

Agenda				AIVONOV
1. Resi market fundamentals	2. Vonovia 5-year track record	3. FY2017 results highlights	5. Appendix	

1	Residential market fundamentals
2	Vonovia 5-year track record since IPO
3	FY2017 results highlights
5	Appendix

## German Residential – Safe Harbor and Low Risk

1. Resi market fundamentals

2. Vonovia 5-year trac

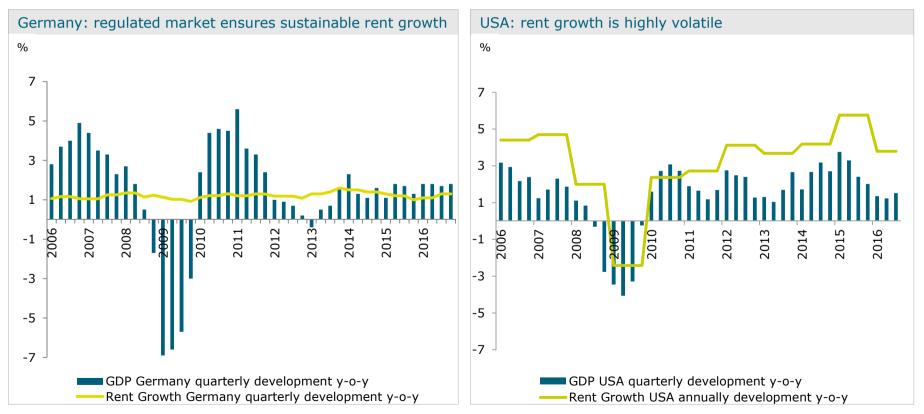
FY2017 results highlights

5. Appendix

AIVONOVIA

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.



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.

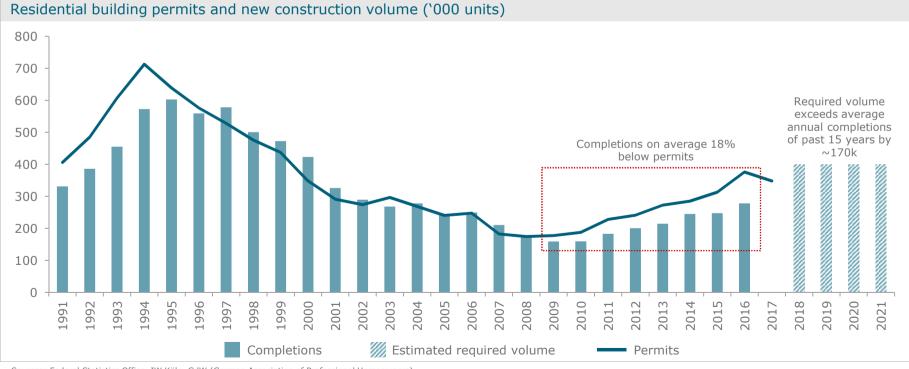
# German Residential – Landlords Benefit from Structural Imbalance between Supply and Demand

# VONOVIA

#### New supply falls short of demand

1. Resi market fundamentals

- 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 cost render construction in affordable segment economically unfeasible.



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

## German Residential – Favorable Fundamentals

1. Resi market fundamentals

2. Vonovia 5-year trac

. FY2017 results highlights

5. Appendix

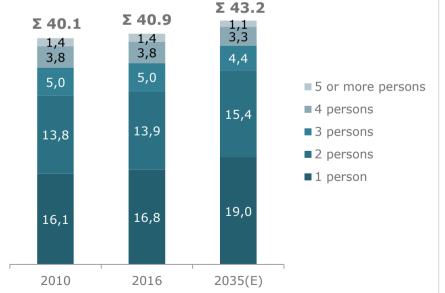
# AIVONOV

#### 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.

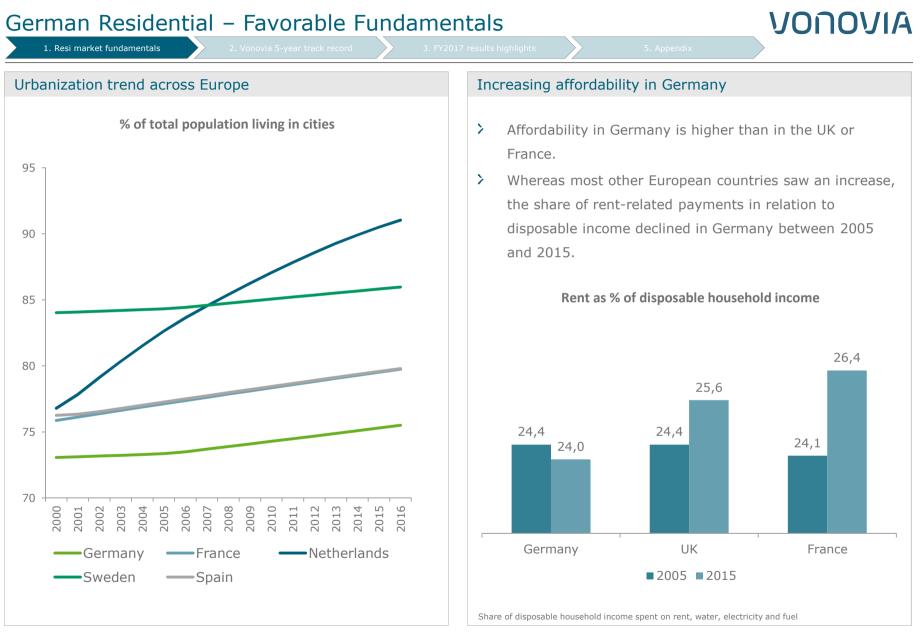


#### Distribution of household sizes (million)

# Amateur landlords15.0Professional, not listed2.3Government owned2.3Cooperatives2.1Listed property companies0.9Churches and other0.6

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.

#### **Ownership structure (million units)**

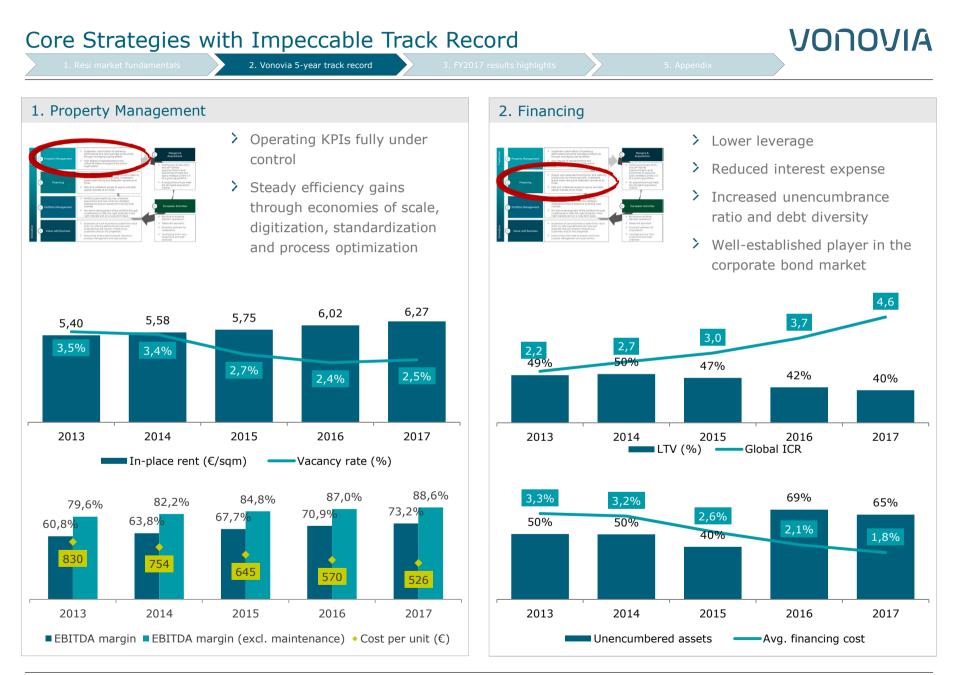


Sources: JLL Research, European Commission, Federal Statistics Office, Eurostat

	Reputation & Customer Satisfa	action
1 Property Mana	<ul> <li>Systematic optimization of operating performance and core business productive through leveraging scaling effects</li> <li>High degree of standardization and industrialization throughout the entire organization</li> </ul>	vity 5 Mergers & Acquisitions 5 Continuous review of on- and off-market
2 Financin	<ul> <li>Ensure well-balanced financing mix and a profile with low financing costs, investme grade credit rating and adequate liquidity times</li> <li>Fast and unfettered access to equity and capital markets at all times</li> </ul>	<ul> <li>opportunities to lever</li> <li>economies of scale and</li> <li>apply strategic pillars 1-4</li> <li>to a growing portfolio</li> <li>All acquisitions must mee</li> <li>the stringent acquisition</li> </ul>
3 Portfolio Mana	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong lo markets</li> <li>Pro-active development of the portfolio t</li> </ul>	6 European Activities
	investments to offer the right products in right markets and on a long-term basis	
4 Value-add Bu	<ul> <li>Expansion of core business to extend the chain by offering additional services and products that are directly linked to our customers and/or the properties</li> </ul>	
	<ul> <li>Insourcing of services to ensure maximu process management and cost control</li> </ul>	um > Leveraging know how, experience and best practices

VONOVIA

# Proven 4+1 Strategy is Evolving into 4+2 Strategy

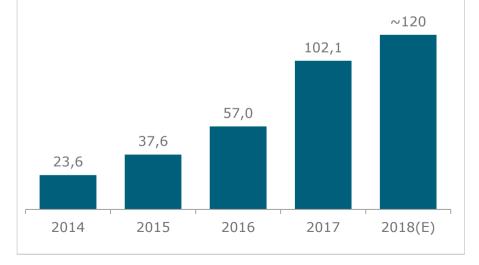


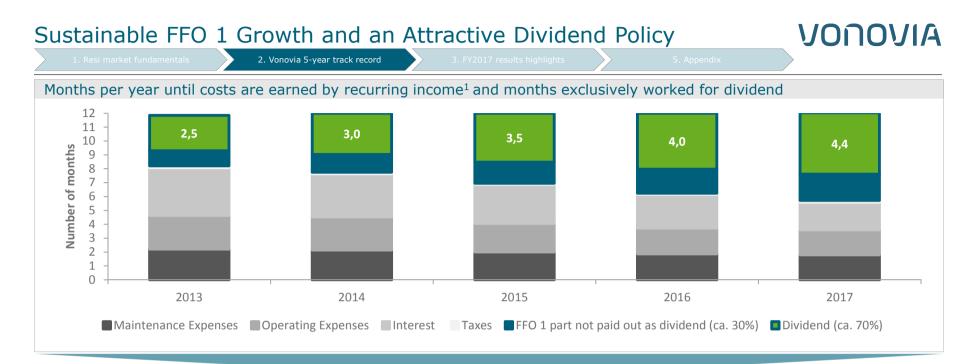
#### **NOUDA** Core Strategies with Impeccable Track Record 2. Vonovia 5-year track record 4. Value-add Business 3. Portfolio Management > More than 51k non-core units > Insourcing of services to sold since IPO (28% of IPO increase customer satisfaction portfolio volume) and extend the value chain > Number of portfolio locations > Leveraging the B-to-C nature reduced by 29%; portfolio of the business and the longnow concentrated across 15 term customer relationship growth regions > Most dynamic and innovative > Investment program grown part of the business from €71m for 2013 to €1bn for 2018 and annually going forward

# Investment track record (€m; includes modernization and space creation)



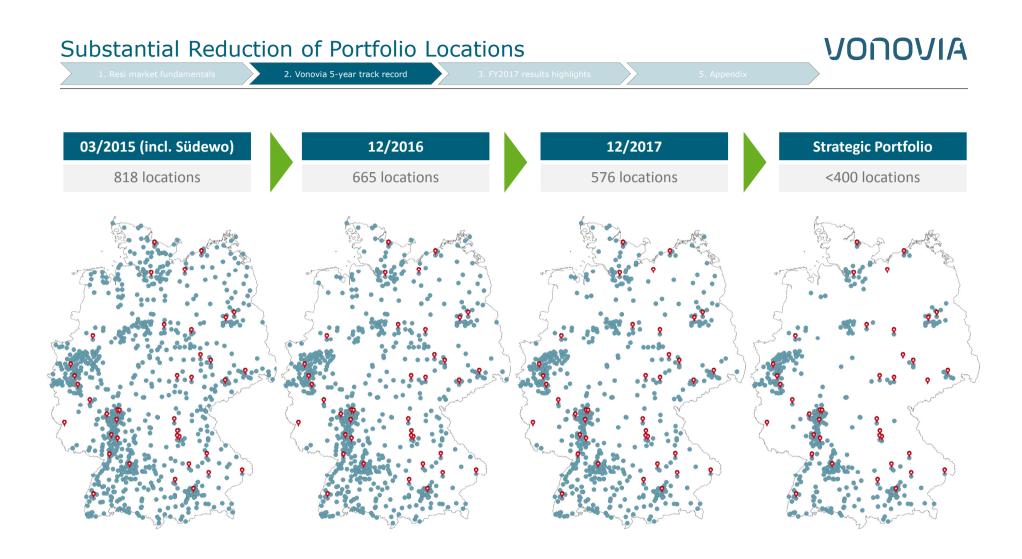
Adj. EBITDA Value-add Business (€m)







<sup>1</sup> Rental income + EBITDA Value-add Business and Other; excluding sales effects. <sup>2</sup> Intended to be proposed to the Annual General Meeting. <sup>3</sup> Midpoint guidance.



