

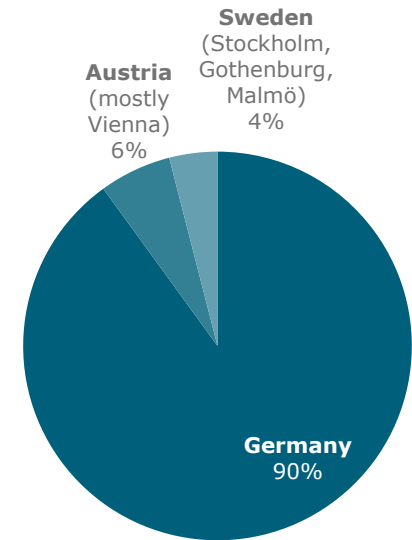
VONOVIA

# Company Presentation

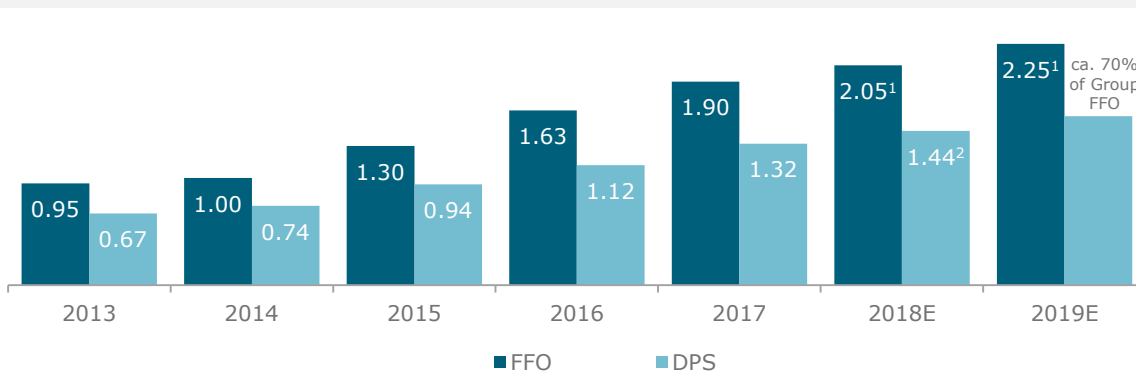
January 2019

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- **Largest listed European residential real estate company** with more than **400k apartments**.
- **Value creation across the full residential real estate life cycle** of our assets.
- Bread-and-butter business in German residential market with strong track record of **optimization, standardization** and **industrialization** via organic and acquisition growth.
- Industrialized approach leverages **economies of scale** in a highly homogeneous asset class.
- **B-to-C** business with ca. 13 years average tenant tenure.
- **Strong internal growth profile** via sustainable market rent growth, **additional rent growth** from portfolio investments and dynamic value-add business.
- **Robust business model** delivers highly **stable and growing cash flows (Funds from Operations, "Group FFO ")**.
- **Predictable top and bottom line** with downside protection and upside potential.



FFO per share and dividend track record



<sup>1</sup> Guidance mid-point. <sup>2</sup> To be proposed to the AGM in May 2019. Note: 2013-2018 FFO is "FFO1" and 2019 FFO is "Group FFO"

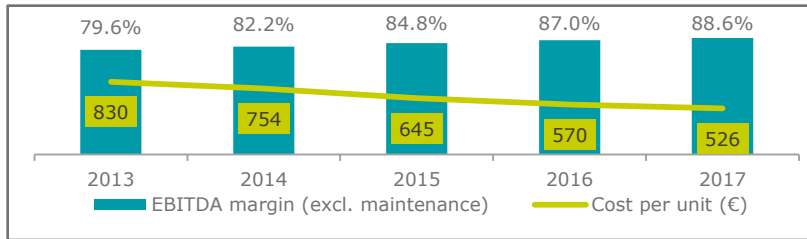
# 4+1 Strategy Has Evolved into 4+2 Strategy

## Reputation & Customer Satisfaction

Traditional

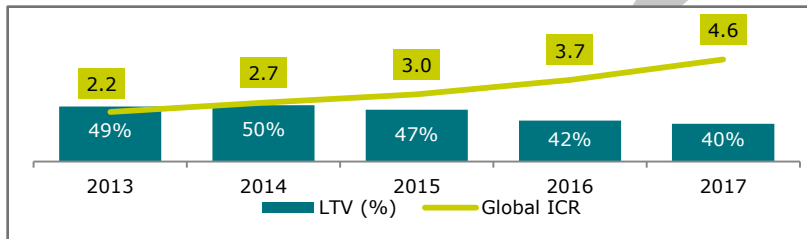
### Property Management

1 Efficient operations of scalable business



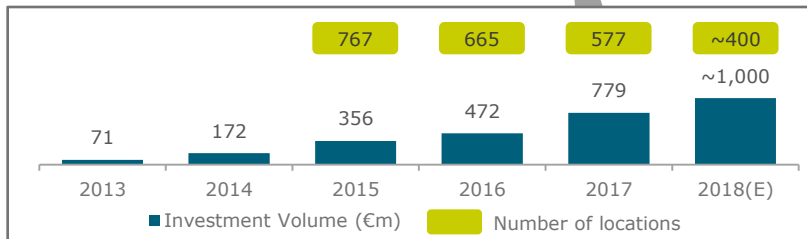
### Financing

2 Solid capital structure



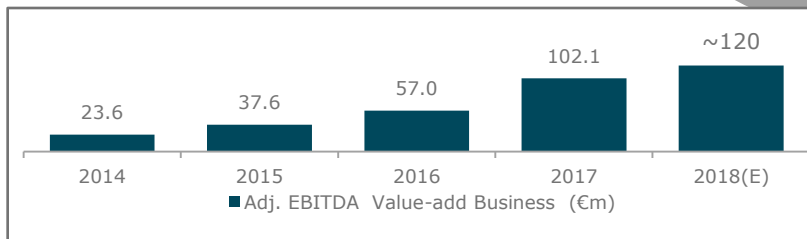
### Portfolio Management

3 Value-investments supplement internal growth



### Value-add Business

4 Leveraging B-to-C nature of the business

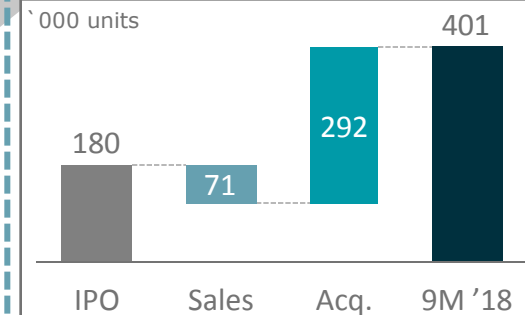


Core Strategies

Innovative

5

### Mergers & Acquisitions



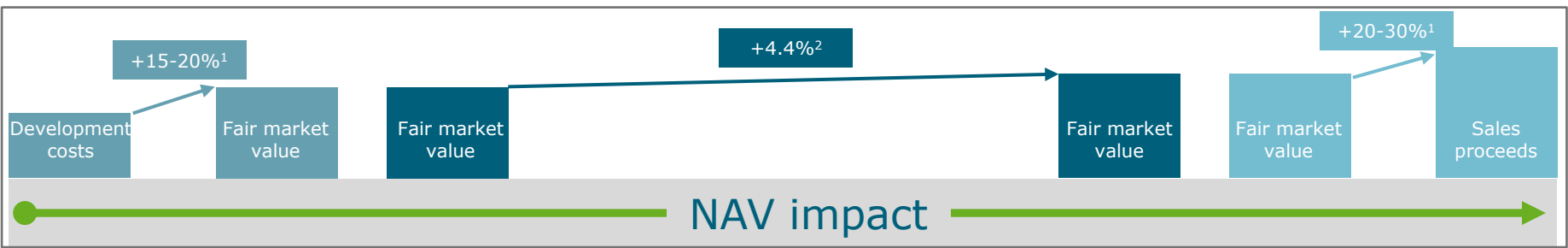
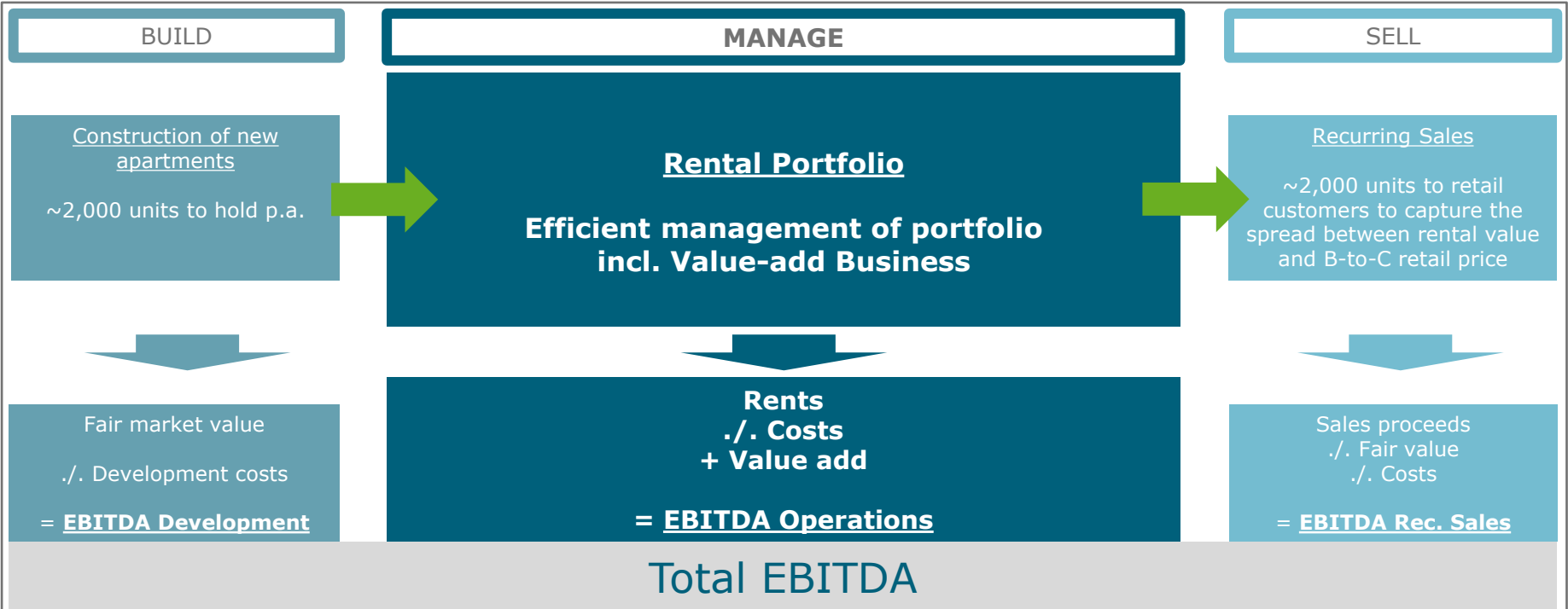
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### European Activities

- > European activities enhance accretive acquisition opportunities
- > Similar to Germany, we closely monitor clearly defined geographies for opportunities, applying the same acquisition criteria

Opportunistic Strategies

Vonovia's business model has evolved to encompass value creation across the full residential real estate life cycle of our assets



<sup>1</sup> Historic range. <sup>2</sup> CAGR since 2013 fair value uplift through performance and investments (excluding yield compression).

# Agenda

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<p><b>Operations</b> (excl. Buwog)</p>	<ul style="list-style-type: none"> <li>➤ <b>Organic rent growth of 4.1 % y-o-y.</b></li> <li>➤ <b>Operating expenses reduced by 9.4%</b> as a result of eliminating the double cost structure from convert included for the first 6 months of 2017 as well as continued efficiency gains.</li> <li>➤ <b>Adj. EBITDA Operations margin</b> (excl. maintenance) of <b>91.3%</b> (+230bps y-o-y).</li> </ul>
<p><b>FFO1</b> (excl. Buwog)</p>	<ul style="list-style-type: none"> <li>➤ <b>FFO1 of €778.2m (+12.7% y-o-y);</b> €739.8m (+13.7%) attributable to VNA shareholders (i.e. excl. perpetual hybrid interest and minorities)</li> <li>➤ €1.50 (+5.6% y-o-y) per end-of-period NOSH</li> <li>➤ €1.55 (+6.4% y-o-y) on weighted average NOSH</li> </ul>
<p><b>Valuation</b></p>	<ul style="list-style-type: none"> <li>➤ <b>Adj. NAV per share of €40.47</b> as of <b>Sep 30, 2018</b> (no valuation of Vonovia portfolio in Q3 2018)</li> <li>➤ <b>Value growth of €2.7 - €3.0bn (6.6% - 7.3%) estimated for H2 valuation,</b> which would result in <b>~13% value growth for the full year 2018.</b></li> <li>➤ <b>Adj. NAV guidance of ~€45</b> per share for year-end 2018.</li> </ul>
<p><b>Guidance 2018</b></p>	<ul style="list-style-type: none"> <li>➤ 2018 Guidance confirmed.</li> <li>➤ <b>DPS of €1.44</b> to be proposed to the Annual General Meeting in May 2019.</li> </ul>
<p><b>Guidance 2019 and new Performance KPIs from 2019 onwards</b></p>	<ul style="list-style-type: none"> <li>➤ Vonovia generates earnings across four segments: Rental, Value-add, Recurring Sales and Development and going forward will report Adj. EBITDAs for each segment plus Total EBITDA, and Group FFO.</li> <li>➤ <b>Earnings distribution capacity is estimated to grow by ca. €100m (+10%) from 2018 to 2019.</b></li> </ul>

# KPI Growth in spite of Smaller Portfolio and Higher NOSH

- Rental income slightly up 3.1% on an almost 2% smaller but higher quality portfolio.
- Adjusted EBITDA Operations up 5.9% because of substantially lower operating expenses and higher contribution from the Value-add Business.
- As a result, and supported by lower interest expenses, FFO1 grew by 12.7% (5.6% per share due to the 6.8% increase in NOSH from the May ABB and scrip dividend).

		9M 2018	9M 2017	Delta	
Average number of residential sqm	'000	21,793	22,134	-1.5%	
Average number of residential units	#	347,770	354,095	-1.8%	
Organic rent growth (y-o-y)	%	4.1	3.9	+20 bps	
In-place rent (eop)	€/month/sqm	6.45	6.19	+4.2%	
Vacancy rate (eop)	%	2.7	2.9	-20 bps	
Rental income	€m	1,287.6	1,249.4	+3.1%	+€38.2m
Maintenance expenses	€m	-202.2	-192.2	+5.2%	
Operating expenses	€m	-173.4	-191.3	-9.4%	
Adj. EBITDA Rental	€m	912.0	865.9	+5.3%	+€46.1m
Adj. EBITDA Value-add Business	€m	90.7	76.0	+19.3%	
Adj. EBITDA Operations	€m	976.2	922.1	+5.9%	+€54.1m
Interest expense FFO1	€m	-189.2	-216.5	-12.6%	
Current income taxes FFO1	€m	-8.8	-15.1	-41.7%	
FFO1	€m	778.2	690.5	+12.7%	+€87.7m
FFO1 per share (eop NOSH)	€	1.50	1.42	+5.6%	
FFO1 per share (avg. NOSH)	€	1.55	1.46	+6.4%	



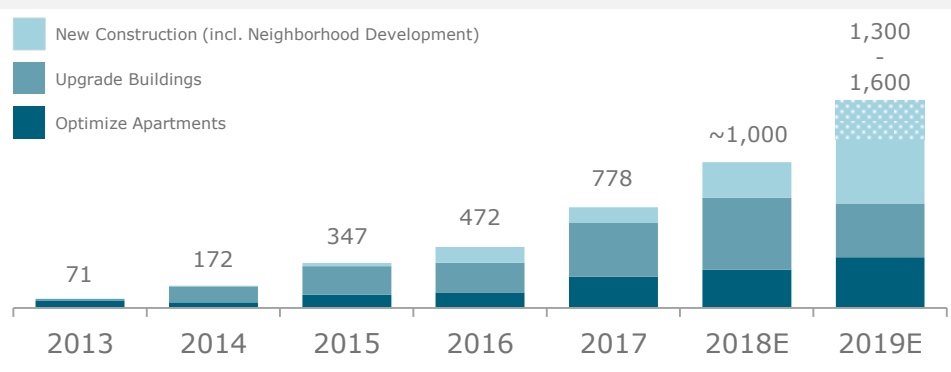
# Rent Growth Drivers

Rent growth drivers (last 12M)	9M 2018	9M 2017	Delta
Sitting tenants (incl. subsidized rents)	1.1%	1.2%	-10bps
New lettings (with no material investment)	0.4%	0.5%	-10bps
<b>Subtotal market-driven rent growth</b>	<b>1.5%</b>	<b>1.7%</b>	<b>-20bps</b>
Modernization (including new lettings with investments → Optimize Apartments)	2.5%	2.1%	+40bps
<b>Subtotal I-f-I rent growth</b>	<b>4.0%</b>	<b>3.8%</b>	<b>+20bps</b>
Space creation	0.1%	0.1%	---
<b>Subtotal organic rent growth</b>	<b>4.1%</b>	<b>3.9%</b>	<b>+20bps</b>

