

Aroundtown SA

Germany / Real Estate
 Frankfurt Stock Exchange
 Bloomberg: AT1 GR
 ISIN: LU1673108939

Q3/18
 Results

RATING
PRICE TARGET

Return Potential
 Risk Rating

BUY
€ 9.50
 28.0%
 Medium

GOING UP! — Q3 EXTENDS GROWTH TREND

Investors should use the recent dip in Aroundtown shares to buy the stock. The company booked exceptional growth in 9M/18 (NAVPS +15%; FFOPS 1: +8% YTD), and we believe this will continue in the coming quarters. Third quarter reporting featured strong operational performance with all headline figures again growing at a mid double digit clip extending the strong pace set in H1. Net rent climbed 42% Y/Y to €165m, thanks to external and internal portfolio expansion, which spurred 4.5% like-for-like (LFL) total rental income growth. Commercial assets now top €13.2bn after YTD acquisitions of €2.5bn. AT has a full pipeline and abundant financial firepower for further growth. Our valuation model now yields €9.50 price target (old: €9.00) on updated revaluations. We reiterate our Buy rating.

Preferred buyer status continues to spur growth We contend that the recent dip in the share price provides an excellent opportunity to buy Aroundtown shares, which have corrected some 6% from their €7.88 high. We regard Aroundtown as the best positioned of the German commercial RE landlords, and Q3 results underpin this view. Investment properties stood at €13.2bn and management hinted at another €500m in acquisitions post 9M reporting. Investments totalled ~€0.9bn in Q3 providing further evidence of management's ability to leverage its strengths and source attractive deals to create value. Thanks to a wide network built up over 14 years, the company has earned "preferred buyer" status often making AT the first call for sellers. Meanwhile, occupier demand remains very strong and will help AT corral the embedded upside in its portfolio. On the earnings call, management indicated a >€1bn pipeline primarily containing office and hotel assets in core regions. AT exited September with €1.4bn in cash and liquid assets. Management confirmed overall financial firepower of some €2bn, while keeping the LTV <45%. We thus expect the operational momentum to continue into next year. (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2015	2016	2017	2018E	2019E	2020E
Net rent (€m)	106.39	233.38	448.98	599.02	703.86	748.32
Adj. EBITDA (€m)	92.7	194.5	369.1	492.2	573.2	611.1
Net income (€m)	920.75	901.09	1539.00	1674.16	810.62	808.90
EPS (diluted) (€)	1.01	0.88	1.35	1.32	0.61	0.61
EPRA NAV ¹ (€m)	2720.69	4349.05	7656.28	10063.35	10619.28	11192.80
NAVPS ¹ (€m)	3.70	5.40	7.63	9.03	9.53	10.04
DPS (€)	0.05	0.16	0.23	0.25	0.27	0.29
FFO 1 (€m)	94.05	165.63	293.00	396.98	458.06	493.93
FFOPS 1 (€)	0.17	0.25	0.36	0.38	0.42	0.45
Liquid assets (€m)	386.98	833.44	852.44	959.60	841.54	842.10

¹ Includes perpetual notes.

RISKS

Risks include, but are not limited to, unfavourable interest rate developments, unfavourable macroeconomic developments, and the departure of key personnel.

COMPANY PROFILE

Aroundtown SA is a specialist real estate company focused on investing in and managing value-add properties primarily located in the German/ Netherlands real estate markets.

MARKET DATA

As of 28 Nov 2018

Closing Price	€ 7.42
Shares outstanding	1,122.33m
Market Capitalisation	€ 8327.69m
52-week Range	€ 6.00 / 7.88
Avg. Volume (12 Months)	3,094,510

Multiples	2017	2018E	2019E
P/FFO 1	20.8	19.4	17.8
P/EPRA NAV	1.0	0.8	0.8
FFO 1 Yield	4.8%	5.2%	5.6%
Div. Yield	3.2%	3.4%	3.6%

STOCK OVERVIEW



COMPANY DATA

As of 30 Sep 2018

Liquid Assets	€ 1,389.00m
Current Assets	€ 2,010.50m
EPRA NAV ¹	€ 9,935.10m
Total Assets	€ 18,117.00m
Current Liabilities	€ 441.00m
Total Equity	€ 9,202.60m

¹ includes perpetual notes

SHAREHOLDERS

Avisco Group	34.0%
Free Float	66.0%



OPERATIONAL MOMENTUM EXTENDS INTO Q3

As of Q3, AT realised total like-for-like (LFL) rental growth of 4.5% comprising 2.8% in-place rent and 1.7% occupancy increases. The office segment improved 4.0% on a like-for-like basis, while the hotel portfolio featured 10% LFL growth. Berlin led the LFL regional increase with 12% followed by Amsterdam (10%) and Hamburg (5.5%). The company continues to target >4.0% LFL for 2018. Grand City Properties (39% AT stake) likewise showed steady like-for-like growth (2.9% in-place rent; 0.4% occupancy) in the third quarter.

