in this area.

Portfolio Structure

Portfolio in the Property Management Business

As of December 31, 2020, Vonovia had a total real estate portfolio comprising 415,688 residential units (2019: 416,236), 139,429 garages and parking spaces (2019: 138,176) and 6,564 commercial units (2019: 6,748). Our locations span 630 cities, towns and municipalities in Germany, Sweden and Austria. 74,021 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 84%) are located in Germany. The Swedish portfolio accounts for around 11% of the fair value, while the share of the Austrian portfolio comes to around 5%. The portfolio is as follows as of December 31, 2020:

Portfolio and Fair Value by Country

	Portfolio			Fair value*		
	Residential units	Living area (in thou. m²)	Vacancy (in %)	(in € million)	(€/m²)	In-place rent multiplier
Vonovia Germany	355,285	22,177	2.2	47,782.8	2,099	25.4
Vonovia Sweden	38,248	2,738	2.3	6,219.4	2,090	17.4
Vonovia Austria	22,155	1,645	4.6	2,832.2	1,570	25.5
Total	**415,688**	**26,560**	**2.4**	**56,834.4**	**2,063**	**24.2**

* Fair value of the developed land excl. € 2,076.3 million, of which € 616.8 million for undeveloped land and inheritable building rights granted, € 386.1 million for assets under construction, € 779.1 million for development and € 294.2 million for other.

Rent and Rental Growth by Country

	In-place rent*			Rent increase	
	Total (p.a. in € million)	Residential (p.a. in € million)	Residential (in €/m²)	Organic (in %)	Market rent forecast valuation (in % p.a.)
Vonovia Germany	1,883	1,805	6.95	2.8	1.7
Vonovia Sweden	357	331	10.31	4.7	2.0
Vonovia Austria	111	90	4.79	5.1	1.4
Total	**2,352**	**2,225**	**7.16**	**3.1**	**1.7**

* Shown based on the country-specific definition.

As of December 31, 2020, the Group's real estate portfolio across Germany comprised 355,285 residential units, 97,093 garages and parking spaces and 3,786 commercial units distributed across 471 cities, towns and municipalities. The total living area amounted to 22,177,034 m², with the average apartment size coming in at around 62 m². With a vacancy rate of 2.2%, Vonovia generated an average monthly in-place rent of € 6.95 per m² in Germany. The annualized in-place rent for the residential portfolio as of December 31, 2020 came to € 1,804.8 million for apartments.

In Sweden, the Group's real estate portfolio comprised 38,248 residential units spanning a total living area of 2,738,209 m², 25,019 garages and parking spaces and 2,172 commercial units. With a vacancy rate of 2.3%, the residential portfolio generated annualized in-place rent of € 330.7 million as of December 31, 2020. The apartments, which average 72 m² in size, generate monthly in-place rent of € 10.31 per m² (inclusive rent). Most of them are located in the Stockholm, Gothenburg and Malmö regions.

In the Austrian portfolio, which is largely located in Vienna, Vonovia achieved an annualized in-place rent of € 89.9 million as of December 31, 2020, with a vacancy rate of 4.6%, in the residential portfolio, which comprises 22,155 units covering total living space of 1,644,754 m². The monthly in-place rent amounted to € 4.79 per m² with an average apartment size of around 74 m². The portfolio also comprised 17,317 garages and parking spaces and 606 commercial units.

Changes in the Portfolio

1,057 apartments were purchased in Germany in the second half of 2020.

In the course of 2020, properties from the portfolio earmarked for sale were also disposed of in several sales as part of the implementation of the portfolio management strategy. At the time of the sale, the statistics for the portfolios sold were as follows:

				In-place rent*	
	Residential units	Living area (in thou. m²)	Vacancy (in %)	Residential (p.a. in € million)	Residential (€/m²)
Disposal portfolios 2020	961	71.9	8.2	4.0	4.98

* Shown based on the country-specific definition.

In addition to the acquisition and sale of larger housing stocks, Vonovia's portfolio changed in 2020 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 German portfolio. Following the implementation of the annual structured reassessment of all potential, as of December 31, 2020, Vonovia's portfolio is as follows:

Portfolio and Fair Value by Portfolio Cluster

	Portfolio			Fair value*		
	Residential units	Living area (in thou. m²)	Vacancy (in %)	(in € million)	(€/m²)	In-place rent multiplier
Strategic	327,479	20,308	2.1	43,570.1	2,093	25.3
Operate	106,884	6,675	2.7	14,699.8	2,071	23.6
Invest	220,595	13,634	1.8	28,870.2	2,104	26.2
Recurring Sales	26,381	1,762	3.1	4,033.9	2,241	26.9
Non-core Disposals	1,425	107	10.9	178.8	1,197	16.5
Vonovia Germany	**355,285**	**22,177**	**2.2**	**47,782.8**	**2,099**	**25.4**
Vonovia Sweden	38,248	2,738	2.3	6,219.4	2,090	17.4
Vonovia Austria	22,155	1,645	4.6	2,832.2	1,570	25.5

* Fair value of the developed land excluding undeveloped land and inheritable building rights granted, assets under construction, development and other.

Rent and Rental Growth by Portfolio Cluster

	In-place rent*			Rent increase	
	Total (p.a. in € million)	Residential (p.a. in € million)	Residential (in €/m²)	Organic (in %)	Market rent forecast valuation (in % p.a.)
Strategic	1,722	1,652	6.93	2.8	1.7
Operate	622	565	7.28	4.5	1.6
Invest	1,100	1,087	6.77	2.0	1.7
Recurring Sales	150	145	7.06	1.8	1.7
Non-core Disposals	11	8	7.40	2.4	1.7
Vonovia Germany	**1,883**	**1,805**	**6.95**	**2.8**	**1.7**
Vonovia Sweden	357	331	10.31	4.7	2.0
Vonovia Austria	111	90	4.79	5.1	1.4

* Shown based on the country-specific definition.

In order to boost transparency in portfolio presentation, we also break our portfolio in Germany down into **15 regional markets**. 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 urban areas. Our decision to focus on the 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, 92% of our German portfolio is located in 15 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). Our stocks earmarked for sale from the "Non-core Disposals" and "Recurring Sales" subportfolios in locations that do not include any strategic stocks are shown as "Non-strategic Locations." The fact that our portfolio is spread nationwide makes us more independent of the circumstances prevailing on individual regional markets.

As of December 31, 2020, the German portfolio is as follows, broken down into regional markets:

Portfolio and Fair Value by Regional Market

	Portfolio			Fair value*		
	Residential units	Living area (in thou. m²)	Vacancy (in %)	(in € million)	(€/m²)	In-place rent multiplier
Berlin	43,171	2,751	1.1	7,815.5	2,746	34.2
Rhine Main Area	27,290	1,744	1.6	4,934.0	2,784	27.1
Southern Ruhr Area	43,428	2,671	2.9	4,483.3	1,653	21.8
Rhineland	28,421	1,887	1.9	4,213.1	2,176	24.3
Dresden	38,505	2,195	3.0	4,044.5	1,763	23.5
Hamburg	19,724	1,246	1.4	3,087.2	2,412	27.0
Kiel	24,274	1,391	1.8	2,535.7	1,774	22.4
Munich	9,677	636	1.1	2,496.3	3,819	36.9
Stuttgart	13,609	854	1.7	2,319.9	2,666	27.4
Hanover	16,190	1,024	2.3	2,053.6	1,969	23.8
Northern Ruhr Area	25,076	1,549	2.9	1,893.8	1,211	17.0
Bremen	11,849	718	2.9	1,318.3	1,792	24.8
Leipzig	9,136	588	2.3	1,054.8	1,702	23.3
Westphalia	9,489	620	3.1	1,028.7	1,642	21.4
Freiburg	4,036	276	0.9	696.8	2,500	26.8
Other Strategic Locations	26,598	1,690	2.7	3,198.2	1,862	22.3
Total Strategic Locations	**350,473**	**21,839**	**2.2**	**47,173.6**	**2,108**	**25.4**
Non-Strategic Locations	4,812	338	5.5	609.2	1,579	21.3
Vonovia Germany	**355,285**	**22,177**	**2.2**	**47,782.8**	**2,099**	**25.4**

* Fair value of the developed land excluding undeveloped land and inheritable building rights granted, assets under construction, development and other.

Rent and Rental Growth by Regional Market

	In-place rent*			Rent increase	
	Total (p.a. in € million)	Residential (p.a. in € million)	Residential (in €/m²)	Organic (in %)	Market rent forecast valuation (in % p.a.)
Berlin	228	216	6.63	-2.1	1.8
Rhine Main Area	182	176	8.58	3.4	1.8
Southern Ruhr Area	206	200	6.44	4.6	1.5
Rhineland	173	165	7.46	3.2	1.7
Dresden	172	162	6.34	2.1	1.7
Hamburg	114	110	7.44	3.9	1.6
Kiel	113	108	6.61	3.3	1.7
Munich	68	64	8.45	3.4	1.9
Stuttgart	85	82	8.15	2.5	1.8
Hanover	86	83	6.94	3.3	1.7
Northern Ruhr Area	112	108	6.00	3.0	1.3
Bremen	53	51	6.10	2.7	1.8
Leipzig	45	43	6.24	2.9	1.7
Westphalia	48	47	6.53	5.6	1.5
Freiburg	26	25	7.69	2.8	1.7
Other Strategic Locations	143	138	7.04	4.5	1.6
Total Strategic Locations	**1,855**	**1,779**	**6.95**	**2.8**	**1.7**
Non-Strategic Locations	29	25	6.69	1.7	1.6
Vonovia Germany	**1,883**	**1,805**	**6.95**	**2.8**	**1.7**

* Shown based on the country-specific definition.

Portfolio in the Development Business

The takeover of the BUWOG Group in 2018 marked a key step in Vonovia's quest to expand its business model by including established real estate development and new construction business (development business). The subsequent integration of these activities has allowed Vonovia to build on its position as a market leader in Germany and Austria not only in the rental segment, but also in the development business. The integration process expanded Vonovia's pre-existing potential to include extensive product and process expertise in the field of construction and in the development of residential construction projects, creating synergy potential for Vonovia. The BUWOG brand that Vonovia uses to run its development business was also assigned a value in its own right as part of the takeover.

It is under this strong brand that the development business area has become firmly established in Vienna and Berlin and associated with the very highest levels of customer satisfaction for our stakeholders. The first few residential construction projects are also being developed in Hamburg and Leipzig, and Vonovia aims to expand the development business to include other urban areas.

By way of example, the takeover of Bien-Ries AG in Hanau expanded the company's development business in Germany to include the Rhine-Main region. The company was transformed into a German limited liability company (to operate as Bien-Ries GmbH) following the takeover in 2020. The development pipeline in the Rhine-Main region currently comprises a total of around 1,900 residential units in cities including Frankfurt am Main, Wiesbaden and Hanau as well as in attractive municipalities within a 30-minute radius of the financial hub of Frankfurt. From now on, and now that the company has been integrated in full, the development business in the Rhine-Main region will also be managed under the BUWOG brand name.

This provides Vonovia with an end-to-end development platform spanning the entire value chain – from the purchase of land to its development, project planning, construction and sale. With its substantial product pipeline of residential construction projects that are currently being built, planned or prepared, Vonovia, with the BUWOG brand, ranks among

Development Business Model

Germany's top 5 building contractors and is the biggest private building contractor in Austria.

As a major player in the residential real estate segment, Vonovia is able to use its property development expertise to offer targeted solutions in response to current challenges such as the shortage of housing, climate change, integration and cross-generational housing. These challenges can be tackled successfully through long-standing experience, extensive market and sector expertise and intensive, ongoing market analysis, making a valuable contribution to society and to Vonovia.

Development Business Model

The Development segment allocates its projects to two different channels:

> **Development to sell** includes the units that are sold to investors or to future owner-occupiers directly.

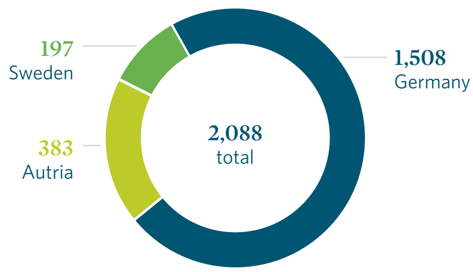
> **Development to hold** refers to those residential construction projects whose apartments will be added to Vonovia's rental portfolio upon their completion. This area also includes Vonovia's pre-existing new construction business, which involves building new residential units on property that already belongs to the company using a serial and modular approach for new construction work. It also includes the Swedish new construction projects on the company's own properties.

Value Creation and Project Development

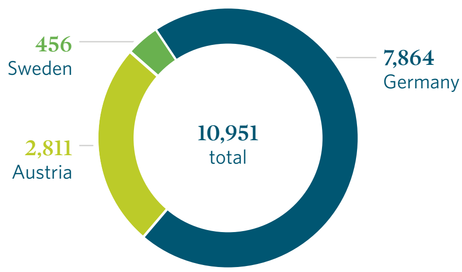
Vonovia is the leading residential real estate company in Germany and, together with its subsidiaries in Germany, Austria and Sweden, makes a key contribution to alleviating the shortage of housing through its real estate development activities. The strategy of incorporating process steps into the company's own value chain allows Vonovia to provide stringent and targeted support to residential construction projects and to exploit cost synergies with regard to technical solutions and the pooling of procurement volumes. Being able to cover the entire residential property value chain

Development to Sell & to Hold (Number of Units)

Completed



Under construction and in the preparatory stages



Valuable Contributions to Society and the Group

Land/Project Acquisition		Development & Sales			
1 Land Acquisition	**2 Due Dilligence & Acquisition**	**3 Development**	**4 Planning**	**5 Construction**	**6 Marketing & Sales**
> Identification of acquisition opportunities > Acquisition teams > Land database > Development of KI tools > Award of concepts by municipal authorities	> Assessment of development opportunities > Cross-discipli-nary acquisition teams > Environmental due diligence	> Integrated, cross-discip-linary project development > Analysis of market and regulations > Coordination of dedica-ted purpose and approval process > Construction optimization and city development > Marketing analyses	> Types + product development > Selection/ coordination of external service providers > Detailed project calculation > Coordination of construc-tion approval process > Professional planning	> Awarding of construction contracts > Coordination of interfaces > Trade coordination/ Construction management	> Development of marketing concepts > Sale > Customer service and aftercare > Initial rental

internally allows the company to generate additional earnings contributions.

These additional earnings contributions can be generated sustainably thanks to Vonovia's extensive development pipeline, which is distributed among Germany, Austria and Sweden.

Overview of Key Development Figures

In the 2020 fiscal year, the Development segment, with its Development to sell and Development to hold areas, made positive contributions to earnings in Germany, Austria and Sweden, therefore contributing to Vonovia's successful growth.

In the **Development to sell** area, the income from disposal of properties came to € 297.7 million, with € 201.0 million attributable to project development in Germany and € 96.7 million attributable to project development in Austria. Income from interim leasing totaling € 1.2 million was also generated. A total of 646 units were completed in 2020.

As of December 31, 2020, there were 3,618 residential units in the to sell development pipeline, 2,617 of which related to projects under construction and 1,001 to short-term projects in the preparatory stages. The share attributable to project development in Germany comes to 1,959 units (1,339 units from projects under construction and 620 units from short-term projects in the preparatory stages), while the share attributable to project development in Austria comes to 1,659 units (1,278 units from projects under construction and 381 from short-term projects in the preparatory stages).

In the **Development to hold** area, a fair value of € 298.2 million was realized, with € 63.3 million attributable to project development in Germany, € 127.9 million attributable to project development in Austria, € 93.7 million attributable to new construction business in Germany and € 13.2 million to project development in Sweden. A total of 1,442 residential units were completed in this area, with 200 units from project development in Germany, 383 units from project development in Austria, 662 units from new construction in Germany and 197 units from project development in Sweden.

As of December 31, 2020, there were 7,333 residential unit in the to hold development pipeline, 3,064 of which related to projects under construction and 4,269 to short-term projects in the preparatory stages. The share in Germany comes to 5,725 units (2,237 of which related to projects under construction and 3,488 to short-term projects in the preparatory stages). The share in Austria comes to 1,152 units (718 of which related to projects under construction and 434 to short-term projects in the preparatory stages). The share in Sweden comes to 456 units (109 of which related to projects under construction and 347 to short-term projects in the preparatory stages).

Adjusted EBITDA of € 110.9 million was generated in the development segment. Including medium-term development potential of around 36,000 residential units, the development pipeline comprised a total of approximately 47,000 residential units at the end of 2020.

Sustainable and Successful Development

As one of the most active residential building developers, Vonovia is aware of its responsibility for society as a whole. As a result, the topic of sustainability is firmly entrenched in our development business model. Sustainability aspects are taken into account early on when a project is still in the planning stages – that is, long before it's ready for occupancy – based on life cycle analyses based on the building's total useful life. Building certification plays a key role in demonstrating to investors, owners, tenants and interested members of the general public how sustainably a property is planned, built and managed.

The "MARINA TOWER" project, for example, a joint project involving BUWOG and IES Immobilien, was awarded the Austrian Sustainable Building Council's (ÖGNI) gold sustainability certificate, as did the "SeeSee" project in Vienna's Seestadt district. "Kennedy Garden" in the Penzing district of Vienna has been awarded the Greenpass sustainability certificate. The "BUWOG NEUMARIEN" new construction project in Berlin-Neukölln has also been successfully awarded gold certification by the German Sustainable Building Council (DGNB).

Sustainability is also, however, a top priority within Vonovia's "own four walls," such as at the new company site in Vienna. After a construction period spanning a total of around 25 months and only a few weeks of delay due to the coronavirus restrictions, the first few BUWOG employees moved into the new office building located at Rathausstraße 1 in Vienna's 1st district on June 2, 2020. The building, designed by architects Schuberth und Schuberth/Stadler Prenn/Ostertag on the site of the former City of Vienna data center, presents itself as a modern working environment that also invites customers to feel at home. Right from the initial planning stage, the careful use of resources was identified as a top priority. Instead of simply demolishing the existing building, the former City of Vienna data center was dismantled in several stages and in close cooperation with BauKarussel. The new building was developed paying the highest possible attention to the use of sustainable building materials as well as product and chemicals management to ensure healthy ambient air. The building consultancy firm bauXund supported the execution process and made sure that the ecological building specifications for the construction project, the Austrian Sustainable Building Council (ÖGNI) criteria, were applied to all subcontractor services. The property was awarded DGNB pre-certification in gold during the construction period, and received ÖGNI gold certification after its completion.

In addition to the company's own development activities, Vonovia also cooperates with research institutes in both Germany and Austria. One project that is particularly worthy of mention in Germany is "52 Grad Nord" in Berlin. Together with scientists from the Technical University of Berlin, a sustainable self-cleaning pond has been designed, which uses the vegetation around its perimeter and substrate filters to filter the rainwater that it collects using a biological process. The habitat and areas next to the banks of the pond have already attracted various types of insects, fish and microorganisms. "Smart city" initiatives are also being pursued in collaboration with the Institute of Urban and Regional Planning at the Technical University of Berlin.

Vonovia's long-standing experience in the development business also includes extensive expertise in matters relating to sustainability, neighborhood development and integration. Real estate development projects regularly comprise an appropriate proportion of subsidized housing construction, such as "Kennedy Garden" in Vienna, "BUWOG NEUMARIEN" in Berlin and the development of the Bayerischer Bahnhof district in Leipzig, with around 30% of these developments made up of subsidized rental apartments.

BUWOG has received several awards for its neighborhood development projects, including the German Brand Award awarded by the German Design Council and the ICONIC AWARD 2020 for innovative architecture. 2002 saw the 52° Nord neighborhood in Berlin-Grünau receive the Award for German Residential Buildings (Award Deutscher Wohnungsbau), an architecture prize awarded by the Federal Foundation of Baukultur (Bundesstiftung Baukultur), among others, in the best neighborhood development project category.

Representative Project Development Measures

Germany

Preparatory stages

BAYERISCHER BAHNHOF DISTRICT, Leipzig
In Leipzig's Südvorstadt, a new district featuring apartments, schools and day-care centers as well as office and commercial premises allowing employees to work close to home is being built on a total area spanning 36 hectares. In order to implement the objectives set by the City of Leipzig, BUWOG will be building around 1,500 rental apartments in two sub-areas of the Bayerischer Bahnhof district starting in 2021. After their completion, around 30% of the rental apartments will be subject to the criteria that apply to subsidized rental apartments. A park for the district, realized in conjunction with the other developers, will develop the area around the historic portico from south to north and

combine high recreational value with ecological quality.
https://www.buwog.de/de/projekt/bayerischer-bahnhof

Under construction

BUWOG LANDGUT, Hanau

New homes are being created for the fast-growing city of Hanau in the BUWOG LANDGUT neighborhood. The Landgut neighborhood consists of a total of 122 residential units, including 33 condominiums and 89 semi-detached houses, terraced houses and single-family residences, built in line with KfW-55 standards. A local energy center generates hot and heating water as well as electricity for the neighborhood using power-heat coupling.
www.buwog-landgut.de

BUWOG PERGOLENVIERTEL, Hamburg

In Hamburg-Winterhude, on a plot of land covering an area of around 2,500 m^2 not far from the Stadtpark city park and the City Nord office hub, BUWOG is working – as part of the overall development of the Pergolenviertel neighborhood – to create barrier-free and fully accessible rental apartments as well as residential communities for occupancy by selected social agencies. A total of 95 subsidized and independently financed rental apartments will have been completed here by 2022, along with three commercial units. The plan is for around one-third of the site to be used in accordance with the "ViVo" concept: This includes a mix of assisted living for senior citizens, multigenerational homes, residential groups for socio-therapeutic housing concepts and various services for people with disabilities.
www.buwog.de/de/projekt/pergolenviertel

BUWOG NEUE MITTE SCHÖNEFELD, Berlin

In the fast-growing area surrounding the new BER airport for the German capital, BUWOG is realizing a residential neighborhood for all generations: BUWOG NEUE MITTE SCHÖNEFELD is located right next to the town hall and enjoys good connections to Berlin and the attractive surrounding area. Around 330 condominiums with one to four rooms – all featuring balconies or terraces – will have been built here by 2023. The concept is rounded off by a smart energy supply for the neighborhood and a residential environment designed to harmonize with the natural habitat.
www.neuemitte-schoenefeld.de

BUWOG SPEICHERBALLETT, Berlin

A sustainable residential district is being created in Spandau on the banks of the Havel river. During the first phase of construction, two historic warehouses will have been renovated by 2021 to house 82 condominiums. By 2022, as part of the second HAVELKIESEL construction phase, another 100 condominiums will have been built in three buildings with photovoltaic facilities installed on the roofs and systems allowing rainwater to be used for garden irrigation and toilet flushing. There are plans for further construction phases to build 260 rental apartments by 2023 and a further 185 residential units by 2024.
www.speicherballett.de

Completed

BUWOG KOMPASSHÄUSER, Berlin

Four BUWOG "Kompasshäuser" wood-hybrid low-energy buildings housing a total of 50 apartments with two to five rooms each have been built in Berlin-Grünau. The use of wood, a renewable building material, has not only aesthetic but also ecological advantages and reduces the use of reinforced concrete. Thanks to their good insulation values in both directions, the buildings, which were completed in 2020, meet the KfW 40 standards.
www.52grad-nord.de

Austria

Preparatory stages

RIVUS VIVERE, Vienna

In Vienna's 23rd district, Vonovia is developing the large-scale "RIVUS" project, which will comprise more than 800 rental apartments and condominiums following its completion in the summer of 2022. A considerable part of the project, including the infrastructure and extensive courtyard area, has already been completed. In January 2021, construction work will start on "RIVUS Vivere," which will round off the complex with its 296 rental apartments and additional infrastructure facilities.

All of the residential units feature private outdoor areas such as balconies, terraces or their own gardens. The site is home to a kindergarten, a state-of-the-art all-day elementary school with sports facilities on the roof as well as a large number of playgrounds and green spaces. The development is also focused on sustainability, including the installation of a photovoltaic plant on the roof.
www.buwog.at/de/projekt/rivus-vivere

Under construction

MARINA TOWER, Vienna

The residential tower project, featuring around 500 premium residential units, enjoys excellent transport connections thanks to its prime location, with plans to implement a sustainable mobility concept, among other things. A deck will also be used to connect the development to the right bank of the Danube, opening up generous open spaces for public access and also making a key contribution to urban development. The MARINA TOWER has received the European Property Award several times and has also been awarded the gold sustainability certificate of the klimaaktiv climate protection initiative as well as of the Austrian Sustainable Building Council (ÖGNI).

www.marinatower.at

HELIO Tower, Vienna

In Vienna's 3rd district, three high-rise residential buildings known as "The Marks" are being built on top of an urban three-story base construction in the "Neu Marx" complex. BUWOG is developing one of the high-rise buildings spanning 33 stories for Vonovia as part of the joint project. The development will include a total of 228 independently financed condominiums and 173 rental apartments as part of Vienna's Housing Construction Initiative, with completion scheduled for 2023. Ecological measures, such as 27 electric car charging stations or the generous bicycle arcade, ensure sustainable mobility. The "HELIO Tower" will house a kindergarten, stores and a restaurant, further adding to the location's diverse infrastructure.

www.helio.buwog.com

Kennedy Garden, Vienna

In the heart of Penzing, Vonovia is working on a total of 512 residential units of various sizes and with various different features spread over several structural elements. 124 rental apartments are being developed as part of the housing initiative focusing on "homes for single parents," with 114 apartments planned as independently financed rental apartments and another 274 as independently financed condominiums. The project is scheduled for completion in the spring of 2022. The project has already been awarded the Greenpass sustainability certificate and received the European Property Award twice in 2020.

www.kennedygarden.buwog.at

Inside XIX, Vienna

Vonovia is implementing the "BUWOG Inside XIX" project in one of Vienna's most preferred locations. The former official building located at Gatterburggasse 12 is being given a new lease of life and is also being expanded to feature a newly constructed wing. The project will create a total of 116 premium residential units – 15 housed in the historical building and 101 in the new building – also with premium features such as smart home controls. The project is scheduled for completion in fall 2022. It received the European Property Award in 2020 for its stylish combination of old and new buildings.

www.gatterburggasse.buwog.com

Completed

ERnteLAA, Vienna

"ERnteLAA" is considered a pioneering sustainable project and was awarded the GBB sustainability prize back in 2016. Following its completion in the fall of 2020, the climate protection measures implemented as part of the project received an accolade in the form of the European Property Award in the "Sustainable Residential Development" category. The project in the Liesing district of Vienna comprises a total of 191 rental apartments, 160 of which are part of Vienna's Housing Construction Initiative.

www.erntelaa.buwog.com

Management System

Management Model

Our corporate governance is based on our corporate strategy → p. 49 et seqq. and our sustainable business activities.

Vonovia manages its business in 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 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 residential 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 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.

The Development segment includes project development to build new homes. 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, Germany's Rhine-Main district and Vienna. The value creation from the valuation of the properties at market prices will be allocated to the Development segment when these residential properties are incorporated into our own portfolio.

Performance Indicators

The 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 make a distinction between financial and non-financial performance indicators.

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 performance indicators.

In light of the increasingly dynamic development in social megatrends and the increasing importance of sustainable economic management and a sustainable business model, the management reviewed Vonovia's strategy, which it has

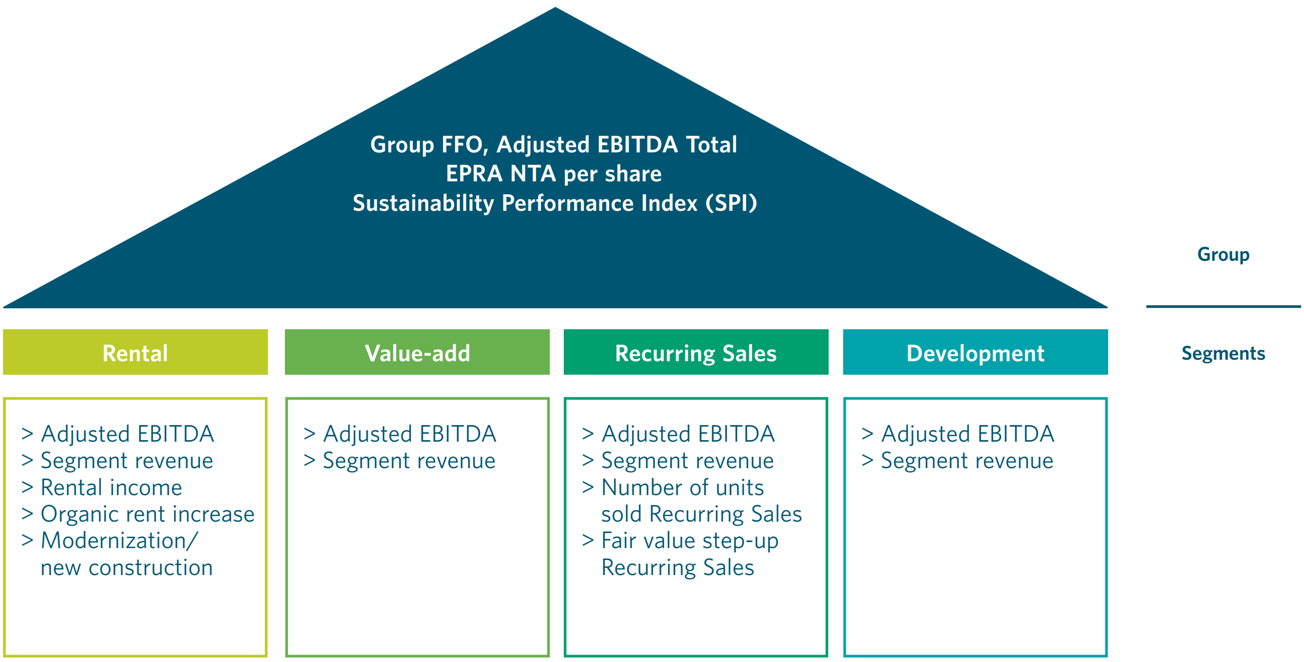
been pursuing successfully since the IPO, as part of the annual strategy process. The existing strategy was supplemented in a targeted manner to include Environment, Social and Governance (ESG) aspects. As a result, these aspects will also be included in the management system in the future. Details on the new strategic alignment are set out in the chapter Fundamental Information About the Group.
→ p. 46 et seqq.

The new corporate strategy, focusing on sustainability, has been expanded to include a sustainability indicator with the implementation of a Sustainability Performance Index (non-financial key figure for Environment, Social, Governance). The components of the Sustainability Performance Index are described in the chapter entitled "Non-Financial Performance Indicators." → p. 87 et seqq.

The previous performance indicator **Adjusted NAV per share** is being replaced by the **EPRA NTA per share**. The EPRA NRV and EPRA NDV are also calculated and published for information purposes.

This means that, as of 2021, our most meaningful performance indicators at **Group level** are the **Group FFO**, the **Adjusted EBITDA Total**, the **EPRA NTA per share** and the **Sustainability Performance Index (SPI)**.

At the segment level, we look at the segment revenue, in addition to Adjusted EBITDA, in order to measure not only rental income in the Rental segment but also performance in the Value-add, Development and Recurring Sales segments. The segment revenues generated by all of the segments make up the Total Segment Revenue. Its development over time serves as an additional growth indicator for Vonovia.



Our new management system includes the following key figures:

Financial Performance Indicators

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

Calculation Group FFO

	Revenue in the Rental segment
(-)	Expenses for maintenance
(-)	Operating expenses in the Rental segment
=	Adjusted EBITDA Rental
	Segment Revenue Value-add
	thereof internal revenue
	thereof external revenue
(-)	Operating expenses in the Value-add segment
=	Adjusted EBITDA Value-add
	Segment Revenue Sales
(-)	Fair value of properties sold adjusted to reflect effects not relating to the period from assets held for Recurring Sales
=	Adjusted result Recurring Sales
(-)	Selling costs in the Recurring Sales segment
=	Adjusted EBITDA Recurring Sales
	Revenue from disposal of „Development to sell" properties
(-)	Cost of Development to sell
=	Gross profit Development to sell
	Fair value Development to hold
(-)	Cost of Development to hold
=	Gross profit Development to hold
(+)	Rental revenue Development
(-)	Operating expenses in the Development segment
=	Adjusted EBITDA Development
Σ	**Adjusted EBITDA Total**
(-)	FFO interest expense
(-)	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 revenue 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 revenue 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 the 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 residential real estate projects both for our own portfolio and for sale to third parties 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. 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.

When it comes to managing the growth of our company, we also focus on Total Segment Revenue. This key figure supplements the organic rent increase reported to date, which is based solely on like-for-like growth in the Rental segment. Total Segment Revenue includes all income generated by the four segments that contributes to value creation, i.e., that covers costs and makes an earnings contribution (changes as against the previous year are set out in the segment reporting → p.169).

Calculation of Total Segment Revenue

	Rental income
(+)	Other income from property management unless included in the operating expenses in the Rental segment
(+)	Income from disposals Recurring Sales
(+)	Internal revenue Value-add
(+)	Income from disposal of properties (Development)
(+)	Fair value Development to hold
=	**Total Segment Revenue**

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 **Adjusted Net Asset Value (Adjusted NAV)** is used to manage the company's value. The indicator relevant from a corporate management perspective was the **Adjusted NAV per share**.

Calculation of Adjusted NAV

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

* Adjusted for effects from cross currency swaps.

With effect from the 2021 fiscal year, we will be managing the value of our company using the **EPRA Net Tangible Assets (EPRA NTA)**, which replaces the **Adjusted Net Asset Value (Adjusted NAV)** reported to date. Our calculations are based on the best practice recommendations of the EPRA (European Public Real Estate Association). The indicator that is relevant from a corporate management perspective is the **EPRA NTA per share**.

Calculation of EPRA NTA

	Total equity attributable to Vonovia's shareholders
(+)	Deferred tax in relation to fair value gains of investment properties*
(+)	Fair value of financial instruments**
(-)	Goodwill
(-)	Intangible assets
(+)	Real estate transfer tax*
=	**EPRA NTA**
(/)	no. of shares as of the reporting date
=	**EPRA NTA per share**

* Share for core and hold portfolio.
** Adjusted for effects from cross currency swaps.

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 known as "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 are aimed at protecting the environment, ensuring trustworthy, transparent and reliable corporate governance and taking social responsibility for our customers and employees. We aim to make our contribution to climate protection for society with our sustainable new construction and modernization measures, to be a transparent and reliable partner for our stakeholders, to offer our tenants affordable homes that meet their needs together with housing-related services and reliable service. We also aim to be an attractive employer for our employees, offering them prospects and paying due attention to diversity and equal opportunities. Our actions are designed to take account of the current megatrends: climate change & energy efficiency, urbanization & the shortage of housing, and demographic change. Our sustainable activities are geared towards the top sustainability topics that we have identified, which are bundled in the Sustainability Performance Index.

In 2020, the fourth most meaningful performance indicator at overall Group level, in addition to the financial performance indicators, was 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 sustainable activities are geared towards the top sustainability topics that we have identified, which are bundled in the **Sustainability Performance Index**. The CSI, the indicator that was relevant in the past, is included in the calculation of the Sustainability Performance Index. Indicators in the new index are the carbon savings achieved annually in housing stock, the share of accessible modernization measures in relation to newly let apartments, the energy efficiency of new constructions, the increase in customer and employee satisfaction and diversity in the company's top management team. In detail, the **Sustainability Performance Index** includes the components set out below. Each component is assigned an individual weighting factor and a defined annual target amount. The individually weighted parameters together make up a target value of 100% to be achieved every year.

Sustainability Performance Index

- CO_2 intensity in the housing stock →
- Sustainable and energy-efficient new construction →
- Homes that are (partially) modernized to make them fully accessible →
- Increase in customer satisfaction →
- Increase in employee satisfaction →
- Diversity in the management team →

Sustainability Performance Index

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 and rented as of the reporting date, 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 as of the relevant reporting date.

The **vacancy rate** also shows the proportion of residential 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 **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 Recurring Sales** represents the difference between the income from the sale of a privatized residential unit and its last recognized fair value. It shows the percentage increase in value for the company on the sale of a residential unit before further costs of sale.

Report on Economic Position

Key Events During the Reporting Period

The coronavirus pandemic is having a pronounced adverse impact on the world's economies, plunging them into a full-fledged recession. According to calculations by the Federal Statistical Office, economic output in Germany declined by 5.0% in 2020. To date, Vonovia's business model has proven to be robust and resilient throughout the pandemic. In the absence of any considerable impact on its net assets, financial position and results of operations, Vonovia can report positive business development in the 2020 fiscal year. During the coronavirus crisis, we were able to successfully maintain our business processes and protect our employees and customers alike. Digitalized processes allowed a large number of our employees to switch seamlessly between working on location and working from home.

The Act on Rent Controls in the Housing Sector in Berlin ("rent freeze"), which came into force in February 2020 and whose constitutionality is still subject to question, has also had no material impact on our business.

After Vonovia initiated a squeeze-out for Hembla, corresponding measures aimed at the operational and financial integration of the business in Sweden based on the model of the existing management platform have been implemented and are going to plan based on the company's experience of integration measures in the past.

Vonovia has strengthened its development business by expanding its activities in the Rhine-Main region with the complete acquisition of the project developer Bien-Ries GmbH, Hanau, at the beginning of April 2020. Work on integrating it into the development organization operating under the BUWOG name started in the course of 2020 and will be continued in 2021. The Bien-Ries business was included in the consolidated financial statements for the first time in the second quarter of 2020.

Vonovia placed two bonds with a total volume of € 1 billion on March 31, 2020, with the bond placement being completed in early April. Two further bonds with a total volume of € 1.5 billion were placed on July 3, 2020. This means that Vonovia enjoys unrestricted access to the capital market even in times of the coronavirus pandemic.

Vonovia acquired a 2.6% stake in the Dutch Vesteda Residential Fund on June 26, 2020. Vesteda's portfolio comprises more than 27,000 apartments in the middle-range price segment, mainly in the Randstad region in the Netherlands. The region is home to the major cities of Amsterdam and Rotterdam, among others. The stake has been acquired in a quest to gather direct practical experience on the Dutch market and compare it with Vonovia's current markets.

The Annual General Meeting held on June 30, 2020, resolved to pay a dividend for the 2019 fiscal year in the amount of € 1.57 per share. During the subscription period, shareholders holding a total of 40.7% of the shares carrying dividend rights opted for the scrip dividend that had been offered as opposed to the cash dividend. As a result, 6,613,688 new shares were issued at a subscription price of € 52.438 and in a total amount of € 346.8 million. The Annual General Meeting was held as a virtual event for the first time, with shareholders able to follow the Annual General Meeting via a live stream.

The index issuer Stoxx Ltd. announced in early September that Vonovia would be included in the European blue chip stock index EURO STOXX 50, effective September 18, 2020. Since then, Vonovia has been the first and only residential real estate company ever to be part of this index, which is important for a large number of international index funds and certificates. The basis for the classification was the free float market capitalization at the end of August 2020.

Vonovia implemented a capital increase involving 17,000,000 new shares on September 8, 2020. The new shares were placed with institutional investors in the scope of a private placement by means of an accelerated book building procedure and have carried dividend rights since January 1, 2020. The shares were granted at a placement price of € 59.00 per share. The gross proceeds from the issue amount to € 1.0 billion.

On November 13, 2020, Vonovia announced that it was extending its partnership with the soccer club VfL Bochum 1848 prematurely until 2026. By continuing to hold the stadium naming rights, Vonovia will remain part of the VfL family for the next five years. This means that the second-league soccer team will continue to play its home games in the "Vonovia Ruhrstadion," a stadium with a long tradition behind it.

At the beginning of December 2020, Vonovia acquired a residential portfolio comprising 1,057 apartments in Kiel from the Danish company H&L Ejendomme as part of the acquisition of a company. The portfolio was transferred in legal and economic terms on December 30, 2020.

Customer satisfaction, measured based on the Customer Satisfaction Index (CSI), improved by 5.0 percentage points in the fourth quarter of 2020, increasing by 9.1 percentage points as against the fourth quarter of 2019. All in all, the CSI was up by 8.6% on the average value for the previous year in 2020. Our customers gave us a much better score regarding the timely preparation of ancillary cost bills and in matters relating to the handling of renovation measures and repair work. These include, for example, the quality of defect rectification measures. Compared with the third quarter of 2020, the score we received for the availability of our telephone service hotline is slightly lower.

Development of the Economy and the Industry

Germany

The pandemic continues to shape activity around the world. After a ten-year period of growth, the German economy experienced a severe recession last year. According to provisional calculations by the Federal Statistical Office (Destatis), gross domestic product (GDP) in price-adjusted terms fell by 5.0% year-on-year in 2020, although this economic slump was less pronounced than the 5.7% contraction witnessed in connection with the financial crisis in 2009. Disruptions to international supply chains and the global slump in demand triggered by the first lockdown in the spring were the main factors behind the decline. Industrial production plummeted by almost 30% within a very short space of time, with exports and equipment investments also showing drastic declines. The immediate measures taken to limit contacts in Germany also hit private consumption hard as opportunities to consume fell away. The German economy started to bounce back in May thanks to swift economic policy support measures taken by the government and the European Central Bank (ECB) on the one hand, and with the easing of contact restrictions following a drop in infection figures, the return to functioning supply chains and the economic revival abroad on the other. In particular, those aggregates that had previously been hit hard expanded considerably, and after contracting by 9.7% in the second quarter, GDP increased by 8.5% in the third, bringing it to around 96% of the level seen in the final quarter of 2019, prior to the outbreak of the pandemic.

The renewed lockdown measures imposed in November 2020, which were tightened up further later on in the year, put an end to this recovery for the time being, although GDP development showed a slight increase of 0.1% in the closing quarter of the year. The impact of the setback varied from economic sector to economic sector. The export-oriented German industrial sector, in particular manufacturing, benefited from the global economic upswing and clawed back in the third quarter a significant part of the drop in production levels seen in the first half of the year. While this trend was slowed by measures to contain the second wave of infection, global production remained on an upward trajectory overall. China made a particular contribution to this trend, with strong economic momentum. All in all, economic output in the manufacturing sector (excluding construction) slid by 9.7% as against 2019. The construction industry was able to hold its own during the crisis. Starting from a high level of construction activity and a lull at the beginning of the coronavirus crisis, capacity utilization returned to an upward trend in the third quarter, producing a 1.4% increase in 2020. Looking ahead to 2021, the Kiel Institute for the World Economy (IfW) expects to see a further increase of around 2.5%. The braking effect of the new restrictions, on the other hand, hit parts of the service sector particularly hard – as in the spring. Revenue levels in the hospitality, culture and entertainment as well as in the travel and transportation sectors, for example, were down considerably. The retail sector paints a mixed picture: online retail increased significantly, while some parts of the bricks-and-mortar retail trade were deep in the red. The coronavirus pandemic also left a visible mark on the demand side. Unlike during the financial and economic crisis, when overall consumption propped up the economy, private consumer spending fell by 6.0% year-on-year in 2020, the most pronounced drop ever witnessed. Government consumer spending, on the other hand, had a stabilizing effect, climbing by 3.4% even during the coronavirus crisis, helped along by purchases of protective equipment and hospital services, among other things. The IfW expects private consumption to increase by 2.7% in 2021, with public consumption tipped to rise by 1.2%. The resurgence of the coronavirus pandemic recently triggered a return to gloomier business expectations. Indicators of economic policy uncertainty have also risen significantly. Nevertheless, the corporate sector, particularly in those sectors that have not been affected directly by the pandemic, is unlikely to slash its investments significantly again now that there are clear hopes that the pandemic can be curtailed permanently in the course of the year. In light of the above, the IfW expects corporate investments to increase by 6.0% in 2021, after contracting by 6.3% in 2020. Exports and imports of goods and services fell in 2020 for the first time since 2009, with exports sliding by 9.9% and imports by 8.6%. The slump in service imports was particularly pronounced, mainly due to the sharp decline of the travel sector. The IfW expects exports to increase by 10.3% in 2021.

For the first time since 2011, Germany recorded a budget deficit again in 2020 and an increase in its debt ratio from 59.5% in 2019 to 72.6% of GDP. The government budget came under additional pressure on the revenue side due to the economic downturn, and on the expenditure side as a result of further aid packages. The support measures offered in Germany ranged from guarantees, liquidity support and takeovers to the € 130 billion-strong economic stimulus program. The short-time work scheme, in particular, is likely to have limited the impact of the pandemic on the labor market so far. According to the German Federal Employment Agency (Bundesagentur für Arbeit), the unemployment rate rose by 0.9 percentage points year-on-year to 5.9%. While the situation on the labor market will improve again as the year progresses, the average number of people out of work will be even higher than in 2020. The IfW expects to see an unemployment rate of 6.1% in 2021.

According to calculations by Destatis, the average inflation rate based on consumer prices was low at 0.5% in 2020, mainly due to the temporary reduction in VAT rates and lower prices for energy products. After the VAT reduction expired at the end of 2020, the inflation rate will rise more significantly again this year, especially with prices of energy, and in particular gasoline, expected to jump due to the introduction of the CO_2 tax. DB Research predicts an inflation rate of 1.4% for 2021.

In view of the continued and tighter lockdown at the beginning of the year in Germany and in other European countries, economists do not expect the predicted economic recovery to materialize until the second quarter of 2021 at the earliest. On the one hand, pent-up demand is likely to be unleashed, while on the other, the billions in aid provided by the government and the European Central Bank (ECB) will have a supportive effect. The considerable differences in the economic forecasts released by the leading economic research institutes are due, on the one hand, to the large number of unresolved questions relating to the pandemic (duration and extent of the lockdown, infection rate trend, vaccine availability, willingness of the population to vaccinate) and, on the other, to the fact that everyone's answers to these questions are different. The German Institute for Economic Research (DIW) and the IfW have revised their forecasts for GDP growth in 2021 downward to 3.5% and 3.1% respectively, whereas the RWI – Leibniz Institute for Economic Research expects the recovery effect to be faster and anticipates GDP growth to the tune of 4.9%.

There are also still lingering risks that have nothing to do with the pandemic. Even before the coronavirus crisis emerged, there were signs pointing towards a marked slowdown in global economic development, primarily due to a slump in industrial production. The volume of global trade also declined. These developments can be explained, at least in part, by ongoing uncertainty in the context of trade conflicts that remain unresolved. Fortunately, it was at least possible to seal a trade agreement between the United Kingdom and the EU before the end of the year.

According to the German Association of German Housing and Real Estate Companies (GdW), the housing industry has so far shown itself to be relatively stable throughout the economic crisis triggered by the pandemic. Experts from the global real estate service provider CBRE say that residential real estate, as an asset class, can even be crowned one of the winners in the current crisis. Housing is considered to be one of our most important basic needs, and the very small-scale tenant structure coupled with the high granularity of rent payments make the residential real estate segment a very defensive and stable asset class that is associated with a low rent default risk. This applies all the more so given that government support systems have helped to secure and stabilize rent payments. According to Helaba, the fundamental overall conditions in the housing market have barely changed. Brisk demand is being fueled by a combination of low interest rates and the influx of people into metropolitan areas. Residential construction is limited by high levels of capacity utilization in the construction industry, which explains why a large gap remains between supply and demand.

According to GdW, the situation on Germany's housing markets in attractive conurbations and fast growing regions has changed rapidly in recent years from a largely balanced to a tense market situation. Driven by immigration, the past few years had brought steady population growth. Population growth appears to have been halted for the time being in 2020 in the wake of the coronavirus pandemic, with border closures in response to the pandemic, for example, reducing levels of immigration. In the long term, however, additional demand for housing could arise in Germany's major cities driven by an influx of immigrants from the ailing economies on Europe's periphery. The experts at DB Research expect net migration to increase again to the pre-crisis level of around 300,000 people. According to Helaba, the increase in working from home could also boost demand for housing in the future and shift demand more from central inner-city locations to the outskirts of conurbations. In any case, when it comes to the internal migration links between Germany's major cities, one trend is starting to reverse. As the capacity in metropolitan areas to accommodate more people moving into the area becomes increasingly scarce, people looking for housing are being pushed out into areas surrounding the major cities, or are once again focusing more on the dream of owning a house with a garden on the outskirts of the city or in neighboring areas. According to CBRE, the rental housing market has long been characterized by extremely low vacancy rates. In addition, the turnover rate in Germany's major cities, which was already low to begin with, has fallen further in recent months. CBRE expects vacancy rates in Germany's major metropolitan areas to fall further, rather than to increase, in the foreseeable future. But not all regions are reaping the benefits of population growth. GdW reports that sparsely populated administrative districts located far from the country's metropolitan centers, in particular, are faced with shrinking populations. The shortage of housing is particularly pronounced in major cities, metropolitan areas and university cities.

Despite increasing construction activity, the number of homes being built remains too low. Only 92% of the 320,000 homes per year that the country needs, according to GdW, were actually built in 2019. According to DB Research, the number of apartments completed in 2020 will stagnate at the 2019 level, with the figure unlikely to exceed 300,000 apartments in 2021 either. This is despite the fact that residential construction was barely affected by the measures taken to contain the pandemic, according to Helaba, meaning that most construction activity continued. It is possible that individual project developers will start to focus more on residential construction in the future and that more resources can be deployed there.

Quoted prices and rents are proving to be largely unaffected by the coronavirus situation. Residential real estate prices rose again overall in 2020, as figures from the analyst empirica based on the empirica-systeme market database show. The empirica price index for condominiums (all years of construction) increased by 12.2% in the fourth quarter of 2020 compared to the prior year (new construction 9.2%). DB Research reports that the flight to security and the low interest rate environment are likely to explain much of the marked price increase in 2020. Apartment rents are still showing less dynamic development than purchase prices. According to empirica, average rents over all years of construction increased across Germany by 4.0% in the fourth quarter of 2020 compared to previous year (for new construction, the increase was 3.9%). The developments nevertheless vary from location to location. Experts from Immowelt, for example, are reporting an easing of the situation in smaller university cities. Less face-to-face teaching at universities because of the coronavirus means that fewer students are looking for a place to stay. Berlin, where the rent freeze introduced in 2020 is designed to prevent further rent increases, is a special case. While existing apartments, which are in ever-shorter supply, are becoming cheaper, rents for unregulated new buildings are rising all the more sharply. Unlike empirica, experts at F+B expect to see an ongoing sideways movement in average quoted rents in Germany in the fourth quarter of 2020. According to F+B's analysis, growth in new contract rents came to +0.1% year-on-year in the third quarter of 2020. Meanwhile, F+B reported another increase, namely by 1.4%, in rents under existing rental contracts during the same period. DB Research expects rent growth in 2021 to roughly reflect inflation, while nationwide house and apartment prices are expected to rise considerably by more than 6% year-on-year. The empirica bubble index for Germany showed a moderate to high risk of a bubble for 324 out of 401 administrative districts and self-governing cities in the fourth quarter of 2020.

As CBRE reports, the pandemic has not had any negative impact on the residential investment market. The transaction volume in 2020 came to around € 20 billion, up by 21% on the previous year. This represents the second-highest transaction volume ever achieved on the German residential real estate market after 2015. This trend can be explained by the increase in investment demand as well as by the takeover of Adler Real Estate by Ado Properties, a transaction that accounted for approximately € 6 billion. CBRE reports that the pandemic resulted in more investors who otherwise focus on other real estate asset classes shifting their attention to the residential sector as (prospective) buyers in 2020. There was a marked surge in the demand for housing, with the high level of investor interest set to continue in 2021. CBRE expects to see an investment volume of more than € 15 billion in 2021.

