# **CR Capital AG**

Germany / Investment Holding Primary exchange: Frankfurt Bloomberg: CRZK GR ISIN: DE000A2GS625

Six month 2022 reporting

BUY
€ 53.00
130.4%
High

## **BUCKING THE TREND**

Six month reporting featured another strong performance from the portfolio and has CR Capital tracking towards our full year targets. The company recorded close to  $\in$ 67m in net income, which pushed NAVPS up to  $\in$ 75.5 at the end of H1 (YE21:  $\in$ 59.4). The Terrabau holding spurred earnings, thanks to good progress with its pipeline. Although home construction operations have remained resilient in the economic downturn, the recent weakness in CRC shares reflects sector sentiment that has fallen off a cliff in the wake of jumbo interest rate hikes. We see good value in CRC shares, but investors need to be patient with no clear catalysts on the horizon beyond evolution of the macro environment. Our rating remains Buy with a  $\in$ 53 target price.

**Bucking the trend** The real estate sector has been hit by the one-two punch of rising interest rates and supply chain snarl ups. Although CRC has evolved away from its roots as a pure-play property developer into an investment entity that has diversified into sustainable technologies (see note of 21 July 2022), the portfolio remains vulnerable to the whiplash of the property markets through Terrabau. Plus, Solartec, a system integrator of rooftop solar rigs for year-round electrification of homes and commercial buildings, is also closely tied to the fortunes of the property sector. Management recently reiterated that Terrabau's home construction activities are well insulated from the current turbulence. Supply chains are secured for upcoming projects into 2024, and the home builder is not exposed to rising construction financing costs, thanks to its forward-selling business model and ability to self-finance projects.

**Good value in CRC shares but too many sector headwinds whipping up** Investors are dumping their property stocks and sector sentiment is bad right now. CRC shares have also been hit in the sector downdraft (-31% YTD) that has seen the German property bellwethers (Vonovia, Deutsche Wohnen, Grand City, LEG, and Aroundtown) shed over. . . (p.t.o.)

#### **FINANCIAL HISTORY & PROJECTIONS**

	2019	2020	2021	2022E	2023E	2024E
Investment rev. (€m)	95.64	64.53	69.86	75.59	81.61	91.31
Y/Y growth	n.a.	-32.5%	8.2%	8.2%	8.0%	11.9%
EBIT (€m)	91.23	51.19	66.44	72.06	77.97	87.59
EBIT margin	95.4%	79.3%	95.1%	95.3%	95.5%	95.9%
Net income (€m)	92.47	51.27	65.39	70.98	76.80	86.28
EPS (diluted) (€)	24.69	13.65	17.11	17.04	17.01	19.10
DPS (€)	1.50	1.50	2.50	2.60	2.70	2.90
NAVPS (€)	33.30	47.50	59.44	68.82	83.43	99.84
Net gearing	4.7%	-0.5%	-0.6%	-3.6%	-4.6%	-5.4%
Liquid assets (€m)	1.07	0.84	1.49	11.34	17.33	24.22

#### **RISKS**

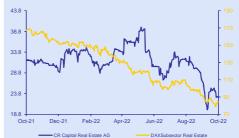
Risks include but are not limited to: increasing competition, the company's focus on the residential market in Berlin, and the loss of key personnel.

#### **COMPANY PROFILE**

CR Capital is a Berlin-based investment holding focused on growth opportunities in the sustainable technology, private equity, and residential property development sectors in order to positively impact key social issues such as climate change, pension planning, and affordable housing. The company is listed on the Open Market of the Frankfurt Stock Exchange.

