



# Investor Presentation

January 2020



# Agenda

VONOVIA

Equity Story & Market Fundamentals

Sustainability

9M 2019 Business Update

Additional Information



Equity Story  
&  
Market  
Fundamentals

pages 2-20

Sustainability

pages 21-26

9M 2019  
Business  
Update

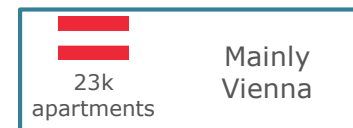
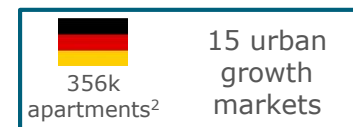
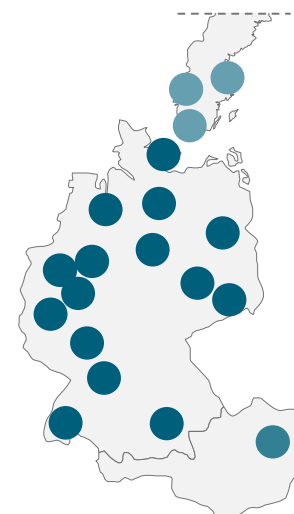
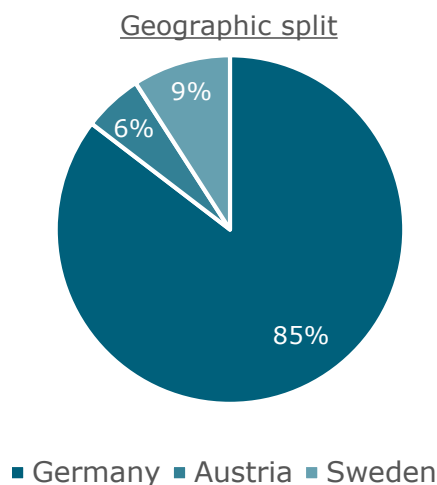
pages 27-45

Additional  
Information

pages 46-72

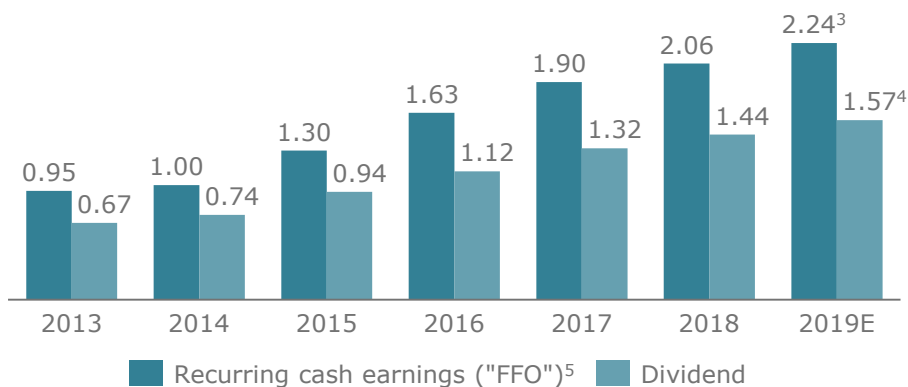
*See Page Finder on  
page 72 for detailed  
agenda*

- Long-term owner and full-scale operator of Europe's largest listed multifamily housing portfolio with ca. 415k apartments for small and medium incomes
- ~€50bn fair market value
- ~€26bn market capitalization

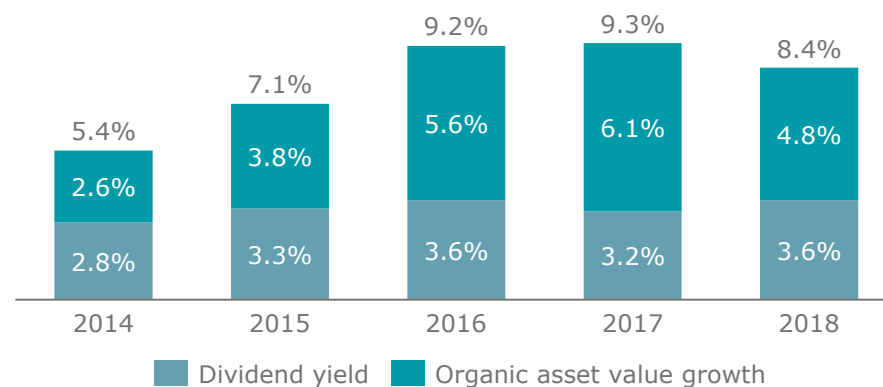


## Growing recurring cash earnings per share and DPS

Dividend policy: ~70% of recurring cash earnings are distributed as dividends



## Two types of sustainable shareholder returns<sup>6</sup>



<sup>1</sup> Pro forma incl. Hembla. <sup>2</sup> Incl. 28k apartments in other strategic locations plus 4k in non-strategic locations that are not shown on the map. <sup>3</sup> Based on upper end of guidance, as indicated. <sup>4</sup> To be proposed to the next AGM in May 2020. <sup>5</sup> 2013-2018 FFO is "FFO1" and 2019 FFO is "Group FFO." <sup>6</sup> Dividend yield plus I-f-I organic asset value growth from operating performance and investments (excluding yield compression).

## Megatrends

Long-term focus built around the megatrends urbanization, energy efficiency, and demographic change

## B-to-C Business

Granular B-to-C operating business on the back of multifamily housing for small and medium incomes with ca. 13 years average customer retention (average lease duration)

## Full-scale Operator

Full service provider with insourcing strategy for best-in-class service levels and maximum process control and efficiency

## Standardization & Industrialization

Unparalleled track record of industrialization, standardization, and optimization of a homogeneous and scalable asset class

## Resilience & Downside Protection

Resilient and largely predictable top- and bottom-line growth in regulated markets with structural supply/demand imbalance. Robust business model with downside protection plus additional upside potential from acquisition opportunities

## Two Types of Shareholder Returns

Sustainably growing dividends  
+  
Organic value appreciation of real estate portfolio from rent growth and investments

## Reputation & Customer Satisfaction

Long-term owner and full-scale operator of Europe's largest listed multifamily housing portfolio for small and medium incomes



**PROPERTY MANAGEMENT** Efficient operations of scalable business via industrialization, standardization and optimization



**FINANCING** Solid and diversified capital structure that allows access to capital at any point in time



**PORTFOLIO MANAGEMENT** The right product in the right location plus investments to support organic growth



**VALUE-ADD** Leverage B-to-C customer relations to enhance cash flows through internal savings and additional income



**MERGERS & ACQUISITIONS** Seize and identify accretive acquisition opportunities within clearly defined acquisition criteria



**EUROPEAN ACTIVITIES** Measured roll out of Vonovia's unique business model to selected European metropolitan areas

## Rental

**Efficient management of own portfolio**



- Average duration of our rental contracts is 13 years
- No cluster risk because of B-to-C business granularity
- High degree of insourcing and standardization along our value chain

## Value-add

**Ancillary service business for internal savings and external income**



- Leveraging long-term customer relations to generate additional cash flows from internal savings and external income
- Customer benefit through better service and/or lower cost

## Development

**Construction of apartments for (i) own portfolio (ii) disposal to third parties**



- Vonovia is one of the largest builders of new homes in Germany
- Size, efficiencies and innovation lead to building costs below fair market values

## Recurring Sales

**Disposal of individual apartments to retail buyers**



- Steady sales volume of ca. 2k apartments p.a.
- Sales prices of 20-30% above fair market value capture the spread between book value and retail value

Residential real estate is a granular operating business. Vonovia has built a scalable platform to efficiently manage large portfolios and to provide the full range of services largely in-house.

## Property Management

~1,500

Lettings agents & caretakers



Face to the customer and eyes and ears on the ground in our local markets

## Technical Service

~5,000

Craftsmen



Wholly owned craftsmen subsidiary ("VTS") for large share of maintenance and modernization plus pooling of entire purchasing power

## Residential Environment

~800

Landscape gardeners



Maintenance of gray and green areas and snow/ice removal in the winter

## Service Center

~1,000

Service Agents



Centralized property management including inbound calls and e-mails, ancillary cost billing, contract management, maintenance dispatch and rent growth management



Best-in-class service levels



Fully SAP based



High degree of standardization

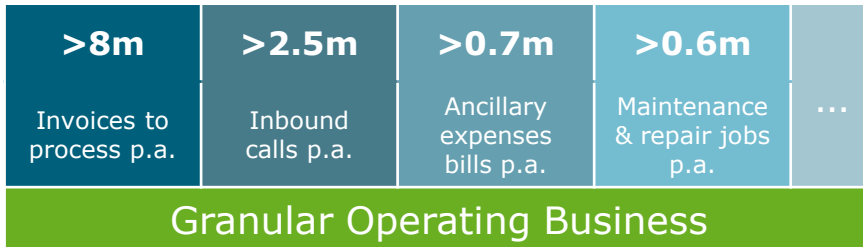


Efficient process management



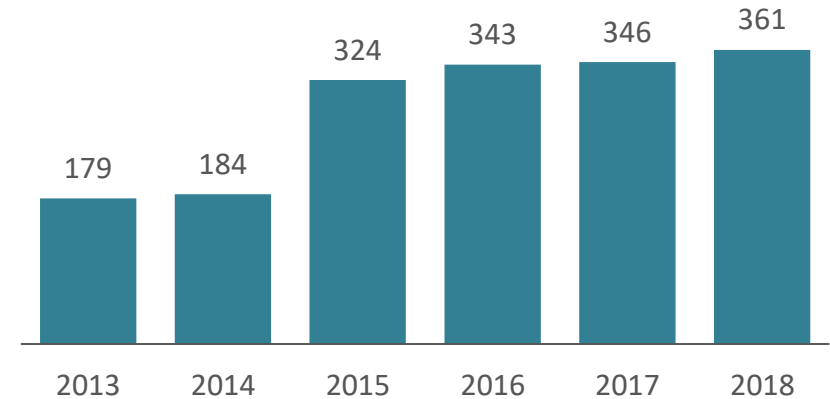
Superior cost control

Our strategy is to own for generations and create scale effects and efficiencies (buy & hold), and therefore different from a financial investor with a limited investment horizon (buy & sell)

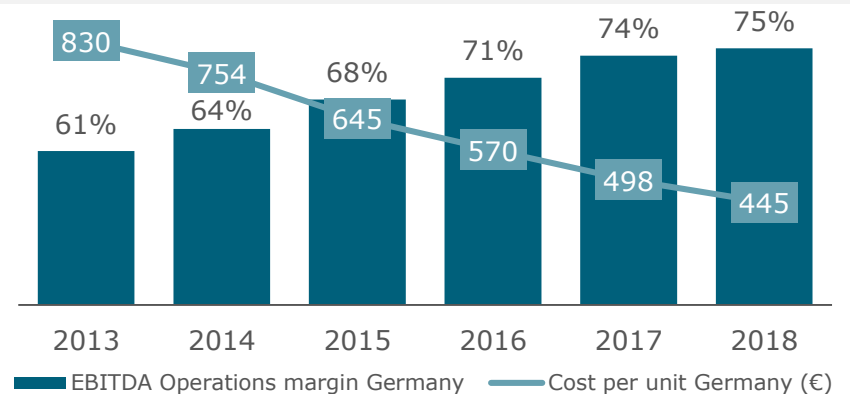


- Unique scalable platform to efficiently manage a large residential real estate portfolio driven by industrialization, standardization and optimization with best-in-class service
- Digitalization still in early stage with cost-reduction potential in the medium- and long-term
- Impact of scale to continue with acquisitions – incremental Cost per unit (Germany) is around €250

Portfolio size (average number of apartments, '000)



Proof of scalability





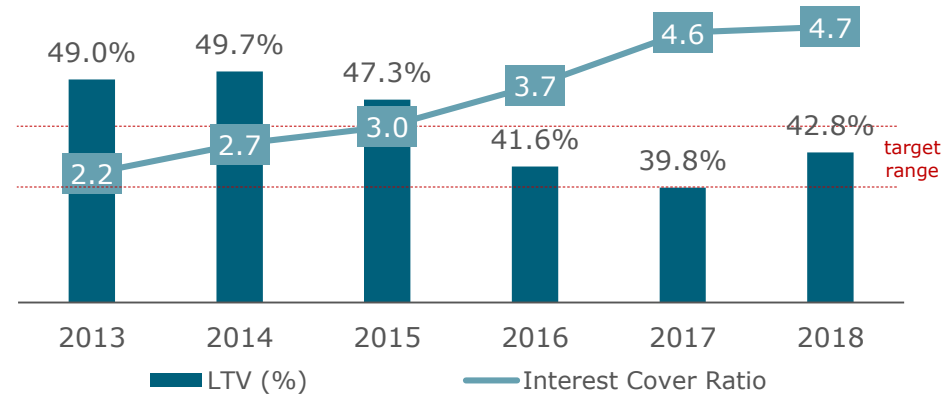


# Financing

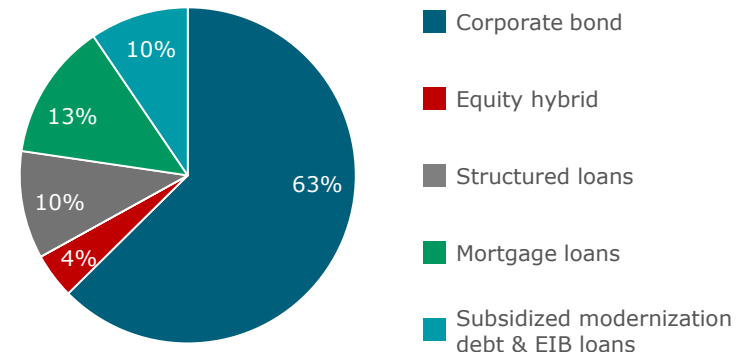
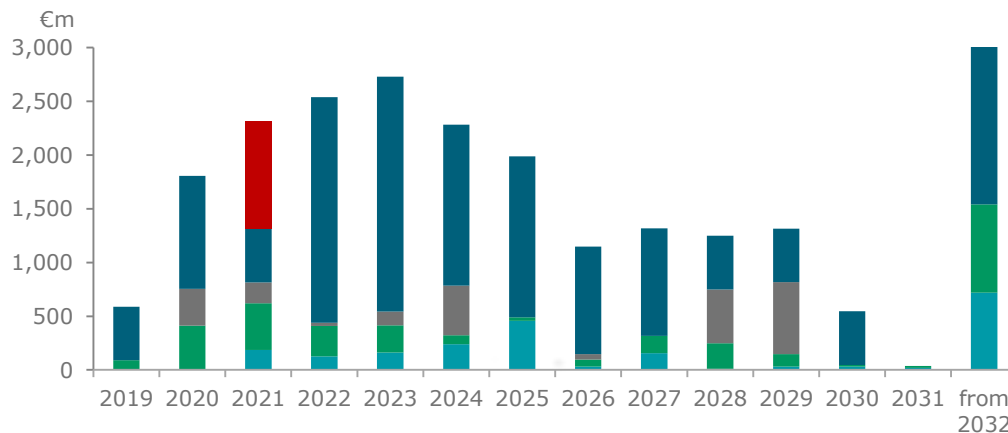
## Solid Capital Structure & Diverse Funding Mix

KPI / criteria	Sep. 30, 2019
Corporate rating (Scope; since 12/2019)	<b>A-</b>
Corporate rating (S&P)	<b>BBB+</b>
LTV	<b>40.3%</b>
Net debt/EBITDA multiple <sup>1</sup>	<b>11.1x</b>
ICR	<b>4.9x</b>
Fixed/hedged debt ratio <sup>2</sup>	<b>97%</b>
Average cost of debt <sup>2</sup>	<b>1.6%</b>
Weighted average maturity (years) <sup>2</sup>	<b>8.4</b>
Unencumbered assets	<b>53%</b>

### Evolution of LTV and Interest Cover Ratio



### Diverse funding mix with no more than 12% of debt maturing annually<sup>3</sup>



<sup>1</sup> Adj. net debt quarterly average over Total EBITDA (LTM); adj. for IFRS 16 effect. <sup>2</sup> Excl. equity hybrid. <sup>3</sup> incl. Bonds 022A, 022B, 022C issue date Oct. 7, 2019 (see Appendix for list of bonds)

Concentrating the portfolio in the right locations

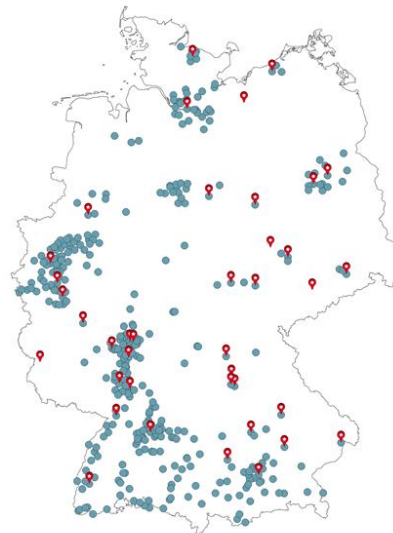
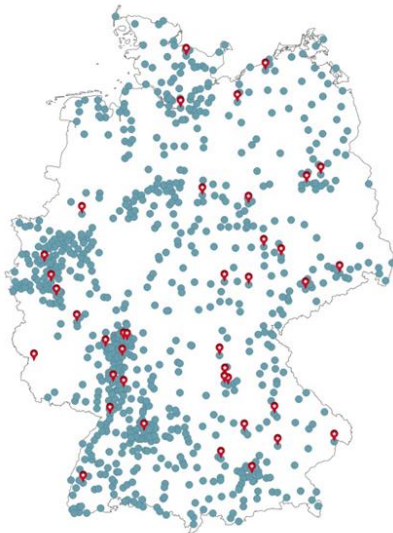
- > ~70k **non-core apartments sold** since IPO in 2013
- > ~99% of current portfolio located in urban growth regions for long-term ownership and subject to structural supply-demand imbalance ("Schwarmstädte")

**March 2015**

347k units in 818 locations

**Strategic Portfolio**

350k units in ~400 locations

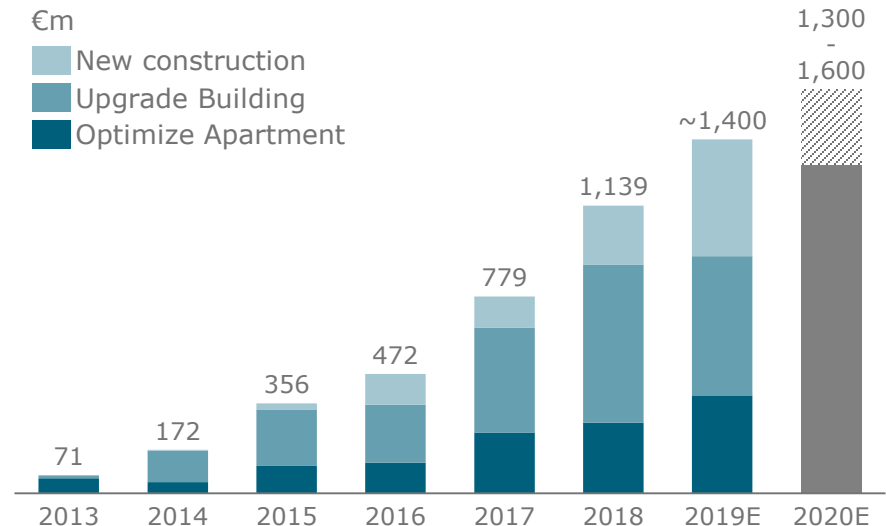


● Vonovia location

📍 High-influx cities ("Schwarmstädte"). For more information: [http://investoren.vonovia.de/websites/vonovia/English/4050/financial-reports-\\_-presentations.html](http://investoren.vonovia.de/websites/vonovia/English/4050/financial-reports-_-presentations.html)

Investments into existing portfolio and new construction

- > **New construction:** Construction of apartments for our own portfolio through entirely new buildings or floor additions to existing buildings applying modular and conventional construction methods.
- > **Upgrade Building:** Energy efficient building modernization usually including new facades, roofs, windows and heating systems.
- > **Optimize Apartment:** Primarily senior-friendly apartment renovation usually including new bathrooms, modern electrical installations and new flooring.