Vonovia location

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

## Growing Contribution from Value-add Business

1. Resi market fundament

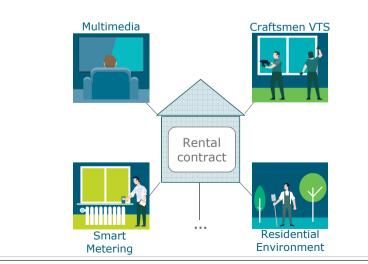
2. Vonovia 5-year track record

17 results highlights

VONOVIA

#### Concept

- Expansion of core business to extend the value chain by offering additional services and products that are directly linked to our customers and/or the properties and offer the same cash flow stability as the rental business.
- > Insourcing of services to ensure maximum process management and cost control.
- > Two types of Value-add Business
  - 1. External income (e.g. multimedia, smart metering)
  - 2. Internal savings (e.g. craftsmen, resi environment)
- > New initiatives always follow same low risk pattern of
  - > Prototype development
  - > Proof of concept in pilot phase
  - > Roll-out across portfolio



#### Company Presentation April 2018

#### Economics

- > NAV does not account for Vonovia's Value-add Business.
- Applying the impairment test WACC<sup>1</sup> to the 2018E Adj. EBITDA Value-add Business translates into an additional value of ~€5.3 per share (~14% on top of current Adj. NAV).

Penetration						
Multimedia	ca. 80%					
Smart metering	ca. 23%					
Residential environment <sup>2</sup>	ca. 30%					
Energy	<1%					
Craftsmen VTS	ca. 70% (maintenance) ca. 30% (modernization) target is around 70% to allow for enough flexibility in the volumes and to enable continuous benchmarking to market prices					



# Reporting annual results for the fifth time since the IPO, Vonovia once again delivered on all metrics and continued on its sustainable growth trajectory

Operations	<ul> <li>&gt; Organic rent growth accelerated to 4.2% in 2017 (+90bps)</li> <li>&gt; EBITDA margin of 73.2% incl. maintenance (+230bps)</li> <li>&gt; Cost per unit down to €526 (-7.7%)</li> <li>&gt; Adj. EBITDA Operations €1,224.2m (+11.9%)</li> </ul>
FFO 1	<ul> <li>&gt; €920.8m (+21%)</li> <li>&gt; €1.90 per share, eop NOSH (+16.3%)</li> <li>&gt; €1.93 per share, avg. NOSH (+18.4%)</li> </ul>
Valuation and Adj. NAV	<ul> <li>&gt; Aggregate value growth of €4,229m in 2017 (+14.8% I-f-I), of which 3.0% from performance, 3.0% from investments and 8.9% from yield compression</li> <li>&gt; Fair value of €1,475 per sqm and 19.7x in-place rent multiple</li> <li>&gt; Adj. NAV of €38.49 per share (+25.2%)</li> </ul>
Governance	<ul> <li>&gt; The Supervisory Board of Vonovia SE will propose to the AGM to be held on May 9, 2018, the election of Jürgen Fitschen as Member of the Supervisory Board. If elected, the Supervisory Board intends to elect Jürgen Fitschen as its Chairman.</li> <li>&gt; CFO Dr. Stefan Kirsten will step down from Vonovia's Management Board at his own request, effective from the end of the 2018 AGM to enable the company to take the next steps in its development under the financial leadership of Helene von Roeder as CFO of Vonovia SE, who will assume joint responsibility for all financial functions.</li> </ul>

## 16.3% FFO 1 Growth on a Broadly Stable Portfolio

On a broadly stable portfolio (+2.3% more residential units on average), Vonovia delivered 8.4% rental income growth, 11.9% Adj. EBITDA Operations growth and €160m FFO 1 growth, equaling +16.3% FFO 1 growth per share (in spite of 4.1% NOSH growth as a result of scrip dividend, conwert acquisition and Gagfah legal merger)

3. FY2017 results highlights

	FY2017	FY2016	Delta	
`000	22,056	21,509	+2.5%	
#	352,848	344,884	+2.3%	
%	4.2	3.3	+90bps	
€/month/sqm	6.27	6.02	+4.2%	
%	2.5	2.4	+10bps	
€m		1 538 1	+8.4%	+€129.8m
€m	··· · · · · · · · · · · · · · · · · ·	_/0001_		1012510111
€m	-259.9	-244.5	+6.3%	
		1.046.2		
€m		•••••••••••••••••	· · · · · · · · · · · · · · · · · · ·	+€103.8m
€m		57.0	+/9.1%	
€m	1,224.2	1,094.0	+11.9%	+€130.2m
€m	-287.5	-322.7	-10.9%	
€m	-15.9	-10.5	+51.4%	
€m	920.8	760.8	+21.0%	+€160.0m
€	••	1.63		
€	1.93	1.63	+18.4%	
	# % €/month/sqm % €m €m €m €m €m €m €m €m €m €m €m €m	`00022,056#352,848%4.2€/month/sqm6.27%2.5 $\ell$ m1,667.9 $\ell$ m-258.0 $\ell$ m-259.9 $\ell$ m1,150.0 $\ell$ m102.1 $\ell$ m1,224.2 $\ell$ m-287.5 $\ell$ m-15.9 $\ell$ m920.8 $\ell$ 1.90	`000 $22,056$ $21,509$ # $352,848$ $344,884$ % $4.2$ $3.3$ $\epsilon$ /month/sqm $6.27$ $6.02$ % $2.5$ $2.4$ $\epsilon$ m $1,667.9$ $1,538.1$ $\epsilon$ m $-258.0$ $-247.4$ $\epsilon$ m $-259.9$ $-244.5$ $\epsilon$ m $1,150.0$ $1,046.2$ $\epsilon$ m $1,224.2$ $1,094.0$ $\epsilon$ m $-287.5$ $-322.7$ $\epsilon$ m $-287.5$ $-322.7$ $\epsilon$ m $-15.9$ $-10.5$ $\epsilon$ m $920.8$ $760.8$ $\epsilon$ $1,90$ $1.63$	`00022,05621,509 $+2.5\%$ #352,848344,884 $+2.3\%$ %4.23.3 $+90bps$ $\epsilon$ /month/sqm6.27 $6.02$ $+4.2\%$ %2.52.4 $+10bps$ $\epsilon$ m1,667.91,538.1 $+8.4\%$ $\epsilon$ m-258.0 $-247.4$ $+4.3\%$ $\epsilon$ m-259.9 $-244.5$ $+6.3\%$ $\epsilon$ m1,150.01,046.2 $+9.9\%$ $\epsilon$ m1,224.21,094.0 $+11.9\%$ $\epsilon$ m $-287.5$ $-322.7$ $-10.9\%$ $\epsilon$ m $-15.9$ $-10.5$ $+51.4\%$ $\epsilon$ m920.8 $760.8$ $+21.0\%$ $\epsilon$ 1.90 $1.63$ $+16.3\%$

Rent Growth Still in Acceleration Phase         1. Resi market fundamentals       2. Vonovia 5-year track record       3. FY2017 results highlights       5. Appendix							אועסהסע			
Rent growth drivers (last 12M)	2017	2016	Delta	Positive rent g	rowth tr	ajectory	,			
					2013	2014	2015	2016	2017	2018(E)
Sitting tenants (incl. subsidized rents)	1.2%	0.9%	+30 bps	Market driven	1.6%	1.6%	1.7%	1.5%	1.6%	*
New lettings	0.4%	0.6%	-20 bps	Modernization	0.4%	0.9%	1.2%	1.8%	2.5%	
Subtotal market-driven rent growth	1.6%	1.5%	+10 bps	Space creation					0.1%	
Nodernization	2.5%	1.8%	+70 bps	Organic rent growth	1.9%	2.5%	2.9%	3.3%	4.2%	4.6% - 4.8%
Subtotal I-f-I rent growth	4.1%	3.3%	+80 bps							
Space creation	0.1%	0.0%	+10 bps	Investment tr space creation		rd (€m;	includes	s moderi		and ~1,000
Subtotal organic rent growth	4.2%	3.3%	+90 bps						79	
Portfolio management (+ acquisitions ./. sales)	0.0%	1.4%	-140 bps	71	172	356	472			
Total rent growth	4.2%	4.7%	-50 bps		2014	2015	2016	5 20	017 2	2018+(E)

## Continued EBITDA Margin Expansion

> 9.9% EBITDA Rental growth translates into an EBITDA Operations growth of 11.9% y-o-y because of €102.1m contribution from Value-add Business.

3. FY2017 results highlights

> EBITDA Operations margin expansion (incl. maintenance) to 73.2% (+230 bps y-o-y).



Em (unless indicated otherwise)	2017	2016	Delta
Rental income	1,667.9	1,538.1	+8.4%
Maintenance expenses	-258.0	-247.4	+4.3%
Operating expenses	-259.9	-244.5	+6.3%
Adj. EBITDA Rental	1,150.0	1,046.2	+9.9%
Income	1,170.5	851.2	+37.5%
of which external	161.6	108.1	+49.5%
of which internal	1,008.9	743.1	+35.8%
Operating expenses	-1,068.4	-794.2	+34.5%
Adj. EBITDA Value-add Business	102.1	57.0	+79.1%
Adj. EBITDA Other <sup>1</sup>	-27.9	-9.2	+203.3%
Adj. EBITDA Operations	1,224.2	1,094.0	+11.9%

**NOUDA** 

<sup>1</sup> Mainly consolidation

LTV below Target Range 1. Resi market fundamentals 2. Vonovia 5-ye					
€m (unless indicated otherwise)	Dec 31, 2017	Sep. 30, 2017	Jun. 30, 2017	Mar. 31, 2017	Dec. 31, 2016
Non-derivative financial liabilities	14,060.5	13,921.1	14,257.6	14,435.3	13,371.0
Foreign exchange rate effects	-23.5	-26.5	-137.2	-194.8	-209.9
Cash and cash equivalents	-266.2	-339.8	-378.1	-1,007.9	-1,540.8
Net debt	13,770.8	13,554.8	13,742.3	13,232.6	11,620.3
Sales receivables	-201.2	-177.6	-180.0	-144.4	-135.4
Additional loan amount for outstanding acquisitions				275.0	
Adj. net debt	13,569.6	13,377.2	13,562.3	13,363.2	11,484.9
Fair value of real estate portfolio	33,436.3	30,948.1	30,830.2	29,607.6	27,115.6
Shares in other real estate companies	642.2	605.4	564.6	520.4	503.1
Adj. fair value of real estate portfolio	34,078.5	31,553.5	31,394.8	30,128.0	27,618.7
LTV	39.8%	42.4%	43.2%	44.4%	41.6%
Debt/EBITDA	11.1x				10.5x

# FFO1 per Share +16.3% 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

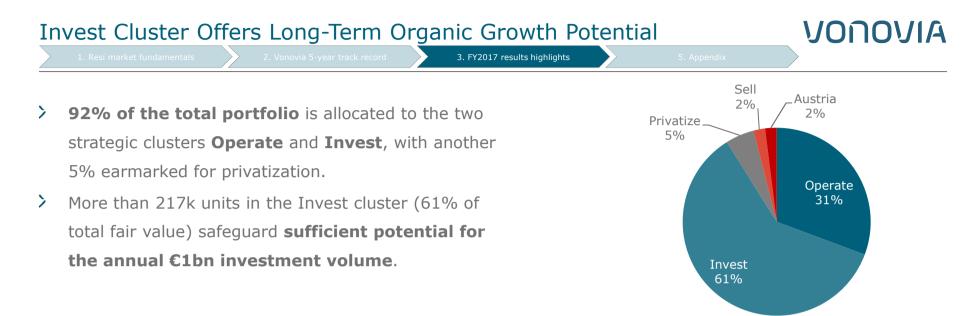
Driven by better operational performance and lower interest expenses, FFO1 per share was up 16.3% y-o-y for eop NOSH and up 18.4% for avg. NOSH<sup>1</sup>.

€m (unless indicated otherwise)	2017	2016	Delta
Adj. EBITDA Operations	1,224.2	1,094.0	11.9%
FFO interest expense	-287.5	-322.7	-10.9%
Current income taxes FFO 1	-15.9	-10.5	51.4%
FFO 1	920.8	760.8	21.0%
of which attributable to Vonovia shareholders	866.2	713.4	21.4%
of which attributable to Vonovia hybrid capital investors	40.0	40.0	0.0%
of which attributable to non-controlling interests	14.6	7.4	97.3%
Capitalized maintenance	-85.7	-71.6	19.7%
AFFO	835.1	689.2	21.2%
Adjusted EBITDA Sales	110.8	92.5	19.8%
Current income taxes Sales	-19.2	-29.5	-34.9%
FFO 2	1,012.4	823.8	22.9%
FFO 1 € / share (eop NOSH)	1.90	1.63	16.3%
FFO 1 € / share (avg. NOSH)	1.93	1.63	18.4%

# Adj. NAV per Share +25.2% VONOVIA 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

- Adj. NAV grew by 30.3% in 2017 driven by the operating performance, value-enhancing investments and yield compression.
- > In spite of the 4.1% increase in NOSH<sup>1</sup>, the **Adj. NAV per share is up 25.2% y-o-y**.

