# AIVONOVIA

## **Company Presentation**

Non-deal Asia Roadshow February 7-10, 2017

### νοπονια

## Market

Company

## Strategy & Execution

### German Residential – Safe Harbor and Low Risk

#### German residential market: important pillar of the German economy

- With a GDP contribution of more than €500bn the German residential real estate industry represents more than 18% of Germany's GDP.
- > Germany and its resilient economy provide a comparatively safe harbor for foreign investments.
- > Germany is the economic powerhouse and growth engine of Europe.
- > Due to its regulatory structure, the German residential rental market is largely immune to macro-economic fluctuations and offers high cash flow visibility.
- > Residential market provides superior returns especially in low interest rate environment.



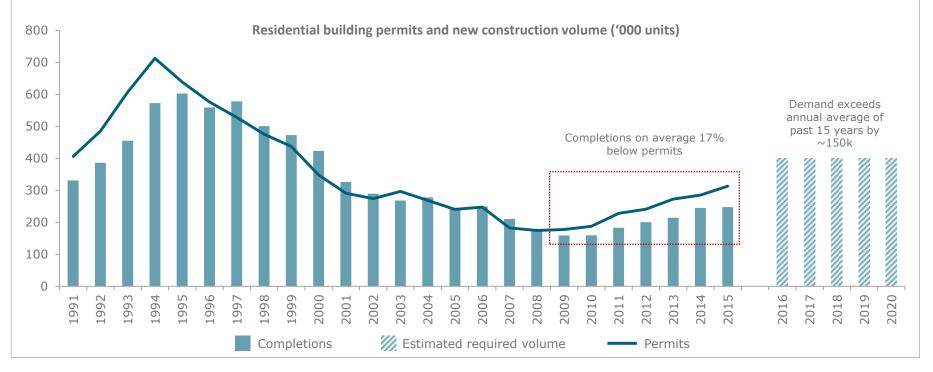
Sources: Federal Statistics Office, GdW (German Association of Professional Homeowners), REIS, BofA Merrill Lynch Global Research; BIP USA: IMF, Statista Note: Due to lack of q-o-q US rent growth data, the annual rent growth for a year is assumed to also be the q-o-q rent growth of that year

### German Residential – Favorable Fundamentals

## AIVONOVIA

#### New Supply falls short of demand

- > After record construction volumes in the 1990s, new volumes have plummeted as Germany has reduced its building capacity.
- > While volumes have been recovering from all-time lows in 2009 and 2010, the current levels are still short of demand.
- > Large gap between buildings permits and actual new constructions during last seven years.
- Discrepancy between new demand and new supply is forecast to continue and add to supply/demand imbalance already evident in many urban areas.
- > Substantial disconnect between in-place values and market replacement cost.



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

### German Residential – Favorable Fundamentals

#### Low home ownership ratio – Germans prefer to rent

- With the exception of Switzerland, Germany has the lowest homeownership ratio in Europe.
- Rental regulation, favorable tenant laws, the general perception that home buying is a life-time decision and comparatively stringent financing requirements are main drivers for low homeownership rate.

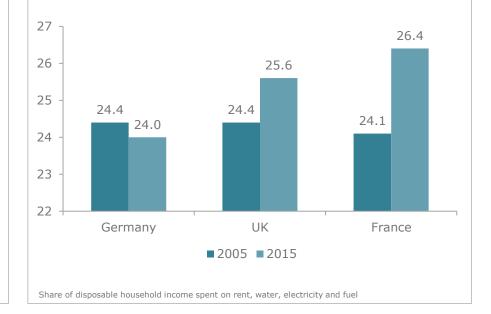
Home ownership rate 2015 in %

#### Rental housing very affordable in Germany

- Affordability in Germany is higher than in the UK or France.
- Whereas most other European countries saw an increase, the share of rent-related payments in relation to disposable income declined in Germany between 2005 and 2015.



Rent as % of disposable household income

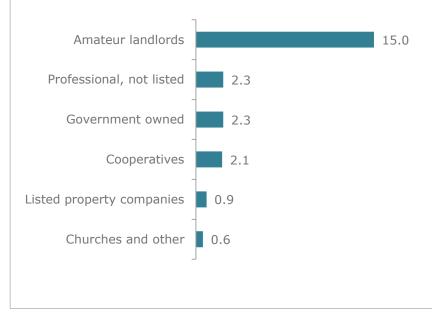


Sources: Federal Statistics Office, Eurostat

### German Residential – Favorable Fundamentals

#### Fragmented ownership structure

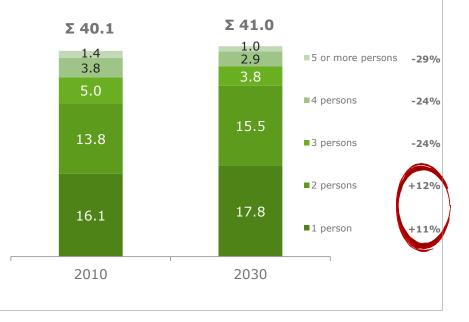
- Germany is the largest housing market in Europe with ~42m housing units, of which ~23m are rental units.
- Ownership structure is highly fragmented and majority of owners are non-professional landlords.
- > Listed sector represents ~4% of total rental market.



#### 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 2030 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)



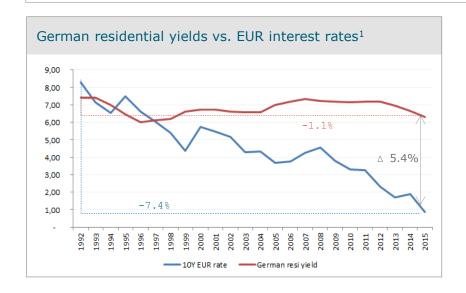
Ownership structure (million units)

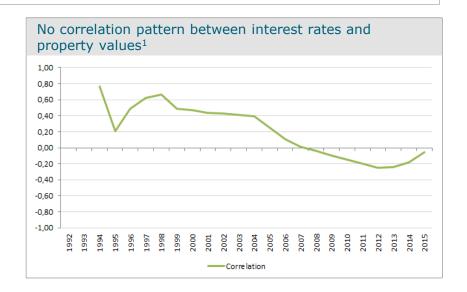
Sources: Federal Statistics Office, GdW (German Association of Professional Homeowners)

### No Correlation between Interest Rates and Property Values VONOVIA



- > While market prices are affected by the general interest 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 7.4% since 1992) is not mirrored by asset yields (down by 1.1% since 1992).
- > Asset yields outperformed interest rates by 2.2% on average since 1992 and 5.4% in June 2015.





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

Non-deal Asia Roadshow, February 7-10, 2017

### νοπονια

## Market

## Company

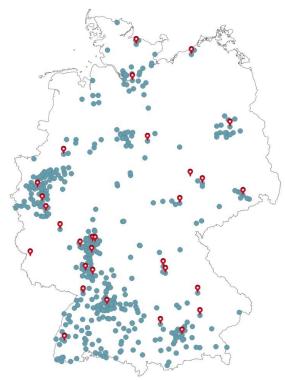
## Strategy & Execution

#### Company

#### Vonovia at a Glance

## VONOVIA

#### Germany's largest residential landlord with national footprint in urban regional markets



Strategic Portfolio Vonovia Location

Schwarmstädte







Dortmund

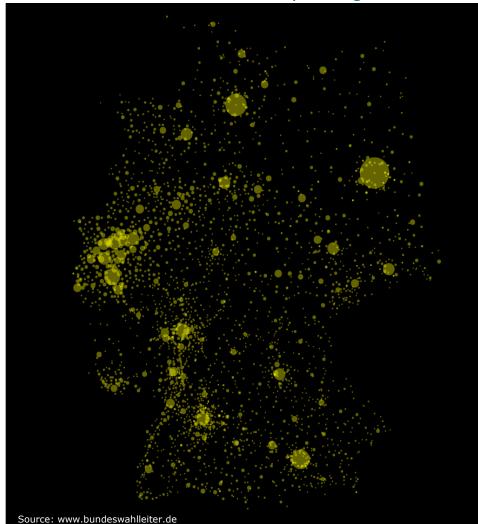
Munich

- > Residential real estate company with **B-to-C characteristics.**
- Industrialized approach leverages **economies of scale** in a highly homogeneous asset class.
- Strong internal growth profile via sustainable market rent > growth, additional rent growth from portfolio investments and dynamic extension business.
- Market leadership with nationwide footprint offers additional growth opportunities.
- Robust business model delivers highly stable and growing > cash flows.
- > Predictable top and bottom line with downside protection and upside potential.
- 338k apartments
- Average apartment size of ~61 sqm
- Vacancy ~2.5%<sup>1</sup> almost fully let
- 13.5 years average tenure
- ~ €1,540m<sup>1</sup> stable rental income
- ~  $\in$  760m<sup>1</sup> operating profit before sales (FFO 1)
- Dividend policy: approx. 70% of FFO 1

<sup>1</sup> Guidance 2016

>

## If You Want to Know Where Germans Live - Follow the Light VONOVIA



#### Illustration of Germany at Night

### Strong Overlap with Vonovia Portfolio

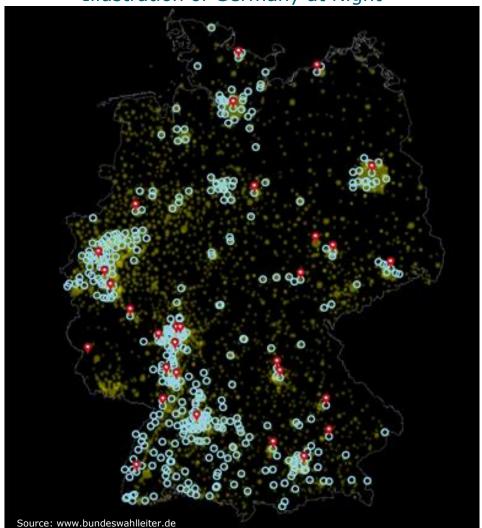


Illustration of Germany at Night

### Management Team with Wide Range of Experience

## νοπονια



#### CFO Dr. A. Stefan Kirsten

- > Since 2011 CFO of Vonovia
- Former CEO of Majid Al Futtaiim Group LLC (real estate development company focusing mainly on retail and entertainment ventures in the Emirates)
- Former CFO of Metro AG and ThyssenKrupp AG in Germany

#### CEO Rolf Buch

- > Since 2013 CEO of Vonovia
- Former management board member of Bertelsmann SE
- Former CEO of Arvato AG (global BPO service provider with more than 60,000 employees in over 40 countries)

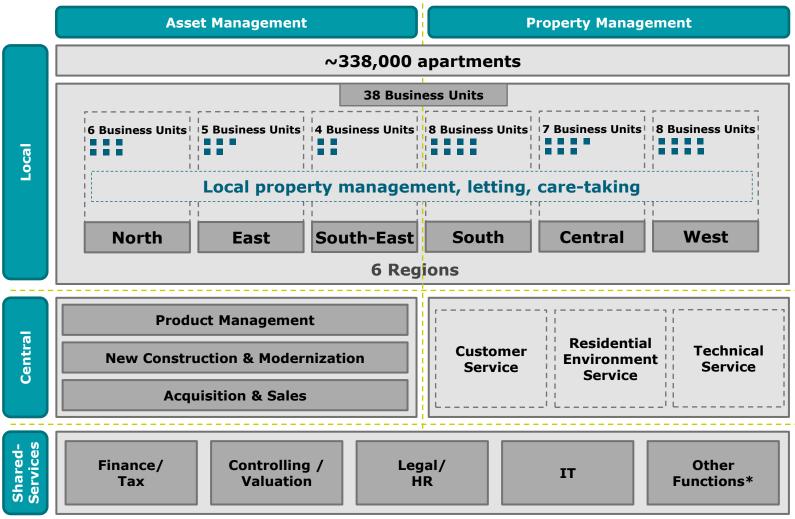
#### CCO Gerald Klinck

- > Board member since 2012
- Former CFO of GAGFAH Group
- 20+ years experience in leading positions in the real estate industry

#### COO Klaus Freiberg

- > Board member since 2010
- Responsible for the property management (customer care service, management and letting of portfolio)
- Former senior manager of Arvato Group; supervised and optimized the service centers of Deutsche Post and Deutsche Telekom