# Illustrative Overview of Investment Program Funding

	<b>Rental Income</b>
-	Maintenance expenses
-	Operating expenses
+	EBITDA Value-add
+	EBITDA Recurring Sales
+	EBITDA Development
=	<b>Total EBITDA</b>
-	Interest expenses
-	Current income taxes
-	Consolidation/non-cash items
=	<b>Group FFO</b>

~70% for dividend <sup>1</sup>		~30%
cash	scrip	retained earnings

-	Capitalized maintenance
-	Hybrid coupon & minorities
-	One-offs
=	<b>Earnings available for investment program</b>

- > Comprehensive investment program to drive organic growth and portfolio improvements
- > Size of investment program is calibrated to remain within LTV target range
- > Funded with retained cash, proceeds from recurring sales plus (often subsidized) loans

€1.3bn – €1.6bn



Investment Program

<sup>1</sup> Average historic cash/scrip ratio has been 55%/45% since inception in 2016

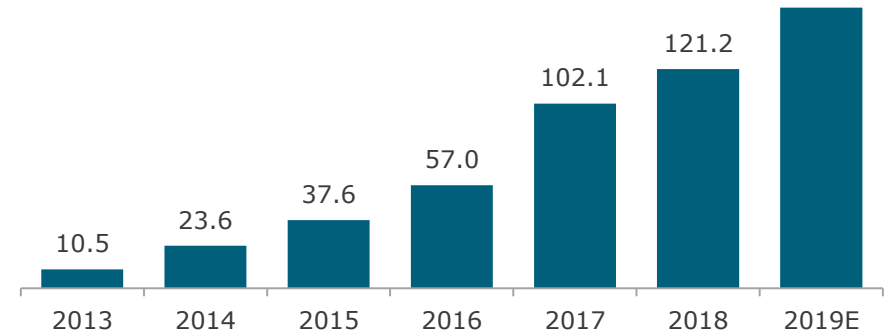
Value-add: lower cost & higher income

**Savings** from insourcing of services to ensure maximum process management and cost control

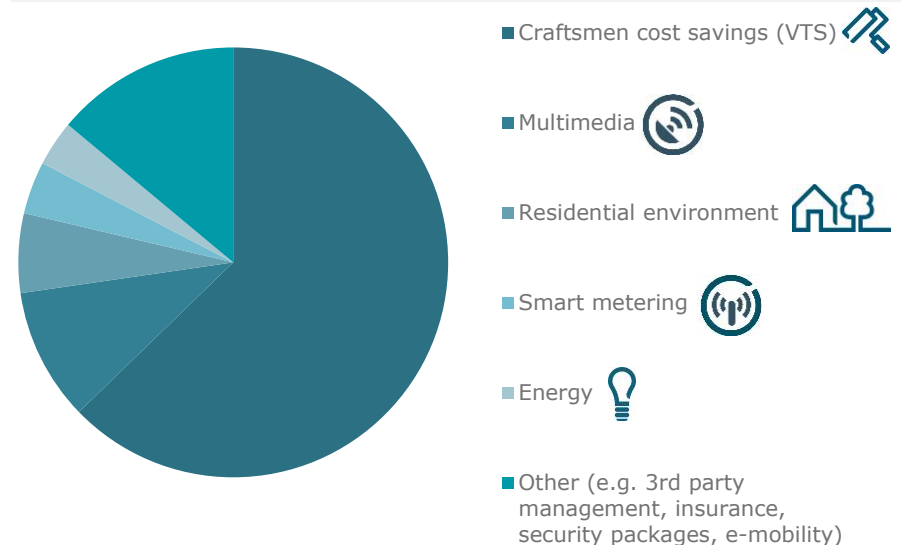
**Additional revenues** from walking back the value chain and offering services at market prices but on a lower cost basis due to scale and efficiencies

**Customer benefit** is in lower cost and/or better service quality

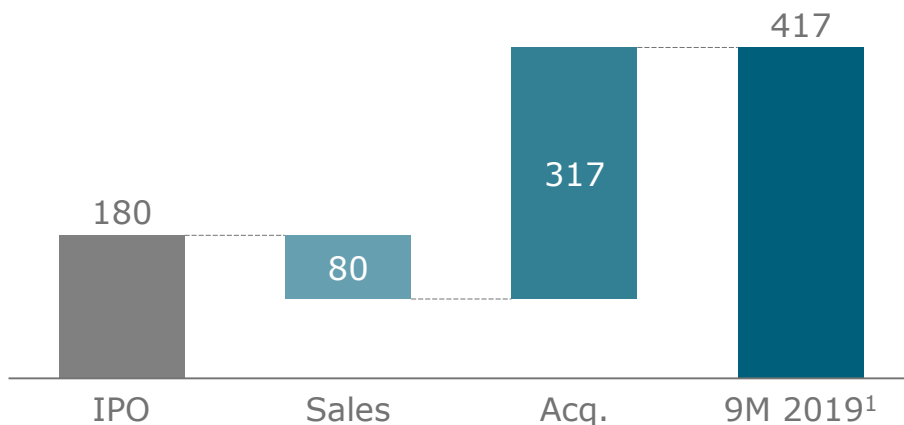
Evolution of Value-add segment (Adj. EBITDA, €m)



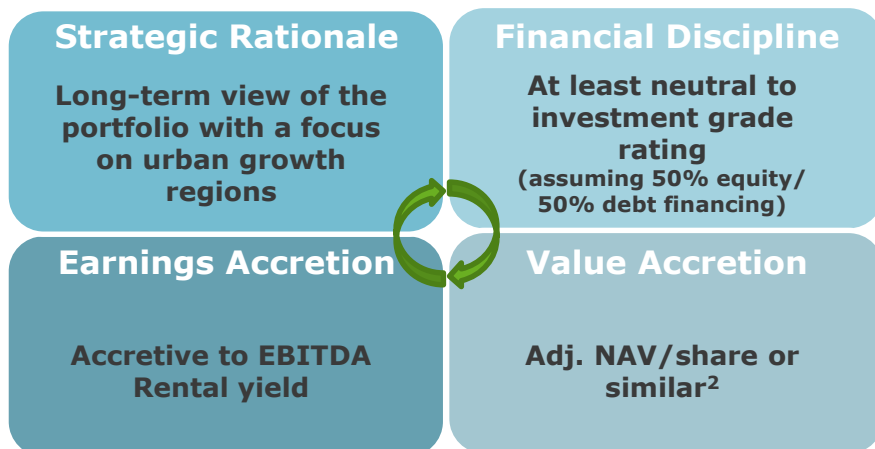
EBITDA contribution from different Value-add initiatives



### Portfolio growth by number of apartments ('000)



### Acquisition criteria



### Major transactions since IPO

DeWAG	04/2014	First sizeable portfolio acquisition
~11k units		
vitus	10/2014	First sizeable corporate acquisition
~21k units		
GAGFAH	03/2015	Mixed cash/stock public takeover
~145k units		
SUDEWO SÜDDEUTSCHE WOHNEN	07/2015	Sizeable all equity financed portfolio acquisition
~19k units		
conwert Immobilien Invest SE	01/2017	Public takeover and first acquisition outside Germany
~23k units		
BUWOG group	06/2018	Public takeover and acquisition of critical mass in Austria
~48k units		
VICTORIA PARK	07/2018	Public takeover and acquisition of "nucleus" in Sweden
~14k units		
hembla	12/2019	Acquisition of critical mass in Sweden
~21k units		

<sup>1</sup> pro forma incl. Hembla

<sup>2</sup> EPRA has published new Best Practice Recommendations to replace EPRA NAV with a revised but broadly similar metric

# European Activities

## Implementation of Vonovia Business Model in Comparable Markets **VONOVIA**

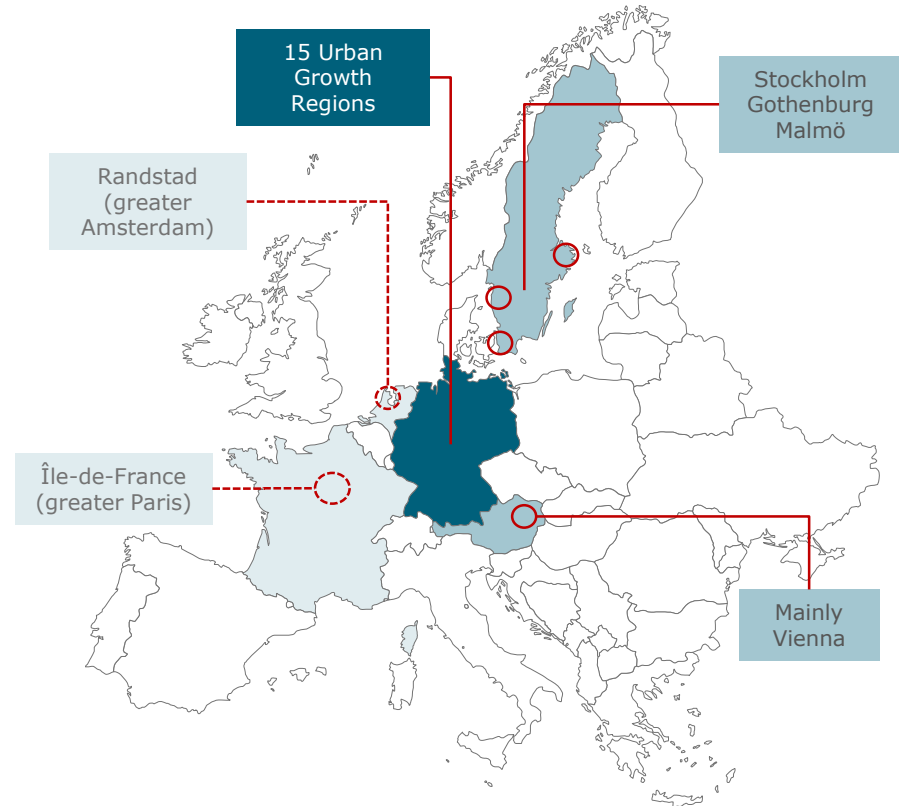
Equity Story & Market Fundamentals

Sustainability

9M 2019 Business Update

Additional Information

- Vonovia has developed an **operating platform** and a unique business model for the **efficient management** of large residential portfolios in regulated environments.
- We are convinced that this **business model can be applied outside of Germany** in comparable markets: large urban rental markets with a supply-demand imbalance and a regulated rental environment.
- No specific target rate or ratios in terms of German vs. non-German exposure → **disciplined but highly opportunistic approach.**
- M&A activities in European target markets are subject to the same **criteria** as in Germany.



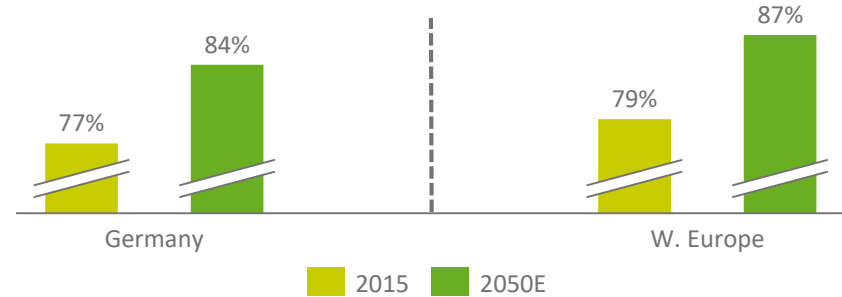
Germany	Austria	Sweden	France	Netherlands
<ul style="list-style-type: none"> <li>• Primary home market and expected to remain dominant in the foreseeable future.</li> <li>• Home of Vonovia business model that we are seeking to repeat in similar markets</li> </ul>	<ul style="list-style-type: none"> <li>• Run scalable operating business (Austrian SAP client successfully implemented)</li> <li>• "Austrian model" along build-hold-sell value chain</li> </ul>	<ul style="list-style-type: none"> <li>• Prove that Vonovia business model works outside Germany</li> <li>• Market consolidation on the basis of Victoria Park and Hembla combination</li> </ul>	<ul style="list-style-type: none"> <li>• Largest long-term potential</li> <li>• Active market engagement and networking to safeguard pole position for when opportunity arises</li> </ul>	<ul style="list-style-type: none"> <li>• Continue market research</li> <li>• Highly opportunistic approach in case of acquisition opportunity</li> </ul>



## Urbanization

Increasing urbanization in Germany and Europe meets a structural supply/demand imbalance in most European cities. Owning apartments in the right locations is key to sustainable long-term organic growth.

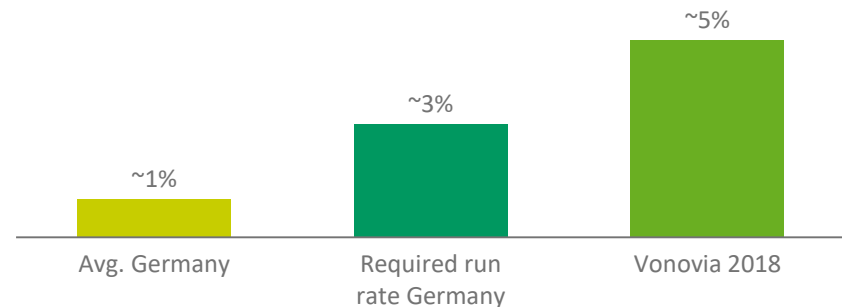
**% of population living in cities**



## Energy efficiency

Ca. 35% of greenhouse gas emissions in Germany originate in real estate. Energy efficient modernization of the housing stock with a view towards reducing CO2 emissions is paramount for Germany to achieve its climate protection targets.

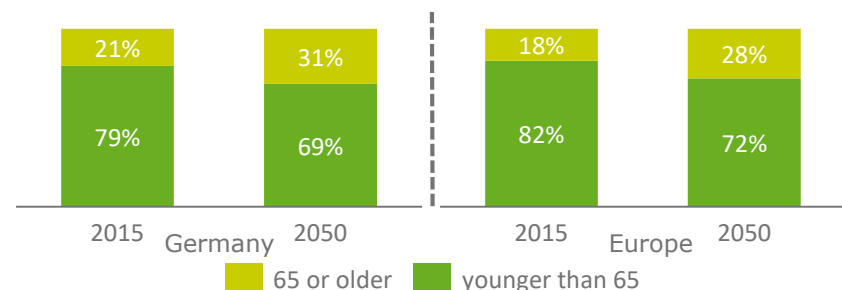
**% of modernized housing units**



## Demographic change

Demographic changes demand the refurbishment of apartments to enable an ageing population to stay in their homes with little or no assistance for longer. Ca. 3 million additional apartments for elderly people will be needed by 2030.

**% of population above/below 65 years**



# Residential Market Fundamentals

## Robust Rent Growth in Regulated Environments

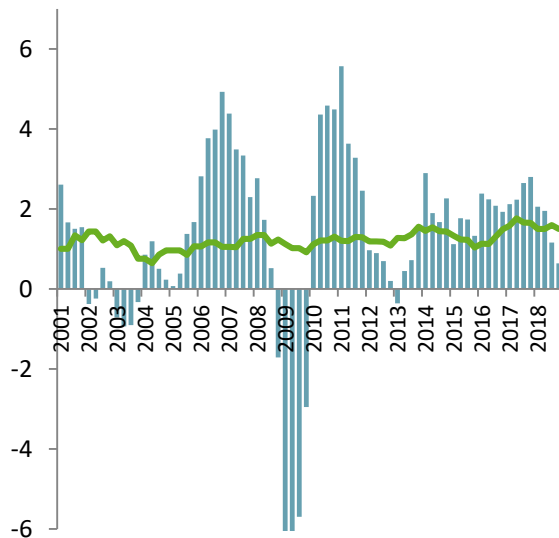
### Regulated residential markets

In **regulated markets like Germany or Sweden**, rent growth is on a sustainable upward trajectory and largely independent from GDP developments

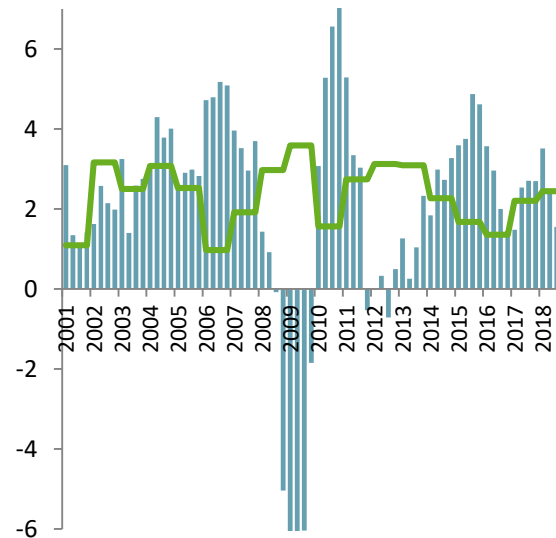
### Unregulated residential markets

In **unregulated markets like the USA**, rents go up and down broadly in line with the GDP development

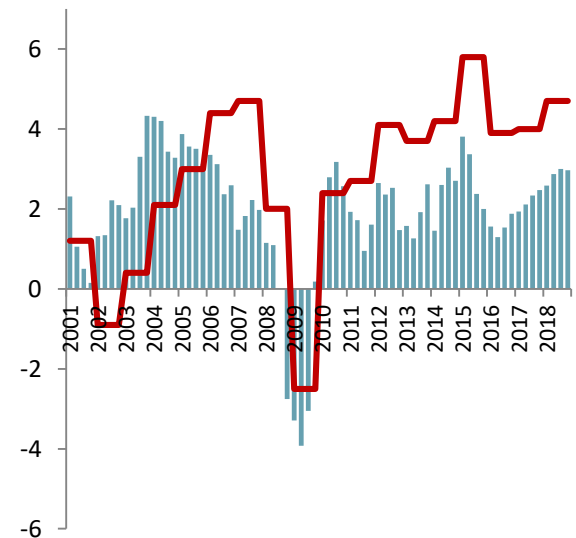
Germany



Sweden



USA



■ GDP, quarterly development y-o-y    ■ Rent growth; quarterly development y-o-y

Sources: Federal Statistics Office, GdW (German Association of Professional Homeowners), REIS, BofA Merrill Lynch Global Research, OECD, Statistics Sweden.  
 Note: Due to lack of q-o-q rent growth data for the US and Sweden, the annual rent growth for a year is assumed to also be the q-o-q rent growth of that year.



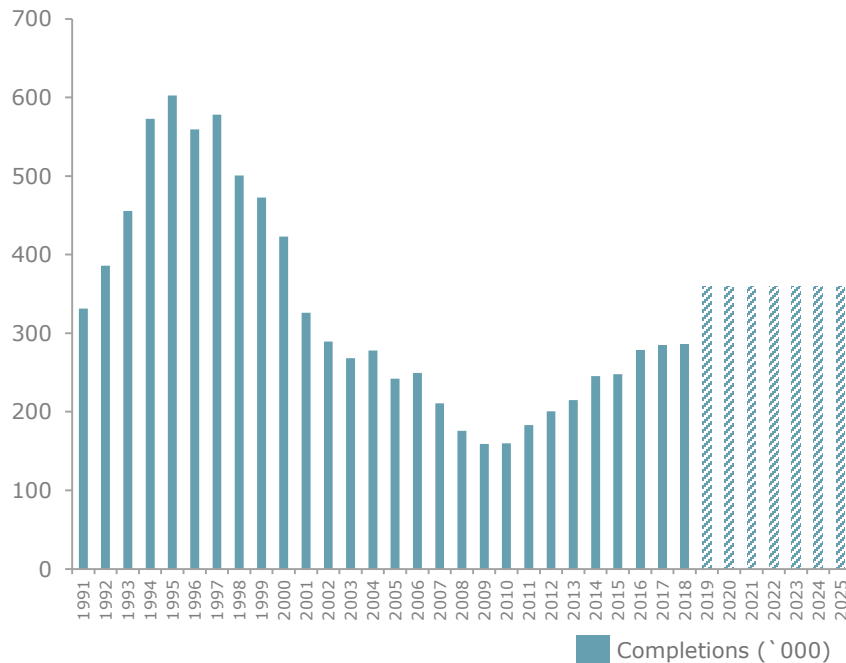
# Residential Market Fundamentals

## Structural Supply-Demand Imbalance

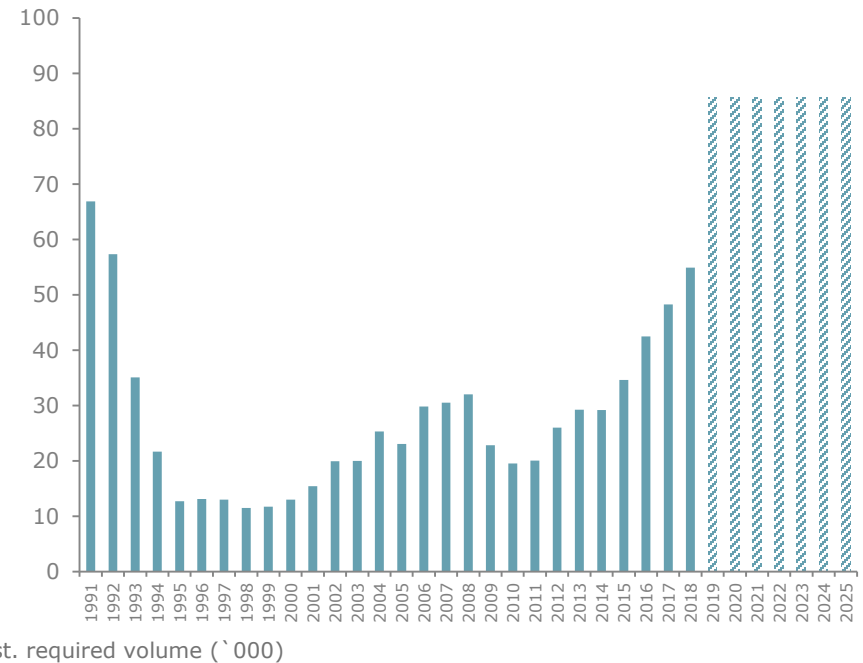
Average annual residential completions of the last five years fall short of estimated required volumes:

- Germany: only 75% of required volumes completed
- Sweden: only 49% of required volumes completed