€m (unless indicated otherwise)	Dec. 31, 2017	Sep. 30, 2017	Jun. 30, 2017	Mar. 31, 2017	Dec. 31, 2016
Equity attributable to Vonovia's shareholders	15,080.8	13,784.0	13,368.0	12,706.5	12,467.8
Deferred taxes on investment properties and assets held for sale	6,185.7	5,385.4	5,307.9	4,827.4	4,550.3
Fair value of derivative financial instruments <sup>2</sup>	26.9	36.2	39.0	29.0	44.4
Deferred taxes on derivative financial instruments	-8.8	-10.3	-12.1	-14.3	-15.4
EPRA NAV	21,284.6	19,195.3	18,702.8	17,548.6	17,047.1
Goodwill	-2,613.5	-2,931.8	-2,931.8	-2,931.8	-2,718.9
Adj. NAV	18,671.1	16,263.5	15,771.0	14,616.8	14,328.2
			+30.3%		
EPRA NAV €/share	43.88	39.57	39.25	37.43	36.58
Adj. NAV €/share	38.49	33.53	33.10	31.18	30.75
<sup>1</sup> See page 59 for reconciliation of number of shares. <sup>2</sup> Adjusted for effects f	rom cross currency swaps.		+25.2%		

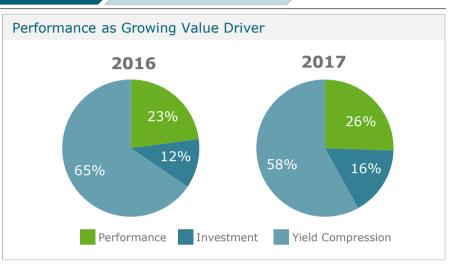


Dec. 31, 2017	Residential	In-place rent	Vacancy rate	Fair value	
	units	(€/sqm/month)	(%)	(€bn)	% of total
Operate	101,697	6.55	2.3	10,252.9	31%
Invest	217,317	6.22	2.2	20,255.1	61%
Subtotal Strategic Clusters	319,014	6.33	2.3	30,508.0	92%
Privatize	14,099	6.13	3.4	1,509.7	5%
Sell	11,473	4.93	8.4	535.6	2%
Total Germany	344,586	6.27	2.5	32,553.3	98%
Austria	2,058	6.51	2.9	551.6	2%
Total Residential Portfolio	346,644	6.27	2.5	33,104.9	100%

# Performance, Investments and Yield Compression Drove Values in 2017

AIVONOV

- Overall I-f-I value growth of €4,229m (14.8%) driven by
  - > Performance: €1,079m (3.0%)
  - Investments: €695m (3.0%)
  - Yield compression: €2,455m (8.9%)
- Above 10% yield compression in the Regional Markets Berlin (13.2%), Hanover (12.4%), Rhine Main (11.6%), Kiel (11.5%), Bremen (11.2%) and Southern Ruhr Area (10.5%)
- High single-digit yield compression in the Regional Markets of Leipzig (9.1%), Westphalia (8.7%) and Freiburg (8.2%)
- Lowest yield compression in the Regional Markets of Munich (4.3%), which continues to have the highest multiple, and Northern Ruhr Area (6.0%)



€m	FY2016	H1 2017	H2 2017	FY2017
Performance	862	393	686	1,079
Rental development		363	586	949
Investments		30	100	130
Investments	440	290	405	695
VTS margin	9	10	15	25
Investments (cash out)	431	280	390	670
Yield compression	2,470	830	1,625	2,455
Total	3,772	1,513	2,716	4,229

3. FY2017 results highlights

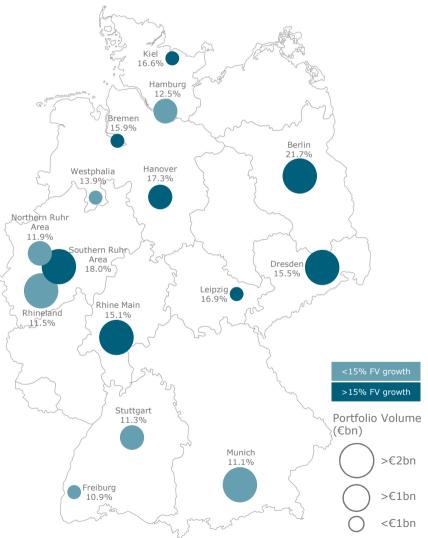
Note: Based on recent forecast of Vonovia calculations. Valuation results are subject to change during the ongoing valuation process.

#### VONOVIA Value Growth Across All Regional Markets 3. FY2017 results highlights Fair value **Regional Market** Multiple (€/sqm) (€m) (in-place rent) Berlin 5,182 2,035 26.6 13.2% Rhine Main Area (Frankfurt, 3,525 1,946 21.0 11.6% Darmstadt, Wiesbaden) Kiel Rhineland (Cologne, Düsseldorf, 16.6% 19.4 3,240 1,581 6.7% Bonn) Southern Ruhr Area (Dortmund, Hamburg 2,884 1,051 15.8 10.5% Essen, Bochum) 12.5% Dresden 2,875 1,230 18.1 6.5% Bremen 15.9% Hamburg 1,940 1,795 21.6 6.9% Berlin 1,820 Munich 2,771 29.1 4.3% 21.7% Stuttgart 1,742 1,893 20.9 7.6% Hanover Westphalia 17.3% 13.9% Northern Ruhr Area (Duisburg, 1,418 854 13.4 6.0% Gelsenkirchen) 1,374 18.5 12.4% Hanover 1,297 Northern Ruhr Area Kiel 992 1,192 17.2 11.5% 11.9% Southern Ruhn Bremen 914 1,230 19.1 11.2% Area Dresden 18.0% Leipzig 763 1,229 18.4 9.1% 15.5% Leipzig 16.9% Westphalia (Münster, Osnabrück) 667 1,075 16.0 8.7% Rhine Main 545 Rhineland Freiburg 1,949 23.0 8.2% 15.1% 11.5% Other Strategic Locations 2,103 1,404 18.4 6.5% **Total Strategic Locations** 31,908 1,495 19.8 8.9%

#### Top 3 Regional Markets by individual value drivers

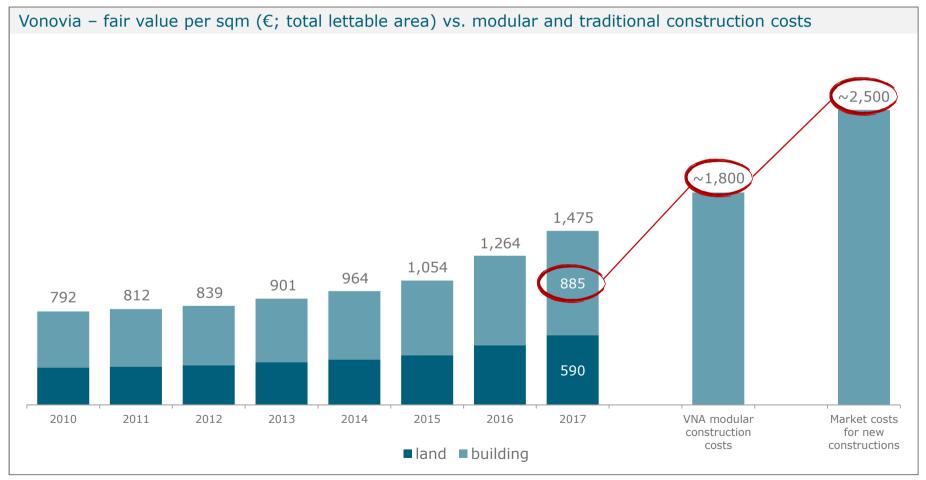
Yield compression	Modernization	Performance
Berlin (13.2%)	S. Ruhr Area (6.0%)	Leipzig (6.0%)
Hanover (12.4%)	Hanover (4.9%)	Dresden (5.9%)
Rhine Main (11.6%)	Westphalia (4.5%)	Berlin (5.8%)

#### Total fair value growth from performance, investments and yield compression



Conservative Valu	AIVONOVIA			
1. Resi market fundamentals	2. Vonovia 5-year track record	3. FY2017 results highlights	5. Appendix	

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. Source for market costs: Arbeitsgemeinschaft für zeitgemäßes Bauen e.V.

Compelling Guidance for 2018 Unchange         1. Resi market fundamentals       2. Vonovia 5-year track record       3. F	Appendix	
	2017 Actuals	2018 Guidance
Organic rent growth (eop)	4.2%	4.6% - 4.8%
Vacancy (eop)	2.5%	<2.5%
Rental Income (€m)	1,667.9	1,660 - 1,680
FFO1 (€m)	920.8	960 - 980
FFO1 (€/share)	1.90	1.98 - 2.02 <sup>2</sup>
Maintenance (€m)	346.2	~360
Modernization & Investments (€m)	778.6	~1,000
Privatization (number of units)	2,608	~2,300
FV step-up (Privatization)	32.7%	~30%
Non-core (number of units)	11,780	opportunistic
FV step-up (Sell Portfolio)	7.9%	>0%
Dividend/share	€1.32 <sup>1</sup>	~70% of FFO1

Note: Excluding any impact from potential Buwog acquisition. <sup>1</sup> Intended to be proposed to the 2018 Annual General Meeting. <sup>2</sup> Based on current number of 485.1m shares outstanding.

Appendix 1. Resi marke	et fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix	AIVONOVIA
PAGES	CONTENT	
26-44	FY2017 results	
45-46	Governance	
47	Buwog Update	
48	SNI Update	
49-50	Historic KPIs	
51	Capital Markets Day	
52	Wrap-up	
53	Modular construction	
54	Organizational chart	
55-57	Financing	
58	European metropolitan areas	
59-60	Germany at night	
61-63	Vonovia shares	
64-67	Sustainability	
68-71	Assessment on the most recent government plans regarding the housing market	
72	No correlation between German residential yields and interest rates	
73	Three layers of perception	
74	Financial calendar	
75-84	Pictures	

IFRS P&L			VONOVIA
1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results	i highlights	5. Appendix	
€m (unless indicated otherwise)	2017	2016	Delta
Income from property letting	2,344.0	2,170.0	+8.0%
Other income from property management	47.6	39.3	+21.1%
Income from property management	2,391.6	2,209.3	+8.3%
Income from disposal of properties	1,206.4	1,227.9	-1.8%
Carrying amount of properties sold	-1,136.0	-1,177.7	-3.5%
Revaluation of assets held for sale	81.1	52.0	+56.0%
Profit on disposal of properties	151.5	102.2	+48.2%
Net income from fair value adjustments of investment properties	3,434.1	3,236.1	+6.1%
Capitalized internal expenses	458.1	341.0	+34.3%
Cost of materials	-1,176.4	-1,081.9	+8.7%
Personnel expenses	-416.0	-353.8	+17.6%
Depreciation and amortization	-372.2	-27.0	>100%
Other operating income	116.2	105.3	+10.4%
Other operating expenses	-273.3	-249.5	+9.5%
Financial income	46.8	27.1	+72.7%
Financial expenses	-353.0	-449.0	-21.4%
Earnings before taxes	4,007.4	3,859.8	+3.8%
Income taxes	-1,440.5	-1,346.9	+6.9%
Profit for the period	2,566.9	2,512.9	+2.1%
Attributable to:			
Vonovia's shareholders	2,410.7	2,300.7	+4.8%
Vonovia's hybrid capital investors	40.0	40.0	
Non-controlling interests	116.2	172.2	-32.5%
Earnings per share (basic and diluted) in €	5.06	4.94	+2.4%

IFRS Balance Sheet (1/2 – Total Assets)		הסע	OVIA
1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 result	s highlights 5. Appendix		
€m (unless indicated otherwise)	Dec. 31, 2017	Dec. 31, 2016	Delta
Assets			
Intangible assets	2,637.1	2,743.1	-3.9%
Property, plant and equipment	177.6	115.7	+53.5%
Investment properties	33,182.8	26,980.3	+23.0%
Financial assets	698.0	585.9	+19.1%
Other assets	13.8	15.2	-9.2%
Deferred tax assets	10.3	19.6	-47.4%
Total non-current assets	36,719.6	30,459.8	+20.6%
Inventories	6.2	5.0	+24.0%
Trade receivables	234.9	164.4	+42.9%
Financial assets	0.5	153.2	-99.7%
Other assets	98.4	102.7	-4.2%
Income tax receivables	47.9	34.6	+38.4%
Cash and cash equivalents	266.2	1,540.8	-82.7%
Assets held for sale	142.6	61.6	>100%
Total current assets	796.7	2,062.3	-61.4%
Total assets	37,516.3	32,522.1	+15.4%

IFRS Balance Sneet (2/2 – Iotal Equity and Liab         1. Resi market fundamentals       2. Vonovia 5-year track record       3. FY2017 results highlight			IUVIA
	D	Dec. 21, 2016	Dalla
€m (unless indicated otherwise)	Dec. 31, 2017	Dec. 31, 2016	Delta
Equity and liabilities Subscribed capital	485.1	466.0	+4.1%
Capital reserves	5,966.3	5,334.9	
Retained earnings	8,471.6	6,665.4	+11.8% +27.1%
Other reserves	157.8	1.5	>100%
Total equity attributable to Vonovia's shareholders	15,080.8	12,467.8	+21.0%
Equity attributable to voltovia's shareholders	1,001.6	1,001.6	0.0%
Total equity attributable to Vonovia's shareholders and hybrid capital investors	16,082.4	13,469.4	+ <b>19.4%</b>
	608.8	419.0	+45.3%
Non-controlling interests	16,691.2	13,888.4	+43.3%
Total equity Provisions	607.2	607.9	-0.1%
Trade payables	2.4	1.3	+84.6%
Non derivative financial liabilities	12,459.4	11,643.4	+04.0%
Derivatives	8.7	19.1	-54.5%
Liabilities from finance leases	94.7	94.7	0.0%
Liabilities to non-controlling interests	24.9	9.9	>100%
Other liabilities	65.3	83.3	-21.6%
Deferred tax liabilities	5,322.6	3,769.5	+41.2%
Total non-current liabilities	18,585.2	16,229.1	+14.5%
Provisions	376.5	370.8	+1.5%
Trade payables	130.7	138.8	-5.8%
Non derivative financial liabilities	1,601.1	1,727.6	-7.3%
Derivatives	4.4	57.5	-92.3%
Liabilities from finance leases	4.6	4.5	+2.2%
	9.0	2.7	
Liabilities to non-controlling interests	0.4	-	>100%
Income tax liabilities	113.2	102.7	-
Other liabilities	2,239.9	2,404.6	+10.2%
Total current liabilities Total liabilities	20,825.1	18,633.7	-6.8%
	37,516.3	32,522.1	+11.8%
Total equity and liabilities	37,510.5	52,322.1	+15.4%

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

VONOVIA

Reconciliation IFRS Profit to FFO         1. Resi market fundamentals       2. Vonovia 5-year track record       3. FY20	17 results highlights	5. Appendix	AIVONC
€m (unless indicated otherwise)	2017	2016	Delta
IFRS PROFIT FOR THE PERIOD	2,566.9	2,512.9	+2.1%
Financial result <sup>1</sup>	326.3	433.0	-24.6%
Income taxes	1,440.5	1,346.9	+6.9%
Depreciation and amortization	372.2	27.0	>100%
Net income from fair value adjustments of investment properties	-3,434.1	-3,236,1	+6.1%
= EBITDA IFRS	1,271.8	1,083.7	+17.4%
Non-recurring items	86.9	94.5	-8.0%
Total period adjustments from assets held for sale	-10.7	17.9	>-100%
Financial income from investments in other real estate companies	-13.0	-9.6	+35.4%
= ADJUSTED EBITDA	1,335.0	1,186.5	+12.5%
Adjusted EBITDA Sales	-110.8	-92.5	+19.8%
= ADJUSTED EBITDA OPERATIONS	1,224.2	1,094.0	+11.9%
FFO interest expense <sup>2</sup>	-287.5	-322.7	-10.9%
Current income taxes FFO1	-15.9	-10.5	+51.4%
= FF01	920.8	760.8	+21.0%
Capitalized maintenance	-85.7	-71.6	+19.7%
= AFFO	835.1	689.2	+21.2%
Current income taxes Sales	-19.2	-29.5	-34.9%
FFO2 (FFO1 incl. Adjusted EBITDA Sales / Current income taxes Sales)	1,012.4	823.8	+22.9%
FFO1 per share in € (eop NOSH)	1.90	1.63	+16.3%
AFFO per share in € (eop NOSH)	1.72	1.48	+16.4%
Number of shares (million) eop	485.1	466.0	+4.1%

<sup>1</sup> Excluding income from investments. <sup>2</sup> Including financial income from investments in other real estate companies.