### Scaleable Organization



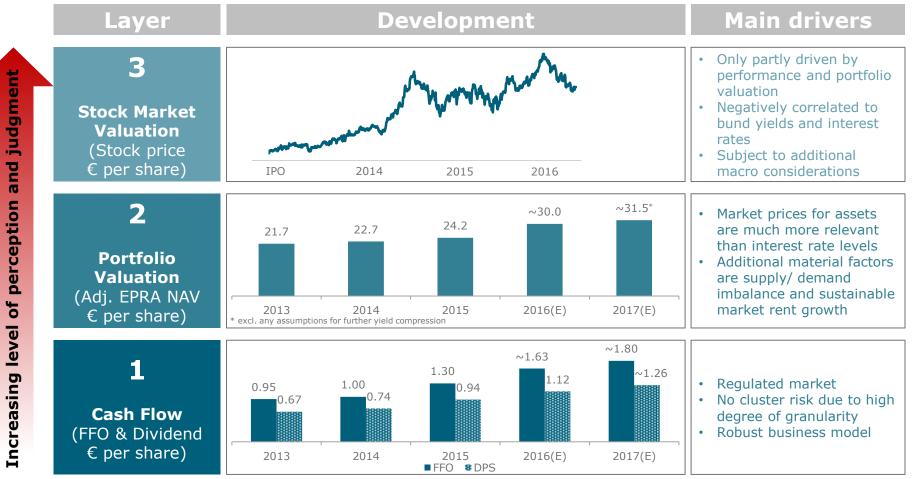
\*other shared services: Internal Audit, Communications, Central Procurement, Insurances, Investor Relations, Accounting

as of September 30, 2016

Non-deal Asia Roadshow, February 7-10, 2017

## 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.

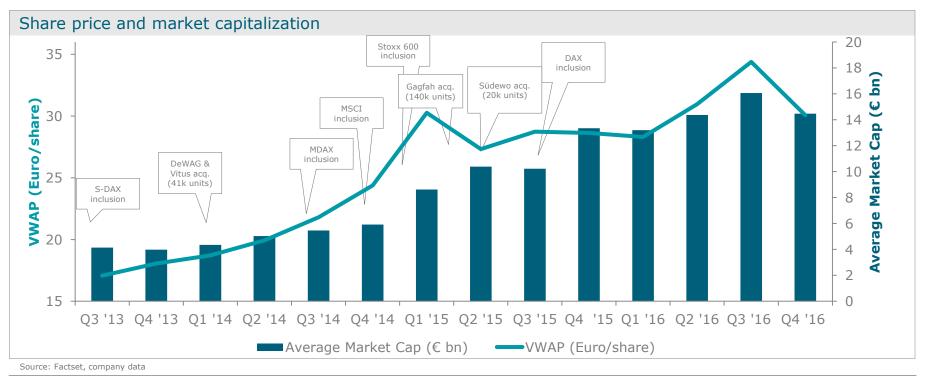


page 14

AIVONOV

### Vonovia History

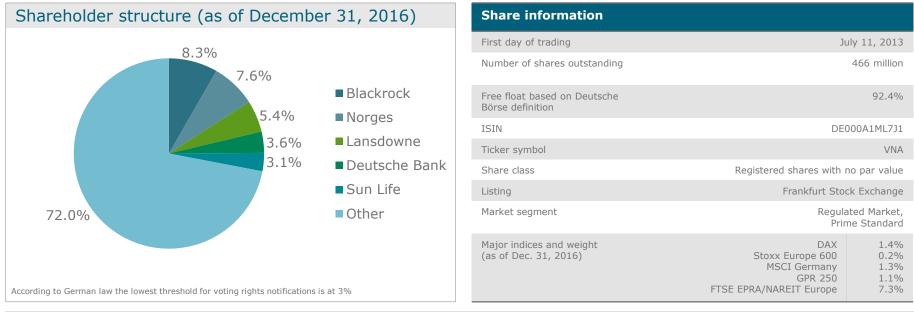
- Seed portfolios of today's Vonovia have origin in public housing provided by government, large employers and similar landlords with a view towards offering affordable housing.
- At beginning of last decade, private equity invested in German residential on a large scale including into what is Vonovia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

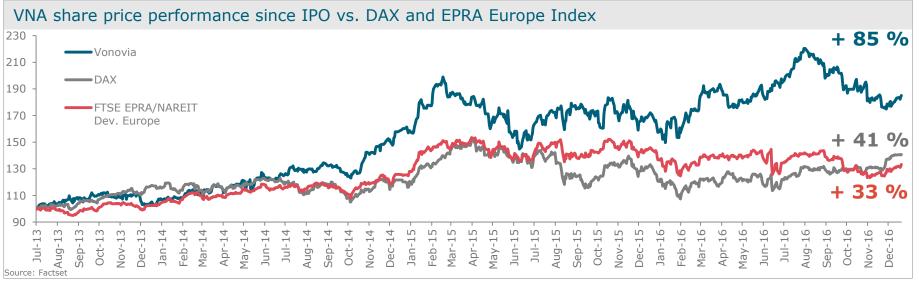


Non-deal Asia Roadshow, February 7-10, 2017

### Liquid Large-cap Stock

## VONOVIA

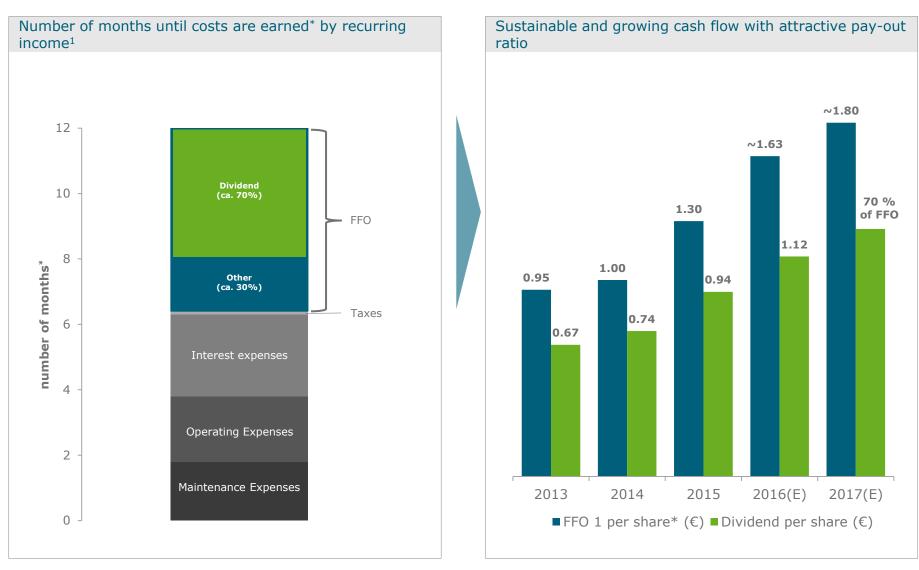




Non-deal Asia Roadshow, February 7-10, 2017

### Attractive Dividend Policy

## VONOVIA



1 Rental income + EBITDA Extension and Other; excluding sales effects \*Please see Glossary / Sources in the Appendix for further information. 2017(E): effects from convert takeover not yet taken into account

#### Guidance for 2016 and 2017

(effects from conwert takeover not yet taken into account)

## νοπονια

	2015 Actuals	2016 Guidance	2017 Guidance	
L-f-l rental growth (eop)	2.9%	3.0-3.2%	3.5%-3.7%	Rent growth expected to continue to accelerate
Occupancy (eop)	97.3%	~97.5%	>97.5%	
Rental Income (€m)	1,415	1,530-1,550	1,530-1,550	Stable top line on smaller portfolio
FFO1 (€m)	608	~760	830-850	Double-digit organic growth (mid-point)
FFO1/share* (eop NOSH)	€1.30	~€1.63	€1.78-€1.82	
EPRA NAV/share* (eop)	€30.02	~€36	€37-€38*	Including valuation impact from
Adj. EPRA NAV/share* (eop)	€24.19	~€30	€31-€32	improved performance and investments (~4% NAV growth); excluding any assumptions for yield compression.
Dividend/share	€0.94	€1.12	70% of FFO 1	Every 1% value uplift from yield compression results in ~€0.60 NAV growth per share.

 $\ast$  Please see Glossary / Sources in the Appendix for further information.



		EUR			USD			JPY	
	2015	2016	2017	2015	2016	2017	2015	2016	2017
	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance
L-f-l rental growth (eop)	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%
Occupancy (eop)	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%
Rental Income (m)	1,415	1,530 - 1,550	1,530 - 1,550	1,514	1,637 - 1,658	1,637 - 1,658	173,182	187,257 - 189,705	187,257 - 189,705
FF01 (m)	608	~760	830 - 850	650	~813	888 - 909	74,413	~93,016	101,584 - 104,032
FFO1/share <sup>*</sup> (eop NOSH)	1.30	~1.63	1.78 - 1.82	1.39	~1.74	1.90 - 1.95	159	~199	218 - 223
EPRA NAV/share <sup>*</sup> (eop)	30.02	~36	37 - 38 <sup>*</sup>	32.11	~39	40 - 41	3,674	~4,406	4,528 - 4,651
Adj. EPRA NAV/share <sup>*</sup> (eop)	24.19	~30	31 - 32	25.88	~32	33 - 34	2,961	~3,672	3,794 - 3,916
Dividend/share	0.94	~1.12	70% of FFO 1	1.01	~1.20	70% of FFO 1	115	~137	70% of FFO 1

\* Please see Glossary / Sources in the Appendix for further information. Exchange rates as of Jan 31, 2017 (EUR1.00 : JPY122.39)

		EUR			USD			KWR	
	2015	2016	2017	2015	2016	2017	2015	2016	2017
	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance
L-f-l rental growth (eop)	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%
Occupancy (eop)	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%
Rental Income (m)	1,415	1,530 - 1,550	1,530 - 1,550	1,514	1,637 - 1,658	1,637 - 1,658	1,776,405	1,920,777 - 1,945,886	1,920,777 - 1,945,886
FF01 (m)	608	~760	830 - 850	650	~813	888 - 909	763,289	~954,112	1,041,990 - 1,067,099
FF01/share <sup>*</sup> (eop NOSH)	1.30	~1.63	1.78 - 1.82	1.39	~1.74	1.90 - 1.95	1,632	~2,046	2,235 - 2,285
EPRA NAV/share <sup>*</sup> (eop)	30.02	~36	37 - 38 <sup>*</sup>	32.11	~39	40 - 41	37,687	~45,195	46,450 - 47,706
Adj. EPRA NAV/share <sup>*</sup> (eop)	24.19	~30	31 - 32	25.88	~32	33 - 34	30,368	~37,662	38,918 - 40,173
Dividend/share	0.94	~1.12	70% of FFO 1	1.01	~1.20	70% of FFO 1	1,180	~1,406	70% of FFO 1

 $\ast$  Please see Glossary / Sources in the Appendix for further information. Exchange rates as of Jan 31, 2017 (EUR1.00 : KWR1,255.41)



		EUR			USD			HKD	
	2015	2016	2017	2015	2016	2017	2015	2016	2017
	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance
L-f-l rental growth (eop)	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%
Occupancy (eop)	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%
Rental Income (m)	1,415	1,530 - 1,550	1,530 - 1,550	1,514	1,637 - 1,658	1,637 - 1,658	11,743	12,698 - 12,864	12,698 - 12,864
FF01 (m)	608	~760	830 - 850	650	~813	888 - 909	5,046	~6,307	6,888 - 7,054
FF01/share <sup>*</sup> (eop NOSH)	1.30	~1.63	1.78 - 1.82	1.39	~1.74	1.90 - 1.95	10.8	~13.5	14.8 - 15.1
EPRA NAV/share <sup>*</sup> (eop)	30.02	~36	37 - 38 <sup>*</sup>	32.11	~39	40 - 41	249	~299	307.1 - 315.4
Adj. EPRA NAV/share <sup>*</sup> (eop)	24.19	~30	31 - 32	25.88	~32	33 - 34	201	~249	257.3 - 265.6
Dividend/share	0.94	~1.12	70% of FFO 1	1.01	~1.20	70% of FFO 1	~7.80	~9.30	70% of FFO 1

 $\ast$  Please see Glossary / Sources in the Appendix for further information. Exchange rates as of Jan 31, 2017 (EUR1.00 : HKD8.29922)



		EUR			USD			SGD	
	2015	2016	2017	2015	2016	2017	2015	2016	2017
	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance	Actuals	Guidance	Guidance
L-f-l rental growth (eop)	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%	2.9%	3.0% - 3.2%	3.5% - 3.7%
Occupancy (eop)	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%	97.3%	~97.5%	>97.5%
Rental Income (m)	1,415	1,530 - 1,550	1,530 - 1,550	1,514	1,637 - 1,658	1,637 - 1,658	2,157	2,332 - 2,363	2,332 - 2,363
FF01 (m)	608	~760	830 - 850	650	~813	888 - 909	927	~1,159	1,265 - 1,296
FFO1/share <sup>*</sup> (eop NOSH)	1.30	~1.63	1.78 - 1.82	1.39	~1.74	1.90 - 1.95	2.0	~2.5	2.7 - 2.8
EPRA NAV/share <sup>*</sup> (eop)	30.02	~36	37 - 38 <sup>*</sup>	32.11	~39	40 - 41	45.8	~55	56.4 - 57.9
Adj. EPRA NAV/share <sup>*</sup> (eop)	24.19	~30	31 - 32	25.88	~32	33 - 34	36.9	~46	47.3 - 48.8
Dividend/share	0.94	~1.12	70% of FFO 1	1.01	~1.20	70% of FFO 1	~1.43	~1.71	70% of FFO 1

 $\ast$  Please see Glossary / Sources in the Appendix for further information. Exchange rates as of Jan 31, 2017 (EUR1.00 : SGD1.52449)

### νοπονια

## Market

## Company

## Strategy & Execution

### Proven and Unchanged Strategy since IPO

	<b>Reputation &amp; Customer Satisfaction</b>	
Laditional Droperty Management	<ul> <li>&gt; Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>&gt; High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & 5 Acquisitions
3 Portfolio Management	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis</li> </ul>	<ul> <li>Continuous review of on- and off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
Uuovative 4 Extension	<ul> <li>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</li> <li>Insourcing of services to ensure maximum process management and cost control</li> </ul>	

### Proven and Unchanged Strategy since IPO

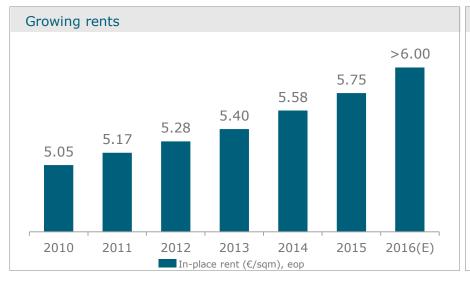
VONOVIA	
---------	--

	<b>Reputation &amp; Customer Satisfaction</b>	
Laditional 1 Property Management	<ul> <li>Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & Acquisitions
3 Portfolio Management	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis</li> </ul>	<ul> <li>Continuous review of on- and off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
Uupodition	<ul> <li>&gt; 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</li> <li>&gt; Insourcing of services to ensure maximum process management and cost control</li> </ul>	

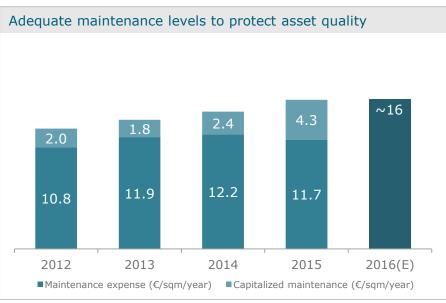
#### Property Management Proporty Management

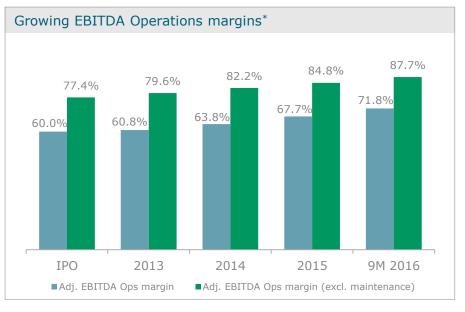
### Property Management

## VONOVIA









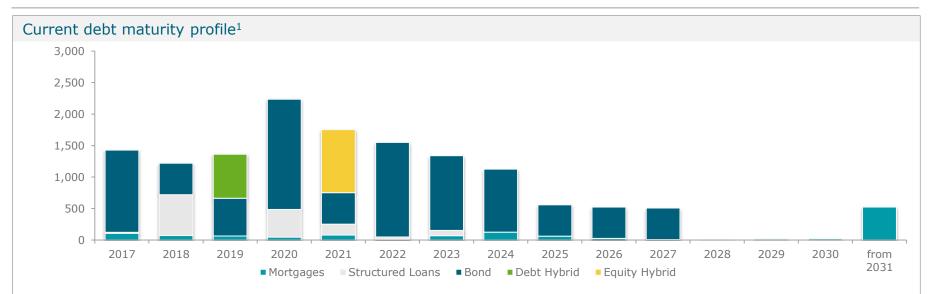
#### \* Please see Glossary / Sources in the Appendix for further information.