### Germany ('000 units)



### Sweden ('000 units)

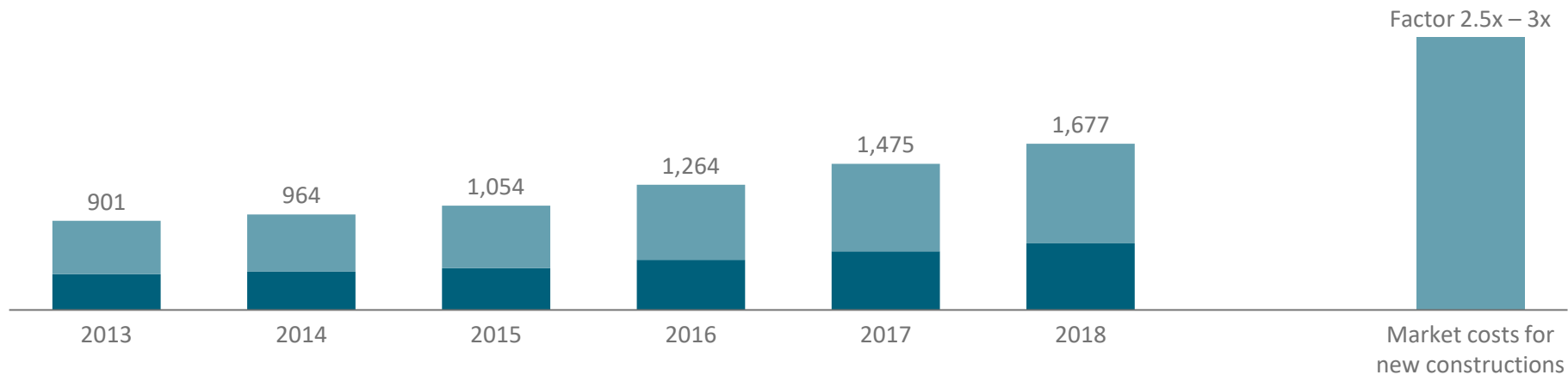


Sources: German Federal Statistics Office, GdW (German Association of Professional Homeowners). Swedish National Board of Housing, Building and Planning, Statistics Sweden, Le service de la donnée et des études statistiques (SDES), Abbé Pierre Foundation

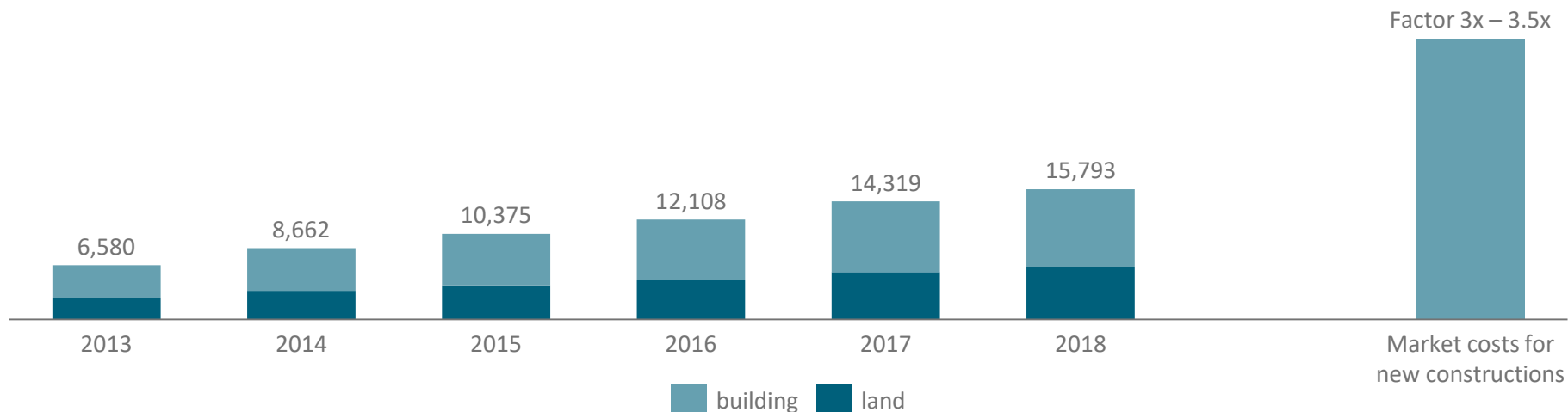
# Residential Market Fundamentals

## Large Gap between In-place Values and Replacement Costs

### Vonovia (German portfolio) – fair value per sqm (€; total lettable area) vs. construction costs



### Victoria Park – fair value per sqm (SEK; total lettable area) vs. construction costs



Note: VNA 2010 – 2014 refers to Deutsche Annington Portfolio at the time; construction costs excluding land. The land value refers to the share of total fair value allocated to land. Allocation between building and land in Sweden assumed to be similar to Germany.

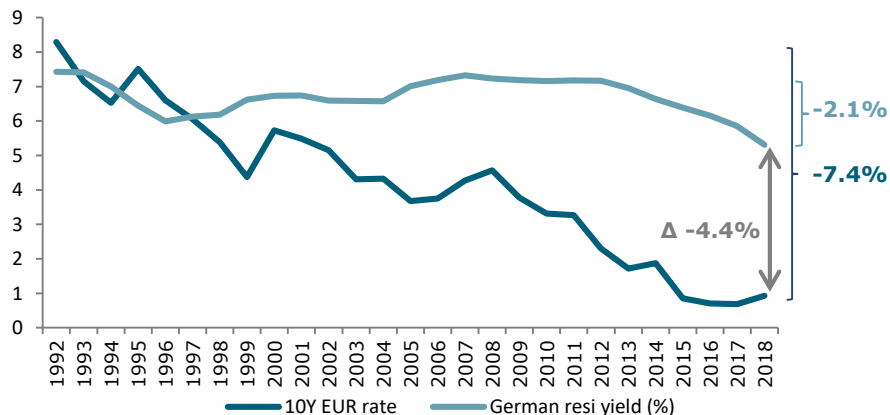
# Residential Market Fundamentals

## No Correlation Pattern between Interest Rates and Asset Yields

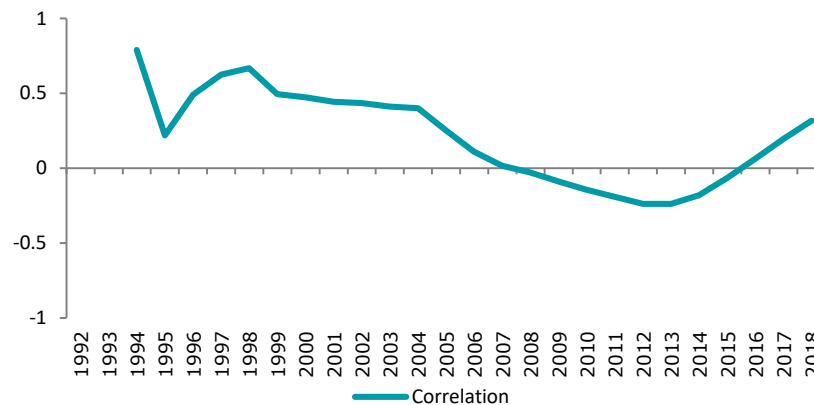
Valuation methodology for German residential properties relies primarily on market prices for assets – not on interest rates

- While market prices are affected by general interest rate levels, there is **no significant correlation**.
- **Other factors** such as supply/demand imbalance, rental regulation, market rent growth, location of assets etc. **outweigh the impact of interest rates** when it comes to pricing residential real estate.
- The **steep decline in interest rates** (down by 740bps since 1992) is **not mirrored by asset yields** (down by 210bps since 1992).

German residential asset yields (%) vs. EUR interest rates (%)<sup>1</sup>



No correlation pattern between interest rates and asset yields<sup>1</sup>



<sup>1</sup> Yearly asset yields vs. rolling 200d average of 10y interest rates  
Sources: Thomson Reuters, bulwiengesa

- ✓ Long-term owner and full-scale operator with proven track record of scale and efficiencies in regulated residential real estate markets
- ✓ Megatrends provide structural support and long-term tailwind for the business
- ✓ Granular B-to-C business with high degree of stability. Business model is resilient, predictable and provides downside protection
- ✓ Uniquely positioned in Germany with ability and ambition to implement Vonovia business model in selected European metropolitan areas
- ✓ Two types of shareholder returns with sustainably growing dividends and organic value appreciation of real estate portfolio



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Market  
Fundamentals

pages 2-20

Sustainability

pages 21-26

9M 2019  
Business  
Update

pages 27-45

Additional  
Information

pages 46-72

*See Page Finder on  
page 72 for detailed  
agenda*

## E NVIRONMENTAL



- Largest and most meaningful positive impact is through increasing energy efficiency and CO<sub>2</sub> reduction of the >50,000 buildings in our portfolio
- Ca. one million tCO<sub>2</sub>e emissions per year
- Supportive of German's ambitious target of achieving an almost climate neutral building stock by 2050 → energy efficient modernization of our portfolio at rate of >3% p.a.
- Researching innovative ways to reduce CO<sub>2</sub> emissions and increase the use of renewable energy

## S OCIAL



- Products & services deeply rooted in society with impact on lives of more than one million people
- Apartments not a product like any other → serve a basic need alongside food and oxygen
- As partner right in the middle of society we provide answers to the challenges of the housing sector
- Most important solution lies in the construction of new and affordable apartments; as one of Germany's largest homebuilders we live up to our responsibility
- Responsibility for ~10,000 employees from 78 countries

## G OVERNANCE



- Business conduct is built around trust, transparency and reliability
- In everything we do we play by the rules and are compliant with all relevant laws, directives, social norms and agreements
- Continuous and open dialogue with all stakeholders
- We will only be successful if our stakeholders feel that they can rely on us

As Europe's largest listed landlord we bear responsibility for more than 400,000 customers (and their families) from 170 nations. All of our actions have more than just an economic dimension.

# Environmental

## Pro-active Approach to Improve Our Footprint

1,000 roof program for **PV installations** with an expected capacity of 10,000,000 kWh p.a.

VNA headquarter with **100% electricity from renewables** has received various sustainability awards

R&D project with Fraunhofer Gesellschaft and others to explore innovative energy concepts for energy-autonomous neighborhoods (e.g. **hydrogen energy storage**)

**Thousands of trees** planted to increase the environmental appeal in our urban neighborhoods

First housing company to cooperate with Germany's leading environmental organization NABU (Nature And Biodiversity Conservation Union) to turn green areas in our urban neighborhoods into **refuge areas for birds and insects**

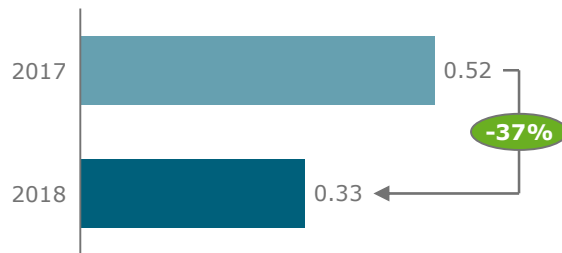
Energy intensity of the portfolio (MWh/sqm)



CO<sub>2</sub> heating intensity (tCO<sub>2</sub>e per rented unit)



Average water intensity (fresh water consumption of Vonovia office locations in m<sup>3</sup>/sqm)



Total waste volume of our portfolio ('000 t)



Portfolio distribution by energy efficiency rating





### CUSTOMERS

- Business philosophy above and beyond what is legally required
- Self-imposed obligation to limit ourselves to maximum rent increase of €2/sqm after invest
- Guarantee to customers 70+ years that rents will remain affordable irrespective of legal rent increase opportunities
- In-house craftsmen organization to ensure swift response time to repair & maintenance needs
- Multilingual service center for customer enquiries with 24/7 emergency service and tenant app to access all relevant data and state-of-the-art customer-landlord communication



### SOCIETY

- Availability and affordability of housing is one of key social questions of our time. The most effective answer to address this challenge is new construction. With ~3,000 apartments per year we are part of the solution
- Several hundred million of investments in neighborhood development to make sure that people feel at home not only within their apartments but also within their immediate neighborhood
- Various foundations, donations and different initiatives (e.g. photo award) support our commitment to society



### EMPLOYEES

- We bear responsibility for offering our employees a working environment in which they are happy, healthy and able to advance in line with their own expectations
- Our Vonovia academy continuously offers a range of training and coaching opportunities
- Comprehensive health management
- Generous home office regulation and part-time models to enable employees to balance career and family
- Signatory of Diversity Charter and committed to appreciation, tolerance and respect



- The duties and authorities of the three governing bodies derive from the SE Regulation, the German Stock Corporation Act and the Articles of Association. In addition, Vonovia is **fully in compliance** with the German Corporate Governance Code.
- In the **two-tier governance system**, the management and monitoring of the business are **strictly separated** from each other.

### Annual General Meeting (AGM)

- Shareholders can exercise their voting rights.
- Decision making includes the appropriation of profit, discharge of members of the SVB and MB, and capital authorization.

### Two-tier Governance System

#### Supervisory Board (SVB)

- Appoints, supervises and advises MB
- Examines and adopts the annual financial statements
- Forms Supervisory Board Committees.
- Fully independent
- Board profile with all required skills and experience



Jürgen Fitschen (Chairman)   Prof. Dr. Edgar Ernst   Burkhard Ulrich Drescher   Vitus Eckert   Dr. Florian Funck   Dr. Ute Geipel-Faber



Daniel Just   Hildegard Müller   Prof. Dr. Klaus Rauscher   Dr. Ariane Reinhart   Clara-Christina Streit   Christian Ulbrich

#### Management Board (MB)

- Jointly accountable for independently managing the company in the best interest of the company and its shareholders.
- Informs the SVB regularly and comprehensively.
- Develops the company's strategy, coordinates it with the SVB and executes that strategy.



**CEO**  
Rolf Buch



**CFO**  
Helene von Roeder



**CRO**  
Arnd Fittkau



**CDO**  
Daniel Riedl



**Gold award** for last 2 years



2016



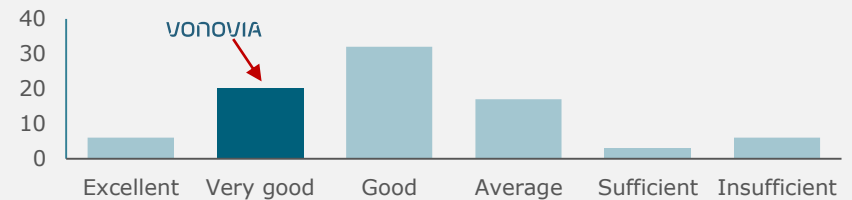
2017



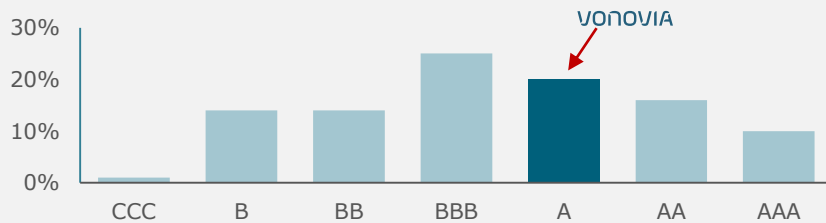
2018



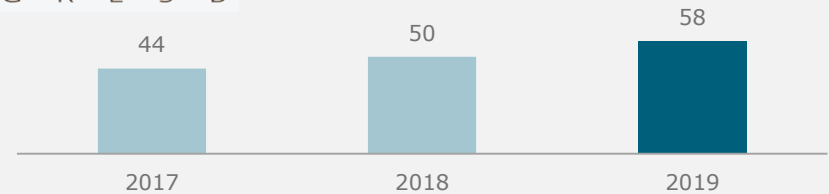
Corporate Governance Ranking of German Large (DAX) and Mid Caps (MDAX)



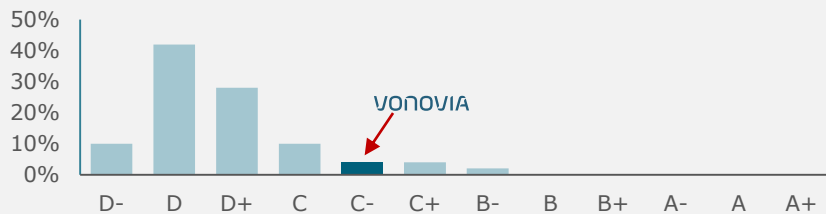
**Upgraded** from BBB to A



**Improved** from 44 to 58 points



**Upgraded** from D to C-



**Changed** from „not disclosed“ to C

2019 Results to be published Jan 2020

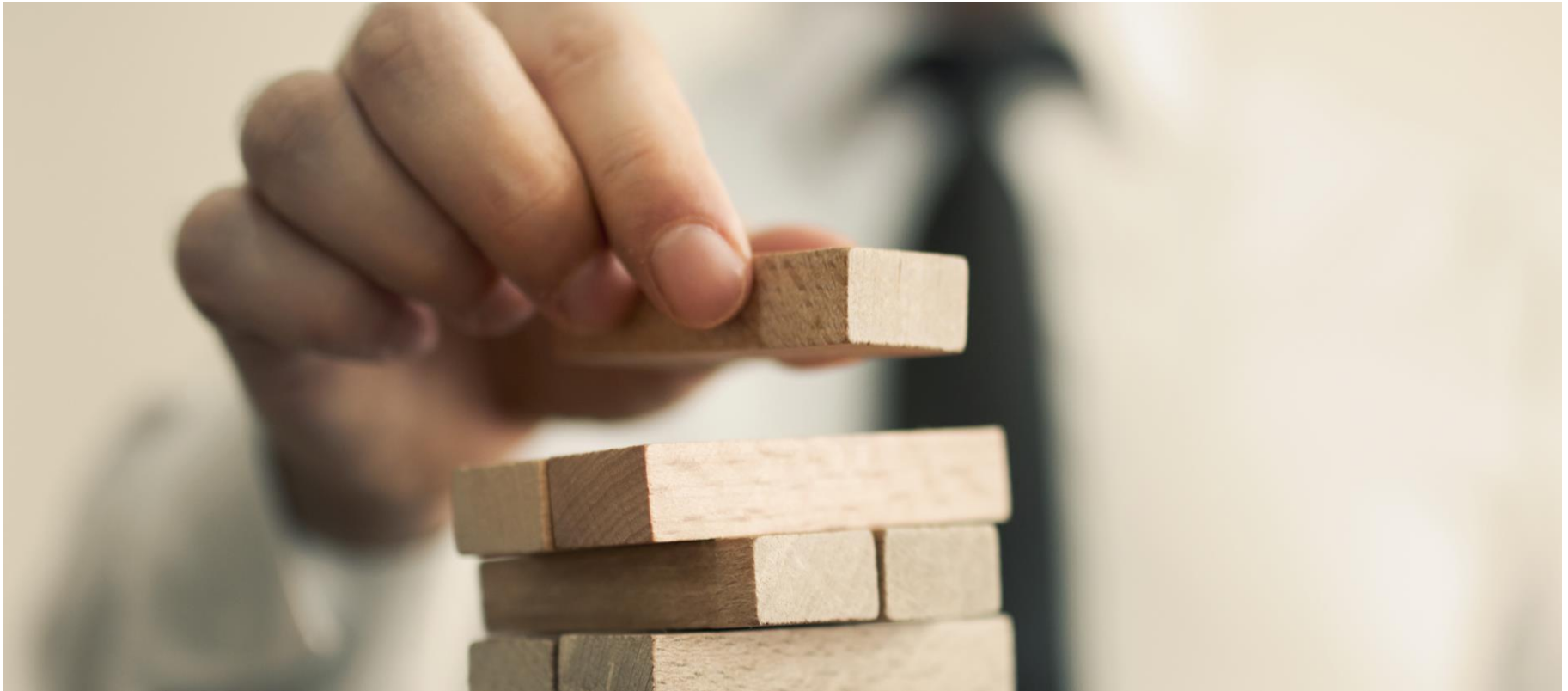
# Agenda

Equity Story & Market Fundamentals

Sustainability

9M 2019 Business Update

Additional Information



Equity Story  
&  
Market  
Fundamentals

pages 2-20

Sustainability

pages 21-26

9M 2019  
Business  
Update

pages 27-45

Additional  
Information

pages 46-72

*See Page Finder on  
page 72 for detailed  
agenda*

<p>Performance</p>	<ul style="list-style-type: none"> <li>➢ Y-o-y increase across all four segments</li> <li>➢ Adj. EBITDA Total <b>€1,331.1m</b> (+16.7%)</li> <li>➢ Group FFO <b>€932.8m</b> (+10.7%) and <b>€1.72</b> per share (+5.5%; eop shares)</li> </ul>
<p>NAV &amp; Valuation</p>	<ul style="list-style-type: none"> <li>➢ Adj. NAV per share <b>€48.92</b> (+9.0% since YE 2018)</li> <li>➢ <b>Est. H2 2019 total fair value growth of €2.1bn – €2.8bn</b> (4.4% - 5.9%) expected</li> <li>➢ <b>YE2019E Adj. NAV per share</b> estimated to come out between <b>€51.5 and €53</b></li> </ul>
<p>Capital Structure</p>	<ul style="list-style-type: none"> <li>➢ LTV <b>40.3%</b> (-250bps since YE 2018)</li> <li>➢ <b>Pro forma year-end LTV</b> incl. Hembra acquisition, financing and H2 valuation estimated to be toward the upper end but still <b>well within our target range</b></li> <li>➢ Net debt/EBITDA multiple <b>11.1x</b></li> </ul>
<p>Guidance 2019 (final) 2020 (initial)</p>	<ul style="list-style-type: none"> <li>➢ <b>Final guidance 2019:</b> Total EBITDA and Group FFO at the <b>upper end of the range</b> leading to a <b>dividend p.s. of €1.57</b> to be proposed to the AGM in May 2020</li> <li>➢ <b>Initial guidance 2020:</b> Total EBITDA of €1,875m – €1,925m and Group FFO of €1,275m – €1,325m</li> </ul>
<p>Regulation &amp; political debate</p>	<ul style="list-style-type: none"> <li>➢ Berlin-specific rent freeze expected to become law in Q1 2020. <b>2020E impact on Group FFO: ~€6m</b></li> <li>➢ Discussions about regulation expected to continue but <b>risk of rent freeze</b> or similar regulation <b>outside Berlin remains extremely low</b></li> <li>➢ <b>Well-balanced stakeholder debate</b> more important than ever and <b>Vonovia is leading by example</b></li> </ul>

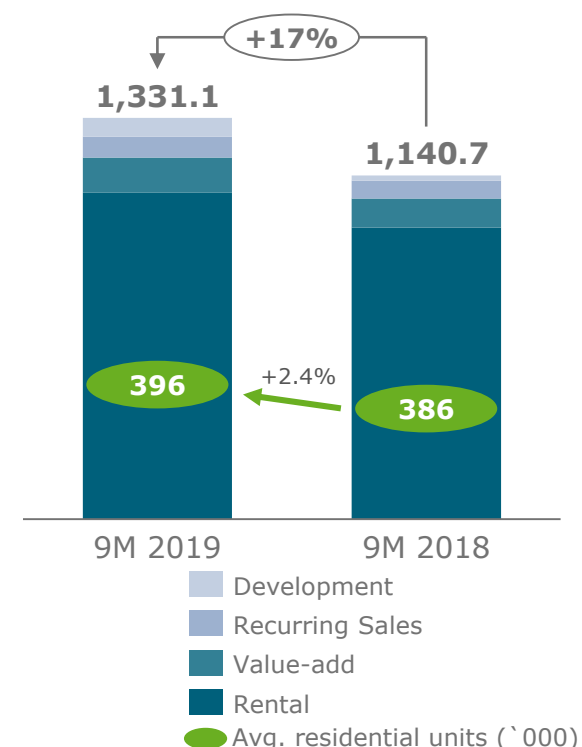
We are continuing our solid performance and remain confident in our upward trajectory and ability to deliver sustainable growth for the remainder of the year and beyond.

