

Review: Buy

Target price: EUR 31

DR. KALLIWODA SDG: *)
Rating: A



*) Dr. Kalliwoda Social Development Goals Rating

Industry: It Services & Software

Industry:	It Services & Software		
Country:	Germany		
ISIN:	DE000A0Z1JH9		
Reuters:	PSAGn.DE		
Bloomberg:	PSAN GR		
Website:	www.psi.de		

Last price:	21,2	
	Low	High
Price 52 W.:	18,1	25,85
Market cap.	332.784.159	
Number of shares	15.697.366	

Shareholders			
Innogy SE			17,77%
Harvinder Singh			8,10%
Invest. F. Lg. Inv. TGV			20,65%
Employees			9,35%
Management			1,16%
Own Shares			1,18%
Baden-Württ.			5,23%
Free Float			36,56%

Performance			
4 weeks			-4,50%
12 weeks			3,41%
52 weeks			-11,67%
3 years			-52,47%

Dividend			
	in EUR	in %	
2017	0,22	1,19%	
2018	0,23	1,47%	
2019	0,25	1,20%	
2020	0,05	0,25%	
2021	0,3	1,23%	
2022	0,4	1,80%	



PSI Software SE:

Resilient Q3 Performance as PSI Group Navigates Cyberattack Aftermath

- Q3 2024 sales were stable at €65 million, but year-to-date sales fell 3.8%, with EBIT still deeply negative at -€19.4 million due to cyberattack impacts.
- Energy Management saw a 7.6% sales drop and worsened EBIT, while Production Management stabilized with a 23% year-over-year EBIT increase in Q3.
- Order intake fell 16.8% to €198 million; cash flow from operations was negative at -€34.2 million, though Q4 improvements are expected.
- PSI merged German subsidiaries and will report under five industry segments from Q4, with a focus on cloud and SaaS development.
- We have maintained our valuation model and reiterated the "BUY" recommendation for the share, with a 12-month target price of EUR 30.60.
- Dr. Kalliwoda's Sustainability Rating: 5 Trees (maximum).

in EURm	2022	2023	2024e	2025e	2026e	2027e
Net sales	247,94	269,89	258,39	294,56	319,60	346,76
EBITDA	34,00	20,16	4,64	40,81	49,27	62,15
EBIT	20,19	5,56	-9,23	26,80	35,12	47,87
Net income	16,75	-0,73	-15,46	17,10	22,98	32,04
EPS	1,07	-0,05	-0,99	1,09	1,47	2,04
BVPS	7,58	7,12	6,58	8,01	8,66	9,12
RoE	14,07%	-0,65%	-14,98%	13,62%	16,93%	22,41%
EBIT margin	8,14%	2,06%	-3,57%	9,10%	10,99%	13,80%
P/E	18,75	-429,47	-20,27	18,33	13,64	9,78
P/BVPS	2,64x	2,81x	3,04x	2,50x	2,31x	2,19x

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

DR. KALLIWODA RESEARCH on Bloomberg

Page: KAL

Analyst:


Dr. Norbert Kalliwoda

E-Mail: nk@kalliwoda.com

Phone: +49 69 97 20 58 53

www.kalliwoda.com

Table of Contents

1.	Q3 2024 Results	3
2.	Outlook	3
3.	Company Profile	3
4.	SWOT Analysis	5
5.	Valuation	6
6.	Segment Report and Revenue Split	7
7.	Profit & Loss	9
8.	Balance Sheet	10
9.	Financial Ratios	11
10.	Cashflow Statement	12
11.	FY23 quarter comparison to previous quarters	12
12.	Dr. Kalliwoda's Sustainability Rating : Max. 5 Trees 	13
13.	Contacts	17
14.	Disclaimer: Material information, disclosures and disclaimers	18

