

# SFC Energy AG

Germany / Energy  
 Primary exchange: Frankfurt  
 Bloomberg: F3C GR  
 ISIN: DE0007568578

Update

<b>RATING</b>	<b>ADD</b>
<b>PRICE TARGET</b>	<b>€ 9.40</b>
Return Potential	4.4%
Risk Rating	High

## 2020 GUIDANCE WITHDRAWN DUE TO PANDEMIC

SFC Energy has withdrawn 2020 guidance due to the covid-19 pandemic and the significant fall in the oil price. Management expects demand in the Industry and Oil & Gas segments to slow considerably in Q2 and Q3. In the Defence & Security segment, SFC expects a significant delay in demand in the first half of the year. As we do not know exactly how long the covid-19 pandemic will last, and how severe the global recession will be, it is difficult to estimate the likely impact on SFC. We lower our forecasts for 2020E and the following years. An updated DCF model yields a new price target of €9.40 (previously: €11.40). Following the recent share price decline, we upgrade the stock from Reduce to Add.

**Guidance withdrawn** On 11 February 2020, SFC guided towards sales of €64m - €71m, underlying EBITDA of €3.6 - €6.6m, and underlying EBIT of €0.1m - €3.1m. The company has withdrawn this guidance as the economic impact of the pandemic on SFC can currently neither be adequately determined nor reliably quantified.

**Oil & Gas segment hit by oil price fall** The oil price (WTI) fell from \$54 on 20 February to \$27 on 19 March, i.e. it halved. As SFC's subsidiary Simark is mainly active in Canada, the price of Western Canadian Select is the relevant price for the Canadian oil industry. It fell from \$38.5 on 20 February to \$10.5 on 19 March. We thus believe that the Canadian oil & gas industry will significantly cut investment budgets, which will result in much lower demand for SFC's subsidiary Simark.

**Industry segment hit by supply chain issues and falling demand** In the February conference call, management already reported temporary supply chain disruptions. But the company will be hit harder by the falling demand from customers. We believe that the Industry segment is more sensitive to the business cycle than the other segments.

(p.t.o.)

### FINANCIAL HISTORY & PROJECTIONS

	2016	2017	2018	2019E	2020E	2021E
Revenue (€m)	44.04	54.29	61.70	58.54	54.50	66.80
Y-o-y growth	-6.9%	23.3%	13.7%	-5.1%	-6.9%	22.6%
EBIT (€m)	-4.90	-0.88	1.33	-1.29	-2.18	0.43
EBIT margin	-11.1%	-1.6%	2.1%	-2.2%	-4.0%	0.6%
Net income (€m)	-4.99	-2.07	0.00	-1.84	-2.14	0.10
EPS (diluted) (€)	-0.58	-0.23	0.00	-0.16	-0.16	0.01
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (€m)	-6.15	0.36	-0.37	0.12	-1.39	-2.13
Net gearing	53.5%	37.7%	13.5%	-37.8%	-36.4%	-30.5%
Liquid assets (€m)	2.04	4.69	7.81	30.96	27.83	29.40

### RISKS

The main risks are internationalisation, unfavourable exchange rate changes, technological innovations, and increasing competition.

### COMPANY PROFILE

SFC Energy AG is a leading provider of integrated power solutions for mobile and stationary off-grid applications. The company is a pioneer in developing and commercialising fuel cells which provide reliable, efficient, and clean power for its energy solutions. Main markets are oil & gas, defence & security, industry, and clean energy & mobility. SFC is headquartered near Munich in Germany.

### MARKET DATA

As of 20 Mar 2020

Closing Price	€ 9.00
Shares outstanding	13.15m
Market Capitalisation	€ 118.39m
52-week Range	€ 7.64 / 13.91
Avg. Volume (12 Months)	47,600

Multiples	2018	2019E	2020E
P/E	n.a.	n.a.	n.a.
EV/Sales	2.0	2.1	2.2
EV/EBIT	91.4	n.a.	n.a.
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



### COMPANY DATA

As of 30 Sep 2019

Liquid Assets	€ 23.04m
Current Assets	€ 47.01m
Intangible Assets	€ 13.19m
Total Assets	€ 71.38m
Current Liabilities	€ 18.79m
Shareholders' Equity	€ 39.29m

### SHAREHOLDERS

HPE	16.0%
Conduit Ventures	3.7%
Management	1.8%
Free Float	78.5%



**Defence & Security business faces delays** In the defence & security business, SFC expects a significant delay in demand in the first half of the year. However, management considers a significant increase in segment demand in H2 to be possible.