MARKET DA	As of 1	8 Oct 2022	
Closing Price		€ 23.00	
Shares outstand		4.54m	
Market Capitalis	€	104.42m	
52-week Range	€ 19.9	0 / 39.80	
Avg. Volume (12		1,360	
Multiples	2021	2022E	2023E
P/NAV	0.4	0.3	0.3
EV/Sales	1.4	1.3	1.2
EV/EBIT	1.4	1.3	1.2
Div. Yield	10.9%	11.3%	11.7%

#### **STOCK OVERVIEW**



COMPANY DATA	As of 30 Jun 2022
Liquid Assets	€ 8.90m
Current Assets	€ 9.10m
Financial Assets	€ 305.60m
Total Assets	€ 315.00m
Current Liabilities	€ 0.00m
Shareholders' Equity	€ 305.70m
SHAREHOLDERS	
MPH Group	57.0%
Free Float	43.0%

...€44bn in market capitalisation this year. But these are landlords with large portfolios exposed to asset valuation risks, whereas as CRC's workhorse holding, Terrabau, is a builder of affordable homes. Nevertheless, investors are shrugging at the stability offered by German residential and are clearly on the sidelines waiting for key catalysts such as: (1) signs that inflation has been tamed; (2) the Fed stops tightening; and (3) signals that values for German residential properties will remain stable vs current expectations of sharp declines.

## SIX MONTH REVIEW

**Strong start to the year** Portfolio revaluations accounted for the bulk of the  $\in$ 69m in investment revenue with Terrabau and Solartec contributing to the result. This flowed abundantly to the bottom line, thanks to low operating costs and no interest expense. Net income tallied  $\in$ 67m for the period topping the prior year total ( $\in$ 62m) and has CRC on track to meet our 2022 net income target of  $\in$ 71m.

Table 1: Six mont	n results vs	prior yea	r and FBe
-------------------	--------------	-----------	-----------

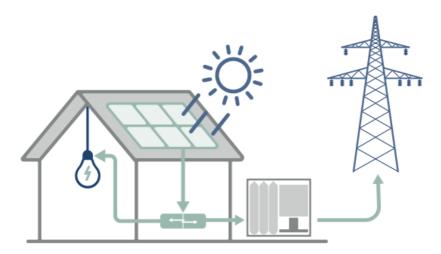
All figures in EUR '000	H1/22	H1/22E	Variance	H1/21	Variance
Investment revenue	68,997	67,500	2.2%	63,688	8.3%
EBITDA	67,708	66,146	2.4%	62,447	8.4%
Margin (%)	98%	98%	-	98%	-
Net income	66,796	65,347	2.2%	61,636	8.4%
EPS diluted (€)	16.5	16.2	2.2%	16.5	0.3%

Source: First Berlin Equity Research; CR Capital

#### **UPDATE ON SOLARTEC**

Earlier this year, CR Capital took an 80% stake in Solartec GmbH. The company designs and installs climate-neutral energy systems, which combine rooftop solar PV rigs with hydrogen technology for year-round electrification of private homes.

#### Figure 1: Solartec solutions for year-round electrification



Source: First Berlin Equity Research; CR Capital

Solartec will work closely with Terrabau GmbH and plans to connect multiple homes to a single system to divvy up the investment costs among multiple homeowners. Aside from the residential business, Solartec plans to roll out a B2B model to commercial landlords. The company reckons these channels will lead to a €20m market opportunity over the near term, and the system integrator began to generate profitable turnover in H2/22. With key components secured and a ready-made customer in Terrabau, we think Solartec should have a strong operational start.

#### **UPDATE ON TERRABAU**

The affordable home builder is the driving force behind CRC's portfolio performance and has a full pipeline through the end of 2023. The company looks to hand over around 200 town homes this year and up to 300 in 2023. All of the flats are forward-sold, which allows Terrabau to self-finance the developments with up-front payments (~30%) and avoid expensive construction financing. Plus, all key materials and labour are locked in.

Unlike the luxury home segment, demand for Terrabau's homes has so far not been dented by rising mortgage financing rates that now range between 3.5% and 4.0% in Germany. The company noted over 200 inquiries on a recent property listing and contends that owning a flat still makes more financial sense than renting in Germany's top hubs—even though the cost gap between renting vs owning has narrowed in this new era of more expensive money.