The debate on housing policy measures and more stringent regulation is likely to make the headlines in 2021, not least because of the German Bundestag elections. In a quest to curb rent increases, for example, the observation period used to prepare rent indices was extended from four to six years in 2020, and the decision was made to tighten up and extend the rent cap until 2025. At the end of 2020, the German cabinet approved the government's draft proposals for a reform of rent index law. The aim is to strengthen the quality of rent indices, ensure that they are more widely used and increase legal certainty for tenants and landlords alike. The housing allowance reform means that low-income households have been receiving more housing allowance since the beginning of 2020. The "rent freeze" came into force in Berlin in February 2020. The law, whose constitutionality remains in doubt, essentially involves public-law restrictions on rent levels in Berlin for a period of five years. The Federal Constitutional Court is expected to pass a judgment on the issue in 2021. The measures taken by the German government in the wake of the coronavirus pandemic include, first and foremost, temporary security of tenure for tenants. Other legislative projects that are relevant to the real estate sector include, for example, the Building Land Mobilization Act (Baulandmobilisierungsgesetz), which is designed, among other things, to make it more difficult to convert rental apartments into condominiums. CO_2 pricing was introduced on January 1, 2021, and will have an impact on housing costs, for example on heating costs. The "Baukindergeld" housing subsidy for families with children is expected to expire in 2021 and the special tax allowances for investments in rental apartments will come to an end. The intended amendment to the German real estate transfer tax system, which aims to make share deals less attractive, has been on hold for more than a year now.

Sweden

Since the outbreak of the pandemic, Sweden has been in the spotlight time and again due to its unique approach in dealing with the coronavirus. The minority government made up of Social Democrats and Greens followed the recommendations made by their chief epidemiologist and opted neither for a lockdown nor for making face masks mandatory. Faced with mounting infection and high death rates, however, the government was forced to change course at the end of the year, although this involved further restrictions on public life as opposed to an extensive lockdown. As a result of this approach, the Swedish economy did not experience as severe a slump as the rest of Europe in the first half of the year or any above-average catch-up effect in the second half. According to provisional calculations by the Swedish statistics office SCB, GDP contracted by 2.8% in 2020.

Despite the second wave of infection across the globe, Sweden's export industry appears to be faring relatively well again. Foreign trade statistics show that this is primarily due to positive trends in goods exports and export orders in the period leading up to the start of the third quarter. Despite this positive development, exports are expected to have dropped by 5.3% year-on-year and are tipped to grow by 5.5% in 2021, driven largely by exports of goods, machinery and motor vehicles. The slump in investment running into the double-digit percentage range that was feared back in the spring has turned out to be mild at 1.5% in 2020 thanks to public investment, which was up by 4.1%, while corporate investment was down by 4.3%. News of the launch of the vaccination drive as well as the combination of expansive fiscal policy and low interest rates are likely to fuel investment growth of 3.0% in 2021. Even then, the bulk of the investment growth is likely to be driven by a marked increase in government spending on infrastructure and military equipment. Corporate investments will start to rise more considerably again once the restrictions imposed in response to the pandemic are lifted.

Despite increased costs in connection with the coronavirus pandemic and significant financial injections made by the Swedish government, the pandemic has put the brakes on municipal consumption, which remained virtually unchanged with only a slight increase of an estimated 0.1% in 2020. Looking ahead to 2021, the National Institute of Economic Research (NIER) expects to see growth in public consumption expenditure of 3.1%. Although the restrictions imposed in Sweden have been less severe, services that involve close contact, in particular, also experienced a marked slump in the wake of the pandemic, while private spending on goods and housing either remained stable or actually increased. Private consumption is likely to have contracted by 5.1% overall in 2020. Household spending is expected to start making a marked recovery in 2021, with a predicted increase of 3.1%. This will not, however, be sufficient to make up for the losses sparked by the pandemic, and it is likely to take until 2022 to make a return to the pre-crisis level. All in all, the forecasts for 2021 expect to see GDP growth of 3.2%.

Sweden's labor market has been hit hard by the pandemic. According to the Swedish Public Employment Service, more than 680,000 people were looking for work at the end of November 2020 and around 40% of them had lost their jobs in the last six months. The NIER expects the unemployment rate for 2020 to come to 8.5%. The forecasts predict a further increase in 2021, although it will be cushioned by the continued option of the short-time work scheme. It could take until the middle of the decade for the rate to fall back to the pre-crisis level. CPIF inflation – the increase in the consumer price index with a fixed interest rate – came to 0.5% in 2020, held back by dwindling energy prices and only a slight increase in the price of services. The early wage agreements concluded point to a more marked increase in production costs for the corporate sector in 2021, which will push prices up, particularly for services. Substantial increases in water and wastewater charges in a large number of municipalities as well as higher land taxes are also expected to contribute to higher inflation of 1.1% in 2021.

The Riksbank, the Swedish central bank, increased its bond purchases considerably in the midst of the second wave of infection. By increasing the volume and extending the term of its securities purchase program, the Riksbank made it clear that extensive monetary policy support will be available for as long as necessary. By contrast, the central bank left the key interest rate unchanged at 0.0%, as was to be expected.

The risks and uncertainties hanging over the forecasts for Germany, as explained earlier, also apply to Sweden. It also remains to be seen how the Swedish government will continue to handle the coronavirus crisis. Despite all of the uncertainties, there is hope for better Swedish economic performance in the second half of 2021, particularly if the vaccination rate is high. In 2020, Sweden's economic policy was characterized by an active demand policy – albeit one that was not nearly as active as in Germany. As a result, public debt in Sweden has not increased to any considerable degree and remains at a low level compared to most other EU countries at around 40% of the GDP. This means that Sweden still has considerable fiscal elbowroom.

Sweden's housing market has proven to be robust throughout the coronavirus crisis. According to experts from the real estate consultancy firm Svefa, rental apartments make up one of the real estate market segments that are coping better with the coronavirus crisis. Boverket, the Swedish National Board of Housing, Building and Planning, has reported considerable and growing interest in the segment among Swedish and international investors alike. Not least in times of uncertainty, real estate assets offering a low vacancy risk and stable cash flows are much sought-after.

According to the Swedish Association of Public Housing Companies, Sveriges Allmännytta, the Swedish housing market is under considerable pressure. The country has witnessed marked population growth in recent years and the population is set to increase by 767,000 to more than 11 million in the period between 2019 and 2030, according to data supplied by Statistics Sweden. Population growth in 2020, however, is expected to have been somewhat more restrained than in the previous year. In light of the coronavirus pandemic and partial border closures, net migration was down on the previous year according to Boverket. In the meantime, new construction has not been able to keep up with the population growth seen in recent years. Much of the country is facing a housing shortage, primarily in its urban areas. Even though the number of municipalities with a balanced housing market is increasing, 212 out of 290 municipalities reported a shortage of homes in Boverket's residential property market survey for 2020. The greater Stockholm, Gothenburg and Malmö regions account for around 76% of the total deficit. Rental apartments, in particular, are in short supply. In many municipalities, however, residential construction activity is hampered by high construction costs. Furthermore, strict lending requirements or difficulties faced by private individuals in being granted loans limit new construction.

According to data supplied by Statistics Sweden, rents rose by an average of 1.9% in 2020, as in the previous year. Rents are also expected to continue rising based on the initial results of the rent negotiations for 2021 published by "Hem & Hyra," the member magazine published by the Swedish tenants' association ("Hyresgästföreningen"). According to Savills, major trends such as ongoing urbanization, smaller household sizes and a strong growth in housing prices for owned apartments and houses have been driving the demand for rental apartments. This trend may intensify further in times of uncertainty.

The market for residential property ownership has not been affected to any significant degree by the coronavirus pandemic either. Boverket reports that, before the outbreak of the coronavirus pandemic, home prices on this market had recovered after falling at the end of 2017. The upswing initially continued at the start of 2020. Measured against the Valueguard HOX price index, which reflects the price development of typical condominiums and single-family homes, residential real estate prices initially dropped considerably in April, the month in which the strongest impact of the coronavirus seen up until then was felt, but rose again noticeably in May and continued to increase as the year progressed. The HOX price index was ultimately up by 11.5% year-on-year in December 2020. SEB experts are predicting price increases of up to 5% for both 2021 and 2022, which is also likely to help sustain an upswing in residential construction. The experts at Boverket expect that the residential property market will also survive the latest wave of widespread shutdowns. There is, however, uncertainty about how strongly demand can be sustained during an economic slowdown that could well last longer than that witnessed last spring.

The strong demand for homes contributed to the resilience of the construction industry during the coronavirus crisis, according to SEB. By way of example, apartment construction activity in 2020 outstripped the original expectations. Boverket currently estimates that construction work started on around 54,000 apartments in 2020 (2019: 51,600, including additions due to conversion work), with the figure for 2021 expected to come to 52,500. This means, however, that construction activity is falling short of the level that is actually required. According to Boverket's estimate, between 59,000 and 66,000 new apartments will need to be built every year between 2020 and 2029 to do justice to the expected population growth and reduce the pent-up housing deficit.

According to Savills, properties worth SEK 209 billion were traded on the Swedish transaction market in 2020; this was only SEK 12 billion less than in the record year of 2019, but 16% higher than the average for the last five years. With a total investment volume of almost SEK 61 billion, residential properties were the preferred asset class. This corresponds to an increase of SEK 10 billion compared with the average for the last five years. Historically, investors tend to seek defensive options in times of uncertainty, according to Savills. The stable cash flows and very low vacancy risk associated with multifamily residences offer an attractive risk-adjusted return for investors. As a result, the sector comprising multifamily residences will most likely prove to be a strong performer as an investment alternative in the current environment.

Austria

Infection rates and the necessary containment measures are also dominating economic developments in Austria, which is already in its third hard lockdown, a move that is set to remain in place until at least the beginning of February. While the first lockdown, imposed last spring, also led to a historic slump in GDP in Austria with a drop of 11.6% in the second quarter, the third quarter brought a strong recovery with GDP growth of 12.0% according to calculations by the Austrian Institute of Economic Research (WIFO). The Austrian central bank (OeNB) expects the renewed restrictions to lead to a much less pronounced slump in economic output than in the spring, a theory that is supported by less disruption to global value chains, the absence of production shutdowns, learning effects and greater confidence now that the vaccination campaign has been launched. Looking at 2020 as a whole, the Austrian Institute of Economic Research (WIFO) expects GDP to have dropped by 7.3%.

The recent lockdown clearly split the Austrian economy into two halves. The manufacturing sectors of industry proved to be relatively resistant, at least for the time being, and reported largely positive development, also supported by the recovery in global trade originating in Asia. The construction sector also proved to be stable. The service sector, on the other hand, was hit by a sharp downturn. In addition to the official measures imposed, this trend can also be attributed to mounting uncertainty among consumers. The OeNB expects that private consumer spending will have slumped by 8.8% in 2020. As economic activity gradually returns to normal, private consumer demand is expected to rise by 3.9% in 2021. Public consumption showed a slight increase of 0.7% in 2020 and is expected to rise by 1.2% this year. Considerable uncertainty surrounding future economic developments, low capacity utilization levels and a deterioration in equity resources also weighed on investment activity. The Institute for Advanced Studies (IHS) predicts that capital investment will have dropped by 4.9% in 2020. The nature of the recession triggered by the coronavirus pandemic and the economic policy measures taken to counteract the crisis mean that the slump in investment, which is normally extremely sensitive to cyclical fluctuations, is less pronounced than the drop in GDP. In line with the expected international economic recovery, capital investment is expected to expand by 4.1% in 2021. The pronounced economic slump that hit the country's main trading partners put pressure on the domestic export markets. Goods exports contracted by 7.8% in 2020. The containment measures hit the tourism sector particularly hard, with travel exports expected to have plummeted by 42.5%. As a result, total exports fell by 11.2%. The IHS expects export activity to increase by 5.7% in 2021 as the economy bounces back and the measures to contain the pandemic are eased.

According to the WIFO, the unemployment rate rose by 2.5 percentage points to 9.9% in 2020, despite the widespread use of coronavirus short-time work schemes, a development that was due primarily to poorer employment opportunities in the service sector. In the course of the year, employment demand should pick up, pushing the unemployment rate back down again. The unemployment rate for 2021 is expected to average 9.3%. The IHS is reporting an inflation rate of 1.4% for 2020. After starting 2020 at 2.0%, inflation slowed but remained relatively high against the backdrop of the economic slump. While low crude oil prices put a damper on inflation, the price increase was driven in particular by rent and food prices. The IHS expects inflation to accelerate slightly to 1.6% in 2021. This means that, despite the recovery, inflationary pressure will remain limited for the time being, although it will be significantly higher than in the euro area as a whole.

Due to the pronounced economic downturn and the government deficit created by the extensive fiscal support measures, the debt ratio rose sharply from 70.5% to 83.3% of GDP in 2020, according to the OeNB. The central bank predicts a further increase to 86.4% in the current year.

Bank Austria expects the start of the vaccination campaign at the beginning of the year and the associated prospect of a gradual normalization of economic life to pave the way for a lasting economic turnaround. It expects to see a rebound in the spring of 2021, which will develop into a sustained strong recovery in the second half of the year, allowing GDP growth to rise to 3.1% in 2021. The WIFO expects the economy to grow by as much as 4.5%, although it has reduced its forecast to 2.5% in the event that a fourth lockdown is imposed in the spring.

There are still considerable risks hanging over these forecasts. The biggest risk remains the uncertainty regarding the future course that the coronavirus pandemic will take. Although the outlook is looking brighter now that vaccinations are under way, bottlenecks in vaccine production and distribution as well as lower-than-expected efficacy or weak vaccination willingness, could delay the gradual ramp-up of social and economic life. There is also a risk that a delayed wave of insolvencies will emerge when support measures are discontinued, which could raise doubts as to the stability of the financial sector. There is also, however, potential for a much stronger economic upturn: In addition to the rapid vaccination of the population, global trade has developed much more favorably than expected. Fueled by developments in China, the global economy could start to expand at a much faster pace again, a trend that would also benefit the Austrian economy. Due to the relatively great significance of the tourism and the leisure industry in Austria, swifter success in combating the pandemic could result in a marked increase in the pace of growth in as early as 2021.

According to Helaba, the coronavirus pandemic has not triggered any crash on the Austrian residential property market. Although the pandemic is also leaving its mark on this sector, there are currently no signs of any price correction. According to experts from the real estate service provider RE/MAX Austria, the overall conditions on the real estate market remain positive. 2020 was characterized by a sustained all-time low in interest rates, unabated strong demand among both owner-occupiers and investors, a lack of alternative investment opportunities and a shortage of supply in a large number of regions.

According to the OeNB, the trend toward mounting real estate prices that had already emerged in the course of the year continued in the third quarter of 2020. The values of the current OeNB residential real estate price index on the basis of new and used condominiums and single-family residences show an increase in Austria in the third quarter of 2020 of 9.5% compared to the previous year. In Vienna, prices increased compared to the previous year by 9.4%. In the rest of Austria (excluding Vienna), price developments came to 9.7% during the same period. Prices were driven in particular by single-family residences. The fundamental price indicator of the OeNB for residential real estate shows a further year-on-year increase for Vienna and Austria as a whole in the third quarter of 2020, which points towards an increasingly overheated residential real estate market. According to the consumer price index published by the Austrian statistical office, Statistics Austria, apartment rents rose by 4.1% in 2020. CBRE reports that fears of a slump in demand for vacant and new rental apartments have failed to materialize to date. Demand actually increased further in some areas. Assumptions regarding rent losses due to a slump in the labor market and resulting financial complications for tenants also failed to materialize. Across Austria, RE/MAX experts expect 2021 to be a generally positive real estate year, albeit with a number of changes compared with previous years. Real estate supply and demand are still increasing. As a result, purchase prices for residential real estate are expected to rise overall, but only at around half the rate seen in the past. While condominiums in central locations will remain sought-after in 2021, demand for condominiums on the outskirts of cities is showing even better development. Prices in this segment could rise by 1.9% and 1.2% respectively in 2021. Condominiums in country municipalities are set for a year of stability in 2021, with slight price growth of 0.2% expected to be on the cards. Demand for rental apartments in central locations, on the outskirts of cities and in country municipalities is expected to grow at a slower rate than supply in 2021 with a knock-on effect on rents. The new rents agreed for apartments that are not subject to rent restrictions could be somewhat lower than those agreed in previous years. As far as Vienna is concerned, the real estate service provider EHL expects rent increases in 2021 to be in line with the inflation rate at most, and predicts that apartment purchase prices will increase by between 4% and 5%. With rising demand and dwindling supply, prices for townhouses and apartment complexes in Austria are likely to rise further in 2021, according to Re/MAX. Helaba expects brisk activity to continue on the housing market. In a representative survey, for example, a quarter of respondents said that they plan to move over the next two years, motivated primarily by the wish for a garden or balcony as well as additional space needed as a study.

The Austrian population has increased considerably in the past and will likely continue to grow in the future, too. The latest population forecast produced by the Austrian statistical office, Statistics Austria, suggests that by 2030, the Austrian population will have grown by an estimated 3.9%, from 8.88 million (2019) to 9.23 million. Bank Austria reports that residential construction activity in Austria has been geared toward addressing the marked increase in the demand for homes for some years now. In the period from 2013 to 2019, an average of 61,000 new apartments were built in Austria every year. This is likely to have covered the ongoing need for new construction. Nevertheless, the excess demand in some market segments, especially for affordable rental apartments, is likely to have only been partially reduced. The 2020 economic crisis is expected to boost demand in this segment. If at all, new housing construction is expected to have contracted only moderately in 2020. According to the OeNB, the end of the housing construction cycle, which had already been on the horizon for two years, was exacerbated by the coronavirus pandemic. Helaba concludes from a drop in building permits that, at least in the new construction sector, supply is likely to increase at a slower rate than in the past in the near future. The slump in tourist travel activity due to travel restrictions and curfews has resulted in a marked increase in the supply of small rental apartments, according to ImmoScout24. Apartments that are usually rented out to tourists on a short-term basis made a return to the conventional housing market. It is, however, unlikely that these apartments will remain in the conventional housing market in the long term as tourism activity recovers.

According to EHL, the Austrian real estate investment market once again proved itself to be attractive and crisis-proof in 2020. Real estate worth around € 3.5 billion was traded. While this is down on the boom period from 2017 to 2019, the trend is a positive one in a long-term comparison. The drop as against the record levels seen in previous years was also largely attributable to delays in transaction processing, e.g. due to lockdowns, etc. Residential use accounted for 39% of the transaction volume. Due to the coronavirus crisis, the experts at Catella expect demand for (residential) real estate investments to remain high due to a combination of low interest rates, considerable investment pressure and a lack of alternative investments. Since housing is considered to be one of the beneficiaries of the crisis, alongside the logistics sector, multi-asset investors can be expected to increasingly shift capital from other real estate classes, but also from other sectors, towards residential real estate.

Group's Business Development

Business Development in 2020 – An Overview

Despite the coronavirus pandemic, 2020 was a successful fiscal year for Vonovia overall. We acted as a reliable partner for all interest groups, but in particular for our customers. In many areas, our business processes have continued virtually unhindered thanks to employees working from home. All in all, the coronavirus pandemic did not have any significant impact on Vonovia's corporate strategy, nor did it have any considerable impact on the company's operational and financial performance. Vonovia only experienced a low level of rent losses. After being temporarily interrupted due to coronavirus restrictions, modernization and/or new construction measures, as well as sales activities, were resumed and continued in full.

In the 2020 fiscal year, we observed stable demand for rental apartments and no negative impact on market values as a result of the coronavirus pandemic.

We invested around € 1.3 billion (2019: € 1.5 billion) in our own portfolio for new construction and modernization measures and around € 0.6 billion for maintenance (2019: € 0.5 billion). We completed 1,442 apartments (2019: 1,301) as part of our new construction measures. We also completed 646 apartments that are intended for sale (2019: 791).

The table below provides an overview of the development of our most recently forecast performance indicators and the target achievement level for these indicators in the 2020 fiscal year. When comparing the current key figures with the previous year, it is important to note that the figures for 2019 include Hembla, which was acquired in November 2019, with an earnings contribution of two months, and that the figures for 2020 include Bien-Ries GmbH, which was acquired in early April 2020, with an earnings contribution of nine months as well as the earnings contribution made by the minority stake in the Dutch company Vesteda Residential Fund, which was acquired in 2020.

	2019	Forecast for 2020 in the 2019 Q3 report	2020
Total Segment Revenue	€ 4.1 billion	€ 4.4 billion	€ 4.4 billion
EPRA NTA per share*	€ 54.88		€ 62.71
Adjusted NAV per share*	€ 52.00	suspended	€ 59.47
Adjusted EBITDA Total	€ 1,760.1 million	€ 1,875–1,925 million	€ 1,909.8 million
Group FFO	€ 1,218.6 million	At the upper end of € 1,275–1,325 million	€ 1,348.2 million
Group FFO per share*	€ 2.25	suspended	€ 2.38
Customer Satisfaction Index (CSI)	Decrease of 8.0%	Scale significantly above previous year	Increase of 8.6%

* Based on the current number of shares outstanding.

The **Total Segment Revenue** came to around € 4.4 billion, up by 6.3% on the prior-year figure of around € 4.1 billion. This increase was due primarily to the acquisition of Hembla and to organic growth thanks to new construction and modernization.

The new net asset value figure **EPRA NTA per share** came to € 62.71 in 2020, up 14.3% on the value of € 54.88 reported in the previous year. The **Adjusted NAV per share** came in at € 59.47 in 2020, up by 14.4% on the prior-year value of € 52.00. This increase in the net asset value figure was due primarily to the net income from fair value adjustments of investment properties of € 3,719.8 million in 2020 (2019: € 4,131.5 million).

The **Adjusted EBITDA Tota**l came to € 1,909.8 million in 2020, an increase of 8.5% as against the 2019 figure of € 1,760.1 million. This increase was largely due to Hembla, which made an earnings contribution of € 92.5 million (2019: a total of € 9.6 million for the months of November and December). All segments saw their Adjusted EBITDA increase.

Group FFO rose by 10.6% in 2020. to € 1,348.2 million (2019: € 1,218.6 million). This corresponds to a Group FFO per share of € 2.38 (2019: € 2.25). The improvement in adjusted EBITDA Rental was the main factor behind the increase in Group FFO. It rose from € 1,437.4 million in 2019 to € 1,554.2 million in 2020. The Group FFO interest expense came to € 380.1 million in 2020, up by 6.0% on the prior-year value of € 358.6 million. Current income taxes FFO came in at € 52.4 million in 2020, around 4.6% higher than in the previous year (€ 50.1 million). At € 129.1 million, consolidation effects in 2020 were down by 2.8% on the prior-year value of € 132.8 million. This was driven primarily by the drop in intragroup profits from € 43.9 million to € 33.5 million.

The **CSI** was up by 8.6% on the average value for the previous year. This was largely due to the fact that our customers gave us a better score regarding the timely preparation of ancillary cost bills and in matters relating to the handling of renovation measures and repair work. In 2021, the CSI will be taken into account when calculating the Sustainability Performance Index. Details can be found in the chapter Management System.

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 use of new digital software solutions, 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 2020. For information on the limited comparative value of the prior-year figures, we refer to the statements in the chapter on overall business development within the Group.
→ p. 96 et seq.

in € million	2019	2020	Change in %
Total Segment Revenue	4,111.7	4,370.0	6.3
Revenue in the Rental segment	2,074.9	2,285.9	10.2
Revenue in the Value-add segment	1,154.8	1,104.6	-4.3
Revenue in the Recurring Sales segment	365.1	382.4	4.7
Revenue in the Development segment	516.9	597.1	15.5
Adjusted EBITDA Total	1,760.1	1,909.8	8.5
Adjusted EBITDA Rental	1,437.4	1,554.2	8.1
Adjusted EBITDA Value-add	146.3	152.3	4.1
Adjusted EBITDA Recurring Sales	91.9	92.4	0.5
Adjusted EBITDA Development	84.5	110.9	31.2
Group FFO	1,218.6	1,348.2	10.6
EBITDA IFRS	1,579.6	1,822.4	15.4
Monthly in-place rent (€/m²)	6.93	7.16	3.3
Average area of own apartments in the reporting period (in thou. m²)	25,316	26,532	4.8
Average number of own units (number of units)	398,398	414,931	4.1
Vacancy rate (in %)	2.6	2.4	-0.2 pp
Maintenance expenses and capitalized maintenance (€/m²)	19.02	22.31	17.3
thereof expenses for maintenance (€/m²)	12.20	12.10	-0.8
thereof capitalized maintenance (€/m²)	6.82	10.21	49.7
Number of units bought	23,987	1,711	-92.9
Number of units sold	4,784	3,677	-23.1
thereof Recurring Sales	2,607	2,442	-6.3
thereof Non-core Disposals	2,177	1,235	-43.3
Number of new apartments completed	2,092	2,088	-0.2
thereof own apartments	1,301	1,442	10.8
thereof apartments for sale	791	646	-18.3
Number of employees (as of December 31)	10,345	10,622	2.7

As of the end of 2020, Vonovia managed a portfolio comprising 415,688 of its own residential units (2019: 416,236), 139,429 garages and parking spaces (2019: 138,176) and 6,564 commercial units (2019: 6,748).

Total Segment Revenue

in € million	2019	2020	Change in %
Rental income	2,077.9	2,288.5	10.1
Other income from property management unless included in the operating expenses in the Rental segment	48.7	50.2	3.1
Income from disposals Recurring Sales	365.1	382.4	4.7
Internal revenue Value-add	1,104.2	1,053.0	-4.6
Income from disposal of properties (Development)	249.5	297.7	19.3
Fair value Development to hold	266.3	298.2	12.0
Total Segment Revenue	**4,111.7**	**4,370.0**	**6.3**

In the 2020 fiscal year, **Total Segment Revenue** rose by 6.3% from € 4,111.7 million to € 4,370.0 million. This increase was due primarily to the increase in rental revenue due to the acquisition of Hembla and to organic growth thanks to new construction and modernization.

The **Adjusted EBITDA Total** rose by € 149.7 million from € 1,760.1 million in the 2019 fiscal year to € 1,909.8 million in 2020. The Adjusted EBITDA Total included the earnings contributions made by Hembla in 2020, with a volume of € 92.5 million (2019: € 9.6 million). The Adjusted EBITDA Rental increased by 8.1% from € 1,437.4 million in 2019 to € 1,554.2 million in 2020. Adjusted EBITDA Value-add rose by 4.1% from € 146.3 million in the 2019 fiscal year to € 152.3 million in 2020. The Adjusted EBITDA Recurring Sales came in at € 92.4 million, up by around 0.5% on the value of € 91.9 million seen in the previous year. The Adjusted EBITDA Development amounted to € 110.9 million in 2020 (2019: € 84.5 million).

Group FFO rose by 10.6% from € 1,218.6 million in 2019 to € 1,348.2 million in 2020.

Group FFO

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

Group FFO

in € million	2019	2020	Change in %
Revenue in the Rental segment	2,074.9	2,285.9	10.2
Expenses for maintenance	-308.9	-321.1	3.9
Operating expenses in the Rental segment	-328.6	-410.6	25.0
Adjusted EBITDA Rental	**1,437.4**	**1,554.2**	**8.1**
Revenue in the Value-add segment	1,154.8	1,104.6	-4.3
thereof external revenue	50.6	51.6	2.0
thereof internal revenue	1,104.2	1,053.0	-4.6
Operating expenses in the Value-add segment	-1,008.5	-952.3	-5.6
Adjusted EBITDA Value-add	**146.3**	**152.3**	**4.1**
Revenue in the Recurring Sales segment	365.1	382.4	4.7
Fair value of properties sold adjusted to reflect effects not relating to the period from assets held for sale in the Recurring Sales segment	-258.4	-274.0	6.0
Adjusted result Recurring Sales	**106.7**	**108.4**	**1.6**
Selling costs in the Recurring Sales segment	-14.8	-16.0	8.1
Adjusted EBITDA Recurring Sales	**91.9**	**92.4**	**0.5**
Revenue from disposal of "Development to sell" properties	249.5	297.7	19.3
Cost of Development to sell	-197.3	-235.9	19.6
Gross profit Development to sell	**52.2**	**61.8**	**18.4**
Fair value Development to hold	266.3	298.2	12.0
Cost of Development to hold*	-207.4	-235.4	13.5
Gross profit Development to hold	**58.9**	**62.8**	**6.6**
Rental revenue Development	1.1	1.2	9.1
Operating expenses in the Development segment	-27.7	-14.9	-46.2
Adjusted EBITDA Development	**84.5**	**110.9**	**31.2**
Adjusted EBITDA Total	**1,760.1**	**1,909.8**	**8.5**
FFO interest expense	-358.6	-380.1	6.0
Current income taxes FFO	-50.1	-52.4	4.6
Consolidation**	-132.8	-129.1	-2.8
Group FFO	**1,218.6**	**1,348.2**	**10.6**

* Excluding capitalized interest on borrowed capital in 2020 of € 0.8 million (2019 € 0.0 million).
** Thereof intragroup profits in 2020: € 33.5 million (2019: € 43.9 million), gross profit development to hold 2020: € 62.8 million (2019: € 58.9 million), IFRS 16 effects 2020: € 32.8 million (2019: € 29.9 million).

As of the end of 2020, our apartments were virtually fully occupied. The apartment vacancy rate of 2.4% was down slightly on the value of 2.6% seen at the end of 2019. **Revenue in the Rental segment** rose by 10.2% from € 2,074.9 million in 2019 to € 2,285.9 million in 2020 largely due to the acquisition of Hembla in early November 2019 as well as to organic growth resulting from new construction and modernization. Hembla contributed a volume of € 182.9 million to this figure (2019: € 29.6 million). Of the rental revenue in the Rental segment, € 1,845.4 million is attributable to rental revenue in Germany (2019: € 1,801.2 million), € 332.5 million to rental revenue in Sweden (2019: € 165.4 million) and € 108.0 million to rental revenue in Austria (2019: € 108.3 million).

The increase in rent due to market-related factors (including the effects resulting from the Berlin rent freeze) came to 0.6% (2019: 1.1%). In addition, we were able to achieve an increase in rent of 1.9% thanks to property value improvements achieved as part of our modernization program (2019: 2.3%). The corresponding like-for-like rent increase came to 2.5% in the reporting period (2019: 3.4%). If we 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** totaling 3.1% (2019: 3.9%). The average monthly in-place rent within the Group at the end of December 2020 came to € 7.16 per m² compared to € 6.93 per m² at the end of December 2019. At the end of 2020, the monthly in-place rent in the German portfolio came to € 6.95 per m² (Dec. 31, 2019: € 6.79), with the figure for the Swedish portfolio coming to € 10.31 per m² (Dec. 30, 2019: € 9.46) and € 4.79 per m² for the Austrian portfolio (Dec. 31, 2019: € 4.64). The rental income from the portfolio in Sweden reflects inclusive rents, meaning that the amounts contain operating, heating and water supply costs. The rental income from the Austrian property portfolio additionally includes maintenance and improvement contributions (EVB).

Despite the coronavirus pandemic, we were able to continue with our modernization, new construction and maintenance strategy in the 2020 fiscal year. Isolated modernization and new construction measures were affected by construction delays. All in all, the total volume of our maintenance, modernization and new construction activity came to € 1,935.9 million in 2020, down slightly on the previous year's figure of € 1,971.1 million. The amount spent on capitalized maintenance rose considerably from € 172.7 million in 2019 to € 270.9 million in 2020. This was due, among other things, to investments in improving building security and fire protection, as well as maintenance work carried out as part of modernization projects.

Maintenance, Modernization and New Construction

in € million	2019	2020	Change in %
Expenses for maintenance	308.9	321.1	3.9
Capitalized maintenance	172.7	270.9	56.9
Maintenance measures	481.6	592.0	22.9
Modernization measures	996.5	908.4	-8.8
New construction (to hold)	493.0	435.5	-11.7
Modernisation and new constuction measures	1,489.5	1,343.9	-9.8
Total cost of maintenance, modernization and new construction	**1,971.1**	**1,935.9**	**-1.8**

In the 2020 fiscal year, operating expenses in the Rental segment were up by 25.0% on the figures for 2019, from € 328.6 million to € 410.6 million. This development is due primarily to the larger portfolio resulting from the prior-year acquisition of Hembla in November 2019. All in all, **Adjusted EBITDA Rental** rose by 8.1%, from € 1,437.4 million in 2019 to € 1,554.2 million in 2020.

The **Value-add** segment was impacted by the coronavirus pandemic, largely due to construction delays affecting individual modernization measures due to the coronavirus. Vonovia's own craftsmen's organization made a contribution to the segment's stable development. We continued to expand our business activities relating to the provision of cable television to our tenants, residential environment, insurance and metering services, and energy supply services. We supplied a total of around 23,100 households with energy directly as of the end of 2020 (2019: around 18,200).

In the 2020 fiscal year, we changed how we report revenue from the Value-add segment with the introduction of a new performance indicator, Total Segment Revenue. Details can be found in chapter [A2] of the Notes to the consolidated financial statements and in the segment reporting. → p. 169 Key changes result from the separate reporting of ancillary costs outside of the segments in gross terms as well as the decision not to take account of revenue from the management of subcontractors in our internal Value-add income. External revenue from our Value-add activities with our end customers rose by 2.0% from € 50.6 million in 2019 to € 51.6 million in 2020. At € 1,053.0 million, Group revenue in 2020 was down by 4.6% on the prior-year figure of € 1,104.2 million, mainly due to the coronavirus crisis. Overall, this results in a 4.3% drop in the income from the Value-add segment from € 1,154.8 million in 2019 to € 1,104.6 million in 2020. In the 2020 fiscal year, operating expenses in the Value-add segment were down by 5.6% on the figures for 2019, from € 1,008.5 million to € 952.3 million. This development is mainly due to construction delays related to the coronavirus. **Adjusted EBITDA Value-add** rose by 4.1%, from € 146.3 million in 2019 to € 152.3 million in 2020.

We continued to pursue our selective sales strategy successfully in the 2020 fiscal year in spite of the coronavirus pandemic. 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 € 382.4 million in the 2020 fiscal year, up by 4.7% on the value of € 365.1 million in 2019; € 264.2 million of this amount is attributed to sales in Germany (2019: € 250.9 million) and € 118.2 million to sales in Austria (2019: € 114.2 million). We privatized 2,442 apartments in the 2020 fiscal year (2019: 2,607), thereof 1,870 in Germany (2019: 2,012) and 572 in Austria (2019: 595). Adjusted EBITDA Recurring Sales came in at € 92.4 million in the 2020 fiscal year, up by 0.5% on the value of € 91.9 million seen in 2019. The **fair value step-up** for Recurring Sales came in at 39.6% in 2020, down slightly on the comparative value of 41.3% for 2019. This is due primarily to lower step-ups for sales in Austria as against the previous year. The step-ups in Austria were higher than in Germany overall.

Outside of the Recurring Sales segment, we made 1,235 **Non-core Disposals** of residential units as part of our portfolio adjustment measures in the 2020 fiscal year (2019: 2,177) with total proceeds of € 203.9 million (2019: € 145.6 million). At 40.1%, the fair value step-up for Non-core Disposals was considerably higher than for the same period in the previous year (15.8%). The increase was largely due to the sale of a large commercial property in Dresden.

In the 2020 fiscal year, the **Development segment**, with its **Development to sell** and **Development to hold** areas, made positive contributions to earnings in Germany, Austria and Sweden, allowing it to contribute to Vonovia's successful growth. The segment revenue from Development (total of income from the sale of Development to sell properties, fair value from Development to hold and rental income in the Development segment) rose by 15.5% from € 516.9 million in 2019 to € 597.1 million in 2020.

In the **Development to sell** area, a total of 646 units were completed in the 2020 fiscal year (2019: 791 units), with all 646 units located in Germany (2019: 350 units). No units were completed in Austria in 2020 (2019: 441 units). In 2020, income from the disposal of Development to sell properties amounted to € 297.7 million (2019: € 249.5 million), with € 201.0 million attributable to project development in Germany (2019: € 131.8 million) and € 96.7 million to project development in Austria (2019: € 117.6 million). The resulting gross profit for Development to sell came to € 61.8 million (2019: € 52.2 million).

In the **Development to hold** area, a total of 1,442 units (2019: 1,301 units incl. attic conversions) were completed, thereof 862 in Germany (2019: 870 units), 383 units in Austria (2019: 401 units) and 197 units in Sweden (2019: 30 units). In the Development to hold area, a fair value of € 298.2 million was achieved in 2020 (2019: € 266.3 million). € 157.1 million of this figure is attributable to project development in Germany (2019: € 164.3 million), € 127.9 million to project development in Austria (2019: € 96.3 million) and € 13.2 million to project development in Sweden (2019: € 5.7 million). The gross profit for Development to hold came to € 62.8 million (2019: € 58.9 million).

The Adjusted EBITDA for the Development segment amounted to € 110.9 million in the 2020 fiscal year (2019: € 84.5 million).

In the 2020 fiscal year, the primary key figure for the sustained earnings power, **Group FFO**, increased by 10.6% from € 1,218.6 million in 2019 to € 1,348.2 million in 2020, largely due to acquisitions and organic growth. This trend was fueled primarily by the positive development in **Adjusted EBITDA Total**, which rose by 8.5% from € 1,760.1 million to € 1,909.8 million during the reporting period.

In the 2020 fiscal year, the **non-recurring items** eliminated in the Adjusted EBITDA Total came to € 61.5 million in 2020 (2019: € 93.1 million). In the third quarter of 2020, income of € 18.1 million was recognized following the reassessment of a compensation entitlement for non-controlling interests. The following table gives a detailed list of the non-recurring items:

Non-recurring Items

in € million	2019	2020	Change in %
Transactions*	48.2	24.0	-50.2
Personnel matters	13.2	27.5	>100
Business model optimization	27.6	13.9	-49.6
Refinancing and equity measures	4.1	-3.9	–
Total non-recurring items	**93.1**	**61.5**	**-33.9**

* Including one-time expenses in connection with acquisitions, such as HR measures relating to the integration process and other follow-up costs.

Reconciliations

The **financial result** changed from € -396.4 million in 2019 to € -435.5 million in 2020. FFO interest expense is derived from the financial result as follows:

Reconciliation of Financial Result/FFO Interest Expense

in € million	2019	2020	Change in %
Interest income	8.9	21.9	>100
Interest expense	-417.5	-411.4	-1.5
Other financial result excluding income from investments	12.2	-46.0	–
Financial result*	**-396.4**	**-435.5**	**9.9**
Adjustments:			
Other financial result excluding income from investments	-12.2	46.0	–
Effects from the valuation of interest rate and currency derivatives	17.9	42.4	>100
Prepayment penalties and commitment interest	28.1	6.2	-77.9
Effects from the valuation of non-derivative financial instruments	-18.9	-48.6	>100
Interest accretion to provisions	10.0	6.2	-38.0
Interest income from bond issue	–	-11.9	–
Accrued interest/other effects	-18.8	-6.0	-68.1
Net cash interest	**-390.3**	**-401.2**	**2.8**
Adjustment for IFRS 16 Leases	8.8	10.5	19.3
Adjustment of income from investments in other real estate companies	1.7	2.4	41.2
Adjustment of interest paid due to taxes	-1.0	23.7	–
Adjustment of accrued interest	22.2	-15.5	–
Interest expense FFO	**-358.6**	**-380.1**	**6.0**

* Excluding income from other investments.

The profit for the period in 2020 came to € 3,340.0 million compared with € 1,294.3 million in 2019. In the previous year, considerably higher depreciation, amortization and impairment losses reduced the profit reported. Net income from fair value adjustments of investment properties came to € 3,719.8 million in the 2020 fiscal year, down by € 411.7 million year-on-year.

Reconciliation of Profit for the Period/Group FFO

in € million	2019	2020	Change in %
Profit for the period	**1,294.3**	**3,340.0**	**>100**
Financial result*	396.4	435.5	9.9
Income taxes	1,844.6	1,674.4	-9.2
Depreciation and amortization	2,175.8	92.3	-95.8
Net income from fair value adjustments of investment properties	-4,131.5	-3,719.8	-10.0
EBITDA IFRS	**1,579.6**	**1,822.4**	**15.4**
Non-recurring items	93.1	61.5	-33.9
Total period adjustments from assets held for sale	-2.2	-15.3	>100
Financial income from investments in other real estate companies	-1.7	-2.4	41.2
Other (Non-core Disposals)	-11.5	-52.7	>100
Intragroup profits	43.9	33.5	-23.7
Gross profit Development to hold	58.9	62.8	6.6
Adjusted EBITDA Total	**1,760.1**	**1,909.8**	**8.5**
Interest expense FFO**	-358.6	-380.1	6.0
Current income taxes FFO	-50.1	-52.4	4.6
Consolidation	-132.8	-129.1	-2.8
Group FFO	**1,218.6**	**1,348.2**	**10.6**
Group FFO per share in €***	2.25	2.38	6.0

* Excluding income from other investments.
** Incl. financial income from investments in other real estate companies.
*** Based on the shares carrying dividend rights on the reporting date Dec. 31, 2019: 542,273,611, Dec. 31, 2020: 565,887,299.

Assets

Consolidated Balance Sheet Structure

	Dec. 31, 2019*		Dec. 31, 2020	
	in € million	in %	in € million	in %
Non-current assets	55,045.1	97.5	60,632.0	97.1
Current assets	1,431.0	2.5	1,785.4	2.9
Total assets	**56,476.1**	**100.0**	**62,417.4**	**100.0**
Equity	21,123.8	37.4	24,831.8	39.8
Non-current liabilities	31,762.1	56.2	34,669.8	55.5
Current liabilities	3,590.2	6.4	2,915.8	4.7
Total equity and liabilities	**56,476.1**	**100.0**	**62,417.4**	**100.0**

* Adjusted (see note [A2] Adjustment to Prior-year-Figures).

The Group's **total assets** increased by € 5,941.3 million as against December 31, 2019, rising from € 56,476.1 million to € 62,417.4 million. The most important impact on non-current assets can be traced back to a € 5,335.2 million increase in investment properties from € 52,736.6 million to € 58,071.8 million, with € 3,719.8 million resulting from the property valuation process. Within current assets, real estate inventories showed a particular increase, rising by € 212.1 million, from € 358.3 million to € 570.4 million. € 109.1 million is attributable to the acquisition of Bien-Ries GmbH. Cash and cash equivalents rose to € 613.3 million as against € 500.7 million as of December 31, 2019. The € 84.3 million increase in non-current financial assets from € 331.7 million to € 416.0 million is characterized primarily by the acquisition of the stake in Vesteda and, with the opposite effect, by the use of termination options (embedded derivatives) in connection with refinancing measures relating to Hembla. The acquisition of Bien-Ries GmbH resulted in new goodwill of € 32.1 million. The acquisition of H&L Immobilien GmbH increased the Group's goodwill by € 34.4 million. Assets held for sale increased by € 30.8 million from € 134.1 million as of December 31, 2019, to € 164.9 million. Goodwill and trademark rights comprise 2.5% of the total assets.

As of December 31, 2020, the **gross asset value (GAV)** of Vonovia's property assets came to € 59,207.1 million, which corresponds to 94.9% of total assets compared with € 53,586.3 million, or 94.9%, at the end of 2019.

The € 3,708.0 million increase in **total equity** from € 21,123.8 million to € 24,831.8 million results in particular from the capital increase of € 1.0 billion implemented on September 8, 2020 and from the profit for the period in the amount of € 3,340.0 million. The cash dividend distributions in the sum of € 504.6 million had the opposite effect, as did the changes recognized directly in equity in the amount of € -291.8 million, which resulted largely from reclassification to purchase price liabilities from put options/rights to reimbursement.

This brings the **equity ratio** to 39.8%, compared with 37.4% at the end of 2019.

Liabilities rose by € 2,233.3 million from € 35,352.3 million to € 37,585.6 million. The amount of non-derivative financial liabilities rose by € 509.8 million, with the € 1,177.1 million increase in non-current non-derivative financial liabilities offset by the € 667.3 million drop in current non-derivative financial liabilities. Beyond this, liabilities increased by € 1,671.4 million due to the increase in deferred taxes primarily in connection with investment properties.

Net Asset Value

Vonovia's net asset value (NAV) figures are based on the best practice recommendations of the European Public Real Estate Association (EPRA). At the end of 2020, the EPRA NAV came to € 35,146.5 million, up by 18.8% on the value of € 29,592.5 million seen at the end of 2019. EPRA NAV per share increased from € 54.57 at the end of 2019 to € 62.11 at the end of 2020. The Adjusted NAV of € 33,651.8 million at the end of 2020 was an increase of 19.3% over € 28,199.6 million at the end of 2019. This represents an increase of 14.4% in the Adjusted NAV per share from € 52.00 at the end of 2019 to € 59.47 at the end of 2020.

Net Asset Value (NAV)

in € million	Dec. 31, 2019*	Dec. 31, 2020	Change in %
Total equity attributable to Vonovia shareholders	19,308.3	23,143.8	19.9
Deferred taxes on investment properties	10,288.9	11,947.8	16.1
Fair value of derivative financial instruments**	1.6	74.5	>100
Deferred taxes on derivative financial instruments	-6.3	-19.6	>100
EPRA NAV	29,592.5	35,146.5	18.8
Goodwill	-1,392.9	-1,494.7	7.3
Adjusted NAV	**28,199.6**	**33,651.8**	**19.3**
EPRA NAV per share in €* **	**54.57**	**62.11**	**13.8**
Adjusted NAV per share in €* **	**52.00**	**59.47**	**14.4**

* Adjusted (see note [A2] Adjustment to Prior-year Figures).
** Adjusted for effects from cross currency swaps.
*** Based on the number of shares on the reporting date Dec. 31, 2019: 542,273,611, Dec. 31, 2020: 565,887,299.

The introduction of the new management system will see the EPRA NTA per share replace the Adjusted NAV per share.

EPRA Net Tangible Assets (EPRA NTA)

in € million	Dec. 31, 2019	Dec. 31, 2020	Change in %
Total equity attributable to Vonovia shareholders	**19,308.3**	**23,143.8**	**19.9**
Deferred tax in relation to fair value gains of investment properties*	8,881.2	10,466.8	17.9
Fair value of financial instruments**	-4.7	54.9	-
Goodwill as per the IFRS balance sheet	-1,392.9	-1,494.7	7.3
Intangibles as per the IFRS balance sheet	-111.3	-117.0	5.1
Real estate transfer tax*	3,081.6	3,434.8	11.5
EPRA NTA	**29,762.2**	**35,488.6**	**19.2**
EPRA NTA per share in €* **	**54.88**	**62.71**	**14.3**

* Proportion of core- or hold-portfolio.
** Adjusted for effects from cross currency swaps.
*** Based on the number of shares on the reporting date Dec. 31, 2019: 542,273,611, Dec. 31, 2020: 565,887,299.

At the end of 2020, the EPRA NTA came to € 35,488.6 million, up 19.2% on the value of € 29,762.2 million seen at the end of 2019. EPRA NTA per share increased from € 54.88 at the end of 2019 to € 62.71 at the end of 2020.

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

in € million	EPRA NAV	GAV
2020	35,146.5	59,207.1
2019	29,592.5	53,586.3
2018	26,105.0	44,226.9
2017	21,284.6	33,424.9
2016	17,047.1	27,106.4

Fair Values

Major market developments and valuation parameters that have an impact on the fair values of Vonovia are assessed every quarter. In addition to the revaluations performed during the year, the entire portfolio was revalued at the end of 2020.

As in 2019, Vonovia's portfolio has shown very positive development. The demand for apartments in metropolitan areas remains stronger than the supply, reflected in the moderate rise in rent levels. 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 dynamic – despite the coronavirus pandemic. Developments were positive in Berlin as well, in spite of the rent freeze. 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 9.4% increase in the value of our property portfolio compared with the previous year, after adjustments for acquisitions and sales and excluding currency effects. In addition to the internal valuation, the property assets are also assessed by the independent property appraiser CBRE GmbH in Germany and Austria and Savills Sweden AB in cooperation with Malmöbryggan Fastighetsekonomi AB for the portfolio in Sweden. The market value resulting from the CBRE expert opinion deviates from the internal valuation result by less than 0.1%. The result from the external valuation was adopted for the Swedish portfolio.

We are currently observing stable demand for rental apartments and no negative impact on market values as a result of the coronavirus pandemic. Potential effects on future price developments will depend to a considerable degree on how the pandemic progresses and the associated economic conditions, and are impossible to reliably predict at present. Residential real estate could become more significant as a relatively secure form of investment. The demand for residential real estate could, however, also change depending on the duration and extent of a possible recession. Vonovia is keeping a close eye on market developments.

At the end of January 2020, the Berlin House of Representatives passed the Act on Rent Controls in the Housing Sector in Berlin (referred to in short as "rent freeze"). This came into force in February 2020. It remains disputed whether the law is constitutional. Assuming that the rent freeze is found to be constitutional, future rental income or rental development will have to be reduced for the period leading up to, and including, 2025. This could have a negative impact on fair values. Likewise, it cannot be ruled out that declining vacancy rates and fluctuation as well as lower return requirements of investors (yield compression) will subsequently have a compensatory effect on fair values. The potential implications can be estimated via the sensitivities shown in the notes to this report. There is no evidence of any impact on fair values at present.

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.

Vonovia, in principle, measures its portfolio on the basis of the discounted cash flow (DCF) method. Under the DCF methodology, the expected future income and costs of a residential property are forecasted and discounted to the date of valuation as the net present value. The income in the DCF model mainly comprises expected rental income (current in-place rent, market rents as well as their development) taking vacancy losses and also sales revenues for an Austrian subportfolio into account. The expected rental income is derived for each location from the latest rent indices and rent tables (including Value AG, Immobilienverband Deutschland (IVD) and the Austrian Economic Chambers (WKÖ)) as well as from studies on spatial prosperity (Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Prognos, Value AG, Bertelsmannstiftung, Statistics Austria, etc.). The expected sales revenues are derived from historical sale prices as well as market data (e.g., the Austrian Economic Chamber (WKÖ, EHL). On the cost side, maintenance expenses and administrative costs are taken into account. Further cost items are, for example, ground rents, non-allocable ancillary costs, rent losses and, in Austria, selling costs. All cost items are 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 environment. Different cost approaches were used to those for residential properties, and the capitalized interest rates were adjusted to reflect the market specifics.

The recognition and valuation of investment properties are explained in detail in the notes to the consolidated financial statements (chapter [D28] Investment Properties).

The fair value of Vonovia's real estate portfolio comprising residential buildings, commercial properties, garages and parking spaces as well as project developments, existing areas with construction potential and land areas with inheritable building rights granted was € 58,910.7 million as of December 31, 2020 (2019: € 53,316.4 million). The determination of fair values led overall to net income from fair value adjustments of investment properties of € 3,719.8 million (2019: € 4,131.5 million).