**Clean Energy & Mobility segment will not shrug off global recession** Clean Energy & Mobility segment is currently still running at a high level, but we expect a slowdown in the coming months.

**Q1 business has so far been very buoyant** SFC has had a very busy start to the current financial year and is currently still producing at its capacity limit. We thus expect solid Q1 results.

**Measures initiated to adjust to lower demand** Management has already decided on measures to reduce personnel and material costs in the Industry and Oil & Gas segments. SFC is also considering measures such as short-time work where necessary.

**Strong financial position is a very helpful cushion** At the end of September 2019, SFC had a cash position of €23m and a net cash position of €8m. This strong financial position will be very supportive in weathering the recession.

**Forecasts lowered** We have lowered our forecasts to account for the impact of the global recession on SFC. We hint at the fact that our forecasts contain a high level of uncertainty. While we model a strong decrease in the Oil & Gas and Industry segments, we still see the possibility that the other segments will grow due to higher government demand (see figure 1).

**Figure 1: Segment sales and gross profit forecasts**

All figures in €m	2019P	2020E	delta
<b>Oil &amp; Gas</b>			
Sales	21.96	18.00	-18%
Gross profit	6.41	5.22	-19%
margin	29.2%	29.0%	-
<b>Defence &amp; Security</b>			
Sales	7.59	8.50	12%
Gross profit	3.40	3.91	15%
margin	44.7%	46.0%	-
<b>Clean Energy &amp; Mobility</b>			
Sales	11.75	13.00	11%
Gross profit	5.06	5.39	7%
margin	43.0%	41.5%	-
<b>Industry</b>			
Sales	17.24	15.00	-13%
Gross profit	5.25	4.50	-14%
margin	30.4%	30.0%	-
<b>Group</b>			
Sales	58.54	54.50	-7%
Gross profit	20.11	19.02	-5%
margin	34.4%	34.9%	-

Source: First Berlin Equity Research

As figure 2 overleaf shows, we now expect 2020E EBIT to amount to €-2.2m, and a return to positive territory in the following year. Our lowered 2021E forecast assumes a strong rebound in revenue (+23% y/y).



Figure 2: Revisions to forecasts

All figures in €m	2019E			2020E			2021E		
	Old	New	Delta	Old	New	Delta	Old	New	Delta
Sales	58.54	58.54	0.0%	69.90	54.50	-22.0%	81.20	66.80	-17.7%
EBIT	-1.29	-1.29	-	1.37	-2.18	-	3.26	0.43	-86.8%
margin	-2.2%	-2.2%	-	2.0%	-4.0%	-	4.0%	0.6%	-
Net income	-1.84	-1.84	-	0.70	-2.14	-	2.33	0.10	-95.7%
margin	-3.1%	-3.1%	-	1.0%	-3.9%	-	2.9%	0.1%	-
EPS (diluted) in €	-0.16	-0.16	-	0.05	-0.16	-	0.18	0.01	-95.7%

Source: First Berlin Equity Research

**Upgrade to Add at lower price target** An updated DCF model yields a new price target of €9.40 (previously: €11.40). Following the strong share price decline we upgrade the stock from Reduce to Add.



## VALUATION MODEL

DCF valuation model								
All figures in EUR '000	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Net sales	58,537	54,500	66,800	81,273	93,316	106,041	119,248	132,691
NOPLAT	-1,287	-2,181	403	2,826	4,608	5,748	6,863	7,979
+ depreciation & amortisation	3,318	3,431	3,369	3,249	2,811	2,561	2,440	2,407
Net operating cash flow	2,031	1,250	3,772	6,075	7,419	8,309	9,303	10,387
- total investments (CAPEX and WC)	-2,118	-3,172	-5,901	-4,980	-4,573	-4,905	-5,184	-5,392
Capital expenditures	-2,576	-1,853	-1,536	-1,788	-1,977	-2,159	-2,331	-2,485
Working capital	458	-1,319	-4,364	-3,192	-2,596	-2,746	-2,853	-2,907
Free cash flows (FCF)	-87	-1,922	-2,129	1,095	2,846	3,404	4,119	4,994
<b>PV of FCF's</b>	<b>-87</b>	<b>-1,803</b>	<b>-1,841</b>	<b>873</b>	<b>2,091</b>	<b>2,304</b>	<b>2,569</b>	<b>2,871</b>