IFRS Cash Flow 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix				
€m	2017	2016	Delta	
Cash flow from operating activities	946.0	828.9	14.1%	
Cash flow from investing activities	-1,350.1	416.4	-	
Cash flow from financing activities	-870.5	-2,812.4	-69.0%	
Net changes in cash and cash equivalents	-1,274.6	-1,567.1	-18.7%	
Cash and cash equivalents at the beginning of the period	1,540.8	3,107.9	-50.4%	
Cash and cash equivalents at the end of the period	266.2	1,540.8	-82.7%	

Income from Property Management           1. Resi market fundamentals         2. Vonovia 5-year track record	3. FY2017 results highlights	5. Appendix	AIVONOVIA
€m (unless indicated otherwise)	2017	2016	Delta
Rental income	1,672.1	1,542.5	8.4%
Ancillary cost	671.9	627.5	7.1%
Income from Property Letting	2,344.0	2,170.0	8.0%
Other income from property management	47.6	39.3	21.1%
Income from property management	2,391.6	2,209.3	8.3%

Rental income under IFRS definition. Includes €4.2m of rental income attributable to Value-add Business.

Cost of Materials         1. Resi market fundamentals       2. Vonovia 5-year track record	3. FY2017 results highlights	5. Appendix	AIVONOVIA
€m (unless indicated otherwise)	2017	2016	Delta
Expenses for ancillary costs	625.6	611.9	+2.2%
Expenses for maintenance	446.8	387.3	+15.4%
Other cost of purchased goods and services	104.0	82.7	+25.8%
Total cost of materials	1,176.4	1,081.9	+8.7%





# Sales – Steady Cash Flow at Attractive Margins VONOVIA 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

- > In spite of value growth of the portfolio, privatization margins are still above 30% and the margin on noncore sales increased to 7.9% from 5.4% in 2016.
- > The fair value step-up in privatization excl. smaller package deals was 35.0%.

	Privatize Por	<u>tfolio</u>	Sell Portfo	olio	TOTAL		
€m (unless indicated otherwise)	2017	2016	2017	2016	2017	2016	
		_		_			
Residential units sold	2,608	2,701	9,172	23,930	11,780	26,631	
Income from disposals	305.9	267.4	900.5	960.5	1,206.4	1,227.9	
Fair value of disposals	-230.6	-196.3	-834.9	-911.4	-1,065.5	-1,107.7	
Adj. profit from disposals	75.3	71.1	65.6	49.1	140.9	120.2	
Fair value step-up (%)	32.7%	36.2%	7.9%	5.4%			

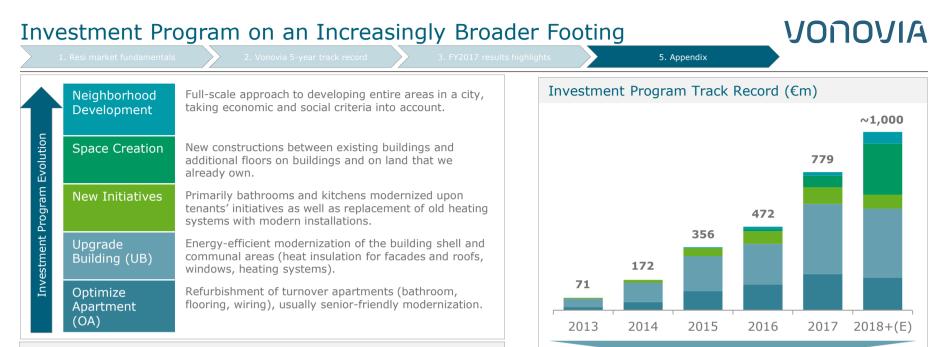
Selling costs	-30.1	-27.7
Adj. EBITDA Sales	110.8	92.5

# All Strategic Markets Show Upward Potential

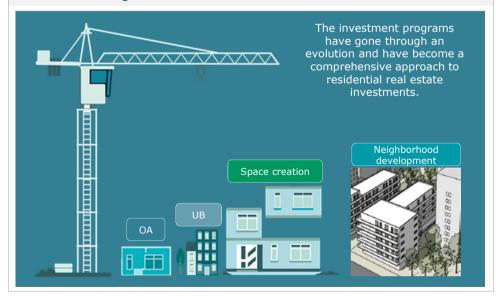
1. Resi market fundamental	ls	2. Vonovia	. Vonovia 5-year track rec		3. FY	2017 results h	ghlights		5. Appendix		,	
	Fair va	ilue			_			In-place rent			Average rent	Average rent
Regional Market	(€m)	(€/sqm)	Residential units	Living area ('000 sqm)	Vacancy (%)	Total (p.a., €m)	Residential (p.a., €m)(€,	Residential /sqm/month)	Organic rent growth (%)	Multiple (in-place rent)		
Berlin	5,182	2,035	38,664	2,449	1.5	195	184	6.35	3.9	26.6	4.3	51.2
Rhine Main Area (Frankfurt, Darmstadt, Wiesbaden)	3,525	1,946	27,921	1,781	1.4	168	162	7.70	3.8	21.0	3.4	41.7
Rhineland (Cologne, Düsseldorf, Bonn)	3,240	1,581	29,753	1,992	2.6	167	159	6.82	3.8	19.4	3.1	27.3
Southern Ruhr Area (Dortmund, Essen, Bochum)	2,884	1,051	43,900	2,682	2.9	183	176	5.64	4.2	15.8	2.9	28.1
Dresden	2,875	1,230	38,563	2,193	2.4	159	148	5.79	5.7	18.1	3.7	35.4
Hamburg	1,940	1,795	16,534	1,048	2.0	90	85	6.86	5.2	21.6	3.3	42.4
Munich	1,820	2,771	9,708	639	0.8	62	59	7.71	3.1	29.1	4.8	51.0
Stuttgart	1,742	1,893	14,152	891	1.5	83	79	7.53	2.4	20.9	3.1	39.8
Northern Ruhr Area (Duisburg, Gelsenkirchen)	1,418	854	26,532	1,640	3.4	105	102	5.37	3.6	13.4	2.5	22.7
Hanover	1,297	1,374	14,592	926	2.7	70	67	6.21	5.2	18.5	2.9	39.1
Kiel	992	1,192	13,801	802	1.8	58	55	5.81	5.7	17.2	3.2	40.1
Bremen	914	1,230	11,905	722	2.9	48	45	5.42	3.2	19.1	3.6	29.3
Leipzig	763	1,229	9,174	588	4.0	41	39	5.74	2.6	18.4	2.9	23.1
Westphalia (Münster, Osnabrück)	667	1,075	9,471	613	1.9	42	41	5.64	4.1	16.0	3.0	35.3
Freiburg	545	1,949	4,048	277	0.9	24	23	6.98	3.8	23.0	4.1	44.6
Other Strategic Locations	2,103	1,404	23,172	1,464	2.3	114	110	6.40	5.2	18.4	3.3	37.7
Total Strategic Locations	31,908	1,495	331,890	20,705	2.3	1,608	1,534	6.32	4.2	19.8	3.4	35.6

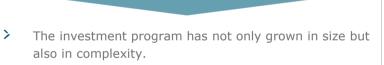
**NOUON** 

Note: Difference between number of resi units in strategic locations and number of resi units in strategic clusters is due to privatization units that are included in the strategic locations but not in the strategic clusters.



#### Investment Program Evolution





- While a yield-to-cost calculation is appropriate for investments that generate relatively quick pay-back periods, such as OA or UB, the larger investments space creation and neighborhood development generate value only over a longer period of time.
- For these types of projects, an IRR calculation is more adequate and after using it for internal reporting purposes already from the program inception, we will now use this metric in the external reporting as well.
- The target IRR for the overall investment program is >8%.
- OA and UB will continue to be measured against a 7% yield-to-cost target.



- Vonovia gave investors the choice between a cash dividend and a scrip dividend for the first time in the context of the 2017 AGM.
- > Nearly half of all shareholders opted for the scrip dividend.
- For the 2018 AGM to be held on May 9, 2018, in Bochum, Vonovia intends to once again propose an optional scrip dividend, provided that the share price is not materially below the Adj. NAV per share when the final decision is taken.
- The specifics will be laid out in the convening notice and related documentation to be published on or before March 29.
- > The final decision on whether to offer a scrip dividend alternative will be taken by the Supervisory Board just before the AGM.



- As part of the preparation of the IFRS annual accounts, an impairment test was conducted to test if any of the goodwill on the balance sheet needs to be impaired.
- > The 2017 WACC (post tax) was 3.60% after 3.10% for 2016.
- > The increase in WACC is primarily driven by a higher base rate and lower debt leverage.
- > The higher WACC results in an impairment of the full goodwill amount allocated to Vonovia's Region East (predominantly Berlin) of €337m.
- > No impairment in any other region.
- A WACC level similar to last year would have resulted in the same headroom as last year, supporting the view that the value growth seen in 2017 is supported by operating cash flow growth.

No impact on Adj. NAV, as the impairment only affects the goodwill and hence the EPRA NAV

# Valuation Results and Parameters

- Value growth results in compression of net initial yield to 3.6% (after 4.0% for YE 2016)
- Future rent growth potential is evidenced by rent growth CAGR

Gross yield	5.7%	5.1%
Multiple (in-place rent)	17.6x	19.7x
Fair Value €/sqm	1,264	1,475
Valuation Parameters (average over Germany)	YE2016	YE2017
Market rent (€/sqm)	6.66	6.96
Market rent growth p.a.	1.2%	1.3%
Rent growth CAGR 10yrs. (excl. investment)	2.0%	2.1%
Stabilized vacancy rate	2.4%	2.1%
Management cost residential	255	259
Maintenance cost residential (€/sqm)	13.66	13.81
Discount rate	5.5%	5.2%
Cap rate	4.3%	3.9%

esults highlights

Valuation Results

Net Initial Yield

5. Appendix

YE2016

4.0%

VOUOAI

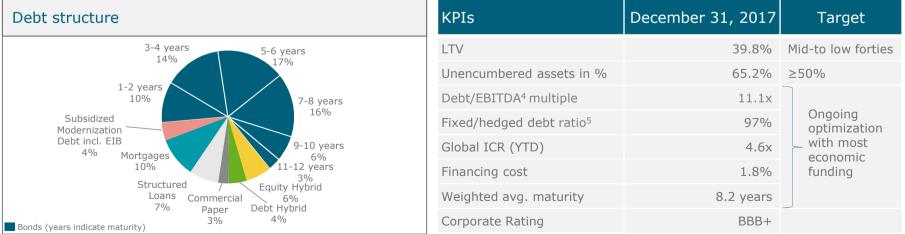
YE2017

3.6%

5. Appendix

- > Vonovia expects to perform a **portfolio valuation update as per June 30, 2018**, as
  - > ongoing value growth can be observed in many markets throughout Germany;
  - > Vonovia's internal accounting policies call for an interim valuation at the end of Q2 if the expected value shift is considered material; and
  - > current market observations suggest a significant value uplift
- For practical reasons and similar to Q2 2017, the valuation exercise will not cover the entire portfolio but a meaningful subset.
- > The **valuation scope** is currently envisaged to include
  - > The 20 largest German cities by fair value
  - > Additional locations for which meaningful value growth is expected
  - > Vienna





<sup>1</sup> incl. Jan 2018 Bonds and secured debt prolongation <sup>2</sup> Average financing cost of debt maturing in the relevant year. <sup>3</sup> Weighted avg. financing costs excl. Equity Hybrid. Including Equity Hybrid avg. interest rate of debt maturing in 2021 is 3.6%. <sup>4</sup> Net Debt as of December 31 over Q4 2017 EBITDA Operations annualized. <sup>5</sup> excl. Equity Hybrid.

