

June 13, 2016

Europe | Germany | Crops

# DR. KALLIWODA

## RESEARCH GmbH

UPDATE

BUY

Target price: € 38.8

# BayWa AG

## Reorganizing the Agricultural Trade Business; Energy and Building Materials Advance

**Industry:** Wholesale  
**Country:** Germany  
**ISIN:** DE0005194062  
**Bloomberg:** BYW6 GR  
**Reuters:** BYWGNX.DE  
**Website:** www.baywa.de

**Last Price:** 30.50  
**High** **Low**  
**Price 52 W.:** 34.60 25.32  
**Market Cap. (EURm)** 1060.32  
**No. of Shares (in m)** 34.76

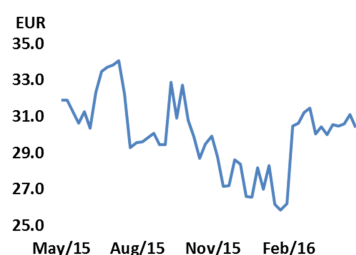
### Shareholders

**Bay. Raiffeisen-Beteiligungs** 35.22%  
**Raiffeisen Agrar Invest** 25.20%  
**Free float** 39.58%

### Dividends

	in EUR	in %
2011	0.60	2.20%
2012	0.65	1.94%
2013	0.75	1.94%
2014	0.80	2.59%
2015	0.85	2.99%

### Chart



### Analysts

Dr. Norbert Kalliwoda  
nk@kalliwoda.com

Dario Maugeri  
dm@kalliwoda.com

- The BayWa AG group slightly rose its revenues to around €3.5bn (0.5% higher y/y) in the first quarter of 2016. As expected, trend in agricultural producer prices lowered farmer propensity to sell grain and therefore reduced margins in the trading business. Consolidated EBIT and net income thus declined from €-3.3m to €-12.4m and from €-15.3m to €-24.2m correspondingly. However, after the Q1/16 closing, the trading business figures have indicated signs of recovery.
- Starting from January 2016 the agriculture trade business was restructured and split up in the BayWa agri supply & trade (BAST) and agriculture sales (BAV). This reorganization should improve efficiency and therefore segment margins. In total in Q1/16 the agricultural revenues were up 1.8% y/y to around €2.6bn while EBIT lowered from €20.3m to €-0.5m.
- Over the last quarter, the energy and building materials segments performed positively. Demand for solar and wind parks boosted the renewable energy sales up 29.8% and EBIT from €-0.1m to €12m, while the fall in oil price reduced revenues in conventional energies business by 15.4% to €449.4m whereas EBIT was up around €2.8m. In total EBIT in the energy segment enhanced from €1.1m to €16.0m in Q1/16. Due to favourable weather conditions at the beginning of the year the building materials segments grew revenues and EBIT by 7.5% and 11.2% respectively.
- Our estimates for the whole BayWa group have remained unchanged for the rest of the year. We have confirmed our target price of €38.8 per share and have estimated the EBIT CAGR of 14.7% for the period 2016E-2018E. This despite in the first quarter BayWa main business activities were affected by seasonality and difficulties in commodities prices, with consequences in consumers decisions and thus temporary fluctuations in company earnings. However in 2015 the pay-out ratio amounted to 61.1%, with a dividend per share of €0.85.

### Key Figures

EURm	2011	2012	2013	2014	2015	2016E	2017E
Net sales	9,586	10,531	15,958	15,202	14,928	15,221	15,987
EBITDA	251	307	281	280	288	352	424
EBIT	149	187	137	152	158	244	320
Net income	68	118	54	81	62	95	131
EPS	1.48	2.82	0.91	1.78	1.39	2.11	2.92
BVPS	25.31	25.11	26.55	22.77	23.37	25.17	28.12
RoE	8.00%	13.66%	6.12%	9.49%	7.71%	11.25%	14.10%
EBIT margin	1.56%	1.77%	0.86%	1.00%	1.06%	1.60%	2.00%
P/E	18.50	11.87	42.58	17.37	20.41	13.49	9.72
P/BVPS	1.08	1.33	1.45	1.36	1.22	1.13	1.01
EV/EBITDA	9.94	10.37	12.56	13.91	14.04	11.72	9.84

Source: company, Dr. Kalliwoda Research GmbH © 2016

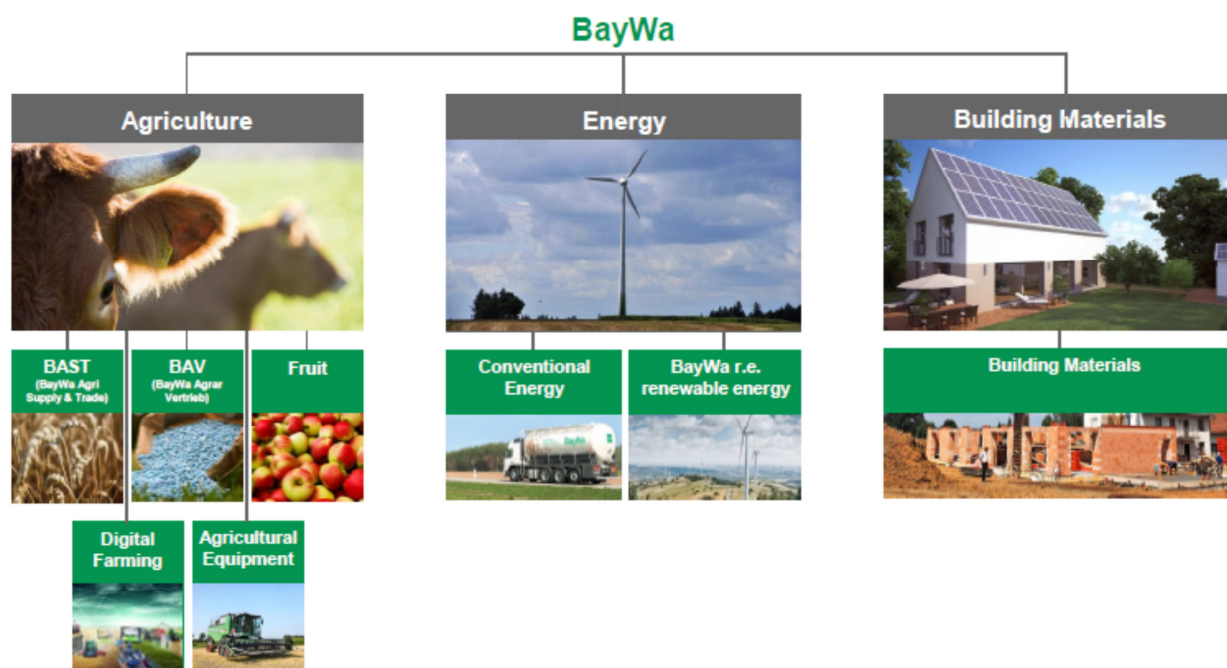
## Content

<b>1</b>	<b>Company Profile .....</b>	<b>3</b>
<b>2</b>	<b>SWOT Analysis .....</b>	<b>4</b>
<b>3</b>	<b>Valuation .....</b>	<b>5</b>
<b>4</b>	<b>Q1/16 Results and Outlook .....</b>	<b>6</b>
<b>5</b>	<b>Profit and Loss Statements . ....</b>	<b>9</b>
<b>6</b>	<b>Balance Sheets.....</b>	<b>10</b>
<b>7</b>	<b>Cash Flow Statements .....</b>	<b>11</b>
<b>8</b>	<b>Financial Ratios . ....</b>	<b>11</b>
<b>9</b>	<b>Contacts . ....</b>	<b>13</b>