All figures in thousands	
PV of FCFs in explicit period (2019E-2033E)	34,012
PV of FCFs in terminal period	80,434
Enterprise value (EV)	114,446
+ Net cash / - net debt (pro forma)	8,563
+ Investments / minority interests	0
Shareholder value	123,009
Diluted number of shares	13,154
<b>Fair value per share in EUR</b>	<b>9.35</b>

WACC		Terminal growth rate							
		1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	
Cost of equity	10.0%	4.5%	23.87	27.51	32.97	42.06	60.22	114.58	30066.64
Pre-tax cost of debt	7.0%	5.5%	16.87	18.54	20.77	23.89	28.57	36.37	51.94
Tax rate	30.0%	6.5%	12.75	13.65	14.76	16.20	18.11	20.79	24.80
After-tax cost of debt	4.9%	7.5%	10.07	10.59	11.22	11.98	12.94	14.18	15.82
Share of equity capital	70.0%	8.5%	8.20	8.52	8.90	9.35	9.89	10.55	11.37
Share of debt capital	30.0%	9.5%	6.83	7.04	7.28	7.56	7.89	8.28	8.74
		10.5%	5.80	5.94	6.10	6.28	6.49	6.73	7.01
		11.5%	4.99	5.09	5.20	5.33	5.46	5.62	5.80
<b>Price target in EUR</b>	<b>9.40</b>								

\* for layout purposes the model shows numbers only to 2026, but runs until 2033



## INCOME STATEMENT

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
<b>Revenues</b>	<b>44,041</b>	<b>54,292</b>	<b>61,704</b>	<b>58,537</b>	<b>54,500</b>	<b>66,800</b>
Cost of goods sold	30,795	36,566	40,623	38,424	35,481	44,070
<b>Gross profit</b>	<b>13,247</b>	<b>17,726</b>	<b>21,082</b>	<b>20,113</b>	<b>19,019</b>	<b>22,730</b>
S&M	9,126	9,786	10,792	12,275	11,400	12,100
G&A	4,883	5,016	5,230	5,900	5,400	5,700
R&D	4,148	3,892	3,525	3,400	4,400	4,500
Other operating income	96	277	320	234	164	200
Other operating expenses	83	194	529	59	164	200
<b>Operating income (EBIT)</b>	<b>-4,898</b>	<b>-885</b>	<b>1,325</b>	<b>-1,287</b>	<b>-2,181</b>	<b>430</b>
Net financial result	-475	-1,150	-737	-762	-494	-303
Non-operating expenses	0	0	0	0	0	0
<b>Pre-tax income (EBT)</b>	<b>-5,373</b>	<b>-2,035</b>	<b>588</b>	<b>-2,048</b>	<b>-2,675</b>	<b>126</b>
Income taxes	-380	37	589	-205	-535	27
Minority interests	0	0	0	0	0	0
<b>Net income / loss</b>	<b>-4,993</b>	<b>-2,072</b>	<b>-1</b>	<b>-1,843</b>	<b>-2,140</b>	<b>99</b>
<b>Diluted EPS (in €)</b>	<b>-0.58</b>	<b>-0.23</b>	<b>0.00</b>	<b>-0.16</b>	<b>-0.16</b>	<b>0.01</b>
<b>EBITDA</b>	<b>-2,508</b>	<b>862</b>	<b>2,478</b>	<b>2,031</b>	<b>1,250</b>	<b>3,799</b>
One-off costs / earnings	-150	592	1,227	1,600	0	0
<b>Underlying EBITDA</b>	<b>-2,658</b>	<b>1,454</b>	<b>3,705</b>	<b>3,631</b>	<b>1,250</b>	<b>3,799</b>
<b>Underlying EBIT</b>	<b>-4,112</b>	<b>177</b>	<b>2,553</b>	<b>313</b>	<b>-2,181</b>	<b>430</b>
<b>Ratios</b>						
Gross margin	30.1%	32.6%	34.2%	34.4%	34.9%	34.0%
EBITDA margin on revenues	-5.7%	1.6%	4.0%	3.5%	2.3%	5.7%
EBIT margin on revenues	-11.1%	-1.6%	2.1%	-2.2%	-4.0%	0.6%
Net margin on revenues	-11.3%	-3.8%	0.0%	-3.1%	-3.9%	0.1%
Tax rate	7.1%	-1.8%	100.1%	10.0%	20.0%	21.2%
<b>Expenses as % of revenues</b>						
S&M	20.7%	18.0%	17.5%	21.0%	20.9%	18.1%
G&A	11.1%	9.2%	8.5%	10.1%	9.9%	8.5%
R&D	9.4%	7.2%	5.7%	5.8%	8.1%	6.7%
Other operating expenses	0.2%	0.4%	0.9%	0.1%	0.3%	0.3%
<b>Y-Y Growth</b>						
Revenues	-6.9%	23.3%	13.7%	-5.1%	-6.9%	22.6%
Operating income	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Net income/ loss	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.