Non-deal Asia Roadshow, February 7-10, 2017

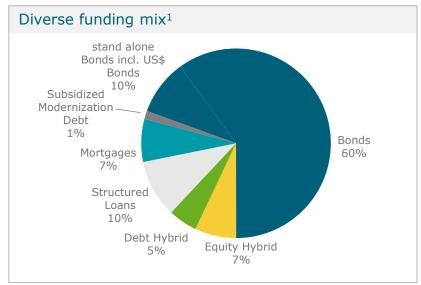
	<b>Reputation &amp; Customer Satisfaction</b>	
L Troperty Management	<ul> <li>&gt; Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>&gt; High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>&gt; Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>&gt; Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & Acquisitions
3 Portfolio Management	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis</li> </ul>	<ul> <li>Continuous review of on- and off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
Introvative 4 Extension	<ul> <li>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</li> <li>Insourcing of services to ensure maximum process management and cost control</li> </ul>	



#### Well-balanced Debt Maturity Profile & Diverse Funding Mix



Maturity profile as of Dec. 31, 2016 and adjusted for repayment of Taurus CMBS and January 2017 bond issuance (€1bn)



KPIs (Sep 30, 2016)	
LTV	~ 47.1% (42% pro forma YE2016 incl. yield compression)
Debt/EBITDA*	10.6x
Unencumbered assets* in %	56%
Fixed/hedged debt ratio	99%
Global ICR <sup>*</sup> (YTD)	3.6x
Financing cost	2.3%
Weighted avg. maturity	~ 7 years

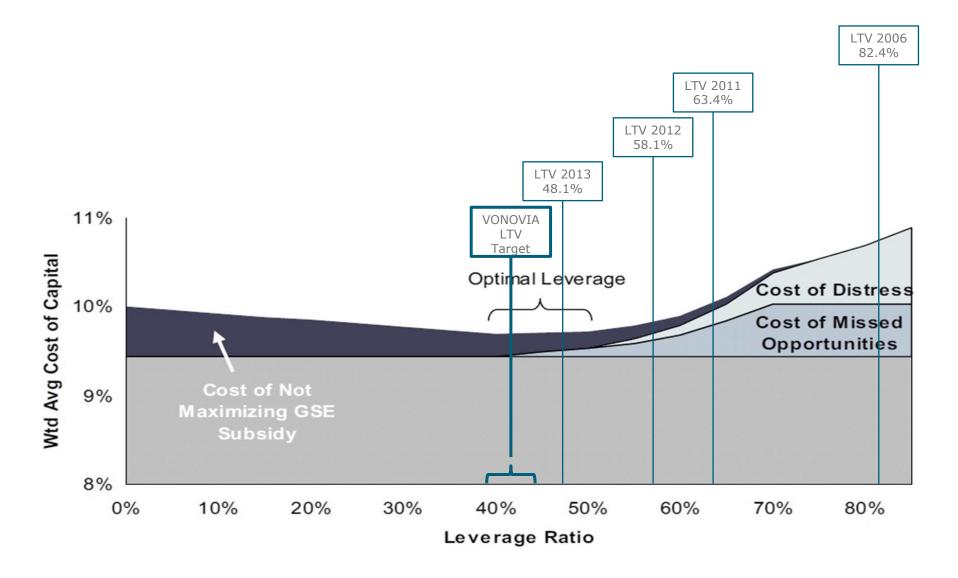
VOUONIA

\* Please see Glossary / Sources in the Appendix for further information.

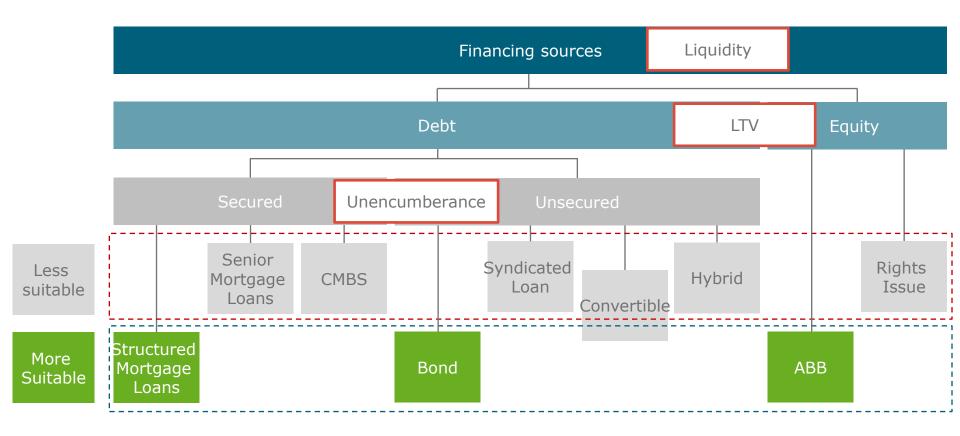
<sup>1</sup> Maturity profile as of Dec. 31, 2016 and adjusted for repayment of Taurus CMBS (scheduled for Feb. 2017) and €1bn bond issuance (Jan. 2017)









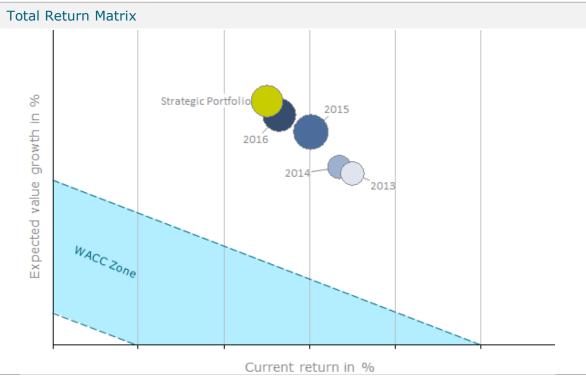


	<b>Reputation &amp; Customer Satisfaction</b>	
Traditional Property Management	<ul> <li>&gt; Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>&gt; High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & Acquisitions
3 Portfolio Management	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis</li> </ul>	<ul> <li>Continuous review of on- and off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
Introvative 4 Extension	<ul> <li>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</li> <li>Insourcing of services to ensure maximum process management and cost control</li> </ul>	

## Total Return Matrix

Portfolio Management

- > Continuous improvement of portfolio quality and exposure to attractive markets through acquisitions and sales.
- > Increased portfolio size has resulted in lower risk profile.
- Benchmark against independent research confirms that our strategic portfolio is in the right locations and has longterm growth potential.
  - > empirica: Growing Metropolitan Areas ("Schwarmstädte") and
  - > Prognos: "Future Atlas Ranking"<sup>2</sup> of all 402 German cities and counties



<sup>1</sup> The word "Schwarmstadt" is a combination of the German words for "flock" and "city," trying to capture the migration movement of large parts of the (especially younger) generations into certain cities. Please see appendix for more details.

<sup>2</sup> Please see appendix for more details

Note: Strategic Portfolio includes privatization assets in strategic locations. The chart does not account for asset quality or micro location; the chart is a zoomed view of the full Total Return Matrix.



#### **Pro-active Portfolio Management**

## νοπονια

	More than €1bn invested in value-enhancing		lue-enhancing		Pro-active p	ortfolio
Modernization*		between 2013 a			management	results in
					material improv	ements in
					quality of ass	sets and
Disposal*	assets (2013-	Non-core and No 2016) with belov on and/or potent	v-average		location	IS.
					Well-positioned	to benefit
		Acquisition of more than 200k units (2013- 2016 ytd) in attractive regions and complementary to the existing portfolio.			from strong underlying	
Acquisition*					fundamentals of entire	
	complementar				German residential market.	
Sep 30, 2016	Residential Units	In-place rent	Vacancy rate	Fair valu	e <i>Fair value (%)</i>	Fair value (%)

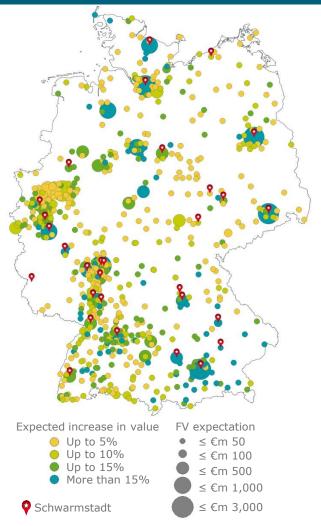
Sep 30, 2016 (unless indicated otherwise)	Residential Units	In-place rent (€/sqm)	Vacancy rate	Fair value (€bn)	<i>Fair value (%)</i> at IPO in 2013 <sup>1</sup>	Fair value (%)
Operate	125,566	5.98	2.3%	8.8	38%	37%
Upgrade Buildings	102,781	5.90	2.5%	7.1	22%	30%
Optimize Apartments	73,440	6.22	2.2%	5.7	13%	24%
Subtotal Strategic Clusters	301,787	6.01	2.3%	21.6	73%	91%
Privatize	17,582	5.91	4.8%	1.4	14%	6%
Non-strategic	12,159	4.81	7.4%	0.5	8%	2%
Non-core	6,192	4.65	9.4%	0.2	5%	1%
Total	337,720	5.94	2.8%	23.7	100%	100%

 $^{\ast}$  Please see Glossary / Sources in the Appendix for further information.

<sup>1</sup> The cluster "Non-strategic" was introduced after the IPO. For comparison purposes, locations considered Non-strategic as of Sep 30, 2016, were defined as Non-strategic as of the IPO date as well.

## Broad Geographic Basis for Expected Valuation Uplift VONOVIA

#### Geographic Breakdown of Expected Valuation Uplift



Value driver	Uplift FV (€m)
Performance (rent development, redemption of rent control, etc.)	750 - 950
Investments	450 - 470
Yield compression	2,300 - 2,500
Total	3,500 - 3,900

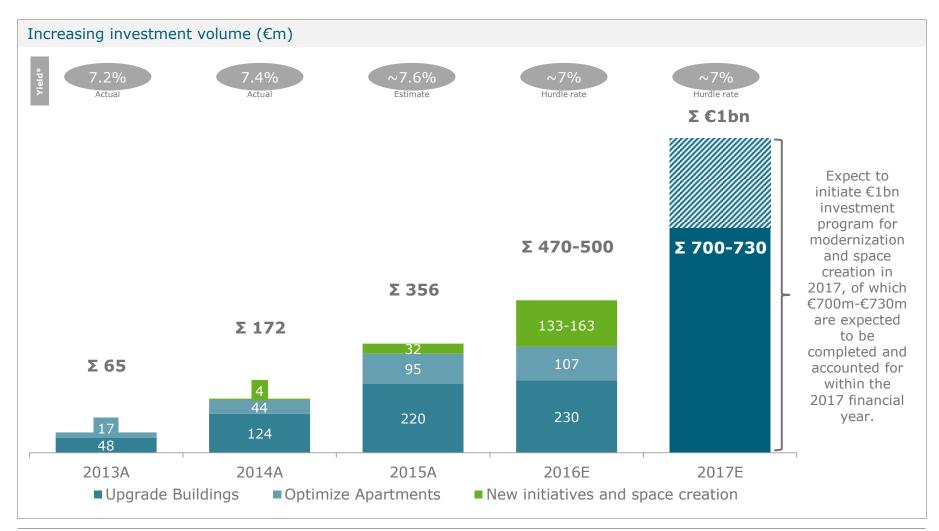
- Significant increase in Vonovia's rents and development of market rents / new leases.
- > Effect of yield compression higher than in 2015:
  - High additional uplift in prime locations (e.g. Hamburg, Munich, Stuttgart)
  - Considerable yield compression also in secondary locations (e.g. Dresden, Darmstadt, Heidenheim)

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



### Growing Investment Program

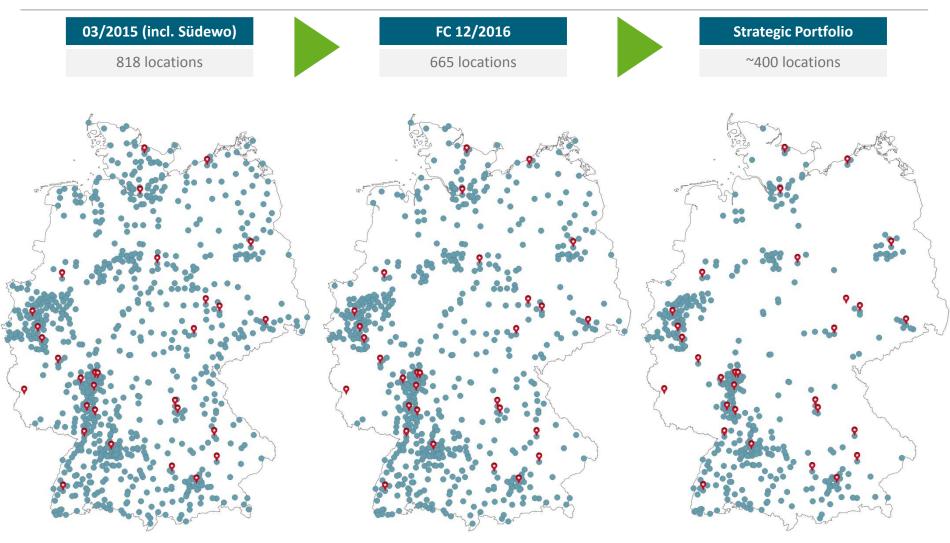
- > Modernization investments are a valuable organic growth driver.
- > Investments in year 1 lead to rent growth in year 2 onwards.