## 1 Company profile

BayWa AG is a trading and services Group composed of three core business segments: Agriculture, Energy, and Building Materials. The company founded in 1923, headquartered in Munich, is active on every continent in the world. The Company is engaged in the wholesale and retail of industrial and agricultural goods, and in the provision of related services. Its business activities are structured into the core segments of Agriculture, Building Materials and Energy, along with Other Activities. The Agriculture segment offers products such as grain and fruits, crop protection products, fertilizers, feedstuff and seeds, as well as agricultural equipment such as tractors, forestry machinery and spare parts. The Building Materials segment provides construction materials and building components, as well as operating garden centers and pet departments only in Austria and providing services for heating and sanitary installations on a regional basis. The Energy segment offers mineral oils, biodiesel and lubricants and operates a network of around 244 fuel stations in Germany. In addition, BayWa has established itself in the renewable energies market as a major, internationally oriented project developer and trader in the fields of wind power, solar power and bioenergy.

BayWa AG is a strong corporate structure listed on Frankfurt Stock Exchange with Approximately 17,416 employees and nearly 3,000 locations in 34 countries.



Source: company

## 2 SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Leader in Crop protection product distribution (Germany) and Top 10 world agricultural traders</li> <li>- Strong position in Heating Oil trade: Largest in Southern Germany and Top Five in Austria</li> <li>- Economies of Scope: Nearly complete coverage of the agricultural value chain</li> <li>- Diversification in the segments agriculture, energy and building materials reduces the dependence on the agrarian segment and the commodity fluctuation</li> <li>- Solid shareholder structure: the main shareholders are Bayerische Raiffeisen-Beteiligungs AG (35%), Raiffeisen Agrar Invest GmbH (25%)</li> <li>- Geographic stronghold in Germany and Austria with worldwide expansion starting in 2013</li> <li>- Core competency in full-service supplement for the agricultural industry generates a large and loyal customer foundation</li> <li>- Loyal customers relations since they are buyers of agrarian products and supplier of crops at the same time</li> </ul>	<ul style="list-style-type: none"> <li>- Still, large dependency on the German and Austrian market (Share of Revenue: ca. 80%)</li> <li>- Agriculture exposure is almost 70% of FY13 revenues against half in FY12m, which plays down in importance Energy and Building businesses</li> <li>- M&amp;A Intensive activity complicated decision-making process and strategy execution</li> <li>- Large inventories are usual in Q3 (after harvest) and 1Q ahead (sowing season) sometimes may create inventory overhang and margin pressure</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>- Global grain production including rice is up by 176 million tonnes year on year and is set to reach a new all-time high of around 2.43 billion tonnes.</li> <li>- By 2050, the world's population will grow by another 2 billion, reaching 9 billion people and increasing prosperity in EM is leading to changes in eating habits and increasing demand for food</li> <li>- Internationalization of business: Chile, USA, China, Australia, Fiji and New Zealand</li> <li>- Number of building permits continues to rise steadily</li> <li>- Cefetra B.V. business should benefit from above than expected improvement in Polish economy</li> </ul>	<ul style="list-style-type: none"> <li>- Germany and Austria are still important so economic weakness in Core Europe is to be felt by BayWa AG</li> <li>- Volatile commodity markets</li> <li>- High fuel prices</li> <li>- Agricultural demand elasticity is to be rather low, yet the Energy business is seasonal while building cyclical bias is evident</li> <li>- Oversupply in grain commodities, wheat especially, is to play an significant role in 2014 if volumes gains cannot offset a decline in grain prices.</li> </ul>

Source: Dr. Kalliwoda Research GmbH © 2016

### 3 Valuation

On the basis of our DCF model we calculated a fair value of 38.82€ per share. We have used the discount factor of 7.1%, sales CAGR growth of c. 4.0% (2016E-2020E) and the long term growth rate (g) of 2.2%.

#### WACC assumptions

##### Equity

Long-term risk-free rate	1.5%
Market risk premium	10.0%
Company beta	1.7
<b>Equity costs</b>	<b>18.5%</b>

##### Debt

Debt costs (before tax)	3.7%
Tax rate on debt interest	29.7%
<b>Debt costs (after tax)</b>	<b>2.6%</b>

Equity value	28%
Debt value	72%
<b>WACC</b>	<b>7.1%</b>

Source: Dr. Kalliwoda Research GmbH © 2016

#### Discounted Cash Flow Model (Basis 06/2016)

in EURm	2016E	2017E	2018E	2019E	2020E
<b>Total revenues</b>	<b>15221.18</b>	<b>15987.06</b>	<b>16692.59</b>	<b>17292.10</b>	<b>17719.41</b>
(y-o-y change)	2.0%	5.0%	4.4%	3.6%	2.5%
<b>EBIT</b>	<b>243.54</b>	<b>319.74</b>	<b>367.24</b>	<b>379.22</b>	<b>388.27</b>
(operating margin)	1.6%	2.0%	2.2%	2.2%	2.2%
<b>NOPLAT</b>	<b>170.48</b>	<b>223.82</b>	<b>257.07</b>	<b>265.45</b>	<b>271.79</b>
+ Depreciation & amortisation	108.36	104.22	98.81	91.98	83.62
= Net operating cash flow	278.84	328.04	355.87	357.43	355.41
- Total investments (Capex and WC)	-193.93	-223.86	-206.00	-170.87	-114.32
Capital expenditure	-127.41	-138.22	-131.23	-121.63	-82.78
Working capital	-66.52	-85.64	-74.78	-49.24	-31.54
= Free cash flow (FCF)	84.91	104.19	149.87	186.56	241.09
<b>PV of FCF's</b>	<b>81.56</b>	<b>93.48</b>	<b>125.61</b>	<b>146.05</b>	<b>176.29</b>