1. Q3 2024 Results

The The PSI Group reported moderate Q3 2024 sales stability and operational progress despite the impacts of a cyberattack earlier in the year. Although Q3 sales were stable year-over-year at €65 million, year-to-date sales decreased by 3.8% to €177.4 million. A balanced operating result (EBIT) of €13,000 was achieved in Q3, though year-to-date EBIT remains deeply negative at -€19.4 million due to cyberattack-related disruptions. The attack affected fixed-price projects especially, notably in the Energy Management segment, saw a sales decline of 7.6% to €84.8 million and an EBIT deterioration to -€19.5 million. Recovery here has lagged given the complexity of fixed-price contracts. Conversely, the Production Management segment demonstrated resilience, with stable sales at €92.6 million and a 23% year-over-year increase in Q3 EBIT to €3.7 million, evidencing faster post-cyberattack recovery in this more product-oriented business.

Order intake and backlog have softened, with orders down 16.8% to €198 million and backlog down 5.5% to €188 million, as Q3 2023 had been bolstered by large orders from clients such as Swissgrid, and Malaysia. Cash flow from operations was a significant -€34.2 million year-to-date, also influenced by one-off working capital adjustments. While cash reserves decreased to €27.4 million, PSI has available financing and expects improved cash flow in Q4.

2. Outlook

The February cyberattack disrupted operations, increasing costs and lowering productivity by necessitating on-site work. Despite this, management anticipates no long-term growth impact, supported by enhanced IT security measures and expected partial insurance compensation in 2025. Before the attack, projections targeted 5% growth in revenue and order intake, with an EBIT of €11 million. Revised estimates now foresee potential revenue losses of up to €25 million and a negative EBIT of as much as -€15 million.

Our projections for FY2024 see PSI reaching €258,39 million in revenue, with an EBIT of -€9,23 million and a net income of -€15,46 million. For FY2025, we forecast continued growth, with revenue reaching €294,56 million, EBIT hitting €26,80 million, and net income at €17,10 million.

3. Company Profile

PSI Software SE develops and sells software systems and products for the energy supply, production, logistics, infrastructure and mobility sectors worldwide. The company operates in two segments, Energy Management and Production Management. The Energy Management segment provides intelligent solutions for utility companies in the electricity, gas, oil, and water sectors, as well as for the district heating sector. It develops control systems for

electrical grids, cross-sector control systems, and gas and pipeline management systems, and products for energy trading, energy distribution, smart grids, power plant optimization, public transport system, and gas industry planning. The Production Management segment offers software products and solutions for planning and controlling production processes in metals production, logistics, mechanical engineering, and automotive manufacturing. The company also offers a range of data processing services; sells electronic equipment; and operates data processing systems. PSI Software SE was founded in 1969 and is headquartered in Berlin, Germany.

PSI History

2023	Effective November, 1, Robert Klaffus has been appointed to the Management Board of PSI Software SE as CEO
2023	Company name change of the former PSI Software AG to PSI Software SE
2021	Release of one of the first app stores for Industrial software
2021	Effective 1 July 2021, Gunnar Glöckner has been appointed to the Management Board of PSI Software SE as Chief Financial Officer
2020	Takeover of Swiss network planning software developer NEPLAN
2020	Takeover of Prognos Energy - a forecasting software specialist
2019	Takeover of smart grid units of Top 5 German player BTC AG
2018	Takeover of Moveo Software AG broadening presence in public transport solutions
2014	Takeover of the strongest competitor in the metals industry, Broner Metals.
2013	PSI subsidiary founded in Brazil.
2012	Strengthening of the energy business with the acquisition of the Time-steps AG.
2011	PSI subsidiary founded in North America.
2010	PSI develops the first integrated mining control system.
2009	PSI celebrates its 40th anniversary. Since 1969, PSI develops and integrates software solutions and complete systems for utilities, manufacturers, logistics and infrastructure providers.
2008	Formation of a subsidiary and a joint venture in Russia. International expansion in the metals, production and energy industry.
2007	Process control system for efficient raw materials production; market entry into the Russian steel and electricity industry.
2006	Opening of a representative office in Russia; new sales partnerships in Eastern Europe and Asia.
2005	First major orders from the Chinese steel industry and expansion of the logistics division to Russia.
2004	PSI subsidiaries founded in Poland and China.
2003	PSI develops the first integrated control system for controlling complex manufacturing processes.
2002	Generation shift in top management; Restructure of PSI into an integrated control system enterprise.
2000	PSI acquires the gas management system division from debis Systems and starts internationalization of its energy business.
1998	Initial public offering (IPO) on August 31.
1996	Development of the first object-oriented ERP system PSIpenta.
1994	The company is converted into a joint-stock corporation.
1986	Market launch of PIUSS-O, the company's first standard software product for production planning (PPS).
1976	The company wins its first large order from the energy supply sector.
1974	PSI is the first German company to introduce an employee stock option plan.
1969	PSI Gesellschaft für Prozesssteuerungs- und Informationssysteme GmbH is founded in Berlin. First order from the steel industry.