3 Portfolio Management

### Substantial Reduction of Portfolio Locations

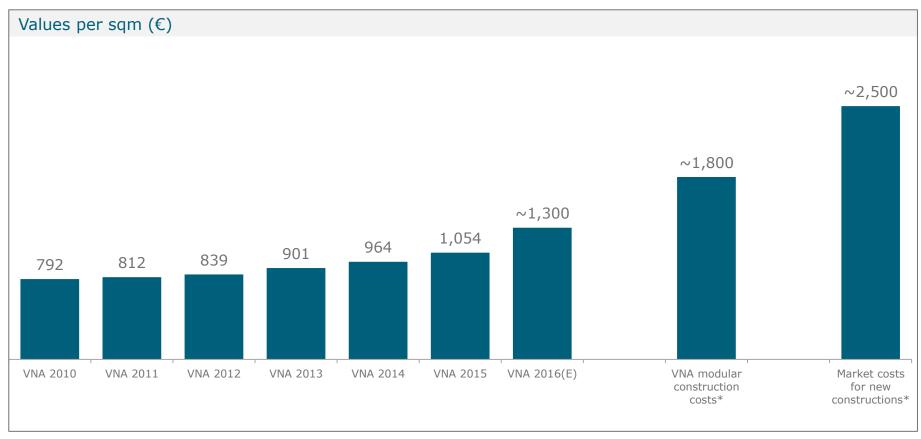
### AIVONOVIA



- Vonovia location
- Schwarmstädte



In-place valuations are still only half of replacement values, in spite of accelerating valuation growth in recent years.



\* Please see Glossary / Sources in the Appendix for further information. Note: VNA 2010 – 2014 refers to Deutsche Annington Portfolio at the time

	<b>Reputation &amp; Customer Satisfaction</b>	
Traditional Property Manageme	<ul> <li>Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & Acquisitions
3 Portfolio Manageme	<ul> <li>Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis</li> </ul>	<ul> <li>Continuous review of one and off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
Innovative 4 Extension	<ul> <li>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</li> <li>Insourcing of services to ensure maximum process management and cost control</li> </ul>	

### Extension - Innovation as Growth Driver

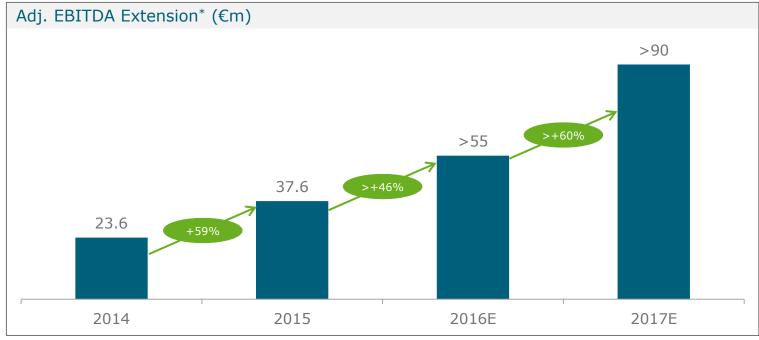
 Continuous flow of innovative projects that are all immediately linked to the apartment or customer/rental contract.



4

Extension

- > Extension business with increasing significance and **compelling growth rates**.
- > Vonovia, through its subsidiaries, now employs ca. **3,600 craftsmen and gardeners**.
- Subsidiary for **Third-party and condo management**\* now with 22 local offices in Germany managing a total of 77k units.
- Multimedia service contracts\* are expected to be rolled out to 270k units by the end of 2016 (+145% since year-end 2015).



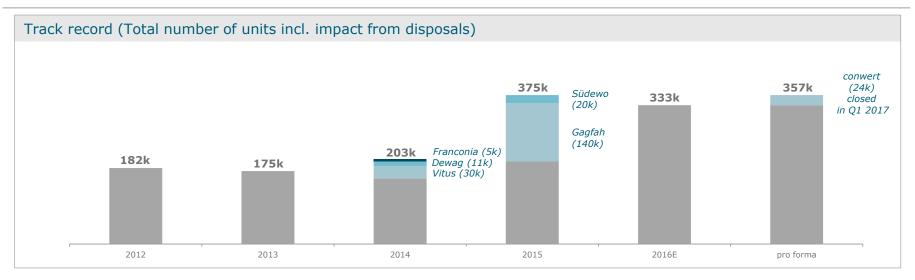
st Please see Glossary / Sources in the Appendix for further information.

	<b>Reputation &amp; Customer Satisfaction</b>	
Traditional Property Management	<ul> <li>&gt; Systematic optimization of operating performance and core business productivity through leveraging scaling effects</li> <li>&gt; High degree of standardization and industrialization throughout the entire organization</li> </ul>	
2 Financing	<ul> <li>Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all times</li> <li>Fast and unfettered access to equity and debt capital markets at all times</li> </ul>	5 Mergers & 5 Acquisitions
	<ul> <li>Portfolio optimization by way of tactical</li> </ul>	Continuous review of on- and off-market opportunities to lever economies of scale and apply
3 Portfolio Management	<ul> <li>acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets</li> <li>Pro-active development of the portfolio through</li> </ul>	<ul> <li>strategic pillars 1-4 to a growing portfolio</li> <li>All acquisitions must meet the stringent acquisition criteria</li> </ul>
	investments to offer the right products in the right markets and on a long-term basis	
extension	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	
In	<ul> <li>Insourcing of services to ensure maximum process management and cost control</li> </ul>	

Smooth transaction	<ul> <li>One of the largest European RE deals with €2.8bn transaction volume</li> <li>After failed attempts by Haselsteiner, DWN, Sagi and Adler, Vonovia successfully completed the transaction within only four months (plus mandatory 2nd offer period)</li> <li>Terms communicated upon announcement in September were never changed even when optionality value on share component jeopardized the transaction</li> <li>Flawless execution from preparation to the announcement and all the way to the settlement; no leakage, no delays, no interloper, no changes to deal structure or timing</li> </ul>
Economic homerun	<ul> <li>Back-of-an envelope calculation shows</li> <li>FFO accretion in the higher single-digit % range</li> <li>LTV neutral in combination with expected 2016YE valuation uplift</li> <li>Cash offer with virtually no premium; €0.01 above last closing price before announcement</li> <li>Cash offer price of €16.16 is below expected 2016 year-end NAV, making the acquisition NAV accretive from day 1</li> </ul>
Strategic fit	<ul> <li>84% of conwert portfolio in top 25 locations of combined entity with majority in Dresden, Leipzig, Berlin and Potsdam</li> <li>2,400 units in Vienna allow Vonovia to test its platform and processes in a non-German environment at very low risk (&lt;1% of combined portfolio)</li> </ul>



### VONOVIA

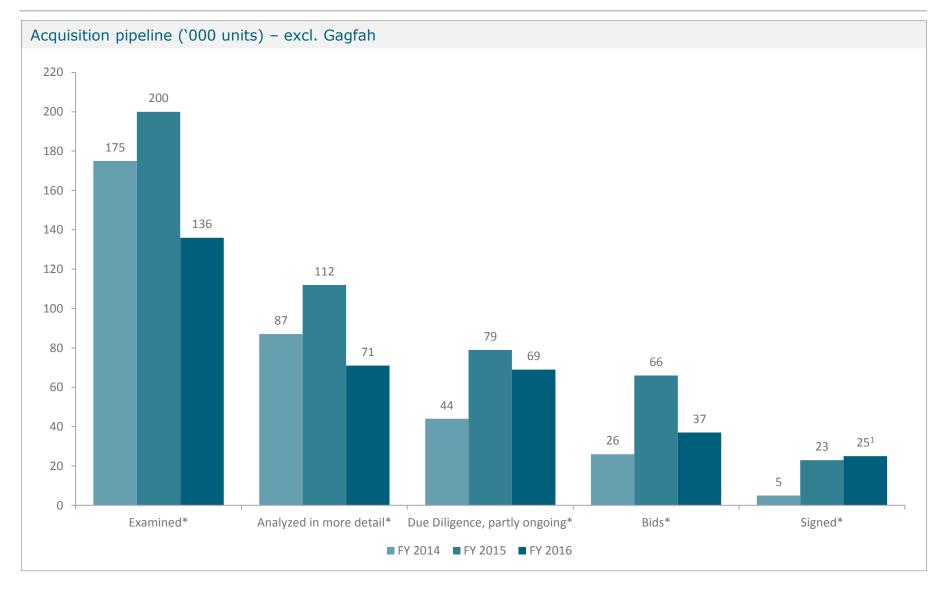




\* Please see Glossary / Sources in the Appendix for further information.



### Acquisitions – Opportunistic but Disciplined



VONOVIA

<sup>1</sup> conwert Immobilien SE transaction closed in Q1 2017.

\* Please see Glossary / Sources in the Appendix for further information.

Non-deal Asia Roadshow, February 7-10, 2017

- Predictable top and bottom line with downside protection and upside potential.
- > Only residential company in German Blue Chip Index DAX; ca. €14bn market cap.
- > Liquid stock with **92% free float** and ca. €45m daily turnover on Xetra.
- > Market leadership with nationwide footprint offers additional growth opportunities.
- Strong internal growth profile via sustainable market rent growth, additional rent growth from portfolio investments and dynamic extension business.
- Industrialized approach leverages economies of scale in a highly homogeneous asset class.
- Proven track record of sustainable and growing free cash flow from operations ("FFO") and dividends.

### IR Contact & Financial Calendar

### VONOVIA

#### Contact

Rene Hoffmann Head of Investor Relations Vonovia SE Philippstraße 3 44803 Bochum Germany

+49 234 314 1629 rene.hoffmann@vonovia.de www.vonovia.de

#### **Financial Calendar**

Feb 7-10	Management Roadshow, Asia (excl. China)
Mar 7	FY 2016 results
Mar 8-10	Roadshow London, Frankfurt, Amsterdam
Mar 13	Roadshow Paris
Mar 22	Commerzbank Resi Property Forum, London (IR only)
Mar 23	HSBC Real Estate Conference, Frankfurt (IR only)
Mar 28-30	Management Roadshow, China
Mar 29	BofAML European Real Estate Conference (IR only)
Mar 30	Bankhaus Lampe Deutschlandkonferenz, Baden Baden (IR only)
May 9	Estimated record day for dividend entitlement
May 16	Annual General Meeting
May 24 <sup>1</sup>	Interim results 3M 2017
May 24	Berenberg European Conference, USA
June 1	German Property Day, Paris
June 8	Kempen European Property Seminar, Amsterdam
~ June 12	Estimated dividend payment date
June 19-20	Capital Markets Day (Bochum)
June 22	dBAccess Berlin Conference, Berlin
Aug 2	Interim results 6M 2017
Nov 8	Interim results 9M 2017



#### Vonovia Investor Relations Tablet App

Now available for iOS and Android

<sup>1</sup> Dates are indicative and subject to change depending on conwert integration

### Appendix

#### **Operating business running smoothly with strong momentum**

- > In-place rent of €5.94 per sqm per month (+4.4% y-o-y). L-f-l rent growth of 2.8% y-o-y.
- Adj. EBITDA Operations<sup>\*</sup> of €832.3m or €2,394 per average unit<sup>\*</sup> (+8.4% y-o-y).
- FFO 1 of €571.6m or €1.23 per share\* (up 29.8% y-o-y on an eop per-share basis).

# Currently ongoing valuation work indicates strong uplift<sup>1</sup>; growth potential across strategic portfolio

- Annual valuation work underway indicates a valuation uplift between €3.5bn and €3.9bn (+15% to 17%)
   on the back of better performance, investments and yield compression.
- Break-down of Strategic Portfolio into 15 Markets and benchmarking against external sources shows growth potential across strategic portfolio.
- > Portfolio management strategy confirmed with regards to investments, acquisitions and disposals.

<sup>&</sup>lt;sup>1</sup> Recent forecast of Vonovia calculations. The value is subject to change during the ongoing valuation process.

<sup>\*</sup> Please see Glossary / Sources in the Appendix for further information.