PV of FCFs in explicit period	622.99
PV of FCFs in terminal period	3,273.15
<b>Enterprise value (EV)</b>	<b>3,896.14</b>
+ Net cash / - net debt	-2,373.79
+ Investments / - minorities	-266.23
<b>Shareholder value</b>	<b>1,256.12</b>
<b>Number of shares outstanding (m)</b>	<b>34.6</b>
<b>WACC</b>	<b>7.1%</b>
Cost of equity	18.5%
Pre-tax cost of debt	3.7%
Normal tax rate	29.7%
After-tax cost of debt	2.6%
Share of equity	28.0%
Share of debt	72.0%
<b>Fair value per share in EUR (today)</b>	<b>36.26</b>
<b>Fair value per share in EUR (in 12 months)</b>	<b>38.82</b>

Source: Dr. Kalliwoda Research GmbH © 2016

Sensitivity Analysis							
WACC	Terminal EBIT margin						
	0.7%	1.2%	1.7%	2.2%	2.7%	3.2%	3.7%
5.6%	-174.02	-84.42	5.18	94.78	184.38	273.99	363.59
6.1%	-157.99	-81.53	-5.06	71.40	147.87	224.33	300.80
6.6%	-145.76	-79.41	-13.06	53.28	119.63	185.97	252.32
7.1%	-136.15	-77.83	-19.50	38.82	97.14	155.46	213.79
7.6%	-128.43	-76.62	-24.81	27.00	78.81	130.63	182.44
8.1%	-122.12	-75.69	-29.26	17.16	63.59	110.02	156.45

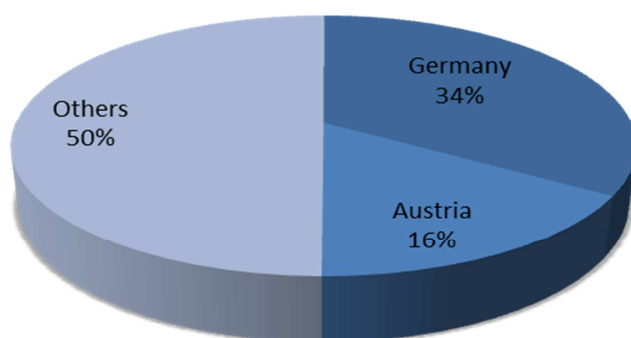
## 4 Q1/16 Earnings and Outlook

Consolidated sales of BayWa AG were slightly up of €18.4m to around €3.5bn (+0.5% y/y) in Q1/16. Starting from January 2016 the trade business division was reorganized in two business units: the BayWa agri supply & trade (BAST) and the agricultural sales unit (BAV). In total, sales of the two new units were up 3.4% to € 2.2bn in the first quarter, and included for the first time the BayWa agri Romania S.r.l. (BAST unit). With the falling in producer prices for agricultural products and lower farmers' investment propensity, sales in the agricultural equipment business declined by € 16.2% y/y. However, the fruit business increased its sales by 9.0% to €140.4m as with the initial consolidation of the recent acquired TFC Holland B.V. (Dutch supplier of tropical fruits). A growing revenues source in Q1/16 was also represented by the recent established digital farming business, which generated € 1.8m in revenues. Overall, the agricultural segment rose revenues overall by 1.8% y/y to € 2.6bn.

Within the energy segment, the trend in crude oil price impacted the conventional energy with sales lowered by 16.2% y/y, although the good performing volume recorded in heat energy sales. On the other hand turnover in renewable energy grew by 29.8% y/y to €160.4m as with the expansion in solar and wind parks. As a whole the energy segment went down by 6.9% to € 609.8m. With regards to the building material segment, favourable weather conditions have allowed an early starts of the season. Thus, revenues increased by 7.5% y/y, to € 269.0m, primarily because the demand for civil engineering, gardening and landscaping products.

### Results and sales breakdown by regions in Q1/2016

Q1/16 results vs. previous year			
in EURm	Q1/16	Q1/15	change
<b>Net sales</b>	<b>3,468.4</b>	<b>3,450.0</b>	<b>0.5%</b>
<b>EBITDA</b>	<b>18.4</b>	<b>27.3</b>	<b>-32.7%</b>
<i>EBITDA margin</i>	<i>0.5%</i>	<i>0.8%</i>	
<b>EBIT</b>	<b>-12.4</b>	<b>-3.3</b>	<b>274.1%</b>
<i>EBIT margin</i>	<i>-0.4%</i>	<i>-0.1%</i>	
<b>Net income</b>	<b>-24.2</b>	<b>-15.3</b>	<b>58.2%</b>
<i>Net margin</i>	<i>-0.7%</i>	<i>-0.4%</i>	



Source: Dr. Kalliwoda Research GmbH © 2016

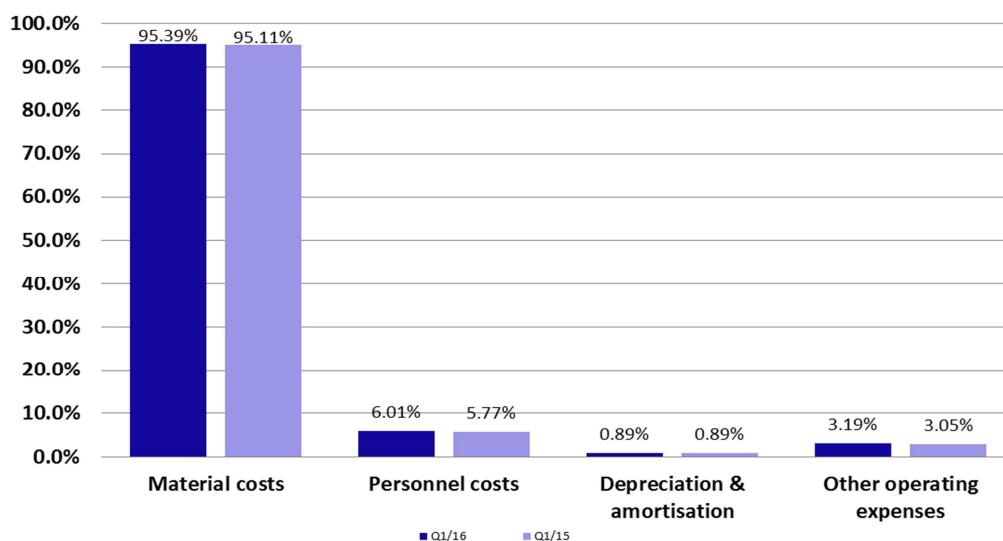
## Segment Break-down figures Q1/2016 vs. Q1/2015