Source: The Company

4. SWOT Analysis

Strengths

- **PSI's focus on process control:** The Group has decades of experience. It also bolsters its innovation and strength with a highly specialized workforce. These experiences, as well as the endowed skills of its workforce, are important pillars of the Group's key competitive advantage, which creates a barrier entry to rivals. PSI still has an edge in many important related sectors and enjoys a first mover advantage in many of its key growth areas. For example, providing continuous innovation in energy smart grid infrastructure, mining, metals, oil & gas.
- **PSI project approach:** One of the key aspects of its success is that the company performs research and development at the location where the company intends to enter a new market. This has the virtue of developing quick customer relationships as well as gaining sector knowledge. Additionally, this creates lower market entry risk and mitigates financial risk.
- **International Presence:** PSI has successfully expanded its international activities, reducing dependency on the domestic market and opening new growth opportunities in global markets.

Opportunities

- **Energy segment:** The energy sector gives PSI an outstanding potential to achieve scale effects. The Group can dynamically shift its existing product portfolio from high voltage systems to lower network levels. In addition, there is a growing demand for software solutions such as volatility and resource software components. Especially the demand for renewable energies is expected to grow strongly.
- **Increasingly digital business:** Reliance on smart solutions increases data availability. This has the potentials to open up new markets for the Group and to expand its software solutions business segment.
- **International growth potential:** PSI focuses on growing in the North American and European market and should be able to take profit from the shift towards renewable energies driven by lower prices for solar power and wind energy. A positive effect besides larger revenues and scale effects is the diversification away from sole dependency on the German market.

Weaknesses

- **Bargaining power of buyers:** PSI's main customers are in capital intensive sectors, which naturally consist of only a few large players. With PSI being itself, a medium sized player may put the Group in unfavorable negotiating position when doing business deals. However, resulting pricing power of its customer is lessened by the fact that software expenditures should resemble a smaller portion of PSI customers overall budget.
- **Business cycle risk:** PSI customers are prone to business cycles and cyclicality. Nevertheless, the risk of such exposure to business cycles is relatively mitigated due to the Group being active in developing products that focus on efficiency and cost cutting.

Threats

- **Increasing rivalry:** Consolidation in the Energy market continues to build conglomerates in the hardware supplier business and thus creating more intense competition for PSI in the pre-mentioned business area. It is also likely that newly formed bigger rivals, upon achieving several acquisitions in the field, will try to gain control of the energy software business.
- **Constrains in talent & qualified staff:** This is likely to stem from the current structural shortage of supply in the software labour. PSI is continuously investing in the training of its employees and is collaborating with universities to mitigate such a risk. Additionally, The Group is actively looking for talent in Eastern Europe and Malaysia. The Group can also benefit from recent acquisitions to add qualified personnel.
- **Cybersecurity risk:** The cyberattack on PSI indicates a significant risk to its operations and financial stability. Although the company has taken measures to mitigate the impact, the full economic consequences are still uncertain.

5. Valuation

To value PSI, we used a traditional DCF model, which derives a 12-months target price for the stock of €30,60€.