## Positive rent growth trajectory (Germany only)

	2013	2014	2015	2016	2017	2018E	2019E
Market driven	1.6%	1.6%	1.7%	1.5%	1.6%	→	→
Modernization	0.4%	0.9%	1.2%	1.8%	2.5%	→	→
Space creation	---	---	---	---	0.1%	→	→
<b>Organic rent growth</b>	<b>1.9%</b>	<b>2.5%</b>	<b>2.9%</b>	<b>3.3%</b>	<b>4.2%</b>	<b>~4.4%</b>	<b>~4.5%</b>

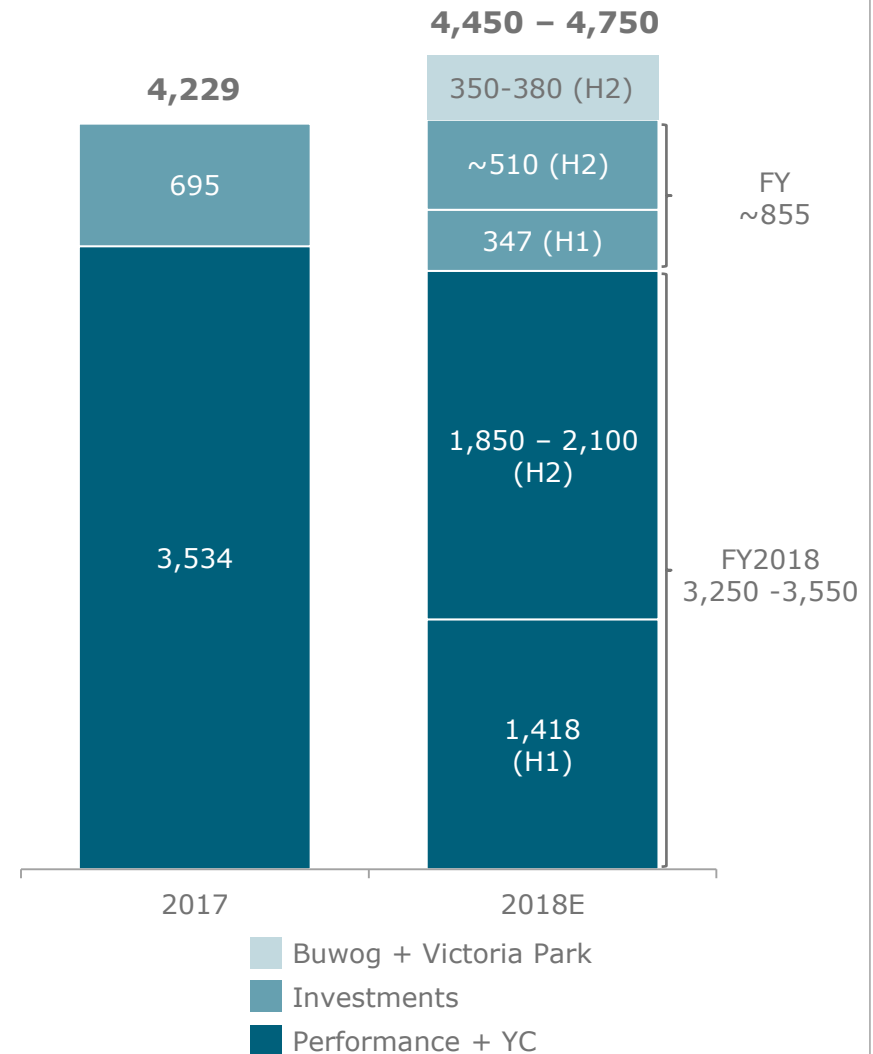
## Investment track record (€m)



## Commentary

- **Vonovia stand-alone FY2018 value growth estimated to be €4,125m – €4,375m (+13% y-o-y (mid-point)).**
- An additional contribution of €350m to €380m estimated to come from Buwog and Victoria Park in H2 2018.
- Combined total value growth for 2018 estimated to be between **€4,450m and €4,750m.**
- Excluding the impact from investments, the absolute value uplift from performance and yield compression (YC) for Vonovia stand-alone is expected to be in the same magnitude as 2017.
- In relative terms, because of the larger underlying portfolio basis, the value uplift from performance and YC is expected to be **10-11% for 2018** and therefore slightly lower than in 2017 (11.9%).

## Value growth drivers (€m)



# Increasingly Diverse Value-add Business with Growing Contribution

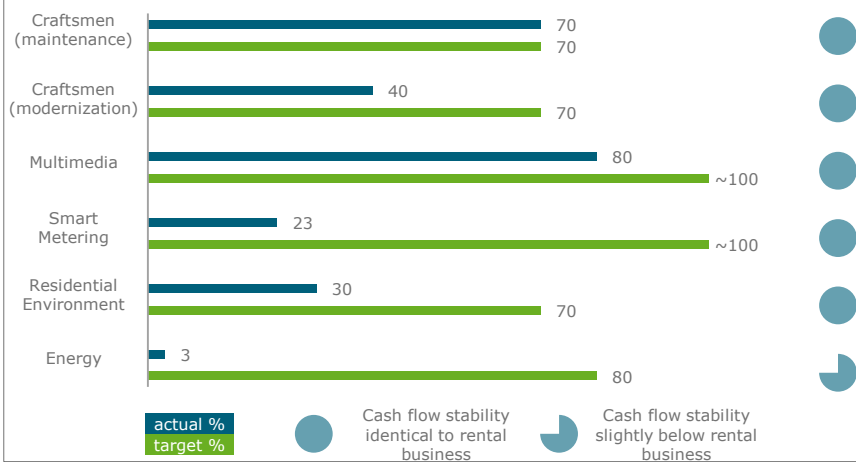
## Concept

- 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).
- Two types of Value-add Business
  1. Internal savings (craftsmen) → **ca. 75%**
  2. External income (e.g. multimedia, smart metering) → **ca. 25%**

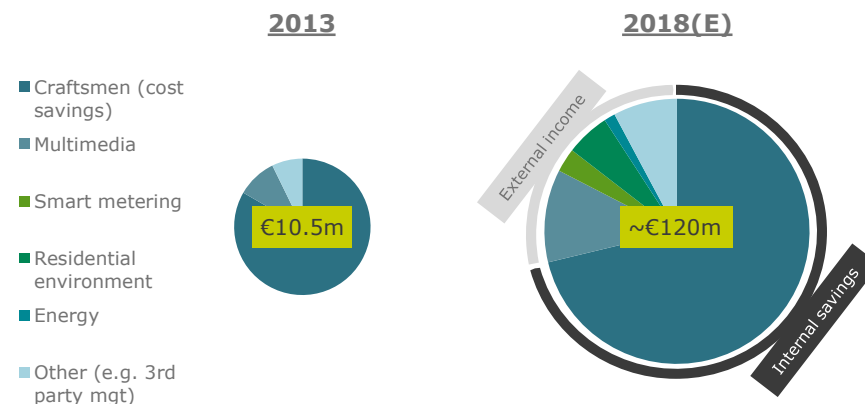
## Value-add and NAV

- NAV does not account for Vonovia's Value-add Business.
- Applying the impairment test WACC<sup>1</sup> to the 2019E Adj. EBITDA Value-add Business translates into an additional value of ~€5.80 per share (~14% on top of 9M Adj. NAV).

## Penetration (%) shows upside potential in established initiatives



## Largest contribution from internal cost savings (Adj. EBITDA)



<sup>1</sup> Pre-tax WACC of 4.68% as per Dec. 31, 2017.

# LTV Remains in Comfort Zone

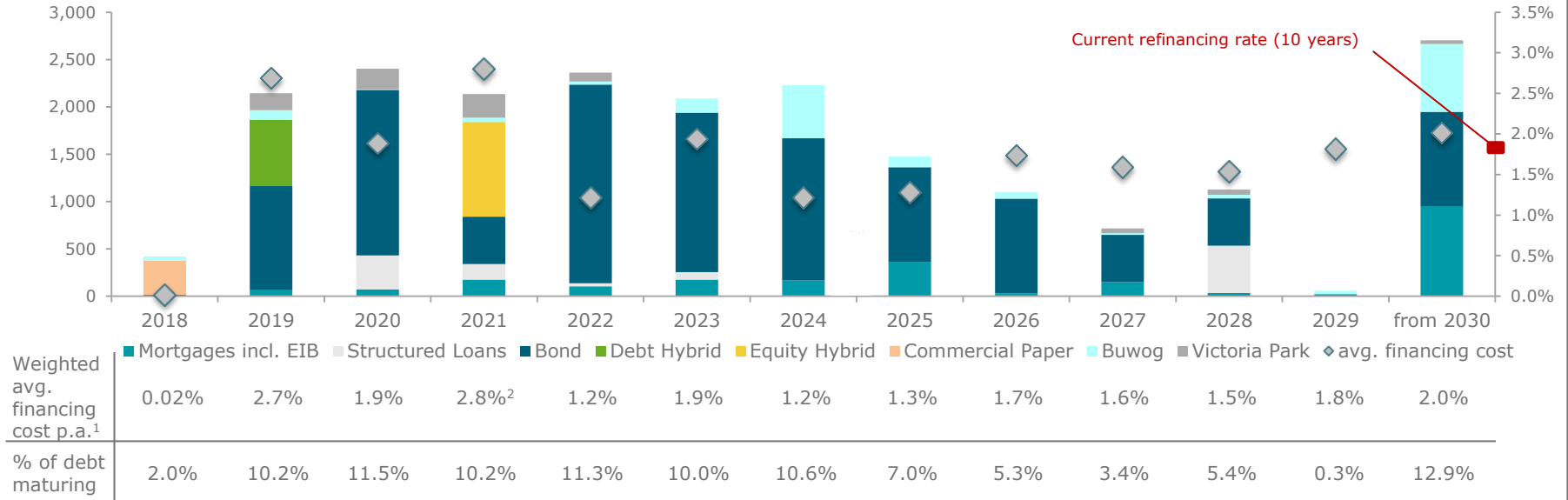
- LTV as of September 30, 2018 was 45.1%.
- Against the background of the stable cash flows and the strong fundamentals in our portfolio locations we see continued upside potential for our property values, and we do not see material long-term downside risks.
- We therefore continue to believe that the LTV target range of 40% - 45% is adequate for our low risk portfolio, and we feel comfortable with this range.
- Based on our internal projections **we estimate the year-end LTV to be below 44% and the Debt/EBITDA multiple<sup>1</sup> below 12x.**

€m (unless indicated otherwise)	Sep 30, 2018	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017
Non-derivative financial liabilities	<b>20,053.2</b>	<b>19,774.6</b>	<b>18,887.0</b>	<b>14,060.5</b>
Foreign exchange rate effects	-31.5	-29.6	-17.8	-23.5
Cash and cash equivalents	-507.3	-865.8	-829.3	-266.2
<b>Net debt</b>	<b>19,514.4</b>	<b>18,879.2</b>	<b>18,039.9</b>	<b>13,770.8</b>
Sales receivables	-273.2	-239.8	-232.4	-201.2
<b>Adj. net debt</b>	<b>19,241.2</b>	<b>18,639.4</b>	<b>17,807.5</b>	<b>13,569.6</b>
Fair value of real estate portfolio	41,948.6	<b>41,732.3</b>	<b>38,485.6</b>	<b>33,436.3</b>
Shares in other real estate companies	733.6	734.5	666.6	642.2
<b>Adj. fair value of real estate portfolio</b>	<b>42,682.2</b>	<b>42,466.8</b>	<b>39,152.2</b>	<b>34,078.5</b>
<b>LTV</b>	<b>45.1%</b>	<b>43.9%</b>	<b>45.5%</b>	<b>39.8%</b>
LTV (incl. perpetual hybrid)	47.5%	46.3%	48.0%	42.8%

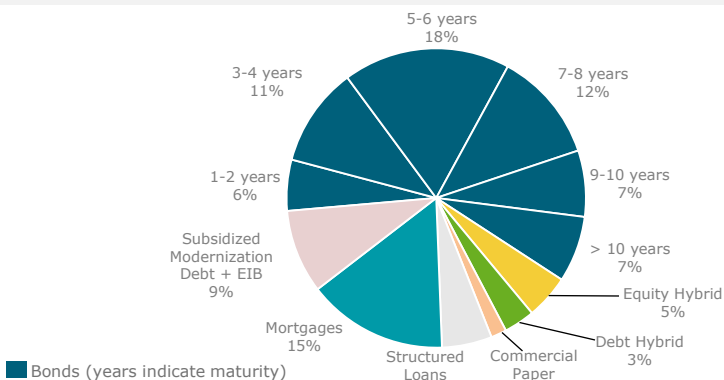
<sup>1</sup> Adj. net debt average 2018E over Total EBITDA 2018E

# Smooth Maturity Profile with Diverse Funding Mix

## Debt maturity profile (€m)



## Debt structure



KPIs	Sep 30, 2018	Target
LTV <sup>4</sup>	45.1%	Mid-to low forties
Unencumbered assets / unsecured debt	210%	≥125%
ICR <sup>5</sup>	5.4x	1.8x
Fixed/hedged debt ratio <sup>3</sup>	96%	Ongoing optimization with most economic funding
Average cost of debt <sup>3</sup>	1.8%	
Weighted avg. maturity <sup>3</sup>	8.0 years	
Corporate Rating (S&P)	BBB+	

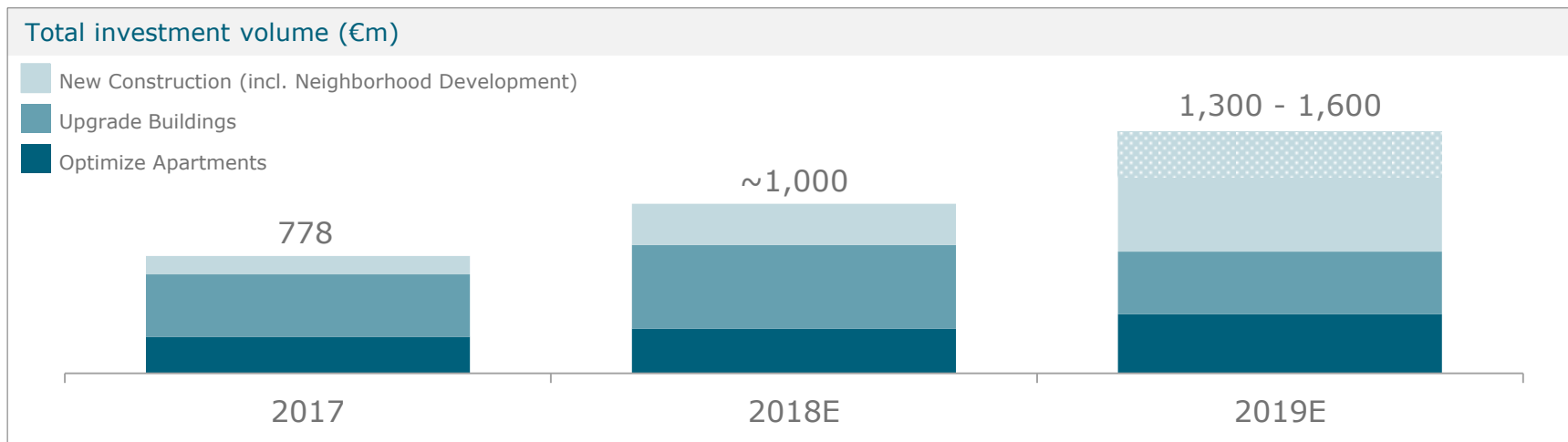
<sup>1</sup> Average financing cost of debt maturing in the relevant year. <sup>2</sup> Weighted avg. financing costs excl. Equity Hybrid. Including Equity Hybrid, avg. interest rate of debt maturing in 2021 is 3.4%. <sup>3</sup> excl. Equity Hybrid. <sup>4</sup> excl. Buwog Squeeze Out. <sup>5</sup> LTM EBITDA/LTM interest expense.