Table 1: Results vs forecasts

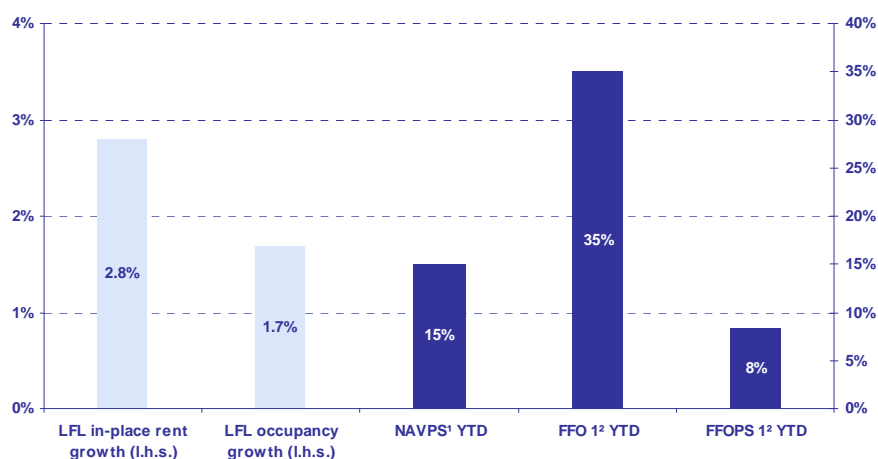
All figures in EURm	Q3/18	Q3/18E	variance	Q3/17	variance	9M/18	9M/17	variance
Recurring LT net rental income	162	158	2.5%	109	49%	440	293	50%
Net rental income	165	161	2.5%	117	42%	456	320	43%
Rental and operating income	193	189	2.1%	137	41%	540	374	44%
Adjusted EBITDA commercial	133	130	2.3%	86	55%	360	237	52%
Margin	69%	69%	-	63%	-	67%	70%	-
Adjusted EBITDA	160	157	1.9%	109	47%	440	303	45%
Margin	83%	83%	-	79%	-	81%	81%	-
FFO 1	108	105	2.9%	74	46%	297	204	46%
FFOPS 1 (€)	0.10	0.10	2.9%	0.08	25%	0.29	0.26	12%

Source: First Berlin Equity Research; Aroundtown SA

Net rental income (NRI) rose 42% Y/Y to €165m (FBe: €161m) and 8.6% sequentially. Recurring net rental income—excluding RI from properties earmarked for disposal—was up 49% Y/Y to €162m. On a nine month basis, NRI rose 43%, while recurring NRI was up 50%. Annualised, recurring NRI stood at €639m as of September 2018 (+54% YTD) giving us a high degree of confidence in our €599m target.

The capital gains, property revaluations and other income line item totalled €345m for the quarter (Q3/17: €228m) and €1.2bn at the 9M junctue (9M/17: €976m). Revaluations were driven by yield compression (30%) and operational performance (70%). The strong development relates to Aroundtown's value-add business model: acquiring properties with high revisionary potential and value creation upside through asset repositioning. Net profit climbed 13% to €418m in the third quarter and €1.4bn (+28% annualised) in the nine month period owing to portfolio growth and the unlocking of embedded value.