Company Presentation April 2018



## **Corporate Investment grade rating**

Rating agency	Rating	Outlook	Last Update
Standard & Poor's	BBB+	Stable	19 Dec 2017

## 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%	$4.580\%^{1}$	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%	1.5000%	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%	2.2500%	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 012 (EMTN)	2 years 0.380%+3M EURIBOR	DE000A185WC9	€ 500m	100.000%	0.140% hedged	13 Sep 2018	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 0.350%+3M EURIBOR	DE000A19SE11	€ 500m	100.448%	0.350%+3M EURIBOR	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	100.805%	1.500%	14 Jan 2028	BBB+

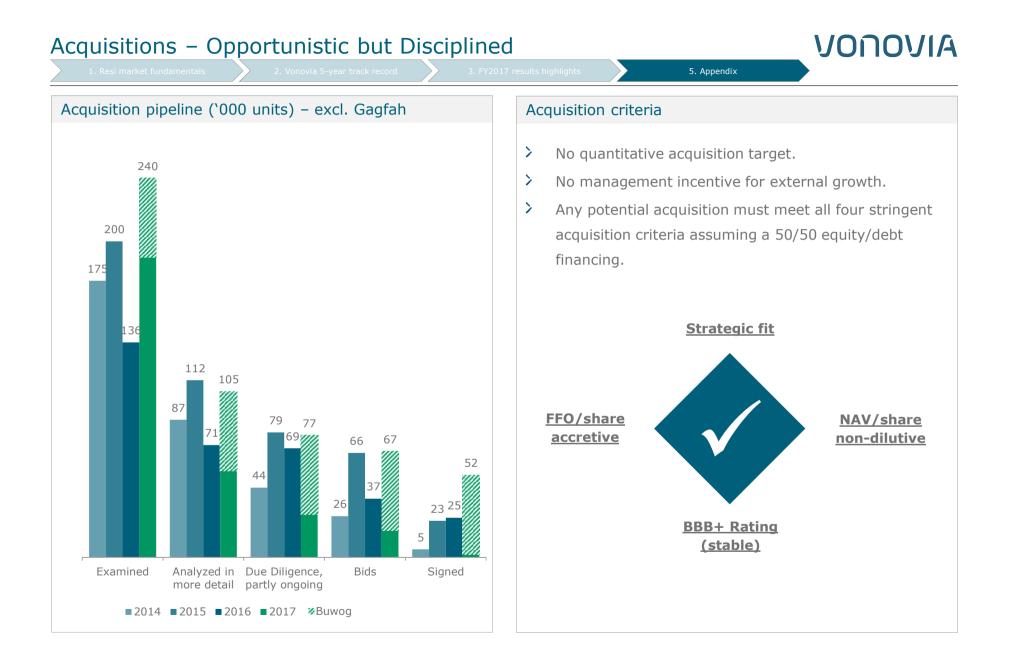
<sup>1</sup> EUR-equivalent Coupon

# Covenants and KPIs (December 31, 2017)

5. Appendix

> Bond KPIs	Covenant	Level	Dec 31, 2017
	LTV Total Debt / Total Assets	<60%	38%
	Secured LTV Secured Debt / Total Assets	<45%	8%
	ICR Last 12M EBITDA / Last 12M Interest Expense		4.6x
	<b>Unencumbered Assets</b> Unencumbered Assets / Unsecured Debt	>125%	234%

> Rating KPIs	Covenant	Level (BBB+)
	Debt to Capital	<60%
	Total Debt / Total Equity + Total Debt	<00%
	ICR	>1.80x
	Last 12M EBITDA / Last 12M Interest Expense	>1.00X



Following the passing of Vonovia SE's former Chairman of the Supervisory Board, Dr. Wulf H. Bernotat, in late August 2017, Supervisory Board Member Prof. Dr. Edgar Ernst had been appointed Interim Chairman until the next Annual General Meeting.

VONOVIA

5. Appendix

- The next AGM is scheduled for May 9, 2018, in Bochum, and Vonovia's Supervisory Board will propose Jürgen Fitschen as new member of the Supervisory Board. Following an approval by the AGM, Jürgen Fitschen is expected to be elected as the new Chairman of the Supervisory Board.
- As previously announced, if the tender offer for Buwog AG is successful, Vitus Eckert, currently Chairman of Buwog AG's Supervisory Board, will be proposed as new member to the Supervisory Board of Vonovia SE.

- As announced on August 4, 2017, Gerald Klinck will not seek an extension of his contract as Member of the Management Board of Vonovia SE and leave the Board upon termination of his current contract following the Annual General Meeting on May 9, 2018.
- As announced on January 23, 2018, Helene von Roeder has been appointed to Vonovia SE's Management Board and will take over Gerald Klinck's responsibilities during this year.
- CFO Dr. Stefan Kirsten will step down from Vonovia's Management Board at his own request, effective from the end of the AGM on May 9, 2018. Dr. Kirsten wants to enable the company to take the next steps in its development under the financial leadership of Helene von Roeder as CFO of Vonovia SE, who will assume joint responsibility for all financial functions. Dr. Kirsten will maintain ties with Vonovia as a supervisory board member of various relevant holdings as well as in a consulting role.
- As previously announced, if the tender offer for Buwog AG is successful, **Daniel Riedl**, Chairman of Buwog AG's Management Board, will join Vonovia SE's Management Board at the next Annual General Meeting.

# Update on Tender Offer for Buwog

3. FY2017 results highlig

VONOVIA

5. Appendix

Transaction timeline

18 Dec 2017	Announcement of the intention to make a voluntary take-over offer
05 Feb 2018	Publication of the offer document
06 Feb 2018	Start of the initial acceptance period
12 Mar 2018	End of the initial acceptance period
15 Mar 2018	Publication of final result of initial acceptance period by Vonovia
16 Mar 2018	Publication of final result of initial acceptance period in the official gazette (Wiener Zeitung)
16 Mar 2018	Start of the additional acceptance period
26 Mar 2018	Payment and settlement (relating to acceptance during initial acceptance period)
07 May 2018	Consolidated Q1 reporting incl. Buwog
18 Jun 2018	End of the additional acceptance period

Assuming a tender ratio of at least 50% plus 1 share during the initial acceptance period and hence a successful transaction, Vonovia would take control just a few days prior to the end of the first quarter. In this case, for the release of Vonovia's Q1 results, Buwog would be consolidated in terms of balance sheet numbers but not in terms of income and cash flow statements.

While a detailed guidance for Vonovia including Buwog would not be possible at that point, we would be looking to provide the market with our best estimate for 2018 FFO 1.

# with investment opportunities. So far, these opportunities are mostly small in scale

>

Update on Cooperation with SNI

- > Cooperation with cdc habitat in France (formerly "SNI"):
  - > Benchmarking workshops carried out between November 2017 and January 2018
  - > Basics of operations considered very similar (e.g. demand profile and type of tenants)
  - > Supply side structures differ in the regulation of social housing
  - Vonovia more advanced in industrialization and efficiencies in leveraging its platform (Value-add Business)

Since indicating international interest Vonovia has seen a steady level of interest from Europe-wide brokers

VONOVIA

5. Appendix

> Next steps: Detailed areas of co-operation currently being considered

## Vonovia will continue to explore opportunities in large European metropolitan areas in line with our established acquisition criteria

Historical Key Figures (1/2)					OVIA
1. Resi market fundamentals 2. Vonovia 5-year track record	3. FY2017 results highlights		5. Appendix		
Financial Key Figures (€m, unless stated otherwise)	2017	2016	2015	2014	2013
Rental income	1,667.9	1,538.1	1,414.6	789.3	728.0
Adjusted EBITDA Operations	1,224.2	1,094.0	957.6	503.4	442.4
Adjusted EBITDA Rental	1,150.0	1,046.2	924.4	482.6	433.0
Adjusted EBITDA Value-add Business	102.1	57.0	37.6	23.6	10.5
Adjusted EBITDA Other	-27.9	-9.2	-4.4	-2.8	-1.1
Income from disposal of properties	1,206.4	1,227.9	726.0	287.3	353.5
Adjusted EBITDA Sales	110.8	92,5	71.1	50.1	27.7
Adjusted EBITDA	1,335.0	1,186.5	1,028.7	553.5	470.1
EBITDA IFRS	1,271.8	1,083.7	838.4	500.3	431.0
FF01	920.8	760.8	608.0	286.6	223.5
thereof attributable to Vonovia shareholders	866.2	713.4	555.5	275.1	218.4
thereof attributable to Vonovia hybrid capital investors	40.0	40.0	33.0	-	-
thereof attributable to Non-controlling interests	14.6	7.4	19.5	11.5	5.1
FF02	1,012.4	823.8	662.1	336.7	251.2
AFFO	835.1	689.2	520.5	258.3	203.5
FFO1 per share in €	1.90	1.63	1.30	1.00	0.95
Income from fair value adjustments of investment properties	3,434.1	3,236.1	1,323.5	371.1	553.7
EBT	4,007.4	3,859.8	1,734.5	589.1	689.6
Profit for the period	2,566.9	2,512.9	994.7	409.7	484.2
Cash flow from operating activities	946.0	828.9	689.8	453.2	259.6
Cash flow from investing activities	-1,350.1	416.4	-3,239.8	-1,177.9	171.3
Cash flow from financing activities	-870.5	-2,812.4	4,093.1	1,741.7	-353.2
Maintenance and modernization	1,124.8	792.4	686.3	345.5	228.4
thereof for maintenance expenses and capitalized maintenance	346.2	320.1	330.7	173.8	157.6
thereof for modernization	778.6	472.3	355.6	171.7	70.8

The key figures of prior years have been adjusted to match the definitions of the 2017 fiscal year. The key figures per share are based on the shares carrying dividend rights on the corresponding reporting date. Values for 2013 and 2014 are TERP-adjusted.

Historical Key Figures (2/2)				_ הסע	OVIA
1. Resi market fundamentals 2. Vonovia 5-year track record			5. Appendix		
Key Balance Sheet Figures ( $\in$ m, unless stated otherwise)	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015	Dec 31, 2014	Dec 31, 2013
Fair value of real estate portfolio	33,436.3	27,115.6	24,157.7	12,759.1	10,326.7
Adjusted NAV	18,671.1	14,328.2	11,273.5	6,472.0	5,123.4
Adjusted NAV per share in €	38.49	30.75	24.19	22.67	21.74
LTV (%)	39.8	41.6	46.9	49.3	48.1
Non-Financial Key Figures	2017	2016	2015	2014	2013
Number of units managed	409,275	392,350	397,799	232,246	201,737
thereof own apartments	346,644	333,381	357,117	203,028	175,258
thereof apartments owned by others	62,631	58,969	40,682	29,218	26,479
Number of units bought	24,847	2,815	168,632	31,858	0
Number of units sold	11,780	26,631	15,174	4,081	6,720
thereof Privatize	2,608	2,701	2,979	2,238	2,576
thereof Sell	9,172	23,930	12,195	1,843	4,144
Vacancy rate (in %)	2.5	2.4	2.7	3.4	3.5
Monthly in-place rent in €/sqm	6.27	6.02	5.75	5.58	5.40
Monthly in-place rent organic growth (%)	4.2	3.3	2.9	2.5	1.9
Number of employees	8,448	7,437	6,368	3,850	2,935
EPRA Key Figures	2017	2016	2015	2014	2013
EPRA NAV	21,284.6	17,047.1	13,988.2	6,578.0	5,123.4
EPRA NAV per share in €	43,88	36.58	30.02	23.04	21.74
EPRA NNNAV	14,657.5	12,034.4	9,739.8	-	-
EPRA Earnings	573.1	450.0	329.2	-	-
EPRA Net Initial Yield in %	3.7	4.1	4.5	-	-
EPRA "topped-up" Net Initial Yield in %	3.7	4.1	4.5	-	-
EPRA Vacancy rate in %	2.3	2.2	2.5	3.0	3.1
EPRA Cost Ratio (incl. direct vacancy costs) in %	26.2	28.4	31.9	-	-
EPRA Cost Ratio (excl. direct vacancy costs) in %	24.7	27.0	30.2	-	-

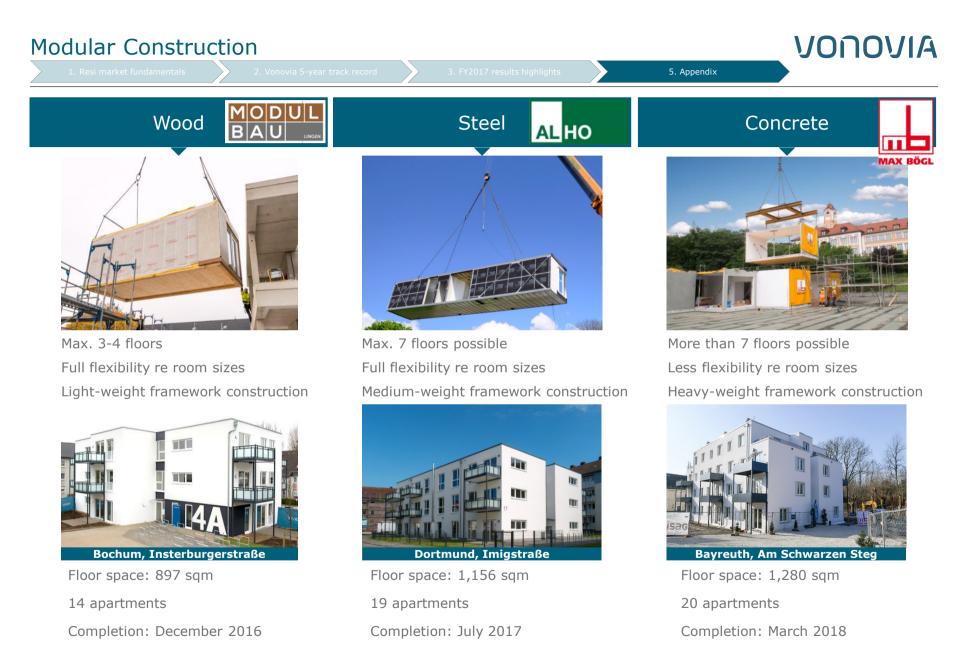
The key figures of prior years have been adjusted to match the definitions of the 2017 fiscal year. The key figures per share are based on the shares carrying dividend rights on the corresponding reporting date. Values for 2013 and 2014 are TERP-adjusted.