# 2018 Guidance Confirmed

	2017 Actuals	2018 Guidance (from Aug.)	Final 2018 Guidance
		Incl. 9 months Buwog & 6 months Victoria Park	
Organic rent growth (eop)	4.2%	~4.4% <sup>1</sup>	~4.4% <sup>1</sup>
Vacancy (eop)	2.5%	<2.5%	<2.5%
Rental Income (€m)	1,667.9	1,890 – 1,910	1,890 – 1,910
FFO1 (€m)	920.8	1,050 – 1,070	1,050 – 1,070
FFO1 (€/share, eop)	1.90	2.03 – 2.07	2.03 – 2.07
Maintenance (€m)	346.2	~410	~410
Modernization & Investments (€m)	778.6	~1,000	~1,000
Recurring Sales (number of units)	2,608	~2,800	~2,800
FV step-up (Recurring Sales)	32.7%	30% - 35%	~35%
Non-core disposals (number of units)	11,780	up to 14,000	~13,000
FV step-up (Sell Portfolio)	7.9%	10% - 15%	>20%
Dividend €/share	1.32	~70% of FFO1	1.44 <sup>2</sup>
EPRA NAV (€/share)	43.88	n/a	~52
Adj. NAV (€/share)	38.49	n/a	~45
Underlying number of shares (million)	485.1	518.1	518.1

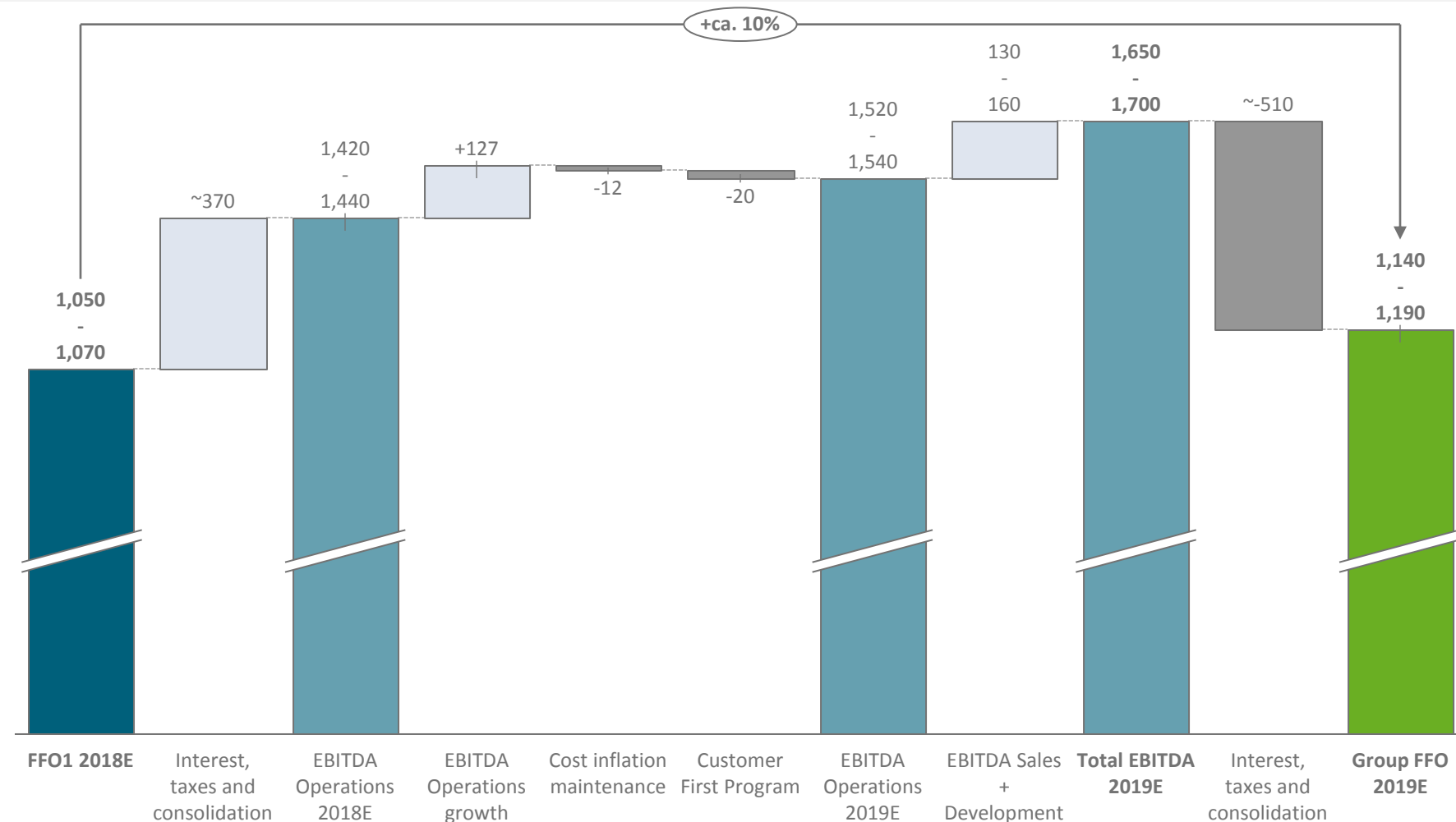
<sup>1</sup> Vonovia stand-alone. <sup>2</sup> To be proposed to the 2019 AGM and based on current number of shares outstanding.

- > The supply/demand imbalance in urban areas and the **conflict between the need for energy efficiency modernization of Germany's housing stock and affordability of rents** have given rise to an intense political and public discussion.
- > Vonovia's investment volume 2019 brings a reduction of Upgrade Building volumes as the **focus shifts from energy efficiency to affordability for parts of our customer base**. We respect that there is growing resistance among parts of our customer base when it comes to energy efficient modernizations. That is why we have committed ourselves to **only do upgrade building modernizations with a maximum rent growth of €2/sqm for the 2019 and 2020** modernization programs.
- > At the same time, we are **increasing our investments into Optimize Apartment, Space Creation and Development to Hold**. As the market leader, Vonovia clearly acknowledges its responsibility and continues its **efforts to be part of the solution** when it comes to providing affordable, adequate and modern buildings and apartments. So while we will be reducing the investment volume of energy efficient modernizations we will be increasing our investments into other parts of the investment program including new construction and portfolio investments in Sweden so that the overall impact is not expected to be material.



# Increasing Dividend Capacity

Reconciliation between FFO1 2018E and Group FFO 2019E (€m)



Dividend capacity estimated to increase by ~€100m in 2019



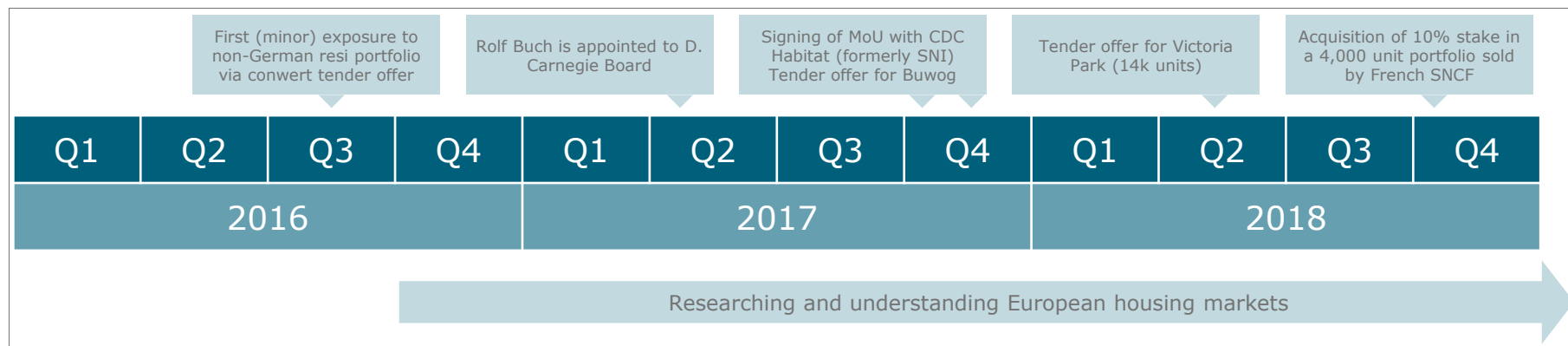
# Initial Guidance 2019 – New Structure

	Initial 2019 Guidance	y-o-y vs. 2018
Organic rent growth (eop)	~4.4%	➔
Rental Income (€m)	2,020 – 2,070	➔
Recurring Sales (# of units)	~2,500	➔
FV step-up Recurring Sales	~30%	➔
Total EBITDA (€m)	1,650 – 1,700	➔
Group FFO (€m)	1,140 – 1,190	➔
Group FFO (€/share)	2.20 – 2.30	➔
Dividend €/share	~70% of Group FFO	➔
Modernization & New Construction (€m)	1,300 – 1,600	➔
Underlying number of shares (million)	518.1	

Group FFO estimated to grow by 10% (mid point) over FFO1 2018E

# European Activities Update

- Cautious step-by-step approach to minimize risk. Currently ca. 10% of the portfolio are located outside Germany. We will continue to monitor the German market and our defined European target markets for accretive acquisition opportunities.
- Germany is expected to remain the dominant market also in the foreseeable future. No specific target rate or ratios in terms of German vs. non-German exposure but highly opportunistic approach as is the case for our German M&A activities.



	Austria (run a scalable business)	Sweden (main focus)	France (biggest long-term potential)	The Netherlands (no active role)
As a % of total portfolio	~6%	~4%	Not meaningful	0%
Next steps	<ul style="list-style-type: none"> <li>Gradual asset rotation via recurring sales of mature assets and development of new assets in a similar magnitude</li> <li>Run scalable operating business</li> <li>Follow accretive acquisition opportunities on an opportunistic basis</li> </ul>	<ul style="list-style-type: none"> <li>Pursue accretive acquisition opportunities on an opportunistic basis</li> <li>Add Vonovia experience and skill set and use Victoria Park as a platform to further grow in the Swedish residential market</li> <li>Demonstrate success and sustainability of Vonovia business model to show it also works outside of Germany</li> </ul>	<ul style="list-style-type: none"> <li>Utilize 10% stake in SNCF portfolio to gain more profound understanding of the market</li> <li>Safeguard pole position and first-mover advantage for potential opening of social housing to commercial ownership</li> <li>Pursue accretive acquisition opportunities on an opportunistic basis if and when legislation changes and allows the payout of economic dividends from social housing</li> </ul>	<ul style="list-style-type: none"> <li>Continue market research</li> <li>Be prepared for accretive acquisition opportunities on an opportunistic basis</li> </ul>

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## “Mietrechtsanpassungsgesetz” (legislation passed by German parliament on Nov 29, 2018 and in effect since January 1, 2019)

### Regulation

### Impact

Modernization allocation to be reduced from 11% to 8% of the investment amount. Contrary to initial plans, this shall apply to all housing markets, not just those that are defined as “tight housing markets.”

Vonovia will of course honor the new 8% threshold, just as the 11% threshold has always been honored. As very few upgrade building modernizations saw more than 8% of the investment amount to be allocated on top of the annual rent, the impact of this change in the regulation is expected to be immaterial.

Following a modernization, an absolute cap of

- €2/sqm rent growth for apartments with a rent of <€7/sqm prior to the modernization and
- €3/sqm rent growth for apartments with a rent of >€7/sqm prior to the modernization

Vonovia has committed itself to not do any upgrade building modernizations that would lead to rent growth of more than €2/sqm. As a consequence, some of the energy efficiency modernizations from our overall pipeline will now be put on hold and the funds will be redirected towards more optimize apartment modernizations, space creation, development-to-hold projects and investments in Sweden.

Further tightening of rent cap: Landlords are required to disclose the previous rent vis-à-vis the new tenant if they want to set the new rent at more than 10% above the local comparable rent.

Vonovia has always been transparent about the previous rent level and our continued compliance with this regulation will have no impact on the business.

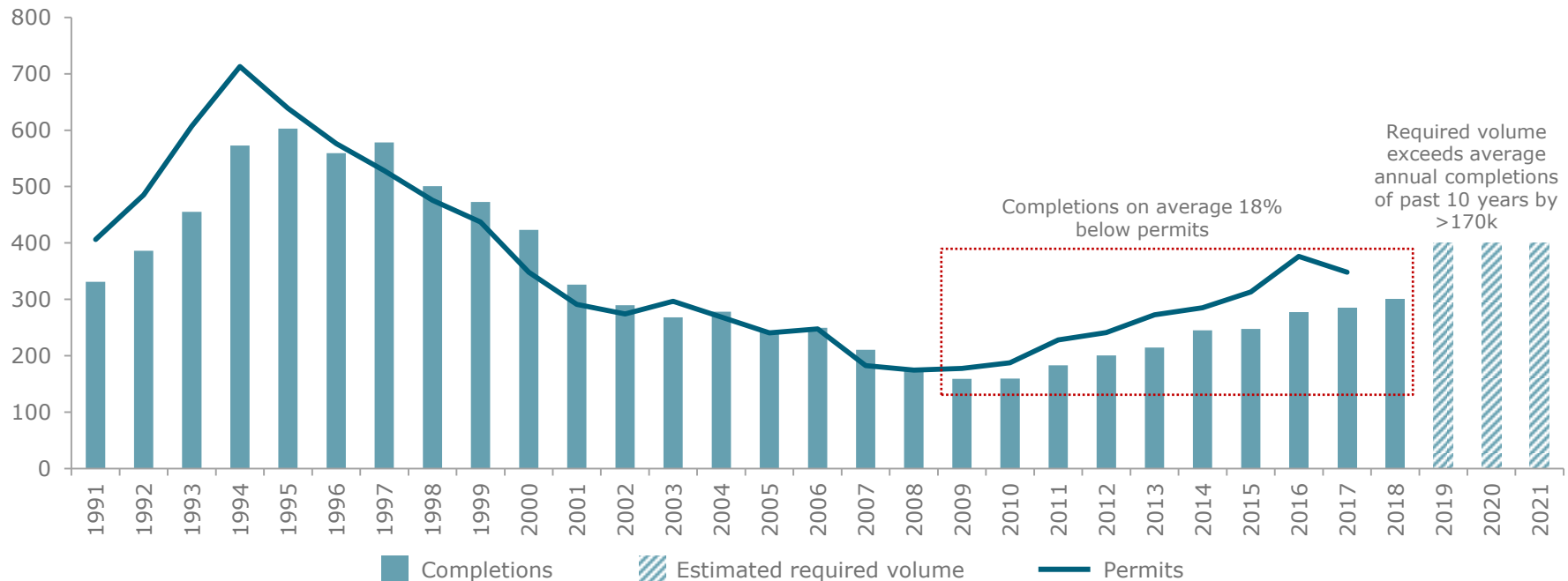
- Additional discussions around potential legislative changes with regards to real estate transfer tax (*Grunderwerbsteuer*), land tax (*Grundsteuer*) and about requirements for recognizing tax consolidation groups.

# German Residential – Landlords Benefit from Structural Imbalance between Supply and Demand

## New supply falls short of demand

- Consensus estimates see a current shortage of around 1 million apartments in urban areas. Three main constraints stand in the way of material changes in the short and even medium term:
  - Building permits often take several years because city administrations lack qualified personnel.
  - Severe shortage of building capacity after years of downsizing.
  - Substantial gap between in-place values and market replacement costs render construction in affordable segment economically unfeasible.

## Residential building permits and new construction volume ('000 units)



Sources: Federal Statistics Office, IW Köln, GdW (German Association of Professional Homeowners)

## Contact

Rene Hoffmann  
 Head of Investor Relations  
 Vonovia SE  
 Universitätsstraße 133  
 44803 Bochum  
 Germany

+49 234 314 1629

[rene.hoffmann@vonovia.de](mailto:rene.hoffmann@vonovia.de)  
[investorrelations@vonovia.de](mailto:investorrelations@vonovia.de)  
[www.vonovia.de](http://www.vonovia.de)

## Financial Calendar

Jan 14-15, 2019	German Investment Seminar, NYC
Jan 16, 2019	Management Roadshow, USA
Jan 21, 2019	KeplerCheuvreux German Corporate Conference, Frankfurt
Jan 31, 2019	Bankhaus Lampe German Equity Forum (London) <sup>1</sup>
Feb 3-4, 2019	Roadshow Tel Aviv (Israel) <sup>1</sup>
<b>Mar 7, 2019</b>	<b>FY2018 Results</b>
Apr 3, 2019	Bankhaus Lampe Deutschlandkonferenz, Baden-Baden
<b>May 7, 2019</b>	<b>Interim results 3M 2019</b>
May 16, 2019	Annual General Meeting
Jun 4-5, 2019	Capital Markets Day
Jun 6, 2019	dB Access Berlin Conference, Berlin
Jun 12, 2019	Exane BNP Paribas European CEO Conference, Paris
<b>Aug 2, 2019</b>	<b>Interim results 6M 2019</b>
<b>Nov 5, 2019</b>	<b>Interim results 9M 2019</b>

<sup>1</sup> IR only

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# Continued EBITDA Margin Expansion

- Adj. EBITDA Operations is up 5.9% to €976.2m.
- EBITDA Operations margin (excl. maintenance) expanded to 91.3%.



€m	9M 2018	9M 2017	Delta
Rental income	1,287.6	1,249.4	+3.1%
Maintenance expenses	-202.2	-192.2	+5.2%
Operating expenses	-173.4	-191.3	-9.4%
<b>Adj. EBITDA Rental</b>	<b>912.0</b>	<b>865.9</b>	<b>+5.3%</b>
Income	1,002.0	795.4	+26.0%
of which external	125.0	115.1	+8.6%
of which internal	877.0	680.3	+28.9%
Operating expenses	-911.3	-719.4	+26.7%
<b>Adj. EBITDA Value-add Business</b>	<b>90.7</b>	<b>76.0</b>	<b>+19.3%</b>
Adj. EBITDA Other <sup>1</sup>	-26.5	-19.8	+33.8%
<b>Adj. EBITDA Operations</b>	<b>976.2</b>	<b>922.1</b>	<b>+5.9%</b>

<sup>1</sup> Mainly consolidation

## Continued FFO1 Growth

- Driven by better operational performance and lower interest expenses, FFO1 was up 12.7% y-o-y or 5.6% per share (eop) on the basis of 6.8% more issued shares.