# Substantial Growth in All Four Segments from Larger Portfolio Volume and Performance Improvements

- 16.7% Adj. EBITDA Total growth and 10.7% Group FFO growth on the back of a 2.4% larger portfolio and performance improvements.
- While the operating business with the rental and value-add segments remains the primary performance driver, recurring sales and development made an increasing contribution in 9M 2019.

€m (unless indicated otherwise)	9M 2019	9M 2018	
Adj. EBITDA Rental	1,082.5	966.7	
Adj. EBITDA Value-add	117.5	96.8	
Adj. EBITDA Recurring Sales	69.1	59.7	
Adj. EBITDA Development	62.0	17.5	
<b>Adj. EBITDA Total</b>	<b>1,331.1</b>	<b>1,140.7</b>	<b>16.7%</b>
FFO interest expenses	-265.6	-237.7	
Current income taxes FFO	-43.1	-23.5	
Consolidation <sup>1</sup>	-89.6	-36.8	
<b>Group FFO</b>	<b>932.8</b>	<b>842.7</b>	<b>10.7%</b>
of which Vonovia shareholders	892.2	804.3	
of which hybrid investors	30.0	30.0	
of which non-controlling interests	10.6	8.4	
Number of shares (eop)	542.3	518.1	
<b>Group FFO per share (eop NOSH)</b>	<b>1.72</b>	<b>1.63</b>	<b>5.5%</b>
Group FFO per share (avg. NOSH)	1.76	1.68	

Adj. EBITDA Total (€m)



<sup>1</sup> Consolidation in 9M 2019 (9M 2018) comprised intragroup profits of €34.3m (€26.5m), the valuation result of new construction/development to hold of €33.1m (€10.2m), and IFRS 16 effects of €22.2m (€0.0m).

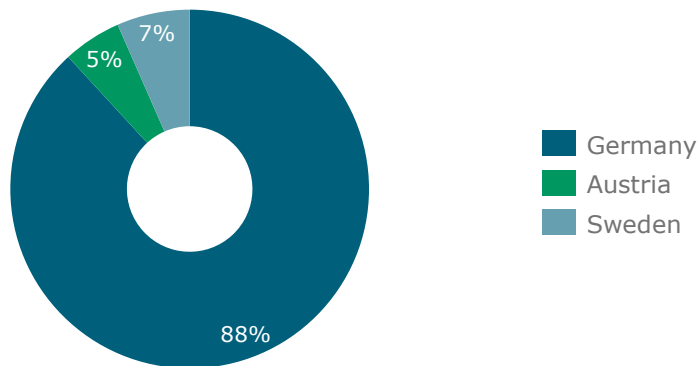
# Rental Segment

## Adj. EBITDA Rental Up from Acquisitions and Organic Growth

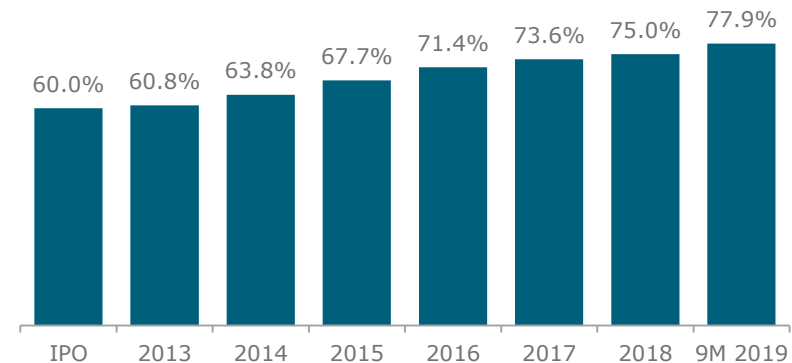
Rental Segment (€m)	9M 2019	9M 2018	Delta
Rental income	1,527.0	1,393.3	+9.6%
Maintenance expenses	-230.2	-218.8	+5.2%
Operating expenses <sup>1</sup>	-214.3	-207.8	+3.1%
<b>Adj. EBITDA Rental</b>	<b>1,082.5</b>	<b>966.7</b>	<b>+12.0%</b>

- Rental income growth in 9M 2019 was driven by the acquisition of Buwog and Victoria Park plus organic rental growth, both of which more than outweighed the rental income dilution from disposals.
- The increase in maintenance expenses is volume driven; per-square-meter levels are in line with last year.
- The increase in operating expenses is mainly attributable to the inclusion of ~€30m (pass-through) ancillary expenses for Victoria Park due to the all-inclusive rent levels in Sweden.

### Rental income by geography



### EBITDA Operations margin Germany<sup>2</sup>



<sup>1</sup> Prior-year adjusted to include corporate transaction costs.

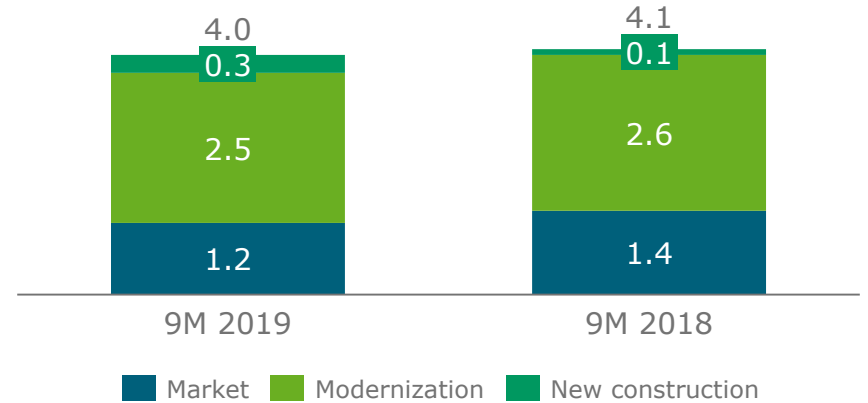
<sup>2</sup> EBITDA Operations margin (Adj. EBITDA Rental + Adj. EBITDA Value-add – intragroup profits). 2019 margin includes positive impact from IFRS 16.

# Rental Segment

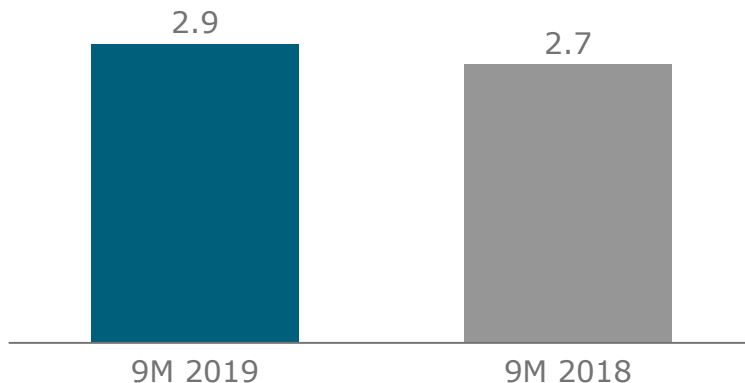
## Operating KPIs Rental Segment

- > Organic rent growth of 4.0% year-on-year.
- > Average in-place rent of €6.69 per sqm (+4.0% not like-for-like and including impacts from acquisitions and disposals).
- > Vacancy rate of 2.9%, largely investment related.
- > Maintenance expenses and capitalized maintenance stable on a per-square-meter basis.

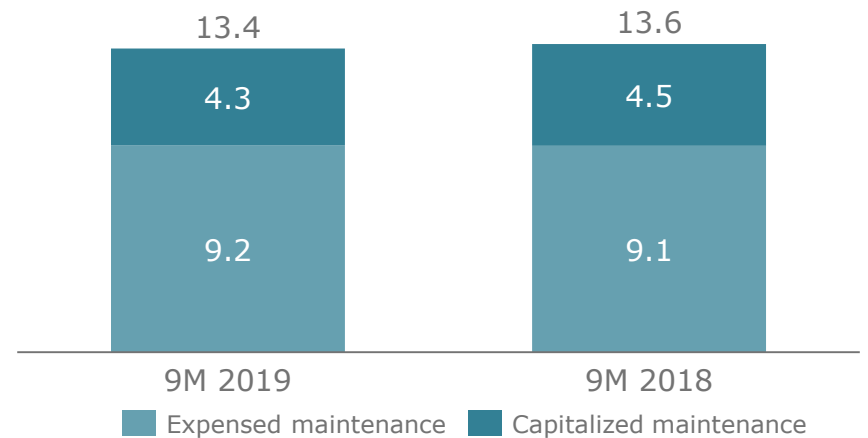
### Organic rent growth (y-o-y; %)



### Vacancy rate (%)



### Expensed and capitalized maintenance (€/sqm)



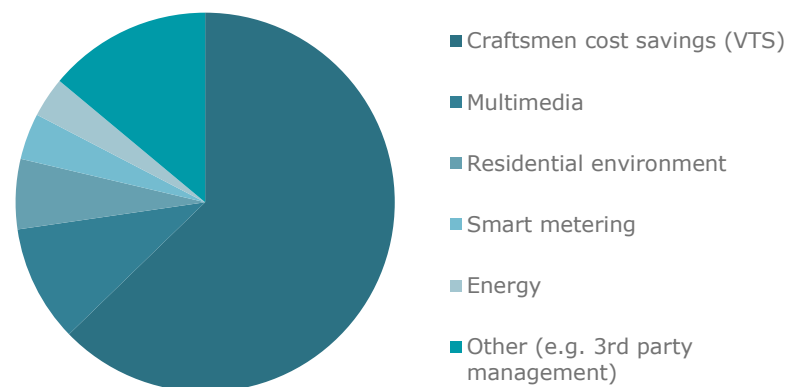
# Value-add Segment

## Continued Dynamic Growth in Adj. EBITDA Value-add

- Two types of value-add: (i) **internal savings** mainly via craftsmen organization and (ii) **additional revenue** through external income by offering services at **market prices but on a lower cost basis due to efficiencies and size**.
- Insourcing of services to ensure **maximum process management** and **cost control**.
- Expansion of core business to generate additional revenues by walking back the value chain and offering services that were previously provided by third parties (**internalization of margin**).
- **Cash flows from Adj. EBITDA Value-add are not included in the portfolio valuation, and as a consequence largely ignored in NAV.**
- Applying the impairment test discount rate<sup>1</sup> to the 2019E Adj. EBITDA Value-add suggests an **additional value of ~€5 per share** (~10% on top of 9M 2019 Adj. NAV).

Value-add Segment (€m)	9M 2019	9M 2018	Delta
Income	1,212.0	1,010.6	+19.9%
of which external	186.8	133.6	+39.8%
of which internal	1,025.2	877.0	+16.9%
Operating expenses Value-add	-1,094.5	-913.8	+19.8%
<b>Adj. EBITDA Value-add</b>	<b>117.5</b>	96.8	+21.4%

### Value-add EBITDA mostly from internal savings<sup>2</sup>



<sup>1</sup> Pre-tax WACC in impairment test of 5.1%. <sup>2</sup> Distribution based on FY2019 expectations

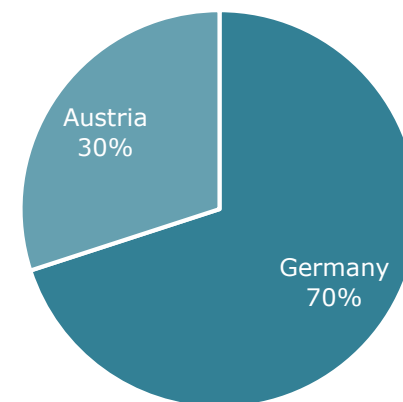


# Recurring Sales Segment

## Adj. EBITDA Contribution from Recurring Sales Up 15.7%

- Stable sales volume but higher proceeds and fair value step-up y-o-y.
- FV step-up improvement also driven by disposals in Austria.
- Avg. sales prices up 10% y-o-y.
- Outside the Recurring Sales Segment we sold 1,679 non-core units in 9M 2019 with a fair value step-up of 15.2%.

Geographic split by sales proceeds



Recurring Sales Segment (€m)	9M 2019	9M 2018	Delta
Units sold	1,893	1,992	-5.0%
Gross proceeds	273.5	261.7	+4.5%
Fair value	-193.4	-190.8	+1.4%
Adjusted earnings	80.1	70.9	+13.0%
Fair-value step-up	41.4%	37.1%	+430bps
Selling costs <sup>1</sup>	-11.0	-11.2	-1.8%
<b>Adj. EBITDA Recurring Sales</b>	<b>69.1</b>	<b>59.7</b>	<b>+15.7%</b>

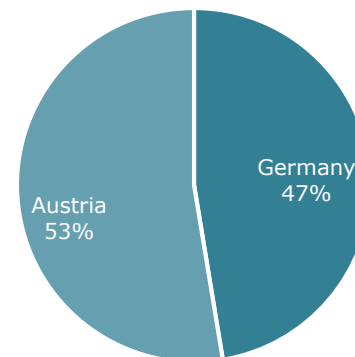
<sup>1</sup> Prior-year adjusted to exclude corporate transaction costs.

# Development Segment

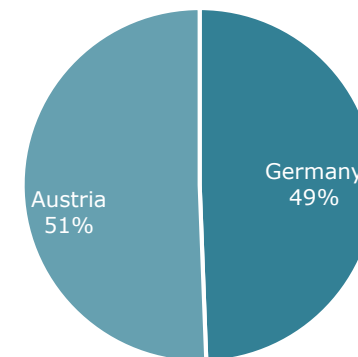
## Ramp-up of Development Business Continues

- This segment includes the contribution of to-sell and to-hold constructions of new buildings. Not included is the construction of new apartments by adding floors on top of existing buildings because this happens in the context of and is accounted for under modernization.

Development to sell (by income)



Development to hold (by fair value)

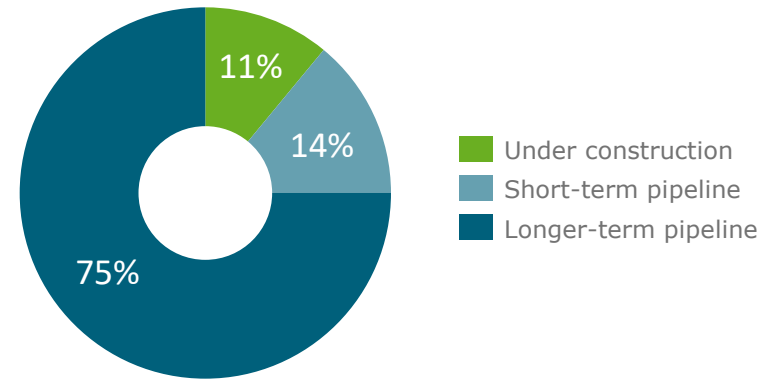


Development Segment (€m)	9M 2019	9M 2018	Delta
Income from disposal of "to sell" properties	194.9	122.9	+58.6%
Cost of Development to sell	-148.1	-107.8	+37.4%
Gross profit Development to sell	46.8	15.1	>100%
Fair value Development to hold	185.3	65.1	>100%
Cost of Development to hold	-152.2	-54.9	>100%
Gross profit Development to hold	33.1	10.2	>100%
Operating expenses Development segment	-17.9	-7.8	>100%
<b>Adj. EBITDA Development</b>	<b>62.0</b>	<b>17.5</b>	<b>&gt;100%</b>

### New rental apartments for our own portfolio ("to hold")

- > 967 units completed in 9M 2019 (including 127 new units through floor additions which are built in the context of and are accounted for under modernization investments and which are not included in the Development Segment).
- > Total pipeline of ca. 31,000 units, of which more than 80% in Germany and the remainder in Austria and Sweden.
- > Average apartment size between 60-70 sqm and broadly in line with overall portfolio average.
- > The development to-hold investment volume is part of the overall investment program.

### Pipeline with ca. 31,000 apartments

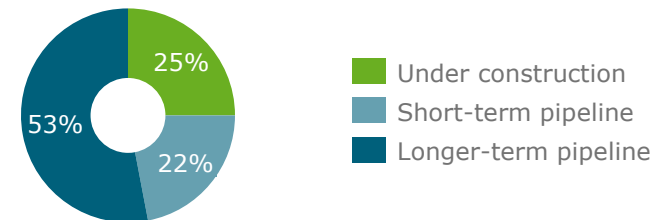


2019 target: up to 1,400 completions

### New apartments for retail disposal ("to sell")

- > 515 units completed in 9M 2019.
- > Total pipeline volume of ca. €2.6bn (ca. 7,400 apartments), of which ca. 60% in Germany and ca. 40% in Austria.
- > Investment capital for Development to sell is not part of investment program.
- > Average apartment size between 70-80 sqm.
- > Average investment volume of ~€4.5k per sqm.
- > Expected gross margin between 20-25% on average.