Financial Position

Cash Flow

The following table shows the Group cash flow:

Key Data from the Statement of Cash Flows

in € million	2019	2020
Cash flow from operating activities	1,555.9	1,430.5
Cash flow from investing activities	-2,505.7	-1,729.9
Cash flow from financing activities	902.8	402.6
Influence of changes in foreign exchange rates	–	9.4
Net changes in cash and cash equivalents	**-47.0**	**112.6**
Cash and cash equivalents at the beginning of the period	547.7	500.7
Casch and cash equivalents at the end of the period	**500.7**	**613.3**

The cash flow from **operating activities** fell from € 1,555.9 million in 2019 to € 1,430.5 million in 2020. The increase in the operating result was countered by the development in working capital and income tax paid.

The cash flow from **investing activities** shows a payout balance of € 1,729.9 million for 2020. This figure was largely shaped in the previous year by income from the sale of the shares in Deutsche Wohnen SE in the amount of € 698.1 million. Payments for acquisition of investment properties came to € 1,723.7 million in 2020, as against € 2,092.0 million in the previous year. Included in this comparison in particular is the purchase of a real estate portfolio in Sweden for € 407.1 million. Payments for the acquisition of shares in consolidated companies in 2020 include payments for the acquisition of Bien-Ries GmbH. In the previous year, the figure was dominated by payments of € 1,716.2 million for the acquisition of Hembla. Subsequent payments of € 112.1

million were incurred within this context in 2020. The cash flow from investing activities also includes a payment of € 160.2 million made for the acquisition of the stake in Vesteda. In 2020, income from portfolio sales in the amount of € 587.4 million was collected.

The cash flow from **financing activities** includes cash inflows from the cash capital increase in the amount of € 1003.0 million. The cash flow from financing activities includes payments for regular and unscheduled repayments in the amount of € 3,721.5 million and, on the other hand, proceeds from issuing financial liabilities in the amount of € 4,188.6 million. Payouts for transaction and financing costs amounted to € 60.1 million. Interest paid came to € 409.2 million in 2020, with dividend payments totaling € 520.8 million. Repayments of lease liabilities came to € 23.1 million.

Net changes in **cash and cash equivalents** came to € 112.6 million.

Financing

According to the publication dated July 22, 2020, 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+.

On December 13, 2019, Vonovia received an A- rating from the largest European rating agency Scope Group for the first time, a rating that was most recently confirmed in a publication dated August 17, 2020.

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).

As of the reporting date of December 31, 2020, Vonovia Finance B.V. had placed a total bond volume of € 15.5 billion, € 15.3 billion of which relates to the EMTN program.

Via its Dutch subsidiary Vonovia Finance B.V., Vonovia increased an EMTN bond of € 500 million that runs until March 2026 by € 200 million with effect from January 30, 2020.

Vonovia Finance B.V. took out secured financing for Vonovia of over € 300 million with Landesbank Baden-Württemberg in February 2020 as well as over € 100 million with ING Bank, a branch of ING-DiBa AG, and over € 100 million with Berliner Sparkasse in March 2020, respectively, each with a term of ten years.

On February 28, 2020, € 300 million was repaid under the Commercial Paper Program that the Dutch subsidiary Vonovia Finance B.V. had taken out for the Vonovia Group. This means that the Commercial Paper Program has been repaid in full.

On March 30, 2020, Vonovia repaid the remaining capital of € 300.6 million on a bond issued by Dutch subsidiary Vonovia Finance B.V.

Vonovia placed two bonds with a total volume of € 1 billion on March 31, 2020. The new bonds will bear interest at an average rate of 1.9% and have a term of four and ten years, respectively.

Secured financing with remaining capital of € 290 million was repaid to a consortium including Berlin Hyp, Berliner Sparkasse and Landesbank Baden-Württemberg on June 30, 2020, as scheduled.

Vonovia Finance B.V. placed two bonds with a total volume of € 1.5 billion on July 2, 2020. With terms of six and ten years, respectively, the bonds bear interest at an average rate of 0.8%. The payout date was July 9, 2020.

Berlin Hyp provides Vonovia Finance B.V. with secured financing of € 184 million with a term of ten years that was disbursed in July 2020.

Secured financing with a volume of around SEK 13.7 billion (approximately € 1.3 billion) was repaid in the Swedish subgroup in August and September.

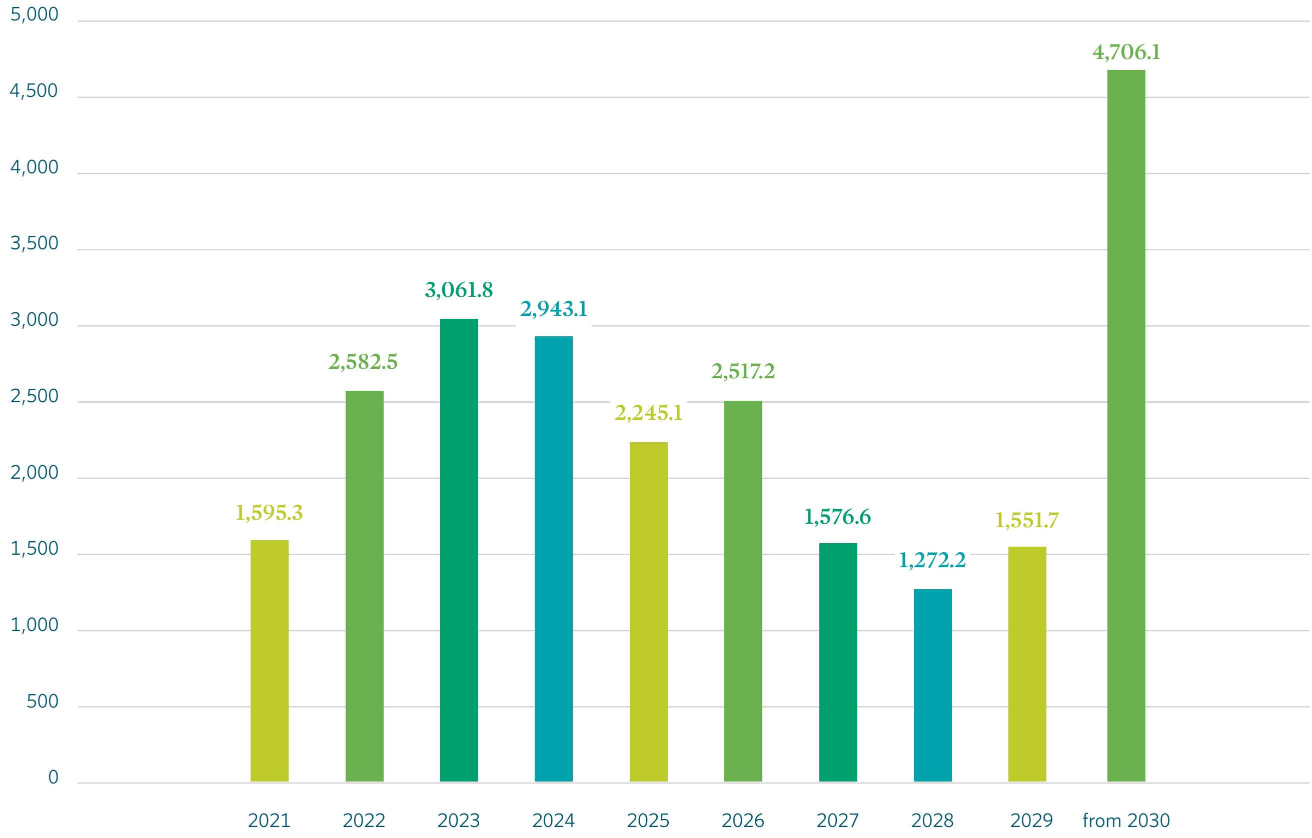
In November 2020, € 200 million was disbursed as part of a secured financing arrangement provided by Commerzbank AG with a term of seven years.

On December 15, 2020, Vonovia repaid a bond of € 751.7 million issued by Dutch subsidiary Vonovia Finance B.V. as scheduled.

The **debt maturity profile** of Vonovia's financing was as follows as of December 31, 2020:

Maturity Profile

as of December 31, 2020, in € million (Face values)



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 reporting date:

in € million	Dec. 31, 2019	Dec. 31, 2020	Change in %
Non-derivative financial liabilities	23,574.9	24,084.7	2.2
Foreign exchange rate effects	-37.8	-18.9	-50.0
Cash and cash equivalents	-500.7	-613.3	22.5
Net debt	**23,036.4**	**23,452.5**	**1.8**
Sales receivables	21.4	-122.3	–
Adjusted net debt	**23,057.8**	**23,330.2**	**1.2**
Fair value of the real estate portfolio	**53,316.4**	**58,910.7**	**10.5**
Shares in other real estate companies	149.5	324.8	>100
Adjusted fair value of the real estate portfolio	**53,465.9**	**59,235.5**	**10.8**
LTV	**43.1%**	**39.4%**	**-3.7 pp**

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

in € million	Dec. 31, 2019*	Dec. 31, 2020	Change in %
Non-derivative financial liabilities	23,574.9	24,084.7	2.2
Total assets	**56,476.1**	**62,417.4**	**10.5**
LTV bond covenants	**41.7%**	**38.6%**	**-3.1 pp**

* Adjusted (see note [A2] Adjustment to Prior-year Figures).

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 one of the leading German, Austrian and Swedish residential real estate management companies. Following the successful integration of the BUWOG Group, Vonovia also ranks among the five biggest real estate developers in Germany and is the market leader in Austria.

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 2020

Vonovia SE's 2020 fiscal year was also dominated by the coronavirus pandemic. The top priority for Vonovia SE, as the Group parent company, was to implement the coronavirus protection measures for the employees and customers of the Vonovia Group and to maintain its business operations.

Vonovia held its Annual General Meeting as a virtual event on June 30, 2020, due to the pandemic. Another virtual Annual General Meeting is scheduled for April 16, 2021.

With the entry in the Commercial Register of Bochum on September 8, 2020, the company's share capital was increased by issuing 17,000,000 new registered no-par-value shares by means of an accelerated book building procedure, excluding subscription rights. On July 30, 2020, the share capital had already been increased by 6,613,688 new registered no-par-value shares by way of a non-cash dividend, meaning that as of December 31, 2020, the share capital amounted to € 565,887,299.00. The premium in the amount of € 1,326,194,883.34 was added to the capital reserves under miscellaneous contributions.

In the 2020 fiscal year, Vonovia reviewed the sustainability of the successful strategy it has been pursuing since its initial listing, and took a particular look at sustainability aspects. As part of these endeavors, Vonovia is committed to achieving a climate-neutral housing stock by 2050.

Vonovia has a BBB+ rating awarded by the rating agency Standard & Poor's and an A- rating awarded by the largest European rating agency Scope Group.

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 IFRS, the properties are remeasured at periodic intervals. Under HGB, the fixed assets are stated at amortized cost, taking depreciation into account. The capitalization regulations in particular also vary.

Expenses relate largely to personnel 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 development in 2020 and, as a result, the result for 2020 is not influenced by any major non-recurring items. Only the assumption of profit by Deutsche Annington Acquisition Holding GmbH is characterized by exchange rate gains resulting from the conversion of Swedish krona as a result of Group financing measures. In addition, significantly higher interest had to be paid to affiliated companies as a result of Group financing.

Revenue and other operating income, the latter excluding reversals of provisions and valuation allowances, increased by € 13.9 million to € 222.7 million. Other operating income in the prior year included the disclosure of special effects from the uncovering of hidden reserves in the shares of affiliated companies in the amount of € 464.3 million as well as the proceeds from the sale of Deutsche Wohnen SE shares in the amount of € 292.6 million.

Expenses relating to personnel expenses, the cost of materials, depreciation and amortization and other expenses amounted to € 288.2 million, with changes in valuation allowances also being disregarded in other expenses. Consequently, the result before income from investments, net interest income and taxes is negative at around € 65.5 million.

The net effect of reversals and new valuation allowances recognized for receivables and other assets amounted to € 5.0 million; reversals of provisions came to € 5.2 million.

Purchased services, as a key component of the **cost of materials**, increased by € 9.0 million as a result of a higher volume of personnel being provided by Group companies, which is, in turn, consistent with the higher costs billed for Group services that are included in income. The provision of personnel relates to employees of Group companies who are assigned to Vonovia SE.

Personnel expenses came to € 38.4 million in 2020, on a par with the previous year (€ 38.3 million).

At € 20.5 million, **depreciation and amortization** was on a par with the previous year's level (€ 19.4 million). **Other operating expenses** are on a similar level if we leave the special effects seen in the previous year out of the equation.

Net financial expenses to affiliated companies increased considerably to € 183.0 million. This is due to volume-related and structural factors in connection with a higher level of debt vis-à-vis Group companies during the fiscal year.

Net **income from investments** is up considerably year-on-year, with income of € 221.4 million reported in 2020 (2019: € -188.4 million). Whereas income from investments includes a material effect in the form of currency effects resulting from the conversion of the Swedish krona in 2020, income from investments in the previous year had been hit by structural measures within the Group.

The **tax expense** for 2020 comes to € 12.5 million as against € 8.4 million a year earlier.

As the controlling company in a VAT group, Vonovia SE owes the corresponding income taxes.

Vonovia SE closed the 2020 fiscal year with a **net loss for the year** of € 53,522,768.55, as against net income for the year of € 419,110,421.17 in 2019. After offsetting this net loss for the year against the profit carried forward from the previous year of € 61,352,008.56, the Management Board withdrew € 470,000,000.00 from retained earnings and € 522,170,759.99 from capital reserves, resulting in a net profit for the 2020 fiscal year of € 1,000,000,000.00.

The Management Board and the Supervisory Board propose to the Annual General Meeting that, of the profit of Vonovia SE for the 2020 fiscal year of € 1,000,000,000.00, an amount of € 956,349,535.31 on the 565,887,299 shares of the share capital as of December 31, 2020, be paid to the shareholders as a **dividend**, corresponding to € 1.69 per share. It is also proposed that the remaining amount of € 43,650,464.69 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 on the share capital as of December 31, 2020.

As in prior years, the dividend for the 2020 fiscal year, payable after the Annual General Meeting to be held on April 16, 2021, will again include the option of a non-cash dividend in shares, to the extent that the Management Board and the Supervisory Board consider this to be in the interests of the company and its shareholders.

Income Statement

in € million	2019	2020
Revenues	166.2	181.3
Other operating income	814.9	51.6
Cost of purchased services	-69.0	-80.2
Personnel expenses	-38.3	-38.4
Other administrative expenses	-197.1	-169.7
Loss (profit) before financial result and tax	**676.8**	**-55.4**
Income from profit transfer	79.5	256.5
Income from investments	11.9	13.5
Interest and similar income	18.5	22.1
Expense from the assumption of losses	-279.8	-48.6
Interest and similar expense	-79.4	-229.1
Financial result	**-249.3**	**14.4**
Tax	-8.4	-12.5
Net income/Net loss	**419.1**	**-53.5**

Net Assets and Financial Position of Vonovia SE

The company's non-current assets of € 20,626.5 million are largely characterized by **financial assets** in the amount of € 20,596.1 million, virtually unchanged against 2019.

The company's **intangible assets** and **tangible fixed assets** fell overall due to depreciation and amortization.

Net current assets (current assets less 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 changed by a total of € 369.7 million in favor of Vonovia SE in 2020. The change in the net lending/borrowing position is due, among other things, to the refinancing of the Swedish business.

Provisions came to € 167.4 million at the end of the year (2019: € 163.6 million), with € 74.2 million attributable to provisions for pensions and € 32.9 million to income tax provisions. Other provisions fell, largely due to a lower volume of outstanding invoices.

Total equity had risen to € 10,725.6 million by the end of 2020 (2019: € 10,280.6 million). This increase is due to the capital increase in connection with the scrip dividend and to the cash capital increase on September 8, 2020 in the context of accelerated book building. The cash dividend distribution in 2020 and the net loss for the year had the opposite effect of reducing total equity.

Assets

in € million	Dec. 31, 2019	Dec. 31, 2020	in € million	Dec. 31, 2019	Dec. 31, 2020
Assets			**Equity and liabilities**		
Financial assets	20,475.9	20,596.1	Equity	10,280.6	10,725.6
Other assets	33.1	30.4	Provisions	163.6	167.4
Receivables from affiliated companies	3,799.8	4,934.2	Liabilities to banks	1,109.0	1,257.7
Other receivables and assets	18.4	26.2	Liabilities to affiliated companies	12,851.4	13,616.2
Cash and cash equivalents	92.9	190.8	Other liabilities	15.5	10.8
Total assets	**24,420.1**	**25,777.7**	**Total equity and liabilities**	**24,420.1**	**25,777.7**

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** increased from € 92.9 million to € 190.8 million in 2020.

Employees of Vonovia SE

At the end of the 2020 fiscal year, an average of 161 people were employed at the company (2019: 168), 128 of whom were full-time employees and 33 of whom were part-time.

Opportunities and Risks for Vonovia SE

The likely development of Vonovia SE in the 2021 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 result for the 2020 fiscal year is characterized to a much lesser extent than in the past by special effects resulting from acquisitions, integration expenses and company law restructuring measures. The effect associated with the considerable book gain from the sale of shares in Deutsche Wohnen SE in 2019 was also not repeated in 2020. Leaving these special effects out of the equation, the company's earnings for the 2020 fiscal year came to around € 65 million, i.e., in the mid-double-digit millions as forecast, on a par with the level seen in previous years.

The results for the 2021 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.

All in all, we expect the company's result for the 2021 fiscal year to again be on a par with the figure seen in the previous years 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 € 1.69 per share for the 2020 fiscal year.

Statement of the Management Board on the Economic Situation

The net assets, financial position and results of operations of the company 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. Developments in Germany are supported by equally positive developments in Sweden and Austria.

Further Statutory Disclosures

Corporate Governance

In the corporate governance declaration, we report, in accordance with No. 3.10 of the German Corporate Governance Code and Section 289f 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 at **https://www.vonovia.de/en** 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 real estate 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 Institute for Corporate Governance of the German housing industry. It 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, in accordance with IFRS is shown in the Notes to the consolidated financial statements.

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).

In the 2020 fiscal year, the Supervisory Board of Vonovia SE approved at its meeting held on December 15, 2020, a revamped remuneration system for the members of the Management Board, which includes the implementation of the new statutory and regulatory requirements. The Supervisory Board will present this remuneration system to the Annual General Meeting in May 2021.

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 October 2020, 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 assessing the appropriateness of remuneration, Vonovia SE looks at its peer group (horizontal, external comparison) and the remuneration structure that applies in the rest of the company (vertical, internal comparison). The remuneration structure is oriented toward 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 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 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 € 400,000, while the contribution for Daniel Riedl comes to € 200,000 and the contribution for Arnd Fittkau and Helene von Roeder amounts to € 160,000 in each case. Alternatively, the amount is paid out as cash remuneration. In addition, Daniel Riedl receives a pension remuneration of € 300,000 as additional cash remuneration. This amount can be paid into the pension fund subject to certain conditions.

In two cases, the fringe benefits include term life insurance policies. 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 has been 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. This resulted in a final gross compensation payment of € 64,874 for 2019, which was paid out in 2020.

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 € 794,000 for Rolf Buch as the Chairman of the Management Board, and at € 440,000 for Arnd Fittkau, Daniel Riedl (contractual entitlement for Vonovia SE € 140,000 and contractual entitlement for BUWOG € 300,000) 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. Vonovia's 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 Adjusted EBITDA Total target. In Daniel Riedl's case, 40% of the BUWOG entitlement to variable short-term remuneration depends on the achievement of the EBITDA Rental + Value-Add target and a further 15% on the achievement of the EBITDA Development 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 2020 calendar year are set out below:

STIP target achievement level	Group FFO	Adjusted NAV/share	Adjusted EBITDA Total
85% = budget	1,303.2	53.85	1,901.2
100%	1,342.2	55.14	1,958.1
Actual target achievement level	100%	100%	87.3%

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) is a plan which meets the requirements set out in the German Stock Corporation Act (AktG) and the German Corporate Governance Code as published on February 7, 2017 and aims to ensure that the remuneration structure focuses on sustainable corporate development. The LTIP 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, which does not provide for an early payout in the event that the Management Board contract is terminated before the date provided for therein.

The Supervisory Board offers the Management Board members a prospective target amount ("grant value") in euros for each performance period, which corresponds to four years as a general rule. Rolf Buch is awarded performance shares with a grant value of € 2,175,000 a year. Arnd Fittkau, Daniel Riedl and Helene von Roeder are each awarded performance shares with a grant value of € 800,000 a year.

The actual payout amount is calculated based on the performance shares granted accordingly 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 in Adjusted NAV per share
c) Development of Group FFO per share
d) Customer Satisfaction Index (CSI)– Aktiv Bo since 2020 (up to 2019 TTR)

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). If the value achieved for a particular success target falls below the minimum value, the target achievement level for this success target is 0%.

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 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 Rolf Buch is concerned, the performance period for the performance shares granted as part of the 2016 tranche ended on December 31, 2019, marking the end of a four-year period. The payment of € 3,375,000 (gross) was made in the 2020 fiscal year in line with the contractual provisions.

The targets for the four success criteria for the 2017 tranche and the target achievement levels following the end of the performance period on December 31, 2020, are set out below:

Targets	Minimum value	Target value (100%)	Maximum value (200%)	Target achievement
Relative Total Shareholder Return	-30%	0%	30%	200%
Growth of NAV per share (NAV per share on Dec. 31, 2016 = € 36.58)	0% growth rate p.a.	3% growth rate p.a.	5% growth rate p.a.	200%
Growth of FFO 1 per share (FFO 1 per share in the 2016 fiscal year = € 1.63)	3% growth rate p.a.	7% growth rate p.a.	9% growth rate p.a.	200%
Customer satisfaction (CSI in the 2016 fiscal year = 61.5 points)	+2 points	+4 points	+6 points	0%

The future structure of the LTIP plan will reflect the demands placed on us by our shareholders and stakeholders from 2021 onwards by including non-financial key figures. This will be achieved by introducing the Sustainability Performance Index (SPI), covering the main ESG-related sustainability topics, as a key performance indicator. These aspects include the CO_2 intensity of the existing portfolio, (partial) modernization measures to make apartments fully accessible, energy-efficient new construction, increased customer and employee satisfaction, and diversity within the management ranks. At the same time, the previous success target "Development of NAV per share" is to be replaced by the success target "Development of net tangible assets per share."

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 € 7,884,000 p.a., with a cap of € 3,600,000 applying to Arndt Fittkau and Helene von Roeder in each case. The total remuneration for Daniel Riedl is capped at € 2,600,000 p.a. in his Vonovia contract and at € 1,000,000 p.a. in his BUWOG contract.

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, Arnd Fittkau and Helene von Roeder make use of this option. 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 2020, the pension contribution was € 1,052,225 for Rolf Buch, € 597,025 for Arnd Fittkau, € 542,509 for Helene von Roeder and € 200,000 for Daniel Riedl, corresponding to the pension fund contribution made. In line with the contractual provisions, pension remuneration of € 300,000 was also paid into the pension fund for Daniel Riedl.

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.

Following the termination of their contracts of employment, Rolf Buch, Arnd Fittkau and Daniel Riedl are subject to a twelve-month non-competition clause. The ex gratia payment for Rolf Buch and Arnd Fittkau corresponds to 75% (Rolf Buch) and 50% (Arnd Fittkau) of the contractual payments most recently received by them (incl. STIP 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. Ms. von Roeder is not subject to any non-competition clause.

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

Grants allocated in €	Rolf Buch CEO 2019	2020	2020 (Min)	2020 (Max)	Klaus Freiberg COO until May 16, 2019 2019	2020	2020 (Min)	2020 (Max)
Fixed remuneration	1,150,000	1,200,000	1,200,000	1,200,000	225,000			
Compensation payment								
Pension contribution					60,000			
Fringe benefits	27,453	30,303	30,303	30,303	10,350			
Total	**1,177,453**	**1,230,303**	**1,230,303**	**1,230,303**	**295,350**			
Annual variable remuneration (bonus)	700,000	794,000	0	794,000	440,000**			
Multi-year variable remuneration (LTIP)								
2019–2022	2,060,584				867,614***			
2020–2023		2,573,330	0	5,437,500				
Total	**2,760,584**	**3,367,330**	**0**	**6,231,500**	**1,307,614**			
Pension expenses	946,410	1,052,225	1,052,225	1,052,225				
Total remuneration	**4,884,447**	**5,649,858**	**2,282,528**	**7,884,000***	**1,602,964**			

* This is the total contractually agreed upper threshold.
** Annual variable remuneration agreed in the termination.
*** LTIP is granted for the complete financial year regardless of the termination during the year.

Inflow in €	Rolf Buch CEO 2019	2020	Klaus Freiberg COO until May 16, 2019 2019	2020	Arnd Fittkau COO since May 16, 2019 2019	2020
Fixed remuneration	1,150,000	1,200,000	225,000		375,000	700,000
Compensation payment						
Pension contribution			60,000			
Fringe benefits	27,453	30,303	10,350		18,721	30,758
Total	**1,177,453**	**1,230,303**	**295,350**		**393,721**	**730,758**
Annual variable remuneration (bonus)	665,000	794,000	308,000		275,000	440,000
Multi-year variable remuneration (LTIP)						
2015–2018	3,000,000		1,000,000			
2016–2018		3,375,000	479,937			
2016–2019				1,500,000		
Total	**3,665,000**	**4,169,000**	**1,787,937**	**1,500,000**	**275,000**	**440,000**
Pension expenses	946,410	1,052,225			291,772	597,025
Total remuneration	**5,788,863**	**6,451,528**	**2,083,287**	**1,500,000**	**960,493**	**1,767,783**

	Arnd Fittkau COO since May 16, 2019				Daniel Riedl CDO since May 9, 2018				Helene von Roeder CFO since May 9, 2018			
	2019	2020	2020 (Min)	2020 (Max)	2019	2020	2020 (Min)	2020 (Max)	2019	2020	2020 (Min)	2020 (Max)
	375,000	700,000	700,000	700,000	600,000	700,000	700,000	700,000	600,000	700,000	700,000	700,000
									64,874	64,874	64,874	64,874
					160,000	500,000	500,000	500,000				
	18,721	30,758	30,758	30,758	29,404	16,057	16,057	16,057	29,608	25,003	25,003	25,003
	393,721	**730,758**	**730,758**	**730,758**	**789,404**	**1,216,057**	**1,216,057**	**1,216,057**	**694,482**	**789,877**	**789,877**	**789,877**
	275,000	440,000	0	440,000	440,000	440,000	0	440,000	440,000	440,000	0	440,000
	504,793				867,614				867,614			
		946,512	0	2,000,000		946,512	0	2,000,000		946,512	0	2,000,000
	779,793	**1,386,512**	**0**	**2,440,000**	**1,307,614**	**1,386,512**	**0**	**2,440,000**	**1,307,614**	**1,386,512**	**0**	**2,440,000**
	291,772	597,025	597,025	597,025					437,241	542,509	542,509	542,509
	1,465,286	**2,714,295**	**1,327,783**	**3,600,000***	**2,097,018**	**2,602,569**	**1,216,057**	**3,600,000***	**2,439,337**	**2,718,898**	**1,332,386**	**3,600,000***

	Daniel Riedl CDO since May 9, 2018		Helene von Roeder CFO since May 9, 2018	
	2019	2020	2019	2020
	600,000	700,000	600,000	700,000
			64,874	64,874
	160,000	500,000		
	29,404	16,057	29,608	25,003
	789,404	**1,216,057**	**694,482**	**789,877**
	412,007	440,000	425,812	440,000
	412,007	**440,000**	**425,812**	**440,000**
			437,241	542,509
	1,201,411	**1,656,057**	**1,557,535**	**1,772,386**

Inflow in €	Thomas Zinnöcker until January 31, 2016		Dr. A. Stefan Kirsten until May 9, 2018		Gerald Klinck until May 9, 2018	
	2019	2020	2019	2020	2019	2020
Multi-year variable remuneration (LTIP)						
2015–2018	2,156,250		1,000,000		750,000	
2016–2018			479,937		479,937	
2016–2019		239,583		1,500,000		1,500,000
Total remuneration	**2,156,250**	**239,583**	**1,479,937**	**1,500,000**	**1,229,937**	**1,500,000**

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.

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 of Committee work		Total remuneration	
	2019	2020	2019	2020	2019	2020
Supervisory Board members in office as of December 31, 2019						
Jürgen Fitschen[3, 6] (since May 9, 2018) Chairman since May 9, 2018	200,000	200,000	60,000	60,000	260,000	260,000
Prof. Dr Edgar Ernst[1] (since June 18, 2013) Deputy Chairman since May 9, 2018	150,000	150,000	80,000	80,000	230,000	230,000
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)	100,000	100,000	40,000	40,000	140,000	140,000
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)	100,000	100,000	20,000	20,000	120,000	120,000
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
Total	**1,350,000**	**1,350,000**	**440,000**	**440,000**	**1,790,000**	**1,790,000**

(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

Risk Management Structure and Instruments

The market environment and the overall statutory/regulatory conditions to which Vonovia is subject are constantly changing. Vonovia is also developing on an ongoing basis with the implementation of the strategy and the associated business activities. This means that new opportunities and risks arise on a regular basis, and that the extent of existing opportunities and risks can change at any time.

As a result, Vonovia has implemented a comprehensive risk management system that ensures that all of the risks that are relevant to the company can be identified, evaluated and managed. This reduces risk potential, secures the company's survival, supports its strategic further development and promotes responsible entrepreneurial action.

Risks are defined as possible events or developments that could have a negative impact on the company's expected economic development and, as a result, could lead to a negative deviation from the short-term plans (budget and forecasts) and the company's medium-term plans (five-year plan).

Opportunities are possible events or developments that could have a positive impact on the company's expected economic development.

In the 2020 fiscal year, the company's risk management system was enhanced and brought into line with the aspects of sustainability added to corporate strategy. This also involved explicitly including sustainability risks in the risk management system. Details are set out in Section (3) Risk Management System. Overall, Vonovia's risk management system is based on an integrated five-pillar risk management approach.

5 Pillars of Risk Management at Vonovia

Management Board
(Strategy, Requirements/Goals, Control Environment, Monitoring)

1 Performance Management	2 Compliance Management	3 Risik Management System	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** > 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 or daily 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 means that the company, its bodies and employees act in line with the applicable rules and regulations. 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 matters.

(3) Risk Management System

Vonovia's strategy has a sustainable and long-term focus. As a result, Vonovia pursues a conservative risk strategy in its business activities. This does not mean minimizing risks, but rather promoting entrepreneurial and responsible action and ensuring the necessary transparency with regard to any possible risks.

In the second half of 2020, Vonovia enhanced the content of its existing risk management system and brought it into line with its corporate strategy, to which sustainability aspects had been added. For the ESG risks, not only the effect of the risks on Vonovia (outside-in view), but also the effect on the environment and society (inside-out view) were added. A materiality analysis was used in the 2020 fiscal year to investigate potential ESG (**E**nvironmental, **S**ocial, **G**overnance) risks for the first time and assess their materiality. The updated sustainability targets are at the heart of Vonovia's new corporate strategy. We aim to focus our activities on reducing CO_2 emissions and on areas of action that will help us to achieve a climate-neutral housing stock, on specific neighborhood strategies, customer satisfaction and service quality, our appeal as an employer, governance and compliance aspects. Accordingly, a non-financial key figure, the Sustainability Performance Index, has been included in the management system as a key performance indicator with effect for the 2021 fiscal year. Details can be found in the chapter on our management system.

The risk management system supports all employees in their day-to-day work in accordance with Vonovia's mission statement. It ensures the early identification, assessment, management and monitoring of all 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. 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.

The operational management of the risk management system falls within the remit of the Head of Controlling, who is responsible for Risk Controlling. He reports to the Chief Financial Officer (CFO). Risk Controlling initiates the software-supported, periodic risk management process and consolidates and validates the risks reported. It is also responsible for validating the risk management measures and monitoring their implementation. Risk Controlling works with the individual risk owners to define early warning indicators that are used to monitor actual developments with regard to certain risks.

The risk owners are the managers at the level directly below the Management Board. They are responsible for identifying, evaluating, managing, monitoring, documenting and communicating all risks in their sphere of responsibility. They are also responsible for recording and reporting all risks in the company's risk tool based on the defined reporting cycles (generally on a half-yearly or ad hoc basis, insofar as is necessary).

Based on a half-yearly risk inventory taken in the first and third quarters of a fiscal year Risk Controlling prepares a risk report for the Management Board and the Supervisory Board. It also simulates major risk developments and their impact on the corporate plans and objectives.

This reporting system ensures that both managers and supervisory bodies are comprehensively informed. In this way, misguided developments can be recognized in good time and counteraction taken at an early stage. Should significant risks occur unexpectedly, they are reported directly to the Management Board and the Supervisory Board on an ad hoc basis.

The risk management system is updated and refined on a regular basis and is also adjusted to reflect changes at the company. The effectiveness of the risk management system is analyzed in regular audits.

In organizational terms, risk management is assigned directly to the Management Board. The Management Board has overall responsibility in this regard. 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 management system looks at all activities in the risk management process, i.e.,

> Risk identification
> Risk assessment
> Risk aggregation
> Risk management
> Risk monitoring.

Based on the COSO Framework, a risk universe with the following four main **risk categories** has been defined to facilitate **risk identification**: strategy, regulatory environment & overall statutory framework, operating business and financing (including accounting and tax). A structured risk catalog has been assigned to each of these categories.

When it comes to **assessing risk**, a distinction is made between risks with an impact on profit and loss and those affecting the balance sheet. Risks with an impact on profit and loss have a negative effect on the company's sustained earnings power and, as a result, on Group FFO. In general, these risks also have an impact on liquidity. Risks affecting the balance sheet do not impact Group FFO. In particular, these risks can be such that they do not affect liquidity, e.g., because they only impact property values.

If possible, risk assessments are always to be performed in quantitative terms. If this was difficult to achieve or not possible, a qualitative assessment was performed using a detailed matrix comprising five loss categories. The expected amount of loss is classified to one of five categories:

Category	Class	Description	Impact on profit and loss*	Impact on statement of financial position*
Very high	5	Threatens the company's existence	Possible loss of > € 500 million in Group FFO	Possible balance sheet loss of > € 8,000 million
High	4	Dangerous impact on business development, previous business situation cannot be restored in the medium term	Possible loss of € 250 million to € 500 million in Group FFO	Possible balance sheet loss of € 4,000 million to € 8,000 million
Considerable	3	Temporarily impairs business development	Possible loss of € 100 million to € 250 million in Group FFO	Possible balance sheet loss of € 1,600 million to € 4,000 million
Noticeable	2	Low impact, possibly leaving a mark on business development in one or more years	Possible loss of € 25 million to € 100 million in Group FFO	Possible balance sheet loss of € 400 million to € 1,600 million
Low	1	Minor impact on business development	Possible loss of € 5 million to € 25 million in Group FFO	Possible balance sheet loss of € 80 million to € 400 million

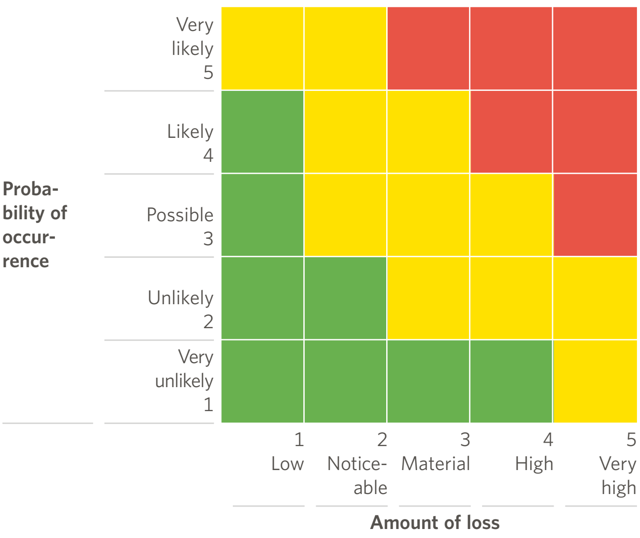
* Understood as the possible financial loss over five years in accordance with the medium-term planning horizon.

Five clusters have been defined for the expected probability of occurrence.

Category	Class	Definition	Probability
Very likely	5	It is to be assumed that the risk will materialize during the observation period.	> 95%
Likely	4	The risk is likely to materialize during the observation period.	60–95%
Possible	3	The risk could materialize during the observation period.	40–59%
Unlikely	2	The risk is unlikely to materialize during the observation period.	5–39%
Very unlikely	1	It is to be assumed that the risk will not materialize during the observation period.	< 5%

The expected amount of loss and the probability of occurrence are classified within the set ranges before action (gross) and after action (net) for each risk, documented in a risk tool and transferred to a heatmap there. Risk reporting is based on the net assessment and the assignment of risks in the net heatmap, comprising five categories for both probability of occurrence and the amount of loss.

Net Heatmap



The term "top risks" refers to the risks assigned to the red and amber fields. These are reported to the Supervisory Board and published as part of the external reporting process. The risks assigned to the red fields are classified as threatening or endangering the company or its survival. The risks assigned to the amber fields are significant to the company. Red and amber risks are subject to intensive monitoring by the Management Board and the Supervisory Board. The risks assigned to the green fields are less significant to the company.

As part of **risk management**, we focus on material risks, combined with active risk management. If possible and necessary, specific risk management measures are agreed and incorporated into a regular monitoring process to be conducted by Risk Controlling.

Regular **risk monitoring** by Risk Controlling ensures that risk management measures are implemented as planned.

(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 (ICS). 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 further technical development of the ICS in addition to performing its primary audit duties in full. Internal Audit is responsible for providing technical support for the documentation software, with administrative support being provided by IT.

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 (CFO) 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 centers, which ensures consistent and continual application of accounting principles 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 the companies in Sweden and the investments in France and the Netherlands – 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 dual-review principle are taken appropriate account of with preventive and also subsequent checks. The subsidiaries in Sweden and the investments in France and the Netherlands 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 discussion with the auditor 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 (ICS) 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 and 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 special ad hoc audits are also performed in consultation with the Management Board. The internal reports are presented to the Management Board, the individuals responsible for the area reviewed and, in cases involving significant and serious findings, the risk manager and, where relevant, 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.

Current Risk Assessment

A scheduled risk inventory was performed in both the first and second half of the 2020 fiscal year. In the second half of 2020, the risk inventory process was supported by extensive risk workshops aimed at identifying and assessing ESG (**E**nvironmental, **S**ocial, **G**overnance) risks. This move reflects the realignment of Vonovia's corporate strategy in the second half of 2020. The risk report was presented to the Management Board and the Audit Committee. There were no unscheduled ad hoc risk reports in the 2020 fiscal year.

A total of 106 (2019: 93) individual risks were identified for Vonovia in the second half of 2020. Specifically, the picture that emerges for each risk category is as follows:

Risk	Strategy	Operating business	Regulatory environment	Financing	Total
					0
		2	3	1	6
	9	50	30	11	100
Total	**9**	**52**	**33**	**12**	**106**

This represents a slight increase compared to 2019. The increase is mainly attributable to the fact that ESG risks were taken into account for the first time in the second half of 2020. A materiality analysis was used in the 2020 fiscal year to investigate potential ESG risks for the first time and assess their materiality. Based on the outcome of this assessment, we have added seven new separate ESG risks to our risk register. One of these risks has been classified as an amber risk and six risks as green risks. The remaining risks in the risk register were assessed and supplemented from an ESG and a reverse ESG perspective as well as with regard to their impact on the environment and society at large. Even though they are only of minor significance to the company, the section below also looks at green ESG risks in view of the fact that they are being included for the first time.

As against 2019, the number of amber risks increased from five to six. There was one new amber ESG risk "Adverse structure of CO_2 tax." The number of green risks rose from 88 to 100. In detail, risks in the "Strategy" category increased from six to nine, with risks in the "Operating business" category rising from 49 to 52 and those in the "Regulatory environment" category climbing from 25 to 33. The number of risks in the "financing" category fell from 13 to 12.

Overall Assessment of the Risk Situation

In the interest of the company's key stakeholders – customers, employees, suppliers, investors and society – Vonovia pursues a conservative strategy that focuses on security and sustainability. In addition, both the business model and the diversified capital market instruments used by Vonovia ensure that we have the greatest possible degree of independence from economic fluctuations.

The company's risk profile is as follows in the second half of 2020: The 106 (2019: 93) individual risks identified do not include any risks threatening or endangering the company or its survival. Six (2019: five) amber risks that are significant to the company and 100 (2019: 88) other green risks were identified.

This means that, at the time this report was prepared, Vonovia's Management Board had not identified any risks associated with future business development that the company cannot suitably overcome, or which could jeopardize the position of Vonovia SE, a major company included in the scope of consolidation or the Group as a whole in terms of revenue, assets and/or finances.

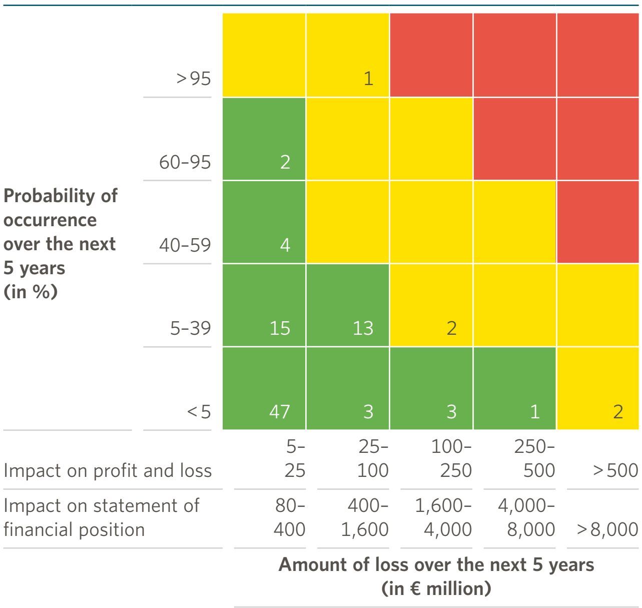
At the end of 2020, the net risks identified can be summarized as follows:

Net risks

Probability of occurrence over the next 5 years (in %)					
>95					
60–95	4	1			
40–59	4	1			
5–39	22	13	1		
<5	45	4	5	3	3
Impact on profit and loss	5–25	25–100	100–250	250–500	>500
Impact on statement of financial position	80–400	400–1,600	1,600–4,000	4,000–8,000	>8,000
	Amount of loss over the next 5 years (in € million)				

There are only minor changes compared with the 2019 heatmap.

Net risks



In the 2020 fiscal year, we were exposed to the coronavirus pandemic, a situation that we were able to address without any significant impact on our corporate objectives. Thanks to the prompt establishment of an efficient crisis management system and the fact that a large proportion of the employees working in our corporate headquarters, in the regions and in our locations abroad were able to work from home, we were able to continue operating throughout. We were also able to provide our craftsmen's, service and construction services on location without encountering any significant restrictions. Thanks to the responsible conduct shown by our employees, there have been no significant restrictions on our operations overall. As things stand at the moment, we consider a long-term coronavirus lockdown scenario to be highly unlikely and estimate that this risk is associated with a potential loss amount of > € 500 million. We believe that the risk of another short-term lockdown is likely to materialize and expect this risk to involve a low amount of loss.

The risk relating to the "Act on the Revision of Statutory Provisions on Rent Limitation" passed by the Berlin State Government, which was assessed as an amber risk (i.e. one that was very likely to materialize) in 2019, has materialized, meaning that it is no longer part of the 2020 assessment.

A new amber risk that we believe could potentially materialize is that relating to **"Unfavorable exchange rate developments"**. This relates exclusively to our business activities in Sweden. We believe that exchange rate developments could have a negative impact on our original projections for our activities in Sweden. The risk with an impact on profit and loss is currently considered to be associated with a considerable amount of loss of € 25-100 million. We have not used any corresponding exchange rate hedging instruments to reduce the amount of loss and have no plans to do so either.

A new amber risk that we consider likely to materialize is the risk with an impact on profit and loss associated with an **"Adverse structure of CO_2 tax"**. The German government has decided to introduce a CO_2 price as a management tool and climate protection measure. The tax on CO_2 emissions per metric ton has already been defined for the period leading up to 2025. The "Climate Action Programme 2030" is also to look at changes in tenancy law with regard to the extent to which CO_2 tax can be passed on. As the discussion regarding the extent to which CO_2 tax can be passed on is still ongoing, we will assume for the time being that Vonovia will have to bear part of this tax. The expected loss amount is currently estimated at between € 25 million and € 100 million.

Furthermore, the assessment of the amber risk **"Deteriorating residential property market situation with regard to apartment sales"**, which has an impact on profit and loss and which we consider unlikely to materialize, is unchanged as against the previous year. The demand for residential property ownership remained very high, even during the coronavirus pandemic. In the 2020 fiscal year, Vonovia was able to continue with its privatization strategy.

The balance sheet risk **"Future market development leads to a drop in property values"**, which was classed as an amber risk that was improbable in the previous year, has been downgraded to a green risk in 2020. We expect residential real estate to continue to show positive development with stable values in the markets in which Vonovia operates.

The amber risks that are classed as highly improbable relate to the risks with an impact on profit and loss **"Nationwide introduction of a 'rent freeze'", "Failure to fulfill obligations (from bonds, secured loans, transactions)"** and the risk **"Pandemic or similar events – long-term lockdown"**.

The following overview presents the **four main risk categories** of the company in detail:

Risks Related to Strategy

Vonovia's strategy is described in the chapter "Fundamental Information About the Group". → p. 46 et seqq. Based on this strategy, the Management Board has not identified any significant or acutely threatening risks, let alone risks that could pose a threat to the company's survival.

Vonovia has set itself an intensity target equating to a roughly 25% reduction in CO_2 emissions in its German portfolio by 2030 compared to the baseline year, 2019, in order to achieve its climate objectives and meet the associated regulatory requirements. We currently consider the risk of non-compliance to be low and improbable.

In addition, Vonovia could be exposed to risks associated with non-compliance with statutory requirements and investor or analyst expectations regarding its sustainability reporting. We currently assess this risk as being associated with a substantial amount of loss, but believe that it is very unlikely to materialize.

Risks could also arise from a failure to meet stakeholder expectations and statutory requirements with regard to diversity. We currently assess this risk as being associated with a low amount of loss and believe that it is very unlikely to materialize.

Overall, nine (2019: six) risks, none of which have a material impact on Vonovia's business development, have been identified in this risk category. These relate, in particular, to the strategy of making acquisitions when the right opportunities present themselves and the strategy of developing new fields of business.

Risks Related to Regulatory Environment & Overall Statutory Framework

The statutory provisions setting rent levels are highly relevant to Vonovia's business development. The rent regulation initiatives, for example, give rise to specific risks. The "Act on the Revision of Statutory Provisions on Rent Limitation" passed by the Berlin State Government could have an impact on rent regulation at nationwide level. While this risk would have a very substantial impact on Vonovia, we consider it to be very improbable.

In addition to the risks associated with the statutory requirements on how rent levels are set, there are a number of risks resulting from possible changes to the other overall statutory conditions that are relevant to our business. Changes to tax provisions, for example, could result in a higher current tax obligation. Similarly, further changes regarding the extent to which operating and ancillary expenses can be passed on could result in higher property management expenses or lower income in our Value-add Business. We do not expect these risks to have a material impact.

In order to be able to pick up on potential changes in the overall statutory framework early on, Vonovia is involved in active dialogue with policymakers and other stakeholders. Vonovia is also represented in associations and monitors the legislative procedure and recent court decisions on a regular basis.

Long-term economic slumps triggered by macroeconomic and geopolitical risks, such as escalating trade conflicts, the economic impact of the coronavirus pandemic or foreign policy conflicts, could have an adverse effect on the overall conditions for Vonovia. We currently assess this risk as being associated with a substantial amount of loss, but believe that it is unlikely to materialize.

Breaches of the Code of Conduct, the Anti-Corruption Policy and legal requirements relating to bribery and corruption could entail risks for Vonovia. We currently assess these risks as being associated with a low amount of loss and believe that they are very unlikely to materialize.

Potential legal disputes associated with guarantees for development projects could give rise to risks for Vonovia if general contractors that are liable to recourse were to become insolvent. We currently assess these risks as being associated with a low amount of loss and believe that they are very unlikely to materialize.

Failure to comply with working conditions that are required by law, such as minimum wage standards, safety standards, etc. as well as failure to respect human rights in the supply chain could result in risks for Vonovia. We currently assess these risks as being associated with a low amount of loss and believe that they are very unlikely to materialize.

A total of 33 (2019: 25) risks resulting from possible regulation or other overall statutory conditions have been identified. With the exception of the risk relating to nationwide rent regulation described above, none of the risks would have a material impact on Vonovia's business development.

Risks Related to Operating Business

A whole range of risks can arise for Vonovia in connection with the performance of its business activities. **The main risks in this regard relate exclusively to a deterioration in the market environment for residential real estate.**

By way of example, a drop in property values due to market-related factors can result in a reduction in the fair values of Vonovia's portfolio in the context of the fair value measurement process, albeit without this impacting liquidity. Vonovia counters this risk by ensuring that its portfolio is diversified in terms of location. This reduces its reliance on local market developments. Negative market developments can also have an impact on the opportunities for selling apartments and buildings. Vonovia has established a stringent process for setting sale prices in order to monitor this risk. In addition, sales volumes, prices and margins are reported to the management team on a regular basis so that the company can respond quickly to market developments.

A total of 52 (2019: 49) risks related to the operating business have been identified.

For example, structural risks, e.g., arising from the materials used in construction or relating to fire protection, could arise in Vonovia's portfolio due to insufficient information on how the building construction work was executed. This applies, in particular, when Vonovia purchases portfolios. Risks can also emerge as a result of non-compliance with changing structural regulations. Vonovia counters these risks by carrying out regular inspections and checks on its properties, ensuring that any faults identified are rectified immediately, developing and implementing suitable fire protection concepts and implementing any amendments to construction regulations as part of a structured process. This procedure is also incorporated directly into the process for integrating real estate portfolios purchased by Vonovia.

Risks in the Development segment can arise throughout the entire developmental cycle of the individual projects. Particular examples are higher construction costs, project delays or lower demand when the apartments are sold to third parties. In order to counter these risks, Vonovia has established detailed due diligence measures that it applies whenever it purchases land as well as in its project and contract management activities. Furthermore, we closely monitor market developments. If necessary, Vonovia also has the option of adding apartments that it intended to sell to third parties to its own portfolio.

When it comes to the development of new fields of business in the Value-add segment, risks can arise from the design and implementation of the business models. Market conditions such as procurement prices or customer demand can also develop differently than expected. As well as taking the usual precautions as part of the internal control system, Vonovia addresses these risks using a detailed innovation controlling system that defines set "stage gates" for decision-making regarding the further implementation of new fields of business.

Failure to comply with statutory occupational health and safety and occupational safety management provisions could create risks for Vonovia. We currently assess these risks as being associated with a substantial amount of loss but believe that they are very unlikely to materialize.