€m (unless indicated otherwise)	9M 2018	9M 2017	Delta
Adj. EBITDA Operations	976.2	922.1	5.9%
Interest expense FFO1	-189.2	-216.5	-12.6%
Current income taxes FFO1	-8.8	-15.1	-41.7%
FFO1	778.2	690.5	12.7%
of which attributable to Vonovia's shareholders	739.8	650.6	13.7%
of which attributable to Vonovia's perpetual hybrid capital investors	30.0	30.0	--
of which attributable to non-controlling interests	8.4	9.9	-15.2%
Capitalized maintenance	-74.4	-50.3	47.9%
AFFO	703.8	640.2	9.9%
Adjusted EBITDA Sales	87.0	81.3	7.0%
Current income taxes FFO2	-10.8	-23.8	-54.6%
FFO2	854.4	748.0	14.2%
FFO1 € / share (eop NOSH) (9M 2018: 518m; 9M 2017: 485m)	1.50	1.42	5.6%
FFO1 € / share (avg. NOSH) (9M 2018: 502m; 9M 2017: 473m)	1.55	1.46	6.4%

# Continued NAV Growth

➤ Adj. NAV is up 12.3% ytd or 5.1% per share in spite of 6.8% more issued shares.

€m (unless indicated otherwise)	Sep 30, 2018	Dec 31, 2017	
Equity attributable to Vonovia's shareholders	17,052.6	15,080.8	
Deferred taxes on investment properties and assets held for sale	7,364.7	6,185.7	
Fair value of derivative financial instruments <sup>1</sup>	70.5	26.9	
Deferred taxes on derivative financial instruments	-20.7	-8.8	
EPRA NAV	24,467.1	21,284.6	
Goodwill	-3,499.9	-2,613.5	
<b>Adj. NAV</b>	<b>20,967.2</b>	<b>18,671.1</b>	+12.3%
EPRA NAV €/share <sup>2</sup>	47.23	43.88	
<b>Adj. NAV €/share<sup>2</sup></b>	<b>40.47</b>	<b>38.49</b>	+5.1%

## Is Adj. NAV a good proxy for the value of a diverse operating business?

By definition, the Adj. NAV

- reflects the brick and mortar value of the buildings
- applies market terms and assumes the properties are owned by "anyone"

This approach ignores

- the Value-add Business
- the cost advantage and operating platform of a professional owner
- the development business profit
- the recurring sales business profit

<sup>1</sup> Adjusted for effects from cross currency swaps. <sup>2</sup> Based on the number of shares on the reporting dates Sep 30, 2018 (518.1m) and Dec 31, 2017 (485.1m).

# Reconciliation IFRS Profit to FFO

VONOVIA

1. Vonovia At A Glance

2. Business Update

3. Residential Market Update

4. Appendix

€m (unless indicated otherwise)	9M 2018	9M 2017	Delta
<b>IFRS PROFIT FOR THE PERIOD*</b>	<b>1,399.0</b>	<b>1,205.2</b>	<b>16.1%</b>
Financial result <sup>1</sup>	296.5	218.2	35.9%
Income taxes*	728.8	663.8	9.8%
Depreciation and amortization*	37.8	23.0	64.3%
Income from fair value adjustments of investment properties*	-1,386.7	-1,164.7	19.1%
<b>= EBITDA IFRS*</b>	<b>1,075.4</b>	<b>945.5</b>	<b>13.7%</b>
Adj. EBITDA BUWOG	-91.8	-	-
Non-recurring items*	93.8	75.9	23.6%
Total period adjustments from assets held for sale	-0.2	-5.0	-96.0%
Financial income from investments in other real estate companies	-14.0	-13.0	7.7%
<b>= ADJUSTED EBITDA</b>	<b>1,063.2</b>	<b>1,003.4</b>	<b>6.0%</b>
Adjusted EBITDA Sales	-87.0	-81.3	7.0%
<b>= ADJUSTED EBITDA OPERATIONS</b>	<b>976.2</b>	<b>922.1</b>	<b>5.9%</b>
FFO interest expense <sup>2</sup>	-189.2	-216.5	-12.6%
Current income taxes FFO1	-8.8	-15.1	-41.7%
<b>= FFO1</b>	<b>778.2</b>	<b>690.5</b>	<b>12.7%</b>
Capitalized maintenance	-74.4	-50.3	47.9%
<b>= AFFO</b>	<b>703.8</b>	<b>640.2</b>	<b>9.9%</b>
Current income taxes Sales	-10.8	-23.8	-54.6%
<b>FFO2 (FFO1 incl. Adjusted EBITDA Sales / Current income taxes Sales)</b>	<b>854.4</b>	<b>748.0</b>	<b>14.2%</b>
FFO1 per share in € (eop NOSH)	1.50	1.42	5.5%
AFFO per share in € (eop NOSH)	1.36	1.32	2.9%
Number of shares (million) eop	518.1	485.1	6.8%

All values excluding Buwog except figures marked with \*. <sup>1</sup> Excluding income from investments. <sup>2</sup> Including financial income from investments in other real estate companies.

€m (unless indicated otherwise)	9M 2018	9M 2017	Delta
Income from property letting	1,954.8	1,753.9	11.5%
Other income from property management	39.7	34.0	16.8%
<b>Income from property management</b>	<b>1,994.5</b>	<b>1,787.9</b>	<b>11.6%</b>
Income from disposal of properties	673.6	951.2	-29.2%
Carrying amount of properties sold	-592.6	-905.6	-34.6%
Revaluation of assets held for sale	48.0	60.5	-20.7%
<b>Profit on disposal of properties</b>	<b>129.0</b>	<b>106.1</b>	<b>21.6%</b>
Income from the disposal of properties (Development)	122.9	-	-
Cost of sold properties	-107.8	-	-
<b>Profit on the disposal of properties (Development)</b>	<b>15.1</b>	-	-
<b>Net income from fair value adjustments of investment properties</b>	<b>1,386.7</b>	1,164.7	19.1%
Capitalized internal expenses	433.3	326.8	32.6%
Cost of materials	-993.4	-866.8	14.6%
Personnel expenses	-360.5	-307.1	17.4%
Depreciation and amortization	-37.8	-23.0	64.3%
Other operating income	87.4	75.8	15.3%
Other operating expenses	-252.0	-196.7	28.1%
Financial income	27.3	46.2	-40.9%
Financial expenses	-301.9	-244.9	23.3%
<b>Earnings before taxes</b>	<b>2,127.8</b>	<b>1,869.0</b>	<b>13.8%</b>
Income taxes	-728.8	-663.8	9.8%
<b>Profit for the period</b>	<b>1,399.0</b>	<b>1,205.2</b>	<b>16.1%</b>
Attributable to:			
Vonovia's shareholders	1,323.1	1,117.6	18.4%
Vonovia's hybrid capital investors	22.4	22.4	0.0%
Non-controlling interests	53.5	65.2	-17.9%
<b>Earnings per share (basic and diluted) in €</b>	<b>2.64</b>	<b>2.36</b>	<b>11.9%</b>

# IFRS Balance Sheet (1/2 – Total Assets)

€m	Sep 30, 2018	Dec 31, 2017	Delta
<b>Assets</b>			
Intangible assets	3,601.1	2,637.1	36.6%
Property, plant and equipment	237.9	177.6	34.0%
Investment properties	41,265.0	33,182.8	24.4%
Financial assets	823.5	698.0	18.0%
Other assets	18.4	13.8	33.3%
Deferred tax assets	10.4	10.3	1.0%
<b>Total non-current assets</b>	<b>45,956.3</b>	<b>36,719.6</b>	<b>25.2%</b>
Inventories	8.8	6.2	41.9%
Trade receivables	434.5	234.9	85.0%
Financial assets	5.6	0.5	>100%
Other assets	165.7	98.4	68.4%
Income tax receivables	43.8	47.9	-8.6%
Cash and cash equivalents	507.3	266.2	90.6%
Real estate inventories	299.8	---	---
Assets held for sale	118.6	142.6	-16.8%
<b>Total current assets</b>	<b>1,584.1</b>	<b>796.7</b>	<b>98.8%</b>
<b>Total assets</b>	<b>47,540.4</b>	<b>37,516.3</b>	<b>26.7%</b>

# IFRS Balance Sheet (2/2 – Total Equity and Liabilities)

€m	Sep 30, 2018	Dec 31, 2017	Delta
<b>Equity and liabilities</b>			
Subscribed capital	518.1	485.1	6.8%
Capital reserves	7,181.8	5,966.3	20.4%
Retained earnings	9,100.8	8,471.6	7.4%
Other reserves	251.9	157.8	59.6%
<b>Total equity attributable to Vonovia's shareholders</b>	<b>17,052.6</b>	<b>15,080.8</b>	13.1%
Equity attributable to hybrid capital investors	1,031.5	1,001.6	3.0%
<b>Total equity attributable to Vonovia's shareholders and hybrid capital investors</b>	<b>18,084.1</b>	<b>16,082.4</b>	12.4%
Non-controlling interests	1,016.3	608.8	66.9%
<b>Total equity</b>	<b>19,100.4</b>	<b>16,691.2</b>	14.4%
Provisions	594.3	607.2	-2.1%
Trade payables	1.0	2.4	-58.3%
Non derivative financial liabilities	17,755.6	12,459.4	42.5%
Derivatives	54.7	8.7	>100%
Liabilities from finance leases	94.4	94.7	-0.3%
Liabilities to non-controlling interests	31.8	24.9	27.7%
Financial liabilities from tenant financing	54.5	---	---
Other liabilities	47.3	65.3	-27.6%
Deferred tax liabilities	6,444.0	5,322.6	21.1%
<b>Total non-current liabilities</b>	<b>25,077.6</b>	<b>18,585.2</b>	34.9%
Provisions	434.7	376.5	15.5%
Trade payables	212.4	130.7	62.5%
Non derivative financial liabilities	2,297.6	1,601.1	43.5%
Derivatives	41.9	4.4	>100%
Liabilities from finance leases	4.9	4.6	6.5%
Liabilities to non-controlling interests	6.7	9.0	-25.6%
Financial liabilities from tenant financing	104.9	7.7	>100%
Other liabilities	259.3	105.9	>100%
<b>Total current liabilities</b>	<b>3,362.4</b>	<b>2,239.9</b>	50.1%
<b>Total liabilities</b>	<b>28,440.0</b>	<b>20,825.1</b>	36.6%
<b>Total equity and liabilities</b>	<b>47,540.4</b>	<b>37,516.3</b>	26.7%

# Sales – Steady Cash Flow at Attractive Margins

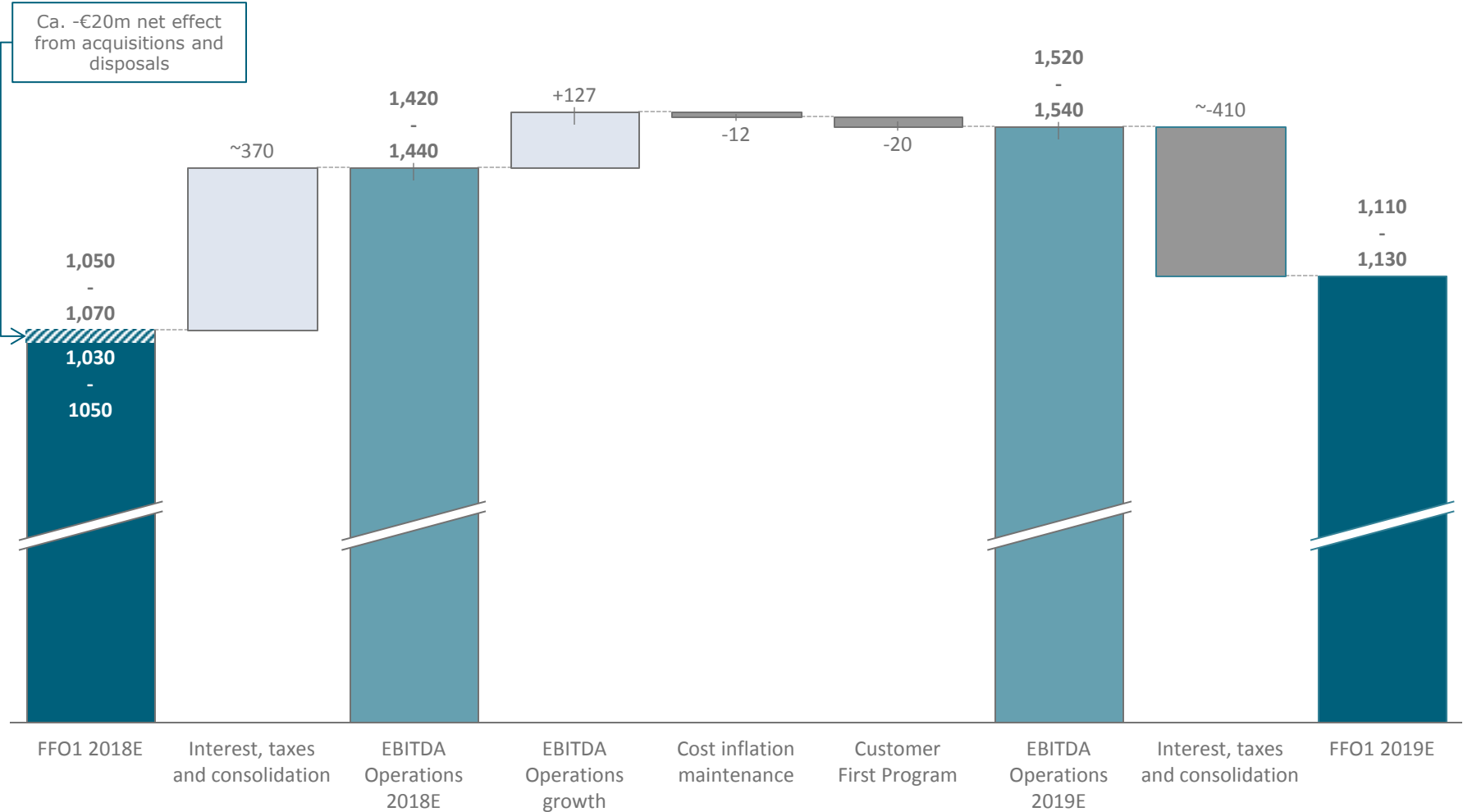
- Total sales volume in 9M 2018 was **9,331 residential units** (prior-year period: 8,304), of which **1,666 from Recurring Sales** (prior-year period: 1,704) and **7,665 Non-core Disposals** (prior-year period: 6,600).
- In spite of value growth of the portfolio, Recurring Sales fair value step-ups could still be maintained around 30% for 9M 2018.
- The Non-core Disposals saw a fair value step-up of 16.3% in 9M 2018, driven largely by two block sales, as we are utilizing the high market liquidity to profitably dispose of our Non-core Portfolio.
- The income and fair value figures of the Non-core Disposals for the prior-year period include a substantial amount of commercial property sales.

€m (unless indicated otherwise)	RECURRING SALES		NON CORE DISPOSALS		TOTAL	
	9M 2018	9M 2017	9M 2018	9M 2017	9M 2018	9M 2017
Income from disposal	200.3	214.4	411.8	736.8	612.1	951.2
Fair value of disposal	-153.7	-161.6	-354.1	-688.5	-507.8	-850.1
Adj. profit from disposal	46.6	52.8	57.7	48.3	104.3	101.1
Fair value step-up (%)	30.3%	32.7%	16.3%	7.0%		
Selling costs					-17.3	-19.8
Adj. EBITDA Sales					87.0	81.3



# Continued FFO1 Growth in 2019

## FFO1 Reconciliation 2018 to 2019 (€m)



Adjusted for portfolio volume effects from acquisitions and disposals the FFO1 is expected to grow by ca. 7.5%

# Evolution of the Business and Additional Revenue Streams Require a Fresh Look at Performance Metrics

- The business has substantially evolved since the IPO in 2013 and today encompasses value creation across the full residential real estate life cycle of our assets and not just rental revenues.
- As a consequence, the concept of FFO1 is no longer sufficient to fully reflect Vonovia’s earnings growth, cash-flow generation and value creation potential.
- Going forward we will be reporting performance based on the Adj. EBITDAs of the four segments Rental, Value-add, Development and Recurring Sales plus Total EBITDA and Group FFO.