Figure 2: Terrabau: Green home construction



Source: First Berlin Equity Research; CR Capital

**Demand acts as a floor for residential sector** Demand for homes / flats in Terrabau's core markets—particularly Berlin—still vastly outstrips supply, and we do not see this gap closing significantly anytime soon. Net immigration levels are also expected to approach the 2015 peak (>1m) this year and ratchet up the pressure on already limited supply. Plus, buoyant job markets, hordes of millennials approaching their home-buying years, and remote working trends have all spurred demand for more living space.

#### **UPDATE ON CR OPPORTUNITIES (CRO)**

New bond issuances are being considered alongside options to expand the portfolio. CRO holds a 20% stake in Solartec and other operators along the renewable energy value chain. Given the tailwinds whipped up in this sector by Germany's mounting energy crises and the stampede of companies committed to net-zero targets, we believe CRO has the right focus.

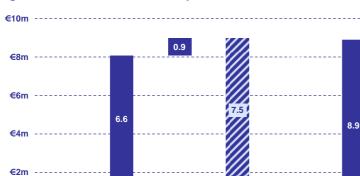
### FINANCIAL PERFORMANCE

#### Table 2: H1/22 financial highlights

All figures in EUR '000	H1/22	2021	Variance
Cash & equivalents	8,924	1,486	501%
Current assets	9,138	2,241	308%
Financial assets	305,634	229,468	33%
Total assets	315,008	248,020	27%
Financial debt (short- and long-term)	0	0	-
Shareholders' equity	305,724	240,784	27%
Equity ratio	97%	97%	-

#### Source: First Berlin Equity Research; CR Capital

**Free cash flow tops €7.5m in H1** CRC exited H1/22 with €8.9m in cash, thanks largely to €6.6m in operating cash flow (figure 2), which showed a sizable jump on the prior year comp (€0.6m). The good result stems from cash distributions from the participations with the bulk coming from Terrabau.



CF from

investing

#### Figure 3: H1/22 Cash flow developments



**Operating CF** 

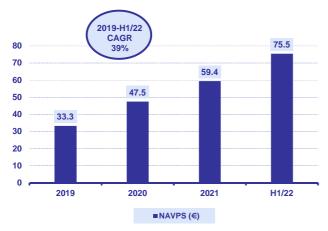
**NAV CAGR of 39%** The NAV climbed 27% in the first six months to  $\leq$ 306m, while NAVPS stood at  $\leq$ 75.5 at end of the reporting period (+25% YTD). The uplift is occasioned by the  $\leq$ 67m in net profit for the period.

FCF

CF from

financing

Cash EoP



#### Figure 4: NAVPS development

1.5

Cash BoP

€0m

Source: First Berlin Equity Research; CR Capital

## VALUATION MODEL

Maintain Buy rating and €53 target price Six month results have the company tracking well towards our full year targets setting up potential for another attractive dividend payout. Despite current market turmoil, management continue to project a resilient, confident picture for the company and plan to stick to their dividend policy. Given the recent decline in the CR Capital share price the dividend yield is now hovering around double digit levels.

#### Table 3: Discounted dividend model

	Unit	2022E	2023E	2024E	2025E	2026E	2027E	2028E	τv
EPS	€	17.0	17.0	19.1	21.1	23.2	25.1	26.4	30.1
Payout ratio	%	15	16	15	15	15	15	15	15
Dividend (DPS)	€	2.6	2.7	2.9	3.2	3.5	3.8	4.0	4.5
Y/Y	%	4.0	3.8	7.4	10.3	9.4	8.6	5.3	-
NPV	€	2.5	2.4	2.4	2.4	2.4	2.4	2.4	26.1
CAGR 2022 -2026	%	7.0							
Terminal grow th rate	%	2.0							
Discount factor	%	8.8							
NPV of dividends	€	27							
Terminal value (TV)	€	26							
Fair value per share	€	53.0							

\*Our model runs through 2033 and we have only shown the abb reviated version for formatting purposes

Cost of equity	8.8%	After-tax cost of debt	4.9%
Pre-tax cost of debt	5.0%	Share of equity capital	100.0%
Tax rate	2.0%	Share of debt capital	0.0%
WACC	8.8%		