Figure 1: Operating performance as of 30 September



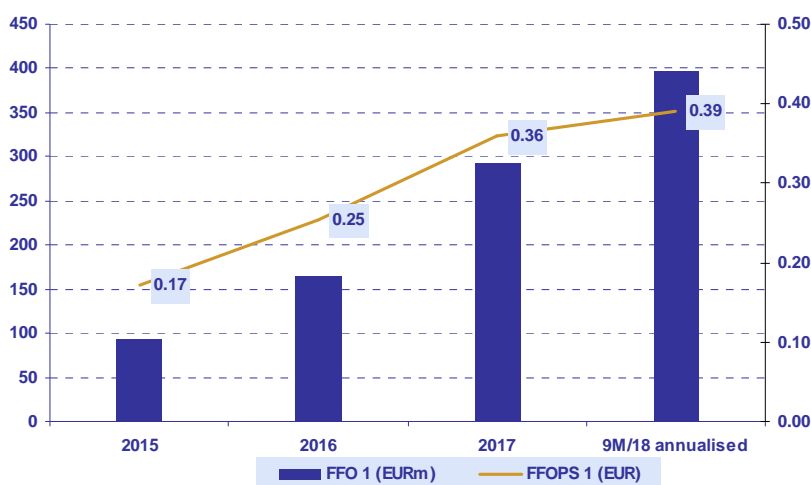
¹ excludes perpetual note; ² annualised

Source: First Berlin Equity Research; Aroundtown



‘Adjusted EBITDA commercial, recurring long-term’ reflects the underlying operational profit of the commercial portfolio by excluding revaluation effects, disposal gains, and share of profits from investments in equity-accounted investees. This climbed 55% in Q3 to €133m and 12% Q/Q. The increase is traced to external growth realised through accretive acquisitions and improving occupancy rates and rent levels. Including the 39% GCP stake, adjusted EBITDA rose at a 47% annualised rate to €160m. On a nine month basis, adjusted EBITDA commercial, recurring long-term surged 52% Y/Y and adjusted EBITDA was up 45%. As of September 2018, the portfolio generates monthly annualised adjusted EBITDA of €587m (+37% YTD). This is on a recurring long term basis and is unaffected by properties held for disposal.

Figure 2: FFO 1 and FFOPS 1 development



Source: First Berlin Equity Research; Aroundtown

FFO 1, the key industry indicator for recurring cash flow, climbed 46% Y/Y to €108m equating to FFOPS 1 of €0.10. This topped our estimate by 3%, owing to better than expected top line performance. On a nine month basis, FFO 1 reached €297m (+46%) translating into FFOPS 1 of €0.19. The annualised FFO 1 run rate is now €397m with an FFOPS 1 run rate of €0.39, which corresponds to a 5.3% yield.

Thanks to some €740m in property disposals in 9M/18, FFO 2 amounted to €465m. As part of its asset rotation strategy, the disposed assets were mainly in non-core locations or fully stabilised properties. Proceeds will be reinvested according to the core strategy.

**Table 2: Commercial properties overview**

	Investment properties (€m)	Rentable area ('000 m ²)	EPRA vacancy	Annualised net rent (€m)	In-place rent (€/m ²)	Value (€/m ²)	Rental yield	WALT
Office	6,945	2,980	10.7%	356	10.7	2,331	5.1%	4.7
Hotel	3,267	1,047	5.3%	159	14.1	3,120	4.8%	14.8
Retail	901	439	8.2%	54	10.4	2,049	6.0%	5.8
Logistics/Wholesale	1,208	1,422	6.2%	70	4.4	850	5.8%	6.9
Land for development & rights	836							
Total	13,157	5,888	8.7%	639	9.7	2,092	5.2%	7.5

Source: First Berlin Equity Research; Aroundtown

Investment properties (excluding assets held for sale) stood at €13.2bn (Q2: €11.9bn), while the asset mix continues to be dominated by attractive office and hotel properties featuring high revisionary potential and good demographics. Management noted strong acquisitions in Berlin, Hamburg, Amsterdam on the call. The company is particularly well entrenched in Germany and the Netherlands, which exhibit the best economic fundamentals in the EU, even if the Teutonic economy is losing momentum after a slowdown in Q3.

AT purchased a blend of predominantly office and hotel assets through September for €2.5bn and hinted at a further €0.5bn thus far in Q4. We expect office and hotels to remain the focus, whereas the retail segment will continue to be de-emphasised. But the company reiterated on the earnings call that many of the retail assets are situated in highly coveted central locations, such as Berlin's Kurfürstendamm, where e-commerce related attrition is much lower than for shopping centres in outer districts.

Table 3: Financial highlights

All figures in EURm	9M/18	YE17	variance
Cash and liquid assets	1,389	849	64%
Investment property ¹	13,505	9,804	38%
Investment in equity-accounted investees	2,126	1,906	12%
Total assets	18,117	13,770	32%
Net debt	5,977	4,400	36%
Total equity*	9,312	7,250	28%
Equity ratio	51%	53%	
EPRA NAV	8,369	6,483	29%
EPRA NAV inc perpetual notes	9,935	7,756	28%
Loan-to-Value (LTV)	38%	36%	-
LTV pro forma*	37%	33%	-

* including convertible bond conversions post reporting; ¹ including advanced payments for investment properties

Source: First Berlin Equity Research; Aroundtown

As of 30 September, EPRA NAV totalled €8.4bn (€7.5 / share) compared to €6.5bn at year end 2017 (€6.5 / share, +15% YTD, +4% Q/Q). NAV growth stems predominantly from the high growth pace, portfolio value extraction and the equity raise in March 2018. Including perpetual notes, which are classified as equity under IFRS, this KPI stood at €9.9bn or €8.9 / share (+17% YTD).