Sales and EBIT margins according to segments FY2015 vs. FY2014					
	Q1/16	Q1/15		Q1/16	Q1/15
<b>Agriculture</b>			<b>Others</b>		
Sales EURm	2,793.9	2,769.1	Sales EURm	15.5	15.4
share in total sales	80.6%	80.3%	share in total sales	0.4%	0.4%
EBITDA margin	0.47%	1.21%	EBITDA margin	-42.0%	0.1%
<b>Energy</b>			<b>Consolidation</b>		
Sales EURm	676.3	719.9	Sales EURm	-294.7	-313.2
share in total sales	19.5%	20.9%	share in total sales	-8.5%	-9.0%
EBITDA margin	3.58%	1.25%			
<b>Building materials</b>			<b>Group</b>		
Sales EURm	277.4	258.8	Total sales EURm	3,468.4	3,450.0
share in total sales	8.0%	7.5%	change y-o-y	0.53%	
EBITDA margin	-4.00%	-5.07%			

Source: Dr. Kalliwoda Research GmbH © 2016

Group gross profit grew by 2.9% (or €9.6m) to € 338m, as with the increase in inventories +10.6% y/y and net of cost of materials up 0.8%. Personnel costs increased by 4.7% y/y to € 208.5m mainly because the first-time inclusion of the acquired companies in 2015, the expansion in BayWa agri supply & trade business and in the renewable energies business. Other operating costs increased by 5.2% as with currency effects and value adjustments of receivables. The drop in income from participating interests recognized at equity (€-1.6m Q1/16 vs. €1.9m Q1/15) lowered the total contributions of participating interests down by € 3.7m/y. In the same period, group EBIT declined by € 9.1m to € -12.4m. Including the change in net interests (down € 1.3m or 8.1% y/y) and tax income (positive for €5.7m), consolidated loss reached € 24.2m, € 8.9m down compared to the previous year.

## Group Profitability



Source: Dr. Kalliwoda Research GmbH © 2016



At the end of March 2016, total asset of the BayWa group came to €6.5bn, up €457.3m compared to December 2015. Main changes in current assets were related to the increase in trade receivables (up €31.8m to €1.1bn) given the initial spring business, and in inventories (up €128.5m to €2.3bn) primarily because the project developments in the renewable energies business; almost unchanged was the result in non-current assets. On the liabilities side, the most important positions were trade payables (€1.1bn Q1/16 vs. €0.7bn FY/15) and current financial liabilities (€1.4bn Q1/16 vs. €1.3bn FY/15) given the brisk development in the first quarter and non-current financial liabilities (up €54.7m) related to the project financing in the renewable energies business.

Despite the net loss (down €8.9m y/y) and higher income tax payments, operative cash flows after the change in working capital were up €58.9m y/y to €70.1m. Cash outflows in investing activities reached €74.3m and were largely related to the acquisitions of TFC Holland, Evergrain Germany, and the operations of Solar-Center. Including the cash inflows from financing activities (around €22.1m) on account of long term borrowing for the renewable energy project development, total cash at the end was up €17.5m compared to December 2015 to €102.0m.

## Outlook

Based on the anticipation of another above-average harvest in 2015/16 and following prices volatility of grain we remain positive for the trading business performance and we expect an increase in efficiency due to the completed restructuring. The outlook for the fruit business is also positive and includes the consolidation since the beginning of March of the controlling interest in TFC Holland. On account of farmer's low investment propensity, the agriculture equipment business might slowdown in the following quarterly results, however for the second part of the year higher margins are expected to compensate.

After a positive start in the first quarter and the project pipeline, the renewable energy segment should ensure growing earnings in the year 2016 driving the whole energy segment. Uncertainties remain in conventional energies business, which turnover might be influenced by the brisk demand for heating oil. The good start recorded in the building materials segment for 2016 might be a further group growing source.



## 5 Profit and loss statements

### Profit and loss statement - BayWa AG

Figures in EURm	Fiscal year					
	2012	2013	2014	2015	2016E	2017E
<b>Total revenues</b>	<b>10,531</b>	<b>15,958</b>	<b>15,202</b>	<b>14,928</b>	<b>15,221</b>	<b>15,987</b>
Change of inventories	39	27	-43	87	40	30
Capitalised items	5	2	5	4	4	4
<b>Total output</b>	<b>10,780</b>	<b>16,247</b>	<b>15,346</b>	<b>15,177</b>	<b>15,451</b>	<b>16,219</b>
Cost of goods sold	-9,355	-14,668	-13,817	-13,575	-13,600	-13,588
<b>Gross profit</b>	<b>1,176</b>	<b>1,290</b>	<b>1,385</b>	<b>1,353</b>	<b>1,621</b>	<b>2,399</b>
Other operating income	205	260	182	158	187	198
Personnel costs	-718	-781	-793	-825	-883	-891
Depreciation & amortisation	-120	-144	-128	-130	-108	-104
Other operating expenses	-418	-549	-457	-488	-617	-1317
<b>Operating income</b>	<b>187</b>	<b>137</b>	<b>152</b>	<b>158</b>	<b>244</b>	<b>320</b>
Net financial result	-47	-62	-72	-70	-108	-133
<b>EBT</b>	<b>140</b>	<b>75</b>	<b>80</b>	<b>88</b>	<b>135</b>	<b>187</b>
Income taxes	-5	-21	0	-26	-41	-56
Minorities	0	0	0	0	0	0
<b>Net income / loss</b>	<b>135</b>	<b>54</b>	<b>81</b>	<b>62</b>	<b>95</b>	<b>131</b>
EPS	2.82	0.91	1.78	1.39	2.11	2.92
DPS	1.13	0.36	0.71	0.56	0.84	1.17
<b>Change y-o-y</b>						
Total revenues	9.86%	51.53%	-4.74%	-1.80%	1.96%	5.03%
Change of inventories	-56.10%	-29.60%	-257.01%	-301.16%	-54.1%	-24.7%
Total output	9.94%	50.71%	-5.54%	-1.11%	1.81%	4.97%
Cost of goods sold	10.02%	56.79%	-5.80%	-1.75%	0.18%	-0.09%
Gross profit	8.63%	9.65%	7.39%	-2.31%	19.83%	48.01%
Other operating income	58.91%	26.67%	-29.75%	-13.47%	18.33%	6.19%
Personnel costs	5.74%	8.77%	1.55%	4.05%	6.98%	0.96%
Depreciation & amortisation	17.30%	20.20%	-11.31%	1.92%	-16.7%	-3.82%
Other operating expenses	9.63%	31.33%	-16.75%	6.81%	26.45%	113.47%
Operating income	25.16%	-26.44%	10.68%	3.99%	54.00%	31.29%
Net financial result	4.56%	32.55%	15.01%	-2.13%	54.19%	23.12%
EBT	34.05%	-46.28%	7.08%	9.43%	53.85%	37.81%
Income taxes	-83.15%	352.17%	-101.34%	-9580%	53.58%	37.81%
Net income / loss	75.60%	-59.84%	48.62%	-23.72%	53.97%	37.81%
EPS	90.88%	-67.84%	96.30%	-21.77%	51.29%	38.79%
DPS	73.38%	-67.84%	96.30%	-21.77%	51.29%	38.79%
<b>Share in total revenues</b>						
Total revenues	100.00 %	100.00 %	100.00 %	100.00 %	100.0 %	100.0 %
Change of inventories	0.37 %	0.17 %	-0.28 %	0.58 %	0.26 %	0.19 %
Capitalised items	0.05 %	0.01 %	0.04 %	0.03 %	0.02 %	0.03 %
Total output	102.36 %	101.81 %	100.95 %	101.66 %	101.51 %	101.5 %
Cost of goods sold	-88.83 %	-91.92 %	-90.89 %	-90.94 %	-89.3 %	-85.0 %
Gross profit	11.17 %	8.08 %	9.11 %	9.06 %	10.65 %	15.01 %
Other operating income	1.95 %	1.63 %	1.20 %	1.06 %	1.23 %	1.24 %
Personnel costs	-6.82 %	-4.89 %	-5.22 %	-5.53 %	-5.80 %	-5.57 %
Depreciation & amortisation	-1.14 %	-0.90 %	-0.84 %	-0.87 %	-0.71 %	-0.65 %
Other operating expenses	-3.97 %	-3.44 %	-3.00 %	-3.27 %	-4.05 %	-8.24 %
Operating income	1.77 %	0.86 %	1.00 %	1.06 %	1.60 %	2.00 %
Net financial result	-0.45 %	-0.39 %	-0.47 %	-0.47 %	-0.71 %	-0.83 %
EBT	1.33 %	0.47 %	0.53 %	0.59 %	0.89 %	1.17 %
Income taxes	-0.04 %	-0.13 %	0.00 %	-0.18 %	-0.27 %	-0.35 %
Minorities	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Net income / loss	1.28 %	0.34 %	0.53 %	0.41 %	0.62 %	0.82 %