Compared to the current market level, this corresponds to an upside of around 51%.

DCF Valuation Model								
Free Cash Flow Calculation								
Discount Period	1	2	3	4	5	6	Phase II	
All figures in EUR'000	2023	2024E	2025e	2026e	2027e	2028e	2029e	2030e
Net sales	269.891,0	258.385,6	294.559,5	319.597,1	346.762,8	376.237,7	408.217,9	442.916,4
(y-o-y change)	8,9%	-4,3%	14,0%	8,5%	8,5%	8,5%	8,5%	8,5%
EBIT	5.562,0	-9.230,0	26.803,7	35.119,8	47.865,1	55.262,0	63.369,3	72.251,0
(EBIT margin)	2,1%	-3,6%	9,1%	11,0%	13,8%	14,7%	15,5%	16,3%
Tax rate	-124,2%	-28,5%	-28,5%	-28,5%	-28,5%	-28,5%	-28,5%	-28,5%
NOPLAT	-1.348	-6.599	19.165	25.111	34.224	39.512	45.309	51.659
+ Depreciation & amortisation	14.598,0	13.868,1	14.006,8	14.146,8	14.288,3	14.431,2	14.575,5	14.721,3
= Net operating cash flow	13.250,4	7.268,7	33.171,4	39.257,5	48.511,9	53.943,6	59.884,6	66.380,8
- Total investments (Capex and WC)	-8.384,0	-7.117,8	-24.348,9	-22.128,2	-19.320,9	-19.814,0	-20.327,3	-20.861,8
Capital expenditure	-14.057,0	-12.951,8	-16.913,2	-17.325,4	-17.753,9	-18.199,4	-18.662,8	-19.144,9
Working capital	5.673,0	5.834,0	-7.435,7	-4.802,8	-1.567,0	-1.614,6	-1.664,5	-1.716,9
= Free cash flow (FCF)	4.866,4	150,9	8.822,6	17.129,3	29.191,0	34.129,6	39.557,3	45.519,0
Free cash flow margin	1,8%	0,1%	3,0%	5,4%	8,4%	9,1%	9,7%	10,3%
PV of FCF's		144,7	7.812,6	14.009,0	22.048,6	23.808,2	25.485,1	27.084,3

Valuation box

All figures in EUR'000	
PV of FCFs in explicit period	120.392,4
Residual free cash flow	41.660,2
FV Residual period CFs in last year explicit period	589.556,3
PV of FCFs in terminal period	350.792,2
Terminal sales growth	1,2%
Terminal EBIT margin	13,0%
Terminal tax rate	29,0%
Terminal incremental investment rate	-5,3%
Implied Enterprise value (EV)	471.184,6
+ Net cash / - net debt	-27.274
+ investments / - minorities	0
Shareholder value	443.910,6
Number of shares outstanding (m)	15.697,0
Fair value per share in € (today)	28,3
Fair value per share in € (in 12 months)	30,6