What is more, crisis situations or catastrophes, such as floods, earthquakes, extreme weather events etc., could have an impact on our real estate portfolio and require specific crisis management measures. We do not believe that climate change gives rise to any significant direct risks at the moment, e.g., caused by extreme weather conditions such as heavy rain with the potential for floods. We have still to assess potential climate risks with a long-term focus.

Risks Related to Financing

Ensuring a balanced and sustainable financing approach focusing on security as well as extensive access to the equity and debt capital markets at all times is extremely important for Vonovia's business development. This orientation is also reflected in the risks identified in relation to financing. The number of risks in the "financing" category fell from 13 to 12. The "Interest rate risk for Sweden" that was recognized separately in 2019 is no longer recognized in 2020 due to group refinancing. It is included in the interest rate risk for the Group as a whole.

The possibility of **"non-compliance with obligations under existing financing arrangements" ("covenants")** gives rise to a single significant risk relating to financing, but one that can have a very considerable impact. Thanks to the processes and methods put in place by Vonovia to monitor these obligations, we believe that this risk is highly unlikely to materialize.

There are also a number of financing-related risks that are not of any material significance to Vonovia's business development.

Unfavorable interest rate developments, for example, could result in higher interest expenses for Vonovia in the long run. Vonovia counters this risk using a diverse range of debt capital instruments, a balanced maturity profile and a large proportion of fixed-interest financial liabilities as well as an optimized level of debt.

Failure to comply with key financial figures or the assessment of our market positioning could also result in us losing our current ratings (S&P: BBB+/Stable/A-; Scope: A-/Stable/A). Given our financing strategy and the prerequisite that acquisition decisions cannot have any impact on our rating, we believe that this risk is very unlikely to materialize.

Vonovia is also exposed to a liquidity risk in its ongoing business activities. We have established extensive liquidity management processes in response to this risk. Vonovia also has a sufficient working capital facility available at all times and enjoys access to short-term money market securities. This means that, as of the reporting date, Vonovia SE has sufficient cash and cash equivalents and short-term financing options to guarantee the ability to pay of all Group companies at all times.

Current Assessment of the Main Opportunities

Assessment of Opportunities Inherent in the Business Model

In the process of defining its strategy and preparing its short and medium-term plans, Vonovia identified earnings potential that has been reflected appropriately in these plans, taking the corresponding assumptions and scenarios into account. The assumptions regarding the company's sustainability strategy, sociological and political megatrends, the regulatory environment, the financing environment and the company's operating business are not only associated with the risks described above. Vonovia's business development can also end up being more favorable than in the assumptions included in the company's plans. These opportunities can arise from a scenario in which strategy-related opportunities, economic environment and market-related factors, and the company's operating business show more positive development than that underlying the corporate plans.

Strategy-related Opportunities

Vonovia's new sustainability strategy could create further opportunities extending beyond the corporate targets already defined in the 2021 budget. Vonovia's long-term climate journey requires it to come up with new concepts for measures and financing to underpin its ecological, technological and economic objectives. In addition, the strategy, which is based on our newly defined neighborhoods, offers a whole variety of opportunities with regard to those modernization measures that relate directly to the existing portfolio and measures relating to new construction, but also measures relating to the residential environment. The creation of a new "Sustainability" division reporting directly to the CEO and the establishment of a new sustainability committee that will meet three to four times a year to discuss the latest sustainability issues enabled us to firmly anchor the new sustainability strategy within our organization, which allows us to identify new opportunities that arise in this area.

Our decision to focus our business activities on sustainable and ecological action could well create further opportunities for Vonovia and society. The aim is to improve quality of life and significantly reduce the CO_2 emissions originating from our residential properties. Vonovia is using sustainable, ecological building materials and sustainable energy concepts to help conserve scarce resources and make targeted use of renewable energy. Within this context, we see our residential neighborhoods as a strong link for sector coupling. We expect opportunities to arise from potential efficiencies in the neighborhood due to the targeted digital networking of electricity, heat and mobility. We are currently working on corresponding neighborhood-specific concepts.

As far as electricity is concerned, we are looking at approaches involving, for example, green electricity generated on a decentralized level (solar electricity or electricity from decentralized cogeneration units). The distribution of tenant electricity within the neighborhood will also become increasingly important in this regard. Possible approaches related to heating include, for example, hybrid heating systems and neighborhood heat storage facilities. Mobility concepts include charging stations and wallboxes installed in response to tenant requests as well as solar electricity generated within the neighborhood. Further opportunities are also arising from the ecological transformation of the residential environment, such as the creation of tenant gardens and flower meadows and the installation of insect hotels. By focusing our new construction activities on the latest ecological standards in a targeted manner, we can make a further contribution to alleviating the shortage of housing and improving our ecological footprint. This will allow us to make our neighborhoods more attractive places overall.

Based on the sociological and economic research data published by various institutes, the population in Germany and parts of Europe is still expected to grow as a result of migration, fueling sustained demand for affordable homes, whereby even new construction activity will fail to meet the demand for housing. The main reasons driving migration, namely political and social crises, a lack of prospects and hostilities, and factors triggered by climate change in migrants' countries of origin will also remain unchanged for the foreseeable future. As a major provider of housing, Vonovia has a key role to play here with regard to integration, also by supporting neighborhood development projects.

Creating a positive investment climate also means making the required ecological construction and modernization measures cost-effective, making additional land available for construction and promoting the acceptance of private-sector real estate investors. There is also a general consensus that bureaucracy has to be reduced as a supporting measure, in particular by streamlining the provisions governing construction and planning permission. The investment climate could also receive a boost from the growing acceptance of the need for modernization work due to climate change.

Looking at the internationalization strategy, the further deregulation of the residential property markets in other European countries, such as France, could give rise to further opportunities to tap into these markets, provided that the overall conditions are similar and consistent with our acquisition criteria. Other acquisition opportunities in Sweden, Austria and the Netherlands could also have a positive impact on business development.

Making acquisitions within the value chain as and when opportunities present themselves, also with regard to the Value-add Business, could open up additional earnings potential. The Value-add Business offers considerable scope for extending the range of housing-related services on offer. By way of example, the expansion of our business activities relating to tenant modernization and apartment design request packages and the expansion of "fiber to the home" (FTTH) services, metering services and measures to develop residential surroundings could create further earnings potential. Additional care or support services for our older tenants also offer potential when it comes to expanding the range of services we offer.

Our updated corporate strategy also focuses on our employees' further development and on employee satisfaction. We aim to make use of new HR development concepts and actively shape the recruitment of new staff to fill vacant positions. We are also aiming to increase the proportion of women at the first and second levels of management. All in all, further opportunities could arise for Vonovia due to the advantages associated with diversity and as a result of our increased appeal as an employer.

Economic Environment and Market-related Opportunities

The housing industry is currently being influenced to a considerable degree by a range of social and technological megatrends. According to analyses released by the German Federal Statistical Office, domestic migration from rural areas to the country's large metropolitan areas will continue unchanged into the 2020s. The resulting shortage of housing in urban areas could be exacerbated even further by the effects of migration from global crisis hotspots and the trend toward smaller households. As a result, the Cologne Institute for Economic Research expects to see a shortfall of as much as 283,000 apartments a year in the first half of the decade. This development trend could benefit Vonovia's real estate portfolio, which focuses primarily on small and medium-sized apartments in urban areas. Vonovia is in a position to actively counter the increasing shortage of affordable housing through its development and new construction business. Additional opportunities for the development and new construction business lie in the streamlining of the overall conditions imposed by the authorities and the provision of more land for construction.

However, the trend toward urbanization will not only create quantitative challenges for the residential property market. Rather, it will also be faced with challenges relating to integration that Vonovia can, and indeed must, counter using an appropriate number of additional neighborhood development projects. One key factor in this regard is the demographic change toward an aging society, resulting in what is likely to be a steady increase in the demand for senior-friendly and affordable homes over the coming years. As a result, opportunities could arise from senior-friendly modernization and investment in new and innovative housing concepts.

The megatrend attracting the most attention in the media in this fiscal year was, without a doubt, climate protection. But the Fridays for Future movement merely reflects a process of far-reaching social change that has been ongoing for years now. Climate protection can still be seen as the most pressing and important problem in Germany. In this market environment, the decision taken very early on to focus on energy-efficiency refurbishments could prove to be advantageous. After all, almost one-third of CO_2 emissions in Germany can currently be attributed to residential property. Aside from this, however, Vonovia also sees itself as a driver of innovation. In the 2020 fiscal year, for example, the Fraunhofer Society launched a center dedicated to research into the decentralized use of energy in collaboration with Open District Hub e. V., which Vonovia hopes will yield information on how to make supplying energy to its real estate portfolio as close to climate-neutral as possible in the medium term. In order to support this process, the “1,000 roofs” program for decentralized energy generation, which was launched in the 2019 fiscal year, was continued in 2020. Vonovia had around 400 photovoltaic plants in Germany by the end of 2020.

Increased environmental awareness could result in the Vonovia brand taking on increasingly positive connotations in the future thanks to the company’s energy-efficiency modernizations and in greater demand for Vonovia’s energy-efficient apartments. This sort of acceptance of modernization will help Vonovia in its endeavors to continue to modernize its portfolio in a sustainable manner so that it meets state-of-the-art standards, while at the same time always adhering to the voluntary social commitments that form part of Vonovia’s business philosophy.

Opportunities Arising from the Operating Business

The megatrend of digitalization is also having an impact on the real estate sector. This is why Vonovia is making systematic investments in testing and expanding new technologies, e.g., in the “customer app”, “artificial intelligence” or “robotics”. The first few projects were implemented successfully in 2020. We expect the systematic rollout of these technologies in several areas of the company to create additional opportunities.

“Predictive maintenance,” for example, could allow damage to elevators or heating units to be prevented before it arises. Smart home systems could allow tenants to consciously manage their energy costs. What is more, digital communication platforms can help to improve dialogue with tenants. The tenant app that was introduced in 2019 is a good example. The response to the app has been very positive and it was used extensively in 2020. Acquisition opportunities at all stages in the value chain to enable the further implementation of digital solutions within Vonovia’s processes, but also at the various interfaces, could open up further earnings potential in this area.

Digitalization could also open up further opportunities outside of Vonovia. The digitalization of public administration could promote the much-called-for streamlining of administrative and approval processes in particular, with a positive impact, for example, on Vonovia’s development/new construction business thanks to the quicker approval of building applications. With the acquisition of BUWOG and Victoria Park back in 2018, Vonovia started to expand its business activities to include attractive markets in other European countries. We also acquired our very first stake in France in 2018. The company’s expansion in Sweden continued in 2019 with the acquisitions of Akelius portfolios and of Hembla. In 2020, we acquired a minority stake in the Dutch company Vesteda Residential. The continuation of this strategy could give rise to further growth opportunities in Sweden, Austria, France and the Netherlands as well as in other European countries.

We also see the potential acquisition of larger portfolios in Germany, but also the 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.

Vonovia manages its housing portfolios throughout Germany using standardized systems and processes. As a result, 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. The same applies to the corresponding transfer of expertise from the property management segment, the Value-add segment and also from the new construction and development segment to other European target markets. The development segment is Vonovia's answer to the pressing challenge associated with affordable housing in central locations. Based on the long-standing project development experience of the BUWOG team, we will be developing modern, sustainable residential properties in fast-growing locations such as Berlin, Vienna and Hamburg, allowing us to expand our development business. By expanding the development business to cover other urban areas, also supported by takeovers as and when the right opportunities present themselves, we can also tap into additional earnings potential. The provision of additional land for construction and the acquisition of additional areas for construction as a result could have a positive impact on the development business overall. The streamlining and deregulation of official processes could provide additional support to the development business. Vonovia believes that new construction and the development business can still be made more efficient and more cost-effective by using modular construction, series construction or other innovative construction methods.

Our own craftsmen's organization is responsible for repair and maintenance services for our residential properties. We are aiming to continually increase the proportion of building and apartment optimizing services we provide ourselves via our craftsmen's organization as well as new building construction and reduce the proportion of third-party services that we need to purchase. In particular due to the shortage of workers with the desired skills and the availability of corresponding capacities, we intend to extend the scope of these services to cover all kinds of technical work and thus bring added value from these services to Vonovia. We are also working on new construction concepts to facilitate both the highly standardized series construction of new properties using a modular system and flexible, individually scalable new construction that can be varied to suit the local conditions. This is being supported by corresponding HR management concepts.

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 2020 we had supplied around 300,000 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 2020, the retrofitting of more than 195,000 apartments had been commissioned. We plan to further expand these business activities in our portfolio over the next few years.

In the 2020 fiscal year, we further expanded our offering in the field of energy supplies, i.e., the distribution of electricity and gas. The market response to this has been positive. In the 2020 fiscal year, 20,400 private electricity customers were supplied with 27 GWh of electricity, with 2,700 private gas customers receiving 13.6 GWh of gas. We expect further opportunities to arise in this area as we expand the business volume.

Financial Opportunities

Vonovia has benefited from favorable conditions on the capital and banking market in recent years. Given the sustained low inflation rates and the recent slowdown in economic development, it is looking increasingly likely that the attractive interest rate environment in Europe will continue in the medium term. Together with the diversification strategy for liquidity procurement that we have been pursuing for many years now, we have the opportunity to optimize the structure and conditions of our financial liabilities on an ongoing basis.

The strengthening of our market share in urban areas within our target markets could have a positive impact on how our investors and ratings agencies assess our risks, resulting in a further improvement in our attractive financing conditions.

Our investments in affordable homes are associated with a cash flow that is largely independent of economic factors. The resulting stability allows us to service our financial liabilities with a relative degree of certainty, even in times of economic or political crisis.

Forecast Report

Business Outlook

Comparison of the Previous Forecasts with the Results from 2020

Despite the coronavirus pandemic, 2020 was a positive fiscal year for Vonovia. We achieved further growth in all operating segments. Thanks to our systematic and rapid crisis management, coupled with a high degree of digitalization, we were able to rise successfully to the challenges presented by the coronavirus crisis.

The coronavirus pandemic only had a minor impact on the Rental segment. In the Value-add segment, our modernization activities were only restricted temporarily, and only to a moderate degree, by the coronavirus crisis. In the Recurring Sales segment, there were a few isolated delays in apartment viewings. The Development segment performed well thanks to successful project developments and completions.

The table below provides an overview of the development of our forecast performance indicators, their target achievement level in the 2020 fiscal year as well as a forecast for the 2021 fiscal year.

At around € 4.4 billion, **Total Segment Revenue** was up by 6.3% in 2020 as against the value of around € 4.1 billion achieved a year earlier, putting it on a par with the most recent forecast.

The **Adjusted NAV per share** came in at € 59.47 in 2020 on the prior-year value of € 52.00 (+14.4%). This includes effects from fair value adjustments of investment properties in the amount of € 3.7 billion in total (2019: € 4.1 billion). The distribution of the dividend – taking into account the scrip dividend with an acceptance rate of 40.7% (2019: 45.8%) – of € 504.6 million in 2020 had the opposite effect (2019: € 404.7 million). The **EPRA NTA per share** due to replace the **Adjusted NAV per share** in 2021 came in at € 62.71 in 2020 on the prior-year value of € 54.88 (+14.3%).

The **Adjusted EBITDA Total** rose by 8.5% from € 1,760.1 million to € 1,909.8 million. The latest forecast range was between € 1,875 million and € 1,925 million. In addition to the acquisition of Hembla effective from November 2019 (earnings contribution for the full year in 2020), the increase in adjusted EBITDA was also driven by organic growth resulting from new construction and modernization measures. All segments increased their adjusted EBITDA as against the previous year, the originally forecast slight drop in the Recurring Sales segment failed to materialize.

Group FFO rose by 10.6% from € 1,218.6 million in 2019 to € 1,348.2 million, ahead of the most recent forecast at the upper end of the forecast range of between € 1,275 million and € 1,325 million.

Customer satisfaction in 2020, measured using the performance indicator **CSI**, was up 8.6% on the previous year's average, meaning it was also on a par with the level included in our most recent forecast. In the 2021 fiscal year, the CSI will be replaced by the **Sustainability Performance Index**. In addition to the CSI, the new index contains other key indicators that relate to our sustainability strategy (see the chapter on our management system → p. 83 et seqq.).

Forecast for the 2021 Fiscal Year

Our forecast for the 2021 fiscal year is based on determined and updated corporate planning for the Vonovia Group as a whole, and considers current business developments, the acquisition of Bien-Ries, possible opportunities and risks, and the expected impacts of the coronavirus pandemic. It also includes the key overall macroeconomic developments and the economic factors that are relevant to the real estate industry and our corporate strategy. Further information is provided in the section entitled Development of the Economy and the Industry → p. 89 et seqq. and Fundamental Information **About the Group**. → p. 46 et seqq. Beyond this, the Group's further development remains exposed to general opportunities and risks (see chapter on Opportunities and Risks → p. 124 et seqq.).

The forecast was based on the accounting principles used in the consolidated financial statements, with the adjustments described elsewhere in the management report being made. The forecast does not take account of any larger acquisitions of real estate portfolios.

We expect that the coronavirus pandemic will not have a significant impact on the key operational and financial figures of any of the operating segments and therefore will have no noteworthy impact on future business development. We are currently observing stable demand for rental apartments and no negative impact on market values as a result of the coronavirus pandemic.

We expect Total Segment Revenue to increase further in 2021. At the end of January 2020, the Berlin House of Representatives passed the Act on Rent Controls in the Housing Sector in Berlin (referred to in short as "rent freeze"). This came into force in February 2020. It remains disputed whether the law is constitutional. Assuming that the rent freeze is found to be constitutional, future rental income or rental development will have to be reduced for the period leading up to, and including, 2025. This could have a negative impact on fair values. Likewise, it cannot be ruled out that declining vacancy rates and fluctuation as well as lower return requirements of investors (yield compression) will subsequently have a compensatory effect on fair values. In addition, we expect the value of our company to increase further in 2021 and predict a moderate increase in EPRA NAV per share, leaving any further market-related changes in value out of the equation.

We predict that all operating segments will contribute to the increase in Adjusted EBITDA Total and Group FFO. The biggest absolute increases are expected to be seen in the Rental and Development segments. This is based, among other things, on the assumption that any potential CO_2 tax can be apportioned to tenants under the German Ancillary Costs Ordinance (Betriebskostenverordnung).

	Actual 2019	Forecast for 2020	Forecast for 2020 in the 2020 Q3 Report	Actual 2020	Forecast for 2021
Total Segment Revenue	€ 4.1 billion	–	€ 4.4 billion	€ 4.4 billion	€ 4.9–5.1 billion
Adjusted NAV per share*	**€ 52.00**	**suspended**	**suspended**	**€ 59.47**	**replaced**
EPRA NTA per share*	**€ 54.88**	**–**	**–**	**€ 62.71**	**suspended**
Adjusted EBITDA Total	**€ 1,760.1 million**	**€ 1,875–1,925 million**	**€ 1,875–1,925 million**	**€ 1,909.8 million**	**€ 1,975–2,025 million**
Group FFO	**€ 1,218.6 million**	**€ 1,275–1,325 million**	**At the upper end of € 1,275–1,325 million**	**€ 1,348.2 million**	**€ 1,415–1,465 million**
Group FFO per share*	€ 2.25	suspended	suspended	€ 2.38	suspended
Customer Satisfaction Index (CSI)	**Decrease of 8.0%**	**Scale slightly above previous year**	**Scale significantly above previous year**	**Increase of 8.6%**	**–******
Sustainablility Performance Index (SPI)	**–**	**–**	**–**	**–**	**~100%**
Rental revenue	€ 2,074.9 million	€ ~2,300 million	€ ~2.3 billion	€ 2,285.9 million	€ 2.3–2.4 billion
Organic rent growth (eop)	3.9%	Increase of ~4.0%**	Increase of ~3.1%***	3.1%	Increase of ~3.0–3.8 %*****
Modernization and new constuction	€ 1,489.5 million	€ 1.3–1.6 billion	~€ 1.5 billion	€ 1,343.9 million	€ 1.3–1.6 billion
Number of units sold Recurring Sales	2,607	~2,500	~2,500	2,442	~2,500
Step-up Recurring Sales	41.3%	~30%	>35%	39.6%	~30%

* Based on the shares carrying dividend rights on the reporting date.
** Without one-time decrease pursuant to the Act on Rent Controls in the Housing Sector in Berlin (MietenWoG Bln).
*** The forecast contains a one-time decrease pursuant to the Act on Rent Controls in the Housing Sector in Berlin (MietenWoG Bln).
**** Introduction of a new non-financial performance indicator SPI in the 2021 financial year that includes the previous CSI. Therefore no guidance.
***** Depending on whether or not the Act on Rent Controls in the Housing Sector in Berlin (MietenWoG Bln) is found to be constitutional at the end of 2021, we expect rent increases at the upper/lower end of the forecast.

Bochum, Germany, February 23, 2021

The Management Board

Rolf Buch (CEO)	Arnd Fittkau (CRO)	Helene von Roeder (CFO)	Daniel Riedl (CDO)

Consolidated Financial Statements

The Group's net assets, financial position and results of operations remain very positive. Total assets rose by € 5.9 billion to € 62.4 billion. Earnings per share are up to € 5.87. The equity ratio has increased to 39.8%. Real estate assets increased by 10.5% in the 2020 fiscal year to € 58.9 billion. Cash and cash equivalents amounted to around € 0.6 billion at the end of the year.

Consolidated Income Statement

for the period from January 1 to December 31

in € million	Notes	2019	2020
Income from property letting		2,840.8	3,069.4
Other income from property management		69.9	77.7
Income from property management	B10	**2,910.7**	**3,147.1**
Income from disposal of properties		510.7	586.3
Carrying amount of properties sold		-441.6	-482.4
Revaluation of assets held for sale		59.7	78.2
Profit on disposal of properties	B11	**128.8**	**182.1**
Income from the disposal of properties (Development)		249.5	297.7
Cost of sold properties		-197.3	-235.9
Profit on the disposal of properties (Development)	B12	**52.2**	**61.8**
Net income from fair value adjustments of investment properties	B13	4,131.5	3,719.8
Capitalized internal expenses	B14	687.2	659.4
Cost of materials	B15	-1,463.0	-1,493.4
Personnel expenses	B16	-535.7	-594.9
Depreciation and amortization		-2,175.8	-92.3
Other operating income	B17	105.7	163.0
Impairment losses on financial assets		-28.6	-40.0
Gains resulting from the derecognition of financial assets measured at amortized cost		5.2	0.0
Other operating expenses	B18	-295.3	-278.8
Net income from investments accounted for using the equity method		0.6	2.7
Interest income	B19	8.9	21.9
Interest expenses	B20	-417.5	-411.4
Other financial result	B21	24.0	-32.6
Earnings before tax		**3,138.9**	**5,014.4**
Income taxes	B22	-1,844.6	-1,674.4
Profit for the period		**1,294.3**	**3,340.0**
Attributable to:			
Vonovia's shareholders		1,147.0	3,228.5
Vonovia's hybrid capital investors		40.0	40.0
Non-controlling interests		107.3	71.5
Earnings per share (basic and diluted) in €	C24	**2.15**	**5.87**

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31

in € million	2019	2020
Profit for the period	**1,294.3**	**3,340.0**
Change in unrealized gains/losses	2.0	-10.1
Taxes on the change in unrealized gains/losses	-0.6	3.3
Net realized gains/losses	9.8	34.1
Taxes due to net realized gains/losses	-0.1	-8.0
Profit on cash flow hedges	**11.1**	**19.3**
Changes in the period	-13.7	177.0
Tax effect	–	-25.1
Profit on currency translation differences	**-13.7**	**151.9**
Items which will be recognized in profit or loss in the future	**-2.6**	**171.2**
Changes in the period	48.6	9.0
Taxes on changes in the period	0.4	-0.2
Profit on equity instruments at fair value in other comprehensive income	**49.0**	**8.8**
Change in actuarial gains/losses, net	-53.7	-18.6
Tax effect	17.5	5.8
Profit on actuarial gains and losses from pensions and similar obligations	**-36.2**	**-12.8**
Items which will not be recognized in profit or loss in the future	**12.8**	**-4.0**
Other comprehensive income	**10.2**	**167.2**
Total comprehensive income	**1,304.5**	**3,507.2**
Attributable to:		
Vonovia's shareholders	1,159.3	3,395.8
Vonovia's hybrid capital investors	40.0	40.0
Non-controlling interests	105.2	71.4

Consolidated Balance Sheet

Assets

in € million	Notes	Dec. 31, 2019*	Dec. 31, 2020
Intangible assets	D26	1,504.2	1,611.7
Property, plant and equipment	D27	358.6	387.6
Investment properties	D28	52,736.6	58,071.8
Financial assets	D29	331.7	416.0
Other assets	D30	54.7	128.5
Deferred tax assets		59.3	16.4
Total non-current assets		**55,045.1**	**60,632.0**
Inventories	D32	8.8	8.7
Trade receivables	D33	205.7	268.9
Financial assets	D29	0.7	0.4
Other assets	D30	138.0	119.0
Income tax receivables	D31	84.7	39.8
Cash and cash equivalents	D34	500.7	613.3
Real estate inventories	D35	358.3	570.4
Assets held for sale	D36	134.1	164.9
Total current assets		**1,431.0**	**1,785.4**
Total assets		**56,476.1**	**62,417.4**

* Adjusted (see explanatory information in chapter [A2] Adjustment to Prior-year Figures in the notes to the consolidated financial statements).

Equity and Liabilities

in € million	Notes	Dec. 31, 2019*	Dec. 31, 2020
Subscribed capital		542.3	565.9
Capital reserves		8,239.7	9,037.9
Retained earnings		10,534.4	13,368.2
Other reserves		-8.1	171.9
Total equity attributable to Vonovia's shareholders		**19,308.3**	**23,143.9**
Equity attributable to hybrid capital investors		1,001.6	1,001.6
Total equity attributable to Vonovia's shareholders and hybrid capital investors		**20,309.9**	**24,145.5**
Non-controlling interests		813.9	686.3
Total equity	E37	**21,123.8**	**24,831.8**
Provisions	E38	662.4	711.3
Trade payables	E39	5.1	5.0
Non-derivative financial liabilities	E40	21,198.0	22,375.1
Derivatives	E41	74.1	76.8
Lease liabilities	E42	442.6	467.3
Liabilities to non-controlling interests	E43	21.2	26.8
Financial liabilities from tenant financing	E44	44.4	45.3
Other liabilities	E45	26.1	2.6
Deferred tax liabilities		9,288.2	10,959.6
Total non-current liabilities		**31,762.1**	**34,669.8**
Provisions	E38	530.2	389.0
Trade payables	E39	219.1	229.5
Non-derivative financial liabilities	E40	2,376.9	1,709.6
Derivatives	E41	41.0	222.2
Lease liabilities	E42	28.3	27.8
Liabilities to non-controlling interests	E43	12.9	16.3
Financial liabilities from tenant financing	E44	117.8	118.1
Other liabilities	E45	264.0	203.3
Total current liabilities		**3,590.2**	**2,915.8**
Total liabilities		**35,352.3**	**37,585.6**
Total equity and liabilities		**56,476.1**	**62,417.4**

* Adjusted (see explanatory information in chapter [A2] Adjustment to Prior-year Figures in the notes to the consolidated financial statements).

Consolidated Statement of Cash Flows

for the period from January 1 to December 31

in € million	Notes	2019	2020
Profit for the period		1,294.3	3,340.0
Net income from fair value adjustments of investment properties	B13	-4,131.5	-3,719.8
Revaluation of assets held for sale	B11	-59.7	-78.2
Depreciation and amortization		2,175.8	92.3
Interest expenses/income and other financial result	B19/B20/B21	396.4	435.5
Income taxes	B22	1,844.6	1,674.4
Results from disposals of investment properties	B11	-69.1	-103.9
Results from disposals of other non-current assets		0.3	-0.1
Other expenses/income not affecting cash		2.7	3.2
Change in working capital		55.4	-134.6
Income tax paid		46.7	-78.3
Cash flow from operating activities		**1,555.9**	**1,430.5**
Proceeds from disposals of investment properties and assets held for sale		702.7	587.4
Proceeds from disposals of other assets		695.8	0.8
Payments for investments in investment properties	D28	-2,092.0	-1,723.7
Payments for investments in other assets	D26/D27/D29	-101.4	-272.3
Payments for acquisition of shares in consolidated companies, in due consideration of liquid funds	A4	-1,716.2	-330.3
Interest received		5.4	8.2
Cash flow from investing activities		**-2,505.7**	**-1,729.9**

in € million	Notes	2019	2020
Capital contributions on the issue of new shares (including premium)	E37	744.2	1,003.0
Cash paid to shareholders of Vonovia SE and non-controlling interests	E37	-417.7	-520.8
Cash paid to hybrid capital investors	E37	-40.0	-40.0
Proceeds from issuing financial liabilities	E40	5,333.2	4,188.6
Cash repayments of financial liabilities	E40	-3,626.6	-3,721.5
Cash repayments of lease liabilities	E42	-22.4	-23.1
Payments for transaction costs in connection with capital measures	E40	-54.6	-42.4
Payments for other financing costs		-41.5	-17.7
Payments in connection with the disposal of shares in non-controlling interests	A4	-576.1	-14.3
Interest paid		-395.7	-409.2
Cash flow from financing activities		902.8	402.6
Influence of changes in foreign exchange rates on cash and cash equivalents		–	9.4
Net changes in cash and cash equivalents		-47.0	112.6
Cash and cash equivalents at the beginning of the period	D34	547.7	500.7
Cash and cash equivalents at the end of the period*		**500.7**	**613.3**

* Thereof restricted cash € 159.9 million (Dec. 31, 2019: € 97.3 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, 2020	**542.3**	**8,239.7**	**10,534.4**	**-52.2**	**41.2**
Profit for the period			**3,228.5**		
Changes in the period			-12.7	-6.8	8.8
Reclassification affecting net income				26.1	
Other comprehensive income			**-12.7**	**19.3**	**8.8**
Total comprehensive income			**3,215.8**	**19.3**	**8.8**
Capital increase	23.6				
Premium on the issue of new shares		1,326.2			
Transaction costs in connection with the issue of shares		-5.8			
Withdrawal from the capital reserves		-522.2	522.2		
Dividend distributed by Vonovia SE			-851.4		
Changes recognized directly in equity			-52.8		
As of Dec. 31, 2020	**565.9**	**9,037.9**	**13,368.2**	**-32.9**	**50.0**
As of Jan. 1, 2019	**518.1**	**7,183.4**	**9,942.0**	**-63.3**	**284.8**
Application of new standards			-34.0		
Deferred tax liabilities from the application of new standards			10.6		
As of Jan. 1, 2019 adjusted	**518.1**	**7,183.4**	**9,918.6**	**-63.3**	**284.8**
Profit for the period			**1,147.0**		
Changes in the period			-35.5	1.4	49.0
Reclassification affecting net income				9.7	
Other comprehensive income			**-35.5**	**11.1**	**49.0**
Total comprehensive income			**1,111.5**	**11.1**	**49.0**
Capital increase	24.2				
Premium on the issue of new shares		1,061.3			
Transaction costs in connection with the issue of shares		-5.0			
Dividend distributed by Vonovia SE			-746.0		
Sale of equity instruments at fair value in other comprehensive income			292.6		-292.6
Changes recognized directly in equity			-42.3		
As of Dec. 31, 2019	**542.3**	**8,239.7**	**10,534.4**	**-52.2**	**41.2**

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
2.9	-8.1	19,308.3	1,001.6	20,309.9	813.9	21,123.8
		3,228.5	40.0	3,268.5	71.5	3,340.0
151.9	153.9	141.2		141.2	-0.1	141.1
	26.1	26.1		26.1		26.1
151.9	180.0	167.3		167.3	-0.1	167.2
151.9	180.0	3,395.8	40.0	3,435.8	71.4	3,507.2
		23.6		23.6		23.6
		1,326.2		1,326.2		1,326.2
		-5.8		-5.8		-5.8
		0.0		0.0		0.0
		-851.4		-851.4		-851.4
		-52.8	-40.0	-92.8	-199.0	-291.8
154.8	171.9	23,143.9	1,001.6	24,145.5	686.3	24,831.8
15.2	236.7	17,880.2	1,001.6	18,881.8	782.3	19,664.1
		-34.0		-34.0	-1.0	-35.0
		10.6		10.6	0.3	10.9
15.2	236.7	17,856.8	1,001.6	18,858.4	781.6	19,640.0
		1,147.0	40.0	1,187.0	107.3	1,294.3
-12.3	38.1	2.6		2.6	-2.1	0.5
	9.7	9.7		9.7		9.7
-12.3	47.8	12.3		12.3	-2.1	10.2
-12.3	47.8	1,159.3	40.0	1,199.3	105.2	1,304.5
		24.2		24.2		24.2
		1,061.3		1,061.3		1,061.3
		-5.0		-5.0		-5.0
		-746.0		-746.0		-746.0
	-292.6	0.0		0.0		0.0
		-42.3	-40.0	-82.3	-72.9	-155.2
2.9	-8.1	19,308.3	1,001.6	20,309.9	813.9	21,123.8

Notes

Section (A): Principles of the Consolidated Financial Statements

1 General Information

Vonovia SE is incorporated and domiciled in Germany. The company is registered in the commercial register at the local court in Bochum under HRB 16879. Its registered office is at Universitätsstraße 133, 44803 Bochum, Germany.

The consolidated financial statements as of and for the year ended December 31, 2020, 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. Changes due to reclassifications are set out in chapter [A2] 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, plan assets and equity instruments at fair value in other comprehensive income. These are measured at their 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 following overview indicates the chapters on the individual topics containing disclosures on accounting policies, judgments and estimates:

Chapter	Accounting policies, judgments, estimates
A6	Currency translation
A7	Government grants
B	Recognition of income and expenses
B12	Profit on the disposal of properties (Development)
B22	Income taxes
C24	Earnings per share
D26	Other intangible assets/goodwill
D27	Property, plant and equipment
D28	Investment properties
D29	Financial assets
D32	Inventories
D33	Impairment losses on financial assets
D34	Cash and cash equivalents
D35	Real estate inventories
D36	Assets held for sale
E37	Income and expense recognized directly in other comprehensive income
E38	Provisions for pensions and similar obligations/other provisions
E40	Non-derivative financial liabilities
E42	Leases
E43	Liabilities to non-controlling interests
E44	Financial liabilities from tenant financing
F47	Share-based payment

2 Adjustment to Prior-year Figures

Balance Sheet

The total consideration for the acquisition of the Hembla Group was allocated with definitive effect as of June 30, 2020. Compared with the provisional allocation as of December 31, 2019, embedded derivatives in the form of termination options amounting to € 78.2 million were also recognized. Inversely, deferred tax liabilities of € 16.1 million were recognized. In addition, further acquisitions classified as "linked transactions" were taken into account. As a result, minority interests increased by € 54.1 million, while the purchase price liability included in other liabilities decreased by € 91.8 million. Goodwill was reduced by € 99.8 million in comparison as a result. The corresponding prior-year figures were adjusted as of the date of first-time consolidation.

Segment Report

Used to measure the performance of the segments over time, segment revenue serves as another growth indicator for Vonovia from the 2020 fiscal year onwards. Total Segment Revenue includes all income generated by the four segments that contributes to value creation, i.e. that covers costs and makes an earnings contribution. The corresponding reporting is based on the internal reporting to the Management Board, as the chief operating decision-maker, which was adjusted in 2020 and reflects the change with regard to the relevance of "Total Segment Revenue" from a corporate management perspective. The corresponding prior-year figures have been adjusted to reflect the new reporting system. Detailed information on the composition of Total Segment Revenue can be found in Chapter [C23] Segment Reporting.

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 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 costs pertaining to the raising of capital or 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's ownership interest in a subsidiary that do not result in the parent 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, as of December 31, 2020, 588 companies (Dec. 31, 2019: 620) – thereof 285 (Dec. 31, 2019: 294) domestic companies and 303 (Dec. 31, 2019: 326) foreign companies – have been included in the consolidated financial statements. In addition, joint activities were performed with two domestic companies (Dec. 31, 2019: two). In addition, four (Dec. 31, 2019: four) domestic companies and one (Dec. 31, 2019: one) foreign company were included as joint ventures and two (Dec. 31, 2019: two) foreign companies were included as associates valued using the equity method.

Three (Dec. 31, 2019: three) foreign companies are no longer included in the scope of consolidation as they are no longer considered to be material. These companies are shown as non-consolidated affiliated companies.

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, 2020, compared with the previous year result from 11 acquisitions, two newly established companies, 33 mergers, 11 accruals and one sale.

Acquisition of Hembla

On September 23, 2019, Vonovia SE announced that it had signed a contract for the purchase of 69.3% of the voting rights and 61.2% of the share capital in Hembla AB (publ), Stockholm, Sweden, ("Hembla") via its subsidiary HomeStar InvestCo AB ("HomeStar") with the funds advised by Blackstone Group Inc. The parties agreed to a purchase price of SEK 215.00 per share (irrespective of share class). The completion of the transaction required the approval of the Swedish merger control authorities, which was given on November 5, 2019.

The acquisition date on which Vonovia SE obtained control of the Hembla Group is November 7, 2019. This was the date on which the offer was settled. This transaction shall be treated as a business combination in accordance with IFRS 3.

On November 8, the offer document submitted on November 7, 2019, for the acquisition of all outstanding Class B Hembla shares not already held by HomeStar was approved and registered by the Swedish financial regulator. The offer price was SEK 215.00 per share. The acceptance deadline for the offer ended on December 9, 2019, at 5 p.m. (CET); the transaction was completed on December 16, 2019. Furthermore, after announcing the offer, HomeStar acquired additional Hembla shares apart from this offer in the period leading up to December 31, 2019.

Since the acquisition of the shares was effected under exactly the same conditions as the purchase on November 7, 2019, and the events are related in terms of content and timing, a linked transaction can be assumed.

Therefore, Vonovia became the holder of 6,136,989 Class A Hembla shares and 81,282,426 Class B Hembla shares as of December 31, 2019, representing approximately 95.3% of the voting rights and approximately 94.1% of the share capital. In addition, through its wholly owned subsidiary HomeStar, Vonovia has acquired a total of 2,253,600 option rights from Hembla employees, which were granted as part of Hembla's long-term incentive program in 2017.

On December 10, 2019, Vonovia announced that it would extend the offer period until January 8, 2020, at 5 p.m. (CET) in order to give remaining shareholders who had not accepted the offer the possibility of doing so.

The second acceptance deadline extended as part of the purchase of Hembla ended on January 8, 2020. During this acceptance period, the offer was accepted by additional shareholders of Hembla, who held a total of 1,204,821 Class B Hembla shares, representing approximately 1.0% of the total voting rights and approximately 1.3% of the share capital.

In addition, a further 242,333 Class B shares had been acquired on the market by June 30, 2020.

Since the acquisition of the shares was effected under exactly the same conditions as the purchase on November 7, 2019, and the events are related in terms of content and timing, a linked transaction can be assumed.

Therefore, through its wholly owned subsidiary HomeStar, Vonovia held 6,136,989 Class A shares and 82,729,580 Class B shares as of June 30, 2020, representing approximately 96.4% of the total voting rights and approximately 95.6% of Hembla's share capital.

As part of the squeeze-out that was applied for and initiated on December 18, 2019, the arbitration panel was established in the course of the first nine months of 2020 and the authorized representative of the minority shareholders ("trustee") was appointed. Once the squeeze-out process has been initiated, Swedish law dictates that it can no longer be aborted unilaterally by one of the parties. As a consequence, the shares are fully attributable to the Group as of December 31, 2020. The delisting of the Class B ordinary shares in Hembla was confirmed by Nasdaq Stockholm on December 19, 2019, and the last day of trading was set as January 10, 2020.

As part of the purchase price allocation, the consideration transferred for the business combination comprises the following:

in € billion	
Net cash purchase price component	1.8
Total consideration	**1.8**

In this context, the allocation of the total purchase price to the acquired assets and liabilities (PPA) of the Hembla Group as of the date of first-time consolidation is based on the financial statements of the Hembla Group as of October 31, 2019, and on the known necessary adjustments to the fair values of the assets and liabilities.

The valuation of the investment properties is based on the fair value determination dated September 30, 2019, which was carried out by Savills Sweden AB on behalf of Hembla. As no material changes in the market environment were identifiable between September 30, 2019, and the acquisition date, only the quantity structure was adjusted to the acquisition date.

The fair value of the loans was determined as the sum of the amounts of future cash flows discounted to the acquisition date using a discounted cash flow (DCF) methodology. The contractually agreed maturities and the interest and repayment schedules were used to determine the future cash flows of the loans. The yield curve used in the DCF calculation to discount the cash flows consists of a risk-free base curve and a premium for the risk of non-performance ("risk spread").

Embedded derivatives were identified within Hembla's loan agreements in the form of termination options that can be exercised subject to previously stipulated conditions (payment of an exit fee). In accordance with IFRS 9 B.4.3.5 (e), an analysis was performed at the time of acquisition of the underlying loan agreements to determine whether the embedded termination options should be measured and recognized separately from the corresponding loan agreement.

In some cases, separate measurement and recognition had to be performed in respect of the termination options, as there was a significant difference between the exercise price of the option concerned and the carrying amount of the underlying loan.

In such cases, the termination options were measured at fair value.

The existing interest rate derivatives at Hembla are also measured at fair value, pursuant to IFRS 9.

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	3.2
Cash and cash equivalents	0.1
Other assets	0.1
Fair value of other assets	0.0
Total assets	**3.4**
Non-controlling interests	0.1
Non-derivative financial liabilities	1.8
Deferred tax liabilities	0.3
Fair value of other liabilities	0.0
Total liabilities	**2.2**
Fair value net assets	1.2
Consideration	1.8
Goodwill	**0.6**

Compared to the provisional allocation of the total consideration as of the closing date of December 31, 2019, additional embedded derivatives in the form of termination options were recognized in the amount of € 78.2 million as of June 30, 2020. Inversely, deferred tax liabilities of € 16.1 million were recognized. In addition, further acquisitions classified as "linked transactions" were taken into account. Consequently, minority interests increased by € 54.1 million, while the purchase price liability included in other liabilities decreased by € 91.8 million. Goodwill was reduced by € 99.8 million in comparison as a result. The corresponding prior-year figure was adjusted as of the date of first-time consolidation.

The goodwill represents synergies arising from the future cooperation between the Hembla Group and Vonovia, particularly those connected with the shared administration and management of Vonovia's Swedish portfolios, and from the partial transfer of Vonovia's business strategy, particularly regarding its property and portfolio management strategy, the utilization of modernization know-how, and the Value-add strategy with a focus on expanding the value chain. It was allocated to the Sweden cash-generating unit.

Acquisition of Bien-Ries GmbH

On March 5, 2020, Vonovia SE announced that it had signed a contract concerning the acquisition of all shares in Bien-Ries GmbH, Hanau, Germany ("Bien-Ries"), via its wholly owned subsidiary Deutsche Annington Acquisition Holding GmbH.

The acquisition date on which Vonovia SE obtained control of the Bien-Ries Group is April 2, 2020. This was the date on which the offer was settled. This transaction shall be treated as a business combination in accordance with IFRS 3.

As part of the purchase price allocation, the consideration transferred for the business combination comprises the following:

in € million	
Net cash purchase price component	100.3
Contingent consideration	11.4
Total consideration	**111.7**

The contingent consideration relates to the scope and completion date of a development project, which remain uncertain at the current time. The value recognized for the contingent consideration corresponds to its fair value on the acquisition date. The contingent consideration has a range between € 0.0 million and € 17.9 million.

The allocation of the total purchase price to the acquired assets and liabilities (PPA) of the Bien-Ries Group as of the date of first-time consolidation is based on the financial statements of the Bien-Ries Group as of March 31, 2020, and on the known necessary adjustments to the fair values of the assets and liabilities.

Pro rata land and development projects intended for sale but not yet certified are recognized as inventories. The valuation of these development projects is based on the fair value determination as of March 31, 2020, which was carried out by CBRE on behalf of Vonovia. Furthermore, the estimated completion costs and the current project progress were used for the measurement of the already certified development projects. The value of contract assets pursuant to IFRS 15 was determined on this basis.

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 € million	
Intangible assets	7.1
Trade receivables	21.9
Cash and cash equivalents	3.3
Real estate inventories	109.1
Fair value of other assets	4.4
Total assets	**145.8**
Provisions	11.5
Non-derivative financial liabilities	29.6
Deferred tax liabilities	18.4
Fair value of other liabilities	6.7
Total liabilities	**66.2**
Fair value net assets	**79.6**
Consideration	111.7
Goodwill	**32.1**

Compared with the provisional allocation of the total consideration as of June 30, 2020, the fair values of the real estate inventories were assessed differently. This was counteracted by the recognition of deferred tax liabilities. Goodwill was increased by € 16.5 million in comparison, mainly due to the reassessment.

The goodwill represents synergies from the future integration of the Bien-Ries Group, particularly due to the utilization of development process know-how and the optimization of cost structures. It was allocated to the Development cash-generating unit.

Since April 2020, the Bien-Ries Group has recognized income from the disposal of properties (Development) in the amount of € 78.0 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 € 6.9 million. If the Bien-Ries Group had already been fully included in the consolidated Group as of January 1, 2020, it would have contributed to income from the disposal of properties (Development) in the amount of € 82.1 million and to EBITDA IFRS in the amount of € -0.5 million.

The gross carrying amount of the acquired trade receivables was € 21.9 million. In particular, this figure includes contract assets pursuant to IFRS 15. Due to the contractual terms in the development business, no separate impairment losses are to be recognized on the corresponding receivables, meaning that the gross amount matches the fair value.

In the 2020 fiscal year, transaction costs related to the acquisition of the Bien-Ries Group in the amount of € 1.0 million were recognized in other operating expenses affecting net income.

Acquisition of H&L Immobilien GmbH

On December 2, 2020, Vonovia SE announced that it had signed a contract concerning the acquisition of a 94.9% stake in H&L Immobilien GmbH (renamed Fjord Immobilien GmbH with an entry in the commercial register being made on February 8, 2021), Kiel, Germany, ("H&L") via its wholly owned subsidiary Deutsche Annington Acquisition Holding GmbH.

The acquisition date, the time at which Vonovia SE obtained control of H&L, is December 30, 2020. This was the date on which the offer was settled. This transaction shall be treated as a business combination in accordance with IFRS 3.

As part of the provisional purchase price allocation, the consideration transferred for the business combination comprises the following:

in € million	
Net cash purchase price component	93.2
Total consideration	**93.2**

Due to the proximity of the acquisition to the reporting date, the allocation of the total purchase price as of December 31, 2020, could only be made on a provisional basis. The provisional allocation of the total purchase price to the acquired assets and liabilities (PPA) of H&L as of the date of first-time consolidation is based on the financial statements of H&L as of December 31, 2020, and on the known necessary adjustments to the fair values of the assets and liabilities.

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 € million	
Investment properties	123.0
Trade receivables	0.1
Cash and cash equivalents	2.2
Fair value of other assets	0.1
Total assets	**125.4**
Provisions	0.5
Non-derivative financial liabilities	36.6
Deferred tax liabilities	26.1
Fair value of other liabilities	3.4
Total liabilities	**66.6**
Fair value net assets	58.8
Consideration	93.2
Goodwill	**34.4**

The valuation of the investment properties is based on the fair value determination as of December 31, 2020, which was carried out by CBRE on behalf of Vonovia.

The fair value of the loans was determined as the sum of the amounts of future cash flows discounted to the acquisition date using a discounted cash flow (DCF) methodology. The contractually agreed maturities and the interest and repayment schedules were used to determine the future cash flows of the loans. The yield curve used in the DCF calculation to discount the cash flows consists of a risk-free base curve and a premium for the risk of non-performance ("risk spread").

The goodwill represents synergies from the future integration of H&L, in particular through the shared administration and management of the respective residential units.

If H&L had already been fully included in the consolidated Group as of January 1, 2020, it would have contributed to the income from property management in the amount of € 6.8 million and to EBITDA IFRS in the amount of € 3.0 million.

The gross carrying amount of the acquired trade receivables was € 0.4 million. In the 2020 fiscal year, transaction costs related to the acquisition of H&L in the amount of € 0.6 million were recognized in other operating expenses affecting net income.

5 Financial Reporting of Financial Assets and Financial Liabilities

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.

Derivative Financial Instruments

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.

Compared with IAS 39, the IFRS 9 regulations 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 and retrospective effectiveness testing as well as 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.

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.

Contracts concluded for the purpose of receiving or supplying non-financial items in accordance with the company’s expected purchase, sale, or use requirements (own-use contracts) are not recognized as derivative financial instruments, but rather as pending transactions under IAS 37.

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 IFRS 9 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.

Equity Instruments to Be Recognized at Fair Value in Other Comprehensive Income

In general, the equity instruments to be recognized at fair value in other comprehensive income are shares in companies that were acquired with long-term strategic intentions.

These equity instruments to be recognized at fair value in 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 in 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, not 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.

6 Currency Translation

Accounting Policies

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.

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.

The exchange rates of the currencies relevant to the Vonovia Group have developed as follows:

	Closing rate		Average for period	
Basis: € 1	Dec. 31, 2019	Dec. 31, 2020	2019	2020
HUF – Hungarian forint	324.34*	–	320.01*	–
SEK – Swedish krona	10.45	10.03	10.59	10.48
USD – US dollar	1.12	1.23	1.12	1.14

* The exchange rate and the average for the period for the Hungarian forint for 2019 has been fixed for May 31, 2019, as the companies ceased to be included in the scope of consolidation on May 31, 2019.

7 Government Grants

Accounting Policies

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.

The companies that belong to the Group receive government grants in the form of construction subsidies, expenses subsidies, expenses loans and low-interest loans. In the 2020 fiscal year, Vonovia was granted low-interest loans of € 182.4 million (2019: € 444.3 million).

8 Changes in Accounting Policies, Estimates, Assumptions, Options and Judgments

Changes in Accounting Policies Due to New Standards and Interpretations

The following new or amended standards and interpretations became mandatory for the first time in the 2020 fiscal year. They did not have any material effects on Vonovia's consolidated financial statements.

> Amendment to References to the Conceptual Framework in IFRS Standards
> IAS 1 "Presentation of Financial Statements"
> IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors"
> IAS 39 "Financial Instruments: Recognition and Measurement"
> IFRS 3 "Business Combinations"
> IFRS 7 "Financial Instruments: Disclosures"
> IFRS 9 "Financial Instruments"
> IFRS 16 "Leases"

IFRS 16

Due to the rent concessions (deferrals, waivers) granted in a large number of countries as a result of the coronavirus pandemic, IFRS 16 was amended to provide companies with an exemption from assessing whether a coronavirus-related rent concession is a lease modification within the meaning of IFRS 16. Instead, they can opt to account for coronavirus-related rent concessions as if they were not lease modifications. This would spare them the work involved in evaluating the lease contracts to check for possible contractually defined rent concessions as well as the work involved in reassessing these contracts applying a new discount rate (which is always required for lease modifications). The relief is limited until June 30, 2021.

No rent concessions were granted by the lessor within the Vonovia Group. This is due primarily to the Group's encouraging and robust financial position, even in times dominated by the coronavirus pandemic. As a result, the Group is not exercising this option as it is not relevant. The amendments to IFRS 16 do not have any material effects on the consolidated financial statements.