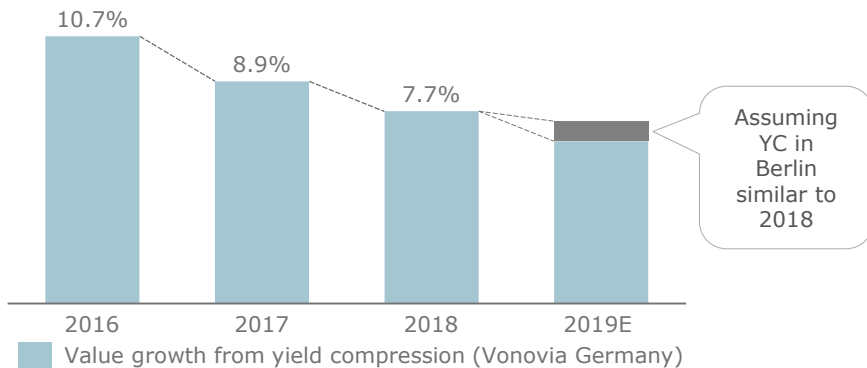
### Pipeline with ca. 7,400 apartments



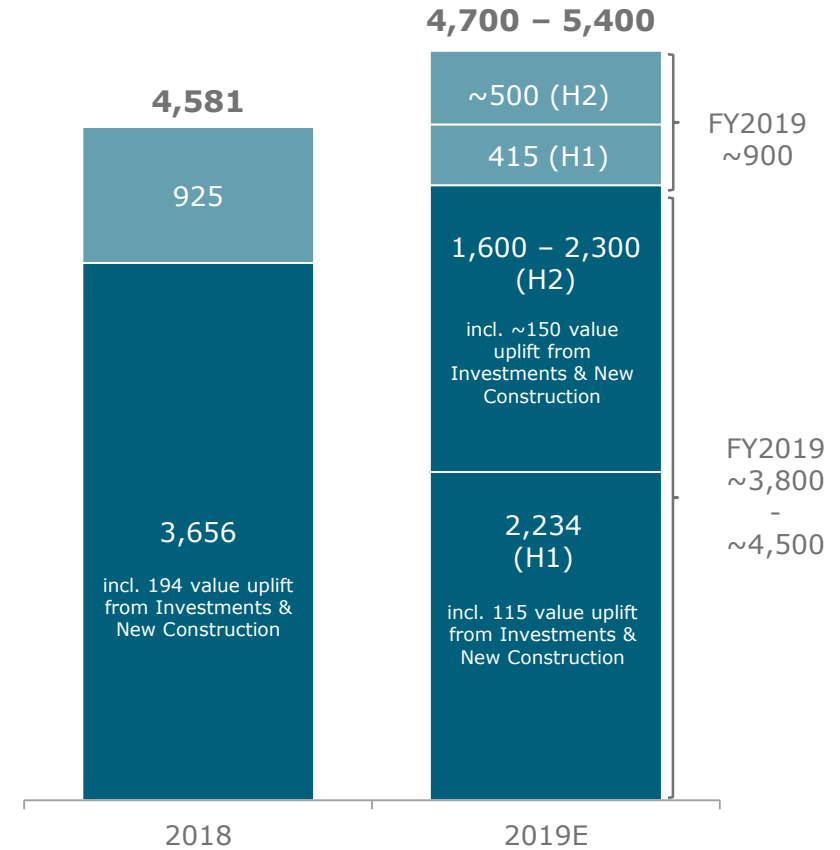
2019 target: up to 800 completions

## Comments

- > **H2 2019** total value growth is estimated to come out between **€2.1bn - €2.8bn** (4.4% - 5.9%)
- > **FY2019** total value growth estimated to be **€4,700m - €5,400m** (10.5% - 12.1%).
- > Offer prices in 2019 have been continuing to increase across our markets except for **Berlin**, where in H2 2019 so far we have been seeing a **flat value development** and **fewer transactions** (see next page).
- > While yield compression momentum has been slowing down since the 2016 peak, this slowdown is taking place at a declining rate. Assuming yield compression at 2018 levels for Berlin would lead to a value growth from yield compression for the full portfolio that is almost in line with the prior year.



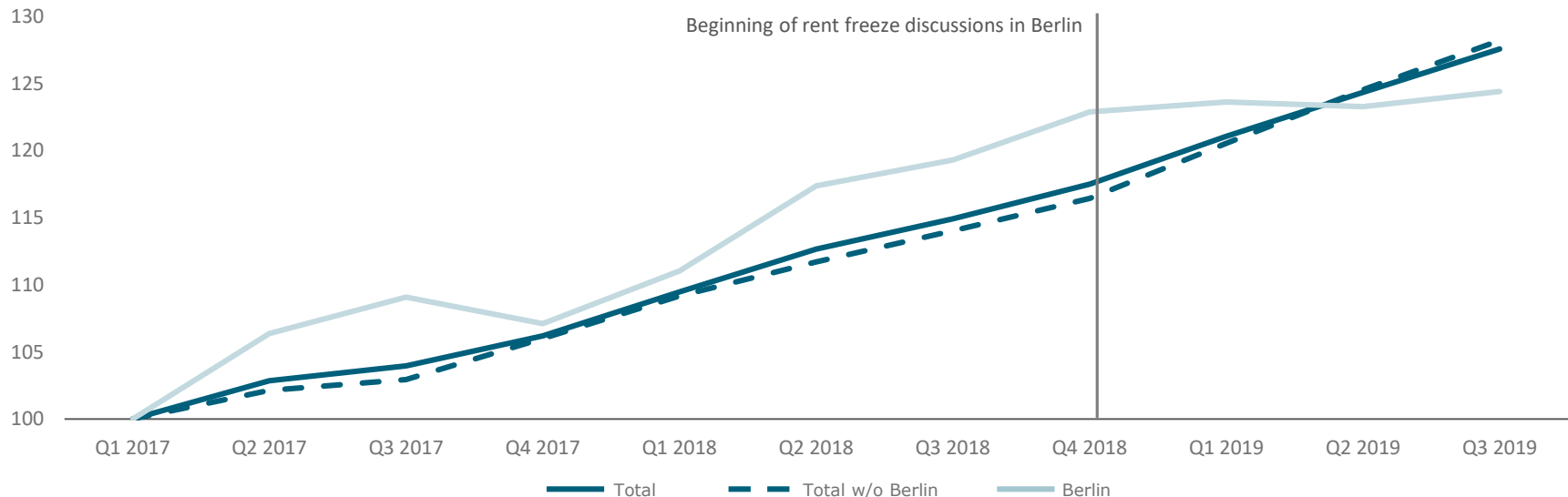
## Value growth drivers (€m)



Investments exclude new construction as those investments are directly accounted for as "additions" to investment properties.

- While offer prices in all of our other German regional markets have been continuing to grow in H2 2019, we have seen very little movement in Berlin.
- In Berlin, the offer prices have been moving sideways and also the number of offers has been stable while the transaction volume has been declining.
- Meaningful value changes, if any, as a result of the rent freeze legislation, would probably not be seen before H1 2020.

## Evolution of offer prices in Germany<sup>1</sup>



<sup>1</sup> Vonovia Portfolio. Index Q1 2017 = 100. Not like-for-like. Data source: empirica; own analysis

# Adj. NAV Growth of +9.0% per share

- Adj. NAV increased by 14.0% to €26.5bn
- Adj. NAV per share increased by 9.0% on a 4.7% higher number of shares

€m (unless indicated otherwise)	Sep. 30, 2019	Dec. 31, 2018	
Equity attributable to Vonovia's shareholders	18,123.7	17,880.2	
Deferred taxes on investment properties	9,055.1	8,161.1	
Fair value of derivative financial instruments <sup>1</sup>	106.5	87.2	
Deferred taxes on derivative financial instruments	-28.9	-23.5	
EPRA NAV	27,256.4	26,105.0	
Goodwill	-730.6	-2,842.4	
<b>Adj. NAV</b>	<b>26,525.8</b>	<b>23,262.6</b>	<b>+14.0%</b>
EPRA NAV €/share	<b>50.26</b>	50.39	
<b>Adj. NAV €/share</b>	<b>48.92</b>	<b>44.90</b>	<b>+9.0%</b>
Number of shares (eop)	542.3	518.1	

<sup>1</sup> Adjusted for effects from cross currency swaps.

## LTV at Lower End of Target Range

- LTV as of Sep. 30, 2019, was 40.3%; Net debt/EBITDA multiple was 11.1x.
- Against the background of the **stable cash flows** and the **strong long-term fundamentals** in our portfolio locations, largely driven by a **structural supply/demand imbalance**, we see continued upside potential for our property values and do not see material long-term downside risks for our portfolio.
- **Pro forma year-end LTV** incl. Hembra acquisition, financing and H2 2019 valuation estimated to be toward the upper end but still **well within our target range**.

€m (unless indicated otherwise)	Sep 30, 2019	Dec 31, 2018
Non-derivative financial liabilities	20,505.6	20,136.0
Foreign exchange rate effects	-45.4	-33.5
Cash and cash equivalents	-1,157.4	-547.7
Net debt	19,302.8	19,554.8
Sales receivables	-10.4	-256.7
<b>Adj. net debt</b>	<b>19,292.4</b>	<b>19,298.1</b>
Fair value of real estate portfolio	47,763.9	44,239.9
Shares in other real estate companies	114.0	800.3
<b>Adj. fair value of real estate portfolio</b>	<b>47,907.9</b>	<b>45,040.2</b>
<b>LTV</b>	<b>40.3%</b>	<b>42.8%</b>
LTV (incl. perpetual hybrid)	42.4%	45.1%
<b>Net debt/EBITDA multiple<sup>1</sup></b>	<b>11.1x</b>	<b>11.4x</b>

<sup>1</sup> Adj. net debt quarterly average over Total EBITDA (LTM); adj. for IFRS 16 effect.

- Lower-than-originally anticipated organic rent growth as a result of not implementing 2019 Berlin Mietspiegel and lower construction volume as a consequence of lagging permits
- Since the IPO in 2013 we have been building a **broader, increasingly diversified and more stable** business that generates **earnings from a variety of sources and geographies**
- While the investment volume and organic rent growth fall a bit short of our earlier expectations, we expect to deliver both **EBITDA and Group FFO at the upper end of the guidance** range, resulting in a **dividend per share of €1.57<sup>1</sup> (+9% y-o-y)**

	2018 Actuals	2019 Guidance (Aug. 2019)	Final 2019 Guidance (Nov. 2019; excl. Hembla)
Organic rent growth (eop)	4.4%	~4.4%	~4.0%
Rental Income (€m)	1,894	2,020 – 2,070	~2,040
Recurring Sales (# of units)	2,818	~2,500	~2,500
FV step-up Recurring Sales	35.5%	~30%	>30%
Adj. EBITDA Total (€m)	1,397	1,700 – 1,750	Upper end of range
Group FFO (€m)	1,132	1,165 – 1,215	Upper end of range
Group FFO (€/share)	2.18	2.15 – 2.24	Upper end of range
Dividend (€/share)	1.44	~70% of Group FFO	1.57 <sup>1</sup>
Investments (€m)	1,139	1,300 – 1,600	~1,400
Adj. NAV (€/share)	44.90	n/a	€51.5 – €53 <sup>2</sup>
Underlying number of shares (million)	518.1	542.3	542.3

<sup>1</sup> To be proposed to the Annual General Meeting in May 2020. <sup>2</sup> incl. Hembla



	2019 Guidance (excl. Hembla)	2020 Guidance (incl. Hembla)
Organic rent growth (eop)	~4.0%	~4.0%
Rental Income	~2.04bn	~2.3bn
Recurring Sales (# of units)	~2,500	~2,500
FV step-up Recurring Sales	>30%	~30%
Adj. EBITDA Total (€m)	Upper end of 1,700 – 1,750 range	1,875 – 1,925
Group FFO (€m)	Upper end of 1,165 – 1,215 range	1,275 – 1,325
Dividend (€/share)	1.57 <sup>1</sup>	70% of Group FFO per share
Investments (€m)	~1,400	1,300 – 1,600

<sup>1</sup> To be proposed to the Annual General Meeting in May 2020

## Legislation

- On Oct. 22, the Berlin Senate agreed on the draft bill for a Berlin-specific rent freeze law; parliamentary hearings are expected to take place in November and December. **The bill is expected to become law in Q1 2020.**
- The proposed rent freeze legislation also includes **rent-reducing elements**
  - Once the law is enacted, **reversal of all rent increases implemented since June 18, 2019**, back to rent level legally agreed as of that date
  - **New lettings** at same rental level as previous rent but in no case above the respective **rent ceilings (Mietobergrenzen)**
  - **Reduction of in-place rents that are >120% of rent ceilings**  
→ This part is expected to be enforced nine months after the rent freeze legislation goes into effect

## Group FFO impact 2020 for Vonovia

- The estimated impact is **ca. €6m** from the reversal rent increases made after June 18, 2019, and unrealized rent growth because of the rent freeze

## Assessment

- Vonovia remains fully convinced that the planned rent freeze legislation is not only **unconstitutional** but also a **large step in the wrong direction**. It will not serve to solve the housing shortage. Instead it will **disincentivize** homeowners and investors in Berlin to make much needed **investments** in **new constructions** and the **modernization** of Berlin's existing housing stock. Notwithstanding this ill-conceived legislation, we will, of course, act in accordance once it is enacted and for as long as it is upheld.
- Vonovia will complete the construction and modernization projects that are underway and **carefully review any future investments into Berlin.**

## Spillover?

- With ca. 10% of our portfolio located in Berlin, the **impact on our performance and portfolio** is clearly **manageable**. Unchanged from previous statements we continue to see the **spillover risk into other areas outside Berlin as extremely low.**

### As the market leader, Vonovia is determined to also lead by example when it comes to stakeholder reconciliation

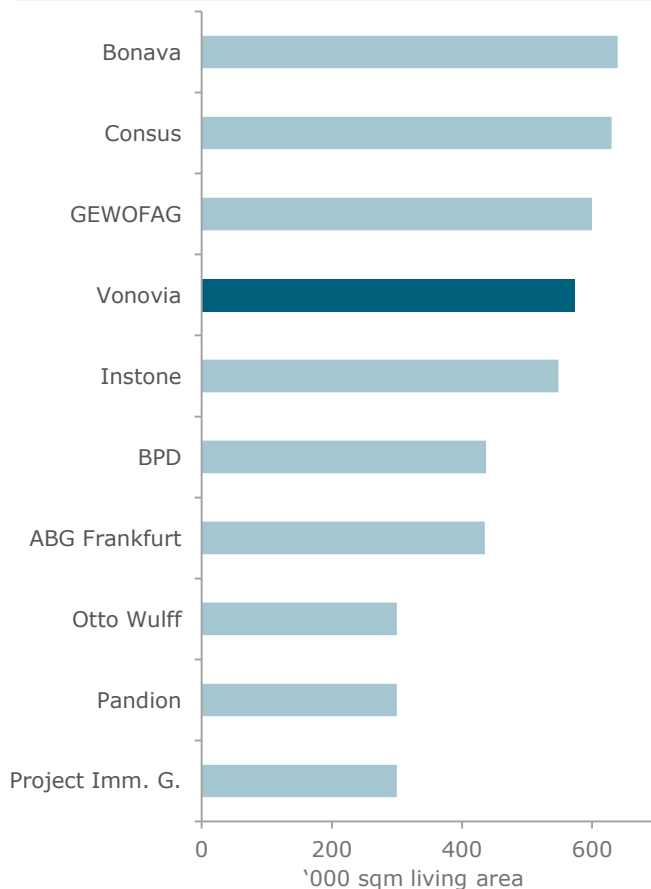
- **We offer our customers a product that is very close to their heart.** The importance of accommodation is probably only surpassed by other elementary needs such as oxygen and food.
- As a consequence, affordable housing and rising rents have been among the most **prominent topics of the national debate.**
- Operating in the residential market brings with it a **special responsibility** that **we take very seriously.**
- That is why we
  - developed our **business philosophy** which goes above and beyond what is legally required (<https://www.vonovia.de/en/geschaeftsverstaendnis>);
  - **limit ourselves** to a maximum rent increase of €2/sqm following modernization even in cases where the law would allow for €3/sqm;
  - have **made a promise** to our tenants who are 70 years or older by giving them a **guarantee** that their apartment will continue to **remain affordable** even if the standard local comparative rents change;
  - decided in August 2019 to **not implement the 2019 Berlin Mietspiegel** in order to (i) not increase the uncertainty among our tenants any further and (ii) not add fuel to an already heated debate.

# Political and Public Debate about Housing (II)

## Vonovia Leads by Example and Is Part of the Solution

**While this is a never-ending responsibility, we have come a long way in our effort to be part of the solution**

### Largest homebuilders in Germany<sup>1</sup>

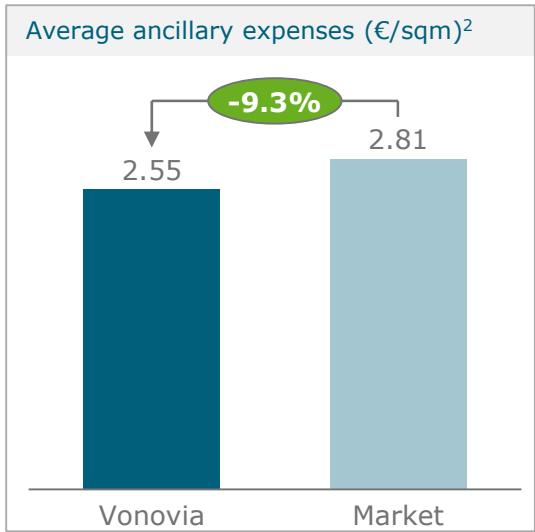


"We welcome this project because it creates new smaller apartments for students and senior citizens and larger apartments for families in a very popular location."  
*Dorothee Dubrau, Director for Housing and Urban Development in Leipzig.*  
 Source: Bild (German daily)

"Let's check out how subsidies are being put to use. Especially when you not only think of a single building but of the whole neighborhood. This is how Essen's run-down northern neighborhood has been turned into the *Elting Viertel*. Great!"  
*Jan Heinisch, CDU and Deputy Minister of Construction and Urban Development in NRW.*  
 Source: Facebook

"More affordable housing in NRW, right where people need it. Vonovia is adding a floor in Essen using modular timber construction. Our NRW building code provides the legal framework. Thanks to the modular approach the construction period for the new apartments is only a few weeks."  
*Stephen Paul, Liberal Party FDP and Member of the NRW State Parliament.*  
 Source: Facebook

Q: "Do you see private owners [...] as a partner or an enemy?"  
 A: "Actually, in their role as landlords they are natural partners, and we have a pretty good working relation with Vonovia. However, when a company [...] does not even accept the Mietspiegel we have a massive conflict."  
*Interview with Berlin's Senator for Housing and Urban Development, Katrin Lompscher.*  
 Source: Tagesspiegel (Berlin daily) on Sep. 30, 2019



<sup>1</sup> Top 7 cities, includes projects completed between 2016 and 2023 (expected), Data source: bulwiengesa, company data. <sup>2</sup> 2017 data, source for market is German Tenant Association (published Oct. 3, 2019)

- › 9M 2019 **performance** on track to deliver EBITDA and Group FFO at the upper end of the guidance for 2019
- › **Valuation** estimate for H2 translates into YE2019E Adj. NAV/share between €51.5 and €53
- › YE2019 **LTV** expected to be well within target range
- › Initial 2020 **guidance** shows an estimated Group FFO growth of 7% (mid-point)
- › Expected to continue to deliver **best-in class rental growth**
- › **Diversification** of business in terms of geography and breadth of activities is paying off
- › **Berlin-specific rental regulation** with only minor impact on Group FFO
- › We continue to see the **spillover risk** into other areas outside Berlin as **extremely low**
- › **Vonovia leads by example** with regards to the highly relevant **stakeholder debate**



Equity Story  
&  
Market  
Fundamentals

pages 2-20

Sustainability

pages 21-26

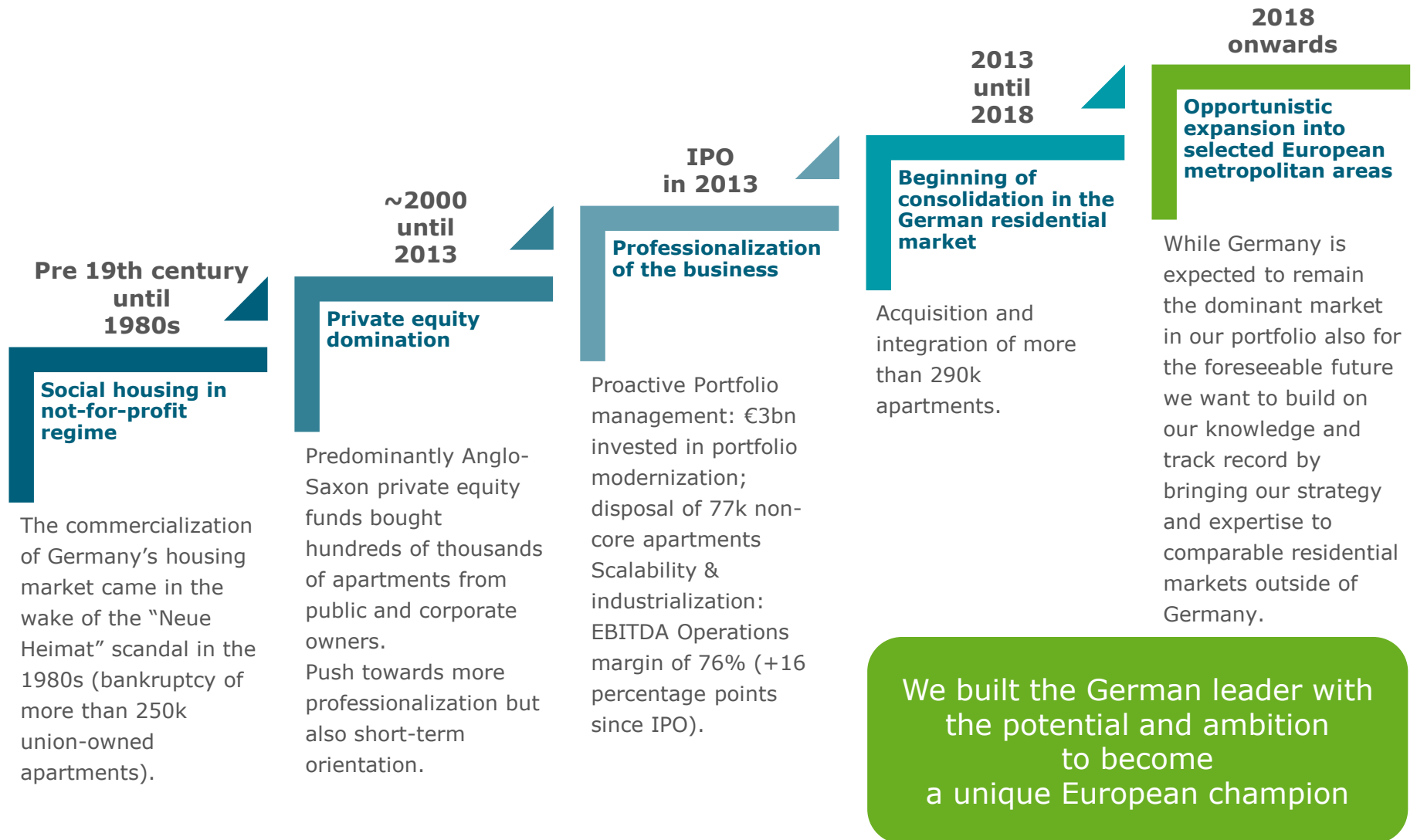
9M 2019  
Business  
Update

pages 27-45

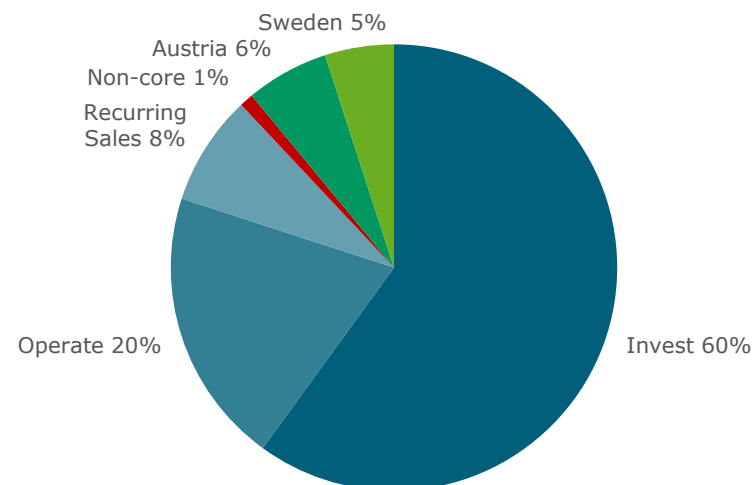
Additional  
Information

pages 46-72

*See Page Finder on  
page 72 for detailed  
agenda*



- **Ca. 60% of German portfolio earmarked for investment strategy**, safeguarding long-term sustainability of our Optimize Apartment and Upgrade Building investment strategy.
- **1,679 non-core units sold in 9M 2019 with a fair value step-up of 15.2%.**