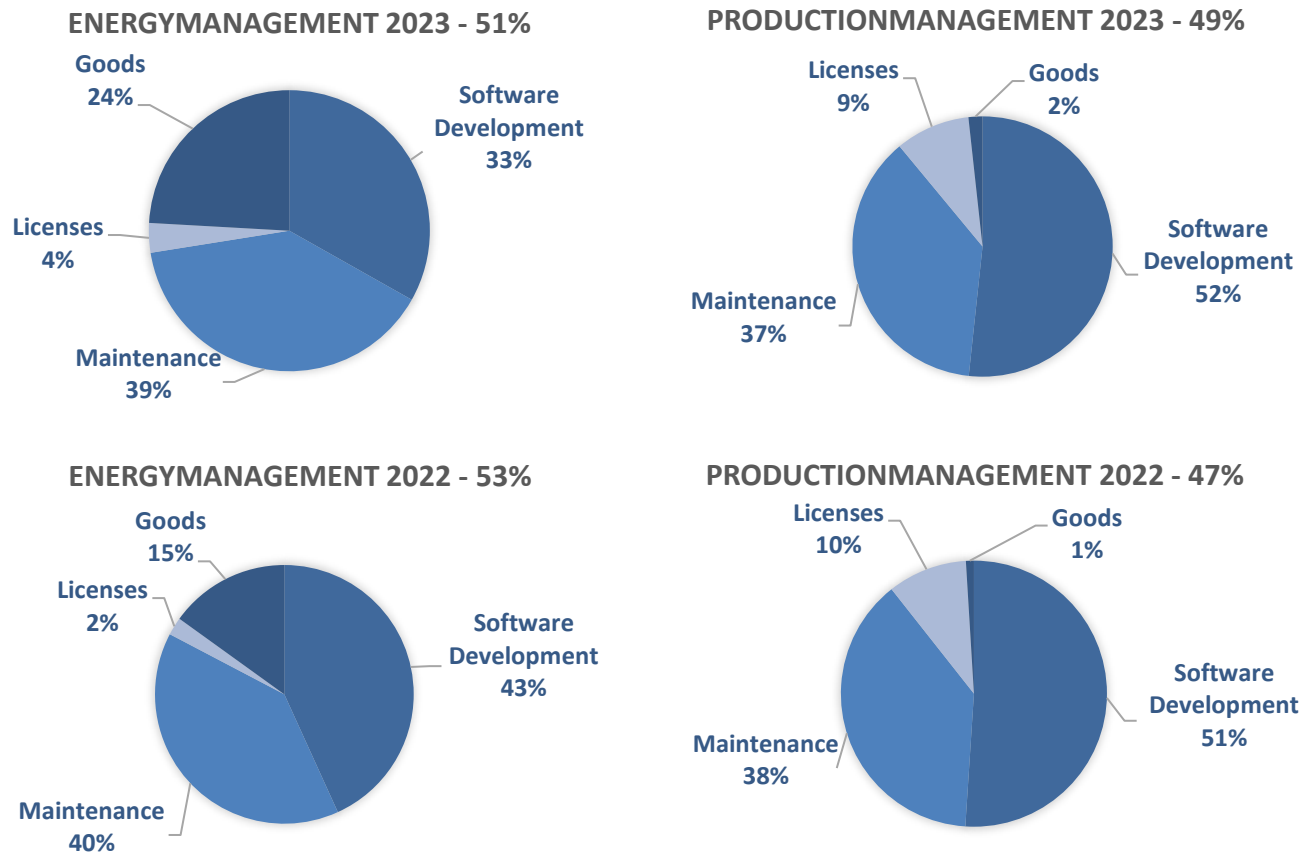
Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

Sensitivity Analysis

		Terminal Growth Rate				
		0,8%	1,0%	1,2%	1,4%	1,6%
WACC	7,68%	31,8	32,7	33,6	34,5	35,6
	7,98%	30,4	31,2	32,1	32,9	33,8
	8,28%	29,1	29,8	30,6	31,4	32,2
	8,58%	27,9	28,6	29,3	30,0	30,7
	8,88%	26,9	27,4	28,1	28,7	29,4

		EBIT-Margin				
		11,0%	12,0%	13,0%	14,0%	15,0%
WACC	7,68%	29,5	31,6	33,6	35,7	37,8
	7,98%	28,1	30,1	32,1	34,0	36,0
	8,28%	26,9	28,8	30,6	32,5	34,3
	8,58%	25,8	27,5	29,3	31,0	32,8
	8,88%	24,8	26,4	28,1	29,7	31,4

6. Segment Report and Revenue Split



Energy Management

- All areas were able to improve both order intake and revenue, with the Malaysian subsidiary even doubling its figures. Overall, the order intake increased by 24.9% to 158.9 million euros, while revenue rose by 6.5% to 138.9 million euros (previous year: 130.4 million euros). Maintenance services contributed the most to the segment's total revenue at 39.3%. Revenue from software development fell from 56.4 million euros to 46.1 million euros, making up only 33.2% of total revenue (previous year: 43.3%). This was mainly due to additional and follow-up work that could not be charged to customers. Hardware revenues showed the largest increase, jumping from 15% to 24.1% of total revenue in 2023.
- Individual projects in the electrical energy sector weighed heavily on the already negative segment result due to high, incorrectly estimated project costs and could not be offset by good profits in Malaysia. As a result, the segment result fell from 1.5 million euros to -8.6 million euros.