Source: Dr. Kalliwoda Research GmbH © 2016

## 6 Balance sheets

### Balance sheet - BayWa AG

Figures in EURm	Fiscal year					
	2012	2013	2014	2015	2016E	2017E
<b>Assets</b>						
Inventories	1,433	1,836	1,986	2,142	2,145	2,143
Trade receivables	621	702	1,084	1,255	1,279	1,344
Tax receivables	50	65	28	23	23	24
Other assets	254	403	28	22	22	23
Securities and other financial assets	2	2	156	224	229	240
Cash & cash equivalents	85	92	108	84	109	143
<b>Current assets</b>	<b>2,445</b>	<b>3,100</b>	<b>3,390</b>	<b>3,749</b>	<b>3,808</b>	<b>3,918</b>
Property, plant and equipment	1,068	1,074	1,397	1,420	1,434	1,448
Assets-for-sale	233	0	0	0	0	0
At-Equity shareholdings	93	102	196	204	208	218
Financial assets	325	408	257	226	230	242
Other assets	42	46	54	60	61	64
Intangible assets	140	157	148	167	167	176
Goodwill	0	0	0	0	0	0
Deferred tax assets	113	128	209	212	167	160
<b>Non-current assets</b>	<b>2,012</b>	<b>1,915</b>	<b>2,262</b>	<b>2,287</b>	<b>2,267</b>	<b>2,307</b>
<b>Total assets</b>	<b>4,457</b>	<b>5,015</b>	<b>5,652</b>	<b>6,037</b>	<b>6,075</b>	<b>6,225</b>
<b>Liabilities</b>						
Tax payables	53	77	28	25	59	55
Pension provisions	30	29	29	30	30	32
Other provisions	136	145	171	176	179	188
Short-term financial debt	894	1,132	1,312	1,491	1,641	1,721
Trade payables	761	767	745	792	794	793
Other liabilities	73	265	204	255	183	165
<b>Current liabilities</b>	<b>1,947</b>	<b>2,414</b>	<b>2,488</b>	<b>2,769</b>	<b>2,886</b>	<b>2,954</b>
Pension provisions	520	512	638	625	638	670
Other provisions	88	86	83	83	84	88
Financial and leasing debt	649	629	1,111	1,227	1,167	1,147
Long-term trade payables	4	3	2	5	5	5
Other liabilities	11	26	127	93	25	26
Deferred tax liabilities	126	163	152	158	130	90
Liabilities from assets-for-sale	27	0	0	0	0	0
<b>Long-term liabilities</b>	<b>1,425</b>	<b>1,419</b>	<b>2,113</b>	<b>2,191</b>	<b>2,049</b>	<b>2,027</b>
<b>Total liabilities</b>	<b>3,372</b>	<b>3,833</b>	<b>4,602</b>	<b>4,961</b>	<b>4,934</b>	<b>4,981</b>
<b>Shareholder's equity</b>	<b>862</b>	<b>914</b>	<b>786</b>	<b>810</b>	<b>875</b>	<b>978</b>
Minority interests	223	268	264	266	266	266
<b>Total equity and liabilities</b>	<b>4,457</b>	<b>5,015</b>	<b>5,652</b>	<b>6,037</b>	<b>6,075</b>	<b>6,225</b>