Sep 30, 2019	Fair value <sup>1</sup>			Residential	In-place rent
	(€bn)	% of total	(€/sqm)	units	(€/sqm/month)
Operate	9.3	20%	1,794	75,209	6.96
Invest	27.8	60%	1,805	248,432	6.62
Strategic	37.1	80%	1,802	323,641	6.70
Recurring Sales	3.7	8%	1,927	28,321	6.84
Non-core	0.5	1%	1,299	4,242	6.32
<b>Vonovia Germany</b>	<b>41.3</b>	<b>89%</b>	<b>1,804</b>	<b>356,204</b>	<b>6.71</b>
Vonovia Austria	2.6	6%	1,415	22,764	4.63
Vonovia Sweden	2.3	5%	1,739	16,647	9.15
<b>Vonovia Total</b>	<b>46.2</b>	<b>100%</b>	<b>1,773</b>	<b>395,615</b>	<b>6.69</b>

Note: In-place rents in Austria and Sweden are not fully comparable to Germany, as Sweden includes ancillary costs and Austria includes maintenance and property improvement contributions from tenants. The table above shows the rental level unadjusted to the German definition.

<sup>1</sup> Fair value of the developed land excluding €1,849.5m, of which €471.2m for undeveloped land and inheritable building rights granted, €392.5m for assets under construction, €514.4m for development, €274.1m IFRS 16 effect, and €197.4m for other.



## Regional Cluster

Equity Story &amp; Market Fundamentals

Sustainability

9M 2019 Business Update

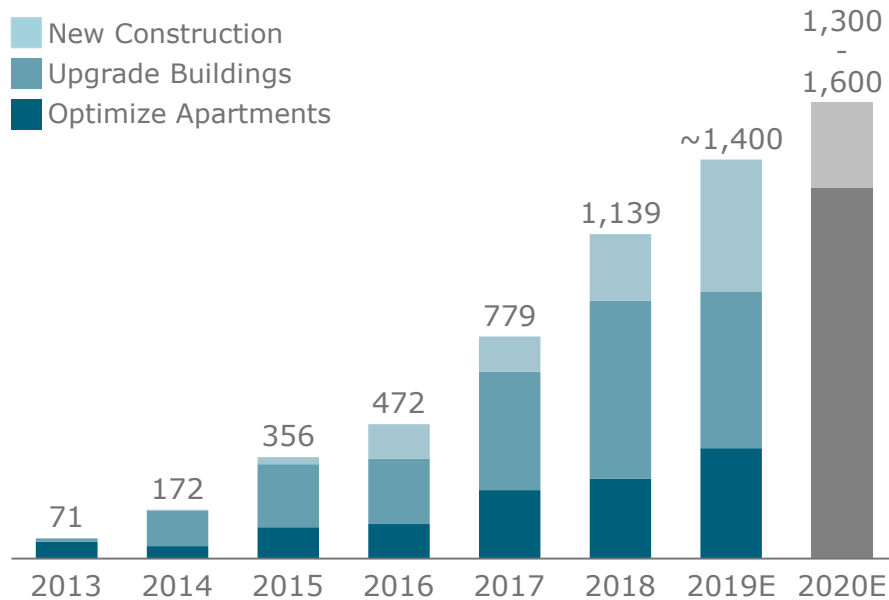
Additional Information

Regional Market	Fair value <sup>1</sup>		In-place rent									
	(€m)	(€/sqm)	Residential units	Vacancy (%)	Total (p.a., €m)	Residential (p.a., €m)	Residential (€/sqm/month)	Organic rent growth (LTM, %)	Multiple (in-place rent)	Purchase power index (market data) <sup>2</sup>	Market rent increase forecast Valuation (% p.a.)	Average rent growth (LTM, %) from Optimize Apartment
Berlin	7,202	2,601	42,029	1.5	226	214	6.78	3.8	31.9	80.4	1.8	50.0
Rhine Main Area (Frankfurt, Darmstadt, Wiesbaden)	4,202	2,355	27,491	1.8	176	170	8.23	4.5	23.9	105.0	1.8	37.8
Southern Ruhr Area (Dortmund, Essen, Bochum)	3,646	1,349	43,405	3.6	192	187	6.09	4.8	19.0	102.0	1.5	31.6
Rhineland (Cologne, Düsseldorf, Bonn)	3,634	1,852	28,784	2.5	168	160	7.16	3.2	21.6	88.5	1.7	30.2
Dresden	3,463	1,511	38,508	3.6	166	157	6.19	4.4	20.8	81.8	1.7	27.8
Hamburg	2,584	2,017	19,816	1.8	109	105	7.11	4.1	23.7	98.4	1.6	39.2
Munich	2,170	3,327	9,651	1.2	65	61	8.17	3.0	33.2	121.8	1.8	46.4
Kiel	2,064	1,481	23,372	2.3	104	99	6.29	3.8	19.8	74.8	1.7	36.3
Stuttgart	2,016	2,263	13,790	1.8	84	81	7.93	2.8	23.9	104.5	1.8	36.0
Hanover	1,791	1,709	16,297	3.1	83	79	6.64	4.7	21.7	90.1	1.7	37.3
Northern Ruhr Area (Duisburg, Gelsenkirchen)	1,596	985	25,958	3.7	110	106	5.74	3.3	14.5	81.7	1.2	25.1
Bremen	1,150	1,555	11,856	3.7	51	48	5.81	4.6	22.8	84.2	1.8	29.2
Leipzig	914	1,470	9,188	4.1	44	41	6.05	2.9	21.0	74.5	1.7	24.2
Westphalia (Münster, Osnabrück)	879	1,409	9,494	3.4	45	43	6.09	4.0	19.7	92.4	1.5	38.6
Freiburg	636	2,281	4,039	1.9	25	24	7.40	3.1	25.6	85.4	1.7	40.6
Other Strategic Locations	2,690	1,546	26,783	3.6	137	132	6.69	4.0	19.7	-	1.5	35.1
Total Strategic Locations Germany	40,635	1,814	350,461	2.8	1,783	1,708	6.71	3.9	22.8	-	1.7	34.9
Non-Strategic Locations	679	1,358	5,743	6.9	35	30	6.40	0.9	19.4	-	1.6	20.0
<b>Germany total</b>	<b>41,314</b>	<b>1,804</b>	<b>356,204</b>	<b>2.8</b>	<b>1,818</b>	<b>1,738</b>	<b>6.71</b>	<b>3.9</b>	<b>22.7</b>	<b>100.0</b>	<b>1.7</b>	<b>34.9</b>
Austria	2,614	1,415	22,764	5.3	108	89	4.63	3.6	24.3	-	1.2	-
Sweden	2,261	1,739	16,647	1.4	141	129	9.15	5.2	16.0	-	2.0	-
<b>Total Vonovia</b>	<b>46,188</b>	<b>1,773</b>	<b>395,615</b>	<b>2.9</b>	<b>2,067</b>	<b>1,957</b>	<b>6.69</b>	<b>4.0</b>	<b>22.3</b>	<b>-</b>	<b>1.7</b>	<b>n/a</b>

Note: In-place rents in Austria and Sweden are not fully comparable to Germany, as Sweden includes ancillary costs and Austria includes maintenance and property improvement contributions from tenants. The table above shows the rental level unadjusted to the German definition.

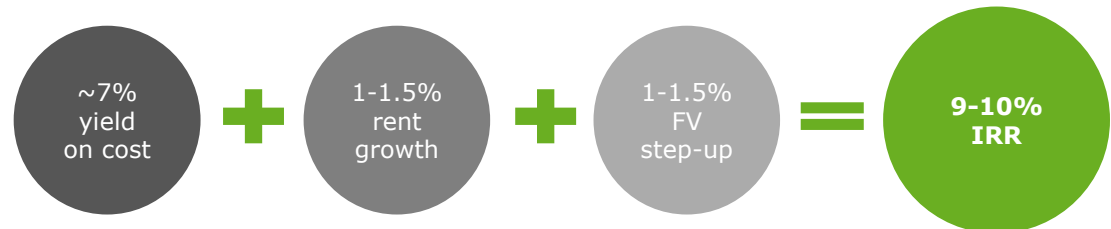
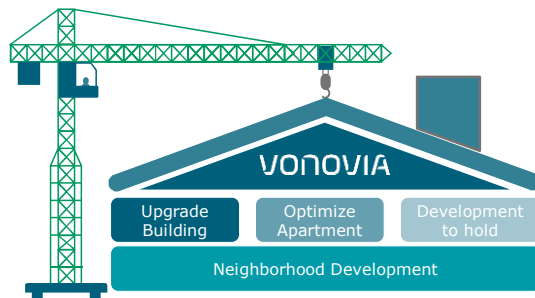
<sup>1</sup> Fair value of the developed land excluding €1,849.5m, of which €471.2m for undeveloped land and inheritable building rights granted, €392.5m for assets under construction, €514.4m for development, €274.1m IFRS 16 effect, and €197.4m for other. <sup>2</sup> Source: GfK (2018). Data refers to the specific cities indicated in the tables, weighted by the number of households where applicable.

## Evolution of Investment Program (€m)

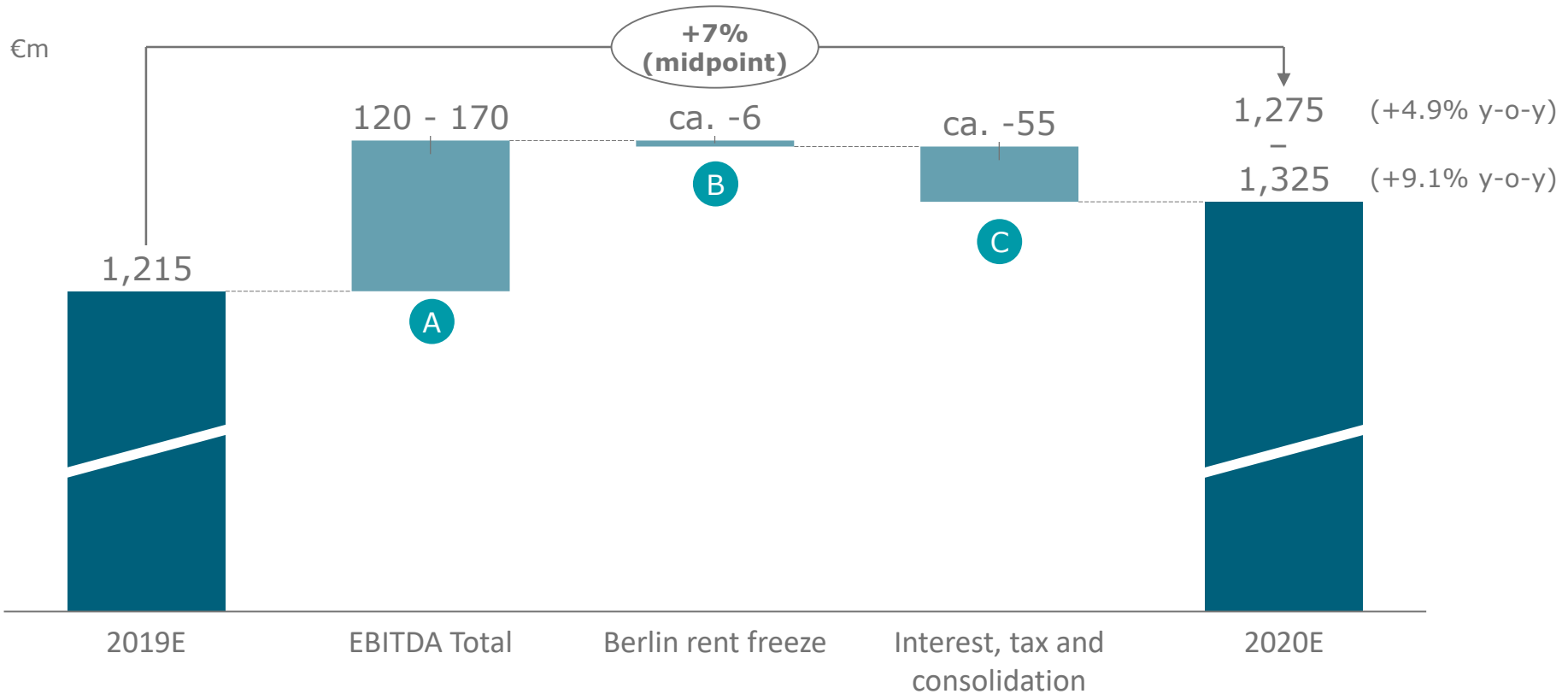


- > In contrast to reactive maintenance (expensed and capitalized) which is spent to *protect* future EBITDAs, investments are **pro-active and discretionary to grow future EBITDAs**
- > Investment programs are **funded by retained cash** (mainly Group FFO not paid out as dividends and sales proceeds) and **debt**
- > **Size** of investment program is **calibrated to ensure we remain within LTV target range**

## 9-10% IRR target for investment program



# Bridge from Group FFO 2019E to 2020E



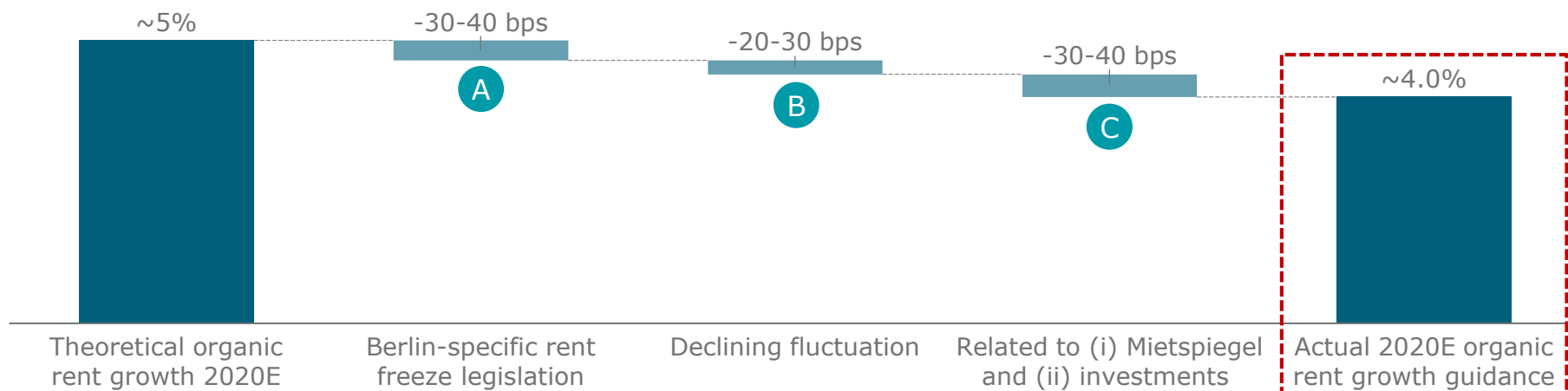
- A** Organic EBITDA growth plus acquisitions including Hembla
- B** Reversal of rent increases made after June 18, 2019, and unrealized rent growth as a result of the Berlin-specific rent freeze
- C** Additional interest for Hembla, higher consolidation amount from non-cash EBITDA growth

- On Oct. 22, 2019, the Berlin Senate agreed on the draft bill for a Berlin-specific rent freeze; parliamentary hearings are expected to take place in November and December. The bill is expected to become law in Q1, 2020.
- The main elements of the legislation as we understand them are as follows:
  - Rents are frozen as of June 2019 for a period of five years. Starting 2022 the Senate is authorized to allow an increase in rents by 1.3% per annum up to the rent ceilings (“Mietobergrenzen”).
  - Modernization that increases rents by up to €1/sqm must be presented to the authorities but requires no formal approval. Subsidies shall be used for additional modernization that leads to rent increases of > €1/sqm.
  - New letting must be at the same level as previous rent unless the previous rent is higher than the rent ceiling (“Mietobergrenze”) in which case the rent must be brought down to the rent ceiling.
  - The defined rent ceilings can be increased by €1 if the apartment meets at least three of five defined characteristics (elevator, kitchen, high-quality bathroom, high-quality flooring, energy consumption level <120 kWh/(m<sup>2</sup> a)).
  - In the case of particularly low rents of less than €5/sqm, new lettings can be made at a max. of €5/sqm but in no case can the new rent be more than €1/sqm higher than the old rent.
  - Excessive rents (“Wuchermieten”) of more 120% of the rent ceilings shall be reduced to the rent ceiling level (premiums/discounts are applied based on location: simple -28 cents/sqm, average -9 cents/sqm, above average +74 cents/sqm). The reduction of excessive rents shall start nine months after the law is enacted and on the order of the administration after reviewing a tenant’s request.

- While German rental regulation has a variety of special terms there are a few that are particularly relevant to understand rental regulation. While there are different translations used by different people, the following is a short overview of the key terms and their English equivalent used by Vonovia.

	German term	English term	Comment
<b>National</b> (encoded in German Civil Code, "BGB")	Mietspiegel	Rent index or Mietspiegel	Based on federal legislation and implemented by individual municipalities. Updates are usually made every two years and based on market rent growth data of the last four years.
	Mietpreisbremse	Rent cap	Unless comprehensive modernizations are made in the apartment, the rent for an incoming tenant must not be more than 10% above the local comparable rent.
<b>Berlin-specific</b> (draft law)	Mietendeckel	Rent freeze	Term used to refer to the planned Berlin-specific rental regulation. It has (i) a rent freeze element based on which rents cannot grow (subject to certain provisions included in the legislation) and (ii) a rent reduction element based on which in-place rents need to be reduced under certain circumstances.
	Mietenobergrenze	Rent ceiling	New maximum rental levels included in the Berlin draft bill that are essentially based on 2013 Mietspiegel levels plus wage inflation. They form the basis for various provisions of the draft bill.