Source: First Berlin Equity Research estimates

## **INCOME STATEMENT**

in € '000	2019	2020	2021	2022E	2023E	2024E
Investment income	93,604	64,378	68,914	74,624	80,625	90,300
Other operating income	1,172	156	942	970	990	1,009
Investment income	95,639	64,534	69,856	75,594	81,615	91,309
Personnel expenses	-1,494	-815	-828	-861	-887	-905
Other impairments	0	-10,203	0	0	0	0
Other operating expenses	-2,878	-2,326	-2,540	-2,642	-2,721	-2,775
EBITDA	91,267	51,190	66,488	72,092	78,007	87,630
Depreciation & amortisation	-40	0	-47	-35	-35	-35
Operating income (EBIT)	91,227	51,190	66,441	72,057	77,972	87,595
Interest expense	-254	-207	-178	0	0	0
Interest income	368	282	160	0	0	0
Pre-tax income (EBT)	91,341	51,265	66,423	72,057	77,972	87,595
Tax expense	1,129	0	-1,032	-1,081	-1,170	-1,314
Minority expense	0	0	0	0	0	0
Net income / loss	92,470	51,265	65,391	70,976	76,802	86,281
Diluted EPS (in €)	24.7	13.6	17.1	17.0	17.0	19.1
Ratios						
EBITDA margin on revenues	95.4%	79.3%	95.2%	95.4%	95.6%	96.0%
EBIT margin on revenues	95.4%	79.3%	95.1%	95.3%	95.5%	95.9%
Net margin on revenues	96.7%	79.4%	93.6%	93.9%	94.1%	94.5%
Tax rate	-1.2%	0.0%	1.6%	1.5%	1.5%	1.5%
Expenses as % of revenues						
Personnel expenses	1.6%	1.3%	1.2%	1.1%	1.1%	1.0%
Other operating expenses	3.0%	3.6%	3.6%	3.5%	3.3%	3.0%
Y-Y Growth						
Revenues	n.m.	-32.5%	8.2%	8.2%	8.0%	11.9%
Operating income	n.m.	-43.9%	29.8%	8.5%	8.2%	12.3%
Net income/ loss	n.m.	-44.6%	27.6%	8.5%	8.2%	12.3%

\* IFRS 10 reporting as of 2019

## **BALANCE SHEET**

in € '000	2019	2020	2021	2022E	2023E	2024E
Assets						
Current assets, total	19,282	18,888	2,306	11,648	17,649	24,548
Cash and cash equivalents	1,071	841	1,486	11,337	17,329	24,219
Accounts receivable	285	0	0	0	0	0
Other ST assets	13,605	18,047	820	311	320	330
Non-current assets, total	117,622	169,577	245,714	306,879	367,368	435,113
Intangible assets & goodw ill	6,586	5	77	87	97	107
Tangible assets	105	96	77	87	97	107
Financial assets	100,531	169,476	245,560	306,705	367,174	434,899
Total assets	136,904	188,465	248,020	318,527	385,017	459,662
Shareholders' equity & debt						
Current liabilities, total	2,821	173	146	161	177	194
Accounts payable	1,136	173	146	161	177	194
ST debt	1,685	0	0	0	0	0
Long-term liabilities, total	8,992	10,315	7,090	7,557	8,059	8,599
Deferred tax liabilities	2,353	1,445	2,324	2,556	2,812	3,093
Provisions	1,253	50	119	121	124	126
Other LT liabilities	176	8,820	4,647	4,879	5,123	5,379
LT debt	5,210	0	0	0	0	0
Shareholders' equity, total	125,091	177,977	240,784	310,810	376,781	450,868
Total consolidated equity and debt	136,904	188,465	248,020	318,527	385,017	459,662
Ratios						
Current ratio (x)	6.8	109.2	15.8	72.5	99.9	126.3
Net debt / (cash)	5,824	-841	-1,486	-11,337	-17,329	-24,219
Net debt /EBITDA (x)	0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend cover (x)	-2.3	-0.3	1.0	1.4	1.5	1.5
Net gearing	5%	0%	-1%	-4%	-5%	-5%
Equity ratio	91%	94%	97%	98%	98%	98%
NAV	125,091	177,977	240,784	310,810	376,781	450,868
NA∨PS (€)	33.3	47.5	59.4	68.8	83.4	99.8