- > Vonovia's 2018 Capital Markets Day will take place in Berlin
- > Agenda
  - > June 4: Dinner at ca. 20:00
  - > June 5:
    - > Presentations and Workshops
      - > Neighborhood Development Project in Berlin Tegel
      - > Development Business
      - > Value-add Business: Energy
    - > Property Tour
  - > CMD will finish in time for flights out of Berlin starting at around 18:30
- > An invitation including the agenda, the exact location and the registration link will be sent out in April.
- Following the CMD, we will be starting our bi-annual perception study and appreciate your cooperation in case you are contacted by h2glenfern.

5. Appendix

- The successful development since the IPO continued in 2017, resulting in a compelling 5-year positive track record.
- In light of the sustainable growth trajectory on which we have put the company, we remain confident in our outlook for 2018 and beyond.
- Market fundamentals continue to be supportive.
- Q1 reporting on May 3 with first estimate on FFO 1 contribution from Buwog if tender offer is successful.
- Changes in the Supervisory Board and Management Board represent a smooth transition that safeguards the long-term stewardship of the company.



Costs: ~€1,800 per sqm

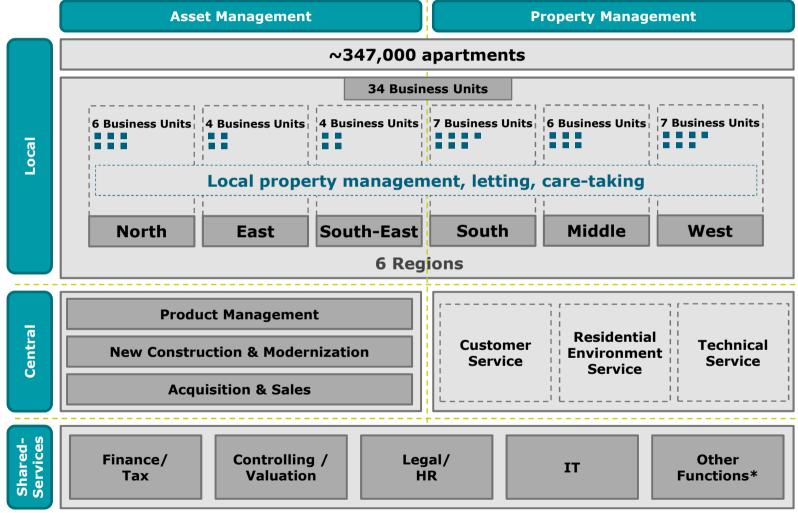
page 53

Costs: €1,900 per sqm

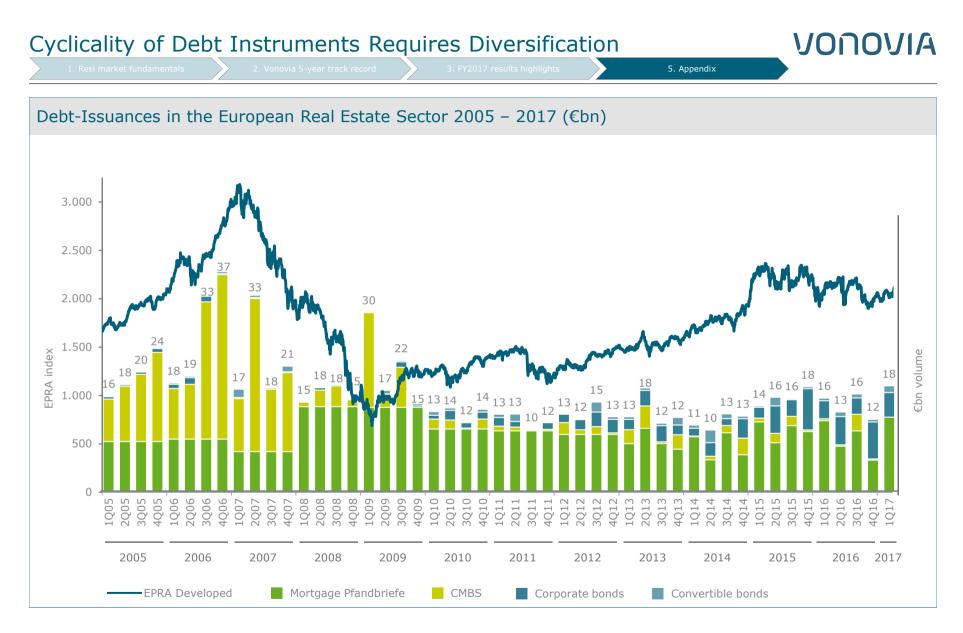
Costs: ~€1,850 per sqm

Company Presentation April 2018





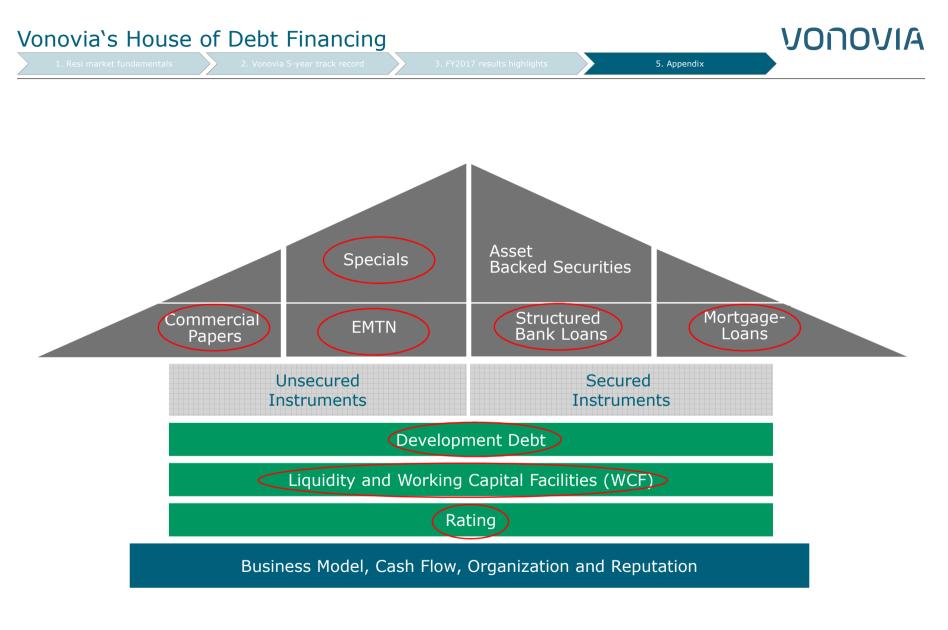
\*Other shared services: Internal Audit, Communications, Central Procurement, Insurances, Investor Relations, Accounting



Sources: Dealogic, Bloomberg, Broker research, Deutsche Bundesbank, Verband deutscher Pfandbriefbanken (VdP), FactSet

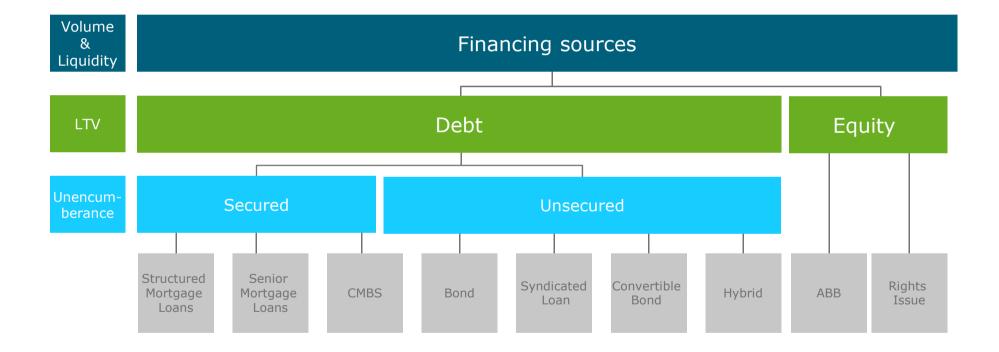
1 Quarterly Mortgage Pfandbrief issuances for 2005-2012 based on equal distribution of annual issuances based on VdP data; 2013 -1Q2017 figures based on Deutsche Bundesbank

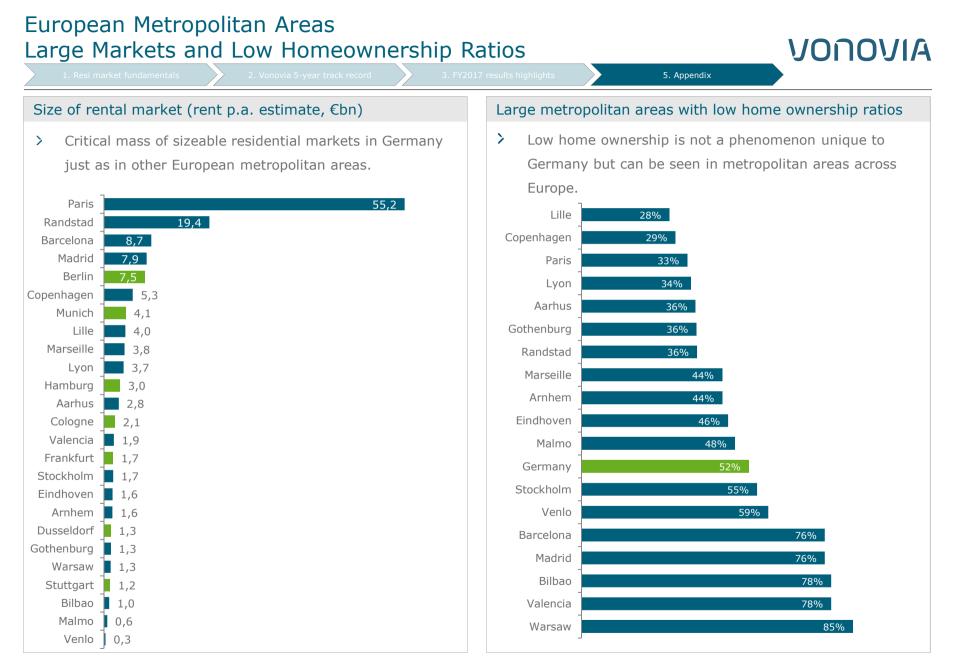
2 Corporate bond issuance volume includes senior unsecured and hybrid bonds  $\geq$   $\in$ 50m, issued in EUR in Western Europe



Currently used by Vonovia

Decision Tree Financing Source	es			VONOVIA
1. Resi market fundamentals 2. Vonovia 5-year track re	ecord	3. FY2017 results highlights	5. Appendix	