## BALANCE SHEET

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
<b>Assets</b>						
<b>Current assets, total</b>	<b>20,056</b>	<b>21,849</b>	<b>28,289</b>	<b>50,107</b>	<b>45,336</b>	<b>51,263</b>
Cash and cash equivalents	2,041	4,694	7,805	30,964	27,833	29,401
Short-term investments	0	0	0	0	0	0
Receivables	9,253	8,712	10,158	9,623	8,959	10,981
Inventories	7,718	7,939	9,753	8,948	7,971	9,901
Other current assets	1,044	504	573	573	573	980
<b>Non-current assets, total</b>	<b>13,737</b>	<b>12,684</b>	<b>13,776</b>	<b>22,555</b>	<b>20,978</b>	<b>19,145</b>
Property, plant & equipment	1,205	1,197	1,596	9,065	7,579	6,352
Goodwill & other intangibles	11,855	10,950	11,497	12,807	12,715	12,109
Other assets	678	537	684	684	684	684
<b>Total assets</b>	<b>33,793</b>	<b>34,534</b>	<b>42,065</b>	<b>72,663</b>	<b>66,314</b>	<b>70,407</b>
<b>Shareholders' equity &amp; debt</b>						
<b>Current liabilities, total</b>	<b>13,335</b>	<b>18,563</b>	<b>18,865</b>	<b>14,785</b>	<b>9,825</b>	<b>14,720</b>
Short-term debt	4,317	9,410	7,198	4,000	2,000	6,900
Accounts payable	5,790	5,520	7,093	6,211	5,346	6,641
Current provisions	646	800	972	972	972	972
Other current liabilities	2,583	2,833	3,602	3,602	1,507	207
<b>Long-term liabilities, total</b>	<b>7,119</b>	<b>2,076</b>	<b>4,996</b>	<b>14,517</b>	<b>14,517</b>	<b>13,617</b>
Long-term debt	4,860	529	3,056	3,056	3,056	2,156
Liabilities under finance leases	0	0	0	7,517	7,517	7,517
Other liabilities	2,259	1,547	1,940	3,944	3,944	3,944
<b>Minority interests</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Shareholders' equity</b>	<b>13,339</b>	<b>13,895</b>	<b>18,204</b>	<b>43,361</b>	<b>41,971</b>	<b>42,071</b>
Share capital	9,047	9,659	10,250	12,950	13,154	13,154
Capital reserve	73,132	75,475	79,498	103,798	104,343	104,343
Other reserves	0	0	0	0	0	0
Treasury stock	0	0	0	0	0	0
Loss carryforward / retained earnings	-68,351	-70,423	-70,520	-72,364	-74,503	-74,404
<b>Total consolidated equity and debt</b>	<b>33,793</b>	<b>34,534</b>	<b>42,065</b>	<b>72,663</b>	<b>66,314</b>	<b>70,407</b>
<b>Ratios</b>						
Current ratio (x)	1.50	1.18	1.50	3.39	4.61	3.48
Quick ratio (x)	0.93	0.75	0.98	2.78	3.80	2.81
Net cash	-7,135	-5,245	-2,449	16,391	15,260	12,828
Net gearing	53.5%	37.7%	13.5%	-37.8%	-36.4%	-30.5%
Book value per share (€)	1.54	1.51	1.79	3.67	3.19	3.20
Equity ratio	39.5%	40.2%	43.3%	59.7%	63.3%	59.8%
Return on equity (ROE)	-37.4%	-14.9%	0.0%	-4.3%	-5.1%	0.2%
Return on investment (ROI)	-14.8%	-6.0%	0.0%	-2.5%	-3.2%	0.1%
Return on assets (ROA)	-12.7%	-2.6%	1.8%	-1.5%	-2.5%	0.6%
Return on capital employed (ROCE)	-22.3%	-4.1%	6.1%	-4.8%	-7.1%	1.3%
Days of sales outstanding (DSO)	76.7	58.6	60.1	60.0	60.0	60.0
Days of inventory turnover	91.5	79.3	87.6	85.0	82.0	82.0
Days in payables (DIP)	68.6	55.1	63.7	59.0	55.0	55.0