#### 2016 guidance confirmed at upper end of range; increase of proposed dividend

- > FFO 1 now expected at higher end of the range with ~€760m or ~€1.63 per share<sup>\*</sup>.
- Dividend of €1.12 per share (19.1% increase y-o-y) intended to be proposed to the 2017 Annual General Meeting; dividend proposal not dependent on acceptance level of tender offer for conwert shares. New shares from conwert offer fully eligible for dividends.
- > EPRA NAV per share<sup>\*</sup> of ~€36 and adj. EPRA NAV per share<sup>\*</sup> of ~€30 expected for year-end 2016.

#### **Confident 2017 guidance** (effects from potential conwert takeover not yet taken into account)

- > L-f-l rent growth expected to accelerate to 3.5%-3.7%.
- Expected double-digit organic FFO 1 growth to €830m to €850m or €1.78-€1.82 per share\*.
- Expect to initiate €1bn investment program for modernization and space creation in 2017, of which
   €700m-€730m are expected to be completed and accounted for within the 2017 financial year.
- > EPRA NAV per share\* expected to grow to €37-€38 based on increased performance and higher investments. Does not include any assumptions for yield compression.

 $\ast$  Please see Glossary / Sources in the Appendix for further information.

Non-deal Asia Roadshow, February 7-10, 2017

### Strong Development of KPIs

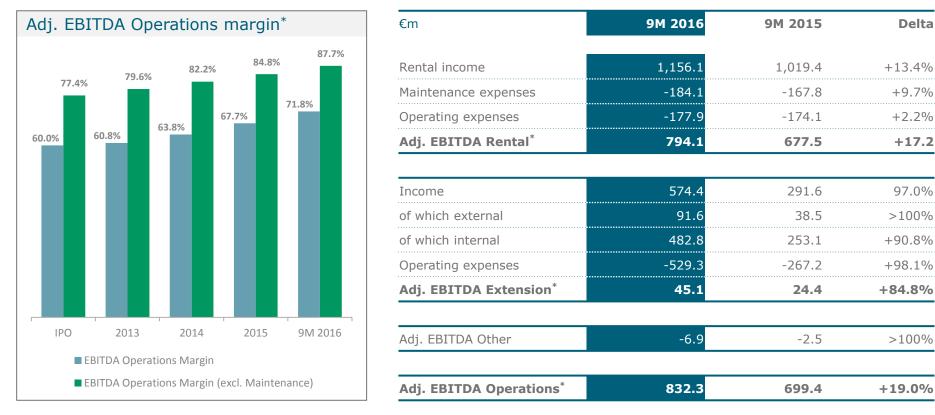
### νοπονια

Higher overall in- place rent growth as			9M 2016	9M 2015	Delta
a result of successful action-driven	In-place rent (eop)	€/month/sqm	5.94	5.69	+4.4%
portfolio	In-place rent l-f-l (eop)	€/month/sqm	5.94	5.77	+2.8%
management and acquisitions	Vacancy rate (eop)	%	2.8	3.4	-60 bps
	Rental income	€m	1,156.1	1,019.4	13.4%
+8.4%	Cost per average unit <sup>*</sup>	€	402	481	-16.4%
per avg. unit*	Adj. EBITDA Operations*	€m	832.3	699.4	+19.0%
€2,394 vs. €2,208)	Rental <sup>*</sup>	€m	794.1	677.5	+17.2%
	Extension <sup>*</sup>	€m	45.1	24.4	+84.8%
	Other (i.e. consolidation)	€m	-6.9	-2.5	n/a
+18.3%	FFO 1	€m	571.6	440.4	<u>29.8</u> %
per avg. unit*	FFO 1 per share <sup>*</sup> (eop NOSH)	€	1.23	0.95	+29.8%
€1,644 vs. €1,390)	FFO 1 per share <sup>*</sup> (avg. NOSH)	€	1.23	1.15	+6.7%
	AFFO*	€m	524.3	359.7	+45.8%
	Adj. EBITDA Sales <sup>*</sup>	€m	65.5	34.1	+92.1%
	Adj. EBITDA (Total)	€m	897.8	733.5	+22.4%
	FFO 2	€m	604.0	466.3	+29.5%
+11.6% per sqm			Sep. 30, 2016	Dec. 31, 2015	Delta
(€1,095 vs. €981)	Fair value of real estate portfolio	€m	23,851.1	24,157.7	-1.3%
	EPRA NAV*	€/share	29.48	30.02	-1.8%
	Adj. EPRA NAV <sup>*</sup>	€/share	23.64	24.19	-2.3%
	LTV	%	47.1%	46.9%	+20bps
	Dividend paid	€m	438.0	276.2	€161.8m

#### Growing Adj. EBITDA and EBITDA Operations Margin<sup>\*</sup> VONOVIA

- Adj. EBITDA Operations margin of 71.8% in 9M 2016, up from 68.6% in 9M 2015. >
- > Expensed vs. capitalized maintenance varies between companies and is a major discretionary swing factor in the EBITDA margin, which is why Vonovia reports Adj. EBITDA margins incl. and excl. maintenance.
- > Excluding expensed maintenance and including operating costs and corporate SG&A the margin was 87.7% after 85.1% in 9M 2015.

Delta



\* Please see Glossary / Sources in the Appendix for further information.

Property Management

#### Property Management

### Maintenance and Modernization

- > Stable maintenance expenses on a per sqm basis y-o-y.
- The maintenance capitalization ratio\* is not an input factor but an outcome; i.e. what type of work is expensed vs. capitalized is determined on the basis of a pre-defined SAP-based catalogue agreed with the auditors.

€m	9M 2016	9M 2015	Delta	€/sqm	9M 2016	9M 2015	Delta
Expenses for maintenance	184.1		+9.7%	Expenses for maintenance	8.49	8.49	0%
Capitalized maintenance	48.0	81.3	-41.0%	Capitalized maintenance	2.21	4.11	-46.2%
Total	232.1	249.1	-6.8%	Total	10.70	12.60	-15.1%
Maintenance capitalization ratio *	21%	33%		Maintenance capitalization ratio *	21%	33%	

Investments (modernization, new initiatives, space creation)	284.6	219.0	+30.0%
space creation)			

 $\ast$  Please see Glossary / Sources in the Appendix for further information.

#### 2 Financing

### Substantial LTV Reduction Expected for YE 2016

€m (unless indicated otherwise)	Sep. 30, 2016	Dec. 31, 2015	Delta
Non-derivative financial liabilities	13,000.0	14,939.9	-13.0%
Foreign exchange rate effects	-155.5	-179.4	-13.3%
Cash and cash equivalents	-1,118.1	-3,107.9	-64.0%
Net debt	11,726.4	11,652.6	+0.6%
Sales receivables	-233.1	-330.0	-29.4%
Additional loan amount for outstanding acquisitions		134.9	
Adj. net debt	11,493.3	11,457.5	+0.3%
Fair value of real estate portfolio	23,851.1	24,157.7	-1.3%
Fair value of outstanding acquisitions		240.0	
Shares in other real estate companies	545.4	13.7	>100%
Adj. fair value of real estate portfolio	24,396.5	24,411.4	-0.1%
LTV	47.1%	46.9%	+20bps

<b>Pro forma LTV*</b>	as of Dec. 31, 2016

Net debt (€bn)	11.6
Adj. fair value of real estate portfolio <sup>1</sup> ( $\in$ bn)	27.6
LTV	~42%

<sup>1</sup> Assuming mid-point of current valuation uplift expectation for year-end.

\* Please see Glossary / Sources in the Appendix for further information.

#### **Corporate Investment grade rating**

Rating agency	Rating	Outlook	Last Update
Standard & Poor's	BBB+	Stable	06 September 2016

#### **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 003 (USD-Bond)	4 years 3.200%	US25155FAA49	USD 750m	100.000%	2.970%*	02 Oct 2017	BBB+
Bond 004 (USD-Bond)	10 years 5.000%	US25155FAB22	USD 250m	98.993%	4.580%*	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 010A (EMTN)	2 years 0.950%+3M EURIBOR	DE000A18V120	€ 750m	100.000%	0.835% hedged	15 Dec 2017	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 14A (EMTN)	5 years 0.750%	DE000A19B8D4	€ 500m	99.863%	0.750%	25 Jan 2022	BBB+
Bond 14B (EMTN)	10 years 1.750%	DE000A19B8E2	€ 500m	99.266%	1.750%	25 Jan 2027	BBB+
* FUR-equivalent Coupon							

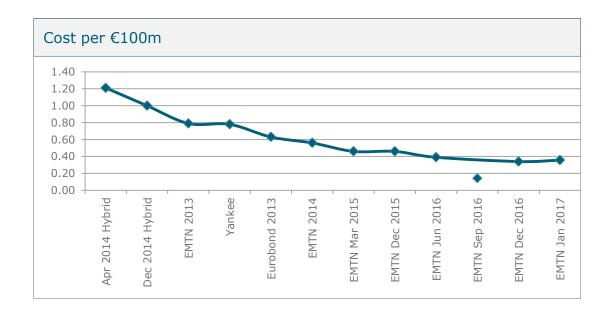
\* EUR-equivalent Coupon



### Financing – Economies of Scale in EMTN Issuance Costs VONOVIA

- > We have managed to establish ourselves as a first class frequent issuer on the capital markets since our IPO.
- > The September 2016 issuance was structured as a private bond.
- > 8 of our bonds so far have been purchased through the ECB's Corporate Sector Purchase Program.

Cost per €100m <sup>(1)</sup>	€m
April 2014 Hybrid	1.21
December 2014 Hybrid	1.00
EMTN 2013	0.79
Yankee	0.78
Eurobond 2013	0.63
EMTN 2014	0.56
EMTN March 2015	0.46
EMTN December 2015	0.46
EMTN June 2016	0.39
EMTN September 2016	0.14
EMTN December 2016	0.34
EMTN January 2017	0.36



(1) Excluding contingency; including some cost estimates for the most recent transactions as not all bills have been fully settled yet.

 $\ast$  Please see Glossary / Sources in the Appendix for further information.

### Bond and Rating KPIs - as per September 30, 2016

> Bond KPIs	Covenants*	Level	Actual
	<b>LTV</b> Total Debt / Total Assets	<60%	45%
	Secured LTV Secured Debt / Total Assets	<45%	15%
	<b>ICR</b> Last 12 months EBITDA / Last 12 months Interest Expense	>1.80x	3.54x
	<b>Unencumbered Assets</b> Unencumbered Assets / Unsecured Debt	>125%	215%

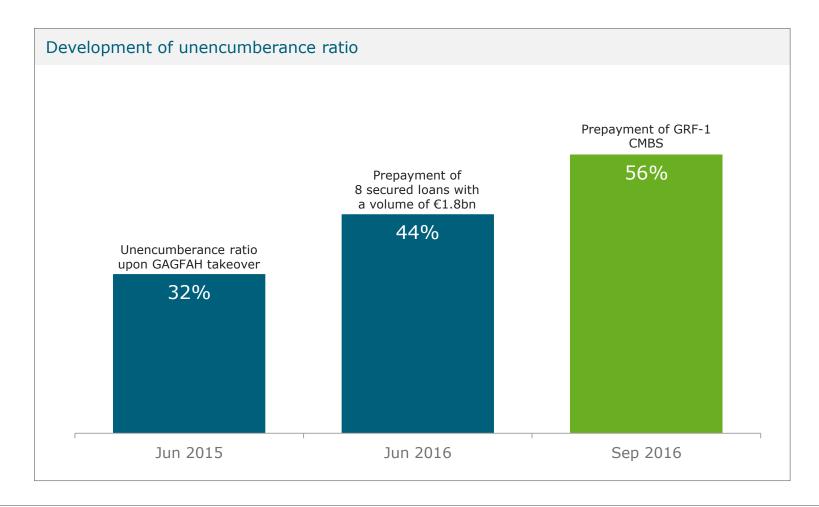
> Rating KPIs	Covenant	Level (BBB+)
	Debt to Capital	
	Total Debt / Total Equity + Total Debt	<60%
	ICR	
	Last 12 months EBITDA / LTM Interest Expense	>1.80x

\* Please see Glossary / Sources in the Appendix for further information

#### 2 Financing

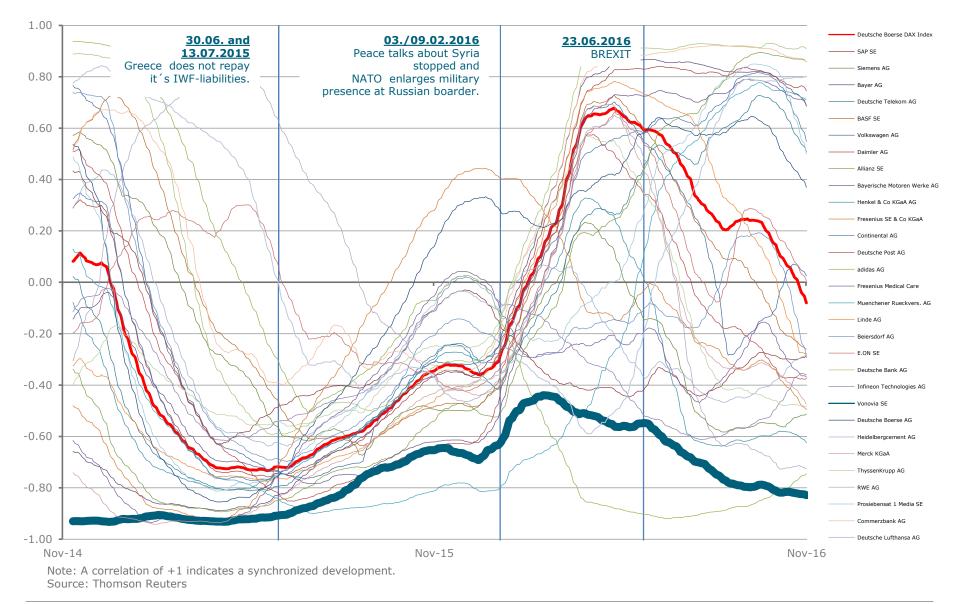
### Development of Unencumberance Ratio

- > Unencumberance ratio dropped from 49.6% pre GAGFAH down to 32.1% including GAGFAH in 2015.
- > S&P provided 18 months (i.e. 30 September 2016) to reach an unencumberance ratio of > 50%.
- > Upon GRF-1 prepayment in August 2016, the unencumberance ratio increased to 56%.