New Standards and Interpretations Not Yet Applied

Application of the following standards, interpretations and amendments to existing standards was not yet mandatory for the 2020 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
Annual Improvements 2018–2020		Jan. 1, 2022*
Amendments to Standards		
IAS 1	"Presentation of Financial Statements"	Jan. 1, 2023*
IAS 16, IAS 37 and IFRS 3	"Property, Plant and Equipment", "Provisions, Contingent Liabilities and Contingent Assets" and "Business Combinations"	Jan. 1, 2022*
IFRS 4	"Insurance Contracts"	Jan. 1, 2021
IAS 39, IFRS 4, IFRS 7, IFRS 9 and IFRS 16	"Financial Instruments: Recognition and Measurement", "Insurance Contracts", "Financial Instruments: Disclosures", "Financial Instruments" and "Leases"	Jan. 1, 2021*
New Standards		
IFRS 17	"Insurance Contracts"	Jan. 1, 2023*

* Not yet endorsed.

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. Specific estimates and assumptions relating to individual elements of financial statements are also explained in the corresponding notes to the consolidated financial statements.

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 residential 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 chapter [D28] 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 chapter [D26] Intangible Assets, 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 flows. 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 discretionary decisions about future events. New information may become available that causes the Group to change its discretionary decisions 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 and the determination of the progress made in cases involving revenue recognition over time 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.
> Within the scope of revenue recognition in accordance with IFRS 15, discretionary decisions relating to the expected revenue, the total costs of a project and the degree of completion may be necessary. These have an impact on the amount and timing of revenue.
> When accounting for leases in accordance with IFRS 16, the assessment of the exercise or non-exercise of unilaterally granted termination or renewal options may involve discretionary judgment, particularly if there is no economic incentive for the exercise or non-exercise of options.

- > 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.

9 Subsequent Events

An agreement on secured financing with a 10-year term and a loan volume of € 200.0 million was signed in December of the fiscal year. The disbursement of this financing is scheduled for February 26, 2021.

On January 12, 2021, Vonovia SE issued a tokenized registered bond of € 20.0 million with a term of three years via the online marketplace firstwire. The investor is M.M. Warburg.

On January 20, 2021, Vonovia SE placed a bond of € 500.0 million and a coupon of 1.0% and a 20-year term, via its Dutch subsidiary Vonovia Finance B.V.

On January 11, 2021, the Management Board of Vonovia SE decided to merge Vonovia Finance B.V., Amsterdam, Netherlands, with Vonovia SE on a cross-border basis. The notarized deeds regarding the transaction were not yet drawn up at the time of reporting.

Section (B): Profit for the Period

The figures from the previous year are only comparable to a limited extent due to acquisitions made in the previous year.

Accounting Policies

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 non-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.

10 Income from Property Management

in € million	2019	2020
Rental income	2,077.9	2,288.5
Ancillary costs	762.9	780.9
Income from property letting	2,840.8	3,069.4
Other income from property management	69.9	77.7
	2,910.7	**3,147.1**

11 Profit on the Disposal of Properties

in € million	2019	2020
Income from the disposal of investment properties	227.1	321.3
Carrying amount of investment properties sold	-158.0	-217.4
Profit on the disposal of investment properties	69.1	103.9
Income from sale of assets held for sale	283.6	265.0
Retirement carrying amount of assets held for sale	-283.6	-265.0
Revaluation of assets held for sale	59.7	78.2
Profit on the disposal of assets held for sale	59.7	78.2
	128.8	**182.1**

The fair value adjustment of residential 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 € 78.2 million as of December 31, 2020 (2019: € 59.7 million).

12 Profit on the Disposal of Properties (Development)

Accounting Policies

Income from the 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. If, upon conclusion of the certified purchase agreement, control within the meaning of IFRS 15.35(c) passes to the customer before or during the construction phase, the 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.

Contractual balances with an expected term of less than one year are not adjusted to reflect the time value of money.

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 accordance with IFRS 15.94, costs for the initiation of the contracts with customers are recognized as an expense as soon as they are incurred, as the depreciation period generally would not amount to more than a year. The costs relate primarily to brokerage commission.

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.

Income from the disposal of properties (Development) in the amount of € 297.7 million (2019: € 249.5 million) comprises € 194.4 million (2019: € 183.3 million) in period-related income from the disposal of properties together with € 103.3 million (2019: € 66.2 million) in time-related income from the disposal of properties. As of the reporting date, contract assets of € 121.5 million (2019: € 59.4 million) are recognized within trade receivables in connection with the period-related revenue recognition. As of the reporting date, this amount includes advance payments received of € 87.1 million (2019: € 114.2 million).

A transaction price of € 124.2 million (2019: € 59.0 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 three fiscal years, with an amount of € 87.4 million attributable to 2021, an amount of € 36.6 million to 2022 and an amount of € 0.2 million to 2023.

13 Net Income from Fair Value Adjustments of Investment Properties

Investment properties in the German and Austrian portfolios 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. External appraisers are responsible for the valuation of the portfolios in Sweden. The measurement of the investment properties led to a valuation gain during the 2020 fiscal year of € 3,719.8 million (2019: € 4,131.5 million; see explanatory information in chapter [D28] "Investment Properties"). This includes € -1.8 million (2019: € 2.7 million) for the measurement of right-of-use assets (IFRS 16).

The figure also includes the valuation result from buildings under construction (new construction/development to hold) that were completed during the reporting period and were moved to the Rental portfolio. A fair value measurement is performed for the first time when the properties are completed. This resulted in a valuation effect of € 62.0 million in the 2020 fiscal year (2019: € 58.9 million).

The valuation result for 2020 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. We are currently observing stable demand for rental apartments and no negative impact on fair values as a result of the coronavirus pandemic as of December 31, 2020.

14 Capitalized Internal Expenses

Capitalized internal expenses in the fiscal year amount to € 659.4 million (2019: € 687.2 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.

15 Cost of Materials

in € million	2019	2020
Expenses for ancillary costs	729.2	780.5
Expenses for maintenance and modernization	628.9	586.4
Other cost of purchased goods and services	104.9	126.5
	1,463.0	**1,493.4**

16 Personnel Expenses

in € million	2019	2020
Wages and salaries	436.7	488.0
Social security, pensions and other employee benefits	99.0	106.9
	535.7	**594.9**

The personnel expenses include expenses for severance payments in the amount of € 3.6 million (2019: € 3.1 million), allocations to the provisions for pre-retirement part-time work arrangements in the amount of € 0.4 million (2019: € 2.3 million) and expenses for the long-term incentive plan (LTIP) at € 17.5 million (2019: € 15.3 million) (see chapter [E38] Provisions).

In the fiscal year under review, employers' contributions to statutory pension insurance amounted to € 41.4 million (2019: € 37.9 million).

As of December 31, 2020, Vonovia had 10,622 employees (Dec. 31, 2019: 10,345) with the annual average coming to 10,572 employees (2019: 10,114). Vonovia also employed 510 apprentices as of December 31, 2020 (Dec. 31, 2019: 473).

17 Other Operating Income

in € million	2019	2020
Compensation paid by insurance companies	46.3	54.1
Reversal of provisions	16.9	33.4
Compensation for damages and cost reimbursements	12.1	15.6
Dunning and debt collection fees	6.2	5.9
Reversal of impairment losses	1.8	4.3
Miscellaneous	22.4	49.7
	105.7	**163.0**

The increase in miscellaneous other operating income is due to the reassessment of a compensation entitlement for non-controlling interests, which produced income of € 18.1 million in the 2020 fiscal year (2019: € 0.0 million).

18 Other Operating Expenses

in € million	2019	2020
Consultants' and auditors' fees	64.2	47.6
Vehicle and traveling costs	35.2	30.5
Communication costs and work equipment	21.0	24.4
Additions to provisions	9.6	21.5
Rents, leases and ground rents	16.5	17.7
Administrative services	12.8	16.9
Advertising costs	13.6	16.6
Insured losses	7.0	12.1
Non-capitalizable expenses from real estate development	5.7	5.2
Impairment losses	4.7	4.3
Costs of sale associated with real estate inventories	5.7	4.1
Dunning and debt collection fees	3.9	3.3
Legal and notary costs	2.8	2.6
Sales incidentals	5.6	1.4
Miscellaneous	87.0	70.6
	295.3	**278.8**

19 Interest Income

in € million	2019	2020
Income from non-current securities and non-current loans	1.9	1.9
Other interest and similar income	7.0	20.0
	8.9	**21.9**

Other interest and similar income includes income from a bond issue above par in the amount of € 11.9 million (2019: € 0.0 million).

20 Interest Expenses

The interest expenses mainly relate to interest expense on financial liabilities measured at amortized cost.

in € million	2019	2020
Interest expense from non-derivative financial liabilities	349.7	374.0
Swaps (current interest expense for the period)	17.2	16.8
Effects from the valuation of non-derivative financial instruments	-18.9	-48.6
Effects from the valuation of swaps	17.9	42.4
Prepayment penalties and commitment interest	28.1	6.2
Interest accretion to provisions	10.0	6.2
Interest from leases	14.0	16.1
Other financial expenses	-0.5	-1.7
	417.5	**411.4**

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	2019	2020
Interest income	8.9	21.9
Interest expense	-417.5	-411.4
Net interest	**-408.6**	**-389.5**
Less:		
Net interest from provisions for pensions in acc. with IAS 19	8.6	5.6
Net interest from other provisions in acc. with IAS 37	1.4	0.6
Net interest from leases	14.0	16.1
Net interest to be classified	**-384.6**	**-367.2**

The net interest classified pursuant to IFRS 9 is as follows:

in € million	2019	2020
Financial assets measured at (amortized) cost	8.9	21.8
Derivatives measured at FV through P&L	-35.1	-59.2
Financial liabilities measured at (amortized) cost	-358.4	-329.8
Classification of net interest	**-384.6**	**-367.2**

21 Other Financial Result

in € million	2019	2020
Result from currency translation	37.2	4.8
Income from other investments	11.8	13.4
Transaction costs	-22.9	-18.9
Purchase price liabilities from put options/rights to reimbursement	-2.1	-31.4
Miscellaneous other financial result	–	-0.5
	24.0	**-32.6**

The currency effects relate primarily to the financial relationships with Swedish subsidiaries.

The income from investments includes financial income resulting from the collection of profits from the investment in AVW GmbH & Co. KG, Hamburg, in the amount of € 9.3 million (2019: € 8.2 million) for the previous fiscal year in each case.

It also comprises financial income from investments in other residential real estate companies in the amount of € 2.4 million (2019: € 1.7 million).

The change in the financial result in connection with purchase price liabilities from put options/rights to reimbursement from € -2.1 million in 2019 to € -31.4 million in 2020 is due, in particular, to their measurement at the end of the year. As part of the review and restructuring of relationships with minority shareholders, total purchase price liabilities from put options/rights to reimbursement had risen considerably by the reporting date.

22 Income Taxes

Accounting Policies

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.

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 2019, the combined tax rate of corporate income tax and trade tax of 33.1% was used to calculate domestic deferred taxes for 2020. The corporate income tax rate for the companies based in Austria remains unchanged at 25.0%, while the rate for companies based in Sweden is 20.6%.

Deferred tax assets and liabilities are netted 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.

in € million	2019	2020
Current income tax	55.2	57.7
Prior-year current income tax	1.6	-14.6
Deferred tax – temporary differences	1,861.0	1,607.5
Deferred tax – unutilized loss carryforwards	-73.2	23.8
	1,844.6	**1,674.4**

The current tax expense is determined on the basis of the taxable income for the fiscal year. For the 2020 fiscal year, the combined tax rate of corporate income tax and solidarity surcharge for domestic companies is 15.8% (2019: 15.8%). Including trade tax at a rate of about 17.3% (2019: 17.3%), the combined domestic tax rate is 33.1% in 2020 (2019: 33.1%). The corporate income tax rate for the companies based in Austria is 25.0% (2019: 25.0%), the rate for companies based in Sweden is 21.4% (2019: 21.4%). The income generated by Vonovia Finance B.V. is subject to Dutch tax law; current taxes of € 2.8 million were incurred there (2019: € 3.1 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 at a series of BUWOG companies in 2019, deferred tax liabilities were also subject to trade tax there, unlike in 2018. This effect caused a deferred tax expense of € 191.0 million in the previous year. In 2020, the deferred taxes of all relevant companies were also subject to trade tax, meaning that this effect did not materialize.

For deductible temporary differences (excl. loss carryforwards) in the amount of € 20.6 million (Dec. 31, 2019: € 16.9 million), no deferred corporate income taxes or deferred trade taxes were recognized because they are not likely to be used in the future.

As of December 31, 2020, there were domestic corporate income tax loss carryforwards amounting to € 3,961.3 million (Dec. 31, 2019: € 4,040.4 million) as well as trade tax loss carryforwards amounting to € 2,171.5 million (Dec. 31, 2019: € 2,242.8 million), for which deferred tax assets have been recognized to the extent that their realization is sufficiently probable. As of December 31, 2020, there were corporate income tax loss carryforwards abroad amounting to € 676.2 million (Dec. 31, 2019: € 690.9 million) as well as trade tax loss carryforwards amounting to € 16.4 million (2019: € 15.4 million), for which deferred tax assets have also been recognized to the extent that their realization is sufficiently probable. The drop in tax loss carryforwards resulted from current tax gains at individual companies and the associated utilization of the loss carryforwards.

No deferred taxes were recognized in the balance sheet for domestic and foreign corporate income tax loss carryforwards amounting to € 870.2 million (Dec. 31, 2019: € 880.3 million). Of this amount, € 25.5 million (2019: € 20.0 million) arose for the first time in the 2020 fiscal year. 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 € 4.3 million (2019: € 3.6 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 € 562.1 million in total (Dec. 31, 2019: € 559.9 million). These did not give rise to any deferred tax assets. Of this amount, € 11.5 million arose for the first time in the 2020 fiscal year (2019: € 12.2 million) and the resulting tax effect is € 1.8 million (2019: € 2.0 million).

The remeasurement of deferred tax assets on temporary differences and loss carryforwards from the previous year led to tax expense amounting to € 6.3 million in the 2020 fiscal year (2019: tax income of € 22.6 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 € 1,059.4 million (Dec. 31, 2019: € 919.9 million). Of this amount, € 171.6 million (2019: € 150.7 million) arose for the first time in the 2020 fiscal year. The fact that no deferred tax assets were recognized on the new interest carryforward generated a tax effect of € 55.5 million in Germany (2019: € 50.0 million). Sweden has had a regulation similar to the German interest threshold since 2019. As a result, no deferred tax assets have been recognized on interest carryforwards in the amount of € 102.0 million in Sweden either (2019: € 47.6 million). Of this amount, € 57.8 million (2019: € 20.6 million) arose for the first time in the 2020 fiscal year. The fact that no deferred taxes were recognized generated a tax effect of € 11.9 million in Sweden (2019: € 4.2 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	2019	2020
Earnings before tax	**3,138.9**	**5,014.4**
Income tax rate in %	33.1	33.1
Expected tax expense	**1,039.0**	**1,659.8**
Trade tax effects	161.6	-57.4
Non-deductible operating expenses	55.8	58.8
Tax-free income	-49.4	-35.4
Change in the deferred tax assets on loss carryforwards and temporary differences	-22.6	6.3
New loss and interest carryforwards not recognized	59.8	73.5
Prior-year income tax and taxes on guaranteed dividends	-22.8	19.8
Tax effect from goodwill impairment	697.3	–
Differing foreign tax rates	-68.1	-40.7
Other tax effects (net)	-6.0	-10.3
Effective income taxes	**1,844.6**	**1,674.4**
Effective income tax rate in %	**58.8**	**33.4**

The deferred taxes refer to temporary differences in balance sheet items and unutilized loss carryforwards as follows:

in € million	Dec. 31, 2019	Dec. 31, 2020
Intangible assets	6.5	–
Investment properties	1.8	12.1
Property, plant and equipment	35.7	37.3
Financial assets	1.3	3.2
Other assets	101.2	158.5
Provisions for pensions	99.6	104.4
Other provisions	23.5	22.5
Liabilities	134.0	120.1
Loss carryforwards	929.7	905.9
Deferred tax assets	**1,333.3**	**1,364.0**

in € million	Dec. 31, 2019	Dec. 31, 2020
Intangible assets	19.4	20.2
Investment properties	10,290.7	11,959.8
Assets held for sale	21.4	38.7
Property, plant and equipment	8.5	9.2
Financial assets	0.8	26.4
Other assets	118.9	153.5
Other provisions	78.4	78.5
Liabilities	24.1	20.9
Deferred tax liabilities	**10,562.2**	**12,307.2**
Excess deferred tax liabilities	**9,228.9**	**10,943.2**

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, 2019	Dec. 31, 2020
Deferred tax assets	59.3	16.4
Deferred tax liabilities	9,288.2	10,959.6
Excess deferred tax liabilities	**9,228.9**	**10,943.2**

The increase in deferred tax liabilities can be attributed primarily to investment properties.

The change in deferred taxes is as follows:

in € million	2019	2020
Excess deferred tax liabilities as of Jan. 1	**7,177.8**	**9,228.9**
Deferred tax expense in income statement	1,787.7	1,631.3
Deferred tax due to first-time consolidation and deconsolidation	294.4	43.4
Change in deferred taxes recognized in other comprehensive income due to equity instruments measured at fair value	-4.3	0.2
Change in deferred taxes recognized in other comprehensive income on actuarial gains and losses from pensions and similar obligations	-17.5	-5.8
Change in deferred taxes recognized in other comprehensive income on derivative financial instruments	0.7	4.7
Deferred taxes recognized in equity on accrued capital procurement costs resulting from the issuance of a hybrid bond with an indefinite term	-0.2	-0.3
Deferred taxes recognized in the capital reserve on capital procurement costs of capital increases	-2.2	-2.9
Currency translation differences	3.2	48.5
Transition to IFRS 16	-10.9	
Other	0.2	-4.8
Excess deferred tax liabilities as of Dec. 31	**9,228.9**	**10,943.2**

No deferred tax liabilities are recognized for profits accumulated at subsidiaries of € 31,244.0 million (Dec. 31, 2019: € 27,785.0 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.

Section (C): Other Disclosures on the Results of Operations

23 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 sustainably and with a view to enhancing its value, investing in existing residential 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 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. Ancillary costs are also reported under "Other."

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 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 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 residential 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 includes the regular and sustainable disposals of individual condominiums and single-family houses from our portfolio. The consolidation of our sales activities in Germany and Austria to form one single reporting segment is based on the similarities that we see in the property management business in these two countries. 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.

The **Development** segment combines cross-country development activities and includes the project development of new residential buildings. The consolidation of our development activities in Germany, Austria and Sweden to form one single reporting segment is based on the similarities that we see in the business in these three countries. The business 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.

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 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, 2020								
Segment revenue	**2,285.9**	**1,104.6**	**382.4**	**597.1**	**4,370.0**	**984.8**	**-1,323.7**	**4,031.1**
thereof external revenue	2,285.9	51.6	382.4	298.9	3,018.8	984.8	27.5	4,031.1
thereof internal revenue		1,053.0		298.2	1,351.2	–	-1,351.2	-
Carrying amount of assets sold			-308.9		-308.9	-173.5		
Revaluation from disposal of assets held for sale			34.9		34.9	27.9		
Expenses for maintenance	-321.1				-321.1			
Cost of development to sell				-235.9	-235.9			
Cost of development to hold**				-235.4	-235.4		235.4	
Operating expenses	-410.6	-952.3	-16.0	-14.9	-1,393.8	-5.6	992.0	
Ancillary costs						-780.9		
Adjusted EBITDA Total	**1,554.2**	**152.3**	**92.4**	**110.9**	**1,909.8**	**52.7**	**-96.3**	**1,866.2**
Non-recurring items								-61.5
Period adjustments from assets held for sale								15.3
Income from investments in other real estate companies								2.4
EBITDA IFRS								**1,822.4**
Net income from fair value adjustments of investment properties								3,719.8
Depreciation and amortization								-92.3
Income from other investments								-13.4
Interest income								21.9
Interest expenses								-411.4
Other financial result								-32.6
EBT								**5,014.4**
Income taxes								**-1,674.4**
Profit for the period								**3,340.0**

* The revenue 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 revenue/costs in the "Other" and "Consolidation" columns are not part of the Management Board's segment management.

** Excluding capitalized interest on borrowed capital in 2020 of € 0.8 million (2019 € 0.0 million).

in € million	Rental	Value-add	Recurring Sales	Develop-ment	Segments total	Other*	Consolida-tion*	Group
Jan. 1–Dec. 31, 2019								
Segment revenue**	2,074.9	1,154.8	365.1	516.9	4,111.7	908.5	-1,349.3	3,670.9
thereof external revenue	2,074.9	50.6	365.1	250.6	2,741.2	908.5	21.2	3,670.9
thereof internal revenue		1,104.2		266.3	1,370.5	–	-1,370.5	–
Carrying amount of assets sold			-302.9		-302.9	-138.7		
Revaluation from disposal of assets held for sale			44.5		44.5	13.0		
Expenses for maintenance	-308.9				-308.9			
Cost of development to sell				-197.3	-197.3			
Cost of development to hold				-207.4	-207.4		207.4	
Operating expenses	-328.6	-1,008.5	-14.8	-27.7	-1,379.6	-8.4	1,039.1	
Ancillary costs						-762.9		
Adjusted EBITDA Total	1,437.4	146.3	91.9	84.5	1,760.1	11.5	-102.8	1,668.8
Non-recurring items								-93.1
Period adjustments from assets held for sale								2.2
Income from investments in other real estate companies								1.7
EBITDA IFRS								1,579.6
Net income from fair value adjustments of investment properties								4,131.5
Depreciation and amortization								-2,175.8
Income from other investments								-11.8
Interest income								8.9
Interest expenses								-417.5
Other financial result								24.0
EBT								3,138.9
Income taxes								-1,844.6
Profit for the period								**1,294.3**

* The revenue 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 revenue/costs in the "Other" and "Consolidation" columns are not part of the Management Board's segment management.
** Adjusted (see note [A2] Adjustment to Prior-year Figures).

The reporting of segment revenue was adjusted with the switch to the new internal reporting system. The corresponding prior-year figures have been adjusted. The main adjustments compared with the previous year were as follows:

> The amount disclosed for external Value-add revenue (previously € 248.4 million) has been reduced by income charged to the Rental segment in connection with services and passed on to tenants there in the ancillary costs bills (€ 185.8 million).

> Ancillary cost revenue is shown under external income in the Other category in full. Previously, these amounts were reported under Value-add (€ 185.8 million) and Consolidation (€ 577.1 million).

> The internal Value-add income has been reduced by the revenue from the management of subcontractors in the amount of € 509.8 million, and increased by income charged to the Rental segment in connection with services and passed on to tenants there in the ancillary costs bills (€ 185.8 million).

> In the Development segment, the fair value (€ 266.3 million) for completed new buildings is shown as internal income. The corresponding production costs are reported under costs of development to hold (€ 207.4 million).

> The internal income is completely eliminated in the Consolidation column. The ancillary cost income is matched by an identical value under costs, as the ancillary costs balance is allocated to operating expenses in the Rental segment.

The operating expenses of the segments have been adjusted in line with the changes to the reporting of revenue in each case. This means that the changes in revenue reporting do not result in any changes to the Adjusted EBITDA reported for each segment in general.

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 sum 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 refinancing and equity increases (where not treated as capital procurement costs).

In the 2020 fiscal year, the **non-recurring items** eliminated in the Adjusted EBITDA Total came to € 61.5 million (2019: € 93.1 million). In the third quarter of 2020, income of € 18.1 million was recognized following the reassessment of a compensation entitlement for non-controlling interests. The following table gives a detailed list of the non-recurring items:

in € million	2019	2020
Transactions*	48.2	24.0
Personnel matters	13.2	27.5
Business model optimization	27.6	13.9
Refinancing and equity measures	4.1	-3.9
Total non-recurring items	**93.1**	**61.5**

* Including one-time expenses in connection with acquisitions, such as HR measures relating to the integration process and other follow-up costs.

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	Consoli-dation	Total
Jan. 1–Dec. 31, 2020							
Revenue from ancillary costs (IFRS 15)	–	–	–	–	645.7	–	645.7
Income from the disposal of investment properties	–	–	234.9	–	86.4	–	321.3
Income from disposal of real estate inventories (Development)	–	–	–	297.7	–	–	297.7
Other revenue from contracts with customers		50.2				27.5	77.7
Revenue from contracts with customers	–	50.2	234.9	297.7	732.1	27.5	1,342.4
thereof period-related	–	–	–	194.4	–	–	194.4
thereof time-related	–	50.2	234.9	103.3	732.1	–	1,120.5
Income from rental income (IFRS 16)	2,285.9	1.4	–	1.2		–	2,288.5
Revenue from ancillary costs (IFRS 16)*	–	–	–	–	135.2	–	135.2
Income from sale of assets held for sale (IFRS 5)	–	–	147.5	–	117.5	–	265.0
Other revenue	2,285.9	1.4	147.5	1.2	252.7	–	2,688.7
Revenues	**2,285.9**	**51.6**	**382.4**	**298.9**	**984.8**	**27.5**	**4,031.1**
Jan. 1–Dec. 31, 2019							
Revenue from ancillary costs (IFRS 15)	–	–	–	–	627.3	–	627.3
Income from the disposal of investment properties	–	–	184.9	–	42.2	–	227.1
Income from disposal of real estate inventories (Development)	–	–	–	249.5	–	–	249.5
Other revenue from contracts with customers	–	48.7	–	–		21.2	69.9
Revenue from contracts with customers	–	48.7	184.9	249.5	669.5	21.2	1,173.8
thereof period-related	–	–	–	183.6	–	–	183.6
thereof time-related	–	48.7	184.9	65.9	669.5	–	990.2
Income from rental income (IFRS 16)	2,074.9	1.9	–	1.1	–	–	2,077.9
Revenue from ancillary costs (IFRS 16)*	–	–	–	–	135.6	–	135.6
Income from sale of assets held for sale (IFRS 5)	–	–	180.2	–	103.4	–	283.6
Other revenue	2,074.9	1.9	180.2	1.1	239.0	–	2,497.1
Revenues	**2,074.9**	**50.6**	**365.1**	**250.6**	**908.5**	**21.2**	**3,670.9**

* Includes land tax and buildings insurance.

External income and non-current assets, excluding financial instruments, deferred tax assets, post-employment benefits and rights under insurance contracts, are distributed among Vonovia's country of origin and other countries as follows. The revenue and the assets are allocated based on the registered office of the unit providing the service.

	External income		Assets	
in € million	Jan. 1-Dec. 31, 2019	Jan. 1-Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020
Germany	3,087.0	3,299.0	44,969.4	49,902.9
Austria	415.6	393.4	3,067.9	3,189.9
Sweden	168.1	338.7	6,777.8	7,294.5
France	0.0	0.0	104.1	110.7
Other countries	0.2	0.0	88.1	117.5
Total	**3,670.9**	**4,031.1**	**55,007.3**	**60,615.5**

24 Earnings per Share

Accounting Policies

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.

	2019	2020
Profit for the period attributable to Vonovia shareholders (in € million)	1,147.0	3,228.5
Weighted average number of shares	532,734,172	550,416,020
Earnings per share (basic and diluted) in €	**2.15**	**5.87**

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.

25 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 2020 fiscal year of € 1,000,000,000.00, an amount of € 956,349,535.31 on the 565,887,299 shares of the share capital as of December 31, 2020 (corresponding to € 1.69 per share) be paid as a dividend to the shareholders, and that the remaining amount of € 43,650,464.69 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 as of December 31, 2020.

As with the 2018 and 2019 fiscal years, the dividend for the 2020 fiscal year, payable after the Annual General Meeting to be held on April 16, 2021, will again include the option of a non-cash dividend in shares, to the extent that the Management Board and the Supervisory Board consider this to be in the interests of the company and its shareholders.

Section (D): Assets

26 Intangible Assets

in € million	Concessions, industrial property rights, license and similar rights	Self-developed software	Customer relationships and non-competition clause	Trademark rights	Goodwill	Total
Cost						
As of Jan. 1, 2020	85.7	5.1	10.4	66.6	4,514.9	4,682.7
Additions due to business combinations	3.5	0.2	3.4	–	66.5	73.6
Additions	24.5	1.8	–	–	–	26.3
Disposals	-4.8	–	–	–	–	-4.8
Changes in value from currency translation	–	–	–	–	35.4	35.4
Transfers	-1.2	–	–	–	–	-1.2
As of Dec. 31, 2020	107.7	7.1	13.8	66.6	4,616.8	4,812.0
Accumulated amortization						
As of Jan. 1, 2020	49.7	3.1	3.7	–	3,122.0	3,178.5
Amortization in reporting year	21.4	1.6	3.5	–	–	26.5
Disposals	-4.8	–	–	–	–	-4.8
Changes in value from currency translation	–	–	–	–	0.1	0.1
As of Dec. 31, 2020	66.3	4.7	7.2	–	3,122.1	3,200.3
Carrying amounts						
As of Dec. 31, 2020	41.4	2.4	6.6	66.6	1,494.7	1,611.7
Cost						
As of Jan. 1, 2019	68.3	6.7	8.5	66.6	3,860.9	4,011.0
Additions due to business combinations	3.5	–	–	–	644.9	648.4
Additions	17.0	1.5	1.9	–	–	20.4
Disposals	-8.0	–	–	–	–	-8.0
Changes in value from currency translation	0.1	–	–	–	9.1	9.2
Transfers	4.8	-3.1	–	–	–	1.7
As of Dec. 31, 2019	85.7	5.1	10.4	66.6	4,514.9	4,682.7
Accumulated amortization						
As of Jan. 1, 2019	41.6	4.9	2.8	–	1,018.5	1,067.8
Additions due to business combinations	0.7	–	–	–	–	0.7
Additions	11.9	1.3	0.9	–	–	14.1
Impairment	–	–	–	–	2,103.5	2,103.5
Disposals	-8.0	–	–	–	–	-8.0
Transfers	3.5	-3.1	–	–	–	0.4
As of Dec. 31, 2019	49.7	3.1	3.7	–	3,122.0	3,178.5
Carrying amounts						
As of Dec. 31, 2019	36.0	2.0	6.7	66.6	1,392.9	1,504.2

Accounting Policies

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.

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 cash-generating unit (CGU) to which the asset belongs. Impairment losses are recognized as expenses in the income statement affecting 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).

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 still recognized at a value of € 66.6 million. There were no indications of impairment.

Goodwill

Accounting Policies

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 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. 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 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.

Groups of Cash-Generating Units

in € million	Rental segment North area	West area	Sweden Business Area	Value-add segment	Development segment	not allocated	Group
Goodwill 2019	**73.7**	**84.0**	**192.9**	**278.5**	**106.1**	**657.7**	**1,392.9**
Additions due to business combinations					32.1	34.4	66.5
Allocation			657.7			-657.7	0.0
Currency translation differences			35.3				35.3
Goodwill 2020	**73.7**	**84.0**	**885.9**	**278.5**	**138.2**	**34.4**	**1,494.7**
WACC before tax Dec. 31, 2020 in %	3.8	3.8	3.6	3.9	6.0		–
WACC before tax Dec. 31, 2019 in %	3.8	3.8	3.8	4.1	4.8		–
Sustainable rate of increase 2020 in %	1.0	0.9	1.0	1.0	1.0		1.0
Sustainable rate of increase 2019 in %	1.0	0.9	1.0	1.0	1.0		1.0

Goodwill came to € 1,494.7 million as of December 31, 2020. This means that goodwill has risen by € 101.8 million compared with December 31, 2019. Currency changes affecting the Swedish krona resulted in an increase of € 35.3 million. The additions due to business combinations in the amount of € 66.5 million result from an addition due to the acquisition of Bien-Ries GmbH in the amount of € 32.1 million, and the addition in the amount of € 34.4 million from the acquisition of H&L Immobilien GmbH.

Due to the provisional purchase price allocation, the goodwill resulting from the acquisition of H&L Immobilien GmbH had not yet been allocated to a cash-generating unit as of the reporting date.

The mandatory annual impairment test performed in the fourth quarter confirmed the value of the goodwill.

As part of the impairment test 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. The main parameters for calculating the value in use are the sustainable rate of increase, the average total cost of capital (WACC) and the expected cash flows. In the Development segment, a sixth, sustainable planning year was added to the five-year plan to reflect a “steady state”.

The growth rate for the CGUs of the rental segment was calculated regionally on the basis of in-place rents and limited to 1.0% for the segment as a whole. 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 2.3% every year as well as the planned vacancy rate of 2.4% at the end of the detailed 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.

The Development segment is characterized by the construction of new buildings for Vonovia’s own portfolio and by the sale of properties to third parties. 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.

A constant growth rate of 1.0% was assumed for the Value-add and Development segments.

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, a country-specific cost surcharge was also calculated for the Development segment. The main parameters are shown in the following table:

Parameters for WACC Calculation

	Rental segment			
	Germany	Sweden	Value-add segment	Development segment
Dec. 31, 2020				
Risk-free interest rate in %	-0.20	-0.20	-0.20	-0.20
Market risk premium in %	7.75	7.75	7.75	7.75
Levered beta	0.65	0.65	0.65	0.84
Country-specific premium in %	–	–	–	0.12
Dec. 31, 2019				
Risk-free interest rate in %	0.18	0.18	0.18	0.18
Market risk premium in %	7.75	7.75	7.75	7.75
Levered beta	0.52	0.53	0.52	0.62
Country-specific premium in %	–	0.10	–	0.08

A increase in the cost of capital will result in the following need for impairment:

	Rental segment				
	North area	West area	Sweden business area	Value-add segment	Development segment
Goodwill 2020 in € million	73.7	84.0	885.9	278.5	138.2
Impairment starts with an increase of the WACC in percentage points	0.05	0.17	0.25	9.70	3.40
Full write-off in the event of an increase in the WACC in %	0.06	0.18	0.55	19.50	4.40

If the planned sustainable rate of increase were to decline by 0.25 percentage points, this would result in a full impairment loss of € 73.7 million being recognized against the goodwill remaining in the North business area. In the West area, a full impairment loss of € 84.0 million would be recognized if the sustainable rate of increase were to decline by 0.25 percentage points. The estimated recoverable amount for the North business area exceeds its carrying amount by € 184.8 million and that of the West business area by € 810.3 million.

In the Sweden business area as well as in the Value-add and Development segments, a 0.25 percentage point drop in the sustainable rate of increase would not result in any goodwill impairment.

27 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, 2020	193.5	51.7	228.9	474.1
Additions due to business combinations	2.2	–	0.6	2.8
Additions	12.0	12.9	68.9	93.8
Capitalized modernization costs	1.7	0.6	0.2	2.5
Disposals	-6.0	-0.1	-14.8	-20.9
Transfer from investment properties	10.7	–	–	10.7
Transfer to investment properties	-12.8	–	–	-12.8
Other transfers	–	0.1	0.1	0.2
Revaluation from currency effects	–	0.0	0.3	0.3
As of Dec. 31, 2020	201.3	65.2	284.2	550.7
Accumulated depreciation				
As of Jan. 1, 2020	9.9	26.9	78.7	115.5
Depreciation in reporting year	4.3	9.8	51.7	65.8
Impairment	0.5	–	–	0.5
Reversal of impairments	-0.6	–	–	-0.6
Disposals	-4.1	-0.2	-14.1	-18.4
Other transfers	–	0.4	-0.3	0.1
Revaluation from currency effects	–	0.1	0.1	0.2
As of Dec. 31, 2020	10.0	37.0	116.1	163.1
Carrying amounts				
As of Dec. 31, 2020	191.3	28.2	168.1	387.6
Cost				
As of Jan. 1, 2019	143.8	46.0	130.3	320.1
Additions due to business combinations	–	0.6	2.7	3.3
Additions of right-of-use assets (IFRS 16) due to first-time application	29.1	–	53.1	82.2
Additions	28.0	5.1	59.0	92.1
Capitalized modernization costs	1.8	0.0	0.1	1.9
Grants received	-1.0	–	–	-1.0
Disposals	-0.4	–	-10.0	-10.4
Transfer from investment properties	3.3	–	–	3.3
Transfer to investment properties	-11.1	–	–	-11.1
Other transfers	–	–	-6.3	-6.3
As of Dec. 31, 2019	193.5	51.7	228.9	474.1
Accumulated depreciation				
As of Jan. 1, 2019	6.3	20.6	42.8	69.7
Additions due to business combinations	–	0.5	1.9	2.4
Depreciation in reporting year	4.2	5.8	47.8	57.8
Impairment	0.5	–	–	0.5
Reversal of impairments	-0.7	–	–	-0.7
Disposals	-0.4	–	-8.7	-9.1
Other transfers	–	–	-5.1	-5.1
As of Dec. 31, 2019	9.9	26.9	78.7	115.5
Carrying amounts				
As of Dec. 31, 2019	183.6	24.8	150.2	358.6

Accounting Policies

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.

The properties used by the company itself are subject to depreciation over a term of 50 years, with fixtures, furniture and office equipment subject to depreciation over a period of 3–13 years and technical equipment, plant and machinery over a period of 5–20 years.

As of December 31, 2020, the item "Owner-occupied properties" includes € 107.9 million (Dec. 31, 2019: € 106.2 million), which mainly enclose production costs for the construction of the new Vonovia headquarters in Bochum and of the BUWOG headquarters in Vienna, Austria.

Furthermore, carrying amounts of owner-occupied properties amounting to € 36.3 million as of December 31, 2020 (Dec. 31, 2019: € 30.6 million) are encumbered with land charges in favor of various lenders.

28 Investment Properties

in € million	
As of Jan. 1, 2020	**52,736.6**
Additions due to business combinations	123.0
Additions	605.1
Capitalized modernization costs	1,114.5
Grants received	-19.6
Transfer to property, plant and equipment	-10.7
Transfer from property, plant and equipment	12.8
Transfer from down payments made	42.2
Transfer from real estate inventories	14.2
Transfer to real estate inventories	-88.2
Transfer from assets held for sale	2.4
Transfer to assets held for sale	-298.1
Disposals	-217.6
Net income from fair value adjustments of investment properties	3,719.8
Revaluation of assets held for sale	78.2
Revaluation from currency effects	257.2
As of Dec. 31, 2020	**58,071.8**

As of Jan. 1, 2019	**43,490.9**
Additions due to business combinations	3,202.9
Additions of right-of-use assets (IFRS 16) due to first-time application	217.9
Additions	983.9
Capitalized modernization costs	1,117.6
Grants received	-14.2
Other transfers	-2.8
Transfer from property, plant and equipment	11.1
Transfer to property, plant and equipment	-3.3
Transfer from real estate inventories	5.4
Transfer to real estate inventories	-21.8
Transfer from assets held for sale	4.5
Transfer to assets held for sale	-316.1
Disposals	-158.2
Disposals due to changes in scope of consolidation	-4.8
Net income from fair value adjustments of investment properties	4,131.5
Revaluation of assets held for sale	59.7
Revaluation from currency effects	32.4
As of Dec. 31, 2019	**52,736.6**

Accounting Policies

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 hereditary building rights of third parties. Investment properties also include right-of-use assets from rented, developed and undeveloped land (hereditary building rights) and from rented residential and commercial properties (interim leasing) within the meaning of IFRS 16 that are 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.

Following initial recognition, investment properties are measured at fair value. Any change therein is recognized as affecting net income in the income statement. During the land or project development phase, reliable measurement at fair value is often not possible due to the lack of marketability and the lack of comparable transactions. In such cases, the cost model is continued until a reliable measurement can be carried out, but at the latest until the property in question is completed.

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.

The values as of December 31, 2020 include assets of € 425.4 million (2019: € 376.1 million) that are measured using the acquisition costs model, as their fair value cannot be measured reliably on a continuing basis.

The additions in 2020 include € 435.5 million (2019: € 493.0 million) in production costs for new construction activities.

The total amount reported for investment properties as of December 31, 2020, includes right-of-use assets from recognized hereditary building rights and interim leasing arrangements in the amount of € 1,433.2 million (2019: € 1,224.8 million). In this respect, we also refer to chapter [E42] Leases.

The majority of € 1,431.9 million is attributable to right-of-use assets from hereditary building rights (2019: € 1,223.7 million). This includes right-of-use assets of € 76.3 million (2019: € 78.1 million) relating 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 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.

For the investment properties encumbered with land charges in favor of various lenders, see chapter [E40] Non-derivative Financial Liabilities.

Directly Attributable Operating Expenses

Rental income from investment properties amounted to € 2,288.5 million (2019: € 2,077.9 million). Operating expenses directly relating to these properties amounted to € 260.4 million during the fiscal year (2019: € 218.7 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 leases. The minimum future lease receipts from these leases are due as follows:

in € million	Dec. 31, 2019	Dec. 31, 2020
Total minimum lease payments	124.2	89.5
Due within 1 year	29.2	25.7
Due in 1 to 5 years	58.6	53.8
Due after 5 years	36.4	10.0

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) method. Under the DCF methodology, the expected future income and costs of a property are forecasted over a detailed period and discounted to the date of valuation as the net present value. The detailed period for the German portfolio is 10 years. Due to the particular market situation in Austria and in order to reflect the extensive Austrian rent restrictions, a sales scenario involving the recurring sales of apartments is assumed for a subportfolio. In order to present these sales in the correct accounting period, the detailed period for the Austrian DCF model has been extended to 100 years.

The income in the DCF model mainly comprises expected rental income (current in-place rent, market rents as well as their development) taking vacancy losses into account. In Austria, it also includes sales revenues from a subportfolio. The expected rental income is derived for each location from the latest rent indices and rent tables (including Value AG, IVD, the Austrian Economic Chambers (WKÖ)) as well as from studies on spatial prosperity (Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Prognos, Value AG, Bertelsmannstiftung, the Austrian statistical office, Statistik Austria, etc.). The expected sales revenues are derived from historical sale prices as well as market data (e.g., WKÖ, EHL).

On the cost side, maintenance expenses and administrative costs are taken into account. In Germany, these are taken into account in accordance with the II. Berechnungsverordnung and inflated in the reporting period. The II. Berechnungsverordnung (BV) is the German Regulation on Calculations for Residential Buildings in accordance with the Second Housing Construction Law, which stipulates how economic viability calculations for homes are to be performed. These cost approaches are also transferred to the Austrian market. Further cost items are, for example, ground rents, non-allocable ancillary costs, rent losses and, in Austria, selling costs. 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 properties in the German portfolio 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., hereditary 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. As the detailed period in the Austrian DCF model has been extended to 100 years in order to present the sales scenarios in the correct accounting period, no terminal value is applied here.

The commercial properties in the portfolio are mainly small commercial units for the supply of the local residential environment. Different cost approaches are 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, hereditary building rights and full or part ownership

The Vonovia portfolio also contains project developments, existing areas with construction potential and land areas with inheritable building rights granted. Project developments are measured using the cost approach 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 once the construction work is complete. Existing areas with construction potential 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 its real estate portfolio in Germany and Austria as of December 31, 2020 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 market value resulting from the external review deviates from the internal valuation result by less than 0.1%.

For the portfolio in Sweden, the result of the external appraiser Savills Sweden AB in cooperation with Malmöbryggan Fastighetsekonomi AB was applied. The fair values for the Swedish portfolio were also calculated using a DCF method that is generally comparable to the procedure used by Vonovia, as explained above, but takes account of specific features of the Swedish real estate market. These include, by way of example, the reflection of the inclusive rents received (including costs for heating and water, among other things) and the explicit inclusion of expenses billed as ancillary expenses in Germany, for example, as operator costs on the owner's side.

The contractually fixed remuneration for the valuation report is not linked to the valuation results.

The right-of-use assets from leasehold contracts are recognized at their fair value. The fair value of the leasehold contracts corresponds to the present value of the standard market leasehold fee payments up until the end of the term of the hereditary building right in question. These are calculated based on the current amount of the ground rent. In order to calculate the present value, the leasehold fee payments are discounted using a property-specific interest rate.

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, contract 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 € 58,910.7 million as of December 31, 2020 (Dec. 31, 2019: € 53,316.4 million). This corresponds to a net initial yield for the developed land of 2.9% (total portfolio including Sweden and Austria; Dec. 31, 2019: 3.1%). For Germany, this results in an in-place-rent multiplier of 25.4 for the portfolio (Dec. 31, 2019: 23.5) and a fair value per m^2 of € 2,099 (Dec. 31, 2019: € 1,893). The in-place-rent multiplier and fair value for the Austrian portfolio come to 25.5 and € 1,570 per m^2 (Dec. 31, 2019: 24.7 and € 1,455 per m^2), while the values for Sweden come to 17.4 and € 2,090 per m^2 (Dec. 31, 2019: 17.1 and € 1,899 per m^2).

The material valuation parameters for the investment properties (Level 3) in the real estate portfolio are as follows as of December 31, 2020, broken down by regional markets:

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)
Dec. 31, 2020				
Berlin	7,815.5	2.4	7.9	7,805.1
Rhine Main area	4,934.0	22.2	6.7	4,905.2
Rhineland	4,213.1	20.0	7.0	4,186.1
Southern Ruhr area	4,483.3	28.3	8.6	4,446.5
Dresden	4,044.5	6.4	6.5	4,031.6
Hamburg	3,087.2	6.7	3.8	3,076.7
Munich	2,496.3	5.1	4.4	2,486.8
Stuttgart	2,319.9	6.4	2.1	2,311.4
Kiel	2,535.7	1.4	3.4	2,531.0
Hanover	2,053.6	0.9	2.3	2,050.4
Northern Ruhr area	1,893.8	8.9	6.2	1,878.7
Bremen	1,318.3	1.1	2.0	1,315.2
Leipzig	1,054.8	10.3	1.2	1,043.4
Westphalia	1,028.7	3.7	1.8	1,023.2
Freiburg	696.8	0.2	2.0	694.5
Other strategic locations	3,198.2	6.1	5.0	3,187.0
Total strategic locations	**47,173.7**	**130.1**	**70.9**	**46,972.8**
Non-strategic locations	609.2	12.9	1.1	595.2
Vonovia Germany	**47,782.8**	**142.9**	**72.0**	**47,567.9**
Vonovia Sweden**	6,219.4	0.0	0.0	6,219.4
Vonovia Austria**	2,832.2	17.5	50.2	2,764.5

* Fair value of the developed land excl. € 2,076.3 million for development, undeveloped land, inheritable building rights granted and other; € 1,221.1 million of this amount relates to investment properties. The investment properties balance sheet item also includes the present value in connection with payments for right-of-use assets in the amount of € 298.9 million.

** The valuation methods used for the portfolio in Austria and Sweden provide valuation parameters that are only partially comparable. 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 (€/m² p.a.)	Market rent residential (€/m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
261	14.00	7.88	1.8%	1.1%	3.9%	2.1%
282	13.97	9.33	1.8%	1.1%	4.6%	2.9%
280	13.71	8.22	1.7%	1.9%	4.9%	3.3%
276	12.69	7.00	1.5%	2.6%	4.8%	3.5%
247	14.08	6.74	1.7%	2.2%	4.8%	3.3%
267	14.36	8.46	1.6%	1.3%	4.5%	3.1%
271	13.97	11.41	1.9%	0.6%	4.4%	2.7%
282	14.61	9.20	1.8%	1.2%	4.7%	3.1%
268	14.67	7.42	1.7%	1.7%	4.9%	3.4%
269	14.00	7.45	1.7%	2.1%	4.8%	3.3%
278	13.22	6.43	1.3%	3.3%	5.2%	4.2%
274	13.27	6.94	1.8%	2.1%	4.8%	3.2%
262	14.87	6.70	1.7%	2.9%	4.9%	3.3%
273	13.17	7.25	1.5%	2.0%	4.9%	3.6%
278	15.22	8.35	1.7%	1.0%	4.5%	2.9%
278	14.09	7.64	1.6%	2.3%	4.9%	3.5%
270	**13.85**	**7.74**	**1.7%**	**1.9%**	**4.7%**	**3.1%**
274	14.72	7.58	1.6%	2.7%	4.8%	3.2%
270	**13.86**	**7.74**	**1.7%**	**1.9%**	**4.7%**	**3.1%**
n.a.	n.a.	10.46	2.0%	0.9%	5.3%	3.7%
n.a.	19.43	5.61	1.4%	2.4%	5.4%	n.a.

	Valuation results*			
Regional market	Fair value (in € million)	thereof assets held for sale (in € million)	thereof owner-occupied properties (in € million)	thereof investment properties (in € million)
Dec. 31, 2019				
Berlin	7,450.0	1.7	5.9	7,442.4
Rhine Main area	4,432.0	12.1	5.6	4,414.3
Rhineland	3,822.7	5.8	7.4	3,809.5
Southern Ruhr area	3,850.5	7.5	3.9	3,839.1
Dresden	3,584.8	0.0	6.1	3,578.7
Hamburg	2,762.2	6.4	2.7	2,753.1
Munich	2,283.3	6.2	3.8	2,273.3
Stuttgart	2,122.9	1.5	2.0	2,119.3
Kiel	2,101.9	0.0	2.6	2,099.3
Hanover	1,873.5	3.4	2.2	1,868.0
Northern Ruhr area	1,696.9	6.7	5.3	1,684.9
Bremen	1,182.3	0.0	1.8	1,180.5
Leipzig	958.3	10.6	1.1	946.7
Westphalia	903.2	0.0	1.1	902.1
Freiburg	657.2	0.0	1.9	655.3
Other strategic locations	2,899.8	2.8	4.2	2,892.8
Total strategic locations	**42,581.5**	**64.7**	**57.6**	**42,459.3**
Non-strategic locations	694.7	64.6	2.0	628.1
Vonovia Germany	**43,276.2**	**129.3**	**59.5**	**43,087.4**
Vonovia Sweden**	5,642.0	0.0	0.0	5,642.0
Vonovia Austria**	2,654.9	0.4	0.0	2,654.4

* Fair value of the developed land excl. € 1,743.4 million for development, undeveloped land, inheritable building rights granted and other; € 1,058.2 million of this amount relates to investment properties. The investment properties balance sheet item also includes the present value in connection with payments for right-of-use assets in the amount of € 294.6 million.

** 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.

The inflation rate applied to the valuation procedure comes to 1.6%. For the Austrian portfolio, a sales strategy with an average selling price of € 2,172 per m² was assumed for 53.8% of the properties.

Net income from the valuation of investment properties amounted to € 3,719.8 million in the 2020 fiscal year (Dec. 31, 2019: € 4,131.5 million).

Sensitivity Analyses

The sensitivity analyses performed on Vonovia's real estate portfolio show the impact of value drivers dependent upon market developments. Those influenced are in particular the market rents and their development, the amount of assessed 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 for demand in 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.