Balance sheet a competitive strength AT reported cash and liquid assets of €1.4bn for the period ended 30 September compared to €849m at the end of Q4/17, while net debt stood at €6.0bn vs €4.4bn at the end of 2017. The debt structure featured an LTV of 38% (37% reflecting post reporting convertible bond conversions), which remains well below the 45% internal limit set by the Management Board. The debt structure features a 1.8% average cost of debt with a 7.6 year maturity, giving AT the longest maturity among the German commercial landlords. AT issued its Series V and Series W bonds in Q4, which support the strategy of extending debt maturity ahead of a potentially tightening money supply.



VALUATION MODEL

We have frequently highlighted Aroundtown's operational strengths and excellent turnaround track record of increasing in-place rent levels in its portfolio while compressing vacancy rates. Q3 reporting supports this stance. We believe that this performance will persist spurred by a commercial market that continues to be driven by a shortage of supply and high occupier demand. We raise our price target to €9.50 (old: €9.00) after accounting for better than expected revaluation gains in Q3. Our rating remains Buy.

in €m	2018E	2019E	2020E
Shareholders' equity	8,915	9,386	9,817
Total equity	9,355	9,907	10,419
NAV per share	9.03	9.01	9.48
Net deferred taxes	1,032	1,172	1,312
Derivative financial instruments	58	61	64
Convertible bond	-	-	-
EPRA NAV (inc. perpetual notes)	10,005	10,619	11,193
EPRA NAV per share (inc. perpetual notes)	9.03	9.53	10.04
FFO	397	458	494
Revaluation results	1,391	389	364
Total return	1,788	847	858

EPRA NAV	10,005	10,619	11,193
Return on NAV	23.4%	8.5%	8.1%
Cost of equity	5.7%	5.7%	5.7%
Spread (percentage points)	17.6%	2.8%	2.4%

	2018E	2019E	2020E
WACC	4.0%	4.0%	4.0%
Value creation	1,765	292	264
NPV	1,759	280	244
Dividends paid	190	258	298
Present value of dividends paid	190	247	275

Fair value calculation			
PV of total value created	2,283		
EPRA NAV (2017)	7,656		
Equity value	9,939		
PV of dividends	712		
Fair value	10,651		
Diluted share count (m)	1,123		
Fair value per share €	9.50		

Valuation metrics	2018E	2019E	2020E
Price target (€)	9.50	9.50	9.50
Share price (€)	7.42	7.42	7.42
Return potential	28.0%	28.0%	28.0%
Dividend yield	3.2%	3.6%	3.9%
Total return potential	31.2%	31.7%	32.0%
NAV discount / premium (share price)	-17.8%	-22.1%	-26.1%
FFOPS 1 yield	5.2%	5.6%	6.1%