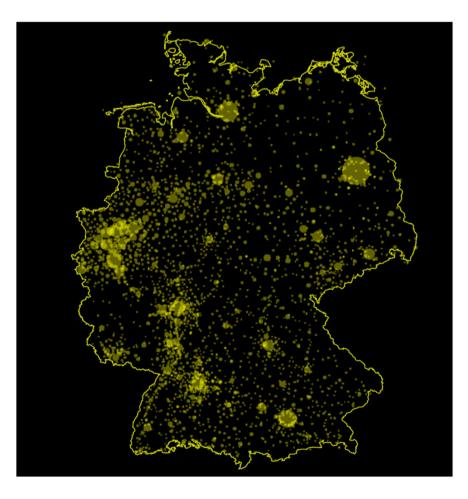




Sources: Federal Statistics Office, Eurostat, JLL Research, own calculations

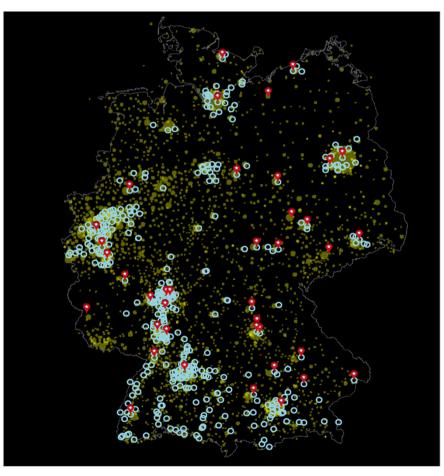


## Illustration of Germany at Night



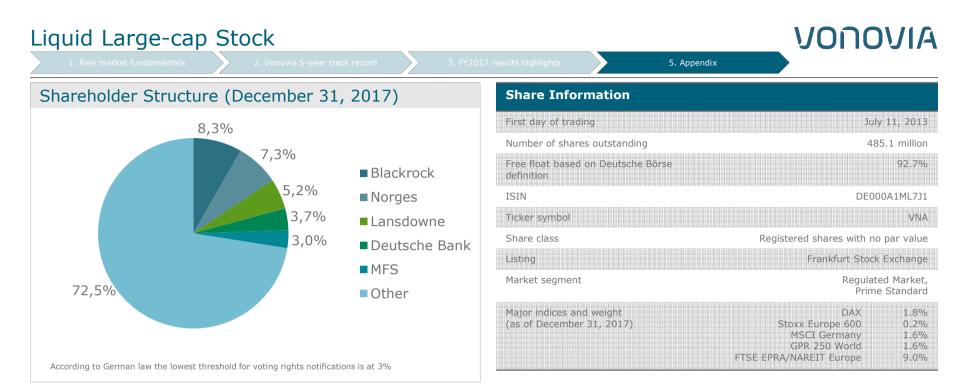


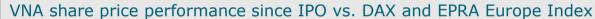
## Illustration of Germany at Night

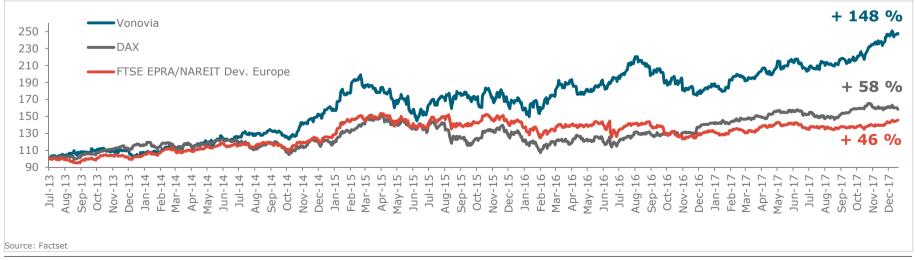


Note: Vonovia Strategic Portfolio

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

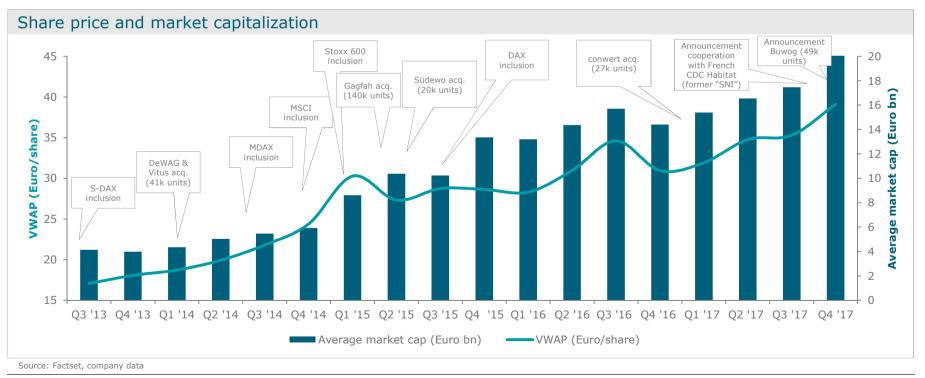








- Seed portfolios of today's Vonovia have origin in public housing provided by government, large employers and similar landlords with a view towards offering affordable housing.
- At beginning of last decade, private equity invested in German residential on a large scale including into what is Vonovia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



# Reconciliation of Shares Outstanding VONOVIA 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

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	

The number of outstanding shares is always available at <a href="http://investoren.vonovia.de/websites/vonovia/English/2010/key-share-information.html">http://investoren.vonovia.de/websites/vonovia/English/2010/key-share-information.html</a>

# Sustainability at a Glance

1. Resi market fundamer

2. Vonovia 5-year track i

FY2017 results highlights

5. Appendix

**NOUDA** 

## Integrated element of Vonovia's business model

- With ca. 350,000 apartments throughout Germany, Vonovia is the country's leading residential real estate company. This role in the housing landscape imposes on us a particular responsibility to actively shape the development of the housing industry.
- > We aim to live up to the responsibility by pursuing a continuous dialogue with our stakeholder groups, and by considering social and ecological issues in our core activities. A key priority for us is to use our business model and our holistic approach to help resolve the most urgent challenges in the housing industry and make a positive contribution to social development.

## Sustainability reporting at Vonovia

- > Separate Sustainability Reporting Unit at Vonovia.
- Start Sustainability Reporting in 2015 with our first sustainability report published in 2016, based on GRI G4 guidelines.
- Publication of second Sustainability Report in 2017, based on the new GRI standards (published in October 2016), report is available at:http://investoren.vonovia.de/websites/vonovia/English/7033/sustainability.html
- > Vonovia received the EPRA Silver Award for the 2016 Sustainability Report



Sustainability Report for 2017 to be published in June 2018

# Sustainability Approach VONOVIA 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

"Our sustainability approach results directly from our business model, on the one hand, and also addresses developments that influence our business, or which we can influence, on the other."

## Vonovia's Sustainability approach



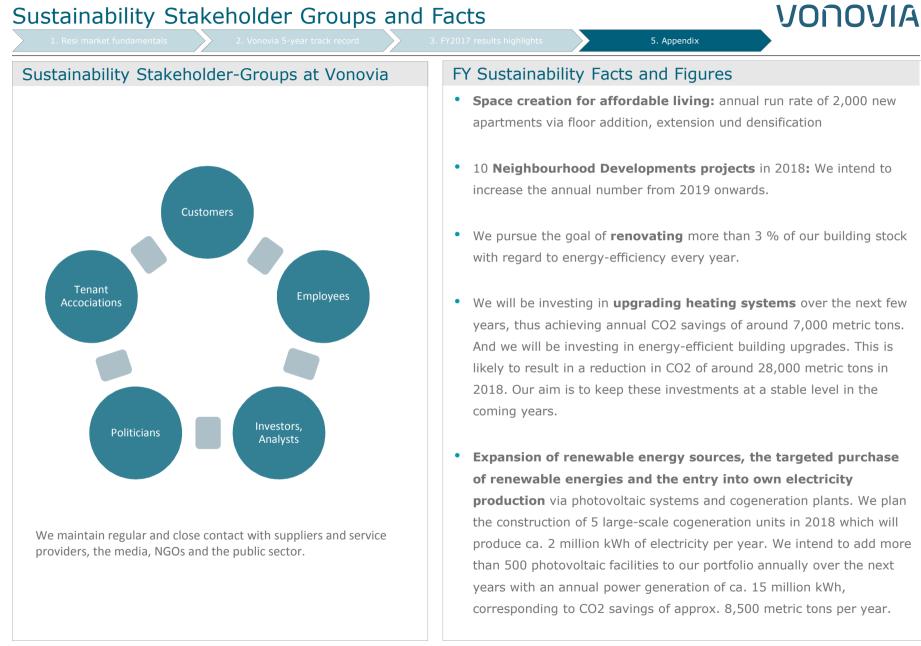
Vonovia implements extensive measures to maintain and develop its portfolio, in particular, measures to improve the **energy** efficiency of the stock. This allows us to make a significant contribution to protecting our climate. At the same time, well insulated apartments increase efficiency and simultaneously reduce ancillary expenses for our customers.



• A nice, stable environment is part of a good residential atmosphere. Therefore, we become involved beyond our buildings and set trends with cities, companies and city planners, as well as with associations, initiatives and, last but not least, with our local customers for the **sustainable development of entire neighborhoods**.

## Sustainability: Establishment within Vonovia

- At the highest level, the **CEO** of Vonovia SE is responsible for sustainability.
- The **Audit Committee** in particular handles sustainability on behalf of the Supervisory Board.
- Vonovia established a new function, **sustainability specialist**, in 2017, in order to ensure that sustainability issues can be tackled in a more structured, cross-departmental manner and to expand our dialogue with stakeholders.



# Sustainability Key Topics

1. Resi market fundamenta

2. Vonovia 5-year tracl

3. FY2017 results highlight

5. Appendix

## Materiality Matrix



#### Sustainable Corporate Governance:

- Long-term growth: Basis to Vonovia Business Model.
- Compliance and Anti-Corruption: Implemented Code of Conduct within Vonovia.
- Adherence to Labor, Social and Environmental Standards in the Supply Chain: Business Partner Code for subcontractors and suppliers: e.g. ruling out of illicit employment, payment of at least legal minimum wage.

#### Society and Customer Interests:

- CSI (Customer Satisfaction Index) is an element used in determining Management Board remuneration.
- Neighbourhood development: not only maintenance, modernization, shaping the residential environment, but also supporting social or cultural facilities or educational institutions
- Social Commitment: several initiatives, e.g. Vonovia Foundation, Vonovia Mieterstiftung e.V.

#### **Climate and Environmental Protection:**

 Reduction of energy and emission consumption: e. g. modernization of energy systems, modern boilers, intelligent thermostats. Further measures against climate change: e.
 g. expansion of renewable energy sources, targeted purchasing of renewable energies, entry into own electricity production via photovoltaic systems

### Employees:

- Several health programs, support work-life-balance, participation in company's success
- Employees from 60 different nations
- 2016: GdW: Award as an exemplary training company and from Focus Money the award "Germany's best training companies".
- German Olympic Sports Federation, representatives of the Sports Ministers' Conference and the German Chambers of Industry and Commerce honoured Vonovia as a top sports-friendly company in 2017

AIVONOVIA

- > On February 7, the coalition partners CDU, CSU and SPD signed a **coalition agreement**<sup>1</sup> that will serve as the basis for their work in the current legislative period. The following is an overview of the main elements of the coalition agreement as far as the housing market is concerned.
- The overriding objective of the coalition agreement is to secure the affordability of housing for tenants while > safeguarding modernization investments that are aimed towards successfully coping with climate change and **demographic challenges**. The proposed measures in terms of regulation suggest that the coalition partners are specifically targeting rogue landlords, who push the envelope by carrying out costly modernization at the expense of their tenants, as well as speculative land buyers.

Rental cap ("Mietpreisbreinse )					
Coalition Agreement	Expected Impact				
The coalition partners want to make it mandatory for landlords	This suggests that the Mietpreisbremse will not disappear as a concept.				
to disclose the previous rental level.	It will make it more difficult for rogue landlords to claim that the				
Background: A new letting rent currently must not be more than 10%	previous rent was more than 10% above the local comparable.				
above the local comparable rent. This is national law that is applied by					
federal states in areas that are defined as "strained housing markets"	Vonovia has respected the existing legislation and will continue to do so.				
by the respective municipalities. As such, the Mietpreisbremse does not	Vonovia does not expect this new disclosure requirement to have a				
apply to every location in Germany. Two federal states, NRW and	material impact on its business.				
Schleswig Holstein, have even passed legislation to discontinue the					
Mietpreisbremse in their jurisdiction. Landlords, however, are not forced					
to relet below the previous rent. Currently there is no mechanism to					
make the previous rent transparent to potential new tenants.					

## Pontal can ( Miotaroichromco")

<sup>1</sup> See https://www.cdu.de/system/tdf/media/dokumente/koalitionsvertrag 2018.pdf?file=1 for the full text of the coalition agreement (German only)

1. Resi market fundamenta

2. Vonovia 5-year track reco

3. FY2017 results highlights

5. Appendix

AIVONOVIA

Modernization allocation					
Coalition Agreement	Expected Impact				
Article 559 of the German Civil Code provides that up to 11% of the investment amount of a modernization project can be allocated to the annual rent of the property in perpetuity, provided the underlying work is modernization/value enhancing (i.e. not maintenance).	This measure will have a larger impact on landlords that carry out expensive modernizations and a smaller impact on landlords that do more efficient modernization work.				
<b>The coalition partners want to reduce the 11% to 8%. This shall</b> <b>only apply to areas with a lower "Kappungsgrenze,"</b> i.e. locations where rent growth on existing tenancies can be no more than 15% over three years (instead of 20%). <sup>1</sup> This is within the discretion of the	Historically, Vonovia has had an average allocation of around 7% of the investment amount, which is also the required average hurdle rate for approving the annual modernization budget. Hence, a reduction from 11% to 8% would have a minor impact on Vonovia.				
federal states and implemented in various ways by some and not by others. The coalition agreement states that this measure shall be reviewed after five years.	As this applies to some and not to other regions, Vonovia will also have the opportunity to direct investment funds to those regions that are not affected.				

#### €3.00 per sqm rent growth cap following a modernization

#### Coalition Agreement The coalition partners want to cap the absolute rent growth after a modernization to a maximum of €3.00 per sqm and extend the moratorium on modernization-related rent growth form currently three to six years.

#### Expected Impact

This measure appears to be primarily aimed towards rogue landlords who use the modernization allocation to carry out luxury modernizations in order to implement excessive rent growth. Business models that push the envelope on the back of tenants by carrying out costly modernizations will find this to be more difficult going forward.

Historically, out of thousands of modernization projects carried out by Vonovia only a small fraction have led to a rent growth of more than  $\in$ 3 per square meter, so this measure will not impact Vonovia.

<sup>1</sup> See <u>https://www.haufe.de/immobilien/verwaltung/mietpreisdeckel-regelungen-der-bundeslaender-zur-kappungsgrenze/mietrechtsaenderung-ermoeglicht-laendern-senkung-der-kappungsgrenze\_258\_275652.html for more detail on the Kappungsgrenze (German only)</u>

5. Appendix

VONOVIA

Extension of validity period for Mietspiegel		
Coalition Agreement	Expected Impact	
The coalition partners want to extend the validity period of Mietspiegel from currently two years to three years. This shall only apply to Detailed Mietspiegel ("qualifizierte Mietspiegel").	Out of a total of 275 Mietspiegel in Germany, 105 are Detailed Mietspiegel and would be affected; the remaining 170 are Simple Mietspiegel and would not be affected. Markets with a Detailed Mietspiegel might see a time delay in rental growth or an expansion of the time frame under which rent growth can be implemented. It is unlikely that the main intended impact, lower costs for municipalities, will actually materialize.	
	This legislation would have a limited impact on Vonovia and mostly affect the timing of rent growth.	

Extension of reference period for Mietspiegel		
Coalition Agreement	Expected Impact	
The coalition partners want to review the length of the reference period that serves as a basis for drafting a new Mietspiegel. The current reference period is 4 years.	The coalition agreement only includes one sentence, expressing the parties' intentions to "review" the reference period without any further specifics. The absence of any concrete language or plans suggests that there was little common ground during the coalition talks, hence the rather unspecific reference to review the issue at a later date. Any legislation in that direction would most likely prove to be rather difficult given the absence of comparable data on a continuous basis, as criteria and other parameters in the different Mietspiegel keep changing. In the absence of any specifics on this subject, the actual impact this could have on Vonovia cannot be estimated at this point. It is clear, however, that an extension of the reference period would have material negative consequences on the entire industry, and Vonovia would also be affected.	