### Interest Rate Correlation DAX 30 Stocks

### ΝΙνουολ



2

Financing



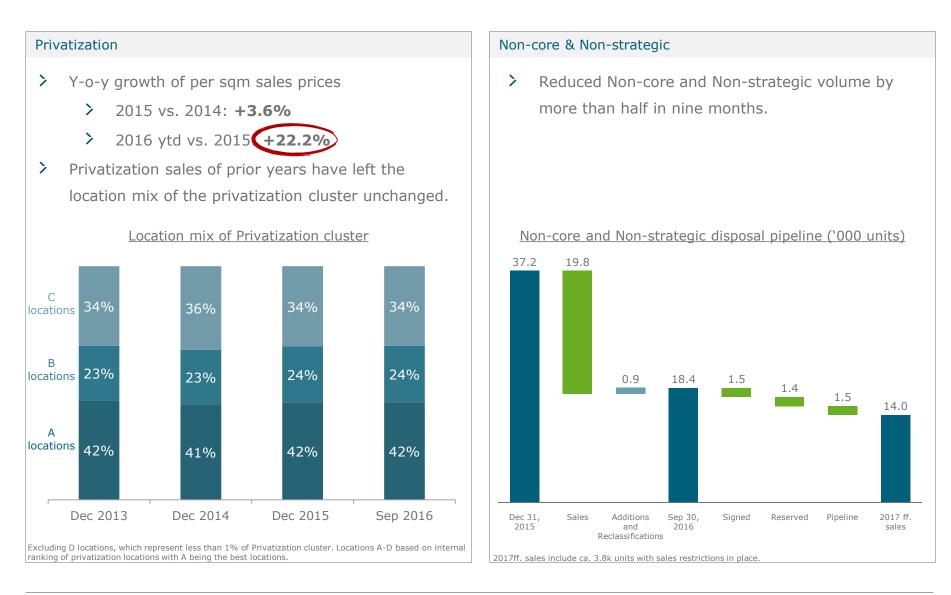
- Privatization volume slightly higher y-o-y partly as a result of privatization sales in the context of portfolio transactions; excluding this impact the margin for the first nine months 2016 was 38.5%.
- Increased non-core and non-strategic sales largely driven by three larger portfolio transactions with an aggregate volume of ca. 17k units.

€m (unless indicated otherwise)	9M 2016	9M 2015	9M 2016	9M 2015	9M 2016	9M 2015
	<u>Privatiza</u>	<u>tion</u>	Non-core/No	<u>n-strategic</u>	<u>Total</u>	
No. of units sold	2,150	1,748	19,772	3,574	21,922	5,322
Income from disposal	205.5	183.2	782.7	132.4	988.2	315.6
Fair value of disposal <sup>*</sup>	-151.8	-133.6	-753.0	-130.3	-904.8	-263.9
Adj. profit from disposal	53.7	49.6	29.7	2.1	83.4	51.7
Fair value step-up <sup>*</sup> (%)	35.4%	37.1%	3.9%	1.6%		

Selling costs		-17.9	-17.6
Adj. EBITDA Sales*		65.5	34.1

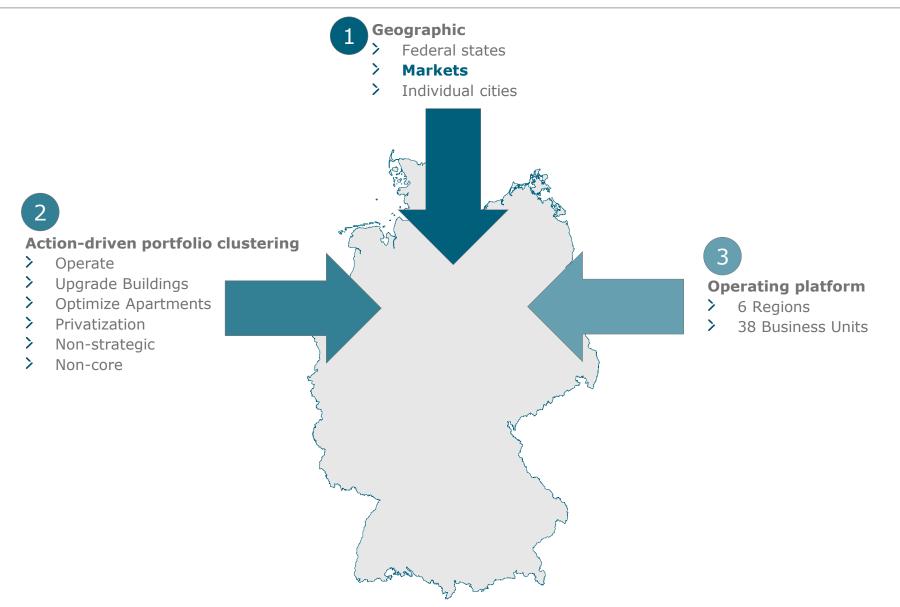
 $\ast$  Please see Glossary / Sources in the Appendix for further information.







### 3 Angles to Look on the Portfolio



### Enhanced Transparency on Portfolio Structure

- Given its numerous larger and mid-sized urban areas and its heterogeneous local markets, Germany is quite different from countries such as France or the UK where the capital city tends to overshadow the rest.
- > The relevance of the catchment area and the appeal that a striving urban area has on its vicinity can be better assessed if the focus is shifted away from federal states and the data for individual cities.

EXAMPLE Saxony ≠ Dresden ≠ Chemnitz	City
EXAM Saxony ≠ Dresden ≠ Chemnitz	Berlin 🕿 Potsdam
NRW ≠ Cologne ≠ Gelsenkirchen	Essen ≈ Bochum ≈ Dortmund
Lower Saxony ≠ Hanover ≠ Salzgitter	Munich $lpha$ locations connected via local train

- > We have prepared a supplemental **reporting structure for our strategic portfolio**<sup>1</sup> that
  - cuts the portfolio into **15 Markets**, each of which represents a **homogeneous area** with similar characteristics and **future development potential**, geographic proximity, commuter relations, etc.;
  - benchmarks the Markets against external sources (empirica on Growing Metropolitan Areas ("Schwarmstädte") and "Prognos Future Atlas" ranking) to systematically measure their relative attractiveness;
  - > is primarily forward-looking;
  - > **supplements** our action-driven portfolio clustering and **confirms** our portfolio management strategy.

<sup>1</sup> Excluding non-core and non-strategic locations and including privatization assets in strategic locations

Portfolio Management

#### <sup>3</sup>Management</sup> 15 Regional Markets

Portfolio

- > Balanced Strategic Portfolio with high exposure and material footprint in strong Markets.
- > Well positioned to benefit from a dynamic development across the country.
- > Market data on future development shows attractive growth rates across all Markets.

Regional Market	Fair value I (€m)	Fair value (€/sqm)	Multiple (in-place rent)	Residential units	Annua- lized in- place rent (€m)	In-place rent (€/sqm)	L-f-l rent growth (y-o-y)	Re-letting rent growth (y-o-y)*	Avg. rent growth forecast CBRE (5yrs)*	Schwarm- stadt?	Prognos ranking
Berlin	2,716	1,296	18.1	32,272	150	5.96	3.2%	6.7%	3.1%	yes	4.0
Rhineland (Cologne, Düsseldorf, Bonn)	2,515	1,273	16.4	28,434	153	6.47	2.6%	5.4%	2.6%	yes	2.9
Rhine Main Area (Frankfurt, Darmstadt, Wiesbaden)	2,303	1,578	17.4	22,500	133	7.57	3.7%	5.6%	3.4%	yes	1.8
Southern Ruhr Area (Dortmund, Essen, Bochum)	2,172	829	13.0	42,149	167	5.38	3.0%	6.1%	1.9%		5.0
Dresden	2,136	931	14.5	38,192	147	5.40	2.9%	7.1%	3.0%	yes	2.0
Stuttgart	1,821	1,432	16.9	19,418	108	7.11	2.5%	0.1%	3.0%	yes	2.2
Hamburg	1,468	1,359	17.2	16,544	85	6.50	3.4%	5.3%	3.2%	/	2.7
Munich	1,374	2,071	22.5	9,800	61	7.43	3.4%	5.9%	4.9%		1.5
Northern Ruhr Area (Duisburg, Gelsenkirchen)	1,210	734	12.3	26,127	99	5.10	2.2%	4.3%	1.7%		6.3
Hanover	912	1,014	14.5	13,892	63	5.83	2.1%	6.7%	2.2%	yes	2.8
Kiel	726	859	13.1	13,995	55	5.46	2.5%	7.0%	2.3%	yes	5.1
Bremen	652	922	14.7	11,212	44	5.29	3.0%	5.5%	2.8%		5.0
Westphalia (Münster, Osnabrück)	515	826	13.0	9,501	40	5.37	3.2%		2.4%	yes	4.2
Freiburg	393	1,399	17.4	4,071	23	6.67	3.1%		3.6%		3.1
Leipzig	234	905	13.8	4,094	17	5.60	1.8%	1.0%	2.1%	yes	4.2
Other Strategic Locations	1,771	1,071	15.2	25,668	117	5.97	2.7%	3.3%	2.7%	5	3.6
Total	22,920	1,125	15.7	317,869	1,462	6.01	2.9%	4.4%	2.8%	28	3.3

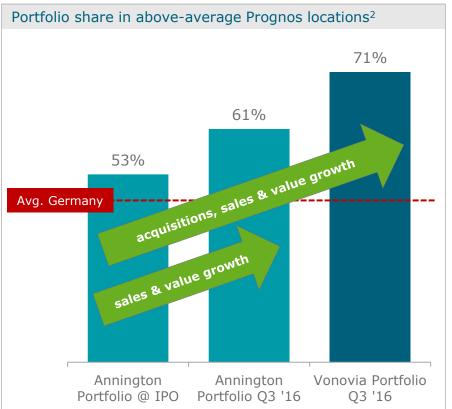
Excluding non-core and non-strategic locations and including privatization assets in strategic locations. \* Please see Glossary / Sources in the Appendix for further information.



### Exposure to Attractive Regional Markets has Grown

> The strategy of portfolio investments, disposals of weaker markets and acquisitions in stronger markets has resulted in a substantially more attractive portfolio due to higher-quality assets and locations.





AIVONOVIA

<sup>1</sup> If more than 50% of the fair value of a regional market is in a Schwarmstadt, all of the fair value of that regional market is counted towards the Schwarmstadt; if less than 50% of the fair value of a regional market is in a Schwarmstadt, none of the fair value of that regional market is counted towards the Schwarmstadt <sup>2</sup> Above average = ranking 1-4

Portfolio weighting based on fair value; average for Germany based on number of units

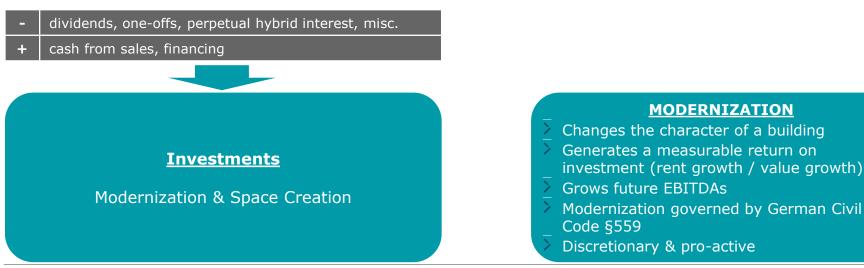


### Maintenance or Modernization?

	Illustrative Flow of Funds
	Rental Income
-	Maintenance Expense
-	Operating expenses ("Platform costs")
+	adj. EBITDA Extension and Other
=	Adj. EBITDA Operations
-	Interest
-	Current Income Tax Rental
=	FFO 1
-	Capitalized Maintenance
=	AFFO

#### **MAINTENANCE**

- Allocation between <u>expensed maintenance</u> and <u>capitalized maintenance</u> is a major swing factor in operating margin
- Regardless of the capitalization rate, however, both combined are largely governed by German Civil Code §558 and essentially protect future EBITDAs as they are reactive, non-discretionary measures.
- Represent what is required to broadly maintain the property value.



Non-deal Asia Roadshow, February 7-10, 2017

# Schwarmstädte

Portfolio

### VONOVIA

- While the actual demographic development has not deviated materially from past projections, the **regional distribution of the population** is seeing a **comprehensive shift** as especially the younger generation moves **into more urban settings**. This results in a certain number of **growing metropolitan areas ("Schwarmstädte1")** and large parts of the country that see a substantial outflow of their population.
- empirica has identified **30 Schwarmstädte** across Germany that are the **beneficiaries of the regrouping of the German population**.
   Comparing 2008 and 2013 demographic data across all 402 cities and counties in Germany shows material population declines in large parts of the country at the expense of a few growing locations to which parts of the population have migrated.
- > Among the **reasons for the geographic shift** of the population are
  - Germany's declining birth-rate results in lower density of similarly-aged persons, which in turn narrows the options for these age groups as points of interest disappear due to lack of demand.
  - ightarrow Increasing economic and social appeal of urban settings vs. rural areas.
- > These **trends are enforced** by
  - > Increasing unattractiveness of places of origin as more people move out and growing attractiveness of Schwarmstädte as more people move in.
  - Increasing number of households in urban areas as a result of more single households, longer life expectancy etc.