## Why interest and taxes cannot be disclosed per segment

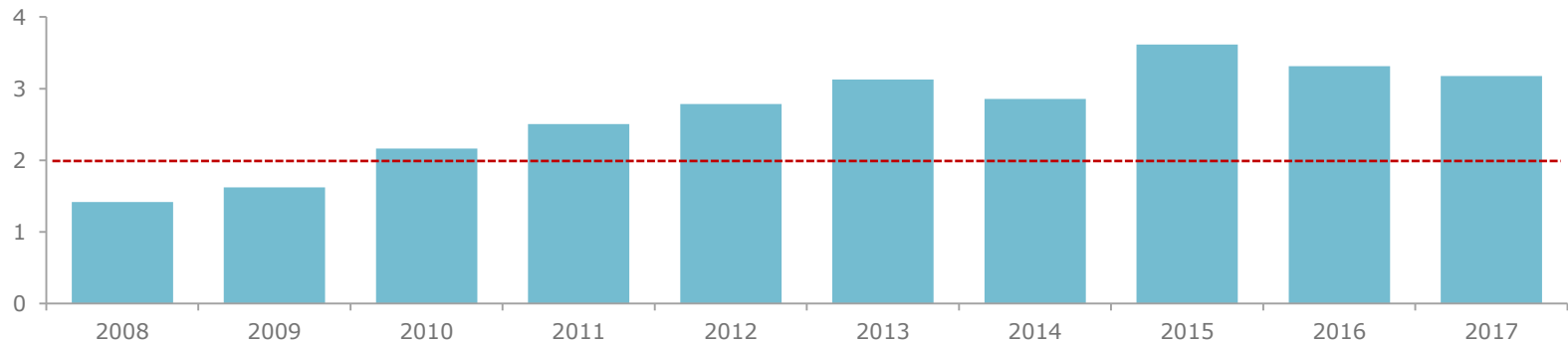
- Interest and tax optimization happens on a corporate level and not within individual segments
- Interest and taxes are not part of the key performance indicators
- Financing is done on a corporate level (cash pooling), decoupled from the asset level; any allocation would be arbitrary as the debt and interest rate is not linked to a segment
- Legal entities cannot be clearly allocated to one specific segment but operate across segments
- Taxes are incurred by legal entities, not segments

	Rental	Value-add	Develop-ment	Recurring Sales	Total	Non-core Dis-posals
Revenues						
Costs						
Adj. EBITDA						
Interest						
Taxes						
Consolidation						
Group FFO						

# How Recurring are Recurring Sales to Retail Customers?

- In contrast to opportunistic sales, portfolio clean-up sales or large asset sales known from other sectors, recurring sales (“privatization”) are a **robust and granular sales channel** that has delivered very stable volumes above 2k units p.a. over the last 10 years with an average annual volume of 2.7k (after an initial ramp-up phase of two years).
- We currently have ca. 29k units (excl. Buwog) that are eligible<sup>1</sup> for recurring sales.

Historic recurring sales volume ('000 units)<sup>2</sup>



<sup>1</sup> Including all units that have been legally prepared for retail sales by way of separate land register entries. <sup>2</sup> 2013-2017 including Buwog recurring sales.

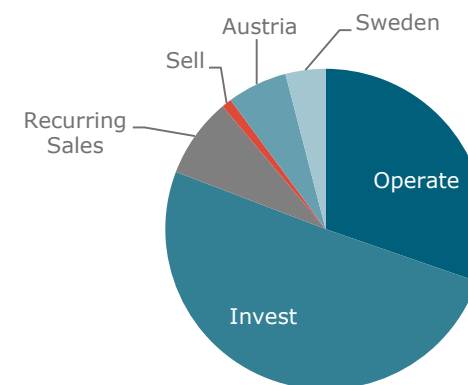
# All Strategic Markets Show Upward Potential

Regional Market	Fair value <sup>1</sup>		In-place rent									Average rent growth forecast CBRE (5 yrs) (%)	Reversionary potential <sup>2</sup> (%) from Optimize Apartments
	(€m)	(€/sqm)	Residential units	Living area ('000 sqm)	Vacancy (%)	Total (p.a., €m)	Residential (p.a., €m)	Residential (€/sqm/month)	Organic rent growth (%)	Multiple (In-place rent)			
Berlin	6,349	2,191	43,992	2,804	1.7	228	216	6.53	4.2	27.9	4.3	46.3	
Rhine Main Area (Frankfurt, Darmstadt, Wiesbaden)	3,665	2,034	27,766	1,772	1.6	171	165	7.90	4.0	21.5	3.5	42.1	
Rhineland (Cologne, Düsseldorf, Bonn)	3,390	1,662	29,657	1,986	2.7	170	162	6.98	3.3	20.0	3.1	28.1	
Southern Ruhr Area (Dortmund, Essen, Bochum)	3,175	1,158	43,798	2,679	3.6	187	180	5.83	4.7	17.0	2.9	31.4	
Dresden	3,006	1,286	38,582	2,195	3.0	162	152	5.94	3.3	18.6	3.7	31.8	
Hamburg	2,358	1,806	20,065	1,272	1.7	108	103	6.85	4.0	21.9	3.3	43.0	
Munich	1,898	2,902	9,670	636	0.9	64	60	7.95	4.1	29.8	4.8	56.8	
Stuttgart	1,833	2,000	14,097	887	1.9	84	81	7.72	3.5	21.7	3.1	40.6	
Kiel	1,826	1,296	23,474	1,351	2.0	102	97	6.07	6.2	17.9	3.2	39.6	
Hanover	1,527	1,463	16,251	1,024	3.1	79	76	6.36	4.2	19.4	2.9	39.2	
Northern Ruhr Area (Duisburg, Gelsenkirchen)	1,459	885	26,335	1,627	3.5	108	105	5.55	4.4	13.5	2.4	25.7	
Bremen	1,049	1,385	12,053	732	3.9	50	47	5.57	3.0	21.1	3.6	30.0	
Leipzig	811	1,307	9,161	587	3.9	42	40	5.88	2.9	19.1	2.9	23.3	
Westphalia (Münster, Osnabrück)	737	1,183	9,496	616	3.0	43	42	5.86	6.0	17.1	3.0	41.3	
Freiburg	556	1,994	4,041	276	1.9	24	23	7.19	4.7	23.2	4.1	45.1	
Other Strategic Locations	2,362	1,369	26,611	1,687	2.8	132	127	6.46	4.7	17.8	3.3	41.3	
<b>Total Strategic Locations Germany</b>	<b>36,003</b>	<b>1,579</b>	<b>355,049</b>	<b>22,132</b>	<b>2.6</b>	<b>1,753</b>	<b>1,674</b>	<b>6.47</b>	<b>4.1</b>	<b>20.5</b>	<b>3.4</b>	<b>36.4</b>	
Austria	2,472	1,312	23,238	1,734	4.4	107	90	4.53	–	23.0	n/a	n/a	
Sweden	1,638	1,498	14,051	997	1.3	115	107	9.03	–	14.2	n/a	n/a	

Note: In-place rents in Austria and Sweden are not fully comparable to Germany, as Sweden, for example, includes certain ancillary costs. The table above shows the rental level unadjusted to the German definition.  
<sup>1</sup> Fair value of the developed land excluding €1,310.7m, of which €355.6m undeveloped land and inheritable building rights granted, €269.3m assets under construction, € 436m development and €249.7m other.  
<sup>2</sup> Data for Strategic Locations also includes Recurring Sales assets in those markets.

# Invest Cluster Offers Long-Term Organic Growth Potential

- 53% of portfolio in Invest Cluster and earmarked for value-enhancing investments in the next years
- Non-core sales almost completed
- 10% of portfolio outside of Germany



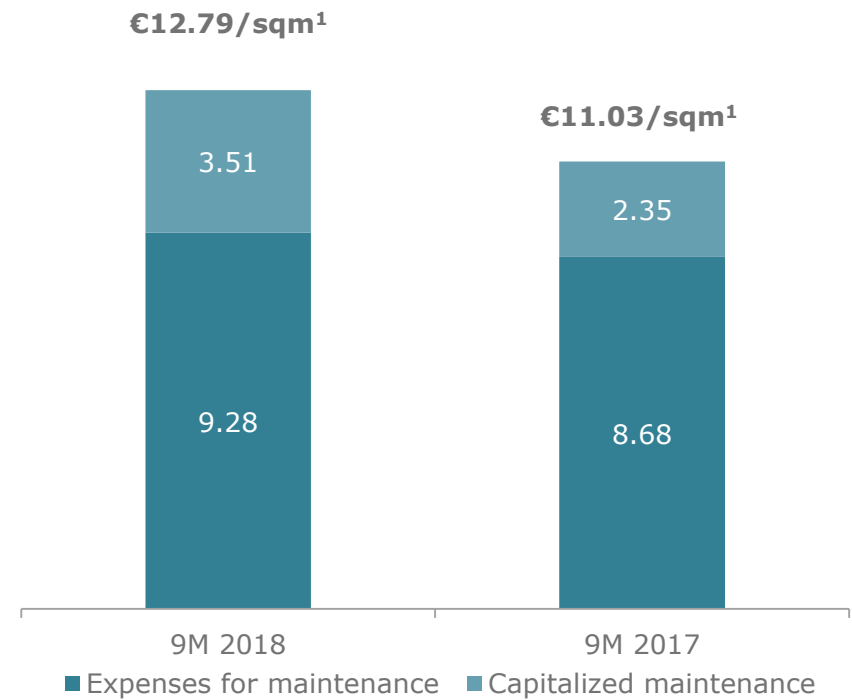
Sep 30, 2018 (pro forma)	Residential units	In-place rent (€/sqm/month)	Vacancy rate (%)	Fair value <sup>1</sup>		
				(€bn)	% of total	(€/m <sup>2</sup> )
Operate	120,133	6.56	2.4	12.4	30%	1,548
Invest	206,611	6.40	2.7	20.4	50%	1,582
<b>Subtotal Strategic Clusters</b>	<b>326,744</b>	<b>6.46</b>	<b>2.6</b>	<b>32.7</b>	<b>81%</b>	<b>1,569</b>
Recurring Sales <sup>2</sup>	29,330	6.61	3.2	3.4	8%	1,673
Sell	7,372	5.43	5.3	0.4	1%	884.8
<b>Total Germany</b>	<b>363,446</b>	<b>6.45</b>	<b>2.7</b>	<b>36.5</b>	<b>90%</b>	<b>1,564</b>
Austria	23,238	4.53	4.4	2.5	6%	1,312
Sweden	14,051	9.03	1.3	1.6	4%	1,498

Note: In-place rents in Austria and Sweden are not fully comparable to Germany, as Sweden, for example, includes certain ancillary costs. The table above shows the rental level unadjusted to the German definition.

<sup>1</sup> Fair value of the developed land excluding €1,310.7m, of which €355.6m undeveloped land and inheritable building rights granted, €269.3m assets under construction, € 436.0m development and €249.7m other.

<sup>2</sup> Including all units that have been legally prepared for retail sales by way of separate land register entries.

€m (unless indicated otherwise)	9M 2018	9M 2017	Delta
Expenses for maintenance	202.2	192.2	5.2%
Capitalized maintenance	76.5	52.0	47.1%
Total	278.7	244.2	14.0%
Maintenance capitalization ratio	27%	21%	



<sup>1</sup> All numbers incl. Victoria Park and excluding Buwog.

# Case Study Optimize Apartment

## Description

- Target: one standard for all apartments
  - Low price through standardization
- Modernization work mainly includes:
  - Installation of new bathrooms with low barrier showers (instead of bathtub)
  - Electricity
  - Installation of new kitchen furnishings
- Most measures are executed according to KfW 159 standard.

## Key metrics – Berlin, Dorfstraße 20a

- € 15k invest (€ 243/sqm)
- In-place rent
  - before renovation: € 5.05/sqm
  - after renovation: € 7.00/sqm
- Yield: 9.6%
- IRR: 13.2%

## Examples

before

after



## Description

- Modernization work typically includes (KfW 152):
  - Replacement of heating system
  - Replacement of windows
  - Insulation of roof, facade, basement, ceiling
  - Addition/extension/refurbishment of balconies
  - Refurbishment of staircase and entrance area

## Key metrics – Dortmund, Töpferstraße

- € 1.1m invest (€ 554/sqm)
- Increase in living space: + 10 sqm (balcony extension)
- Gross rent
  - before modernization: € 5.05/sqm
  - after modernization: € 6.79/sqm
- Vacancy rate
  - before modernization: 7.4%
  - Rate of vacancy after modernization: 0.0%
- Yield (rent & vacancy): 5.9%
- IRR: 8.5%

## Example – Dortmund, Töpferstraße

before



after





## Description

- Construction methods : modular and conventional
  - Moduls of steel, wood or concrete
- Current projects in Bochum, Cologne, Dresden, Bremen, etc.

## Key metrics – Bochum, Kaulbachstraße

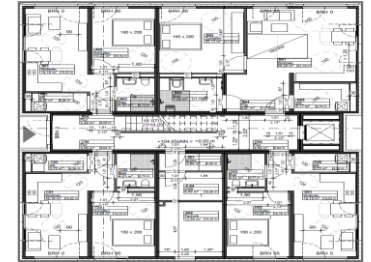
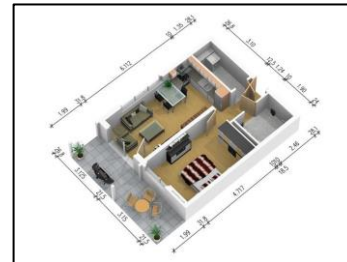
- 3 multi-family houses with 42 units
  - Size of units: 49 sqm - 115 sqm
  - Gross rent: € 9.70/sqm
- Modular steel construction
  - General contractor: ALHO
- Date of completion: April 2018
  - 7 months of construction
- € 6.1m invest (€2,133/sqm)
- 7.3% IRR (without land)