## Our 2020E organic rent growth guidance accounts for these dampening factors:

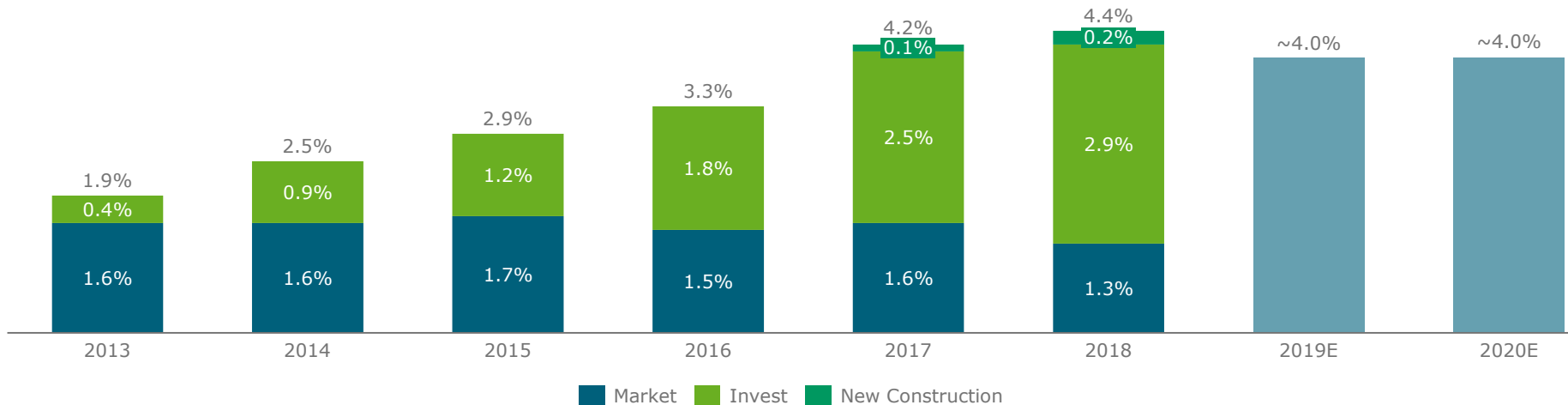


- A** (i) Reversal of post June 18, 2019, rent increases in Berlin in anticipation that rent freeze becomes law in Q1 2020 and in-place rents will need to be rolled back to June 18, 2019 levels plus (ii) unrealized rent growth
- B** Continuously declining tenant turnover to now below 10%
- C** (i) Political influence on Mietspiegel values plus Mietpreisbremse translate into lower rent growth opportunities from Mietspiegel upgrades; (ii) execution of full investment-driven rent growth is taking longer due to delay in building permits, shortage of construction labor and increasingly comprehensive investment projects

*This analysis does not include the impact from the element in the Berlin-specific rent freeze regulation that deals with one-off rent reductions: (i) Relettings can only be made at the level of the previous rent and in no case above the respective rent ceiling (Mietobergrenzen); and (ii) In-place rents of >120% rent ceiling value are to be reduced. Our estimate for the full impact would be ca. 50 bps. As this part of the legislation is expected to be enacted nine months after implementation and reductions would only come by order of the administration after reviewing a tenant's application we do not expect a large impact in 2020. Furthermore, this part of the rent freeze is widely considered the most unconstitutional element of the Berlin rent freeze legislation.*

# Three Sources of Rent Growth

- > Vonovia's **investment program proactively addresses the challenges** of a more sensitive rent growth environment and enables us to **largely compensate for the slight decline in market rent growth** opportunities which is due to increasing political influence on Mietspiegel and impacts from the Mietpreisbremse.
- > Added benefit: In contrast to market rent growth from Mietspiegel adjustments, investment-driven rent growth results in a **tangible benefit for tenants and addresses the social challenges of climate protection, CO2 reduction and senior friendly refurbishments**

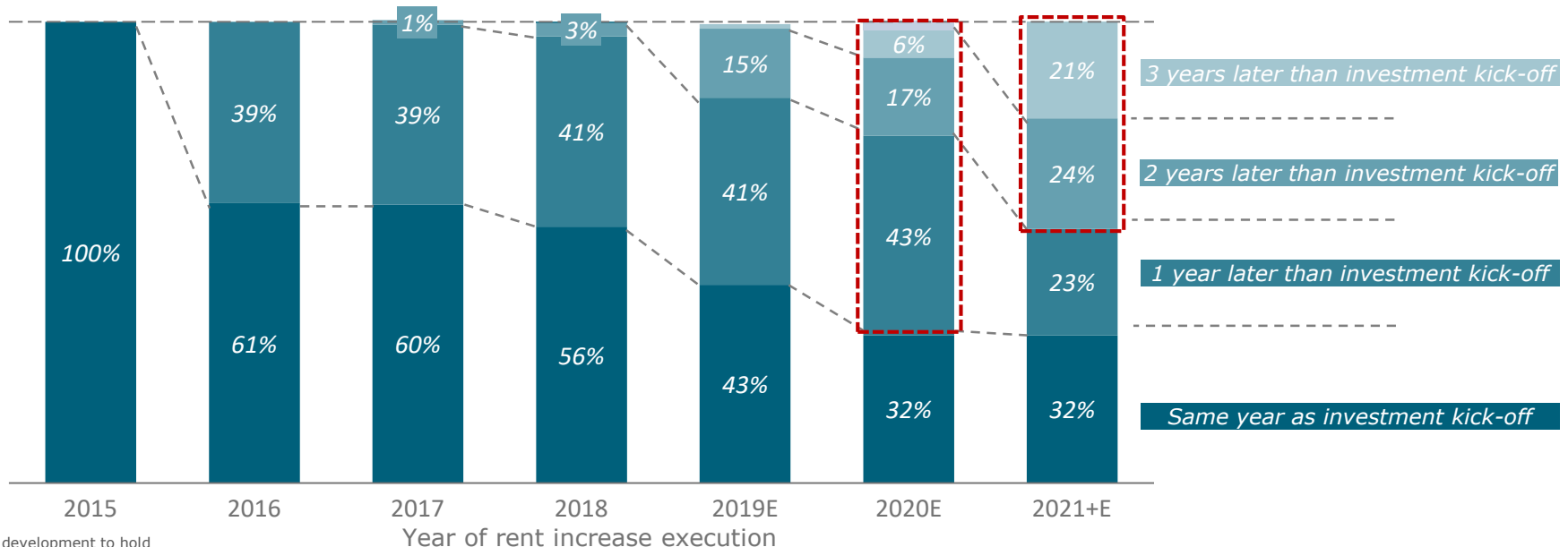


**We are confident to continue to deliver best-in-class organic rent growth**

# Substantial Rent Growth Pipeline

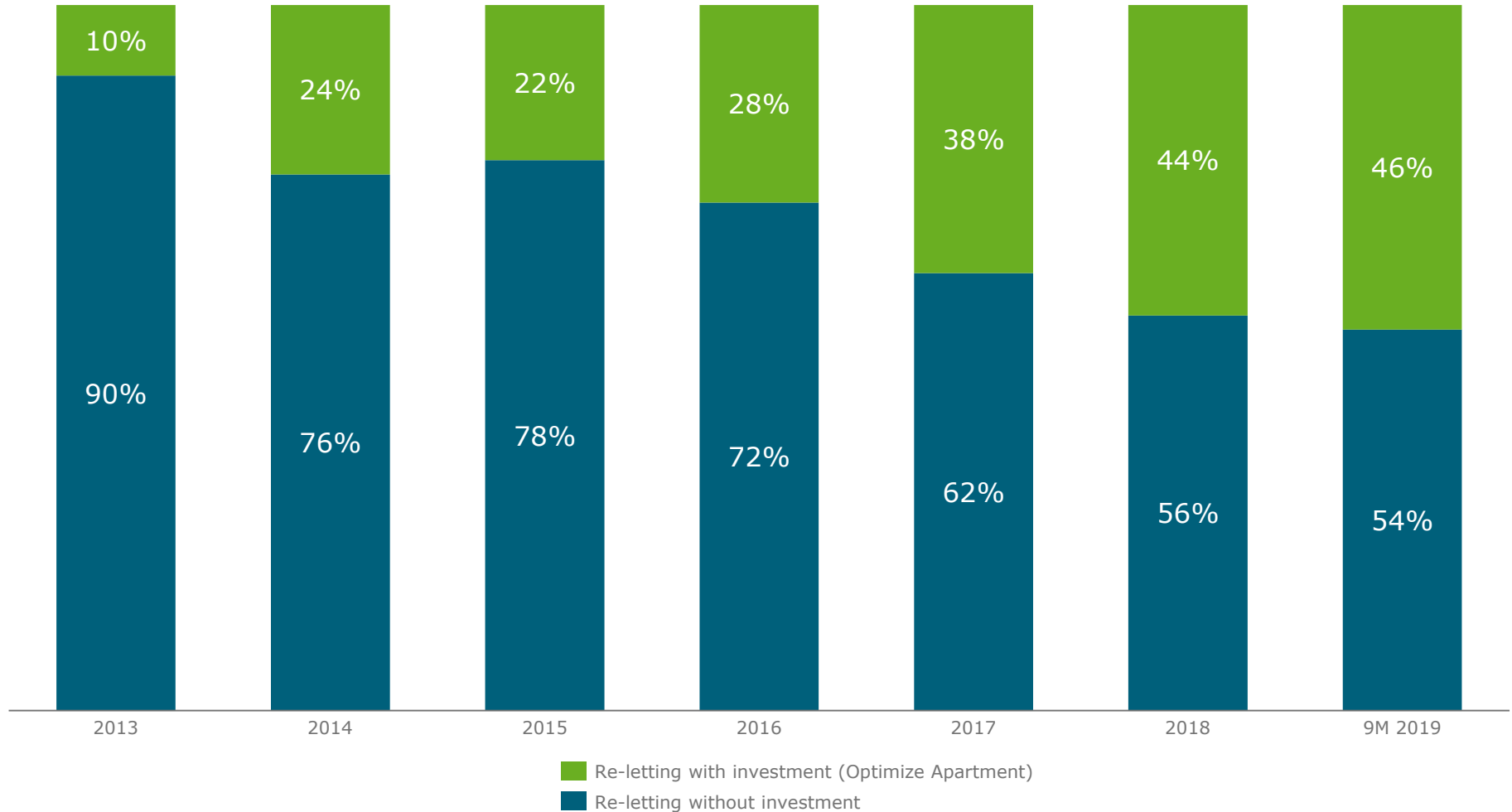
- Increasingly **comprehensive investment projects** incl. neighborhood developments and new construction result in **more extended periods between investment and full rent growth realization.**
- 6% of 2017 investment program rent growth, 39% of 2018 investment program rent growth and 67% of 2019 investment program rent growth for an **aggregate incremental rental income of ~ €63m p.a.** are **still in the pipeline** as investments are underway but not fully completed.

## Year-by-year rent growth materialization from investment programs



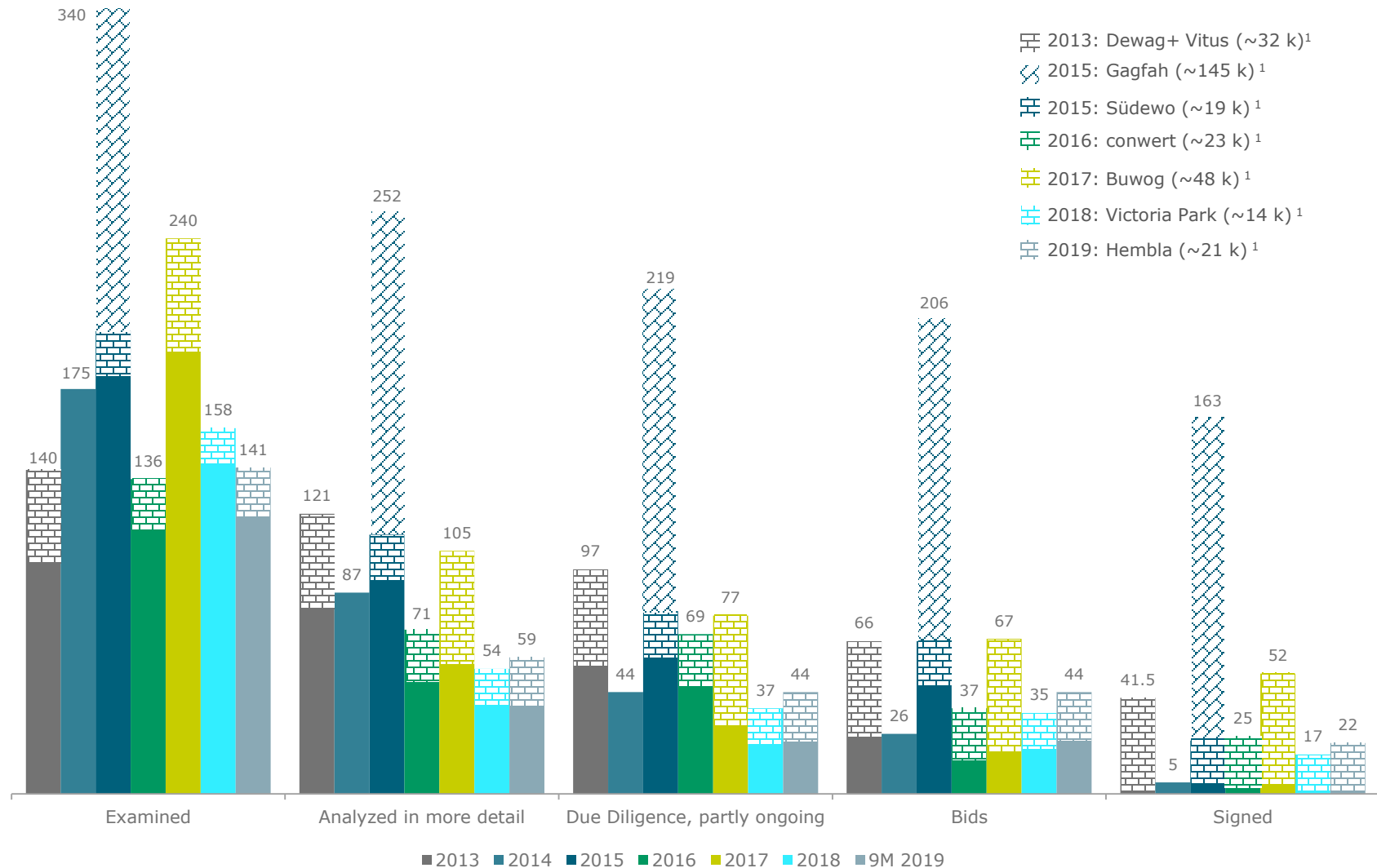


# Re-lettings with and without Investments



# Acquisitions – Opportunistic but Disciplined

## Acquisition pipeline ('000 units)



<sup>1</sup>Acquisitions are shown for all categories in the year the acquisition process started.

# Acquisition Track Record

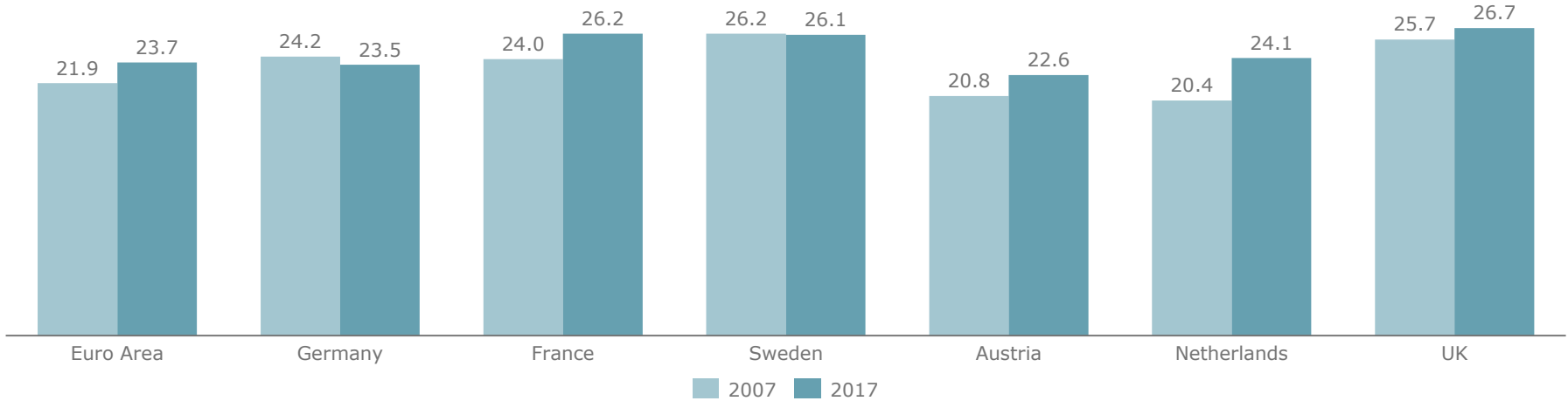
Year	Deal	Residential units #	TOP Locations	Fair Value per sqm			In-place rent per sqm and month		
				@ Acquisition	Sep 30, 2019	Δ	@ Acquisition	Sep 30, 2019	Δ
2014	DEWAG	11,300	Berlin, Hamburg, Cologne, Frankfurt/Main	€1,344	€2,356	75%	€6.76	€8.05	19%
	VITUS	20,500	Bremen, Kiel	€807	€1,486	84%	€5.06	€5.97	18%
2015	GAGFAH	144,600	Dresden, Berlin, Hamburg	€889	€1,745	96%	€5.40	€6.50	20%
	FRANCONIA	4,100	Berlin, Dresden	€1,044	€2,025	94%	€5.82	€6.85	18%
	SÜDEWO	19,400	Stuttgart, Karlsruhe, Mannheim, Ulm	€1,380	€2,071	50%	€6.83	€7.60	11%
2016	GRAINGER	2,400	Munich, Mannheim	€1,501	€2,331	55%	€7.09	€8.10	14%
2017	CONWERT (Germany & Austria)	23,400	Berlin, Leipzig, Potsdam, Wien	€1,353	€1,970	46%	€5.88	€6.51	11%
	thereof Germany	21,200	Berlin, Leipzig, Potsdam	€1,218	€1,869	53%	€5.86	€6.47	10%
	thereof Austria	2,200	Vienna	€1,986	€2,486	25%	€6.11	€6.83	12%
	PROIMMO	1,000	Hanover	€1,617	€1,801	11%	€6.63	€6.93	4%
2018	BUWOG (Germany & Austria)	48,300	Berlin, Lübeck, Vienna, Villach	€1,244	€1,447	16%	€5.10	€5.38	5%
	thereof Germany	27,000	Berlin, Lübeck, Kiel	€1,330	€1,646	24%	€5.96	€6.37	7%
	thereof Austria	21,300	Vienna, Villach, Graz	€1,157	€1,259	9%	€4.21	€4.43	5%
	VICTORIA PARK (Sweden)	14,000	Stockholm, Malmö, Gothenburg	SEK15,286	SEK18,598	22%	SEK92.25	SEK97.89	6%
<b>Total</b>		<b>289,000</b>							

Note: Excluding smaller tactical acquisitions.

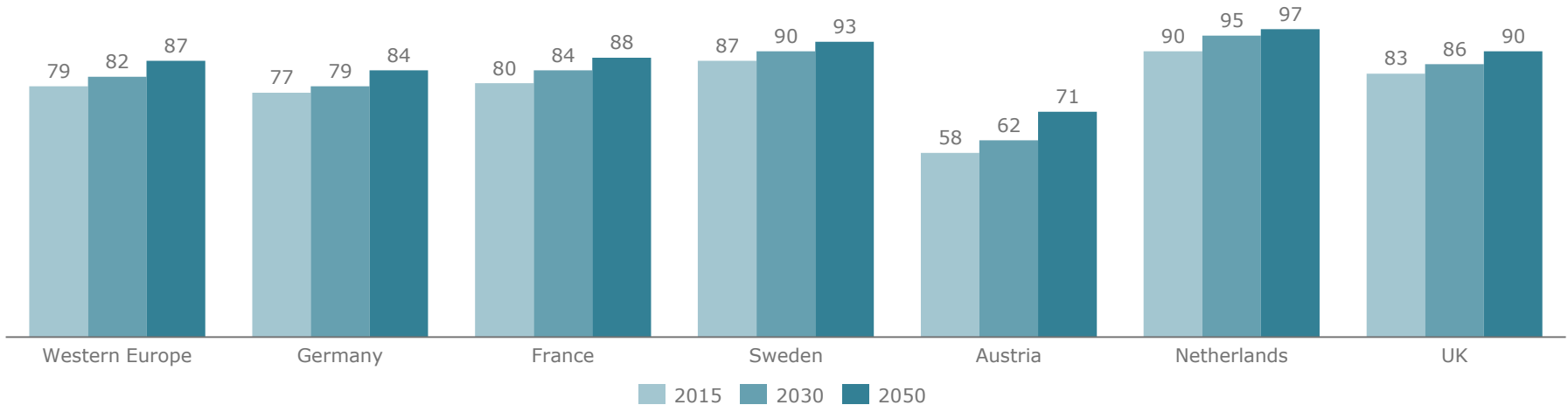
# Residential Market Fundamentals

## Housing Affordability and Urbanization

### Housing affordability<sup>1</sup> (%)



### Population living in urban areas (%)



<sup>1</sup> Share of disposable household income spent on housing, water, electricity, gas and other fuels  
Sources: Eurostat, United Nations

# Residential Market Fundamentals (Germany)

## Household Sizes and Ownership Structure

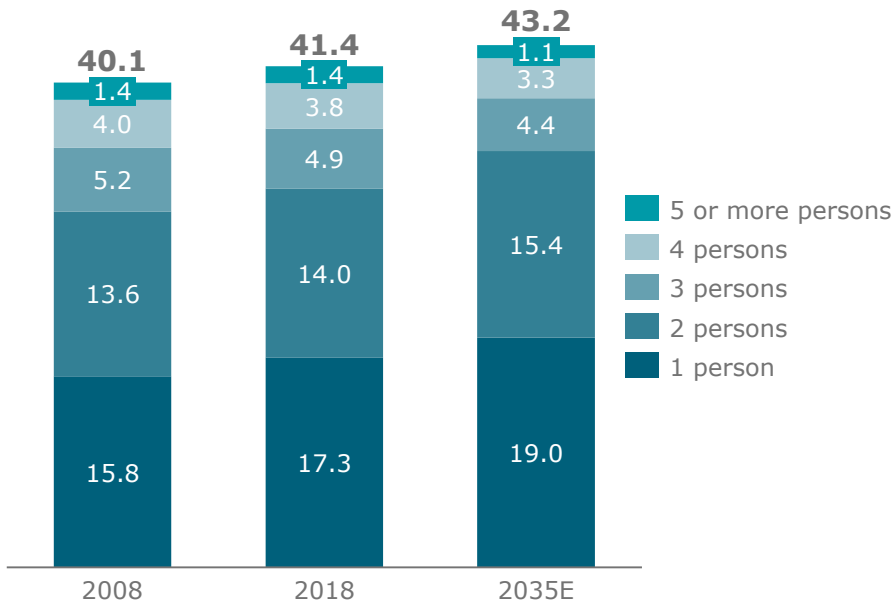
### Growing number of smaller households

- While the overall population in Germany is expected to slightly decline, the number of households is forecast to grow until at least 2035 with a clear trend towards smaller households.
- The household growth is driven by various demographic and social trends including divorce rates, employment mobility etc.