		Change 2008-2013				
	Cohort-growth rate 15-34	Total Population	Age 20-34	Age 30-34		
Munich	336	7.1%	11.7%	19.5%		
Leipzig	325	7.6%	14.6%	31.9%		
Frankfurt/M.	325	7.8%	11.3%	15.6%		
Heidelberg	287	4.3%	6.7%	22.9%		
Darmstadt	287	5.7%	16.3%	16.2%		
Regensburg	277	5.2%	11.8%	18.7%		
Dresden	271	6.1%	6.6%	22.8%		
Karlsruhe	271	4.9%	15.1%	17.2%		
Freiburg	258	6.7%	10.3%	18.2%		
Stuttgart	247	4.4%	9.1%	15.2%		
Düsseldorf	242	3.0%	8.4%	10.4%		
Münster	241	5.4%	8.9%	18.2%		
Cologne	236	4.2%	8.6%	10.8%		
Mainz	235	3.4%	6.1%	14.6%		
Offenbach	232	7.0%	15.0%	15.7%		
Kiel	231	3.5%	10.8%	12.0%		
Jena	231	3.2%	3.2%	27.5%		
Berlin	223	5.0%	11.1%	22.9%		
Braunschweig	218	3.3%	12.4%	17.1%		
Mannheim	213	2.9%	12.4%	15.8%		
Nuremberg	211	3.2%	8.9%	15.5%		
Bonn	210	3.7%	10.2%	15.2%		
Erlangen	209	2.4%	8.8%	19.7%		
Hamburg	209	3.2%	4.5%	10.6%		
Rostock	207	2.4%	4.5%	30.3%		
Landshut	206	5.6%	11.8%	9.8%		
Koblenz	206	2.3%	13.7%	15.9%		
Augsburg	205	3.9%	11.2%	15.1%		
Halle	205	0.8%	5.1%	20.0%		
Trier	203	1.9%	6.9%	17.8%		
Germany (total)	118	0.3%	3.4%	9.6%		

Schwarmstädte with stronger growth of young generation and stronger overall population growth

<sup>1</sup> The word "Schwarmstadt" is a combination of the German words for "flock" and "city," trying to capture the migration movement of large parts of the (especially younger) generations into certain cities

## Prognos Methodology

Portfolio

- Prognos is an independent research institute that benchmarks all 402 cities and counties in Germany ("Prognos Future Atlas Ranking").
- Cities and counties are ranked across 8 categories ranging from 1 ("excellent potential") to 8 ("extreme future risks").
- > Analysis comprises 29 socioeconomic indicators across four categories
  - > Demographics
  - > Labor market
  - > Innovation
  - > Prosperity
- > The analysis looks at both the current strength and the dynamic development, allowing an assessment of the positive/negative momentum.
- The first Prognos ranking was published in 2004; updates have been made in 2007, 2010, 2013 and most recently in 2016.





Frankfurt, Odenwaldstr. 2-4b



Frankfurt, Am Lindenbaum 15-85A



Frankfurt, Friedlebenstr. 32



Essen, Meistersingerstrasse 20-24C





Dortmund, Binsengarten 8-24 A



Dresden, Niederseidewitzer Weg, 32-40



Dresden, Kipsdorfer Strasse, 123-139



Dresden, Berzdorfer Str. 20-24





Essen, Feldwiese 16-30



Dortmund, Lippmannstr. 2-14



Dortmund, Doerwerstr, 68-70



Essen, Bonnekampstr. 18-43 B

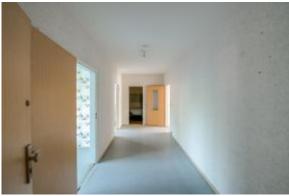
Non-deal Asia Roadshow, February 7-10, 2017



### VONOVIA

#### Before





After







#### Before





#### After







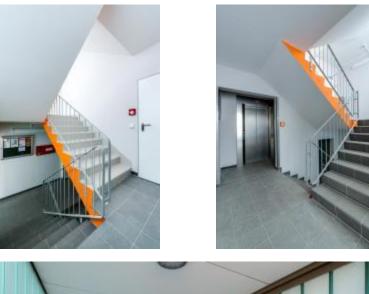
#### Before















#### Before





After







Before





After





















## Modernization - Impressions



Addition of new floor plus modernization investment - Before



Addition of new floor plus modernization investment - After



Upgrade Building - Before



Upgrade Building - After



# VONOVIA













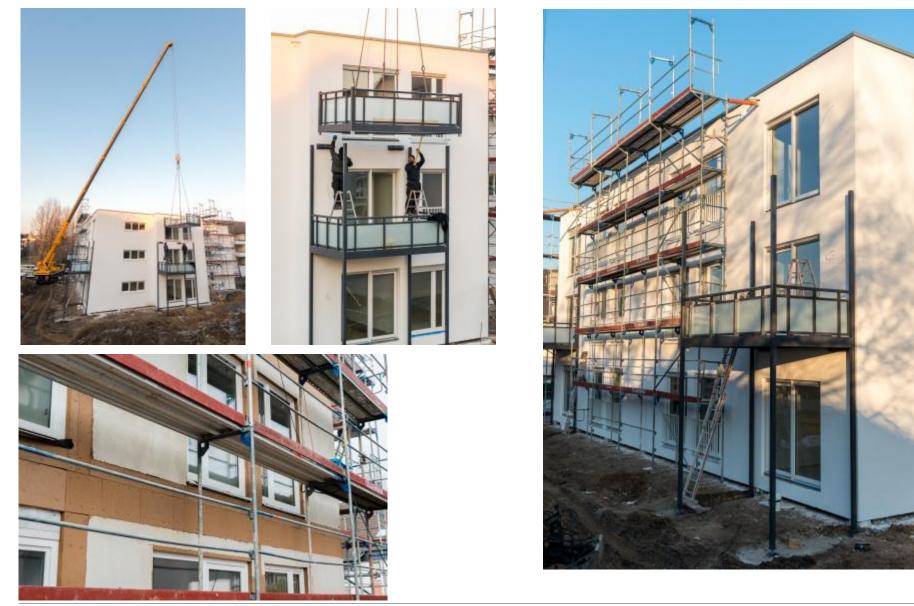








# VONOVIA



- > Pilot project in Bochum with 14 residential units
- > Factory-based construction of modules in within 4 months; on-site assembly of modules within only 5 days
- Construction cost of €1,800 per sqm (all-in, excl. land, which we already owned)
- > Completed in mid December 2016 and fully let by mid January 2017
- > In-place rent of slightly above €9 per sqm, translating into a 6% yield



## Management Neighbourhood Development "Eltingviertel"

## νοπονια



3







### TGS Van



## Final Guidance for 2016

# νοπονια

	2015 actuals	Initial Guidance for 2016 (in Nov. `15)	Updated Guidance for 2016 (in Aug. `16)	Final Guidance for 2016	
L-f-l rental growth (eop)	2.9%	2.8-3.0%	3.0-3.2%	3.0-3.2%	
Vacancy (eop)	2.7%	~3%	~2.5%	~2.5%	
Rental Income (€m)	1,415	1,500-1,520	1,530-1,550	1,530-1,550 Upper et	ad of
FFO1 (€m)	608	690-710	740-760	~760 Opper en guidance ~25% p	e rang
FFO1/share <sup>*</sup> (eop NOSH)	€1.30	€1.48-1.52	€1.59-1.63	~€1.63	
EPRA NAV/share* (eop)	€30.02	€30-31 <sup>1</sup>	€30-31 <sup>1</sup>	~€36 Final 2016	
Adj. EPRA NAV/share* (eop)	€24.19	€24-25	€24-25	~€30 includes expectation	ns for
Maintenance (€m)	331	~330	~340	~340 end po valuatio	
Modernization (€m)	356	430-500	470-500	470-500	point)
Privatization (#)	2,979	~2,400	~2,400	~2,500	
FMV step-up (Privatization)	30.5%	~30%	>35%	>35%	
Non-core (#)	12,195	opportunistic	opportunistic	Up to 24,000 continuously opportunistic	
FMV step-up (Non-Core)	9.2%	~0%	~5%	~5% 19% incre	
Dividend/share cluding assumptions for year-end valuation gains.	€0.94	~70% of FFO1	€1.05	€1.12 <sup>2</sup> not sul acceptance conwert	ce lev

<sup>1</sup> Excluding assumptions for year-end valuation gains.

<sup>2</sup> Intended to be proposed to the 2017 Annual General Meeting.

\* Please see Glossary / Sources in the Appendix for further information.

## FFO per Share\* Up 29.8% y-o-y

- The 19% Adj. EBITDA Operations\* growth combined with reduced financing expenses and continuously low current income taxes translate into an absolute FFO growth of 29.8% on a per-share\* basis.
- > Prior-year current income taxes of €15.8m are now broken down between "Operations" and "Sales."

€m (unless indicated otherwise)	9M 2016	9M 2015	Delta
Adj. EBITDA Operations <sup>*</sup>	832.3	699.4	+19.0%
FFO interest expense	-249.1	-251.4	-0.9%
Current income tax (Operations)	-11.6	-7.6	+52.6%
FFO 1	571.6	440.4	+29.8%
of which attributable to Vonovia's shareholders	536.2	402.9	+33.1%
of which attributable to Vonovia's hybrid capital investors	30.0	22.9	+31.0%
of which attributable to non-controlling interests	5.4	14.6	-63.0%
Capitalized maintenance	-47.3	-80.7	-41.4%
AFFO*	524.3	359.7	+45.8%
Current income tax (Sales)	-33.1	-8.2	>100%
Adjusted EBITDA Sales*	65.5	34.1	+92.1%
FFO 2	604.0	466.3	+29.5%
FFO 1 € / share <sup>*</sup> (eop NOSH)	1.23	0.95	+29.8%
FFO 1 € / share <sup>*</sup> (avg. NOSH)	1.23	1.15	+6.7%
AFFO € / share <sup>*</sup> (eop NOSH)	1.13	0.77	+45.7%
AFFO € / share <sup>*</sup> (avg. NOSH)	1.13	0.94	+19.5%

 $\ast$  Please see Glossary / Sources in the Appendix for further information.

## EPRA NAV\* Impacted by Dividend Payout

- Accounting for €0.94 dividend (€438m) paid in May 2016 the EPRA NAV is stable.
- > Portfolio valuation will be accounted for in the Q4/FY 2016 results.

€m (unless indicated otherwise)	Sep. 30, 2016	Dec. 31, 2015	Delta
Equity attributable to Vonovia's shareholders	10,356.5	10,620.5	-2.5%
Deferred taxes on investment properties and assets held for sale	3,293.5	3,241.2	+1.6%
Fair value of derivative financial instruments <sup>1</sup>	114.2	169.9	-32.8%
Deferred taxes on derivative financial instruments	-28.4	-43.4	-34.6%
EPRA NAV*	13,735.8	13,988.2	-1.8%
Goodwill	-2,718.9	-2,714.7	+0.2%
Adj. EPRA NAV <sup>*</sup>	11,016.9	11,273.5	-2.3%
EPRA NAV €/share*	29.48	30.02	-1.8%
Adj. EPRA NAV €/share <sup>*</sup>	23.64	24.19	-2.3%

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

\* Please see Glossary / Sources in the Appendix for further information.

## Reconciliation IFRS Profit to FFO

# ΝΙνουολ

€m (unless indicated otherwise)	9M 2016	9M 2015	Delta
PROFIT FOR THE PERIOD	278.3	193.5	43.8%
Financial result	354.1	297.8	18.9%
Income taxes	177.1	131.1	35.1%
Depreciation	16.4	7.3	>100%
Income from fair value adjustments of investment properties			
= EBITDA IFRS	825.9	629.7	31.2%
Non-recurring items	70.3	103.6	-32.1%
Total period adjustments from assets held for sale	11.2	0.6	>100%
Income from invetsments in other real estate companies	-9.6	-0.4	>100%
= ADJUSTED EBITDA	897.8	733.5	22.4%
Adjusted EBITDA Sales <sup>*</sup>	-65.5	-34.1	92.1%
Adjusted EBITDA Other	6.9	2.5	>100%
Adjusted EBITDA Extension*	-45.1	-24.4	84.8%
= ADJUSTED EBITDA RENTAL*	794.1	677.5	17.2%
Adjusted EBITDA Extension*	45.1	24.4	84.8%
Adjusted EBITDA Other	-6.9	-2.5	>100%
Interest expense FFO	-249.1	-251.4	-0.9%
Current income taxes FFO 1	-11.6	-7.6	52.6%
= FFO 1	571.6	440.4	29.8%
Capitalised maintenance	-47.3	-80.7	-41.4%
= AFFO	524.3	359.7	45.8%
Current income taxes Sales	-33.1	-8.2	>100%
FFO 2 (FFO 1 incl. Adjusted EBITDA Sales*/current income taxes Sales)	604.0	466.3	29.5%
FFO 1 per share in € (eop NOSH) <sup>*</sup>	1.23	0.95	29.8%
AFFO per share in € (eop NOSH) *	1.13	0.77	45.7%
Number of shares (million)	466	466	

EBITDA increase mainly driven by rental business

Increase of adjusted EBITDA Sales<sup>\*</sup> mainly due to higher Non-core sales volume, higher Non-core step-ups

Increase of adjusted EBITDA Extension\* (+85%) reflects expansion strategy to the extent it is not accounted for under rental business

Adjusted EBITDA Rental\* reflects operational performance as well as acquisitions

Note: 9M 2016 includes 9 months of GAGFAH and SÜDEWO contributions, while 9M 2015 only includes 7 months of GAGFAH, 6 months of Franconia and 3 months of SÜDEWO contributions \* Please see Glossary / Sources in the Appendix for further information.