## CASH FLOW STATEMENT

All figures in EUR '000	2016A	2017A	2018A	2019E	2020E	2021E
<b>EBIT</b>	<b>-4,898</b>	<b>-885</b>	<b>1,325</b>	<b>-1,287</b>	<b>-2,181</b>	<b>430</b>
Depreciation and amortisation	2,390	1,747	1,153	3,318	3,431	3,369
<b>EBITDA</b>	<b>-2,508</b>	<b>862</b>	<b>2,478</b>	<b>2,031</b>	<b>1,250</b>	<b>3,799</b>
Changes in working capital	-3,541	1,362	-1,417	458	-1,319	-4,364
Other adjustments	818	-519	945	205	535	-27
<b>Operating cash flow</b>	<b>-5,231</b>	<b>1,704</b>	<b>2,005</b>	<b>2,694</b>	<b>466</b>	<b>-592</b>
CAPEX	-301	-497	-928	-820	-600	-668
Investments in intangibles	-619	-844	-1,445	-1,756	-1,254	-868
<b>Free cash flow</b>	<b>-6,151</b>	<b>363</b>	<b>-368</b>	<b>118</b>	<b>-1,387</b>	<b>-2,129</b>
Acquisitions & disposals, net	205	33	0	0	0	0
Other investments	150	0	0	0	0	0
<b>Investing cash flow</b>	<b>-565</b>	<b>-1,308</b>	<b>-2,373</b>	<b>-2,576</b>	<b>-1,853</b>	<b>-1,536</b>
Debt financing, net	2,834	2,252	-1,786	-3,198	-2,000	4,000
Equity financing, net	1,500	400	4,220	27,000	750	0
Dividend paid	0	0	0	0	0	0
Other financing	-60	-394	1,045	-762	-494	-303
<b>Financing cash flow</b>	<b>4,274</b>	<b>2,258</b>	<b>3,479</b>	<b>23,041</b>	<b>-1,744</b>	<b>3,697</b>
Forex & other effects	1	-2	0	0	0	0
<b>Net cash flows</b>	<b>-1,521</b>	<b>2,653</b>	<b>3,111</b>	<b>23,159</b>	<b>-3,131</b>	<b>1,568</b>
Cash, start of the year	3,277	1,756	4,409	7,805	30,964	27,833
<b>Cash, end of the year</b>	<b>1,756</b>	<b>4,409</b>	<b>7,520</b>	<b>30,964</b>	<b>27,833</b>	<b>29,401</b>
<b>EBITDA/share (in €)</b>	<b>-0.29</b>	<b>0.09</b>	<b>0.24</b>	<b>0.17</b>	<b>0.10</b>	<b>0.29</b>
<b>Y-Y Growth</b>						
Operating cash flow	n.m.	n.m.	17.7%	34.3%	-82.7%	n.m.
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EBITDA/share	n.m.	n.m.	160.5%	-29.5%	-44.8%	203.9%

**FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY**

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	23 June 2014	€4.84	Buy	€7.40
2...38	↓	↓	↓	↓
39	29 August 2019	€10.10	Add	€11.90
40	18 November 2019	€9.22	Add	€10.00
41	13 February 2020	€12.20	Reduce	€11.40
42	Today	€9.00	Add	€9.40

**Authored by: Dr. Karsten von Blumenthal, Analyst**

**Company responsible for preparation:**

**First Berlin Equity Research GmbH**

Mohrenstraße 34  
10117 Berlin

Tel. +49 (0)30 - 80 93 96 85 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© 2020 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 <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 €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 and/or Canada.**