\* IFRS 10 reporting as of 2019

## **CASH FLOW STATEMENT**

in € '000	2019	2020	2021	2022E	2023E	2024E
Netincome	92,470	51,265	65,391	70,976	76,802	86,281
Depreciation & amortisation	40	10,203	47	35	35	35
Income from investments	-48,000	0	9,993	6,075	12,488	14,842
Result from at equity participations	-41,589	-61,293	-64,986	-70,424	-76,225	-85,900
Financial result	-114	-75	18	0	0	0
Tax Result	-1,131	0	1,032	1,081	1,170	1,314
Change in w orking capital	-4,108	-426	3,983	991	509	548
Operating cash flow	-2,432	-326	15,478	8,733	14,779	17,119
Tax paid	-78	0	-1,032	-1,081	-1,170	-1,314
Net operating cash flow	-2,510	-326	14,446	7,652	13,609	15,805
Cash flow from investing	-372	647	-11,145	-55	-55	-55
Dividend paid to shareholders	-2,809	0	-5,619	-950	-10,831	-12,194
Dividends received	0	0	3,141	3,204	3,268	3,333
Debt inflow, net	3,402	0	0	0	0	0
Equity inflow , net	0	0	0	0	0	0
Interest expense	-253	-207	-178	0	0	0
Cash flow from financing	340	-207	-2,656	2,254	-7,563	-8,860
Cash, start of the year	3,940	1,071	841	1,486	11,337	17,329
Consolidation changes	-327	-344	0	0	0	0
Change in cash, net	-2,542	114	645	9,851	5,992	6,890
Cash, end of the year	1,071	841	1,486	11,337	17,329	24,219
Free cash flow (FCF)	-2,882	321	3,301	7,597	13,554	15,750
FCFPS (in €)	-0.8	0.1	0.9	1.8	3.0	3.5
Y-Y Growth						
Net operating cash flow	n.m.	n.m.	n.m.	-47.0%	77.8%	16.1%
Free cash flow	n.m.	n.m.	928.3%	130.2%	78.4%	16.2%
FCFPS	n.m.	n.m.	910.9%	111.2%	64.6%	16.2%

\* IFRS 10 reporting as of 2019

#### Imprint / Disclaimer

#### First Berlin Equity Research

First Berlin Equity Research GmbH ist ein von der BaFin betreffend die Einhaltung der Pflichten des §85 Abs. 1 S. 1 WpHG, des Art. 20 Abs. 1 Marktmissbrauchsverordnung (MAR) und der Markets Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Durchführungsverordnung und der Markets in Financial Instruments Regulations (MiFIR) beaufsichtigtes Unternehmen.

First Berlin Equity Research GmbH is one of the companies monitored by BaFin with regard to its compliance with the requirements of Section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) Market Abuse Regulation (MAR) and Markets in Financial Instruments Directive (MiFID) II, Markets in Financial Instruments Directive (MiFID) II Commission Delegated Regulation and Markets in Financial Instruments Regulations (MiFIR).

Anschrift: First Berlin Equity Research GmbH Mohrenstr. 34 10117 Berlin Germany

Vertreten durch den Geschäftsführer: Martin Bailey

Telefon: +49 (0) 30-80 93 9 680 Fax: +49 (0) 30-80 93 9 687 E-Mail: <u>info@firstberlin.com</u>

Amtsgericht Berlin Charlottenburg HR B 103329 B UST-Id.: 251601797 Ggf. Inhaltlich Verantwortlicher gem. § 6 MDStV First Berlin Equity Research GmbH

#### Authored by: Ellis Acklin, Senior Analyst All publications of the last 12 months were authored by Ellis Acklin.

Company responsible for preparation: First Berlin Equity Research GmbH, Mohrenstraße 34, 10117 Berlin

The production of this recommendation was completed on 19 October 2022 at 09:26

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

**Copyright 2022 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 85 (1) SENTENCE 1 OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO ART. 20 (1) OF 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 ART. 37 OF COMMISSION DELEGATED REGULATION (EU) NO 2017/565 (MIFID) II.