Source: Dr. Kalliwoda Research GmbH © 2016

## 7 Cash Flow Statement

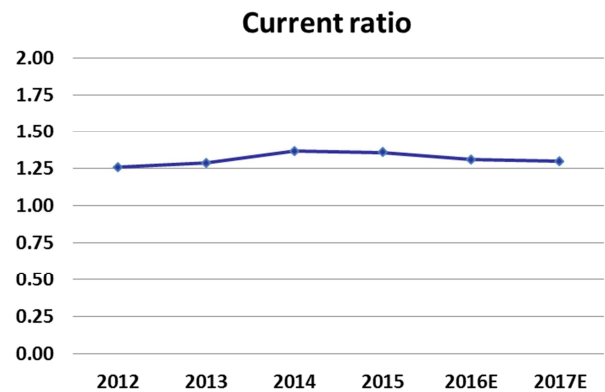
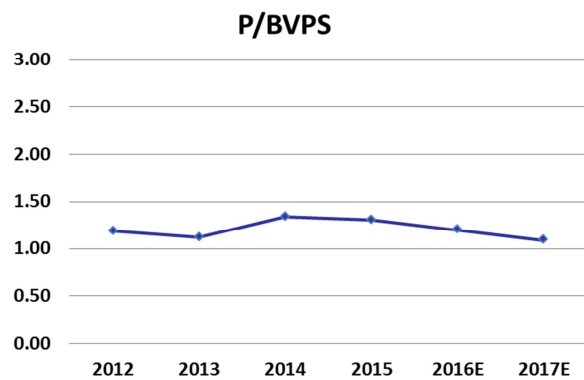
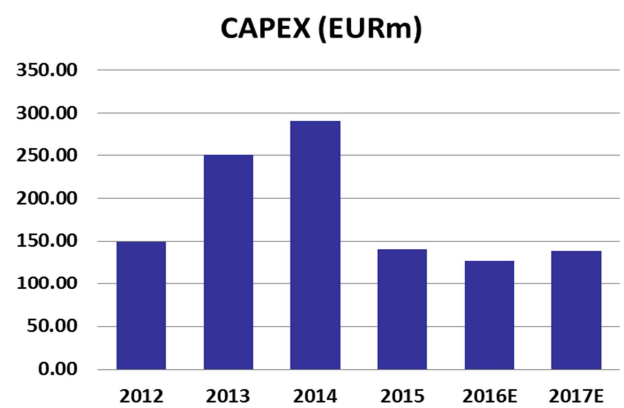
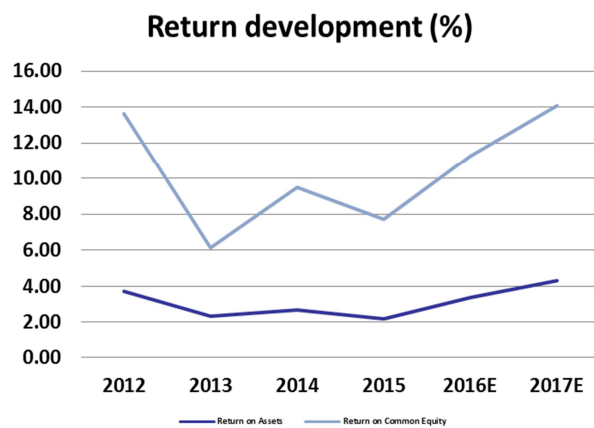
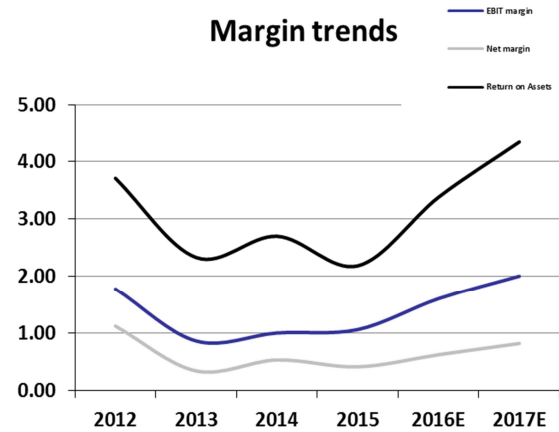
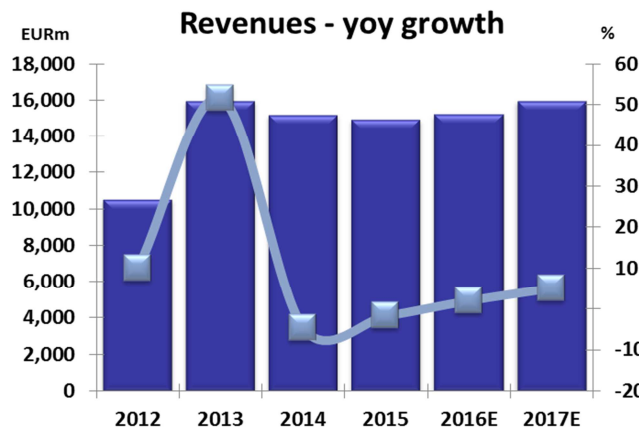
Cash flow statement - BayWa AG						
Figures in EURm	Fiscal year					
	2012	2013	2014	2015	2016E	2017E
Net income / loss before minority share deduction	118.0	54.3	80.7	61.6	94.8	130.6
Depreciation & amortisation	119.8	144.0	127.7	130.2	108.4	104.2
Change of working capital	15.3	-31.9	-224.1	-191.0	-66.5	-85.6
Others	-80.9	52.9	-75.0	18.3	20.7	-18.4
<b>Net operating cash flow</b>	<b>150.0</b>	<b>219.3</b>	<b>-90.6</b>	<b>19.0</b>	<b>157.4</b>	<b>130.9</b>
<b>CAPEX</b>	<b>-193.6</b>	<b>15.6</b>	<b>-227.6</b>	<b>-143.5</b>	<b>-127.4</b>	<b>-138.2</b>
Free cash flow	-43.6	234.9	-318.2	-124.4	29.9	-7.4
<b>Cash flow from financing</b>	<b>37.4</b>	<b>-217.0</b>	<b>334.4</b>	<b>98.7</b>	<b>-5.2</b>	<b>40.9</b>
Change of cash	-2.3	7.4	16.3	-23.9	24.7	33.5
Cash at the beginning of the period	87.0	84.7	92.1	108.4	84.5	109.2
Cash at the end of the period	84.7	92.1	108.4	84.5	109.2	142.7

Source: Dr. Kalliwoda Research GmbH © 2016


## 8 Financial ratios

Ratios	2012	2013	2014	2015	2016E	2017E
Gross margin	13.22%	9.72%	9.97%	10.55%	11.98%	16.23%
EBITDA margin	2.91%	1.76%	1.84%	1.93%	2.31%	2.65%
EBIT margin	1.77%	0.86%	1.00%	1.06%	1.60%	2.00%
Net margin	1.09%	0.33%	0.53%	0.41%	0.61%	0.81%
Return on equity (ROE)	13.66%	6.12%	9.49%	7.71%	11.25%	14.10%
Return on assets (ROA)	3.70%	2.33%	2.70%	2.18%	3.34%	4.24%
Return on capital employed (ROCE)	7.16%	3.82%	4.82%	3.39%	5.34%	6.84%
Current ratio	1.26	1.28	1.36	1.35	1.32	1.33
Quick ratio	0.36	0.33	0.54	0.56	0.56	0.58
Net interest cover	3.97	2.21	2.12	2.25	2.25	2.40
Net debt/EBITDA	6.63	7.84	10.10	10.63	8.92	7.52
Book value per share	25.11	26.55	22.77	23.37	25.17	28.12
CAPEX/Sales	1.42%	1.57%	1.91%	0.94%	0.84%	0.86%
Working capital/Sales	11.51%	9.35%	13.95%	15.68%	15.82%	15.60%
EV/Sales	0.30	0.22	0.26	0.27	0.27	0.26
EV/EBITDA	10.37	12.56	13.91	14.04	11.72	9.84
EV/EBIT	17.03	25.73	25.60	25.60	16.94	13.05
P/BVPS	1.33	1.45	1.36	1.22	1.13	1.01
P/E	11.87	42.58	17.37	20.41	13.49	9.72