## Example – Bochum, Kaulbachstraße

exterior view



floor plan

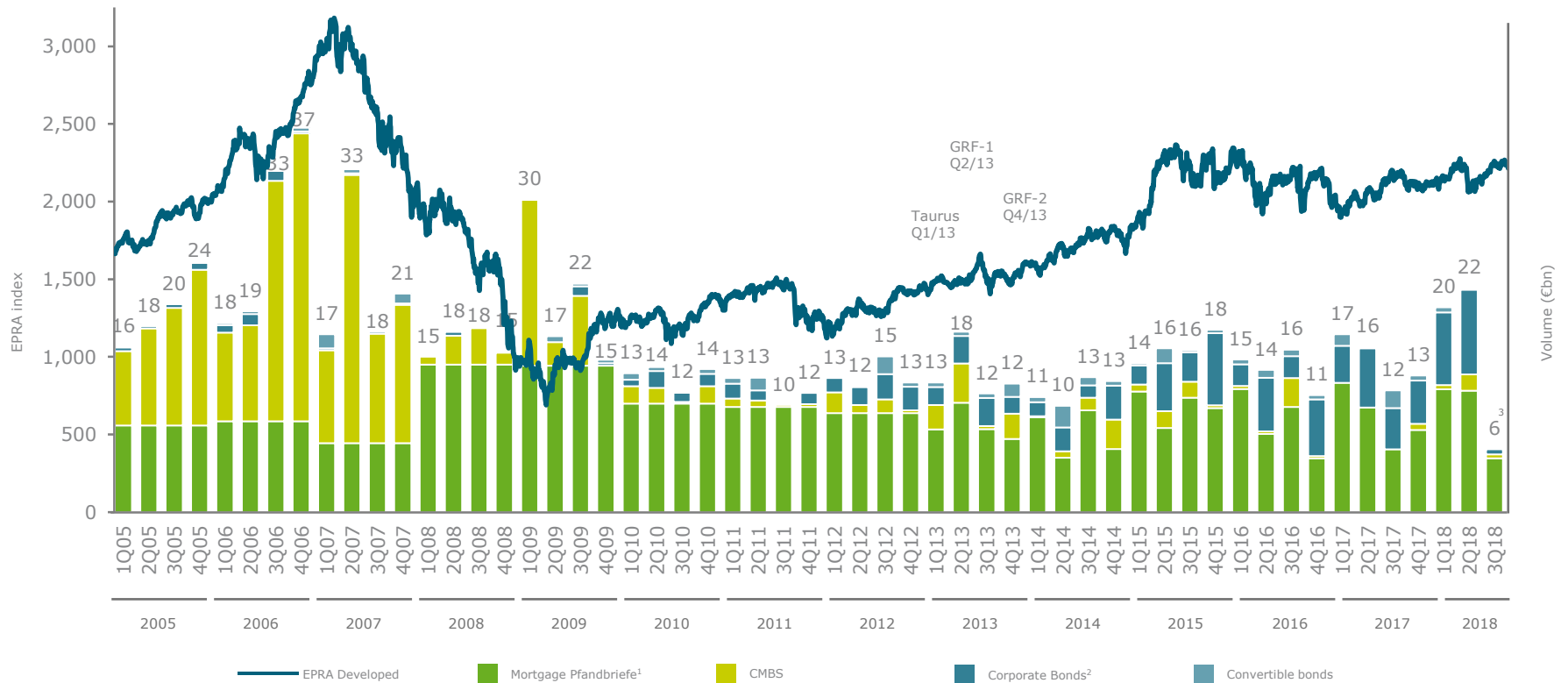


look inside



# Cyclicality of Debt Instruments Requires Diversification

## Debt-Issuances in the European Real Estate Sector 2005 – 2018 YTD (€bn)

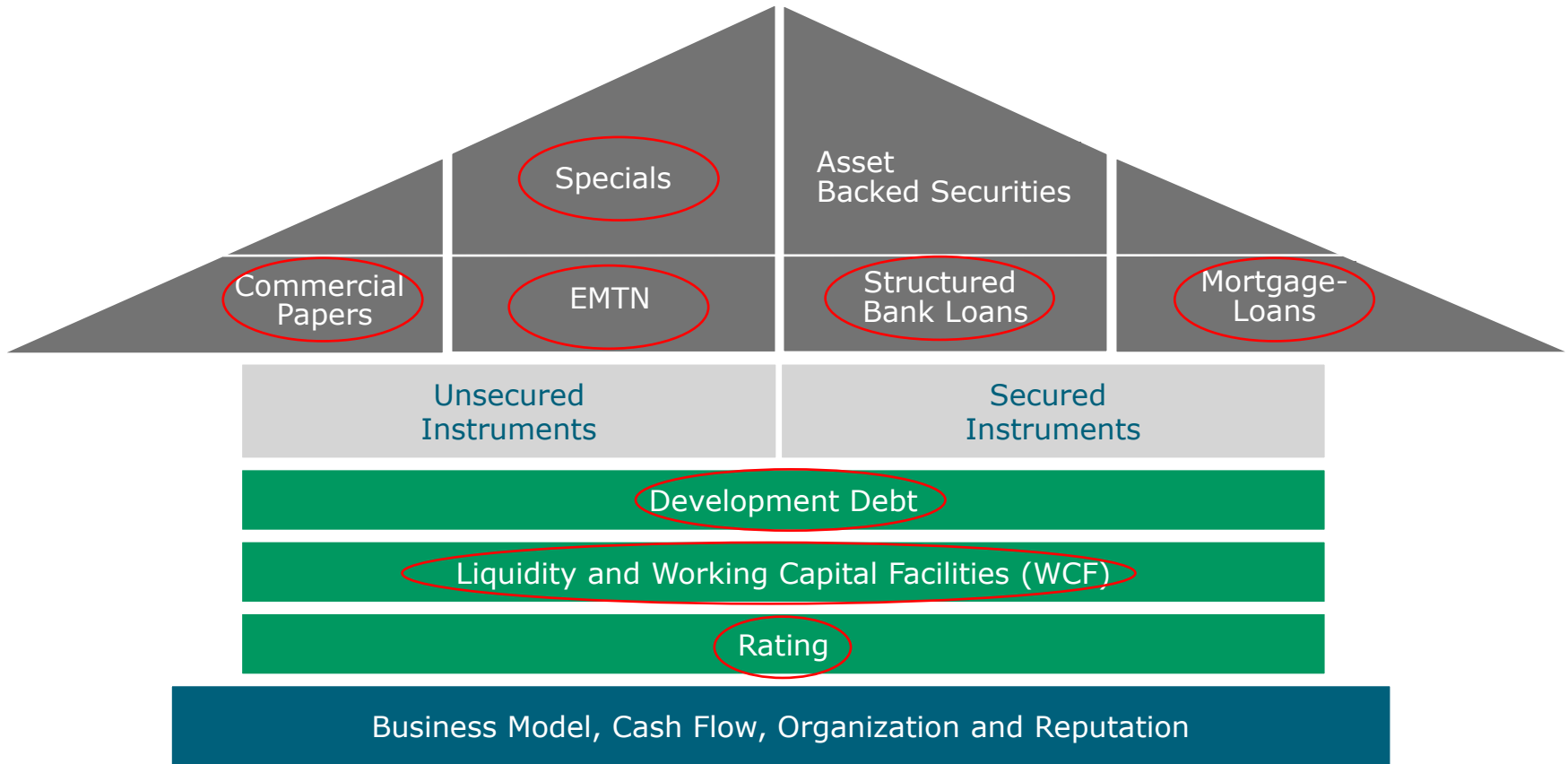


Source: Dealogic, Bloomberg, Broker research, Deutsche Bundesbank, Verband deutscher Pfandbriefbanken (VdP), FactSet as of November 16, 2018

<sup>1</sup> Quarterly Mortgage Pfandbrief issuances for 2005-2012 based on equal distribution of annual issuances based on VdP data; 2013 -3Q2018 figures based on Deutsche Bundesbank

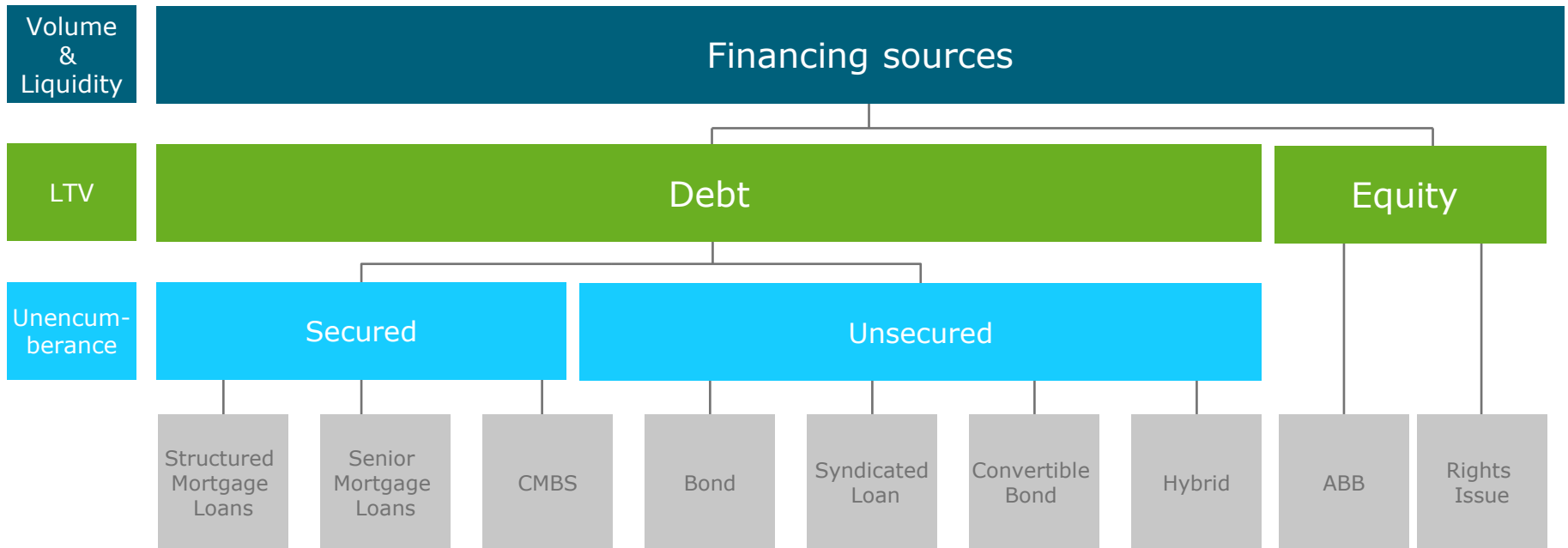
<sup>2</sup> Corporate bond issuance volume includes senior unsecured and hybrid bonds ≥ €50m, issued in EUR in Western Europe

<sup>3</sup> Excludes Mortgage Pfandbriefe and CMBS for September 2018, Convertibles for 3Q18 as data not yet available



Currently used by Vonovia

# Decision Tree Financing Sources



# Covenants and KPIs (September 30, 2018)

> Bond KPIs

Covenant	Level	Sep 30, 2018
<b>LTV</b>		
Total Debt / Total Assets	<60%	<b>42%</b>
<b>Secured LTV</b>		
Secured Debt / Total Assets	<45%	<b>12%</b>
<b>ICR<sup>1</sup></b>		
Last 12M EBITDA / Last 12M Interest Expense	>1.80x	<b>5.4x</b>
<b>Unencumbered Assets</b>		
Unencumbered Assets / Unsecured Debt	>125%	<b>210%</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

<sup>1</sup> excl. Buwog and Victoria Park.

## Corporate Investment grade rating

Rating agency	Rating	Outlook	Last Update
Standard & Poor's	BBB+	Stable	02 Aug 2018

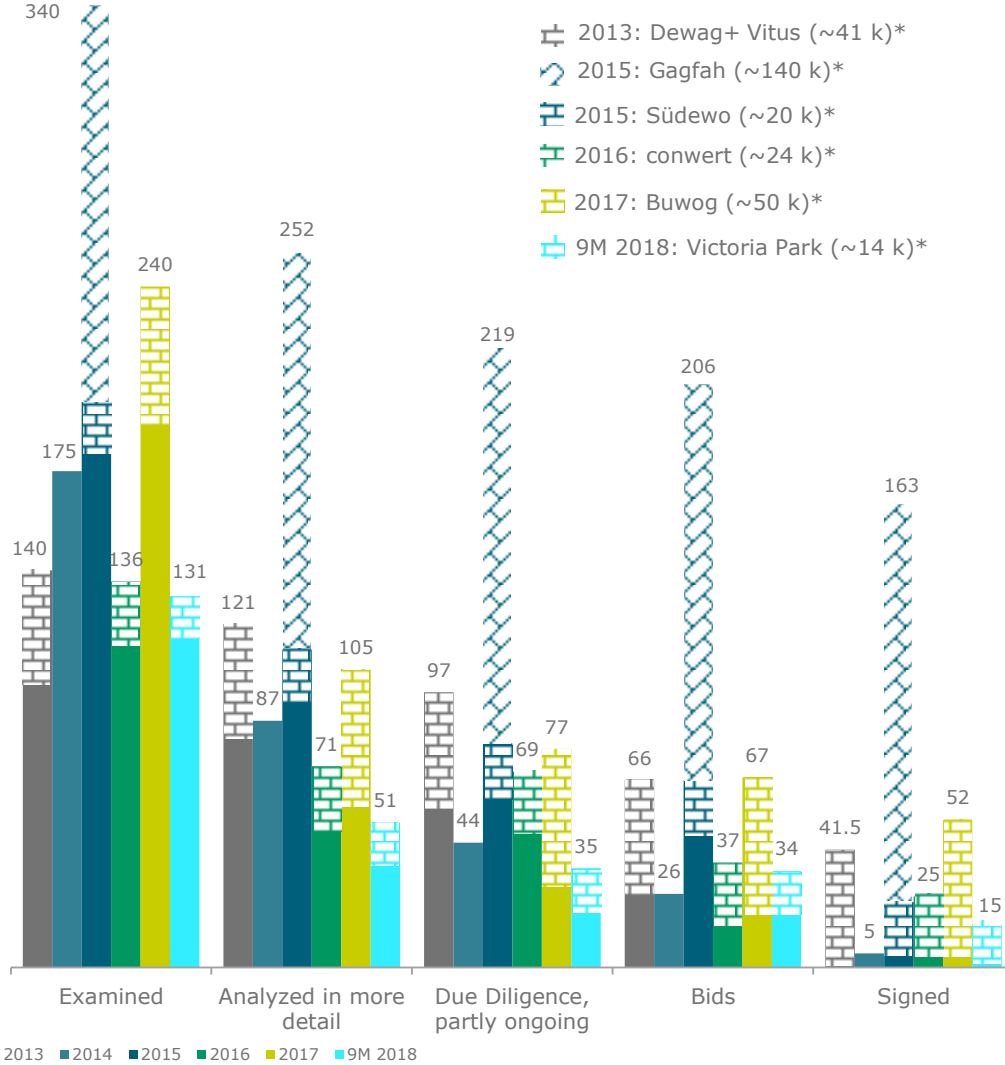
## Bond ratings

Name	Tenor & Coupon	ISIN	Amount	Issue price	Coupon	Final Maturity Date	Rating
Bond 002 (EUR-Bond)	6 years 3.125%	DE000A1HNW52	€ 600m	99.935%	3.125%	25 July 2019	BBB+
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 006 (Hybrid)	60 years 4.625%	XS1028959671	€ 700m	99.782%	4.625%	08 Apr 2074	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	€ 500m	99.263%	0.875%	30 Mar 2020	BBB+
Bond 009B (EMTN)	10 years 1.500%	DE000A1ZY989	€ 500m	98.455%	1.500%	31 Mar 2025	BBB+
Bond 010B (EMTN)	5 years 1.625%	DE000A18V138	€ 1,250m	99.852%	1.625%	15 Dec 2020	BBB+
Bond 010C (EMTN)	8 years 2.250%	DE000A18V146	€ 1,000m	99.085%	2.250%	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%	1.500%	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+

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

# Acquisitions – Opportunistic but Disciplined

Acquisition pipeline ('000 units)



\*Inclusion of acquisitions in the year the acquisition process started.

## Acquisition criteria

- No quantitative acquisition target.
- No management incentive for external growth.
- Any potential acquisition must meet all four stringent acquisition criteria assuming a 50/50 equity/debt financing.



# Update Integration Buwog and Victoria Park

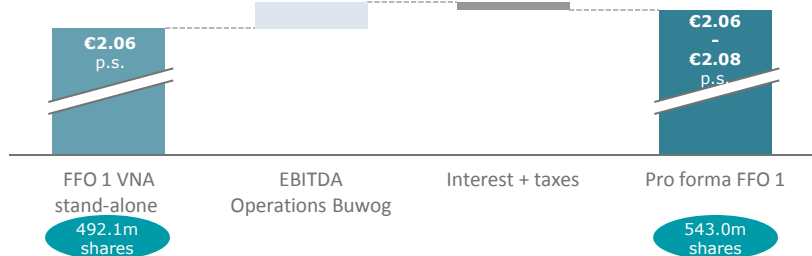
## Buwog

- Buwog squeeze out effective as of Nov 16, 2018; 100% of Buwog shares now owned by Vonovia.
- Integration of Buwog Rental Business Germany fully on track and to be completed by year end, as expected.
- Combination of convert assets with Buwog assets in Austria fully on track and to be managed on our SAP platform by mid 2019, as expected.
  - ➔ this will also serve as a blueprint for potential future integrations outside of Germany.
- Development business to be transferred onto our platform by mid 2019.
- Of the €30m synergies announced with the transaction, €5m will be realized in 2018, another €20m in 2019 and the remainder in 2020.

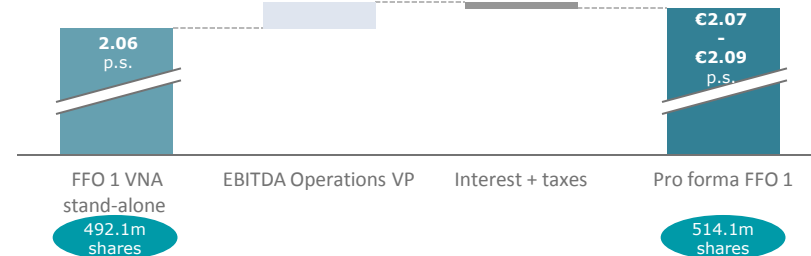
## Victoria Park

- Vonovia exercises control via its seats on the Board and sets the parameters within which Vonovia Park is expected to continue its successful track record.
- No operational integration of Victoria Park, in contrast to all previous acquisitions.
- Victoria Park is to serve as the nucleus in Sweden from which we try to build a scalable business model, grow in the Swedish residential market and aim to prove that the Vonovia business model also works in markets outside of but similar to Germany.