INCOME STATEMENT

All figures in EURm	2015	2016	2017	2018E	2019E	2020E
Net rent	106	233	449	599	704	748
Operating and other income	19	40	78	104	122	129
Rental and operating income (RI)	125	274	527	703	826	878
Capital gains, property revaluations & other	815	720	1,327	1,391	389	364
Result from equity-accounted investees	134	197	228	264	164	157
Property OpEx	-29	-75	-147	-195	-234	-248
Administration & other OpEx	-4	-8	-15	-19	-22	-22
Operating income (EBIT)	1,041	1,107	1,920	2,144	1,122	1,129
Net financial result	-20	-47	-70	-104	-124	-127
Other financial expenses	8	-36	-15	-42	0	0
Pre-tax income (EBT)	1,028	1,024	1,836	1,998	999	1,001
Tax expense	-9	-20	-34	-44	-48	-52
Deferred tax	-98	-103	-263	-280	-140	-140
Tax result	-108	-123	-297	-324	-188	-192
Comprehensive net income	921	901	1,539	1,674	811	809
Minority interests	234	169	228	151	81	81
Perpetual notes	0	4	29	47	45	45
Net income to owners	687	728	1,283	1,476	685	683
Basic EPS (€)	1.26	1.11	1.56	1.42	0.62	0.62
Diluted EPS (€)	1.01	0.87	1.35	1.32	0.61	0.61
Adjusted EBITDA commercial	93	195	369	492	573	611
Ratios						
Adjusted EBITDA commercial margin	74.1%	71.1%	70.0%	70.1%	69.4%	69.6%
Tax rate	6.0%	7.4%	7.8%	7.8%	7.3%	7.4%
Expenses as % of revenues						
Property OpEx	22.8%	27.5%	27.9%	27.8%	28.3%	28.3%
Administration & other OpEx	3.4%	2.9%	2.8%	2.7%	2.7%	2.5%
Y/Y Growth						
Revenues	-51.3%	118.7%	92.6%	33.3%	17.5%	6.3%
Operating income	2.9%	6.3%	73.5%	11.7%	-47.7%	0.6%
Adjusted EBITDA	-30.7%	109.8%	89.7%	33.4%	16.5%	6.6%
Net income/ loss	-3.9%	6.0%	76.1%	15.1%	-53.6%	-0.2%
Funds from Operations (FFO)						
Adjusted EBITDA commercial portfolio	93	195	369	492	573	611
Finance expense	-20	-47	-70	-104	-124	-127
Tax expense	-9	-20	-34	-44	-48	-52
Minority adjustment	-8	-7	-9	-8	-8	-9
FFO 1 commercial portfolio	55	120	257	336	393	423
FFO related to properties for disposal	0	0	-20	-7	-7	-7
FFO 1 commercial (long-term recurring)	55	120	237	329	386	416
Adjustment for GCP contribution	39	46	56	68	72	78
FFO 1	94	166	293	397	458	494



BALANCE SHEET

All figures in EURm	2015	2016	2017	2018E	2019E	2020E
Assets						
Current assets, total	433	1,100	1,523	1,582	1,332	1,361
Cash and cash equivalents	121	641	736	892	774	774
Short-term investments	262	181	99	49	49	49
Receivables	46	111	163	385	452	481
Other current assets	4	11	18	18	19	19
Assets held for sale	0	155	508	238	38	38
Non-current assets, total	4,008	6,989	12,247	16,533	17,375	18,495
Property, plant & equipment	5	23	26	26	27	27
Investment properties	2,431	5,016	9,804	13,687	14,467	15,465
Equity accounted investees	1,183	1,557	1,906	2,121	2,226	2,320
Other LT assets	389	393	512	700	655	683
Total assets	4,440	8,089	13,770	18,116	18,706	19,856
Shareholders' equity & debt						
Current liabilities, total	241	349	566	435	492	518
Short-term debt	129	160	17	17	17	17
Accounts payable	96	108	267	257	307	327
Provisions & other current liabilities	16	81	282	161	167	174
Long-term liabilities, total	1,773	3,799	5,955	8,326	8,307	8,920
Long-term debt	1,522	3,385	5,078	7,164	7,001	7,469
Deferred tax liabilities	186	366	752	1,032	1,172	1,312
Other LT liabilities	66	48	125	130	134	139
Minority interests	320	373	674	440	521	602
Shareholders' equity	2,105	3,568	6,576	8,915	9,386	9,817
Total consolidated equity and debt	4,440	8,089	13,770	18,116	18,706	19,856
Ratios						
Current ratio (x)	1.79	3.15	2.69	3.64	2.71	2.63
Equity ratio	54.6%	48.7%	52.6%	51.6%	53.0%	52.5%
EPRA NAV ¹	2,721	3,871	6,483	8,490	9,046	9,619
EPRA NAVPS (€)	3.7	4.9	6.5	7.6	8.1	8.6
Net debt	1,076	2,737	4,400	6,222	6,177	6,644
Return on equity (ROE)	43.7%	25.3%	23.4%	18.8%	8.6%	8.2%
Loan-to-value (LTV)	29.4%	39.3%	35.9%	38.0%	36.3%	36.6%
LTV without convertible bond	19.0%	34.0%	33.5%	38.0%	36.3%	36.6%