Source: Dr. Kalliwoda Research GmbH © 2016



## 9 Contacts

Primary Research   Fair Value Analysis   International Roadshows		Arndtstr. 47 60325 Frankfurt Tel.: 069-97 20 58 53 Fax: 069-13 81 92 15
Head: <b>Dr. Norbert Kalliwoda</b> E-Mail: nk@kalliwoda.com	CEFA-Analyst; University of Frankfurt/Main; PhD in Economics; Dipl.-Kfm.	<u>Sectors:</u> IT, Software, Electricals & Electronics, Mechanical Engineering, Logistics, Laser, Technology, Raw Materials
<b>Dr. Peter Arendarski</b> E-Mail: pa@kalliwoda.com	Senior-Analyst, Msc & Ph.D in Finance (Poznan Univers. of Economics), CFA Level 3 Candidate	<u>Sectors:</u> Technology, Raw Materials, Banks & Insurances, Financial-Modelling (Quant., Buyside)
<b>Patrick Bellmann</b> E-Mail: pb@kalliwoda.com	Junior-Analyst; WHU - Otto Beisheim School of Management, Vallendar	<u>Sectors:</u> Support Research and Quantitative Approach
<b>Kilian Dreher</b> E-Mail: kd@kalliwoda.com	Junior-Analyst; University of Frankfurt/Main	<u>Sectors:</u> Consumer, Retail, Food & Beverages, Fashion
<b>Michael John</b> E-Mail: mj@kalliwoda.com	Dipl.-Ing. (Aachen)	<u>Sectors:</u> Chemicals, Chemical Engineering, Basic Metals, Renewable Energies, Laser/Physics
<b>Rainer Koch</b> E-Mail: rk@kalliwoda.com	Computer-Science/Dipl.-Betriebsw, (Frankfurt); seasoned international Executive IT-Industry	<u>Sectors:</u> IT, IT-Services, Internet, Media, Internet, Emerging Markets
<b>Olaf Köster</b> E-Mail: ok@kalliwoda.com	Dipl.-Betriebswirt, EBS	<u>Sectors:</u> Renewable Energy/Technology
<b>Christoph Löffel</b> E-Mail: cl@kalliwoda.com	Bachelor Betriebswirtschaftslehre Universität Mannheim	<u>Sectors:</u> Financials, Real Estate
<b>Dario Maugeri</b> E-Mail: dm@kalliwoda.com	Master of Science in Corporate Finance; Rotterdam School of Management	<u>Sectors:</u> Automotive, Technology
<b>Dr. Christoph Piechaczek</b> E-Mail: cp@kalliwoda.com	Dipl.-Biologist; Technical University Darmstadt; Univ. Witten-Herdecke.	<u>Sectors:</u> Biotech & Healthcare; Medical Technology Pharmaceutical
<b>Nele Rave</b> E-Mail: nr@kalliwoda.com	Lawyer; Native Speaker, German School London,	<u>Legal adviser</u>
<b>Hellmut Schaarschmidt;</b> E-Mail: hs@kalliwoda.com	Dipl.-Geophysicists; University of Frankfurt/Main.	<u>Sectors:</u> Oil, Regenerative Energies, Specialities Chemicals, Utilities
<b>Dr. Erik Schneider</b> E-Mail: es@kalliwoda.com	Dipl.-Biologist; Technical University Darmstadt; Univ. Hamburg.	<u>Sectors:</u> Biotech & Healthcare; Medical Technology Pharmaceutical
<b>Alejandro Silva</b> E-Mail: asr@kalliwoda.com	Dipl.-Betriebswirt, Universität Zaragoza, CAIA Level II Candidate	<u>Sectors:</u> Basic Materials, Oil&Gas, Renewables
<b>Hans-Georg Sutter</b> E-Mail: hsu@kalliwoda.com	Dipl.-Wirtschaftsingenieur University Kaiserslautern	<u>Sectors:</u> IT/e-commerce
<b>Rainer Wochele</b> E-Mail: rw@kalliwoda.com	Bachelor of Science in Economics and Business Administration (Goethe University Frankfurt M. / Graduation Fall 2013)	<u>Junior-Analyst</u>
Also view Sales and Earnings Estimates:  <b>DR. KALLIWODA   RESEARCH on Terminals of Bloomberg, Thomson Reuters, vwd group and Factset</b>	Analyst of this research: Dr. Norbert Kalliwoda, CEFA	

## Disclaimer

### Essential information, disclosures and disclaimer

#### A. Essential information

The investments in financial instruments and securities (e.g. equities, bonds) generally involved on high risks. It is possible that the investors lose some or all of the invested money. Potential investors should be aware of the fact that the prices of securities could fall and rise. The income from such an investment might be considerable fluctuations. Investment strategies are not appropriate at all times and past results are not a guarantee for the future performance. Investors should make their own and independent decisions as to whether a risky investment.

#### B. Disclosures according to Section 34b of the German Securities Trading Act (WpHG) and to the German Regulation governing the Analysis of Financial Instruments (FinAnV).

##### I. Information about author, company held accountable, regulatory authority:

Company responsible for the content of this document: DR. KALLIWODA RESEARCH GmbH, Frankfurt am Main, Germany.

Regulatory authority for DR. KALLIWODA RESEARCH GmbH is the Federal Financial Supervisory Authority (BaFin), Graurheindorfer Straße 108, 53117 Bonn, Germany and Lurgiallee 12, 60439 Frankfurt am Main, Germany.

Author of this research: Dr. Norbert Kalliwoda, Analyst, CEO and founder of DR. KALLIWODA RESEARCH GmbH.

##### II. Additional Information:

##### 1. Sources of information:

Essential sources of information for the compilation of this document are publications from domestic and international information services and media (e.g. Bloomberg, dpa-AFX, Reuters, VWD, among others), financial press (e.g. *Allgemeine Zeitung Frankfurter*, *Börsenzeitung*, *Financial Times Handelsblatt* and others), specialized trade press, published statistics, rating agencies as well as publications by peer group companies and the company itself. Additionally, conservation has been held with the management of the company. This document was made available to the company before publishing to ensure the correctness of the information provided.

##### 2. Summary of the basis of valuation principles and methods used to prepare this document:

Within the scope of the evaluation of companies the following valuation methods are applied: Multiple-based models (Price/Earnings, Price/Cash-flow, Price/Book value, EV/Sales, EV/EBIT, EV/EBITDA), peer group comparisons, historic valuation methods, discounting models, sum-of-the-parts-approaches, substance-valuation methods and swot-analyses. The valuation principles and models are dependent on macroeconomic factors, such as interest rates, exchange rates, raw materials and on basic assumptions about the economy. Besides, the market moods and market sentiment affects the valuation of enterprises. The approaches are based on expectations that could change rapidly and without advance warning according on developments specific to individual branch. The valuation results and fair values derived from the models might therefore change accordingly.

The ratings are the evaluation results and refer to a fair value pricing reflecting a time-horizon of up general relate to a twelve-months. Nevertheless, evaluation results are subject to changing market conditions and constitute merely a snapshot. The evaluation results and fair values may be reached faster or slower than expected by the analysts. The results and fair values may be scale upwards or downwards.