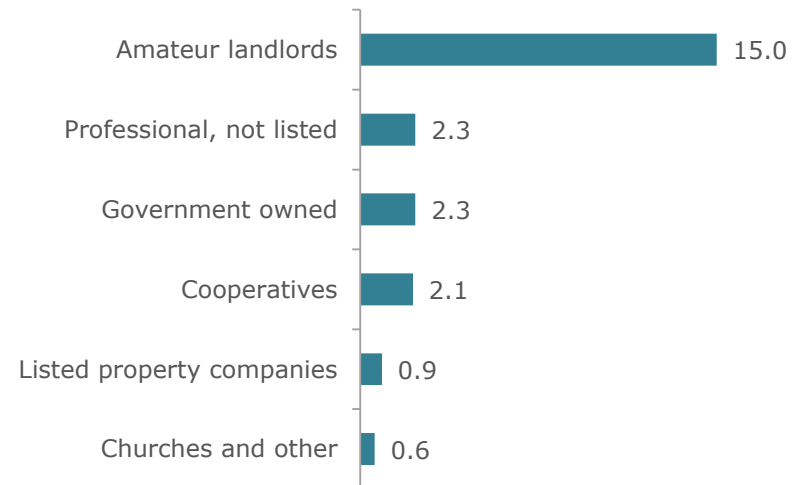
### Fragmented ownership structure

- Germany is the largest housing market in Europe with ~42m housing units, of which ~23m are rental units.
- Ownership structure is highly fragmented and majority of owners are non-professional landlords.
- Listed sector represents ~4% of total rental market.

Distribution of household sizes (million)



Ownership structure (million units)



Sources: German Federal Statistics Office, GdW (German Association of Professional Homeowners). 2035(E) household numbers are based on trend scenario of the German Federal Statistics Office.

# Covenants and KPIs (Sep 30, 2019)

> Bond KPIs

Covenant	Level	Sep 30, 2019
<b>LTV</b>		
Total Debt / Total Assets	<60%	<b>40%</b>
<b>Secured LTV</b>		
Secured Debt / Total Assets	<45%	<b>13%</b>
<b>ICR</b>		
Last 12M EBITDA / Last 12M Interest Expense	>1.80x	<b>4.9x</b>
<b>Unencumbered Assets</b>		
Unencumbered Assets / Unsecured Debt	>125%	<b>203%</b>

> Rating KPIs

Covenant	Level (BBB+)
<b>Debt to Capital</b>	
Total Debt / Total Equity + Total Debt	<60%
<b>ICR</b>	
Last 12M EBITDA / Last 12M Interest Expense	>1.80x

## Corporate Investment grade rating

Rating agency	Rating	Outlook	Last Update
Standard & Poor's	BBB+	Stable	23 Sep 2019

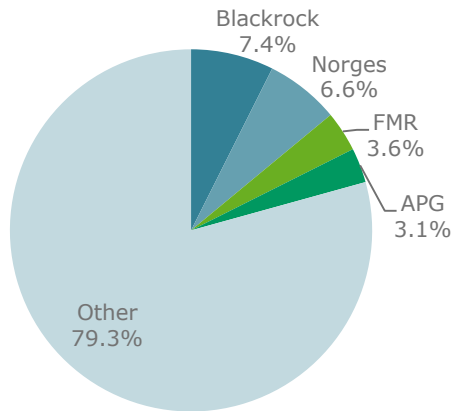
## Bond ratings

Name	Tenor & Coupon	ISIN	Amount	Issue price	Coupon	Final Maturity Date	Rating
Bond 004 (USD-Bond)	10 years 5.000%	US25155FAB22	USD 250m	98.993%	4.580% <sup>(1)</sup>	02 Oct 2023	BBB+
Bond 005 (EMTN)	8 years 3.625%	DE000A1HRVD5	€ 500m	99.843%	3.625%	08 Oct 2021	BBB+
Bond 007 (EMTN)	8 years 2.125%	DE000A1ZLUN1	€ 500m	99.412%	2.125%	09 July 2022	BBB+
Bond 008 (Hybrid)	perpetual 4%	XS1117300837	€ 1,000m	100.000%	4.000%	perpetual	BBB-
Bond 009A (EMTN)	5 years 0.875%	DE000A1ZY971	€ 301m <sup>(2)</sup>	99.263%	0.875%	30 Mar 2020	BBB+
Bond 009B (EMTN)	10 years 1.500%	DE000A1ZY989	€ 500m	98.455%	1.5000%	31 Mar 2025	BBB+
Bond 010B (EMTN)	5 years 1.625%	DE000A18V138	€ 752m <sup>(2)</sup>	99.852%	1.625%	15 Dec 2020	BBB+
Bond 010C (EMTN)	8 years 2.250%	DE000A18V146	€ 1,000m	99.085%	2.2500%	15 Dec 2023	BBB+
Bond 011A (EMTN)	6 years 0.875%	DE000A182VS4	€ 500m	99.530%	0.875%	10 Jun 2022	BBB+
Bond 011B (EMTN)	10 years 1.500%	DE000A182VT2	€ 500m	99.165%	1.5000%	10 Jun 2026	BBB+
Bond 013 (EMTN)	8 years 1.250%	DE000A189ZX0	€ 1,000m	99.037%	1.250%	06 Dec 2024	BBB+
Bond 014A (EMTN)	5 years 0.750%	DE000A19B8D4	€ 500m	99.863%	0.750%	25 Jan 2022	BBB+
Bond 014B (EMTN)	10 years 1.750%	DE000A19B8E2	€ 500m	99.266%	1.750%	25 Jan 2027	BBB+
Bond 015 (EMTN)	8 years 1.125%	DE000A19NS93	€ 500m	99.386%	1.125%	08 Sep 2025	BBB+
Bond 016 (EMTN)	2 years 3M EURIBOR+0.350%	DE000A19SE11	€ 500m	100.448%	3M EURIBOR+0.350%	20 Nov 2019	BBB+
Bond 017A (EMTN)	6 years 0.750%	DE000A19UR61	€ 500m	99.330%	0.750%	15 Jan 2024	BBB+
Bond 017B (EMTN)	10 years 1.500%	DE000A19UR79	€ 500m	99.439%	1.500%	14 Jan 2028	BBB+
Bond 018A (EMTN)	4.75 years 3M EURIBOR+0.450%	DE000A19X793	€ 600m	100.000%	0.793% hedged	22 Dec 2022	BBB+
Bond 018B (EMTN)	8 years 1.500%	DE000A19X8A4	€ 500m	99.188%	1.500%	22 Mar 2026	BBB+
Bond 018C (EMTN)	12 years 2.125%	DE000A19X8B2	€ 500m	98.967%	2.125%	22 Mar 2030	BBB+
Bond 018D (EMTN)	20 years 2.750%	DE000A19X8C0	€ 500m	97.896%	2.750%	22 Mar 2038	BBB+
Bond 019 (EMTN)	5 years 0.875%	DE000A192ZH7	€ 500m	99.437%	0.875%	03 Jul 2023	BBB+
Bond 020 (EMTN)	6.5 years 1.800%	DE000A2RWZZ6	€ 500m	99.836%	1.800%	29 Jun 2025	BBB+
Bond 021A (EMTN)	10 years 0.500%	DE000A2R7JD3	€ 500m	98.965%	0.500%	14 Sep 2029	BBB+
Bond 021B (EMTN)	15 years 1.125%	DE000A2R7JE1	€ 500m	99.822%	1.125%	14 Sep 2034	BBB+
Bond 022A (EMTN)	3.5 years 0.125%	DE000A2R8NC5	€500m	99.882%	0.125%	06 Apr 2023	BBB+
Bond 022B (EMTN)	8 years 0.625%	DE000A2R8ND3	€ 500m	98.941%	0.625%	07 Oct 2027	BBB+
Bond 022C (EMTN)	20 years 1.625%	DE000A2R8NE1	€ 500m	98.105%	1.625%	07 Oct 2039	BBB+

<sup>(1)</sup> EUR-equivalent Coupon

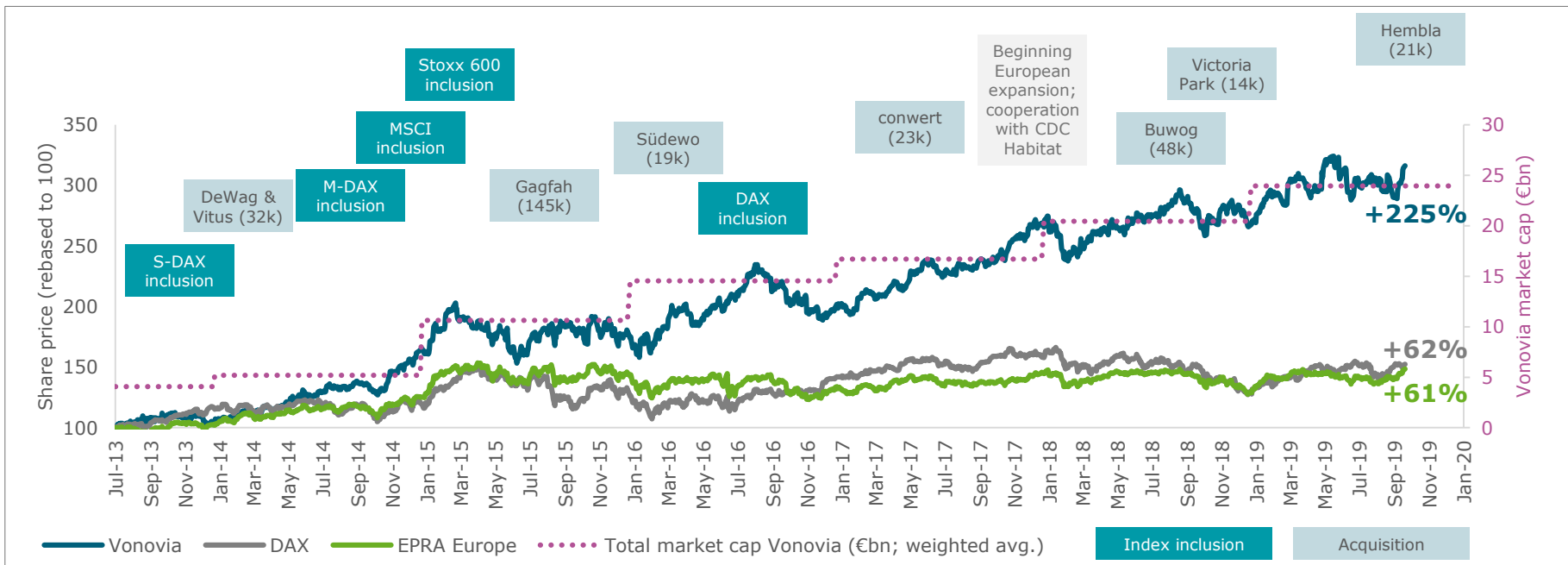
<sup>(2)</sup> Nominal amount outstanding after Liability Management in Sep 2019

# Liquid Large-cap Stock



According to German law the lowest threshold for voting rights notifications is at 3%

First day of trading	July 11, 2013
No. of shares outstanding	542.3 million
Free float	93.4%
ISIN	DE000A1ML7J1
Ticker symbol	VNA
Share class	Registered shares with no par value
Main listing	Frankfurt Stock Exchange
Market segment	Regulated Market, Prime Standard
Major indices	DAX, Stoxx Europe 600, MSCI, GPR 250 World, FTSE EPRA/NAREIT Europe



Source: Factset, company data; VNA performance is total shareholder return (share price plus dividends reinvested)



# Reconciliation of Shares Outstanding

Date	NOSH (million)	Comment
December 31, 2016	466.0	
March 31, 2017	468.8	conwert acquisition
June 30, 2017	476.5	Scrip dividend
September 30, 2017	485.1	Gagfah cross-border merger
December 31, 2017	485.1	
March 31, 2018	485.1	
June 30, 2018	518.1	€1bn ABB in 05/2018; scrip dividend
September 30, 2018	518.1	
December 31, 2018	518.1	
March 31, 2019	518.1	
June 30, 2019	542.3	€744m ABB in 05/2019; scrip dividend
September 30, 2019	542.3	

The number of outstanding shares is always available at <https://investoren.vonovia.de/websites/vonovia/English/2010/basic-information.html>

## Fixed Remuneration (incl. Pension)

- Monthly fixed compensation paid in 12 equal installments
- Annual pension contribution (alternative: cash payout)

## Bonus / STIP

- Criteria/Targets: Group FFO, adj. NAV/share, adj. EBITDA Total, personal targets agreed with SVB
- Bonus Cap at predetermined amount
- Payout: Cash

## LTIP

- Annually granted remuneration component in the form of virtual shares
- Criteria/Targets: relative TSR, adj. NAV/share, Group FFO/share, Customer Satisfaction Index (CSI)
- Performance Period: 4 years
- Payout: Cash
- Cap: 250% of grant value

Management Board remuneration is based on three pillars



## Total remuneration cap

### Share Holding Provision



- Mandatory share ownership
- 100% of annual fixed remuneration (excl. pension) (accumulation on a pro rata basis during first 4 years)

## Bonus / STIP

### Targets set by Supervisory Board

Group FFO target  
40%

Adj. NAV/share target  
15%

Adj. EBITDA Total  
target  
15%

Personal targets  
agreed with SVB  
30%

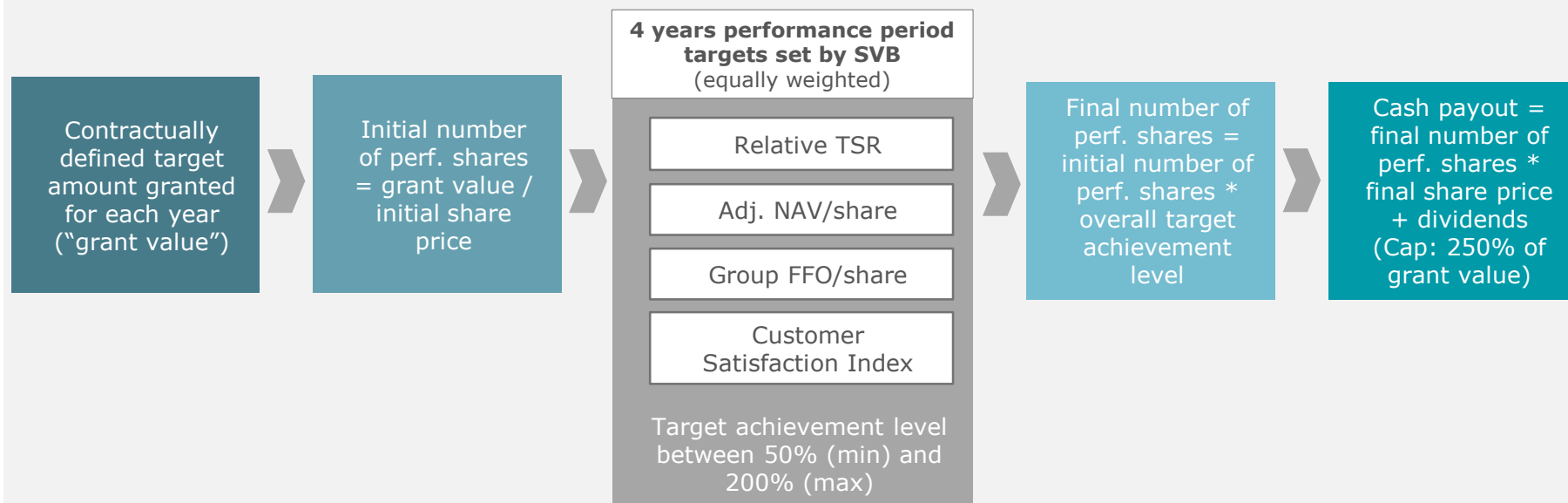
- Bonus cap at predetermined amount
- Cash payout

### Rationale

- **Group FFO** is the key figure for managing the sustained operational earnings power of our business.
- **Adj. NAV/share** as standard figure for the value of our property assets (calculation according to EPRA best practice standards, after corrections for goodwill).
- **Adj. EBITDA Total:** aggregate EBITDA across the four segments, reflecting the sustainable earnings strength of the business before interest, taxes, depreciation and amortization.
- **Personal targets** related to individual department responsibilities or overlapping targets (e.g. integration projects).

## LTIP

Annually granted long-term remuneration component in the form of virtual shares (“performance shares”)



### Rationale

- **LTIP** aims to ensure that remuneration structure focuses on sustainable corporate development.
- **Relative TSR** is from an investor perspective a well-established and accepted performance measure, focusing on share return, relative to a selected peer group. Hence, it is adequate for comparison with relevant competitors.
- **Customer Satisfaction Index (CSI):** Based on customer surveys and reflects how our services are perceived and accepted by our customers.
- **Shareholder alignment** safeguarded by (i) relative performance targets (Group FFO/share and Adj. NAV/share) as well as (ii) calculation method which takes actual share price performance into account.



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## App & Website



<https://investors.vonovia.de>



## Financial Calendar

Jan 9	Oddo BHF Forum in Lyon <sup>1</sup>
Jan 13	German Investment Seminar in New York City (Commerzbank)
Jan 14	Roadshow Toronto
Jan 15	Roadshow Chicago
Jan 16	Roadshow Montreal <sup>1</sup>
Jan 20	German Corporate Conference in Frankfurt (Kepler Cheuvreux)
Jan 30	German Equity Forum in London (Bankhaus Lampe) <sup>1</sup>
Feb 11 & 12	Roadshow in Kopenhagen & Helsinki (Hauck & Aufhäuser) <sup>1</sup>
<b>Mar 5</b>	<b>Full Year Results 2019</b>
<b>May 5</b>	<b>Interim results 3M 2020</b>
<b>May 13</b>	<b>Annual General Meeting</b>
<b>Aug 5</b>	<b>Interim results H1 2020</b>
<b>Nov 4</b>	<b>Interim results 9M 2020</b>

The most up-to-date financial calendar is always available online.

<sup>1</sup> IR only

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Tables and diagrams may include rounding effects.



## Equity Story & Market Fundamentals

1	Cover
2	Agenda
3	At a Glance
4	Business Drivers
5	Strategy
6	EBITDA Segments
7	Full-scale Operator
8	Property Management
9	Financing
10	Portfolio Management
11	Investment Funding
12	Value-add
13	Mergers & Acquisition
14	European Activities
15	Megatrends
16	Robust Rent Growth
17	Supply/Demand Imbalance
18	In-place Values vs. Replacement Costs
19	No correlation Interest Rates vs. Yields
20	Why Vonovia?

## Sustainability

21	Agenda
22	ESG
23	Environmental
24	Social
25	Governance
26	ESG Rankings

## 9M Business Update

27	Agenda
28	Highlights
29	Growth across All Segments
30	Rental EBITDA
31	Operating KPIs
32	Value-add EBITDA
33	Recurring Sales EBITDA
34	Development EBITDA
35	Development Pipeline
36	Outlook H2 Valuation
37	Berlin Valuation
38	Adj. NAV
39	LTV
40	2019 Guidance
41	2020 Guidance
42	Berlin Rent Freeze
43	Political Debate (I)
44	Political Debate (II)
45	Wrap-up

## Additional information

46	Agenda
47	History of Vonovia
48	Portfolio Cluster
49	Regional Markets
50	Investment Program
51	Bridge 2019-2020 Group FFO
52	Berlin Rent Freeze
53	RE Regulation Terminology
54	2020 Organic Rent Growth
55	Historic Rent Growth
56	Rent Growth Pipeline
57	OA Investments
58	Acquisition Opportunity Funnel
59	Acquisition Track Record
60	Housing Affordability and Urbanization
61	Household Sizes and Ownership Structure
62	Financing Covenants and KPIs
63	Overview of Bonds
64	Share Price and Major Holders
65	Shares Outstanding
66	Management Remuneration Overview
67	STIP
68	LTIP
69	IR Contact & Financial Calendar
70	Disclaimer
71	For Your Notes
72	Index