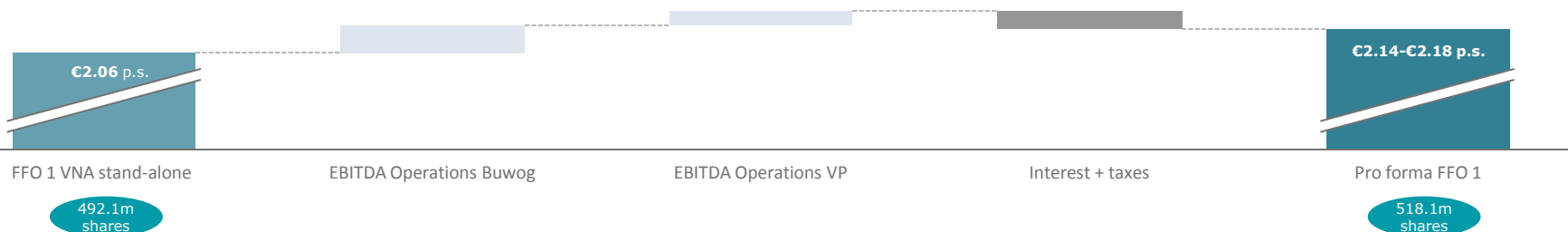
50% debt + 50% equity financing as per acquisition criteria (FY2019E)



50% debt + 50% equity financing as per acquisition criteria (FY2019E)



2019 pro forma accretion analysis (actual financing)





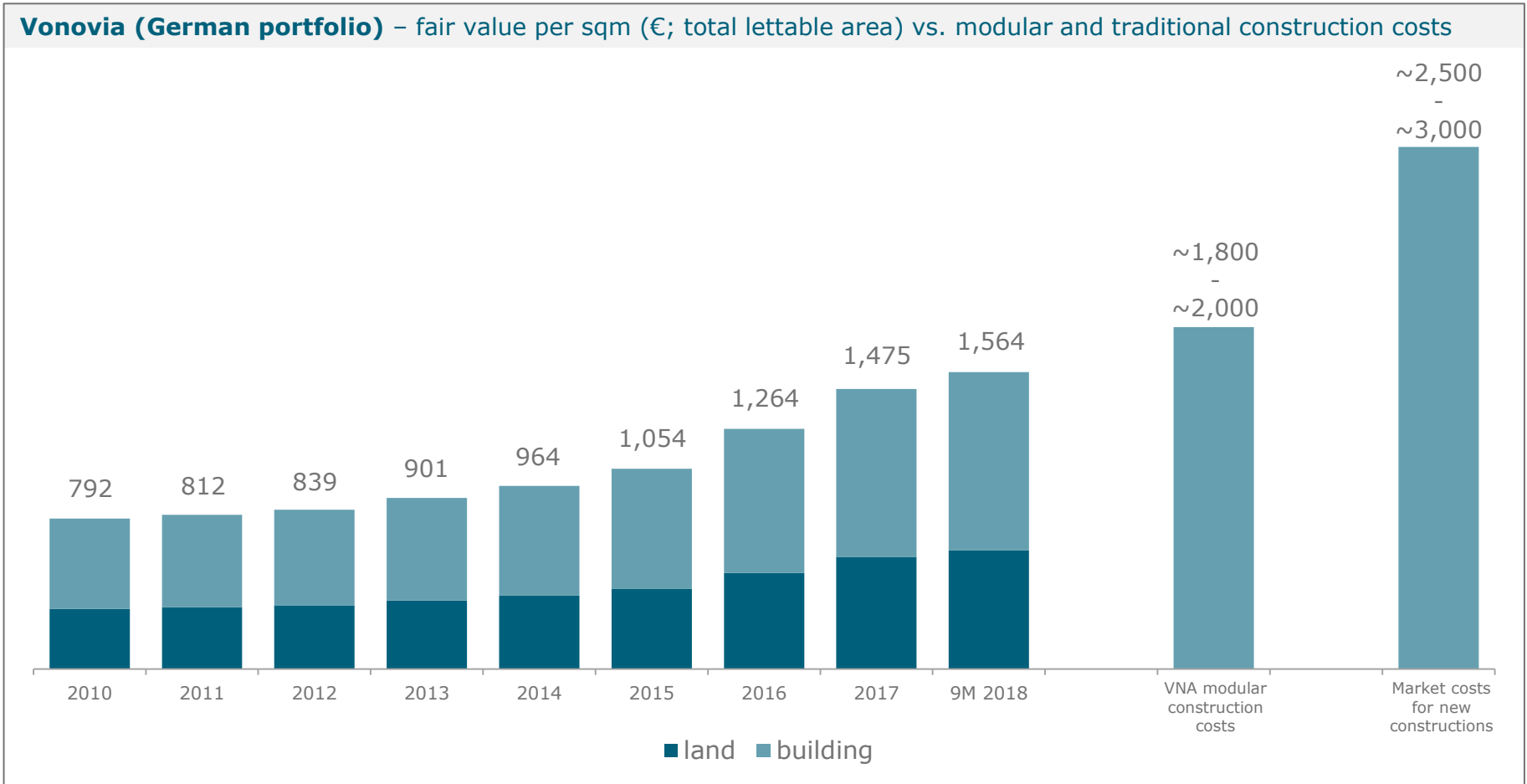
# Acquisition Track Record

Larger acquisitions				Fair Value			In-place rent		
Year	Deal	Residential units #	TOP Locations	@ Acquisition	Sep 30, 2018	Δ	@ Acquisition	Sep 30, 2018	Δ
2014	DEWAG	11,300	Berlin, Hamburg, Cologne, Frankfurt/Main	1,344	2,065	54%	6.76	7.78	15%
	VITUS	20,500	Bremen, Kiel	807	1,350	67%	5.06	5.73	13%
2015	GAGFAH	144,600	Dresden, Berlin, Hamburg	889	1,516	71%	5.40	6.25	16%
	FRANCONIA	4,100	Berlin, Dresden	1,044	1,744	67%	5.82	6.51	12%
	SÜDEWO	19,400	Stuttgart, Karlsruhe, Mannheim, Ulm	1,380	1,846	34%	6.83	7.40	8%
2016	GRAINGER	2,400	Munich, Mannheim	1,501	2,031	35%	7.09	7.81	10%
2017	CONWERT (Germany & Austria)	23,400	Berlin, Leipzig, Potsdam, Vienna	1,353	1,718	27%	5.88	6.27	7%
	thereof Germany	21,200	Berlin, Leipzig, Potsdam	1,218	1,601	31%	5.86	6.22	6%
	thereof Austria	2,200	Vienna	1,986	2,345	18%	6.11	6.67	9%

Note: Without most recent acquisitions in 2018

# Conservative Valuation Levels

- In-place values are still way below replacement values, in spite of accelerating valuation growth in recent years.



Note: VNA 2010 – 2014 refers to Deutsche Annington Portfolio at the time; construction costs excluding land. The land value refers to share of total fair value allocated to land.

# Substantial Reduction of Portfolio Locations

03/2015 (incl. Südevo)

818 locations

12/2016

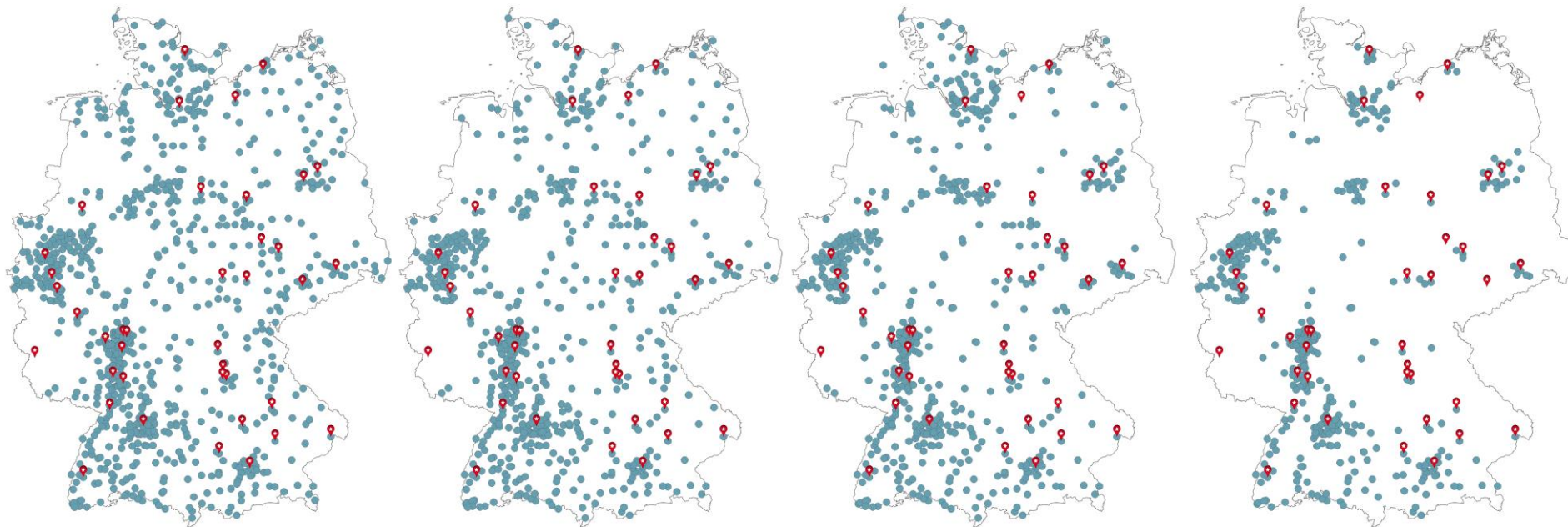
665 locations

12/2017

577 locations

Strategic Portfolio

~400 locations



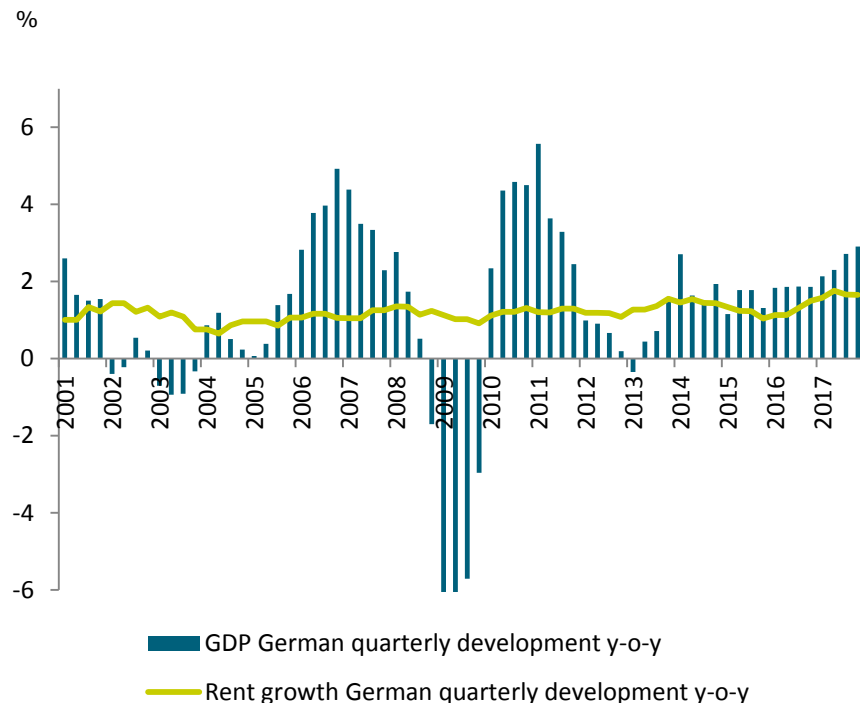
● Vonovia location

📍 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)

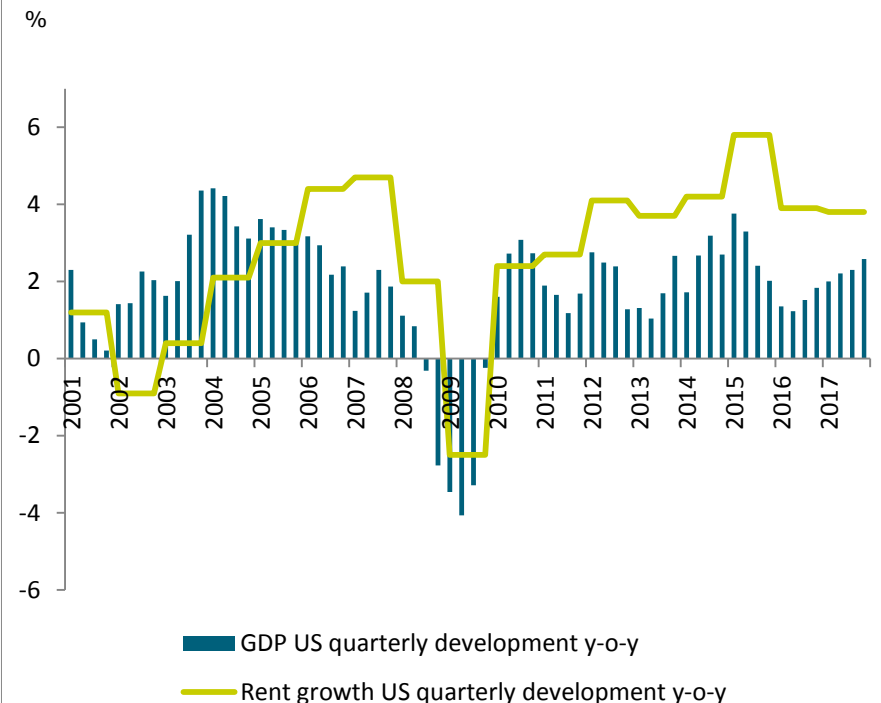
## Rental regulation safeguards high degree of stability

- Contrary to most other jurisdictions such as the USA, rental growth in Germany is regulated and not directly linked to CPI, GDP development etc.
- Rents are regulated via “Mietspiegel” (city-specific rent indices), which look at the asking rents of the previous four years to determine a rent growth level for existing tenants for the next two years.

### Germany: regulated market ensures sustainable rent growth



### USA: rent growth is highly volatile

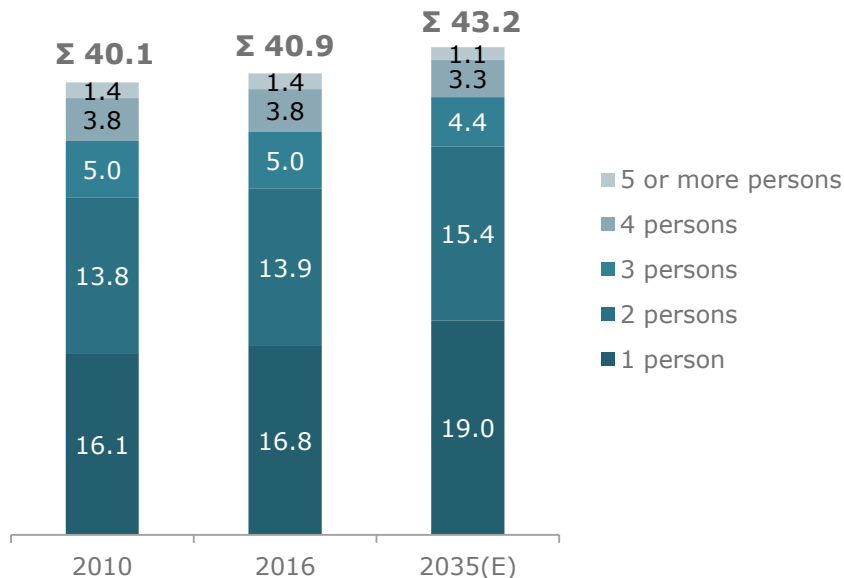


Sources: Federal Statistics Office, GdW (German Association of Professional Homeowners), REIS, BofA Merrill Lynch Global Research, OECD.  
 Note: Due to lack of q-o-q US rent growth data, the annual rent growth for a year is assumed to also be the q-o-q rent growth of that year.

## 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.

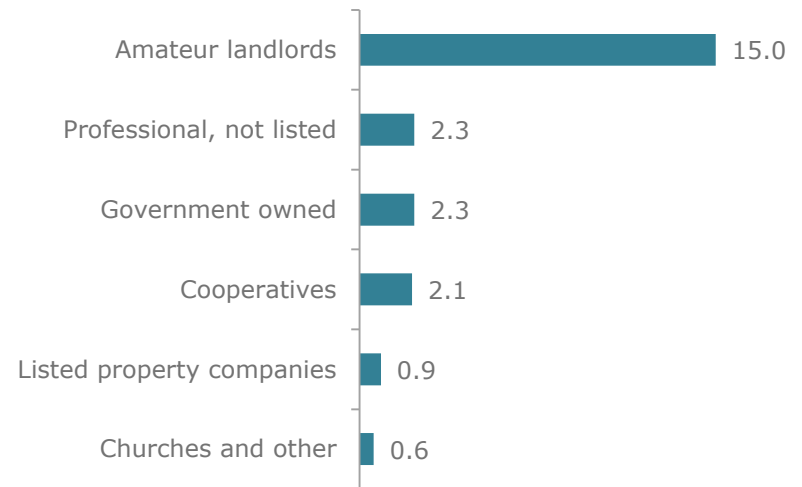
Distribution of household sizes (million)



## 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.

Ownership structure (million units)

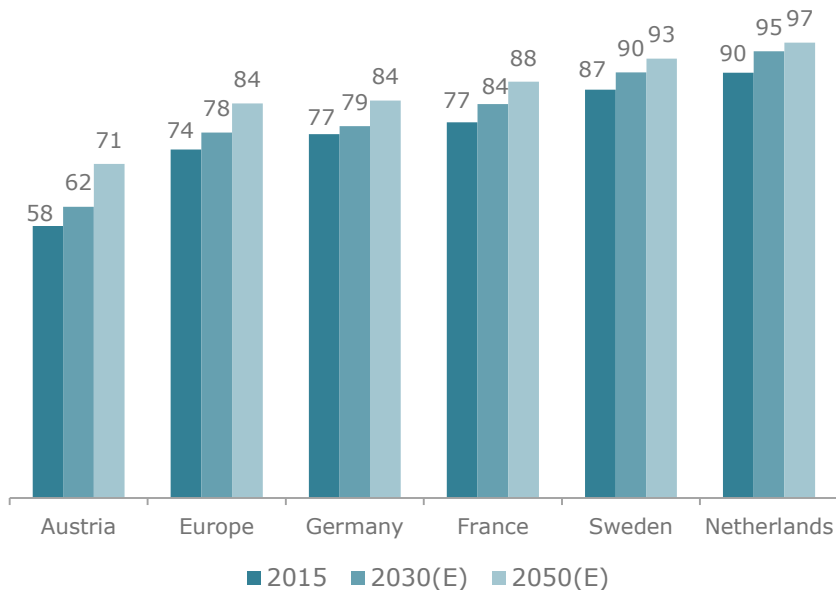


Sources: German Federal Statistics Office, GdW (German Association of Professional Homeowners). 2035(E) household numbers are based on trend scenario of the German Federal Statistics Office.