DR. KALLIWODA RESEARCH GmbH uses the following rating model:

<b>BUY:</b>	Based on our analysis, we expect the stock to appreciate and produce a total return of at least 10% over the next twelve months
<b>ACCUMULATE:</b>	Based on our analysis, we expect the stock to appreciate and produce a total return between 5%- 10% over the next twelve months
<b>HOLD:</b>	Based on our analysis, we expect the stock to produce a total return between -5% and +5% over the next twelve months
<b>REDUCE:</b>	Based on our analysis, we expect the stock to cause a negative return between - 5% and -10% over the next twelve months
<b>SELL:</b>	Based on our analysis, we expect the stock to cause a negative return exceeding - 10% over the next twelve months

### 3. Date of first publication of this document: 13th of June 2016

### 4. Updates:

A specific update of this document has currently not been set. The research reflects the author's judgement on the date of this publication and is subject to change without any notice. The document might be incomplete or reduced and it may not contain all information concerning the company covered. It is in the sole decision of DR. KALLIWODA RESEARCH GmbH whether and when a potential update of this research is made.

### III. Disclosures about potential conflicts of interest:

The business model of DR. KALLIWODA RESEARCH GmbH is based on economic relationships with issuer company and equity transactions to be performed relating to the issuer's stock. Dr. Kalliwoda Research has entered into an agreement about the creation of this document with the company which is, or whose financial instruments are the issue of this research.

Conflicts of interest may be in existence with employees of DR. KALLIWODA RESEARCH GmbH who are the authors of this document as well as other persons that were involved in the preparation of this research or related parties.



---

**Following conflicts of interest might exist:**


---

1. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties might have a major shareholding (holding more than 5%) of the share capital of the emitter that is, or whose financial instruments are, the subject of the research.
  2. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties are possibly holders of instruments that are mentioned in this research (or that are linked to these instruments) or might become holders and could regularly trade the emitter's securities or securities based on these issues as principal or agent.
  3. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties could have participated in leading a consortium for the emitter via a public offering of the financial instruments that are the subject of this research.
  4. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties might have been party to an agreement on the provision of investment banking services with the emitter which is the subject of this research, or have received services or a pledge to perform under the terms of such an arrangement during the same period.
  5. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties may have other substantial economic interests concerning to the emitter which is the subject of this research.
  6. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties might have been party to an agreement with the company, which is the subject of this research, resulting in receiving the compensation for preparation of this research.
  7. Dr. Kalliwoda Research GmbH employees or other persons that were involved in the preparation of this document or related parties received the feedback concerning the company profile and SWOT from the company, which is the subject of this research, before publishing this report to the public.
- 

**Important: Please get familiar with possible risks and possible conflicts of interest in the disclosure and disclaimer at the end of this report, especially for this report: 6. and 7.**

The analysts have limited access to gain information that possibly could constitute a conflict of interest for the institution Dr. Kalliwoda Research GmbH keeps insider registers appropriate to sec. 15 WpHG for assignees that normally have approach to inside information. Insiders' dealings appropriate to sec. 14 WpHG categorically are prohibited.

The analysts that composed this research did not receive or acquire shares in the emitter that is the subject of this document at any time. The analysts mentioned above hereby certify that all of the views expressed accurately reflect the individual views about the emitter. No part of the indemnity was, is or will be, directly or indirectly, linked to the evaluation result or views expressed by the analyst in this research.

### **C. Disclaimer:**

This document is published and being distributed by Dr. Kalliwoda Research GmbH solely for informational purposes and for the personal use by persons in Germany. This research is not intended to be in any form an offer or advice to buy or sell the securities referred to herein. This research is intended to provide information to assist investors in making their own investment decisions. Any decision to purchase any securities of the emitter must be made solely on the basis of the information contained in the offering documents from the emitter relating to such securities and not on the contents hereof. Furthermore, our recommendation may not be fully suitable to every investor, depending on their investment objective, individual financial situation or targeted holding period.

Potential investors should seek professional and individual information and advice before making their investment decisions. This document neither constitutes a contract or any kind of obligation.

Neither this document nor any copy, in whole or in part, thereof may be distributed in any other jurisdiction where its distribution might be restricted by law, and person into whose published this document comes should inform and observe themselves about any such restrictions.

The information within this document has been obtained from sources believed by Dr. Kalliwoda Research GmbH to be reliable. Dr. Kalliwoda Research GmbH does not examine the information to be verify and complete, nor warrants its correctness and completeness. Although due attention has been taken in compilation this document, it cannot be excluded that the information given is not complete or the document contains mistakes.

The liability of Dr. Kalliwoda Research GmbH shall be restricted to gross negligence and wilful misconduct. All aspects penned in this document are those of Dr. Kalliwoda Research GmbH respectively the authors and subject to modify without notice. Possible faults or incompleteness of this document may be reformed by Dr. Kalliwoda Research GmbH and do not constitute reasons for liability, neither with regard to indirect nor to direct or consequential losses.

Moreover, Dr. Kalliwoda Research GmbH does not accept any responsibility and liability for any damage arising from using of this research or its contents or otherwise arising in relation herewith. In each case, the liability and responsibility of Dr. Kalliwoda Research GmbH is limited to typical, predictable damages and the liability for any direct or indirect losses is excluded.

This document is subject to the laws of the Federal Republic of Germany. Place of jurisdiction is Frankfurt am Main, Germany.

This document or any copy, in whole or in part thereof, may be distributed in any other jurisdiction where its distribution might be restricted by law and persons who have access to this document have to inform and observe themselves about any such restrictions.

In the United Kingdom this document is to be distributed only to persons who are described in Section 11 (3) of the Financial Services Act 1986 (Investment Advertisements) (Exemptions) Order 1996 (as amended). This research may not be distributed and forwarded directly or indirectly to any other group of individuals. The distribution of this document in other international jurisdictions may be restricted by law and individuals who possess this study should inform themselves of any existing restrictions and comply with them.

**Neither this document nor any copy of it may be taken or transmitted into the United States of America, Canada, Japan or Australia or distributed, directly or indirectly, in the United States of America, Canada, Japan or Australia or to any resident thereof. Any Failure to comply with these restrictions may constitute a violation of United States, Canadian, Japanese or Australian securities laws or the law of any other jurisdiction.**

By confirming this document the reader or user agrees and accepts to be bound by all of the foregoing provisions and this disclaimer. Besides, the user accepts not to distribute this document to unauthorized persons. The user of this document compensated Dr. Kalliwoda Research GmbH for any disadvantages, damages, claims and losses resulting from or in relation with the unauthorized use of this document.

© 2016 Dr. Kalliwoda Research GmbH, Steinstr. 24, D-64839 Münster und Arndtstraße 47, D-60325 Frankfurt am Main. All rights reserved.