Management costs residential (€ per residential unit p.a.)	Maintenance costs total residential (€/m² p.a.)	Market rent residential (€/m² per month)	Market rent increase residential	Stabilized vacancy rate residential	Discount rate total	Capitalized interest rate total
Valuation parameters investment properties (Level 3)						
258	14.10	7.79	1.8%	1.2%	4.3%	2.5%
278	14.14	9.10	1.8%	1.1%	4.9%	3.2%
275	13.78	8.00	1.7%	1.9%	5.1%	3.5%
272	12.69	6.76	1.5%	2.6%	5.1%	3.8%
243	14.19	6.74	1.7%	2.2%	5.2%	3.7%
263	14.37	8.22	1.6%	1.3%	4.7%	3.3%
266	14.03	11.22	1.9%	0.6%	4.6%	2.9%
276	14.48	9.07	1.8%	1.3%	5.0%	3.3%
263	14.58	7.22	1.7%	1.7%	5.3%	3.8%
264	14.08	7.29	1.7%	2.0%	5.0%	3.5%
273	13.24	6.26	1.2%	3.4%	5.5%	4.5%
268	13.21	6.74	1.8%	2.1%	5.1%	3.5%
258	14.78	6.52	1.8%	3.2%	5.1%	3.5%
268	13.20	6.95	1.5%	1.9%	5.1%	3.8%
274	15.05	8.21	1.7%	1.0%	4.6%	3.0%
273	14.09	7.39	1.6%	2.3%	5.2%	3.7%
266	**13.88**	**7.57**	**1.7%**	**1.9%**	**4.9%**	**3.4%**
269	14.56	7.34	1.7%	2.4%	5.2%	3.4%
266	**13.89**	**7.57**	**1.7%**	**1.9%**	**4.9%**	**3.4%**
n.a.	n.a.	9.76	2.0%	0.9%	5.7%	3.7%
n.a.	19.25	5.38	1.6%	1.6%	5.6%	n.a.

In addition, factors other than demand can have an impact on these parameters. Examples include changes in the portfolio, 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.

	Change in value in % under varying parameters		
	Management costs residential	Maintenance costs residential	Cost increase/inflation
Regional market	-10%/10%	-10%/10%	-0.5%/+0.5% points
Dec. 31, 2020			
Berlin	0.6/-0.6	1.9/-1.9	7.2/-7.1
Rhine Main Area	0.4/-0.4	1.3/-1.3	3.2/-3.4
Rhineland	0.5/-0.5	1.6/-1.6	3.7/-3.8
Southern Ruhr Area	0.8/-0.8	2.1/-2.1	4.6/-4.7
Dresden	0.7/-0.7	2.1/-2.1	4.7/-4.8
Hamburg	0.5/-0.5	1.7/-1.7	4.0/-4.2
Munich	0.3/-0.3	1.1/-1.1	3.5/-3.6
Stuttgart	0.5/-0.5	1.5/-1.5	3.3/-3.5
Kiel	0.7/-0.7	2.1/-2.1	4.3/-4.4
Hanover	0.6/-0.6	1.9/-1.9	4.2/-4.3
Northern Ruhr Area	0.9/-0.9	2.6/-2.6	4.6/-4.7
Bremen	0.7/-0.7	2.0/-2.0	5.0/-5.1
Leipzig	0.7/-0.7	2.2/-2.2	5.0/-5.0
Westphalia	0.7/-0.7	2.1/-2.1	4.2/-4.3
Freiburg	0.5/-0.5	1.7/-1.7	4.0/-4.1
Other strategic locations	0.6/-0.6	1.9/-1.9	3.9/-4.0
Total strategic locations	0.6/-0.6	1.8/-1.8	4.6/-4.7
Non-strategic locations	0.7/-0.7	2.4/-2.3	6.5/-6.4
Vonovia Germany	**0.6/-0.6**	**1.8/-1.8**	**4.6/-4.7**
Vonovia Sweden*	n.a.	n.a.	1.4/-1.4
Vonovia Austria*	n.a.	0.3/-0.3	0.3/-0.4

* 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.

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, 2020, around 133,000 residential units in Vonovia's portfolio were subject to one or several contractual restrictions or other obligations.

> **Sale restrictions:** As of December 31, 2020, around 63,000 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 residential units and provisions requiring the consent of certain representatives of the original seller prior to sale.

Change in value in % under varying parameters			
Market rent residential	Market rent increase residential	Stabilized vacancy rate residential	Discounting and capitalized interest rates total
-2%/+2%	-0.2%/+0.2% points	-1%/+1% points	-0.25%/+0.25% points
-2.2/2.2	-10.1/13.1	1.5/-1.7	14.3/-11.1
-2.3/2.3	-7.4/8.7	1.0/-1.5	9.3/-7.8
-2.3/2.3	-7.1/8.3	1.6/-1.6	8.6/-7.4
-2.4/2.5	-7.2/8.4	1.9/-1.9	8.1/-7.0
-2.5/2.5	-7.4/8.5	1.8/-1.8	8.5/-7.3
-2.3/2.3	-7.7/9.1	1.2/-1.6	9.4/-7.9
-2.1/2.1	-8.2/9.8	0.7/-1.5	10.9/-8.9
-2.3/2.3	-7.3/8.6	1.3/-1.5	9.0/-7.6
-2.4/2.3	-7.1/8.2	1.8/-1.8	8.1/-7.0
-2.4/2.4	-7.2/8.4	1.7/-1.7	8.5/-7.2
-2.6/2.6	-6.3/7.1	2.0/-2.0	6.5/-5.8
-2.4/2.4	-7.7/9.0	1.8/-1.8	8.9/-7.6
-2.4/2.5	-7.4/8.6	1.8/-1.8	8.5/-7.2
-2.3/2.3	-6.8/7.8	1.7/-1.8	7.7/-6.7
-2.4/2.4	-8.0/9.4	1.2/-1.6	9.7/-8.1
-2.4/2.4	-6.9/7.9	1.6/-1.7	7.9/-6.8
-2.3/2.3	**-7.8/9.3**	**1.5/-1.7**	**9.6/-8.0**
-2.5/2.5	-8.5/10.2	1.9/-1.9	10.8/-9.0
-2.3/2.3	**-7.8/9.3**	**1.5/-1.7**	**9.6/-8.0**
-3.0/3.0	-1.3/1.3	0.8/-1.2	7.5/-6.5
-0.3/0.3	-0.9/1.0	0.9/-0.9	4.7/-4.3

> **Preemptive rights on preferential terms:** Around 6,000 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 residential 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 95,000 residential 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:** Around 56,000 apartments are subject to minimum maintenance obligations. Because minimum maintenance obligations have been exceeded in recent years, the weighted average of the annual necessary spending on maintenance and modernization has changed to € 6.52 per m². Furthermore, around 49,000 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 42,000 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 residential 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.

All contractual obligations that have a material impact on the valuation were taken into account accordingly.

29 Financial Assets

	Dec. 31, 2019		Dec. 31, 2020	
in € million	non-current	current	non-current	current
Non-consolidated subsidiaries	2.0	–	1.5	–
Joint venture investments valued at equity	29.5	–	32.9	–
Other investments	140.2	–	309.7	–
Loans to other investments	33.3	–	33.3	–
Securities	4.4	–	4.9	–
Other non-current loans	11.7	–	11.3	–
Derivatives	110.6	0.7	22.4	0.4
	331.7	**0.7**	**416.0**	**0.4**

Accounting Policies

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.

With regard to the business model criterion, all financial investments at Vonovia are to be assigned to the "hold to collect" 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 in 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.

The carrying amount of financial assets corresponds to maximum risk of loss as of the reporting date.

The € 160.2 million increase in other investments results from the acquisition of a 2.6% stake in the Vesteda Residential Fund FGR, Amsterdam, Netherlands.

The loans to other investments not yet due relate to a loan to the property fund DB Immobilienfonds 11 Spree-Schlange von Quistorp KG.

Non-current derivatives include positive market values from cross currency swaps in the amount of € 18.4 million (Dec. 31, 2019: € 29.1 million), together with positive market values in the amount of € 4.0 million (Dec. 31, 2019: € 81.5 million) from embedded derivatives and other interest rate derivatives. The decrease in the the reporting year results from the utilization of termination options in connection with refinancing measures relating to Hembla in the amount of € 75.5 million.

30 Other Assets

in € million	Dec. 31, 2019 non-current	Dec. 31, 2019 current	Dec. 31, 2020 non-current	Dec. 31, 2020 current
Right to reimbursement for transferred pensions	4.4	–	4.3	–
Receivables from insurance claims	0.8	14.9	0.8	17.8
Miscellaneous other assets	49.5	123.1	123.4	101.2
	54.7	**138.0**	**128.5**	**119.0**

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 € 0.8 million (Dec. 31, 2019: € 0.8 million).

The increase in non-current miscellaneous other assets is due primarily to payments made in advance for real estate assets.

31 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 decrease in the 2020 fiscal year mainly results from the reimbursement of tax prepayments and capital gains tax to be credited at Vonovia SE and its biggest domestic subsidiary, as well as at the largest Austrian tax group.

32 Inventories

Accounting Policies

Inventories are valued at cost or at their net realizable value, whichever is lower.

The raw materials and supplies recognized relate to repair materials for the internal craftsmen's organization.

33 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	7.1	-5.6	20.7	11.0	18.3	3.3	5.7	4.8	65.3
Receivables from the sale of real estate properties	0.7	-0.2	24.5			0.9	1.6	0.6	28.1
Contract assets			119.2	0.6	0.8	0.3	0.6		121.5
Receivables from property letting	85.2	-47.2							38.0
Receivables from other management	0.1	-0.1	0.5	0.6					1.1
Receivables from other supplies and services	6.9	-2.1	9.9		0.2				14.9
As of Dec. 31, 2020	**100.0**	**-55.2**	**174.8**	**12.2**	**19.3**	**4.5**	**7.9**	**5.4**	**268.9**
Receivables from the sale of investment properties	6.2	-4.5	49.8	2.5	7.5	2.6	1.5	1.0	66.6
Receivables from the sale of real estate properties			26.2						26.2
Contract assets			57.8		0.0	1.4	0.2		59.4
Receivables from property letting	76.0	-34.3							41.7
Receivables from other management			2.3						2.3
Receivables from other supplies and services	11.0	-1.5	–						9.5
As of Dec. 31, 2019	**93.2**	**-40.3**	**136.1**	**2.5**	**7.5**	**4.0**	**1.7**	**1.0**	**205.7**

* 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.

Accounting Policies

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 a 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.

The carrying amounts of current trade receivables correspond to their fair values.

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. For the 2020 fiscal year, the change in GDP was only included as an indicator for further analysis of the change in the expected credit loss. In the resulting review of current historical default rates towards the end of the 2020 fiscal year, however, no impact from the significant change in GDP relative to the reduction in credit quality was identified. Neither defaults nor individual impairment losses increased towards the end of the fiscal year. In contrast, it can be assumed that the credit risk of debtors did not increase significantly during the pandemic, taking into account numerous government measures. The particular characteristics of the business model and the resulting debtors, as well as government support of the overall economy, have uniquely meant that in this pandemic, GDP is not a good indicator of the future development of expected credit losses. In principle, the correlation is still considered to be reliable.

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 average receivables taken as a basis do not include receivables subject to specific valuation allowances that were written off in full.

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.

This is performed systematically by way of a receivables management system according to the aspects receivables relating to ancillary expenses, product-related aspects, and rent adjustments and payment difficulties.

Impairment losses on trade receivables developed as follows:

in € million	
Impairment losses as of Jan. 1, 2020	**40.3**
Addition	40.7
Addition due to business combinations	0.2
Utilization	-25.3
Reversal	-0.7
Impairment losses as of Dec. 31, 2020	**55.2**
Impairment losses as of Jan. 1, 2019	**39.5**
Addition	30.5
Addition due to business combinations	1.5
Utilization	-29.3
Reversal	-1.9
Impairment losses as of Dec. 31, 2019	**40.3**

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 € 9.6 million (Dec. 31, 2019: € 7.8 million), was set up depending on the term. In cases involving payment difficulties, the provision corresponded to between 40% and 95% of the receivables and amounted to € 10.4 million in total (Dec. 31, 2019: € 4.9 million). The risk provisions for former tenants correspond to 95% of the receivables and amount to € 17.5 million in total (Dec. 31, 2019: € 17.2 million).

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	2019	2020
Expenses for the derecognition of receivables	1.9	3.7
Income from the receipt of derecognized receivables	7.1	3.7

34 Cash and Cash Equivalents

Accounting Policies

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.

Cash and cash equivalents are measured using the general impairment approach in accordance with IFRS 9.

Cash and cash equivalents include cash on hand, checks and deposits at banking institutions totaling € 613.3 million (Dec. 31, 2019: € 500.7 million).

Bank balances in the amount of € 159.9 million (Dec. 31, 2019: € 97.3 million) are restricted with regard to their use.

35 Real Estate Inventories

Accounting Policies

The **development business related to the acquisition** 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, a valuation in accordance with IAS 2 at the lower of amortized cost and net realizable value is performed due to the intention to sell, with a corresponding disclosure under real estate inventories.

Recognized real estate inventories in the amount of € 570.4 million (Dec. 31, 2019: € 358.3 million) mainly concern development projects. 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.

36 Assets Held for Sale

Accounting Policies

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.

The assets held for sale include properties totaling € 164.9 million (Dec. 31, 2019: € 134.1 million) for which notarized purchase contracts had already been signed as of the reporting date.

Section (E): Capital Structure

37 Total Equity

Accounting Policies

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.

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 as well as currency translation differences are recognized in other comprehensive income.

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.

Development of the Subscribed Capital

in €	
As of Jan. 1, 2020	**542,273,611.00**
Capital increase against non-cash contributions on July 30, 2020 (scrip dividend)	6,613,688.00
Capital increase against cash contributions on September 8, 2020	17,000,000.00
As of Dec. 31, 2020	**565,887,299.00**

Development of the Capital Reserves

in €	
As of Jan. 1, 2020	**8,239,693,576.98**
Premium from capital increase for scrip dividend on July 30, 2020	340,194,883.34
Premium from capital increase on September 8, 2020	986,000,000.00
Transaction costs on the issue of new shares (after allowing for deferred taxes)	-6,017,445.75
Withdrawal from capital reserve	-522,170,759.99
Other changes not affecting net income	161,106.75
As of Dec. 31, 2020	**9,037,861,361.33**

Cash Capital Increase

On September 3, 2020, with the agreement of the Supervisory Board's Finance Committee, Vonovia SE increased the share capital in return for a cash contribution, partially using the 2018 authorized capital and excluding a subscription right, by € 17,00,000.00 from € 548,887,299.00 to € 565,887,299.00. The increase was entered in the commercial register on September 8, 2020.

The 17,000,000 new no-par-value registered shares were placed with institutional investors in the scope of a private placement by means of an accelerated book building procedure and carry dividend rights as of January 1, 2020.

The shares were granted at a placement price of € 59.00 per share, delivering issue proceeds to Vonovia SE in the amount of € 1,003.0 million before commission and expenses. The proceeds from this capital increase were used to repay debt due in the fourth quarter of 2020. The additional proceeds from the issue are to be used for future growth opportunities that arise in the current environment and which Vonovia intends to pursue in line with its investment criteria.

Dividend

The Annual General Meeting held on June 30, 2020, resolved to pay a dividend for the 2019 fiscal year in the amount of € 1.57 per share, and € 851.4 million in total.

As in previous years, shareholders were offered the option of choosing between being paid the dividend in cash or being granted new shares. During the subscription period, shareholders holding a total of 40.7% of the shares carrying dividend rights opted for the scrip dividend as opposed to the cash dividend. As a result, 6,613,688 new shares were issued using the company's authorized capital pursuant to Section 5b of the Articles of Association ("2018 authorized capital") at a subscription price of € 52.438, i.e., a total amount of € 346,808,571.34. The total amount of the dividend distributed in cash therefore came to € 504,560,997.93.

Authorized Capital

After being used in connection with the two capital increases in 2020, the 2018 authorized capital fell by € 23,613,688.00 from € 218,354,736.00 to € 194,741,048.00 as of December 31, 2020. Shareholder subscription rights for the 2018 authorized capital can be excluded.

Retained Earnings

As of December 31, 2020, retained earnings of € 13,368.2 million (Dec. 31, 2019: € 10,534.4 million) were reported. This figure includes actuarial gains and losses of € -117.2 million (Dec. 31, 2019: € -104.6 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 € -52.8 million (2019: € -42.3 million) mainly include additional purchases of shares in Hembla, which are not classified as a linked transaction, and the allocation of guaranteed dividends.

Other Reserves

Changes in other comprehensive income during the period in the amount of € 153.9 million (2019: € 38.1 million) are mainly the result of currency translation differences due to changes in the exchange rate for the Swedish krona against the euro.

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.

As part of the ongoing review and restructuring of relationships with minority shareholders, these contractual relationships are being reviewed and will be renegotiated on a case-by-case basis.

Due to the reassessment of some of these relationships and the put options established in the contracts, an amount of € 147.0 million was reclassified from “Non-controlling interests” within equity to “Purchase price liabilities from put options/rights to reimbursement” within current “Derivatives” in the fiscal year. As a result of further share acquisitions in Hembla during the year, non-controlling interests decreased by a further € 54.1 million.

38 Provisions

	Dec. 31, 2019		Dec. 31, 2020	
in € million	non-current	current	non-current	current
Provisions for pensions and similar obligations	**569.9**	**–**	**627.8**	**–**
Provisions for taxes (current income taxes excl. deferred taxes)	**–**	**211.1**	**–**	**124.2**
Other provisions				
Environmental remediation	13.0	–	11.5	–
Personnel obligations	61.7	71.8	52.3	56.3
Outstanding trade invoices	–	109.8	–	93.4
Miscellaneous other provisions	17.8	137.5	19.7	115.1
Total other provisions	**92.5**	**319.1**	**83.5**	**264.8**
Total provisions	**662.4**	**530.2**	**711.3**	**389.0**

Provisions for Pensions and Similar Obligations

Accounting Policies

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 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.

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 4,523 (Dec. 31, 2019: 3,866) eligible persons. The increase is due primarily to the fact that eligible persons for whom a final agreement on the reimbursement model was reached with the pension provider were included in the measurement of pensions for the first time.

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 (eligible persons: 307). 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.

Overview of the most important basic data for existing pension plans (all of which have already been closed):

	VO 1/VO 2 Veba Immobilien	VO 60/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	Yes	Yes	Depends on individual grouping
Total pension model based on final salary	Yes	No	No
Net benefit limit incl. state pension	None	Yes	None
Gross benefit limit	Yes	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	Age of 55	Age of 55 (half)
Legal basis	Works agreement	Works agreement	Commitment to executives in individual contracts
Number of eligible persons	378	662	398

	VO 1991/VO 2002 Gagfah	VO guideline Gagfah M	VO 2017 VBL-Ersatzversorgung
Type of benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits	Retirement, invalidity and surviving dependent benefits
Pensionable remuneration	Salary September of each year	Final salary	Salary of each year
Max. pension level	Module p.a.	Yes	Module p.a.
Total pension model based on final salary	No	Yes	No
Net benefit limit incl. state pension	None	None	None
Gross benefit limit	None	Yes	None
Adjustment of pensions	1 % p.a.	Section 16, (1,2) BetrAVG	1 % p.a.
Supplementary periods	Age of 55	Age of 55	None
Legal basis	Works agreement	Works agreement	Individual agreement
Number of eligible persons	1,110	393	107

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 Labor 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 in each case made related to the end of the year and with economic effect for the following year.

Actuarial Assumptions

in %	Dec. 31, 2019	Dec. 31, 2020
Actuarial interest rate	1.00	0.70
Pension trend	1.75	1.75
Salary trend	2.75	2.50

Due to a change at Bloomberg, the Bloomberg Barclays Classification System ("BCLASS"), rather than the Bloomberg Industry Classification System ("BICS"), will be used in the future as the basis for determining the portfolio of high-quality corporate bonds of the RATE:Link method of Willis Towers Watson that is relevant for the determination of interest rates. As a result of the refinement in the interest rate method, the actuarial interest rate as of December 31, 2020, has increased by around 30 basis points, reducing the defined benefit obligation (DBO) by € 32.0 million.

The 2018 G mortality tables of Prof. Dr. Klaus Heubeck have been taken for the biometric assumptions without any changes.

The defined benefit obligation (DBO) developed as follows:

in € million	2019	2020
DBO as of Jan. 1	**541.8**	**591.0**
Interest expense	9.0	5.8
Current service cost	10.9	12.2
Actuarial gains and losses:		
Changes in the biometric assumptions	-5.1	-8.4
Changes in the financial assumptions	59.3	27.4
Transfer	–	44.9
Benefits paid	-24.9	-24.8
DBO as of Dec. 31	**591.0**	**648.1**

The transfer is due to the final agreement on the reimbursement model reached with a pension provider.

The present value of the pension obligation is divided among the groups of eligible persons as follows:

in € million	Dec. 31, 2019	Dec. 31, 2020
Active employees	128.1	140.0
Former employees with vested pension rights	114.9	134.4
Pensioners	348.0	373.7
DBO as of Dec. 31	**591.0**	**648.1**

Plan assets comprise solely reinsurance contracts. The fair value of the plan assets has developed as follows:

in € million	2019	2020
Fair value of plan assets as of Jan. 1	**22.3**	**21.8**
Return calculated using the actuarial interest rate	0.4	0.2
Actuarial gains:		
Changes in the financial assumptions	0.5	0.4
Benefits paid	-1.4	-1.2
Fair value of plan assets as of Dec. 31	**21.8**	**21.2**

The actual return on plan assets amounted to € 0.6 million during the fiscal year (2019: € 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, 2019	Dec. 31, 2020
Present value of funded obligations	39.6	31.2
Present value of unfunded obligations	551.3	616.9
Total present value of defined benefit obligations	**590.9**	**648.1**
Fair value of plan assets	-21.8	-21.1
Net liability recognized in the balance sheet	**569.1**	**627.0**
Other assets to be recognized	0.8	0.8
Provisions for pensions recognized in the balance sheet	**569.9**	**627.8**

In 2020, actuarial losses of € 18.6 million (excluding deferred taxes) were recognized in other comprehensive income (2019: € 53.7 million).

The weighted average term of the defined benefit obligations is 16.1 years (Dec. 31, 2019: 15.8 years).

The following table contains the estimated, 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
2021	27.3
2022	26.5
2023	26.1
2024	26.0
2025	26.2
2026–2030	127.1

Sensitivity Analyses

An increase or decrease in the material actuarial assumptions would have led to the following defined benefit obligation as of December 31, 2020, providing the other assumptions did not change:

in € million		DBO
Actuarial interest rate	Increase by 0.5%	599.5
	Decrease by 0.5%	703.5
Pension trend	Increase by 0.25%	660.7
	Decrease by 0.25%	635.2

An increase in life expectancy of 4.9% would have resulted in an increase in the DBO of € 31.0 million as of December 31, 2020. This percentage rise corresponds to a one-year increase in the life expectancy of a man who was 65 at the reporting date.

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 € 4.3 million (Dec. 31, 2019: € 4.4 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.

Other Provisions

Accounting Policies

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.

A **contingent liability** is a possible obligation toward 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 generally not recognized.

Development of Other Provisions during the Fiscal Year

in € million	As of Jan. 1, 2020	Additions due to changes in scope of consolidation	Additions	Reversals	Interest accretion to provisions	Netting plan assets	Utilization	As of Dec. 31, 2020
Other provisions								
Environmental remediation	13.0	–	–	–	0.2	–	-1.7	11.5
Personnel obligations	133.5	0.1	55.8	-5.1	0.1	–	-75.8	108.6
Outstanding trade invoices	109.8	2.8	97.2	-13.6	–	–	-102.8	93.4
Miscellaneous other provisions	155.3	13.9	45.5	-17.2	0.4	–	-63.1	134.8
	411.6	**16.8**	**198.5**	**-35.9**	**0.7**	**–**	**-243.4**	**348.3**

Development of Other Provisions during the Previous Year

in € million	As of Jan. 1, 2019	Additions due to changes in scope of con-solidation	Additions	Reversals	Interest accretion to provisions	Netting plan assets	Utilization	As of Dec. 31, 2019
Other provisions								
Environmental remediation	15.0	–	–	-0.2	0.2	–	-2.0	13.0
Personnel obligations	126.8	–	70.3	-5.2	0.3	–	-58.7	133.5
Outstanding trade invoices	61.7	–	131.1	-8.0	–	–	-75.0	109.8
Miscellaneous other provisions	162.8	0.3	52.0	-12.3	0.8	–	-48.3	155.3
	366.3	**0.3**	**253.4**	**-25.7**	**1.3**	**–**	**-184.0**	**411.6**

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) determined in accordance with IFRS 2 of € 30.0 million (Dec. 31, 2019: € 23.7 million) (see chapter [E47] Share-Based Payments).

The cost items under miscellaneous other provisions include as material individual costs legal disputes in the amount of € 23.6 million (2019: € 14.1 million), litigation costs in the amount of € 10.7 million (2019: € 11.7 million), costs associated with company audits in the amount of € 6.0 million (2019: € 0.1 million), onerous contracts in the amount of € 2.1 million (2019: € 2.3 million) and, in the previous year, € 0.1 million costs in connection with tax returns.

The Group expects to settle most of the provision in the coming year.

39 Trade Payables

in € million	Dec. 31, 2019 non-current	Dec. 31, 2019 current	Dec. 31, 2020 non-current	Dec. 31, 2020 current
Liabilities				
from property letting	–	73.8	–	85.0
from other supplies and services	5.1	145.3	5.0	144.5
	5.1	**219.1**	**5.0**	**229.5**

40 Non-derivative Financial Liabilities

in € million	Dec. 31, 2019 non-current	Dec. 31, 2019 current	Dec. 31, 2020 non-current	Dec. 31, 2020 current
Non-derivative financial liabilities				
Liabilities to banks	6,853.9	549.1	6,375.2	533.8
Liabilities to other creditors	14,344.1	1,727.6	15,999.9	1,060.7
Deferred interest from non-derivative financial liabilities	–	100.2	–	115.1
	21,198.0	**2,376.9**	**22,375.1**	**1,709.6**

Accounting Policies

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 are expired or settled 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.

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, € 109.8 million (Dec. 31, 2019: € 89.7 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, 2020	First-time consoli-dation	New loans	Scheduled repayments	Unschedu-led repay-ments	Adjusted for effecti-ve interest method	Other adjust-ments	Exchange rate diffe-rences	As of Dec. 31, 2020
Bond (USD)	219.4					-17.4			202.0
Bond (EMTN)	13,545.9		2,700.0	-1,052.3		-7.1			15,186.5
Commercial paper	300.0			-300.0					0.0
Promissory note loan	49.9								49.9
Mortgages	9,359.5	97.9	1,476.6	-874.2	-1,498.2	-125.7		95.3	8,531.2
Deferred interest	100.2						14.9		115.1
	23,574.9	**97.9**	**4,176.6**	**-2,226.5**	**-1,498.2**	**-150.2**	**14.9**	**95.3**	**24,084.7**

The non-derivative financial liabilities developed as follows in the previous year:

in € million	As of Jan. 1, 2019	First-time consoli-dation	New loans	Scheduled repay-ments	Unschedu-led repay-ments	Adjusted for effecti-ve interest method	Other adjust-ments	Exchange rate diffe-rences	As of Dec. 31, 2019
Bond	599.6			-600.0		0.4			0.0
Bonds (Sweden)	62.4			-56.9		-3.9		-1.6	0.0
Bonds (USD)	215.1					4.3			219.4
Bonds (EMTN)	11,760.3		3,000.0	-500.0	-697.7	-16.7			13,545.9
Bond (Hybrid)	699.2			-700.0		0.8			0.0
Commercial paper	420.0		300.0	-420.0					300.0
Promissory note loan			50.0			-0.1			49.9
Mortgages	6,259.5	1,765.4	1,983.2	-288.6	-363.4	-12.3	0.6	15.1	9,359.5
Deferred interest	119.9						-19.7		100.2
	20,136.0	**1,765.4**	**5,333.2**	**-2,565.5**	**-1,061.1**	**-27.5**	**-19.1**	**13.5**	**23,574.9**

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 € 18.9 million lower than the recognized value (Dec. 31, 2019: € 37.8 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:

				Repayment of the nominal obligations is as follows:					
in € million	Nominal obligation Dec. 31, 2020	Maturity	Average interest rate	2021	2022	2023	2024	2025	from 2026
Bond (USD)*	185.0	2023	4.58%			185.0			
Bond (EMTN)*	500.0	2021	3.63%	500.0					
Bond (EMTN)*	500.0	2022	2.13%		500.0				
Bond (EMTN)*	500.0	2025	1.50%					500.0	
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	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)*	700.0	2026	1.50%						700.0
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 (EMTN)*	500.0	2025	1.80%					500.0	
Bond (EMTN)*	500.0	2029	0.50%						500.0
Bond (EMTN)*	500.0	2034	1.13%						500.0
Bond (EMTN)*	500.0	2023	0.13%			500.0			
Bond (EMTN)*	500.0	2027	0.63%						500.0
Bond (EMTN)*	500.0	2039	1.63%						500.0
Bond (EMTN)*	500.0	2024	1.63%				500.0		
Bond (EMTN)*	500.0	2030	2.25%						500.0
Bond (EMTN)*	750.0	2026	0.63%						750.0
Bond (EMTN)*	750.0	2030	1.00%						750.0
Promissory note loan*	50.0	2026	0.29%						50.0
Mortgages**	8,516.6	2029	1.33%	1,095.3	482.5	876.8	943.1	745.1	4,373.8
	24,051.6			**1,595.3**	**2,582.5**	**3,061.8**	**2,943.1**	**2,245.1**	**11,623.8**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.
** For a portion of the mortgages, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.

In the previous year, the maturities and average interest rates of the nominal obligations were as follows:

				Repayment of the nominal obligations is as follows:					
in € million	Nominal obligation Dec. 31, 2019	Maturity	Average interest rate	2020	2021	2022	2023	2024	from 2025
Bond (USD)*	185.0	2023	4.58%				185.0		
Bond (EMTN)*	500.0	2021	3.63%		500.0				
Bond (EMTN)*	500.0	2022	2.13%			500.0			
Bond (EMTN)*	300.6	2020	0.88%	300.6					
Bond (EMTN)*	500.0	2025	1.50%						500.0
Bond (EMTN)*	751.7	2020	1.63%	751.7					
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	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 (EMTN)*	500.0	2025	1.80%						500.0
Bond (EMTN)*	500.0	2029	0.50%						500.0
Bond (EMTN)*	500.0	2034	1.13%						500.0
Bond (EMTN)*	500.0	2023	0.13%				500.0		
Bond (EMTN)*	500.0	2027	0.63%						500.0
Bond (EMTN)*	500.0	2039	1.63%						500.0
Commercial paper*	300.0	2020	-0.23%	300.0					
Promissory note loan*	50.0	2026	0.29%						50.0
Mortgages**	9,217.7	2030	1.65%	925.7	972.5	604.9	919.4	1,267.0	4,528.2
	23,405.0			**2,278.0**	**1,472.5**	**2,704.9**	**3,104.4**	**2,767.0**	**11,078.2**

* Under the conditions of existing loan agreements, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.
** For a portion of the mortgages, Vonovia is obliged to fulfill certain financial covenants, which it fulfilled.

The loan repayments shown for the following years contain contractually fixed minimum repayment amounts.

Of the nominal obligations to creditors, € 7,287.6 million (Dec. 31, 2019: € 8,108.6 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.

Financial liabilities to banks and other creditors have an average interst rate of approximately 1.41%. The financial liabilities as a whole do not contain any significant short-term interest rate change 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 [G53] Financial Risk Management).

Repayment of Corporate Bonds

On March 30, 2020, Vonovia repaid the remaining capital of € 300.6 million on a bond issued by Dutch subsidiary Vonovia Finance B.V.

On December 15, 2020, Vonovia repaid a bond of € 751.7 million issued by Dutch subsidiary Vonovia Finance B.V. as scheduled.

Repayment of Commercial Paper

On February 28, 2020, € 300.0 million was repaid under the Commercial Paper Program that the Dutch subsidiary Vonovia Finance B.V. had taken out for the Vonovia Group. This means that the Commercial Paper Program has been repaid in full.

Repayment of Secured Financing

Secured financing with a volume of around SEK 13.7 billion (approximately € 1.3 billion) was repaid in the Swedish subgroup in August and September.

Secured financing with remaining capital of € 290.0 million was repaid to a consortium including Berlin Hyp, Berliner Sparkasse and Landesbank Baden-Württemberg on June 30, 2020, as scheduled.

Issue of Bonds Under the European Medium-Term Notes Program (EMTN)

Via its Dutch subsidiary Vonovia Finance B.V., Vonovia increased an EMTN bond of € 500.0 million that runs until March 2026 by € 200 million with effect from January 30, 2020.

Vonovia placed two bonds with a total volume of € 1.0 billion on March 31, 2020. The new bonds will bear interest at an average rate of 1.9% and have a term of four and ten years, respectively.

Vonovia Finance B.V. placed two bonds with a total volume of € 1.5 billion on July 2, 2020. With terms of six and ten years, respectively, the bonds bear interest at an average rate of 0.8%. The payout date was July 9, 2020.

New Portfolio Loans

Vonovia Finance B.V. took out secured financing for Vonovia of over € 300.0 million with Landesbank Baden-Württemberg in February 2020 as well as over € 100.0 million with ING Bank, a branch of ING-DiBa AG, and over € 100.0 million with Berliner Sparkasse in March 2020, respectively, each with a term of ten years.

Berlin Hyp provided Vonovia Finance B.V. with secured financing of € 184.0 million with a term of ten years that was disbursed in July 2020.

In November 2020, € 200.0 million was disbursed as part of a secured financing arrangement provided by Commerzbank AG with a term of seven years.

41 Derivatives

	Dec. 31, 2019		Dec. 31, 2020	
in € million	non-current	current	non-current	current
Derivatives				
Purchase price liabilities from put options/rights to reimbursement		39.0		220.5
Cash flow hedges	21.6		29.6	
Stand-alone derivatives	52.5		47.2	
Deferred interest from derivatives		2.0		1.7
	74.1	**41.0**	**76.8**	**222.2**

Regarding derivative financial liabilities please refer to chapter [G51] Additional Financial Instrument Disclosures and chapter [G55] Cash Flow Hedges and Stand-alone Interest Rate Swaps.

42 Leases

Accounting Policies

IFRS 16 "Leases," which is applied as a mandatory requirement since January 1, 2019, 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. The distinction between operating and finance leases only remains in place for accounting as the lessor.

All contracts that give the Vonovia Group the right to control the use of an identified asset over a certain period of time in return for consideration are considered **leases** within the meaning of IFRS 16.

For all lease contracts that meet the definition of leases according to IFRS 16, Vonovia recognizes lease liabilities equal to the present value of the future lease payments, discounted using the term-specific incremental borrowing rate. Correspondingly, right-of-use assets are recognized in the amount of the lease liabilities, plus any advance payments that have already been made or any initial direct costs.

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.

The right-of-use assets are generally recognized at amortized cost, taking depreciation and impairment losses into account. Right-of-use assets that meet the definition of investment properties (IAS 40) are recognized at fair value in line with the recognition and measurement rules set out in IAS 40.

Changes within the lease term or within the lease payments lead to a remeasurement of the present value and, as a result, to an adjustment of the lease liability and the right-of-use asset.

Periods resulting from extension or termination options granted on a unilateral basis are assessed on a case-by-case basis and are only taken into account if their use is sufficiently probable – for example, due to financial incentives.

There is an accounting option available for short-term leases and leases of low-value assets. Vonovia makes use of this option, meaning that such leases are not recognized. As far as rented IT-equipment is concerned, portfolios are, in some cases, set up for lease contracts with similar terms and a single discount rate is applied to these portfolios.

Those variable lease payments, which are not included in the measurement of the lease liabilities, as well as lease payments associated with short-term leases, with leases of low-value assets and with lease contracts that do not constitute leases within the meaning of IFRS 16 are recognized as expenses on a straight-line basis over the lease term.

In addition to conventional vehicle leasing over a fixed lease term of three to five years, the Vonovia Group also leases IT equipment (IT leasing), residential and commercial property for subletting (interim leasing), heat generation plants to supply the Group's own properties with heat (contracting) as well as office buildings, office spaces and parking spaces (rental). Under License agreements with public-sector institutions, Vonovia is granted the right to use public properties as storage locations or parking spaces, to lay heating pipes or cables, or to construct playgrounds. Long-term leasehold contracts, however, have the biggest impact on the company's net assets, financial position and results of operations. These involve Vonovia leasing land for the rental of constructed residential and commercial properties. As a general rule, these contracts have a term of 99 years.

Development of Right-of-use Assets

in € million	Dec. 31, 2019	Dec. 31, 2020
Right-of-use assets		
Leasehold contracts	1,223.7	1,431.9
Interim rental agreements	1.1	1.3
Right-of-use assets within investment properties	**1,224.8**	**1,433.2**
Leasing of land for the construction of commercial properties used by the Group	26.2	27.3
Lease agreements	21.4	22.9
Contracting	19.7	15.9
Vehicle leases	6.3	2.6
Tenancy and license agreements	2.4	0.6
Leases of IT equipment	4.4	3.0
Right-of-use assets within property, plant and equipment	**80.4**	**72.3**
	1,305.2	**1,505.5**

As of December 31, 2020, the right-of-use assets resulting from leases amount to € 1,505.5 million (2019: € 1,305.2 million).

The majority of the right-of-use assets amounting to € 1,433.2 million is reported under **investment properties** and results not only from interim lease agreements (€ 1.3 million) but mainly from leasehold contracts (€ 1,431.9 million). The other right-of-use assets totaling € 72.3 million are reported under **property, plant and equipment** and mainly include right-of-use assets resulting from the rental of land for the construction of commercial properties to be used by the company itself (€ 27.3 million), from rental agreements that have been concluded (€ 22.9 million), from heating supply contracts (€ 15.9 million) as well as leases of IT equipment (€ 3.0 million).

Development of Lease Liabilities

in € million	Dec. 31, 2019 Due within one year	Dec. 31, 2019 Due in 1 to 5 years	Dec. 31, 2019 Due after 5 years	Dec. 31, 2020 Due within one year	Dec. 31, 2020 Due in 1 to 5 years	Dec. 31, 2020 Due after 5 years
Lease liabilities						
Leasehold contracts (IAS 40)	10.6	39.7	338.3	10.6	35.3	371.9
Interim rental agreements	0.9	0.2	–	0.9	0.4	–
Leasing of land for the construction of commercial properties used by the Group	0.1	0.3	26.1	0.1	0.5	27.3
Lease agreements	6.8	12.2	2.6	8.3	13.4	1.5
Contracting	1.9	9.1	8.9	5.0	5.7	7.9
Vehicle leases	4.7	1.6	–	1.5	1.1	–
Tenancy and license agreements	1.8	0.1	0.5	0.1	0.1	0.5
Leases of IT equipment	1.5	3.0	–	1.3	1.7	–
	28.3	**66.2**	**376.4**	**27.8**	**58.2**	**409.1**

As of December 31, 2020, the lease liabilities amount to € 495.1 million (2019: € 470.9 million).

The increase in lease liabilities compared to the prior year amounting € 24.2 million is mainly due to an increase in lease liabilities attributable to leasehold contracts in the amount of € 29.3 million, mainly due to extensions of the lease term, increases in the lease payments and new leasehold contracts. The drop in miscellaneous lease liabilities is primarily due to expired lease contracts.

Totaling € 409.1 million, the majority of the lease liabilities recognized as of December 31, 2020, is due after more than five years. Of this amount, € 371.9 million is attributable to lease liabilities resulting from leasehold contracts. Lease liabilities due within the next year amount to € 27.8 million. € 10.6 million of this amount is attributable to leasehold contracts.

The following table shows the development of the right-of-use assets reported under property, plant and equipment.

in € million	Carrying amount of right-of-use assets Jan. 1, 2020	Additions 2020	Depreciation and amortization 2020	Carrying amount of right-of-use assets Dec. 31, 2020	Interest expenses 2020
Leasing of land for the construction of commercial properties used by the Group	26.2	1.5	-0.3	27.3	0.7
Lease agreements	21.4	9.3	-7.7	22.9	0.3
Contracting	19.7	0.8	-4.5	15.9	0.5
Vehicle leases	6.3	1.4	-4.9	2.6	–
Tenancy and license agreements	2.4	1.7	-1.5	0.6	–
Leases of IT equipment	4.4	0.2	-1.6	3.0	–
	80.4	**14.9**	**-20.5**	**72.3**	**1.5**

in € million	Carrying amount of right-of-use assets Jan. 1, 2019	Additions 2019	Depreciation and amortization 2019	Carrying amount of right-of-use assets Dec. 31, 2019	Interest expenses 2019
Leasing of land for the construction of commercial properties used by the Group	26.5	–	-0.3	26.2	0.7
Lease agreements	22.8	5.9	-7.1	21.4	0.2
Contracting	21.2	0.6	-1.9	19.7	0.6
Vehicle leases	11.8	0.9	-6.3	6.3	0.1
Tenancy and license agreements	2.6	1.6	-1.9	2.4	–
Leases of IT equipment	2.0	3.8	-1.0	4.4	–
	86.9	**12.8**	**-18.5**	**80.4**	**1.6**

The interest expenses recognized in the 2020 fiscal year resulting from leases pursuant to IFRS 16 amounted to € 16.1 million (2019: € 14.0 million), mainly from leasehold contracts (€ 13.7 million).

In the 2020 fiscal year, a total of 479 lease contracts (2019: 1,176) were classified as short-term leases and thus were not recognized in line with the accounting option available. The corresponding leasing expenses, recognized in the 2020 fiscal year, amounted to € 1.7 million (2019: € 3.3 million). Expenses totaling € 9.1 million were incurred in connection with variable lease payments made in 2020 (2019: € 8.8 million). These have not been included in the measurement of the lease liabilities.

In addition to variable lease payments as well as payments resulting from short-term leases, each included in the cash flow from operating activities, interest payments and repayments of lease liabilities totaling € 38.4 million were incurred in 2020 (2019: € 36.4 million). Thus, the total cash outflow for leases within the reporting period amounted to € 49.2 million (2019: € 48.5 million).

Total income from subleasing, mostly from subleasing of right-of-use assets in connection with rented residential and commercial properties, amounts to € 8.3 million (2019: € 4.6 million). As of the reporting date, there were no significant non-cancellable subleases on the Spree-Bellevue property.

The loss arising from the rental of the sold Spree-Bellevue property (sale and leaseback transaction) in fiscal year 2020 amounted to € 0.7 million (2019: gain of € 1.0 million). This does not have any material impact on the Group's cash flows.

43 Liabilities to Non-controlling Interests

Accounting Policies

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.

The liabilities to non-controlling interests relate especially to the obligations to pay a guaranteed dividend under the valid profit-and-loss transfer agreements in an amount of € 43.1 million (Dec. 31, 2019: € 34.1 million).

44 Financial Liabilities from Tenant Financing

Accounting Policies

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.

The financial liabilities from tenant financing as of the reporting date include € 117.4 million (Dec. 31, 2019: € 117.7 million) in tenant financing contributions. In addition, the financial liabilities from tenant financing include € 46.0 million (Dec. 31, 2019: € 44.5 million) in maintenance and improvement contributions deposited by tenants (EVB).

45 Other Liabilities

	Dec. 31, 2019		Dec. 31, 2020	
in € million	non-current	current	non-current	current
Advance payments received	–	42.6	–	79.6
Miscellaneous other liabilities	26.1	221.4	2.6	123.7
	26.1	**264.0**	**2.6**	**203.3**

The advance payments received include on-account payments of € 53.1 million (Dec. 31, 2019: € 30.9 million) from tenants for ancillary costs after offsetting against the corresponding trade receivables.

The miscellaneous other liabilities include purchase price liabilities in the amount of € 32.7 million (Dec. 31, 2019: € 75.0 million) for the acquisition of further shares in companies that are already consolidated.

Section (F): Corporate Governance Disclosures

46 Related Party Transactions

Vonovia had business relationships with unconsolidated subsidiaries in the 2020 fiscal year. These transactions resulted from the normal exchange of deliveries and services and are shown in the table below:

	Purchased services		Receivables		Liabilities	
in € million	2019	2020	2019	2020	2019	2020
Associated companies	2.2	5.8	0.3	8.9	3.0	3.0

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 of 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	2019	2020
Short-term employee benefits (without share-based payment)	7.2	7.9
Post-employment benefits	1.7	2.2
Termination benefits	0.5	1.4
Share-based payment	5.9	8.4
	15.3	**19.9**

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 chapter [F47] Share-Based Payments.

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 chapter [F48] Remuneration.

47 Share-Based Payments

Accounting Policies

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 chapter [E33] Provisions).

Management Board

As part of the new LTIP plan, the Management Board members are granted a fixed number of phantom stocks (performance share units or "PSU") annually, 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 LTIP plan is calculated based on the following parameters: Relative Total Shareholder Return (RTSR), Performance of Adj. NAV per Share, Performance of Group FFO per share and the Customer Satisfaction - Index (CSI), which are all assigned an equal weighting of 25%. As a result, this 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 phantom stocks that had been granted but not paid out from the LTIP as of December 31, 2020, 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	Arnd Fittkau	Helene von Roeder	Daniel Riedl
2017–2020	Dec. 31, 2020	4,750,000			
2018–2021	Dec. 31, 2021	2,680,369		704,535	704,535
2019–2022	Dec. 31, 2022	1,643,072	304,737	691,820	691,820
2020–2023	Dec. 31, 2023	763,306	280,756	280,756	280,756

The LTIP program resulted in expenses pursuant to IFRS 2 totaling € 8.4 million in the 2020 reporting year (2019: € 5.9 million), with € 5.7 million attributable to Rolf Buch, € 1.1 million attributable in each case to Helene von Roeder and Daniel Riedl, and € 0.5 million attributable to Arnd Fittkau.

For further information, please refer to the remuneration report in the further statutory disclosures in the combined management report.

Executives Below Management Board Level

A new LTIP plan was launched for the first level of management in 2016. This 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 phantom stocks that had been granted but not paid out from the LTIP as of December 31, 2020, 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, 2020
2017	Dec. 31, 2020	3,538,474
2018	Dec. 31, 2021	1,902,121
2019	Dec. 31, 2022	1,434,521
2020	Dec. 31, 2023	592,513

The LTIP program results, in accordance with IFRS, in expenses of € 4.4 million in the 2020 reporting year (2019: € 3.4 million).

Employees

An employee share program was concluded 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 € 2.3 million in the 2020 reporting year (2019: € 2.0 million), which have been offset directly against the capital reserves.

48 Remuneration

Remuneration of the Supervisory Board

The members of the Supervisory Board received total remuneration of € 1.8 million during the 2020 fiscal year (2019: € 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		Arnd Fittkau CRO		Klaus Freiberg COO until May 16, 2019		Daniel Riedl CDO	
	2019	2020	2019	2020	2019	2020	2019	2020
Fixed remuneration	1,150,000	1,200,000	375,000	700,000	225,000		600,000	700,000
Compensation payment								
Deferred compensation	355,000	400,000	100,000	160,000	60,000			
Pension contribution							160,000	500,000
Fringe benefits	27,453	30,303	18,721	30,758	10,350		29,404	16,057
Total	**1,532,453**	**1,630,303**	**493,721**	**890,758**	**295,350**		**789,404**	**1,216,057**
Annual variable remuneration (bonus)	665,000	794,000	275,000	440,000	308.000*		412,007	440,000
Multi-year variable remuneration (LTIP plan):								
2019–2022	2,060,584	–	504,793		867.614**		867,614	–
2020–2023	–	2,573,330	–	946,512			–	946,512
(number of shares)	46,151	46,169	9,531	16,982	19,432		19,432	16,982
Total	**2,725,584**	**3,367,330**	**779,793**	**1,386,512**	**1,175,614**		**1,279,621**	**1,386,512**
Total remuneration	**4,258,037**	**4,997,633**	**1,273,514**	**2,277,270**	**1,470,964**		**2,069,025**	**2,602,569**

Total remuneration of the Management Board in €	Helene von Roeder CFO		Total remuneration	
	2019	2020	2019	2020
Fixed remuneration	600,000	700,000	2,950,000	3,300,000
Compensation payment	64,874	64,874	64,874	64,874
Cash remuneration/deferred compensation	160,000	160,000	675,000	720,000
Pension contribution			160,000	500,000
Fringe benefits	29,608	25,003	115,536	102,121
Total	**854,482**	**949,877**	**3,965,410**	**4,686,995**
Annual variable remuneration (bonus)	425,812	440,000	2,085,819	2,114,000
Multi-year variable remuneration (LTIP plan):				
2018–2021	867,614	–	5,168,219	–
2019–2022	–	946,512	–	5,412,866
(number of shares)	19,432	16,982	113,978	97,115
Total	**1,293,426**	**1,386,512**	**7,254,038**	**7,526,866**
Total remuneration	**2,147,908**	**2,336,389**	**11,219,448**	**12,213,861**

* Annual variable remuneration agreed in the termination.
** LTIP is granted for the complete financial year regardless of the termination during the year.

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 and Arnd Fittkau are paying their contractual share of € 400,000 (Rolf Buch), € 160,000 (Helene von Roeder and Arnd Fittkau) respectively, based on their fixed remuneration, into the deferred compensation scheme. The annual benefit contribution for Daniel Riedl of € 200,000 and the contractually agreed additional pension remuneration of € 300,000 – both on the part BUWOG – are 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 Dec. 31		Defined benefit obligation as of Dec. 31	
in €	2019	2020	2019	2020
Rolf Buch	946,410	1,052,225	5,733,678	7,378,836
Helene von Roeder	437,241	597,025	864,057	1,123,176
Arnd Fittkau	291,772	542,509	363,890	1,580,205

Remuneration of Former Management Board Members and Their Surviving Dependents

Total remuneration of former Management Board members and their surviving dependents amounts to € 1.7 million for the 2020 fiscal year (2019: € 0.7 million). In accordance with the provisions of the termination agreement with Klaus Freiberg, total remuneration includes compensation payable following termination of the contract of employment on December 31, 2019, amounting to € 1.4 million.

The defined benefit obligation (DBO) to former members of the Management Board and their surviving dependents amount to € 22.1 million (2019: € 21.3 million).

49 Auditors' 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 Wirtschaftsprüfungs-gesellschaft:

in € million	2019	2020
Audits	4.8	5.0
Other confirmation services	0.6	0.4
	5.4	**5.4**

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. The consolidated interim financial statements were reviewed and the financial statements were audited in accordance with audit standard IDW PS 490.

The other confirmation services comprised 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 and business audits pursuant to ISAE 3000 relating to various housing assistance reports. Other confirmation services also included services associated with the issue of comfort letters pursuant to audit standard IDW PS 910, a review of the tax compliance management system pursuant to audit standard IDW PS 980 and the issue of valuation certificates.

50 Declaration of Conformity with the German Corporate Governance Code

In November 2020, the Management Board and the Supervisory Board issued a Declaration of Conformity with the recommendations of the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG) and made the it permanently available on the company's website (**https://www.vonovia.de/en**).