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular section 85 (1) sentence 1 of the German Securities Trading Act [WpHG], art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and art. 37 of Commission Delegated Regulation (EU) no. 2017/565 (MiFID II) 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 art. 37 (1) of Commission Delegated Regulation (EU) no. 2017/565 (MiFID) II and art. 20 (1) of Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) investment firms which produce, or arrange for the production of, investment research that is intended or likely to be subsequently disseminated to clients of the firm or to the public, under their own responsibility or that of a member of their group, shall ensure the implementation of all the measures set forth in accordance with Article 34 (2) lit. (b) of Regulation (EU) 2017/565 in relation to the financial analysts involved in the production of the investment research and other relevant persons whose responsibilities or business interests may conflict with the interests of the persons to whom the investment research is disseminated. In accordance with art. 34 (3) of Regulation (EU) 2017/565 the procedures and measures referred to in paragraph 2 lit. (b) of such article shall be designed to ensure that relevant persons engaged in different business activities involvies at level of independence appropriate to the size and activities of the investment firm and of the group to which it belongs, and to the risk of damage to the interests of clients.

In addition, First Berlin shall pursuant to Article 5 of the Commission Delegated Regulation (EU) 2016/958 disclose in their recommendations all relationships and circumstances that may reasonably be expected to impair the objectivity of the financial analyses, including interests or conflicts of interest, on their part or on the part of any natural or legal person working for them under a contract, including a contract of employment, or otherwise, who was involved in producing financial analyses, concerning any financial instrument or the issuer to which the recommendation directly or indirectly relates.

With regard to the financial analyses of CR Capital AG the following relationships and circumstances exist which may reasonably be expected to impair the objectivity of the financial analyses: The author, First Berlin, or a company associated with First Berlin reached an agreement with the CR Capital AG for preparation of a financial analysis for which remuneration is owed.

Furthermore, 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:

- The author, First Berlin, or a company associated with First Berlin owns a net long or short position exceeding the threshold of 0.5 % of the total issued share capital of the analysed company;
- 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;

With regard to the financial analyses of CR Capital AG the following of the aforementioned potential conflicts of interests or the potential conflicts of interest mentioned in Article 6 paragraph 1 of the Commission Delegated Regulation (EU) 2016/958 exist: The author, First Berlin, or a company associated with First Berlin reached an agreement with the CR Capital AG for preparation of a financial analysis for which remuneration is owed.

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.

#### INFORMATION PURSUANT TO SECTION 64 OF THE GERMAN SECURITIES TRADING ACT [WPHG], 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 is 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			2
Current market capitalisation (in €)		0 - 2 billion	> 2 billion
Strong Buy <sup>1</sup>	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%

<sup>1</sup> 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  $\leq 0 - \leq 2$  billion, and Category 2 companies have a market capitalisation of  $> \leq 2$  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.

#### **RECOMMENDATION & PRICE TARGET HISTORY**

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	23 July 2014	€0.95	Buy	€10.50
25	Ļ	Ļ	Ļ	Ļ
6	23 May 2017	€1.60	Buy	€14.00
7	29 April 2019	€31.80	Buy	€20.00
8	30 September 2019	€25.20	Buy	€35.00
9	4 June 2020	€28.90	Buy	€37.00
10	7 April 2020	€21.70	Buy	€37.00
11	17 September 2021	€34.00	Buy	€58.00
12	21 July 2022	€30.50	Buy	€53.00
13	Today	€23.00	Buy	€53.00

#### **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: https://firstberlin.com/disclaimer-english-link/

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Marie-Curie-Straße 24-28, 60439 Frankfurt am Main

#### 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 ron 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 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 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 and/or Canada.