¹ excludes perpetual notes



CASH FLOW STATEMENT

All figures in EURm	2015	2016	2017	2018E	2019E	2020E
Net income	921	901	1,539	1,674	811	809
Depreciation & amortisation	0	2	2	2	2	2
Capital gains, property revaluations & other	-815	-720	-1,327	-1,391	-389	-364
Profit share from equity accounted investees	-134	-197	-228	-264	-164	-157
Shared based payment in a subsidiary	0	2	2	0	0	0
Net finance expenses	13	83	85	146	124	127
Tax result	108	123	297	324	188	192
Operating cash flow	93	195	369	490	571	609
Changes in working capital	-4	-17	-13	-504	35	-30
Provisions for other liabilities	6	-1	-2	-121	7	7
Dividend received	7	18	41	50	58	63
Tax paid	-8	-16	-33	-44	-48	-52
Net operating cash flow	94	179	362	-130	623	597
CapEx/ intangibles	-1	-7	-9	-2	-2	-2
Disposal/ investment in investment properties, net	-776	-1,051	-615	-2,491	-391	-634
Acquisition/disposals of subsidiaries	-386	-994	-1,946	270	200	0
Proceeds from investments in financial assets	-255	151	-184	138	-4	-4
Cash flow from investing	-1,419	-1,900	-2,754	-2,086	-197	-640
Debt financing, net	1,230	1,786	1,165	2,087	-163	468
Equity financing, net	320	741	1,561	1,006	0	0
Dividends paid	0	-34	-155	-190	-258	-298
Other financing activities	-113	-204	-13	-385	0	0
Net paid financing expenses	-20	-45	-66	-146	-124	-127
Cash flow from financing	1,418	2,244	2,492	2,371	-545	42
Net cash flows	93	523	100	156	-119	0
Assets held for sale - cash	0	-2	-5	0	0	0
Cash, start of the year	28	121	641	736	892	774
Cash, end of the year	121	641	736	892	774	774
Adjusted EBITDA commercial/share (€)	0.17	0.30	0.41	0.45	0.49	0.53
FFO 1	94	166	293	397	458	494
FFOPS 1 (€)	0.17	0.25	0.36	0.38	0.42	0.45
Y/Y Growth						
EBITDA/share	42.0%	75.7%	38.6%	8.1%	10.8%	7.0%
FFO 1	-99.8%	76.1%	76.9%	35.5%	15.4%	7.8%
FFOPS 1 (€)	114.9%	47.5%	40.7%	7.4%	8.8%	7.8%

FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	29 September 2015	€3.40	Buy	€5.70
2...20	↓	↓	↓	↓
21	19 April 2018	€6.39	Buy	€8.50
22	31 May 2018	€7.18	Buy	€9.00
23	30 August 2018	€7.74	Buy	€9.00
24	Today	€7.42	Buy	€9.50

Authored by: Ellis Acklin, Analyst

Company responsible for preparation:

First Berlin Equity Research GmbH
 Mohrenstraße 34
 10117 Berlin

Tel. +49 (0)30 - 80 93 96 83 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com
 www.firstberlin.com

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

Copyright© 2018 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 34B OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO THE GERMAN ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS [FINANV]

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular the German Securities Trading Act [WpHG], Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and the German Ordinance on the Analysis of Financial Instruments [FinAnV] into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with Section 34b Paragraph 1 of the German Securities Trading Act [WpHG] and Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) financial analyses may only be passed on or publicly distributed if circumstances or relations which may cause conflicts of interest among the authors, the legal entities responsible for such preparation or companies associated with them are disclosed along with the financial analysis.

First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest (further information and data may be provided on request):

- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

If despite these measures one or more of the aforementioned conflicts of interest cannot be avoided on the part of the author or First Berlin, then reference shall be made to such conflict of interest.

INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG] (2ND FINANOG) OF 23 JUNE 2017, DIRECTIVE 2014/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 MAY 2014 ON MARKETS IN FINANCIAL INSTRUMENTS AND AMENDING DIRECTIVE 2002/92/EC AND DIRECTIVE 2011/61/EU, ACCOMPANIED BY THE MARKETS IN FINANCIAL INSTRUMENTS REGULATION (MIFIR, REG. EU NO. 600/2014)

First Berlin notes that it has concluded a contract with the issuer to prepare financial analyses and is paid for that by the issuer. First Berlin makes the financial analysis simultaneously available for all interested security financial services companies. First Berlin thus believes that it fulfils the requirements of section 64 WpHG for minor non-monetary benefits.

PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.

ASSET VALUATION SYSTEM

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

Category		1	2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy ¹	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

¹ The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: <http://firstberlin.com/disclaimer-english-link/>

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Lurgiallee 12, 60439 Frankfurt

EXCLUSION OF LIABILITY (DISCLAIMER)

RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.

NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA, Canada and/or the United Kingdom (Great Britain).