Section (G): Additional Financial Management Disclosures

Other Notes and Disclosures

51 Additional Financial Instrument Disclosures

Measurement categories and classes:

in € million	Carrying amounts Dec. 31, 2020
Assets	
Cash and cash equivalents	
Cash on hand and deposits at banking institutions	613.3
Trade receivables	
Receivables from the sale of properties	65.3
Receivables from property letting	38.0
Other receivables from trading	16.0
Receivables from sale of real estate inventories (Development)	149.6
Financial assets	
Investments valued at equity	32.9
Loans to other investments	33.3
Other non-current loans	11.3
Non-current securities	4.9
Other investments	311.2
Derivative financial assets	
Cash flow hedges (cross currency swaps)	18.8
Stand-alone interest rate swaps and interest rate caps as well as embedded derivatives	4.0
Liabilities	
Trade payables	234.5
Non-derivative financial liabilities	24,084.7
Derivative financial liabilities	
Purchase price liabilities from put options/rights to reimbursement	220.5
Stand-alone interest rate swaps and interest rate caps	47.2
Other swaps	31.3
Lease liabilities	495.1
Liabilities from tenant financing	163.4
Liabilities to non-controlling interests	43.1

	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 IFRS 16/IAS 28	Fair value Dec. 31, 2020	Fair value hierarchy level
	613.3					613.3	1
	65.3					65.3	2
	38.0					38.0	2
	16.0					16.0	2
	149.6					149.6	2
					32.9	32.9	n.a.
	33.3					63.3	2
	11.3					11.3	2
				4.9		4.9	1
				311.2		311.2	2
		-13.1	31.9			18.8	2
		4.0				4.0	2
	234.5					234.5	2
	24,084.7					25,767.7	2
	220.5					220.5	3
		47.2				47.2	2
		12.1	19.2			31.3	2
					495.1		
	163.4					163.4	2
	43.1					43.1	2

Measurement categories and classes:

in € million	Carrying amounts Dec. 31, 2019
Assets	
Cash and cash equivalents	
Cash on hand and deposits at banking institutions	500.7
Trade receivables	
Receivables from the sale of properties	66.6
Receivables from property letting	41.7
Other receivables from trading	11.8
Receivables from sale of real estate inventories (Development)	85.6
Financial assets	
Investments valued at equity	29.5
Loans to other investments	33.3
Other non-current loans	11.7
Non-current securities	4.4
Other investments	142.2
Derivative financial assets	
Cash flow hedges (cross currency swaps)	29.8
Stand-alone interest rate swaps and interest rate caps as well as embedded derivatives	81.5
Liabilities	
Trade payables	224.2
Non-derivative financial liabilities	23,574.9
Derivative financial liabilities	
Purchase price liabilities from put options/rights to reimbursement	39.0
Stand-alone interest rate swaps and interest rate caps	52.5
Other swaps	23.6
Lease liabilities	470.9
Liabilities from tenant financing	162.2
Liabilities to non-controlling interests	34.1

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 € 4.3 million (Dec. 31, 2019: € 4.4 million).
> Amount by which the fair value of plan assets exceeds the corresponding obligation of € 0.8 million (Dec. 31, 2019: € 0.8 million).
> Provisions for pensions and similar obligations: € 627.8 million (Dec. 31, 2019: € 569.9 million).

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 IFRS 16/IAS 28	Fair value Dec. 31, 2019	Fair value hierarchy level
500.7					500.7	1
66.6					66.6	2
41.7					41.7	2
11.8					11.8	2
85.6					85.6	2
				29.5	29.5	n.a.
33.3					56.8	2
11.7					11.7	2
			4.4		4.4	1
			142.2		142.2	2
	-10.2	40.0			29.8	2
	81.5				81.5	2
224.2					224.2	2
23,574.9					24,724.7	2
39.0					39.0	3
	52.5				52.5	2
	0.2	23.4			23.6	2
				470.9	470.9	2
162.2					162.2	2
34.1					34.1	2

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, 2020	Level 1	Level 2	Level 3
Assets				
Investment properties	58,071.8			58,071.8
Financial assets				
Non-current securities	4.9	4.9		
Other investments	311.2		311.2	
Assets held for sale				
Investment properties (contract closed)	164.9		164.9	
Derivative financial assets				
Cash flow hedges (cross currency swaps)	18.8		18.8	
Stand-alone interest rate swaps and caps as well as embedded derivatives	4.0		4.0	
Liabilities				
Derivative financial liabilities				
Cash flow hedges	31.3		31.3	
Stand-alone interest rate swaps and caps	47.2		47.2	

in € million	Dec. 31, 2019	Level 1	Level 2	Level 3
Assets				
Investment properties	52,759.1			52,759.1
Financial assets				
Non-current securities	4.4	4.4		
Other investments	140.2		140.2	
Assets held for sale				
Investment properties (contract closed)	134.1		134.1	
Derivative financial assets				
Cash flow hedges (cross currency swaps)	29.8		29.8	
Stand-alone interest rate swaps and caps as well as embedded derivatives	81.5		81.5	
Liabilities				
Derivative financial liabilities				
Cash flow hedges	23.6		23.6	
Stand-alone interest rate swaps and caps	52.5		52.5	

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 chapter [D28] 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.

Securities and shares in listed companies included in other investments are generally 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 was fundamentally relevant for interest rate swaps. This credit risk is derived for material risks from rates observable on the capital markets and ranges from 20 to 100 basis points, depending on the residual maturities of financial instruments. Regarding the positive market values of the cross currency swaps, a counterparty risk of 37 basis points was taken into account.

The calculated cash flows of the cross currency swaps result from the forward curves 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 and 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.

			From subsequent measurement						
in € million	From interest	Dividends from other investments	Impairment losses	Derecognized receivables	Derecognized liabilities	Financial result affecting income 2020	Measurement of cash flow hedges	Measurement of financial instruments categorized as equity instruments	Total financial result 2020
2020									
Debt instruments carried at (amortized) cost	21.8	–	-40.0	0.0	–	-18.2	–	–	-18.2
Debt instruments measured at FV through P&L	–	13.4	–	–	–	13.4	–	–	13.4
Derivatives measured at FV through P&L with reclassification	-59.2	–	–	–	–	-59.2	–	–	-59.2
Debt instruments measured at FVOCI with reclassification	–	–	–	–	–	–	24.0	–	24.0
Equity instruments measured at FVOCI without reclassification	–	–	–	–	–	–	–	9.0	9.0
Financial liabilities measured at (amortized) cost	-329.8	–	–	–	0.7	-329.1	–	–	-329.1
	-367.2	**13.4**	**-40.0**	**0.0**	**0.7**	**-393.1**	**24.0**	**9.0**	**-360.1**

in € million	From interest	Dividends from other investments	Impairment losses	Derecognized receivables	Derecognized liabilities	Financial result affecting income 2019	Measurement of cash flow hedges	Measurement of financial instruments categorized as equity instruments	Total financial result 2019
			From subsequent measurement						
2019									
Debt instruments carried at (amortized) cost	8.9	–	-28.6	5.2	–	-14.5	–	–	-14.5
Debt instruments measured at FV through P&L	–	11.8	–	–	–	11.8	–	–	11.8
Derivatives measured at FV through P&L with reclassification	-35.1	–	–	–	–	-35.1	–	–	-35.1
Debt instruments measured at FVOCI with reclassification	–	–	–	–	–	–	11.8	–	11.8
Debt instruments measured at FVOCI without reclassification	–	–	–	–	–	–	–	48.6	48.6
Financial liabilities measured at (amortized) cost	-358.4	–	–	–	0.7	-357.7	–	–	-357.7
	-384.6	**11.8**	**-28.6**	**5.2**	**0.7**	**-395.5**	**11.8**	**48.6**	**-335.1**

52 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.

53 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 (see chapter "Structure and Instruments of the Risk Management System" → p. 124 et seqq.). 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

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. Liquidity transfers from the German subgroup to Swedish subsidiaries are generally secured through the conclusion of foreign currency forwards. In addition, currency fluctuations are expected to result from financing relationships with Swedish subsidiaries. The loans denominated in euros granted to Swedish subsidiaries (Dec. 31, 2019: € 1,268.1 million) were converted into SEK loans in the reporting year, meaning that the loans denominated in Swedish krona increased to SEK 20,226.3 million (Dec. 31, 2019: SEK 5,657.7 million). Based on the exchange rate as of December 31, 2020, a -5% change in the value of the Swedish krona against the euro would result in currency gains of € 10.1 million, while a change of +5% would result in a currency loss of € 10.0 million. Vonovia is subject to no further material currency risks in the scope of its usual business activities.

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 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.

A sensitivity analysis for cash flow hedges is provided under chapter [G55] 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 the Finance and Treasury department 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 2020 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, 2020	2021 Interest	2021 Repayment	2022 Interest	2022 Repayment	2023 to 2027 Interest	2023 to 2027 Repayment
Non-derivative financial liabilities							
Liabilities to banks	6,909.0	93.0	1,075.0	83.2	410.0	282.6	3,599.0
Liabilities to other creditors	17,060.5	124.5	520.3	216.5	2,172.5	668.8	8,744.8
Deferred interest from other non-derivative financial liabilities	115.2	–	–	–	–	–	–
Lease liabilities	495.1	15.1	22.4	14.8	14.2	71.5	40.0
Financial liabilities from tenant financing	163.4	–	118.1	–	2.1	–	10.4
Derivative financial liabilities							
Purchase price liabilities from put options/rights to reimbursement	220.5	–	51.0	–	–	–	27.8
Cash flow hedges/stand-alone interest rate derivatives	72.8	39.2	–	37.5	–	42.7	–
Cash flow hedges (cross currency swap) USD in €	-18.4	-10.2	–	-10.2	–	-10.2	-185.0
Cash flow hedges (cross currency swap) in €		8.5	–	8.4	–	8.4	185.0
Deferred interest from swaps	1.3	1.3	–	–	–	–	–

in € million	Carrying amount as of Dec. 31, 2019	2020 Interest	2020 Repayment	2021 Interest	2021 Repayment	2022 to 2026 Interest	2022 to 2026 Repayment
Non-derivative financial liabilities							
Liabilities to banks	7,403.0	101.1	892.6	97.1	951.6	301.2	3,542.8
Liabilities to other creditors	16,071.7	147.8	1,385.4	222.8	520.9	755.2	9,319.7
Deferred interest from other non-derivative financial liabilities	100.2	–	–	–	–	–	–
Lease liabilities	470.9	13.2	22.8	16.5	15.2	60.4	47.5
Financial liabilities from tenant financing	162.2	–	117.8	–	2.0	–	10.0
Derivative financial liabilities							
Purchase price liabilities from put options/rights to reimbursement	39.0	–	3.3	–	34.0	–	1.7
Cash flow hedges/stand-alone interest rate derivatives	70.8	37.8	–	36.1	–	78.3	–
Cash flow hedges (cross currency swap) USD in €	-29.1	-11.1	–	-11.1	–	-22.3	-185.0
Cash flow hedges (cross currency swap) in €		8.5	–	8.5	–	16.8	185.0
Deferred interest from swaps	1.4	1.4	–	–	–	–	–

In September 2019, a buyback offer was made to the investors holding two outstanding EMTN bonds due to mature in March and December 2020. This offer resulted in approx. 40% of the outstanding nominal volume of the two bonds being bought back, meaning that the maturity amounts of these instruments fell from an original amount of € 500.0 million to € 301 million in March, and from an original amount of € 1,250.0 million to € 752.0 million in December.

Credit Line

In October 2018, Vonovia concluded a syndicated revolving credit facility of € 1,000.0 million with several banks, led by Commerzbank AG, via its Dutch financing company. The term of an unsecured credit line was extended until the end of September 2024 as part of an amendment agreement concluded in September 2020. It bears interest at a rate that is based on the EURIBOR plus an additional margin. This credit line had not been used as of December 31, 2020.

Project-specific credit lines totaling around € 69.6 million were available on the reporting date in connection with bank-financed development projects. The nominal amount of these agreements totals € 243.2 million. These credit lines can be utilized based on the progress of the construction work, provided that corresponding evidence is submitted, taking the contractually agreed payment requirements into account.

There is also a guarantee credit agreement in place between Vonovia and Commerzbank that was increased from € 25.0 million to € 35.0 million in August 2020. Bills of exchange of approximately € 23.4 million had been drawn from this amount as of December 31, 2020. There is another guarantee credit agreement with Raiffeisen Bank International AG in the amount of € 5.0 million within the conwert subgroup. It had not been drawn by the reporting date.

In December 2019, Vonovia SE concluded agreements with Atradius Credit Insurance N.V. and Swiss Re International SE for two revolving lines of credit. Vonovia SE has granted a letter of comfort for a further, already terminated general guarantee agreement between BUWOG Bauträger GmbH and VHV Allgemeine Versicherung AG, under which guarantees of € 0.6 million are currently in force. No new guarantees will be issued under this agreement. Within the BUWOG subgroup, there is also a guarantee line that can be used on a revolving basis with UniCredit Bank Austria AG.

As of December 31, 2020, the total volume available under general guarantee agreements came to € 131.0 million, € 95.3 million of which had been drawn by the reporting date. In addition, a project-specific development financing arrangement with Berliner Volksbank eG allows for the possibility of making use of bills of exchange, bonds and/or guarantees. On the reporting date of December 31, 2020, an amount of € 0.7 million was used.

In April 2019, Victoria Park AB entered into a revolving line of credit of SEK 1,050.0 million with a two-year term with Commerzbank. Vonovia SE acts as the guarantor for this line of credit. SEK 850.0 million of this credit line had been used as of December 31, 2020.

In November 2017, Vonovia concluded a master commercial paper agreement via its Dutch financing company with a total volume of € 500.0 million with Commerzbank AG as lead arranger and several banks as traders. This master program was increased to a total volume of € 1,000.0 million in September 2018. No issues were outstanding as part of this program as of December 31, 2020.

All in all, Vonovia has cash on hand and deposits at banking institutions of € 613.3 million as of the reporting date (Dec. 31, 2019: € 500.7 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.

54 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, 2019	Dec. 31, 2020
Total equity	21,123.8	24,831.8
Total assets	56,476.1	62,417.4
Equity ratio	37.4%	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.

55 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 € 1,117.4 million (Dec. 31, 2019: € 972.9 million). Interest rates on hedging instruments are between 0.064% and 3.760% with original swap periods of between 4.75 and 20 years.

An interest rate swap concluded between BUWOG – BAUEN UND WOHNEN GmbH and UniCredit Bank Austria AG in December 2014, which has been reported as a stand-alone interest rate swap, was terminated prematurely in September 2020 with a remaining face value of € 102.1 million. At the same time, the aforementioned company concluded a new interest rate swap with the same face value, the same counterparty, a term leading up to December 31, 2034, and a fixed interest rate of 0.064%, designating it as a cash flow hedge.

In addition, a new cash flow hedge with a nominal value of € 47.0 million was designated for an interest rate swap in connection with the acquisition of the Dritte D.V.I. Investment GmbH. The agreement has a term until November 30, 2038 and a fixed interest rate of 1.505%.

For three hedging instruments that are maintained within a so-called passive hedge accounting, € 9.6 million was reclassified affecting net income in the reporting year in line with the expected cash flows from the underlying hedged items. This reduced the value recognized in other comprehensive income to € 28.4 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	3M EURIBOR margin 0.45%
Interest rate swaps	600.0	Mar. 22, 2018	Dec. 22, 2022	0.793%
HELABA				
Hedged items	146.6	Jan. 28, 2019	Apr. 30, 2024	1M EURIBOR margin 0.0%
Interest rate swaps	146.6	Jan. 28, 2019	Apr. 30, 2024	0.390%
Berlin Hyp				
Hedged items	146.6	Jan. 28, 2019	Apr. 30, 2024	1M EURIBOR margin 0.0%
Interest rate swaps	146.6	Jan. 28, 2019	Apr. 30, 2024	0.390%
Norddeutsche Landesbank (2)				
Hedged items	79.7	June 28, 2013	June 30, 2023	3M EURIBOR margin 1.47%
Interest rate swaps	79.7	June 28, 2013	June 30, 2023	2.290%
UniCredit Bank AG				
Hedged items	47.0	Oct. 1, 2018	Nov. 30, 2038	3M EURIBOR margin 1.32%
Interest rate swaps	47.0	Oct. 1, 2018	Nov. 30, 2038	1.505%
UniCredit Bank Austria AG				
Hedged items	102.1	Jan. 2, 2015	Dec. 31, 2034	3M EURIBOR margin 1,12 %
Interest rate swaps	102.1	Sep. 18, 2020	Dec. 31, 2034	0.064%

In 2013, two cross currency swaps were contracted in equal amounts with each of JP 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 1,000.0 million. The CCS, each for an amount of USD 375.0 million, fell due in October 2017 in line with the bonds. The hedging instruments, each for an amount of USD 125.0 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:

	Face value million USD	Face value million €	Beginning of term	End of term	Interest rate USD	Interest rate €	Hedging rate USD/€
J.P. Morgan Securities plc Morgan Stanley & Co. International plc							
Hedged items	250.0	185.0	Oct. 2, 2013	Oct. 2, 2023	5.00%		
CCS	250.0	185.0	Oct. 2, 2013	Oct. 2, 2023		4.58%	1.3517

Hedge break costs of € 11.5 million were incurred in connection with the premature repayment of two stand-alone interest rate swaps concluded by BUWOG – BAUEN UND WOHNEN GmbH. These costs were offset by the reversal of negative market values of € 11.0 million that had been recognized in the past. As of December 31, 2020, the hedged nominal value of BUWOG's remaining 14 stand-alone interest rate swaps came to € 351.4 million (Dec. 31, 2019: € 487.9 million).

On the reporting date, the Hembla Group recognized two stand-alone interest rate swaps and eight interest rate caps. The nominal value hedged in Swedish krona corresponds to a volume of € 967.6 million as of December 31, 2020 (Dec. 31, 2019: € 1,004.7 million), with the fair value amounting to € -0.7 million in total (Dec. 31, 2019: € -0.2 million). The embedded derivatives have been reduced to 18 loan termination rights with a positive fair value of € 2.7 million (Dec. 31, 2019: € 78.2 million).

On the reporting date, the Victoria Park Group recognized 19 stand-alone interest rate swaps and six interest rate caps. The nominal value hedged in Swedish krona corresponds to a volume of € 939.6 million as of December 31, 2020 (Dec. 31, 2019: € 1,964.0 million) with the fair value amounting to € -7.7 million (Dec. 31, 2019: € -2.6 million) in total. The embedded derivatives still relate to ten loan termination rights with a positive fair value of € 0.9 million (Dec. 31, 2019: € 1.5 million).

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 € -29.6 million as of December 31, 2020 (Dec. 31, 2019: € -21.6 million). The corresponding deferred interest amounted to € -1.7 million (Dec. 31, 2019: € -2.0 million). At the same time, positive market values from cross currency swaps in the amount of € 18.4 million (Dec. 31, 2019: € 29.1 million), together with positive market values in the amount of € 4.0 million (Dec. 31, 2019: € 81.5 million) from embedded derivatives and other interest rate derivatives of Victoria Park and Hembla were disclosed. The corresponding deferred interest amounted to € 0.4 million (Dec. 31, 2019: € 0.7 million). Financial liabilities also included negative fair values from stand-alone interest rate derivatives in the amount of € -47.1 million (Dec. 31, 2019: € -52.5 million).

The impact of the cash flow hedges (after income taxes) on the development of other reserves is shown below:

		Changes in the period		Reclassification affecting net income		
in € million	As of Jan. 1	Changes in CCS	Other	Currency risk	Interest risk	As of Dec. 31
2020	**-52.2**	**-5.4**	**-1.4**	**12.7**	**13.4**	**-32.9**
2019	**-63.3**	**8.6**	**-7.2**	**-2.9**	**12.6**	**-52.2**

The impact of the cash flow hedges (including income taxes) on total comprehensive income is shown below:

Cash Flow Hedges

in € million	2019	2020
Change in unrealized gains/losses	2.0	-10.1
Taxes on the change in unrealized gains/losses	-0.6	3.3
Net realized gains/losses	9.8	34.1
Taxes due to net realized gains/losses	-0.1	-8.0
Total	**11.1**	**19.3**

In the reporting year, after allowing for deferred taxes, negative cumulative ineffectiveness for cash flow hedges amounted to € 1.0 million (2019: € 0.6 million), deteriorating net interest by € 0.4 million.

On the basis of the valuation as of December 31, 2020, 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:

	Change in equity		
in € million	Other reserves not affecting net income	Income Statement affecting net income	Total
2020			
+50 basis points	9.1	16.3	25.4
-50 basis points	-6.4	-15.0	-21.4
2019			
+50 basis points	3.8	11.5	15.3
-50 basis points	0.4	-10.5	-10.1

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 € -0.2 million (or € +0.2 million), while ineffectiveness affecting net income in the amount of € +0.8 million (or € -0.7 million) would result at the same time. In the previous year, a change in the other reserves not affecting net income of € -1.0 million (or € +0.8 million) was recognized in connection with ineffectiveness affecting net income in the amount of € +1.1 million (or € -1.0 million).

56 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, 2019	Dec. 31, 2020
Guarantees in connection with Development	55.4	120.3
Payment guarantees	0.3	–
Rent surety bonds	1.1	1.6
Other	27.7	–
	84.5	**121.9**

Vonovia is involved in a number of legal disputes resulting from normal business activities. In particular, these involve disputes under the law of tenancy and sales disputes and, in individual cases, company law disputes (mainly following squeeze-out processes). 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.

57 Other Financial Obligations

The other financial obligations are as follows:

in € million	Dec. 31, 2019	Dec. 31, 2020
Other financial obligations		
Cable TV service contracts	283.0	251.3
IT service contracts	41.2	28.5
Supply contracts	12.1	–
Surcharges under the German Condominium Act	3.3	0.2
Other	8.6	13.7
	348.2	**293.7**

The obligations under cable TV service contracts are set against future income from the marketing of the cable TV service.

Bochum, Germany, February 23, 2021

Rolf Buch
(CEO)

Arnd Fittkau
(CRO)

Helene von Roeder
(CFO)

Daniel Riedl
(CDO)

Information

To offer a high degree of transparency, we publish detailed information in line with the requirements of the European Public Real Estate Association (EPRA).

List of Vonovia Shareholdings

as of December 31, 2020, according to Section 313 (2) HGB

Company	Company domicile	Interest %
Vonovia SE	Bochum/DE	
Consolidated Companies		
Germany		
Alboingärten Bauvorhaben Bessemerstraße GmbH	Schönefeld	100.00
alt+kelber Immobilienverwaltung GmbH	Berlin	100.00
Barmer Wohnungsbau GmbH	Wuppertal	91.39
Barmer Wohnungsbau Grundbesitz I GmbH	Wuppertal	100.00
Barmer Wohnungsbau Grundbesitz IV GmbH	Wuppertal	100.00
Barmer Wohnungsbau Grundbesitz V GmbH	Wuppertal	100.00
Baugesellschaft Bayern mbH	Munich	94.90
Bau- und Siedlungsgesellschaft Dresden mbH	Dresden	94.73
Beamten-Baugesellschaft Bremen Gesellschaft mit beschränkter Haftung	Bremen	94.90
Bien-Ries Bautechnik GmbH	Hanau	100.00
Bien-Ries GmbH	Hanau	100.00
Börsenhof A Besitz GmbH	Bremen	94.00
Bremische Gesellschaft für Stadterneuerung, Stadtentwicklung und Wohnungsbau mit beschränkter Haftung	Bremen	94.90
Bundesbahn-Wohnungsbaugesellschaft Kassel Gesellschaft mit beschränkter Haftung	Kassel	94.90
Bundesbahn-Wohnungsbaugesellschaft Regensburg mbH	Regensburg	94.90
BUWOG - Bauen und Wohnen Deutschland 1 GmbH	Schönefeld	100.00
BUWOG - Bauen und Wohnen Deutschland 2 GmbH	Berlin	100.00
BUWOG - Bauen und Wohnen Deutschland 3 GmbH	Berlin	100.00
BUWOG - Bauen und Wohnen Leipzig GmbH	Leipzig	100.00
BUWOG Bauträger GmbH	Berlin	94.90
BUWOG - Berlin I GmbH & Co. KG	Bochum	94.90
BUWOG - Berlin II GmbH	Kiel	94.90
BUWOG - Berlin Kreuzberg I GmbH & Co. KG	Bochum	94.90
BUWOG - Berlin Wohnen GmbH	Kiel	94.90
BUWOG - Berlin Wohnen II GmbH	Kiel	94.90 [1)]
BUWOG - Berlin Wohnen III GmbH	Kiel	94.90
BUWOG - Braunschweig I GmbH	Kiel	94.90
BUWOG - Gartenfeld Development GmbH	Berlin	94.90
BUWOG - Gartenfeld Wohnen GmbH	Kiel	94.90

Company	Company domicile	Interest %
BUWOG - Gervinusstraße Development GmbH	Berlin	100.00
BUWOG - Goethestraße Development GmbH	Berlin	94.90
BUWOG - Grundstücks- und Betriebs GmbH	Kiel	94.90
BUWOG - Hamburg Süd GmbH	Kiel	94.90 [1)]
BUWOG - Hamburg Umland I GmbH	Kiel	94.90
BUWOG - Hamburg Umland II GmbH	Kiel	94.90
BUWOG - Hamburg Wohnen GmbH	Kiel	100.00
BUWOG - Harzer Straße Development GmbH	Berlin	94.90
BUWOG - Hausmeister GmbH	Kiel	100.00
BUWOG - Heidestraße Development GmbH	Berlin	94.90
BUWOG - Herzogtum Lauenburg GmbH	Kiel	94.90
BUWOG - Immobilien Management GmbH	Kiel	100.00
BUWOG Immobilien Treuhand GmbH	Bochum	100.00 [1)]
BUWOG - Jahnstraße Development GmbH	Berlin	94.90
BUWOG Kassel I GmbH & Co. KG	Bochum	94.90
BUWOG Kassel II GmbH & Co. KG	Bochum	94.90
BUWOG - Kassel Verwaltungs GmbH	Kiel	100.00
BUWOG Kiel I GmbH & Co. KG	Bochum	94.90
BUWOG - Kiel II GmbH	Kiel	94.90
BUWOG - Kiel III GmbH	Kiel	94.90
BUWOG - Kiel IV GmbH	Kiel	94.90
BUWOG - Kiel Meimersdorf GmbH	Kiel	94.90 [1)]
BUWOG - Kiel V GmbH	Kiel	94.90
BUWOG-Lindenstraße Development GmbH	Berlin	100.00
BUWOG - Lübeck Hanse I GmbH	Kiel	94.90
BUWOG - Lübeck Hanse II GmbH	Kiel	94.90
BUWOG - Lübeck Hanse III GmbH	Kiel	94.90
BUWOG - Lübeck Hanse IV GmbH	Kiel	94.90
BUWOG - Lückstraße Development GmbH	Berlin	94.90
BUWOG - Lüneburg GmbH	Kiel	94.90
BUWOG - Mariendorfer Weg Development GmbH	Berlin	94.90
BUWOG - NDL I GmbH	Kiel	100.00
BUWOG - NDL II GmbH	Kiel	100.00
BUWOG - NDL III GmbH	Kiel	100.00
BUWOG - NDL IV GmbH	Kiel	100.00
BUWOG - NDL IX GmbH	Kiel	100.00
BUWOG - NDL V GmbH	Kiel	100.00
BUWOG - NDL VI GmbH	Kiel	100.00
BUWOG - NDL VII GmbH	Kiel	100.00
BUWOG - NDL VIII GmbH	Kiel	100.00
BUWOG - NDL X GmbH	Kiel	100.00
BUWOG - NDL XI GmbH	Kiel	100.00
BUWOG - NDL XII GmbH	Kiel	100.00
BUWOG - NDL XIII GmbH	Kiel	100.00
BUWOG - Niedersachsen/Bremen GmbH	Kiel	94.90 [1)]

Company	Company domicile	Interest %
BUWOG - Parkstraße Development GmbH	Berlin	94.90
BUWOG Projektmanagement GmbH	Berlin	100.00
BUWOG - Regattastraße Development GmbH	Berlin	100.00
BUWOG - Region Ost Development GmbH	Berlin	100.00
BUWOG - Scharnhorststraße 26–27 Development GmbH	Berlin	100.00
BUWOG - Schleswig-Holstein GmbH	Kiel	94.90 [1)]
BUWOG Spandau 1 GmbH & Co. KG	Kiel	100.00 [2)]
BUWOG Spandau 2 GmbH & Co. KG	Kiel	100.00 [2)]
BUWOG Spandau 3 GmbH & Co. KG	Kiel	100.00 [2)]
BUWOG - Spandau Primus GmbH	Kiel	100.00
BUWOG Syke GmbH	Kiel	100.00
BUWOG - Weidenbaumsweg Development GmbH	Berlin	94.90
BUWOG-Westendpark Development GmbH	Berlin	100.00
BWG Frankfurt am Main Bundesbahn-Wohnungsgesellschaft mbH	Frankfurt am Main	94.90
conwert & kelber Besitz 10/2007 GmbH	Berlin	94.80
conwert & Kelber Besitz 11/2007 GmbH	Zossen	94.80
conwert & kelber Bestand 10/2007 GmbH	Berlin	94.80
conwert Alfhild II Invest GmbH	Berlin	94.90
conwert Alfhild Invest GmbH	Berlin	94.90
conwert alpha Invest GmbH	Zossen	94.90
conwert Aries Invest GmbH	Zossen	100.00
conwert Berlin 2 Immobilien Invest GmbH	Zossen	94.90
conwert beta Invest GmbH	Berlin	94.90
conwert Capricornus Invest GmbH	Zossen	100.00
conwert Carina Invest GmbH	Berlin	100.00
conwert Cassiopeia Invest GmbH	Berlin	94.90
conwert Centaurus Invest GmbH	Zossen	94.90
conwert Corvus Invest GmbH	Berlin	94.00
conwert delta Invest GmbH	Berlin	100.00
conwert Deutschland Beteiligungsholding GmbH	Berlin	100.00
conwert Deutschland GmbH	Berlin	100.00
conwert Deutschland Holding GmbH	Berlin	94.90
conwert Dresden Vier Invest GmbH	Berlin	100.00
conwert Eisa Invest GmbH	Zossen	94.90
conwert Epitaurus Invest GmbH	Zossen	94.00
conwert epsilon Invest GmbH	Berlin	94.90
conwert Fenja Invest GmbH	Berlin	94.90
conwert gamma Invest GmbH	Berlin	94.90
conwert Gemini Invest GmbH	Zossen	100.00
conwert Grazer Damm Development GmbH	Zossen	94.90
conwert Grundbesitz Leipzig Besitz GmbH	Berlin	94.90
conwert Grundbesitz Leipzig Bestand GmbH	Zossen	94.90
conwert Immobilien Development GmbH	Berlin	94.90
conwert lambda Invest GmbH	Berlin	100.00
conwert Lepus Invest GmbH	Berlin	100.00
conwert omega Invest GmbH	Zossen	94.90

Company	Company domicile	Interest %
conwert Pegasus Invest GmbH	Berlin	94.90
conwert Phoenix Invest GmbH	Berlin	100.00
conwert Sachsen Invest GmbH	Zossen	100.00
conwert Tizian 1 Invest GmbH	Berlin	94.90
conwert Tizian 2 Invest GmbH	Berlin	94.90
conwert Wali Invest GmbH	Berlin	94.90
conwert Wohn-Fonds GmbH	Zossen	100.00
DA EB GmbH	Nuremberg	100.00
DAIG 1. Objektgesellschaft mbH	Düsseldorf	100.00 [1)]
DAIG 12. Objektgesellschaft mbH	Düsseldorf	94.00 [1)]
DAIG 13. Objektgesellschaft mbH	Düsseldorf	94.00
DAIG 2. Objektgesellschaft mbH	Düsseldorf	100.00 [1)]
DAIG 3. Objektgesellschaft mbH	Düsseldorf	100.00 [1)]
DAIG 4. Objektgesellschaft mbH	Düsseldorf	100.00 [1)]
DA Jupiter Wohnanlage GmbH	Düsseldorf	94.00 [1)]
Deutsche Annington Acquisition Holding GmbH	Düsseldorf	100.00 [1)]
Deutsche Annington Beteiligungsverwaltungs GmbH	Düsseldorf	100.00
Deutsche Annington DEWG GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington DEWG Verwaltungs GmbH	Düsseldorf	100.00
Deutsche Annington DMB Eins GmbH	Bochum	100.00
Deutsche Annington Fundus Immobiliengesellschaft mbH	Cologne	100.00
Deutsche Annington Fünfte Beteiligungsgesellschaft mbH	Düsseldorf	100.00
Deutsche Annington Haus GmbH	Kiel	100.00
Deutsche Annington Heimbau GmbH	Kiel	100.00
Deutsche Annington Holdings Drei GmbH	Bochum	100.00
Deutsche Annington Holdings Eins GmbH	Düsseldorf	100.00
Deutsche Annington Holdings Fünf GmbH	Düsseldorf	100.00 [1)]
Deutsche Annington Holdings Sechs GmbH	Bochum	100.00 [1)]
Deutsche Annington Holdings Vier GmbH	Düsseldorf	100.00 [1)]
Deutsche Annington Holdings Vier GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington Holdings Zwei GmbH	Düsseldorf	100.00
Deutsche Annington Immobilien-Dienstleistungen GmbH	Düsseldorf	100.00
Deutsche Annington Interim DAMIRA GmbH	Düsseldorf	100.00
Deutsche Annington Kundenservice GmbH	Bochum	100.00 [1)]
Deutsche Annington McKinley Eins GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington McKinley Eins Verwaltungs GmbH	Düsseldorf	100.00
Deutsche Annington McKinley-Holding GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington Rheinland Immobiliengesellschaft mbH	Cologne	100.00
Deutsche Annington Rhein - Ruhr GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington Sechste Beteiligungs GmbH	Düsseldorf	100.00
Deutsche Annington WOGE Sechs Verwaltungs GmbH	Bochum	100.00 [1)]
Deutsche Annington WOGE Sieben Verwaltungs-GmbH	Düsseldorf	100.00
Deutsche Annington WOGE Vier Bestands GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington WOGE Vier GmbH & Co. KG	Bochum	100.00 [2)]
Deutsche Annington Wohnungsgesellschaft I mbH	Essen	100.00

Company	Company domicile	Interest %
Deutsche Annington Zweite Beteiligungsgesellschaft mbH	Düsseldorf	100.00
Deutsche Eisenbahn-Wohnungs-Gesellschaft mbH	Leipzig	100.00
Deutsche Multimedia Service GmbH	Düsseldorf	100.00 [1)]
Deutsche TGS GmbH	Düsseldorf	51.00 [1)]
Deutsche Wohn-Inkasso GmbH	Bochum	100.00 [1)]
Diak-Nd Pflege-Altenheime Besitz GmbH	Berlin	100.00
Eisenbahn-Siedlungsgesellschaft Augsburg mbH (Siegau)	Augsburg	94.90
Eisenbahn-Siedlungsgesellschaft Stuttgart, gemeinnützige Gesellschaft mit beschränkter Haftung	Stuttgart	94.87
Eisenbahn-Wohnungsbau-Gesellschaft Karlsruhe GmbH	Karlsruhe	94.90
Eisenbahn-Wohnungsbaugesellschaft Köln mbH	Cologne	94.90
Eisenbahn-Wohnungsbaugesellschaft Nürnberg GmbH	Nuremberg	94.90
Franconia Invest 1 GmbH	Düsseldorf	94.90
Franconia Wohnen GmbH	Düsseldorf	94.90
Frankfurter Siedlungsgesellschaft mbH (FSG)	Düsseldorf	100.00 [1)]
FSG-Holding GmbH	Düsseldorf	94.80
GAGFAH Acquisition 1 GmbH	Bochum	94.80
GAGFAH Acquisition 2 GmbH	Bochum	94.80 [1)]
GAGFAH Asset Management GmbH	Bochum	100.00 [1)]
GAGFAH Dritte Grundbesitz GmbH	Bochum	94.80 [1)]
GAGFAH Erste Grundbesitz GmbH	Bochum	94.80 [1)]
GAGFAH GmbH	Bochum	94.90
GAGFAH Griffin GmbH	Bochum	94.90 [1)]
GAGFAH Griffin Holding GmbH	Bochum	100.00 [1)]
GAGFAH Hausservice GmbH	Essen	94.90 [1)]
GAGFAH Holding GmbH	Bochum	100.00 [1)]
GAGFAH M Immobilien-Management GmbH	Bochum	94.90
GAGFAH Zweite Grundbesitz GmbH	Bochum	94.80 [1)]
GAG Grundstücksverwaltungs-GmbH	Berlin	94.90
GBH Acquisition GmbH	Bochum	94.80
GBH Service GmbH	Heidenheim an der Brenz	100.00
Grundwert Living GmbH	Berlin	100.00
Haus- und Boden-Fonds 38	Essen	54.15
H&L Immobilien GmbH	Kiel	100.00
HPE Hausbau GmbH	Zossen	94.90
HPE Sechste Hausbau Portfolio GmbH	Zossen	100.00
HPE Siebte Hausbau Portfolio GmbH	Berlin	100.00
HvD I Grundbesitzgesellschaft mbH	Berlin	100.00
IESA Immobilien Entwicklung Sachsen GmbH	Berlin	100.00
Immobilienfonds Koblenz-Karthause, Wofgang Hober Kommanditgesellschaft (Deutschbau-Fonds I) (in Liquidation)	Düsseldorf	92.71
Immo Service Dresden GmbH	Dresden	100.00
JANANA Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.90
KADURA Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.91
Kieler Stadtentwicklungs- und Sanierungsgesellschaft mbH	Kiel	100.00
Kieler Wohnungsbaugesellschaft mit beschränkter Haftung	Kiel	94.90 [1)]
KKS Projektentwicklung GmbH	Berlin	94.80

Company	Company domicile	Interest %
KWG Grundbesitz CI GmbH & Co. KG	Berlin	99.90
KWG Grundbesitz CIII GmbH & Co. KG	Berlin	95.41
KWG Grundbesitz I Verwaltungs GmbH	Berlin	100.00
KWG Grundbesitz III GmbH	Berlin	100.00
KWG Grundbesitz VI GmbH	Berlin	100.00
KWG Grundbesitz VII GmbH	Berlin	100.00
KWG Grundbesitz VIII GmbH	Berlin	100.00
KWG Grundbesitz X GmbH	Berlin	100.00
KWG Immobilien GmbH	Berlin	100.00
KWG Kommunale Wohnen GmbH	Berlin	94.07
LEMONDAS Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.90
LEVON Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.90
Liegenschaften Weißig GmbH	Dresden	94.75
MANGANA Grundstücksgesellschaft mbH & Co.KG	Grünwald	94.90
MAKANA Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.90
MELCART Grundstücks-Verwaltungsgesellschaft mbH	Grünwald	94.80
MIRA Grundstücksgesellschaft mbH	Düsseldorf	94.90
MIRIS Grundstücksgesellschaft mbH & Co. KG	Grünwald	94.90
Neues Schweizer Viertel Betriebs+Service GmbH & Co. KG	Berlin	94.99
NILEG Immobilien Holding GmbH	Hanover	100.00
NILEG Norddeutsche Immobiliengesellschaft mbH	Hanover	94.86
Osnabrücker Wohnungsbaugesellschaft mit beschränkter Haftung	Osnabrück	94.09
PRIMA Wohnbauten Privatisierungs-Management GmbH	Berlin	100.00 [1)]
RSTE Objektgesellschaft Wohnanlagen für Chemnitz mbH	Wuppertal	94.73
RVG Rheinauhafen-Verwaltungsgesellschaft mbH	Cologne	74.00
Schweizer Viertel Grundstücks GmbH	Berlin	94.74
SEED 1 GmbH	Berlin	100.00
"Siege" Siedlungsgesellschaft für das Verkehrspersonal mbH Mainz	Mainz	94.90
Süddeutsche Wohnen Gebäude GmbH	Stuttgart	100.00 [1)]
Süddeutsche Wohnen GmbH	Stuttgart	94.33 [1)]
Süddeutsche Wohnen Grundstücksgesellschaft mbH	Stuttgart	100.00 [1)]
Süddeutsche Wohnen Management Holding GmbH	Stuttgart	100.00 [1)]
SÜDOST WOBA DRESDEN GMBH	Dresden	94.90
SWG Siedlungs- und Wohnhausgesellschaft Sachsen GmbH	Berlin	100.00
Tempelhofer Feld GmbH für Grundstücksverwertung	Kiel	94.90
Viterra Holdings Eins GmbH	Düsseldorf	100.00 [1)]
Viterra Holdings Zwei GmbH	Düsseldorf	100.00
Vonovia Dritte Berlin GmbH	Schönefeld	94.90
Vonovia Eigentumsservice GmbH	Bochum	100.00 [1)]
Vonovia Eigentumsverwaltungs GmbH	Bochum	100.00 [1)]
Vonovia Elbe Berlin II GmbH	Nuremberg	94.90
Vonovia Elbe Berlin III GmbH	Nuremberg	94.90
Vonovia Elbe Berlin IV GmbH	Nuremberg	94.90
Vonovia Elbe Berlin VI GmbH	Nuremberg	94.90
Vonovia Elbe Dresden I GmbH	Nuremberg	94.90
Vonovia Elbe GmbH	Nuremberg	94.90

Company	Company domicile	Interest %
Vonovia Elbe Ost GmbH	Nuremberg	94.90
Vonovia Elbe Wannsee I GmbH	Nuremberg	94.90
Vonovia Elbe Wohnen GmbH	Bochum	100.00
Vonovia Energie Service GmbH	Bochum	100.00 [1)]
Vonovia Engineering GmbH	Bochum	100.00 [1)]
Vonovia Immobilien Treuhand GmbH	Bochum	100.00 [1)]
Vonovia Immobilienmanagement GmbH	Bochum	100.00 [1)]
Vonovia Immobilienmanagement one GmbH	Frankfurt am Main	94.90 [1)]
Vonovia Immobilienmanagement two GmbH	Frankfurt am Main	94.90 [1)]
Vonovia Immobilienservice GmbH	Munich	100.00 [1)]
Vonovia Kundenservice GmbH	Bochum	100.00 [1)]
Vonovia Managementverwaltung GmbH	Nuremberg	100.00 [1)]
Vonovia Mess Service GmbH	Essen	100.00 [1)]
Vonovia Modernisierungs GmbH	Düsseldorf	100.00 [1)]
Vonovia Operations GmbH	Bochum	100.00 [1)]
Vonovia Pro Bestand Nord GmbH	Bochum	100.00
Vonovia Pro Bestand Nord Invest GmbH	Bochum	94.90
Vonovia Pro Bestand Nord Properties GmbH	Bochum	94.90
Vonovia Pro Bestand Nord Real Estate GmbH	Bochum	94.90
Vonovia Technischer Service Nord GmbH	Essen	100.00 [1)]
Vonovia Technischer Service Süd GmbH	Dresden	100.00
Vonovia Wohnumfeld Service GmbH	Düsseldorf	100.00 [1)]
WOBA DRESDEN GMBH	Dresden	100.00
WOBA HOLDING GMBH	Dresden	100.00
WOHNBAU NORDWEST GmbH	Dresden	94.90
Wohnungsbau Niedersachsen Gesellschaft mit beschränkter Haftung	Hanover	94.85
Wohnungsgesellschaft Norden mit beschränkter Haftung	Hanover	94.88
Wohnungsgesellschaft Ruhr-Niederrhein mbH Essen	Essen	94.90
Austria		
Adelheid-Popp-Gasse 10 GmbH & Co KG	Vienna	100.00
Anton Baumgartner-Straße 125, 1230 Wien, Besitz GmbH	Vienna	100.00
Brunn am Gebirge Realbesitz GmbH	Vienna	100.00
BUWOG Altprojekte GmbH	Vienna	100.00
BUWOG Baranygasse 7 GmbH	Vienna	100.00
BUWOG - Bauen und Wohnen Gesellschaft mbH	Vienna	100.00
BUWOG Bernreiterplatz 13 GmbH	Vienna	100.00
BUWOG Beteiligungs GmbH	Vienna	100.00
BUWOG Breitenfurterstraße 239 GmbH	Vienna	100.00
BUWOG Breitenfurterstraße Eins, GmbH & Co KG	Vienna	100.00
BUWOG Breitenfurterstraße Zwei, GmbH & Co KG	Vienna	100.00
BUWOG Bruno-Marek-Allee 22 GmbH & Co KG	Vienna	100.00
BUWOG cw Dienstleistung Holding GmbH	Vienna	100.00
BUWOG cw Handelsges.m.b.H.	Vienna	100.00
BUWOG cw Invest GmbH	Vienna	100.00
BUWOG cw Neubaubesitz GmbH	Vienna	100.00

Company	Company domicile	Interest %
"BUWOG cw SECURITISATION" Holding GmbH	Vienna	100.00
BUWOG Demophon Immobilienvermietungs GmbH	Vienna	100.00
BUWOG Diesterweggasse 27 GmbH	Vienna	100.00
BUWOG Diesterweggasse 27 GmbH & Co KG	Vienna	100.00
BUWOG Döblerhofstraße GmbH	Vienna	100.00
BUWOG Gewerbeimmobilien Eins GmbH	Vienna	100.00
BUWOG Gewerbeimmobilien Zwei GmbH	Vienna	100.00
BUWOG Group GmbH	Vienna	100.00
BUWOG Handelskai 346 GmbH	Vienna	100.00
BUWOG Himberger Straße GmbH	Vienna	100.00
BUWOG Holding GmbH	Vienna	100.00
BUWOG Linke Wienzeile 280 GmbH	Vienna	100.00
BUWOG - Penzinger Straße 76 GmbH	Vienna	100.00
BUWOG Pfeiffergasse 3–5 GmbH	Vienna	100.00
BUWOG Projektentwicklung GmbH	Vienna	100.00
BUWOG - Projektholding GmbH	Vienna	100.00
BUWOG - PSD Holding GmbH	Vienna	100.00
BUWOG Rathausstraße GmbH	Vienna	100.00
BUWOG Schweidlgasse 30 GmbH & Co KG	Vienna	100.00
BUWOG Seeparkquartier GmbH	Vienna	100.00
BUWOG Seeparkquartier Holding GmbH	Vienna	100.00
BUWOG Süd GmbH	Villach	99.98
CENTUM Immobilien GmbH	Vienna	100.00
Con Tessa Immobilienverwertung GmbH	Vienna	100.00
Con value one Immobilien GmbH	Vienna	100.00
CWG Beteiligungs GmbH	Vienna	100.00
DATAREAL Beteiligungsgesellschaft m.b.H. & Co. Gablenzgasse 60 KG	Vienna	100.00
DATAREAL Beteiligungsgesellschaft m.b.H.& Co. Heiligenstädter Straße 9 OG	Vienna	100.00
EARNY Holding GmbH	Vienna	100.00
EB Immobilien Invest GmbH	Vienna	100.00
EBI Beteiligungen GmbH	Vienna	100.00
EBI Beteiligungen GmbH & Co,1190 Wien, Rampengasse 3–5, KG	Vienna	100.00
ECO Anteilsverwaltungs GmbH	Vienna	100.00
ECO Business-Immobilien GmbH	Vienna	100.00
ECO Business-Immobilien-Beteiligungen GmbH	Vienna	100.00
ECO CEE & Real Estate Besitz GmbH	Vienna	100.00
ECO Eastern Europe Real Estate GmbH	Vienna	100.00
ECO Immobilien Verwertungs GmbH	Vienna	100.00
"Epssilon" Altbau GmbH	Vienna	100.00
"Epssilon" Meidlinger Hauptstr.27 Liegenschaftsverwaltungs GmbH	Vienna	100.00
"G1" Immobilienbesitz GmbH	Vienna	100.00
GENA SECHS Immobilienholding GmbH	Vienna	100.00
GENA ZWEI Immobilienholding GmbH	Vienna	100.00
Gewerbepark Urstein Besitz GmbH	Vienna	100.00
Gewerbepark Urstein Besitz GmbH & Co KG	Vienna	100.00

Company	Company domicile	Interest %
GGJ Beteiligungs GmbH	Vienna	100.00
GGJ Beteiligungs GmbH & Co Projekt Drei OG	Vienna	100.00
GGJ Beteiligungs GmbH & Co Projekt Eins OG	Vienna	100.00
GGJ Beteiligungs GmbH & Co Projekt Fünf OG	Vienna	100.00
GGJ Beteiligungs GmbH & Co Projekt Zehn OG	Vienna	100.00
GGJ Beteiligungs GmbH & Co Projekt Zwei OG	Vienna	100.00
GJ-Beteiligungs GmbH	Vienna	100.00
GJ-Beteiligungs GmbH & Co Projekt Fünf OG	Vienna	100.00
"GKHK" Handelsgesellschaft m.b.H.	Vienna	100.00
G-Unternehmensbeteiligung GmbH	Vienna	100.00
"Heller Fabrik" Liegenschaftsverwertungs GmbH	Vienna	100.00
Hertha-Firnberg-Straße 10, 1100 Wien, Immobilienbesitz GmbH	Vienna	100.00
Kapital & Wert Immobilienbesitz GmbH	Vienna	100.00
Lithinos Immobilien Invest GmbH	Vienna	100.00
Mariahilferstraße 156 Invest GmbH	Vienna	100.00
MARINADECK Betriebs GmbH	Vienna	100.00
MARINA TOWER Holding GmbH	Vienna	51.00
"MEZ" - Vermögensverwaltungs Gesellschaft m.b.H. (in Liquidation)	Vienna	100.00
PI Immobilien GmbH	Vienna	100.00
RESAG Property Management GmbH (in Liquidation)	Vienna	100.00
REVIVA Immobilien GmbH	Vienna	100.00
RG Immobilien GmbH (verschmolzen mit IEG)	Vienna	100.00
Roßauer Lände 47–49 Liegenschaftsverwaltungs GmbH	Vienna	100.00
Stubenbastei 10 und 12 Immobilien GmbH	Vienna	100.00
Themelios Immobilien Invest GmbH	Vienna	100.00
TP Besitz GmbH	Vienna	100.00
TPI Immobilien Holding GmbH	Vienna	100.00
TPI Tourism Properties Invest GmbH	Vienna	96.00
"TPW" Immobilien GmbH	Vienna	100.00
T-Unternehmensbeteiligung GmbH	Vienna	100.00
Verein "Social City" - Verein zur Förderung der sozialen Kontakte und der sozialen Infrastruktur in Stadterneuerungsgebieten	Vienna	100.00
WZH WEG Besitz GmbH	Vienna	100.00
Sweden		
AB Nerke Holding 211	Malmö	100.00
AB Nerke Holding 411	Malmö	100.00
Bosystem TM AB	Stockholm	100.00
Bredbykvarn Fastighets AB	Stockholm	100.00
Bredbykvarn Garage AB	Stockholm	100.00
Bromsten Fastighetsförvaltning AB	Stockholm	100.00
Bronseri Aktiebolag	Eskilstuna	100.00
D. Carnegie & Co AB	Stockholm	100.00
Fastighets AB Bonden	Stockholm	100.00
Fastighets AB Brunteglet	Stockholm	100.00
Fastighets AB K-backen 1	Malmö	100.00