## Urbanization trend across Europe

- > Cities across Europe are on the rise and the population living in cities is expected to grow substantially by 2030 and 2050, respectively.

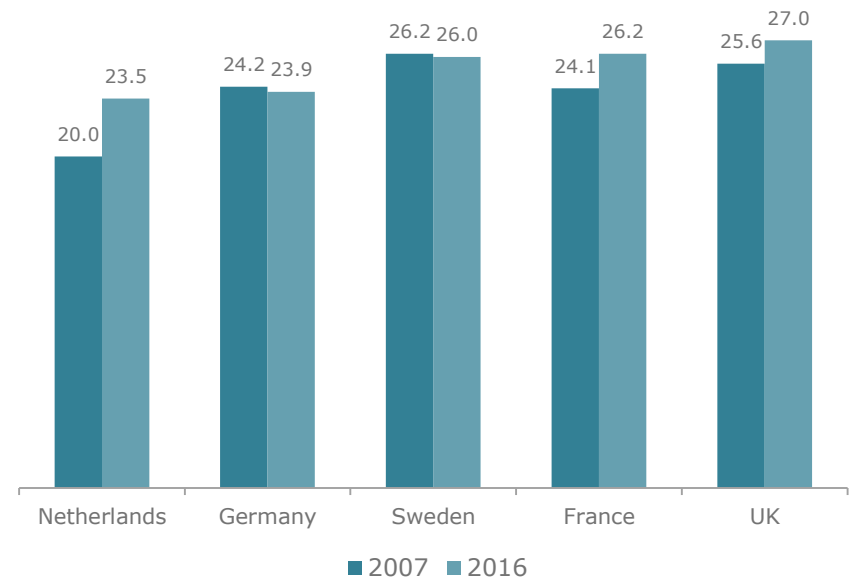
% of population living in urban areas



## Increasing affordability in Germany

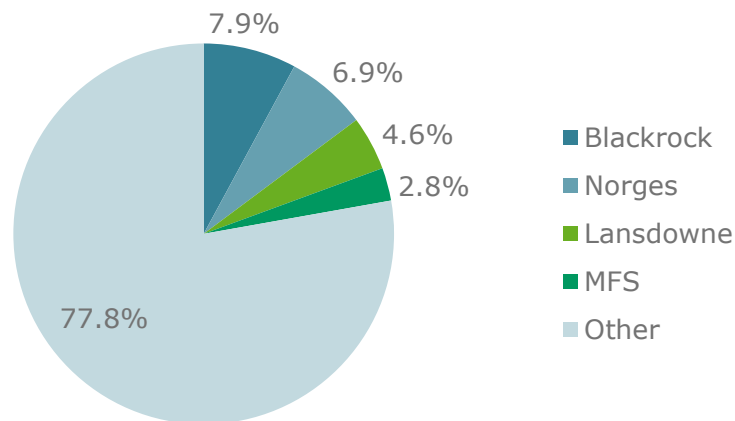
- > Affordability in Germany is higher than France, UK, Spain and the Netherlands.
- > Whereas most other European countries saw an increase, the share of rent-related payments in relation to disposable income declined in Germany between 2007 and 2016.

Rent as % of disposable household income\*



\*Share of disposable household income spent on rent, water, electricity and fuel

## Shareholder Structure (September 30, 2018)



Free-float factor according to Deutsche Börse definition: 93.1%  
According to German law the lowest threshold for voting rights notifications is at 3%

## Share Information

First day of trading	July 11, 2013	
Number of shares outstanding	518.1 million	
Free float based on Deutsche Börse definition	93.1%	
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 and weight (as of Sep 30, 2018)		
	DAX	2.1%
	Stoxx Europe 600	0.2%
	MSCI Germany	1.7%
	GPR 250 World	1.8%
	FTSE EPRA/NAREIT Europe	9.6%
	GPTMS150	2.6%

## VNA share price performance since IPO vs. DAX and EPRA Europe Index



Source: Factset

# Vonovia History

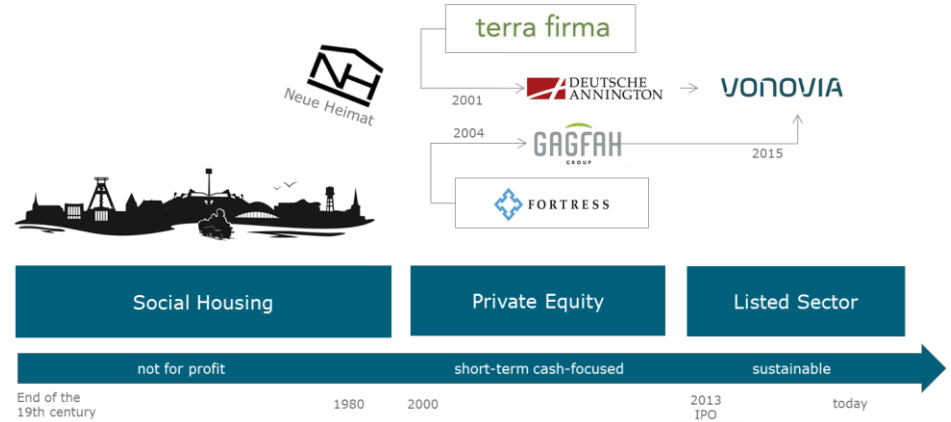
1. Vonovia At A Glance

2. Business Update

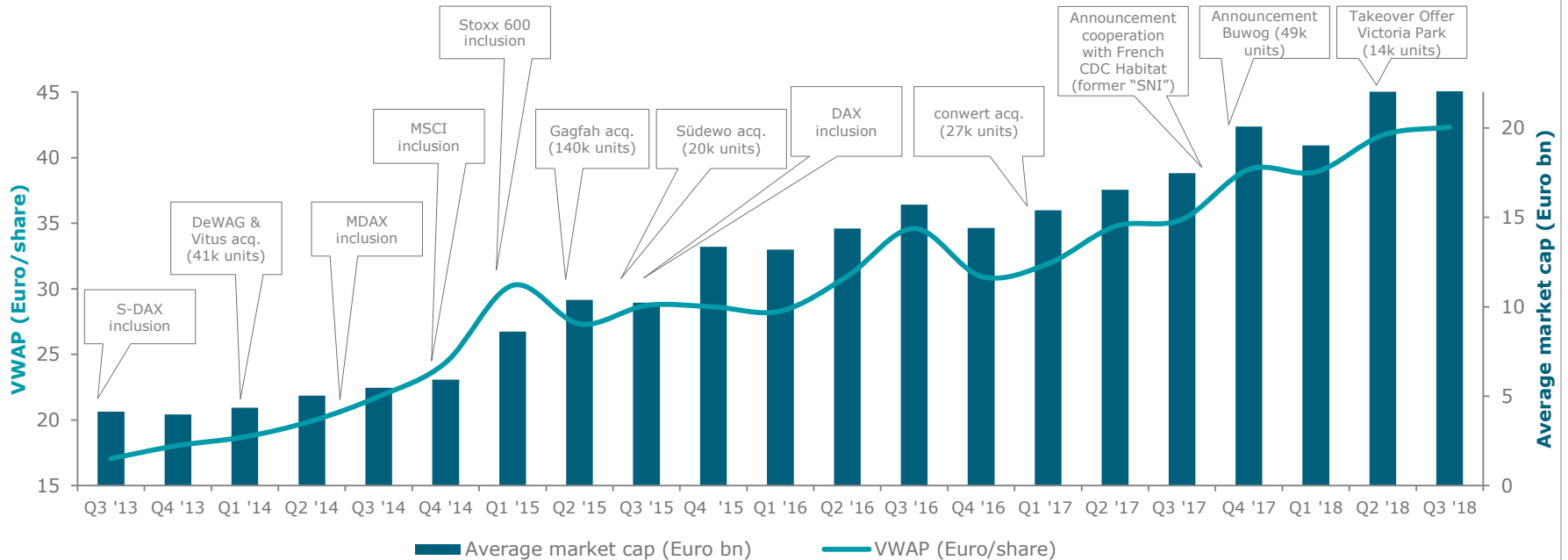
3. Residential Market Update

4. Appendix

- Seed portfolios of today's Vonovia have origin in public housing provided by government, large employers and similar landlords with a view towards offering affordable housing.
- At beginning of last decade, private equity invested in German residential on a large scale including into what is Vonovia today (mainly Deutsche Annington and Gagfah then).
- IPO in 2013.
- Final exit of private equity in 2014.



## Share price and market capitalization



Source: Factset, company data



# 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
Sep 30, 2018	518.1	

The number of outstanding shares is always available at

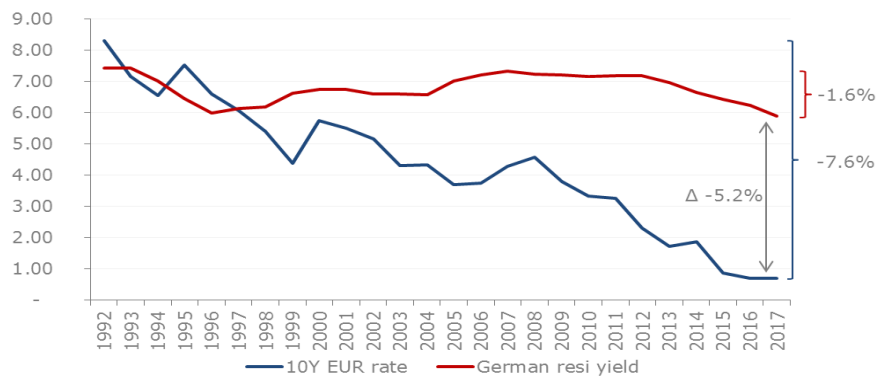
<http://investoren.vonovia.de/websites/vonovia/English/2010/key-share-information.html>

# No Correlation between Interest Rates and Asset Yields

Valuation methodology for German residential properties is primarily based 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 760bps since 1992) is **not mirrored by asset yields** (down by 160bps 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

# Three Valuation Layers with Different Volatilities

➤ High degree of stability and predictability of underlying business (layer 1) and portfolio valuation (layer 2) is not reflected in share price development (layer 3), as equity markets appear to apply valuation parameters that are substantially less material for Vonovia’s operating performance.

Increasing level of perception and judgment

Layer	Development	Main drivers
<p><b>3</b></p> <p><b>Stock Market Valuation</b> (Stock price € per share)</p>		<ul style="list-style-type: none"> <li>• Only partly driven by performance and portfolio valuation</li> <li>• Negatively correlated to bund yields and interest rates</li> <li>• Subject to additional macro considerations</li> </ul>
<p><b>2</b></p> <p><b>Portfolio Valuation</b> (Adj. NAV € per share)</p>		<ul style="list-style-type: none"> <li>• Market prices for assets are much more relevant than interest rate levels</li> <li>• Additional material factors are supply/ demand imbalance and sustainable market rent growth</li> </ul>
<p><b>1</b></p> <p><b>Cash Flow</b> (FFO &amp; Dividend € per share)</p>		<ul style="list-style-type: none"> <li>• Regulated market</li> <li>• No cluster risk due to high degree of granularity</li> <li>• Robust business model</li> </ul>

<sup>1</sup> Guidance mid-point. <sup>2</sup> To be proposed to the AGM in May 2019. Note: 2013-2018 FFO is "FFO1" and 2019 FFO is "Group FFO"

Management Board compensation is based on three pillars

## Fixed Remuneration (incl. Pension)

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

## Bonus / STIP

- Criteria/Targets: FFO1, adj. NAV/share, EBITDA Sales, 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, EPRA NAV/share, FFO1/share, Customer Satisfaction Index (CSI)
- Performance Period: 4 years
- Payout: Cash
- Cap: 250% of grant value



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

FFO1 target  
40%

Adj. NAV/share target  
15%

EBITDA Sales target  
15%

Personal targets  
agreed with SVB  
30%

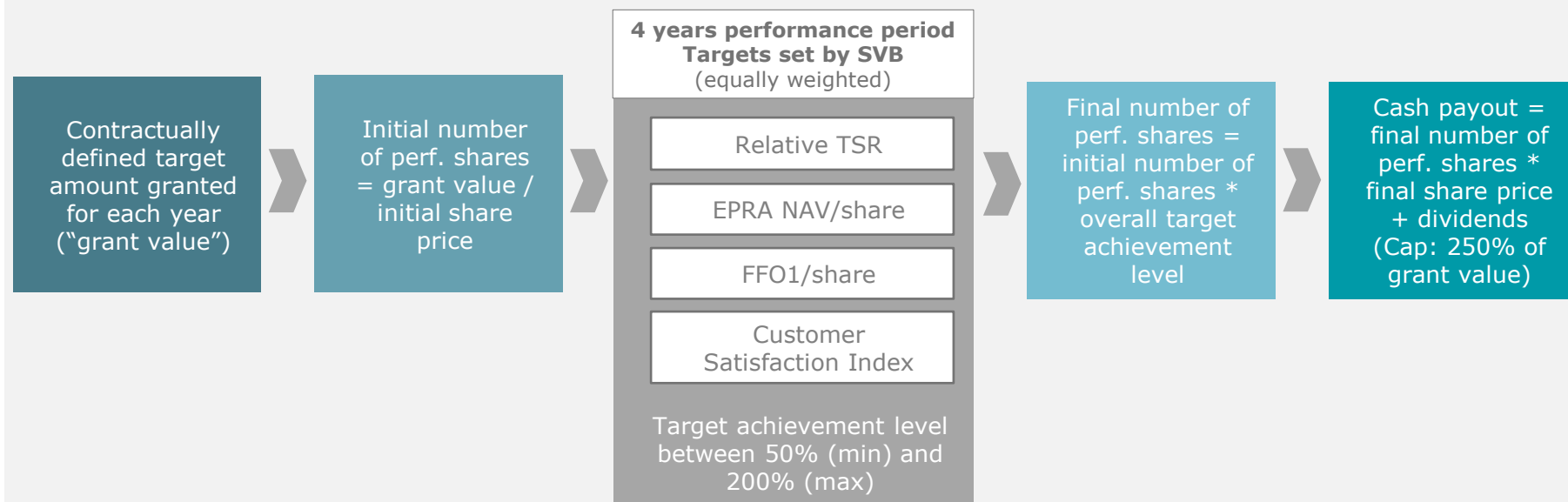
- Bonus cap at predetermined amount
- Cash payout

### Rationale

- **FFO1** is key figure in the industry 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).
- **EBITDA Sales:** Measure of success of our sales activities.
- **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 (FFO/share and EPRA NAV/share) as well as (ii) calculation method which takes actual share price performance into account.

# Impressions

1. Vonovia At A Glance

2. Business Update

3. Residential Market Update

4. Appendix

**Dortmund**



**Berlin**



**Bielefeld**



**Essen**



**Dortmund**



**Bremen**



**Freiburg**



**Dresden**



**Munich**



**Frankfurt**



**Malmö**



**Vienna**



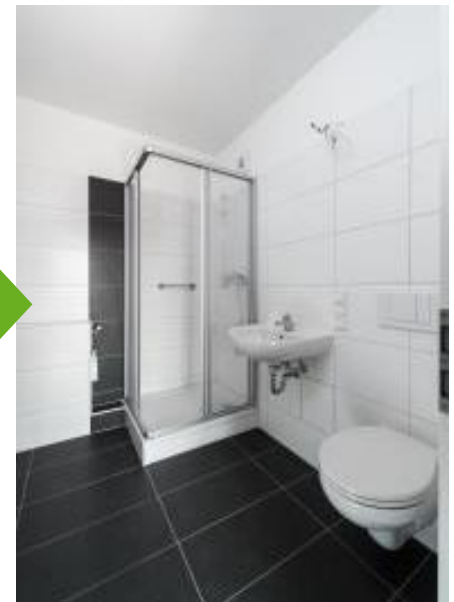
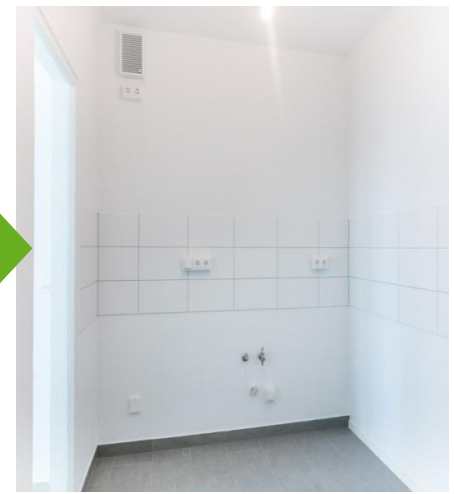
# Optimize Apartment

1. Vonovia At A Glance

2. Business Update

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# Upgrade Building

1. Vonovia At A Glance

2. Business Update

3. Residential Market Update

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# Modular Construction

1. Vonovia At A Glance

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3. Residential Market Update

4. Appendix



# Modular Construction

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4. Appendix



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# For Your Notes



1. Vonovia At A Glance

2. Business Update

3. Residential Market Update

4. Appendix

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