1. Resi market fundamenta

2. Vonovia 5-year track reco

3. FY2017 results highlights

5. Appendix

νοπονια

Subsidy for homebuyers		
Coalition Agreement	Expected Impact	
The coalition partners want to grant €1,200 per annum and per child for up to ten years to families who are looking to buy or build, provided their taxable household income does not exceed certain	In light of the prices in most urban areas this measure is unlikely to help many families afford a home in a city.	
thresholds (€90k in cases of families with one child and an additional €15k for each additional child)	Vonovia does not expect any substantial upward pressure on prices for its assets on the basis of these plans.	

Subsidies		
Coalition Agreement	Expected Impact	
The coalition agreement includes various examples how the new government would aim to subsidize energy efficient modernizations and renovations to enable the elderly to live in their homes longer.	Modernization of the housing stock and more affordable construction of new apartments are key for the German housing market.	
The coalition partners have also agreed to promote serial and modular construction and expressed their intention to support the individual federal states to streamline the building permit process and to investigate possibilities for serial construction permissions (potentially not dissimilar to the car industry, where a certain model receives standard approval rather than each vehicle being approved individually).	Vonovia is a strong supporter of energy-efficient modernization, renovation of apartments for the elderly and intelligent, affordable space creation, as indicated by the annual €1bn investment program. Any further progress or additional support in this direction would be welcomed as a positive for the business.	

## 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

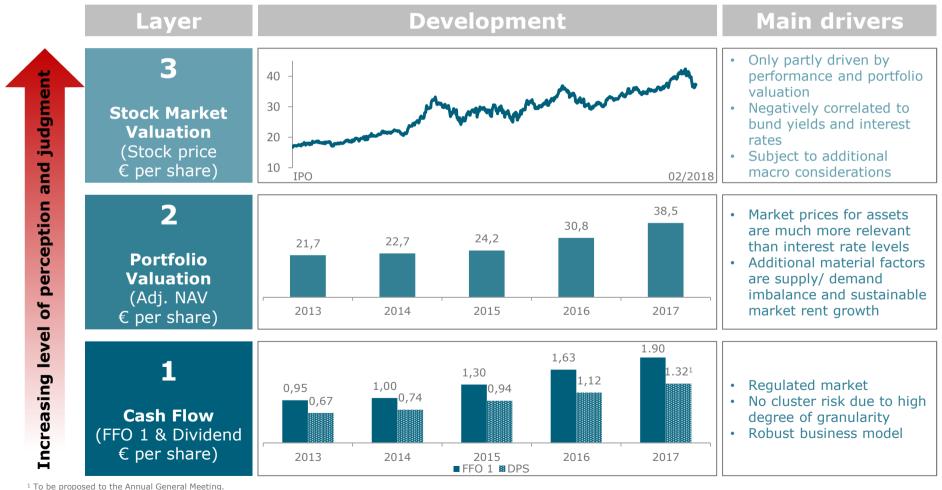
- > While market prices are affected by general interest rate levels, there is **no significant correlation**.
- Other factors such as supply/demand imbalance, rental regulation, market rent growth, location of assets etc.
   outweigh the impact of interest rates when it comes to pricing residential real estate.
- The steep decline in interest rates (down by 760bps since 1992) is not mirrored by asset yields (down by 120bps since 1992).
- > Asset yields outperformed interest rates by 240bps on average since 1992 and 550bps in June 2016.



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

## Three Valuation Layers with Different Volatilities VONOVIA 1. Resi market fundamentals 2. Vonovia 5-year track record 3. FY2017 results highlights 5. Appendix

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.



## IR Contact & Financial Calendar

1. Resi market fundamen

. Vonovia 5-year track record

FY2017 results highlights

5. Appendix

**Interim results 9M 2018** 

VONOVIA

Contact		Financial Calendar 2018
Rene Hoffmann Head of Investor Relations Vonovia SE Philippstraße 3 44803 Bochum Germany	Apr 18	Roadshow (Seoul)
	Apr 19	Roadshow (Hong Kong)
	Apr 20	Roadshow (Singapore)
	May 3	Interim results 3M 2018
	May 9	Annual General Meeting
	May 14-15	Roadshow (London)
	May 17	Roadshow (Frankfurt)
+49 234 314 1629	May 24	Berenberg Conference (Tarrytown) <sup>1</sup>
rene.hoffmann@vonovia.de	May 25-26	Roadshow (North America) <sup>1</sup>
investorrelations@vonovia.de	May 29	UniCredit German & Austrian Property Day (Paris) <sup>1</sup>
<u>www.vonovia.de</u>	May 30	Kempen European Seminar (Amsterdam)
	Jun 4-5	Capital Markets Day (Berlin)
	Jun 6	DB Access Conference (Berlin)
	Jun 14	Exane European CEO Conference (Paris)
	Aug 31	Interim results 6M 2018

Dec 6





Dortmund



Frankfurt



Essen



Dresden











Elmshorn



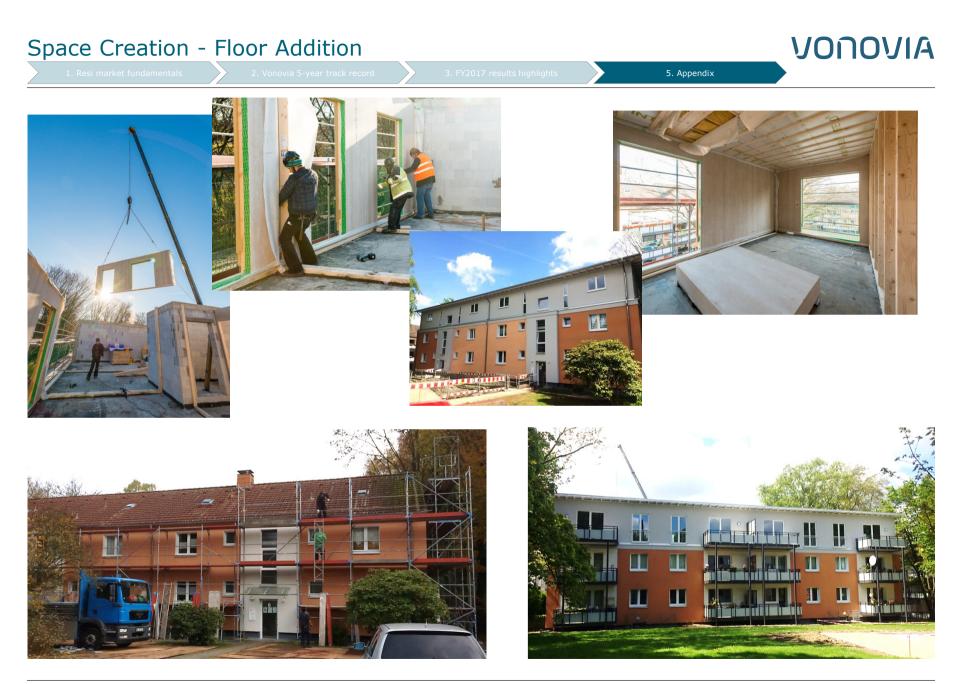




Köln

Kerpen

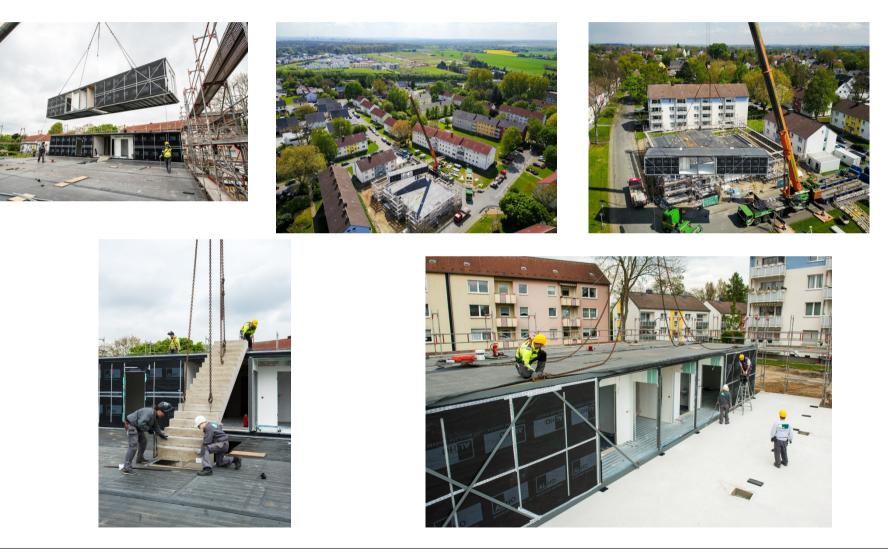


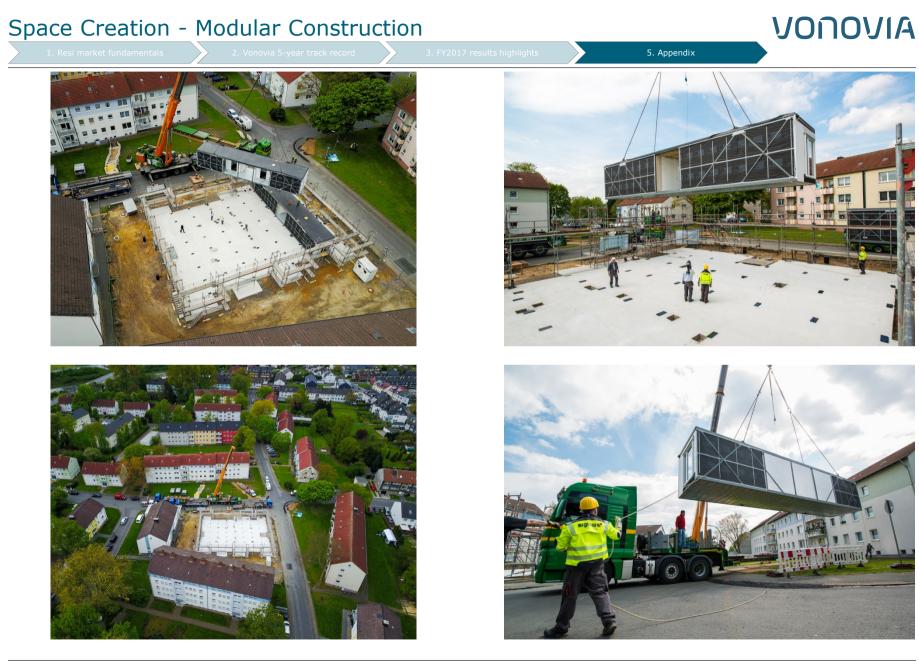




Company Presentation April 2018











This presentation has been specifically prepared by Vonovia SE and/or its affiliates (together, "Vonovia") for internal use. Consequently, it may not be sufficient or appropriate for the purpose for which a third party might use it.

This presentation has been provided for information purposes only and is being circulated on a confidential basis. This presentation shall be used only in accordance with applicable law, e.g. regarding national and international insider dealing rules, and must not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by the recipient to any other person. Receipt of this presentation constitutes an express agreement to be bound by such confidentiality and the other terms set out herein.

This presentation includes statements, estimates, opinions and projections with respect to anticipated future performance of Vonovia ("forward-looking statements") which reflect various assumptions concerning anticipated results taken from Vonovia's current business plan or from public sources which have not been independently verified or assessed by Vonovia and which may or may not prove to be correct. Any forward-looking statements reflect current expectations based on the current business plan and various other assumptions and involve significant risks and uncertainties and should not be read as guarantees of future performance or results and will not necessarily be accurate indications of whether or not such results will be achieved. Any forward-looking statements only speak as at the date the presentation is provided to the recipient. It is up to the recipient of this presentation to make its own assessment of the validity of any forward-looking statements and assumptions and no liability is accepted by Vonovia in respect of the achievement of such forward-looking statements and assumptions.

Vonovia accepts no liability whatsoever to the extent permitted by applicable law for any direct, indirect or consequential loss or penalty arising from any use of this presentation, its contents or preparation or otherwise in connection with it.

No representation or warranty (whether express or implied) is given in respect of any information in this presentation or that this presentation is suitable for the recipient's purposes. The delivery of this presentation does not imply that the information herein is correct as at any time subsequent to the date hereof.

Vonovia has no obligation whatsoever to update or revise any of the information, forward-looking statements or the conclusions contained herein or to reflect new events or circumstances or to correct any inaccuracies which may become apparent subsequent to the date hereof.

This presentation does not, and is not intended to, constitute or form part of, and should not be construed as, an offer to sell, or a solicitation of an offer to purchase, subscribe for or otherwise acquire, any securities of the Company nor shall it or any part of it form the basis of or be relied upon in connection with or act as any inducement to enter into any contract or commitment or investment decision whatsoever.

This presentation is neither an advertisement nor a prospectus and is made available on the express understanding that it does not contain all information that may be required to evaluate, and will not be used by the attendees/recipients in connection with, the purchase of or investment in any securities of the Company. This presentation is selective in nature and does not purport to contain all information that may be required to evaluate the Company and/or its securities. No reliance may or should be placed for any purpose whatsoever on the information contained in this presentation, or on its completeness, accuracy or fairness.

This presentation is not directed to or intended for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction.

Neither this presentation nor the information contained in it may be taken, transmitted or distributed directly or indirectly into or within the United States, its territories or possessions. This presentation is not an offer of securities for sale in the United States. The securities of the Company have not been and will not be registered under the US Securities Act of 1933, as amended (the "Securities Act") or with any securities regulatory authority of any state or other jurisdiction of the United States. Consequently, the securities of the Company may not be offered, sold, resold, transferred, delivered or distributed, directly or indirectly, into or within in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in compliance with any applicable securities laws of any state or other jurisdiction of the United States unless registered under the Securities Act.

Tables and diagrams may include rounding effects.