Company	Company domicile	Interest %
Fastighets AB Läraren i Strängnäs	Stockholm	100.00
Fastighets AB Linrepan	Stockholm	100.00
Fastighets AB Träbalkongen	Stockholm	100.00
Fastighets AB Turemalm	Stockholm	100.00
Fastighetsbolaget Anelk AB	Stockholm	100.00
Fastighetsbolaget Erganten AB	Eskilstuna	100.00
Fastighetsbolaget Homiensis II AB	Stockholm	100.00
Fastighetsbolaget Klena Kommanditbolag	Stockholm	100.00
Fastighetsbolaget Kullerstensvägen AB	Stockholm	100.00
Fastighetsbolaget Kullerstensvägen Kommanditbolag	Stockholm	100.00
Fastighetsbolaget Lärdom AB	Eskilstuna	100.00
Fastighetsbolaget Nyfors City AB	Stockholm	100.00
Fastighetsbolaget Sågenvägen AB	Stockholm	100.00
Fastighetsbolaget Vaksam 8 AB	Eskilstuna	100.00
Fastighetsbolaget VP AB	Malmö	100.00
Fastighetsförvaltningsaktiebolaget Friheten 11	Eskilstuna	100.00
Fastighetsuthyrning Tranås AB	Stockholm	100.00
Flemingsberg Fastighetsförvaltning AB	Stockholm	100.00
Graflunds Byggnads Aktiebolag	Malmö	100.00
Graflunds Fastighets Aktiebolag	Eskilstuna	100.00
Graflunds Holding AB	Stockholm	100.00
Graflunds Kommersiella Fastigheter AB	Eskilstuna	100.00
Hembla AB	Stockholm	100.00
Hembla AlbaStone II AB	Stockholm	100.00
Hembla AlbaStone III AB	Stockholm	100.00
Hembla AlbaStone IV AB	Stockholm	100.00
Hembla AlbaStone V AB	Stockholm	100.00
Hembla Bergen II AB	Stockholm	100.00
Hembla Holmiensis Inanis I AB	Stockholm	100.00
Hembla Holmiensis Inanis II AB	Stockholm	100.00
Hembla Holmiensis Inanis III AB	Stockholm	100.00
Hembla Holmiensis Inanis IV AB	Stockholm	100.00
Hembla Holmiensis Inanis V AB	Stockholm	100.00
Hembla Inanis Alba I AB	Stockholm	100.00
Hembla Inanis Alba II AB	Stockholm	100.00
Hembla Inanis Holdco AB	Stockholm	100.00
Hembla Norrköping AB	Stockholm	100.00
Hembla NYKR AT AB	Stockholm	94.08
Hembla NYKR FH AB	Stockholm	100.00
Hembla NYKR Holdco AB	Stockholm	100.00
Hembla Servicecenter AB	Stockholm	100.00
Holmiensis Affärsutveckling AB	Stockholm	100.00
Holmiensis Bostäder AB	Stockholm	100.00
Holmiensis Bostäder II AB	Stockholm	100.00
Holmiensis Duvholmen 1 AB	Stockholm	100.00
Holmiensis Huddinge Fyra AB	Stockholm	100.00

Company	Company domicile	Interest %
HomeStar InvestCo AB	Stockholm	100.00
Hyresbostäder Bollvägen Zenithegie AB	Stockholm	100.00
Hyresbostäder Borg AB	Stockholm	100.00
Hyresbostäder Fornhöjden AB	Stockholm	100.00
Hyresbostäder Grevgatan 20 Zenithegie AB	Stockholm	100.00
Hyresbostäder i Alby AB	Stockholm	100.00
Hyresbostäder i Arboga AB	Stockholm	100.00
Hyresbostäder i Katrineholm AB	Stockholm	100.00
Hyresbostäder i Köping AB	Stockholm	100.00
Hyresbostäder i Söderort AB	Stockholm	100.00
Hyresbostäder i Sverige Fyra AB	Stockholm	100.00
Hyresbostäder i Sverige II AB	Stockholm	100.00
Hyresbostäder i Sverige III AB	Stockholm	100.00
Hyresbostäder i Sverige V AB	Stockholm	100.00
Hyresbostäder i Tranås AB	Stockholm	100.00
Hyresbostäder i Tranås Två Handelsbolag	Malmö	100.00
Hyresbostäder Industrivägen 19 Zenithegie AB	Stockholm	100.00
Hyresbostäder Järna AB	Stockholm	100.00
Hyresbostäder Järnvägsgatan 28 AB	Stockholm	100.00
Hyresbostäder Linnean AB	Stockholm	100.00
Hyresbostäder Myran AB	Stockholm	100.00
Hyresbostäder Nynäsvägen 24 och 26 AB	Stockholm	100.00
Hyresbostäder Nynäsvägen 27 AB	Stockholm	100.00
Hyresbostäder Ösmo AB	Stockholm	100.00
Hyresbostäder Polhemsgatan 3 Zenithegie AB	Stockholm	100.00
Hyresbostäder Puddelprocessen Holdco AB	Stockholm	100.00
Hyresbostäder Renen AB	Stockholm	100.00
Hyresbostäder Sten AB	Stockholm	100.00
Hyresbostäder Svart AB	Stockholm	100.00
Hyresbostäder Turbinen och Zenith VI AB	Stockholm	100.00
Hyresbostäder VII Albyberget AB	Stockholm	100.00
Hyresbostäder Vitsippan AB	Stockholm	100.00
Hyresbostäder Zenithegie I AB	Stockholm	100.00
Hyresbostäder Zenithegie II AB	Stockholm	100.00
Hyresbostäder Zenithegie III AB	Stockholm	100.00
Hyresbostäder Zenithegie IV AB	Stockholm	100.00
Hyresbostäder Zenithegie V AB	Stockholm	100.00
Hyresbostäder Zenithegie VI AB	Stockholm	100.00
Hyresfastigheter i Strängnäs AB	Stockholm	100.00
Jordbroförvaltnings AB	Stockholm	100.00
Kattgun Aktiebolag	Eskilstuna	100.00
Kista Fastighetsförvaltning AB	Stockholm	100.00
Kista Kommanditdelägare AB	Stockholm	100.00
Kommanditbolaget Bergen 1	Stockholm	100.00
Kommanditbolaget Nidarosgatan	Stockholm	100.00
Kommanditbolaget Nordkapsgatan 4–19	Stockholm	100.00

Company	Company domicile	Interest %
Kommanditbolaget Telemark	Stockholm	100.00
Kommanditbolaget Tönsbergsgatan 1–15	Stockholm	100.00
Kungskatten Holding AB	Stockholm	100.00
Lövgardet Business KB	Malmö	100.00
Lövgardet Residential HB	Malmö	100.00
Märtuna I AB	Stockholm	100.00
Markarydsbostäder Holding AB	Stockholm	100.00
Markarydsbostäder i Södertälje Aktiebolag	Södertälje	100.00
Markarydsbostäder i Stockholm Aktiebolag	Upplands-Bro	100.00
Östgötafastigheter Gavotten 1 AB	Stockholm	100.00
Östgötafastigheter Hambon 1 AB	Stockholm	100.00
Östgötafastigheter Hambon 2 AB	Stockholm	100.00
Östgötafastigheter i Norrköping AB	Norrköping	100.00
Östgötafastigheter Kadriljen 1 AB	Stockholm	100.00
Östgötafastigheter Mazurkan 1 AB	Stockholm	100.00
Östgötafastigheter Menuetten 1 AB	Stockholm	100.00
Östgötafastigheter Tangon 1 AB	Stockholm	100.00
Östgötaporten AB	Stockholm	100.00
Östgötatornen AB	Stockholm	100.00
Provinsfastigheter I Magasinet 4 AB	Stockholm	100.00
Provinsfastigheter I Stallet 3 AB	Stockholm	100.00
Provinsfastigheter I Vedboden 1 AB	Stockholm	100.00
Provinsfastigheter i Visättrahem AB	Stockholm	100.00
Spånga Förvaltning AB	Stockholm	100.00
Trojeborgsfastigheter i Sverige AB	Stockholm	100.00
Valsätra Galaxen AB	Stockholm	100.00
Veningen B AB	Stockholm	100.00
Victoria Park AB	Malmö	100.00
Victoria Park Almen 17 AB	Malmö	100.00
Victoria Park Beethoven I AB	Malmö	100.00
Victoria Park Beethoven II AB	Malmö	100.00
Victoria Park Beethoven III AB	Malmö	100.00
Victoria Park Bergsjön AB	Malmö	100.00
Victoria Park Boliger AB	Malmö	100.00
Victoria Park Borås AB	Malmö	100.00
Victoria Park Bostäder Tensta AB	Malmö	100.00
Victoria Park Bygg och Projekt AB	Malmö	100.00
Victoria Park Cedern 18 AB	Malmö	100.00
Victoria Park Eskil Ctr AB	Malmö	100.00
Victoria Park Fastigheter AB	Malmö	100.00
Victoria Park Fastigheter Södra AB	Malmö	100.00
Victoria Park Fröslunda AB	Malmö	100.00
Victoria Park Gulsparven AB	Malmö	100.00
Victoria Park Haren 10 AB	Malmö	100.00
Victoria Park Herrgården AB	Malmö	100.00
Victoria Park Holding AB	Malmö	100.00

Company	Company domicile	Interest %
Victoria Park Holding Karlskrona AB	Malmö	100.00
Victoria Park Holding Växjö Magistern AB	Malmö	100.00
Victoria Park Holding Växjö S AB	Malmö	100.00
Victoria Park Karlskrona, Malmö AB	Malmö	100.00
Victoria Park Living AB	Malmö	100.00
Victoria Park Lövgardet AB	Malmö	100.00
Victoria Park Malmen 14 AB	Malmö	100.00
Victoria Park Malmö Centrum AB	Malmö	100.00
Victoria Park Markaryd AB	Malmö	100.00
Victoria Park Mozart AB	Malmö	100.00
Victoria Park Mozart Fastighets AB	Malmö	100.00
Victoria Park Myran 30 AB	Malmö	100.00
Victoria Park Mytorp AB	Malmö	100.00
Victoria Park Nedogap AB	Malmö	100.00
Victoria Park Nygård AB	Malmö	100.00
Victoria Park Nyköping AB	Malmö	100.00
Victoria Park Örebro AB	Malmö	100.00
Victoria Park Ostbrickan AB	Malmö	100.00
Victoria Park Råbergstorp AB	Malmö	100.00
Victoria Park Rosengård AB	Malmö	100.00
Victoria Park Skiftinge AB	Malmö	100.00
Victoria Park Söderby 23 AB	Malmö	100.00
Victoria Park Söderby 394 AB	Malmö	100.00
Victoria Park Söderby 43 AB	Malmö	100.00
Victoria Park Söderby 51 AB	Malmö	100.00
Victoria Park Söderby 68 AB	Malmö	100.00
Victoria Park Stenby AB	Malmö	100.00
Victoria Park Tallriset AB	Malmö	100.00
Victoria Park V21 AB	Malmö	100.00
Victoria Park Valfisken Större 28 AB	Malmö	100.00
Victoria Park Våmmedal AB	Malmö	100.00
Victoria Park Växjö Magistern AB	Malmö	100.00
Victoria Park Växjö S AB	Malmö	100.00
Victoria Park Vivaldi I AB	Malmö	100.00
Victoria Park Vivaldi II AB	Malmö	100.00
Victoria Park Vivaldi III AB	Malmö	100.00
Victoria Park Vivaldi IV AB	Malmö	100.00
Victoria Park Vivaldi V AB	Malmö	100.00
Victoria Park Vivaldi VI AB	Malmö	100.00
Other Countries		
BUWOG High Deck Residential B.V.	Amsterdam/NL	94.90
Buwog Lux I S.à r.l.	Esch-sur-Alzette/LU	94.00
BUWOG Wohnwerk S.A.	Luxembourg/LU	94.84
DA DMB Netherlands B.V.	Eindhoven/NL	100.00

Company	Company domicile	Interest %
DAIG 10. Objektgesellschaft B.V.	Amsterdam/NL	100.00
DAIG 11. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 14. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 15. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 16. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 17. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 18. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 19. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 20. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 21. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 22. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 23. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 24. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 25. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DAIG 9. Objektgesellschaft B.V.	Amsterdam/NL	94.44
DA Jupiter NL JV Holdings 1 B.V.	Amsterdam/NL	94.44
Vonovia Finance B.V.	Amsterdam/NL	100.00
VONOVIA FRANCE SAS	Paris/FR	100.00
Affiliated companies not consolidated		
BOKRÉTA Management Kft.	Budapest/HU	100.00
IMMO-ROHR PLUSZ Kft.	Budapest/HU	100.00
My-Box Debrecen Inglatian-Fejlesztö Kft Cg.	Budapest/HU	100.00
Companies with which joint activity is excercised		
Planungsgemeinschaft "Das-Neue-Gartenfeld" GmbH & Co. KG	Berlin/GER	38.44
Planungsgemeinschaft "Das-Neue-Gartenfeld" Verwaltungs GmbH	Berlin/GER	100.00
At equity consolidated joint ventures		
MARINA CITY Entwicklungs GmbH	Vienna/AT	50.00
Möser GbR	Essen/GER	50.00
Schaeffler-Areal 1. Liegenschaften GmbH	Bad Heilbrunn/GER	30.00
Schaeffler-Areal 2. Liegenschaften GmbH (in Liquidation)	Bad Heilbrunn/GER	30.00
Wolmirstedt GbR	Essen/GER	50.00
At equity consolidated associated companies		
Malmö Mozart Fastighets AB	Malmö/SWE	42.00
Rosengård Fastighets AB	Malmö/SWE	25.00

	Company domicile	Interest %	Equity € k Dec. 31, 2019	Net income for the year € k Dec. 31, 2019
Other investments with more than 10% of Vonovia's share in the capital				
Hellerhof GmbH	Frankfurt am Main/GER	13.17	101,397	11,490
VBW Bauen und Wohnen GmbH	Bochum/GER	19.87	110,375	7,377

1) Exemption according to Section 264 (3) HGB
2) 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, 2020.

Rolf Buch, Chairman of the Management Board

Function: Chief Executive Officer
Responsible for transactions, Value-add, general counsel, investor relations, IT, HR management, auditing, corporate communications and sustainability/strategy.

Appointment:
> Kötter Group (Member of the Council of Shareholders)[2]

Arnd Fittkau, Member of the Management Board

Function: Chief Rental Officer
Responsible for the Rental segment in the North, East, South, and West business areas, as well as for customer service and portfolio and tenant management.

Appointment:
> STEAG Fernwärme GmbH
  (Member of the Advisory Board)[2]

Helene von Roeder, Member of the Management Board

Function: Chief Financial Officer
Responsible for controlling, finance, property evaluation, accounting, tax, insurance, central procurement and Immobilien Treuhand.

Appointments:
> AVW Versicherungsmakler GmbH
  (Member of the Supervisory Board)[2]
> E. Merck KG (Member of the Council of Shareholders)[2]
> Merck KGaA (Member of the Supervisory Board)[1]
> Vonovia Finance B.V. (Member of the Supervisory Board)[2, 4]

Daniel Riedl, Member of the Management Board

Function: Chief Development Officer
Responsible for development in Austria, development in Germany and operating business in Austria.

[1] Supervisory Board mandates in accordance with Section 100 (2) of the German StockCorporation Act (AktG).
[2] Membership in comparable German and foreign supervisory bodies of commercial enterprises.
[3] Exempted Group mandates in accordance with Section 100 (2) No. 2 of the German Stock Corporation Act (AktG).
[4] Other Group bodies.

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.

Jürgen Fitschen,
Chairman

Senior Advisor at Deutsche Bank AG

Appointments:
> CECONOMY AG (Chairman of the Supervisory Board)[1]
> Kommanditgesellschaft CURA Vermögensverwaltung GmbH & Co. KG (Member of the Administrative Board)[2]
> Syntellix AG (Member of the Supervisory Board)[2]

Prof. Dr. Edgar Ernst,
Deputy Chairman

President of the German Financial Reporting Enforcement Panel (FREP)

Appointments:
> METRO AG (Member of the Supervisory Board)[1]
> TUI AG (Member of the Supervisory Board)[1]

Burkhard Ulrich Drescher

Managing Director of Innovation City Management GmbH

Appointment:
> STEAG Fernwärme GmbH (Member of the Advisory Board)[2]

Vitus Eckert

Attorney, Shareholder and Managing Director of Eckert Fries Carter Rechtsanwälte GmbH

Appointments:
> STANDARD Medien AG (Chairman of the Supervisory Board)[2]
> S. Spitz GmbH (Deputy Chairman of the Supervisory Board)[2]
> Vitalis Food Vertriebs-GmbH (Chairman of the Supervisory Board, group company of S. Spitz GmbH)[2]
> Simacek Holding GmbH (Chairman of the Supervisory Board)[2]
> Simacek Facility Management Group GmbH (Chairman of the Supervisory Board, group company of Simacek Holding GmbH)[2]

Dr. Florian Funck

Member of the Management Board of Franz Haniel & Cie. GmbH

Appointments:
> CECONOMY AG (Member of the Supervisory Board)[1]
> TAKKT AG (Chairman of the Supervisory Board)[3]

Dr. Ute Geipel-Faber

Self-employed management consultant

Appointment:
> Bayerische Landesbank (Member of the Supervisory Board)[1]

Daniel Just

Chairman of Bayerische Versorgungskammer

Appointments:
> DWS Grundbesitz GmbH (1st Deputy Chairman of the Supervisory Board)[2]
> Universal Investment GmbH (Member of the Supervisory Board)[2]
> GLL Real Estate Partners GmbH (Member of the Administrative Board)[2]

Hildegard Müller

President of the German Association of the Automotive Industry (VDA)

Appointments:
> Siemens Energy AG (Member of the Supervisory Board)[1]
> Siemens Energy Management GmbH (Member of the Supervisory Board, group company of Siemens Energy AG)[1]
> RAG Stiftung (Member of the Board of Trustees)[2]

Prof. Dr. Klaus Rauscher

Self-employed management consultant

Appointment:
> Innogy SE (Member of the Supervisory Board)[1]

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)[2]
> Jerónimo Martins SGPS S.A. (Member of the Administrative Board)[2]
> Vontobel Holding AG (Member of the Administrative Board)[2]
> Deutsche Börse AG (Member of the Supervisory Board)[1]

Christian Ulbrich

President and Chief Executive Officer Jones Lang LaSalle Incorporated

[1] Supervisory Board mandates in accordance with Section 100 (2) of the German StockCorporation Act (AktG).
[2] Membership in comparable German and foreign supervisory bodies of commercial enterprises.
[3] Exempted Group mandates in accordance with Section 100 (2) No. 2 of the German Stock Corporation Act (AktG).
[4] Other Group bodies.

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 balance sheet as of December 31, 2020, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from January 1 to December 31, 2020, 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, 2020. In accordance with German legal requirements, we have not audited the content of those components of the combined management report specified in the „Other Information“ section of our auditor’s 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, 2020, and of its financial performance for the financial year from January 1 to December 31, 2020, 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 those components of the combined management report specified in the „Other Information“ section of the auditor’s report.

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, 2020. 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 13 and 28 to the consolidated financial statements as well as the section on opportunities and risks in the combined management report.

The Financial Statement Risk

Investment properties in the amount of EUR 58.1 billion are reported in the consolidated financial statements of Vonovia as of December 31, 2020. Of this amount, EUR 48.7 billion is attributable to properties located in Germany, EUR 3.0 billion to properties located in Austria and EUR 6.4 billion to properties located in Sweden. 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 EUR 3.7 billion were recognized in the consolidated income statement.

Vonovia determines the fair values using internal valuation models. Exceptions to this are the Swedish real estate portfolio Victoria Park AB (publ) (hereinafter Victoria Park), Malmö, Sweden, and the real estate portfolio Hembla AB (publ), Stockholm, Sweden (hereinafter Hembla).

The fair values are determined internally by means of a discounted cash flow (DCF) method based on homogeneous valuation units of aggregated commercially related and comparable land and buildings. Further, an independent valuer prepares an appraisal, which is used to verify the internal measurements. For the Victoria Park and Hembla real estate portfolios, fair value is determined by independent valuers.

The measurement of investment properties is complex and incorporates numerous assumptions and data relevant to measurement that involve considerable estimation uncertainties and judgment. Even minor changes in the assumptions and data relevant to measurement can result in significant changes to the resulting fair value. The most significant assumptions and data are market rents, including the expected trend in rental rates, the planned maintenance costs and discount and capitalization rates. When determining the trend of discount and 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 appropriate.

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

With the involvement of our own property valuation experts, using partly control-based and partly substantive audit procedures, we assessed the accuracy and completeness of the property portfolio data used in the internal valuation models. In addition, we particularly assessed the internal valuation techniques 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 data used for measurement. We also used external market data to assess the assumptions and data used for measurement, such as the discount and capitalization rates applied, market rents and expected trend in rental rates as well as planned maintenance costs.

We compared the valuations conducted by Vonovia with our own calculations for a representative sample of German and Austrian portfolio valuation units, supplemented with a risk-oriented selection of elements. To this end, we used the standardized income approach („Ertragswertverfahren“) in accordance with the German Real Estate Appraisal Regulation [ImmoWertV] for the German portfolio and the market comparable method („Vergleichswertverfahren“) in line with ImmoWertV for the Austrian portfolio. In addition, we also conducted on-site inspections for the German properties in the sample to evaluate their respective condition.

We were satisfied with the qualification and objectivity of the external valuers commissioned by Vonovia, evaluated the valuation methods used for the appraisal with regard to compliance with IAS 40 in conjunction with IFRS 13, assessed the material assumptions and data for measurement, and compared the internal measurements with those of the respective external appraisal.

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 data 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 note 26 to the consolidated financial statements.

The Financial Statement Risk

Goodwill in the amount of EUR 1.5 billion is reported in the consolidated financial statements of Vonovia as of December 31, 2020. 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 areas in the Rental segment and the Value-add and Development segments.

Vonovia conducts annual impairment testing of recognized goodwill in the fourth quarter. For each group of cash-generating units, the carrying amount of the unit 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 the cash flow forecasts and the 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 difference (headroom) between value in use and the carrying amounts of the groups of cash-generating units. In financial year 2020, the appreciation in value of the investment properties and the associated increase in the carrying amounts of all groups of cash-generating units in the Rental segment led to a reduction in headroom, but not to an impairment of goodwill.

There is the risk for the consolidated financial statements that an impairment loss 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

With the involvement of our own valuation experts, we assessed the adequacy of Vonovia's calculation method, among other things, and reconciled the expected future cash flows recorded in the model to the underlying detailed planning. This detailed planning was derived from the five-year plan adopted by the Management Board on November 26, 2020, and acknowledged by the Supervisory Board on December 15, 2020. We assessed the plausibility of the planning assumptions based on sector-specific market expectations. 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 a significant part of the value in use for the regional business areas in the Rental segment is based on cash flow forecasts beyond the detailed planning horizon (period of perpetuity), we particularly evaluated capitalized maintenance as well as the sustainable growth rates used for the period of perpetuity against the backdrop of regional differences in the various business areas and based on external market assessments.

With regard to the WACCs determined by Vonovia, we assessed the individual assumptions and data used in detail on the basis of available market data and also critically evaluated them as a whole compared to comparable 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 audit focus area and verified whether further impairment losses could arise due to changes of individual WACC assumptions and data 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 data used for measurement.

Our Observations

The calculation method used for impairment testing of goodwill is appropriate and in line with the accounting policies to be applied. The Company's assumptions and data used for measurement are within an acceptable range. The disclosures in the notes on impairment testing of goodwill are appropriate.

Other Information

Management and/or the Supervisory Board are/is responsible for the other information. The other information comprises the following components of the combined management report, whose content was not audited:

> the non-financial statement contained in its own section of the combined management report and

> the corporate governance statement referred to in the combined management report.

The other information also includes the remaining parts of the annual report.

The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

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 information audited for content 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.

In accordance with our engagement letter, we conducted a separate assurance engagement of the non-financial statement. Please refer to our assurance report dated March 1, 2021, for information on the nature, scope and findings of this assurance engagement.

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

Assurance Report in accordance with Section 317 (3b) HGB on the Electronic Reproduction of the Consolidated Financial Statements and the Combined Management Report Prepared for Publication Purposes

We have performed an assurance engagement in accordance with Section 317 (3b) HGB to obtain reasonable assurance about whether the electronic reproduction of the consolidated financial statements and the combined management report together with the reproduction of the annual financial statements in one file (hereinafter the "ESEF documents") contained in the file that can be downloaded by the issuer from the electronic client portal with access protection, „vonovia-2020-12-31.zip" (SHA256 hash value: 46fcc542dcc66ff0018ecc4dfede88b02f19ddcaa17173703 60d-f3c0d3a78938) and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format („ESEF format"). In accordance with German legal requirements, this assurance engagement only extends to the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format and therefore relates neither to the information contained in this reproduction nor any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the combined management report contained in the above-mentioned electronic file and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the above-mentioned file beyond this reasonable assurance conclusion and our audit opinion on the accompanying consolidated financial statements and the accompanying combined management report for the financial year from January 1 to December 31, 2020, contained in the "Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report" above.

We conducted our assessment of the reproduction of the consolidated financial statements and the combined management report contained in the above-mentioned electronic file in accordance with Section 317 (3b) HGB and the Exposure Draft of the IDW Assurance Standard: Assurance in accordance with Section 317 (3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410) and the International Standard on Assurance Engagements 3000 (Revised). Accordingly, our responsibilities are further described below. Our audit firm has applied the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's management is responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the combined management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the Company's management is responsible for the internal controls they consider necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format, whether due to fraud or error.

The Company's management is also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited combined management report as well as other documents to be published to the operator of the German Federal Gazette [Bundesanzeiger].

The Supervisory Board is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material non-compliance with the requirements of Section 328 (1) HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the assurance engagement. We also:

> Identify and assess the risks of material non-compliance with the requirements of Section 328 (1) HGB, whether due to fraud or error, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance conclusion.

> Obtain an understanding of internal control relevant to the assessment of the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of these controls.

> Evaluate the technical validity of the ESEF documents, i.e. whether the file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815 on the technical specification for this electronic file.

> Evaluate whether the ESEF documents enable an XHTML reproduction with content equivalent to the audited consolidated financial statements and the audited combined management report.

Evaluate whether tagging the ESEF documents with Inline XBRL technology (iXBRL) provides an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the annual general meeting on June 30, 2020. We were engaged by the Supervisory Board on October 13, 2020. 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, March 1, 2021

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

[signature] Ufer	[signature] Bornhofen
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Limited Assurance Report of the Independent Auditor regarding the non-financial group statement*

To the Supervisory Board of Vonovia SE, Bochum

We have performed an independent limited assurance engagement on the non-financial group statement as well as the chapter "Fundamental Information About the Group" of the combined management report of Vonovia SE, Bochum (further "Company" or "Vonovia SE") according to § 315b of the German Commercial Code (HGB), for the period from January 1 to December 31, 2020.

Management's Responsibility

The legal representatives of the Company are responsible for the preparation of the non-financial group statement in accordance with §§ 315b, 315c in conjunction with 289c to 289e HGB.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the non-financial group statement and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, the legal representatives are responsible for the internal controls they deem necessary for the preparation of the non-financial group statement that is free of – intended or unintended – material misstatements.

Practitioner's Responsibility

It is our responsibility to express a conclusion on the non-financial group statement based on our work performed within a limited assurance engagement.

We conducted our work in the form of a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", published by IAASB. Accordingly, we have to plan and perform the assurance engagement in such a way that we obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the non-financial group statement of the Company for the period from January 1 to December 31, 2020 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB. We do not, however, issue a separate conclusion for each disclosure. As the assurance procedures performed in a limited assurance engagement are less comprehensive than in a reasonable assurance engagement, the level of assurance obtained is substantially lower. The choice of assurance procedures is subject to the auditor's own judgement.

Within the scope of our engagement we performed, amongst others, the following procedures:

> Inquiries of group-level personnel who are responsible for the materiality analysis in order to understand the processes for determining material topics and respective reporting boundaries for Vonovia SE

> A risk analysis, including media research, to identify relevant information on the sustainability performance of Vonovia SE in the reporting period

> Reviewing the suitability of internally developed Reporting Criteria

* Our engagement applied to the German version of the non-financial group statement 2020. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

> Evaluation of the design and the implementation of systems and processes for the collection, processing and monitoring of disclosures, including data consolidation, on environmental, employee and social matters, respect for human rights, and anti-corruption and bribery matters

> Inquiries of group-level personnel who are responsible for determining disclosures on concepts, due diligence processes, results and risks, performing internal control functions and consolidating disclosures

> Inspection of selected internal and external documents

> Analytical procedures for the evaluation of data and of the trends of quantitative disclosures as reported at group level by all sites

> Assessment of the overall presentation of the disclosures

In our opinion, we obtained sufficient and appropriate evidence for reaching a conclusion for the assurance engagement.

Independence and Quality Assurance on the Part of the Auditing Firm

In performing this engagement, we applied the legal provisions and professional pronouncements regarding independence and quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial group statement of Vonovia SE for the period from January 1 to December 31, 2020 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB.

Restriction of Use/General Engagement Terms

This assurance report is issued for purposes of the Supervisory Board of Vonovia SE, Bochum only. We assume no responsibility with regard to any third parties.

Our assignment for the Supervisory Board of Vonovia SE, Bochum, and professional liability as described above was governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (**https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf**). By reading and using the information contained in this assurance report, each recipient confirms notice of the provisions contained therein including the limitation of our liability as stipulated in No. 9 and accepts the validity of the General Engagement Terms with respect to us.

Düsseldorf, March 1, 2021

KPMG AG

Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Bornhofen Wirtschaftsprüfer [Geman Public Auditor]	ppa. Auer

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 23, 2021

Rolf Buch
(CEO)

Arnd Fittkau
(CRO)

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.

Vonovia reports the EPRA key figures based on the EPRA Best Practice Recommendations (BPRs). In October 2019, EPRA published a revised version of the BPR that will be applied for the first time in the 2020 fiscal year. In particular, fundamental changes have been made to the manner in which the net asset value (NAV) is calculated. The key figures NAV and NNNAV are being replaced by three new key figures: Net Reinstatement Value (NRV), Net Tangible Assets (NTA) and Net Disposal Value (NDV). 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 Performance Measures).

We would like to point out that the EPRA BPRs refer generally to both residential and commercial real estate companies. On the other hand, Vonovia is active almost exclusively in the area of residential real estate. Vonovia's business model is based on the development and construction of new apartments, both for its own portfolio and for sale to third parties, the rental of homes, the provision of housing-related services and the sale of apartments. Unlike companies with a commercial real estate portfolio and, as a result, a relatively small number of properties, Vonovia's portfolio features a large number of fairly similar residential 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 Development segment was expanded further in the 2020 fiscal year. Our business still relates almost exclusively to residential units. Further information on the Development segment can be found in the chapter "Portfolio in the Development Business". → **p. 77 et seqq.**

EPRA Key Figures

in € million			2019	2020	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.	1,075.8	1,196.9	11.3
EPRA Net Reinstatement Value (NRV)	Assumes that entities never sell assets and aims to represent the value required to rebuild the entity.	The EPRA NAV set of metrics make adjustments to the NAV per IFRS financial statements to provide stakeholders with the most relevant information on the fair value of the assets and liabilities of a real estate investment company, under different scenarios.	37,065.9	43,677.3	17.8
EPRA Net Tangible Assets (NTA)	Assumes that entities buy and sell assets, thereby crystallizing certain levels of unavoidable deferred tax.		29,762.2	35,488.6	19.2
EPRA Net Disposal Value (NDV)	Represents the shareholders' value under a disposal scenario, where deferred tax, financial instruments and certain other adjustments are calculated to the extent of their liability, net of any resulting tax.		17,161.9	20,543.4	19.7
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 purchasers' costs.	A comparable measure for portfolio valuations. This measure should make it easier for investors to judge themselves, how the valuation of portfolio X compares with portfolio Y.	3.3	3.0	-0.3 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 step rents).		3.3	3.0	-0.3 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.	2.4	2.3	-0.1 pp
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.	25.8	26.8	1.0 pp
EPRA Cost ratio (excl. direct vacancy costs) in %	Administrative & operating costs (excluding costs of direct vacancy) divided by gross rental income.		24.5	25.6	1.1 pp

* Allocation of deferred tax restructured.

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.

The adjustment of deferred taxes in relation to EPRA adjustments has been fundamentally revised and the previous years have been restated accordingly. The EPRA Earnings increased by 11.3% in 2020 compared with 2019.

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 by 10.6% 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	2019	2020	Change in %
Earnings per IFRS income statement	**1,294.3**	**3,340.0**	**>100**
Changes in value of investment properties, development properties held for investment and other interests	-4,131.5	-3,719.8	-10.0
Profits or losses on disposal of investment properties, development properties held for investment and other interests	-128.8	-182.1	41.4
Profits or losses on sales of trading properties including impairment charges in respect of trading properties.	-52.2	-61.8	18.4
Selling costs	49.8	35.3	-29.1
Tax on profits or losses on disposals	33.7	31.1	-7.7
Negative goodwill/goodwill impairment	2,103.5	–	-100.0
Changes in fair value of financial instruments and associated close-out costs	71.0	98.9	39.3
Acquisition costs	48.2	24.0	-50.2
Deferred tax in relation to EPRA adjustments**	1,787.8	1,631.3	-8.8
EPRA Earnings	**1,075.8**	**1,196.9**	**11.3**
EPRA Earnings per share in €*	**1.98**	**2.12**	**7.1**
Adjustment Development	25.6	48.1	87.9
Adjustment Recurring Sales	91.9	92.4	0.5
Adjustment other non-recurring Items	44.9	37.5	-16.5
Adjustment depreciation and amortization	72.3	92.3	27.7
Adjustments of prior-year/one-time interest expense	-34.9	-45.8	31.2
Adjustments for tax on profits or losses on disposals and other/prior-year taxes**	-27.0	-40.4	49.6
Adjustment for IFRS 16 effects	-29.9	-32.8	9.7
Adjusted Earnings (Group FFO)	**1,218.6**	**1,348.2**	**10.6**
Adjusted Earnings (Group FFO) per share in €*	**2.25**	**2.38**	**6.0**

* Based on the shares carrying dividend rights on the reporting date: Dec. 31, 2019: 542,273,611, Dec. 31, 2020: 565,887,299.
** Allocation of deferred tax restructured.

EPRA NAV Key Figures

The EPRA NAV key figures make adjustments based on the IFRS equity to provide stakeholders with information that is as clear as possible on the fair value of a real estate company's assets and liabilities in various scenarios.

The Net Reinstatement Value (NRV) is calculated based on the assumption that residential properties are never sold. It represents the asset value that would be required to rebuild the company from scratch. The equity attributable to Vonovia's shareholders is adjusted by the deferred taxes in relation to fair value gains of investment properties and the fair value of financial instruments after taking deferred taxes into account. The fair value of intangible assets is also added. At Vonovia, this refers to the additional value of the Value-add and Development segments, which is calculated in an appraisal that is updated every year. In addition, the real estate transfer tax and other purchasers' costs, deducted as part of the property valuation process, are added back.

The EPRA NTA (Net Tangible Assets) is calculated based on the assumption that properties are purchased and sold. This means that part of the deferred taxes on the real estate assets is inevitably realized as a result of the sale process. At Vonovia, the Recurring Sales and Non-core Disposals portfolio clusters, as well as the portfolio in Austria, are not to be allocated to the real estate portfolio that is held in the long term. The deferred taxes on these portfolios are calculated in proportion to the fair values and reduce the total deferred taxes recognized. Similarly, the real estate transfer tax and other purchasers' costs for these portfolios are calculated and taken into account without any value-enhancing effect. The fair value of financial instruments, after taking deferred taxes into account, is adjusted and the intangible assets (goodwill and other intangible assets) are eliminated in full.

The EPRA Net Disposal Value (NDV) determines the value of the equity in a sale scenario. The fair values of the deferred taxes and financing instruments are realized as in IFRS equity. Goodwill is eliminated and the fixed-interest financial liabilities are stated at fair value, taking the resulting tax effects into account.

The tables below show the new EPRA NAV key figures as of December 31, 2020, and the corresponding previous year, and compare them with the previous key figures, EPRA NAV, EPRA NNNAV and Adjusted NAV.

Dec. 31, 2020 (in € million)	EPRA NRV	EPRA NTA	EPRA NDV	EPRA NAV	EPRA NNNAV	Adj. NAV
IFRS equity attributable to Vonovia shareholders	**23,143.8**	**23,143.8**	**23,143.8**	**23,143.8**	**23,143.8**	**23,143.8**
Deferred tax in relation to fair value gains of IP	11,947.7	10,466.8	–	11,947.7	–	11,947.7
Fair value of financial instruments*	54.9	54.9	–	54.9	–	54.9
Goodwill as per the IFRS balance sheet	–	-1,494.7	-1,494.7	–	–	-1,494.7
Intangibles as per the IFRS balance sheet	–	-117.0	–	–	–	–
Fair value of fixed interest rate debt	–	–	-1,105.8	–	-1,105.8	–
Revaluation of intangibles to fair value	4,610.0	–	–	–	–	–
Real estate transfer tax	3,920.8	3,434.8	–	–	–	
NAV	**43,677.3**	**35,488.6**	**20,543.4**	**35,146.5**	**22,038.1**	**33,651.8**
Fully diluted number of shares (millions)	565.9	565.9	565.9	565.9	565.9	565.9
NAV per share (in €)	**77.18**	**62.71**	**36.30**	**62.11**	**38.94**	**59.47**

* Adjusted for effects from cross currency swaps.

Dec. 31, 2019 (in € million)	EPRA NRV	EPRA NTA	EPRA NDV	EPRA NAV**	EPRA NNNAV	Adj. NAV
IFRS equity attributable to Vonovia shareholders	**19,308.3**	**19,308.3**	**19,308.3**	**19,308.3**	**19,308.3**	**19,308.3**
Deferred tax in relation to fair value gains of IP	10,288.9	8,881.2	–	10,288.9	–	10,288.9
Fair value of financial instruments*	-4.7	-4.7	–	-4.7	–	-4.7
Goodwill as per the IFRS balance sheet	–	-1,392.9	-1,392.9	–	–	-1,392.9
Intangibles as per the IFRS balance sheet	–	-111.3	–	–	–	–
Fair value of fixed interest rate debt	–	–	-753.5	–	-753.5	–
Revaluation of intangibles to fair value	3,903.4	–	–	–	–	–
Real estate transfer tax	3,570.0	3,081.6	–	–	–	–
NAV	**37,065.9**	**29,762.2**	**17,161.9**	**29,592.5**	**18,554.8**	**28,199.6**
Fully diluted number of shares (millions)	542.3	542.3	542.3	542.3	542.3	542.3
NAV per share (in €)	**68.35**	**54.88**	**31.65**	**54.57**	**34.22**	**52.00**

* Adjusted for effects from cross currency swaps.
** Adjusted (see note [A2] Adjustment to Prior-year Figures).

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 residential properties. The fair values are increased by the 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.

Despite the significant increase in annualized rental income, the EPRA Net initial yield decreased from 3.3% in 2019 to 3.0% in 2020. The reason for this is a significant increase in the fair value of the real estate portfolio beyond the rent development (yield compression).

in € million	2019	2020	Change in %
Investment properties*	51,383.8	56,669.5	10.3
Assets held for sale*	129.7	164.9	27.1
Fair value of the real estate portfolio (net)	**51,513.5**	**56,834.4**	**10.3**
Allowance for estimated purchasers' costs	3,535.2	3,920.8	10.9
Fair value of the real estate portfolio (gross)	**55,048.7**	**60,755.2**	**10.4**
Annualized cash passing rental income	2,280.0	2,351.9	3.2
Property outgoings	-480.0	-505.5	5.3
Annualized net rents	**1,800.0**	**1,846.4**	**2.6**
Adjustments for rental incentives	3.8	4.9	28.9
Topped-up net annualized rent	**1,803.8**	**1,851.3**	**2.6**
EPRA Net initial yield in %	**3.3**	**3.0**	**-0.3 pp**
EPRA Topped-up net initial yield in %	**3.3**	**3.0**	**-0.3 pp**

* Fair value of the developed land excl. IFRS 16, development, undeveloped land, inheritable building rights granted.

EPRA 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.

As of the end of 2020, our apartments were again virtually fully occupied. At 2.3%, the EPRA Vacancy rate was slightly lower than the value for the previous year (2.4%).

in € million	Dec. 31, 2019	Dec. 31, 2020	Change in %
Market rent of vacant apartments	58.0	56.6	-2.4
Market rent of residential property portfolio	2,444.5	2,515.2	2.9
EPRA Vacancy rate in %	**2.4**	**2.3**	**-0.1 pp**

EPRA Cost Ratio

As the ratio of EPRA costs to gross rental income, the EPRA cost ratio provides information on the cost efficiency of a real estate company. The EPRA cost ratio is reported including and excluding direct vacancy costs. The slight year-on-year increase in the EPRA cost ratio in 2020 is due to the acquisition of Hembla and, as a result, to a higher portfolio share attributable to Sweden. Due to the gross rents that are standard practice in Sweden, ancillary expenses put above-average pressure on costs.

in € million	2019	2020	Change in %
Operating expenses Rental	328.6	410.6	25.0
Maintenance expenses	308.9	321.1	3.9
Adjusted EBITDA Value-add	-146.3	-152.3	4.1
Intercompany profit	43.9	33.5	-23.7
EPRA costs (including direct vacancy costs)	**535.1**	**612.9**	**14.5**
Direct vacancy costs	-26.8	-27.0	0.7
EPRA costs (excluding direct vacancy costs)	**508.3**	**585.9**	**15.3**
Gross rental income	**2,074.9**	**2,285.9**	**10.2**
EPRA Cost ratio including direct vacancy costs in %	**25.8**	**26.8**	**1.0 pp**
EPRA Cost ratio excluding direct vacancy costs in %	**24.5**	**25.6**	**1.1 pp**

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 primarily characterized by growth in Sweden with the acquisition of the Akelius Residential Property portfolio and of Hembla AB. In 2020, portfolios that are smaller in comparison were acquired in Germany, with a focus on Kiel and Berlin.

The investments made in new construction in 2020 were not quite able to match the prior-year level (-11.7%). The investments made in the existing portfolio were on a par with the previous year.

The coronavirus pandemic did not have any major impact on our investment strategy, and only isolated modernization and new construction measures were affected by construction delays.

in € million	2019	2020	Change in %
Acquisitions	3,694.1	292.6	-92.1
Development	493.0	435.5	-11.7
Investment properties	1,117.6	1,114.5	-0.3
Other	–	–	–
Property-related capital expenditure	**5,304.7**	**1,842.6**	**-65.3**

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.

Dec. 31, 2020	Residential units	Living area (in thou. m²)	Residential in-place rent like-for-like* Dec. 31, 2019 (p.a. in € million)	Dec. 31, 2020 (p.a. in € million)	Change (in %)
Strategic	317,199	19,692	1,598.6	1,635.3	2.3
Operate	102,580	6,404	540.8	556.1	2.8
Invest	214,619	13,289	1,057.8	1,079.1	2.0
Recurring Sales	25,545	1,706	142.2	144.7	1.7
Non-core Disposals	1,230	93	8.1	8.3	2.4
Vonovia Germany	**343,974**	**21,492**	**1,748.9**	**1,788.2**	**2.2**
Vonovia Sweden	37,177	2,663	315.9	329.0	4.1
Vonovia Austria	20,661	1,542	85.5	87.3	2.1
Total	**401,812**	**25,697**	**2,150.3**	**2,204.6**	**2.5**

* The underlying portfolio has a fair value of € 52,353.2 million.

Regional Market	Residential units	Living area (in thou. m²)	Residential in-place rent like-for-like* Dec. 31, 2019 (p.a. in € million)	Dec. 31, 2020 (p.a. in € million)	Change (in %)
Berlin	41,525	2,642	216.8	207.9	-4.1
Rhine Main area	26,776	1,709	170.7	176.2	3.2
Southern Ruhr area	41,989	2,580	191.1	199.1	4.2
Rhineland	27,733	1,843	160.2	164.6	2.8
Dresden	37,297	2,129	158.9	162.0	1.9
Hamburg	19,303	1,228	105.6	109.8	3.9
Kiel	22,773	1,312	100.4	103.6	3.2
Munich	9,497	625	61.9	63.5	2.6
Stuttgart	13,326	837	80.2	82.0	2.2
Hanover	15,811	1,000	80.7	83.3	3.2
Northern Ruhr area	24,317	1,503	105.0	108.1	2.9
Bremen	11,419	694	49.3	50.7	2.7
Leipzig	8,828	568	41.6	42.5	2.2
Westphalia	9,174	598	44.5	46.9	5.4
Freiburg	3,997	273	24.6	25.3	2.8
Other strategic locations	25,706	1,634	132.3	137.5	3.9
Total strategic locations Germany	**339,471**	**21,175**	**1,723.9**	**1,762.8**	**2.3**
Non-strategic locations	4,503	317	25.0	25.4	1.7
Vonovia Germany	**343,974**	**21,492**	**1,748.9**	**1,788.2**	**2.2**
Vonovia Sweden	37,177	2,663	315.9	329.0	4.1
Vonovia Austria	20,661	1,542	85.5	87.3	2.1
Total	**401,812**	**25,697**	**2,150.3**	**2,204.6**	**2.5**

* The underlying portfolio has a fair value of € 52,353.2 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 the company's 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 the 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, has to be adjusted to reflect realized/unrealized changes in value.

Adjusted EBITDA Rental

The Adjusted EBITDA Rental is calculated by deducting 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 and 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 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).

COSO

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a private-sector U.S. organization. It was founded in 1985. In 1992, COSO published the COSO model, an SEC-recognized standard for internal controls. This provided a basis for the documentation, analysis and design of internal control systems. In 2004, the model was further developed and the COSO Enterprise Risk Management (ERM) Framework was published. Since then, it has been used to structure and develop risk management systems.

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 Key Figures

For information on the EPRA key figures, we refer to the chapter on segment reporting according to EPRA.

→ **p. 262 et seqq.**

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.

European Public Real Estate Association (EPRA)

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.

Fair Value

Fair value is particularly relevant with regard to valuation in accordance with IAS 40 in conjunction with IFRS 13. 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.

GAV

The Gross Asset Value (GAV) of the recognized real estate investments. This consists of the owner-occupied properties, the investment properties including development to hold, the assets held for sale and the development to sell area. In the latter, both residential properties for which a purchase contract has been signed and those with the intention to sell – i.e., a purchase contract has not yet been signed – are included.

Group FFO

Group FFO reflects the recurring earnings from the operating business. In addition to the adjusted EBITDA for the Rental, Value-add, Recurring Sales and Development segments, Group FFO allows for recurring current net interest expenses from non-derivative financial instruments as well as current 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 euros 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 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.

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 € per square meter) 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 on 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.

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.

Sustainability Performance Index (SPI)
Index to measure non-financial performance. A performance indicator introduced at Vonovia in January 2021 consisting of key figures on the CO_2 intensity of the portfolio, primary energy requirements in new buildings, (partial) modernization measures to make apartments fully accessible, customer and employee satisfaction, and diversity within the management ranks.

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 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 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.

Financial Calendar

March 4, 2021
Publication of the 2020 Annual Report

April 16, 2021
Annual General Meeting (virtual)

May 4, 2021
Publication of the interim statements for the first three months of 2021

August 6, 2021
Publication of the interim statements for the first half of 2021

November 4, 2021
Publication of the interim statements for the first nine months of 2021

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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.

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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 2020 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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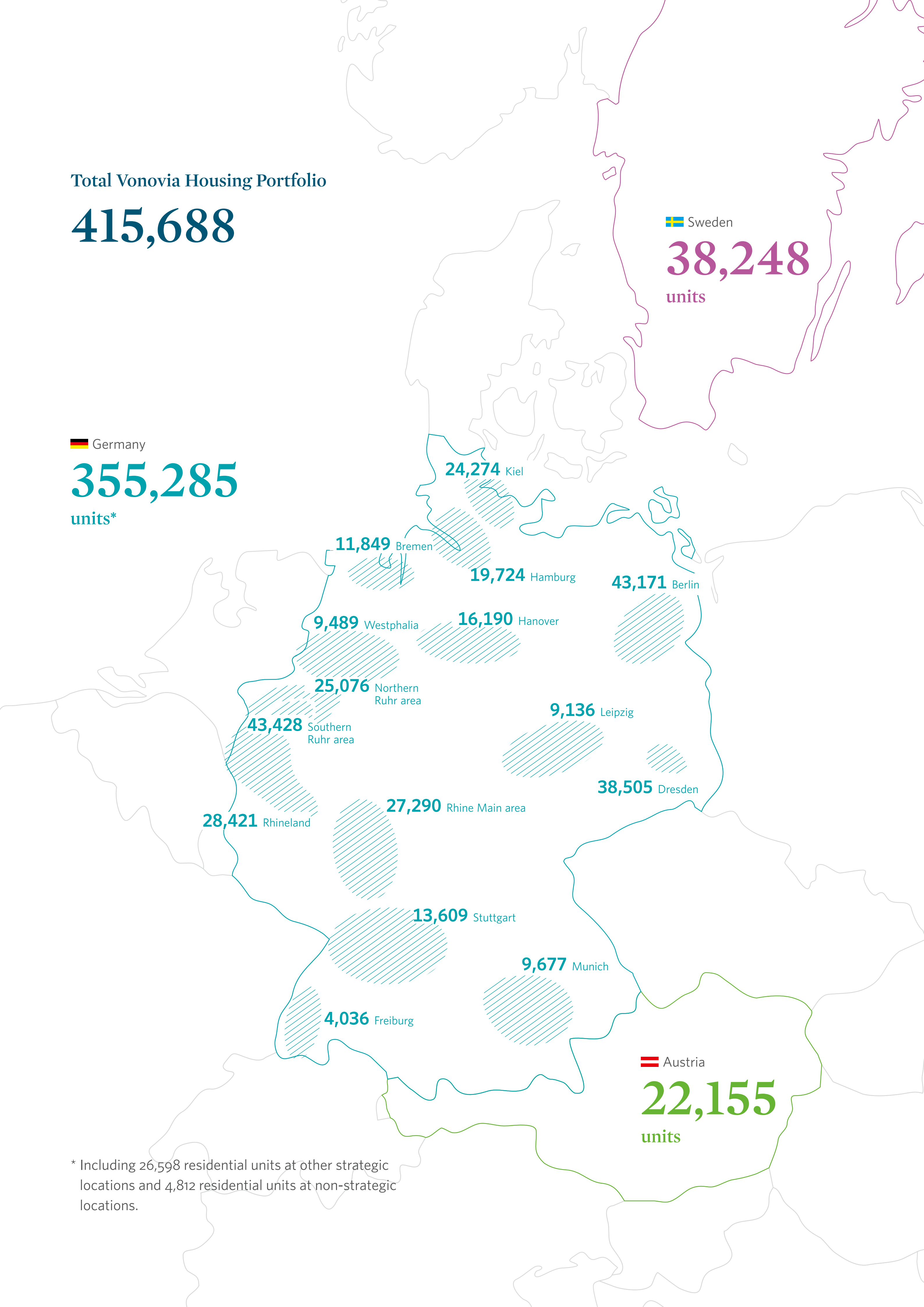
As of March 2021

Total Vonovia Housing Portfolio

415,688



* Including 26,598 residential units at other strategic locations and 4,812 residential units at non-strategic locations.

www.vonovia.de/en