P&L

הסע	OVIA
-----	------

€m (unless indicated otherwise)	9M 2016	9M 2015	Delta
Income from property letting	1,640.3	1,470.3	11.6%
Other income from property management	29.1	21.3	36.6%
Income from property management	1,669.4	1,491.6	11.9%
Income from disposal of properties	988.2	315.6	>100%
Carrying amount of properties sold	-953.9	-288.9	>100%
Revaluation of assets held for sale	37.9	24.4	55.3%
Profit on disposal of properties	72.2	51.1	41.3%
Net income from fair value adjustments of investment properties			
Capitalized internal expenses	227.7	115.1	97.8%
Cost of materials	-790.6	-683.0	15.8%
Personnel expenses	-267.1	-234.5	13.9%
Depreciation and amortization	-16.4	-7.3	>100%
Other operating income	70.5	60.1	17.3%
Other operating expenses	-166.7	-171.8	-3.0%
Financial income	22.4	3.5	>100%
Financial expenses	-366.0	-300.2	21.9%
Earnings before tax	455.4	324.6	40.3%
Income taxes	-177.1	-131.1	35.1%
Profit for the period	278.3	193.5	43.8%
Attributable to:			
Vonovia's shareholders	182.7	159.3	14.7%
Vonovia's hybrid capital investors	22.4	22.4	0.0%
Non-controlling interests	73.2	11.8	>100%
Earnings per share (basic and diluted) in €	0.39	0.42	-5.7%

Increase mainly acquisitionrelated; additionally in-place rent on a like-for-like basis increased by 2.8%; additionally vacancy rate decreased by 0.6pp

Increase mainly due to higher Non-core sales volume in 9M 2016 19,772 units vs. 3,574 in 9M 2015

Increase due to in-sourcing effect of craftsmen organization and larger volume of maintenance and modernization work

Ramp-up from 6,125 to 7,074 employees leads to increased personnel expenses which primarily result from TGS growth

Increase mainly driven by issuing EMTN Bond of €3.0bn in December 2015; higher prepayment fees and commitment interest

Note: 9M 2016 includes 9 months of GAGFAH and SÜDEWO contributions, while 9M 2015 only includes 7 months of GAGFAH, 6 months of Franconia and 3 months of SÜDEWO contributions

## Balance Sheet (1/2 – Total Assets)

€m (unless indicated otherwise)	Sep. 30, 2016	Dec. 31, 2015	Delta	
Assets				
Intangible assets	2,741.0	2,724.0	0.6%	
Property, plant and equipment	87.5	70.7	23.8%	Increase mainly due to
Investment properties	23,696.9	23,431.3	1.1%	the acquisition and valuation of Deutsche
Financial assets	729.7	221.7	>100%	Wohnen shares
Other assets	16.5	158.5	-89.6%	
Income tax receivables	0.1	0.1	0.0%	2015 including advance payments
Deferred tax assets	72.3	72.3	0.0%	made on acquisitions of companies and real
Total non-current assets	27,344.0	26,678.6	2.5%	estate
Inventories	4.6	3.8	21.1%	
Trade receivables	257.9	352.2	-26.8%	Decrease mainly due to scheduled and
Financial assets	-	2.0	-100%	unscheduled loan
Other assets	114.0	113.4	0.5%	repayments, mainly GRF 1 and 3-yr 2013
Income tax receivables	20.6	23.1	-10.8%	bond
Cash and cash equivalents	1,118.1	3,107.9	-64.0%	
Assets held for sale	102.8	678.1	-84.8%	2015 including 13,570 units sale to LEG
Total current assets	1,618.0	4,280.5	-62.2%	
Total assets	28,962.0	30,959.1	-6.5%	

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

## νοπονια

€m (unless indicated otherwise)	Sep. 30, 2016	Dec. 31, 2015	Delta	
Equity and liabilities				Increase mainly
Subscribed capital	466.0	466.0	0.0%	results from the
Capital reserves	5,891.4	5,892.5	0.0%	valuation of the
Retained earnings	3,961.2	4,309.9	-8.1%	Deutsche Wohner
Other reserves	37.9	-47.9	>100%	shares
Total equity attributable to Vonovia's shareholders	10,356.5	10,620.5	-2.5%	
Equity attributable to hybrid capital investors	1,031.5	1,001.6	3.0%	
Total equity attributable to Vonovia's shareholders and hybrid capital investors	11,388.0	11,622.1	-2.0%	
Non-controlling interests	319.4	244.8	30.5%	
Total equity	11,707.4	11,866.9	-1.3%	Mainly repayment
Provisions	661.4	612.9	7.9%	of GRF 1, and
Trade payables	0.8	0.9	-11.1%	repayments of
Non derivative financial liabilities	12,737.4	13,951.3	-8.7%	portfolio loans
Derivatives	87.4	144.5	-39.5%	
Liabilities from finance leases	94.3	94.9	-0.6%	
Liabilities to non-controlling interests	8.0	46.3	-82.7%	
Other liabilities	88.6	25.9	>100%	
Deferred tax liabilities	2,633.9	2,528.3	4.2%	
Total non-current liabilities	16,311.8	17,405.0	-6.3%	
Provisions	386.0	429.5	-10.1%	David ware ware at
Trade payables	113.8	91.6	24.2%	Bond repayment €700m
Non derivative financial liabilities	262.6	988.6	-73.4%	
Derivatives	56.0	58.8	-4.8%	
Liabilities from finance leases	4.9	4.4	11.4%	
Liabilities to non-controlling interests		9.8	-100%	
Other liabilities	119.5	104.5	14.4%	
Total current liabilities	942.8	1,687.2	-44.1%	
Total liabilities	17,254.6	19,092.2	-9.6%	
Total equity and liabilities	28,962.0	30,959.1	-6.5%	

### Guidance for 2017 (effects from potential conwert takeover not yet taken into account)

# νοπονια

	2015 Actuals	2016 Guidance	2017 Guidance	Rent growth expected to continue to
L-f-l rental growth (eop)	2.9%	3.0-3.2%	3.5%-3.7%	accelerate
Vacancy (eop)	2.7%	~2.5%	<2.5%	
Rental Income (€m)	1,415	1,530-1,550	1,530-1,550	Stable top line on smaller portfolio
FFO1 (€m)	608	~760	830-850	
FFO1/share* (eop NOSH)	€1.30	~€1.63	€1.78-€1.82	Double-digit organic growth (mid-point)
EPRA NAV/share* (eop)	€30.02	~€36	€37-€38*	Including valuation impact from improved performance and investments
Adj. EPRA NAV/share* (eop)	€24.19	~€30	€31-€32	(~4% NAV growth); excluding any assumptions for yield compression.
Maintenance (€m)	331	~340	~340	Every 1% value uplift from yield compression results in ~€0.60 NAV
Modernization ( $\in$ m)	356	470-500	700-730	growth per share.
Privatization (#)	2,979	~2,500	~2,300	
FMV step-up (Privatization)	30.5%	>35%	~35%	Expect to initiate €1bn
Non-core (#)	12,195	Up to 24,000 continuously opportunistic	opportunistic	investment program for modernization and space creation in 2017, of which €700m-€730m are expected to be
FMV step-up (Non-Core)	9.2%	~5%	>0%	completed and accounted for within the 2017 financial year.
Dividend/share	€0.94	€1.12	70% of FFO 1	

 $\ast$  Please see Glossary / Sources in the Appendix for further information.

	9M 2016 /	9M 2015 /
	Sep 30, 2016	Sep 30, 2015
Headcount (eop)	7,074	6,125
EPRA vacancy rate (eop)	2.6%	3.2%
IFRS profit for the period	278.3	193.5
Number of units acquired	2,440	168,632
Number of units sold	21,922	5,322
Total residential sqm (`000; eop)	21,064	22,863

## Glossary / Sources

Item	Comment / Description / Source
Acquisition	200k units include the acquisition of Vitus (30k), Dewag (11k), Franconia (5k), Südewo (20k), and Gagfah (140k)
Acquisition pipeline: "Analyzed in more detail"	Generally interesting and reviewed by central Acquisitions Department
Acquisition pipeline: "Bids"	Submission of indicative or binding offer following a due diligence
Acquisition pipeline: "Due Diligence"	Thorough review of promising transactions of "Analyzed in more detail" category, including support from respective Vonovia Regions
Acquisition pipeline: "Examined"	Offers received (duplicates excluded)
Acquisition pipeline: "Signed"	Signed purchase agreement after successful bid
Adj. EBITDA Extension	(Income not related to EBITDA Rental or EBITDA Sales) - (Operating expenses not related to EBITDA Rental or EBITDA Sales); 2016E and 2017E estimates are based on the Internal Management Report
Adj. EBITDA Operations	Adj. EBITDA - Adj. EBITDA Sales
Adj. EBITDA Operations margin	Adj. EBITDA Operations / Total rental income
Adj. EBITDA Operations margin (excl. Maintenance)	(Adj. EBITDA Operations + Maintenance expenses) / Total rental income
Adj. EBITDA Operations per average unit	Adj. EBITDA Operations / average number of own apartments in the reporting period
Adj. EBITDA Rental	Rental income - Maintenance expenses - Operating expenses
Adj. EBITDA Sales	IFRS profit on disposal of properties - revaluation (realized) of assets held for sale + revaluation from disposal of assets held for sale - Selling costs
Adj. EPRA NAV	Net Asset Value as defined by the European Public Real Estate Association (EPRA) minus goodwill amount
Adj. EPRA NAV per share	Net Asset Value as defined by the European Public Real Estate Association (EPRA) minus goodwill amount divided by the number of shares at the end of the reporting period
AFFO	FFO 1 - Capitalized Maintenance
AFFO per share (avg. NOSH)	AFFO / average number of shares in the reporting period (9M 2016: 466.0m; 9M 2015: 383.0m)
AFFO per share (eop NOSH)	AFFO / number of shares at the end of the reporting period (466m shares for both Sep. 30, 2016 and Sep. 30, 2015)
Avg. rent growth forecast CBRE (5yrs)	Average rent growth CAGR 5 years forecast in the current CBRE market valuation.
Cost per €100m (bond issuance)	Legal fees, bookrunner fees, rating agency fee, others
Cost per average unit	(Operating expenses of the Rental segment + Adj. EBITDA Extension/Other) / average number of own apartments in the reporting period
Covenant: ICR	Adj. EBITDA (total) / FFO interest expense (each calculated for the last twelve months)
Covenant: LTV	Total non derivative financial liabilities / total assets (as shown in the balance sheet)

## Glossary / Sources

Item	Comment / Description / Source
Covenant: Secured LTV	Total secured non derivative financial liabilities / total assets (as shown in the balance sheet)
Covenant: Unencumbered assets	Total unencumbered assets / total unsecured non derivative financial liabilities
Debt/EBITDA	Net Debt/EBITDA operations; based on internal forecast for 2016 on the basis of 9M actuals
Disposal	42k units sold includes reported sales of 4.1k in 2013, 1.8k in 2014, 12.2k in 2015 and the estimate of around 24k for 2016
EPRA NAV	Net Asset Value as defined by the European Public Real Estate Association (EPRA)
EPRA NAV per share	Net Asset Value as defined by the European Public Real Estate Association (EPRA) divided by the number of shares at the end of the reporting period (466m shares for both Sep. 30, 2016 and Sep. 30, 2015)
EPRA NAV per share 2017 guidance	Based on current EPRA NAV per share forecast for 2016 and then adjusted for estimates: (i) 2017 FFO 1, (ii) disposals, (iii) fair value gain through rent growth, (iv) dividend payout; does not include any impact from yield compression
Fair value of disposal	Carrying amount of properties sold + Revaluation from sale of assets held for sale
Fair value step-up	Income from disposal / fair value of disposal
FFO1 per average unit	FFO 1 / average number of own apartments in the reporting period (9M 2015: 316.7k; 9M 2015: 347.7k)
FFO1 per share	Unless indicated otherwise, FFO per share is calculated on the basis of the number of shares as of the end of the reporting period (466m shares for both Sep. 30, 2016 and Sep. 30, 2015)
FFO1 per share (avg. NOSH)	FFO1 / average number of shares in the reporting period (9M 2016: 466.0m; 9M 2015: 383.0m)
FFO1 per share (eop NOSH)	FFO1 / number of shares at the end of the reporting period (466m shares for both Sep. 30, 2016 and Sep. 30, 2015)
ICR	Adj. EBITDA (total) / FFO interest expense (each calculated for the last twelve months)
Maintenance capitalization ratio	Capitalized maintenance / (Expenses for maintenance + Capitalized maintenance)
Market costs for new constructions	Average market costs for building German multifamily houses
Modernization	Reported investment amounts for 2013 (€65m), 2014 (€172m) and 2015 (€356m) + estimated volume for 2016 of €470m-€500m
Multimedia Service Contracts 270k at YE 2016	Source: Internal Management Report
Number of months until costs are earned by rental income	Based on Forecast 3+9 2016
Pro forma LTV	Source: Internal Management Report
Re-letting rent growth (y-o-y)	(Re-letting rent current period - Re-letting rent prior period) / Re-letting rent prior period
Third party and condo management with 77k units	Includes 3rd-party owned and Vonovia owned condos plus 3rd-party managed units that were acquired in the context of buying 3rd-party management companies IVV, Haase and MVG; Source: Internal Management Report
Unencumbered assets	Total unencumbered assets / total unsecured non derivative financial liabilities
VNA modular construction costs	Actual costs for pilot project for modular construction in Bochum
Non-deal Asia Roadshow, February 7-10, 2017	page 96

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 DA'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.