Production Management

- Here, the order intake increased by 10.5% to 138.4 million euros and revenue by 11.5% to 131 million euros, continuing the growth seen in previous years across all areas. The PSI Metals division contributed significantly, followed by strong performances from PSI Logistics and PSI Automotive & Industry. Overall, software development accounted for the largest share of segment revenue at 51.7%, followed by maintenance services at 37.3%. These positive developments stabilized the segment result at the strong level of the previous year, reaching 20.3 million euros (previous year: 20.4 million euros).

7. Profit & Loss

Profit and loss statement - PSI Software AG									
in EURm	2022	2023	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Sales split									
Energy management	130,41	138,86	132,81	162,01	175,78	190,72	206,93	224,52	243,60
Production management	117,53	131,04	125,58	132,55	143,82	156,04	169,31	183,70	199,31
Net sales	247,94	269,89	258,39	294,56	319,60	346,76	376,24	408,22	442,92
Cost of goods sold	-36,30	-46,12	-34,11	-39,23	-42,74	-46,61	-50,83	-55,42	-60,44
Gross profit	212,91	220,61	223,88	256,02	277,38	300,73	326,05	353,50	383,25
Other operating income	13,63	17,06	15,33	17,47	18,96	20,57	22,32	24,22	26,27
Personnel costs	-161,55	-183,73	-195,66	-192,29	-206,44	-218,07	-237,13	-257,75	-280,05
Depreciation & Amortization	-13,81	-14,60	-13,87	-14,01	-14,15	-14,29	-14,43	-14,58	-14,72
Other operating expenses	-29,72	-36,94	-39,31	-39,71	-40,10	-40,50	-40,91	-41,32	-41,73
EBIT	20,19	5,56	-9,23	26,80	35,12	47,87	55,26	63,37	72,25
Net financial result	-0,26	-2,55	-2,80	-2,89	-2,97	-3,05	-3,13	-3,21	-3,28
EBT	19,92	3,02	-12,03	23,92	32,15	44,81	52,13	60,16	68,97
Income taxes	-3,18	-3,75	-3,43	-6,82	-9,16	-12,77	-14,86	-17,15	-19,66
Result after income taxes from continuing operations	16,75	-0,73	-15,46	17,10	22,99	32,05	37,28	43,02	49,32
EPS	1,07	-0,05	-0,99	1,09	1,47	2,04	2,38	2,74	3,15
DPS	0,40	0,40	0,10	0,49	0,81	1,02	1,19	1,37	1,57
Change y-o-y									
Net sales	-0,18%	8,85%	-4,26%	14,00%	8,50%	8,50%	8,50%	8,50%	8,50%
Cost of goods sold	1,51%	27,04%	-26,05%	15,01%	8,97%	9,04%	9,05%	9,05%	9,05%
Gross profit	2,39%	3,62%	1,48%	14,35%	8,34%	8,42%	8,42%	8,42%	8,42%
Other operating income	50,49%	25,10%	-10,13%	14,00%	8,50%	8,50%	8,50%	8,50%	8,50%
Personnel costs	1,79%	13,73%	6,49%	-1,72%	7,36%	5,63%	8,74%	8,70%	8,65%
Depreciation & Amortization	5,88%	5,68%	-5,00%	1,00%	1,00%	1,00%	1,00%	1,00%	1,00%
Other operating expenses	13,77%	24,32%	6,41%	1,00%	1,00%	1,00%	1,00%	1,00%	1,00%
EBIT	-15,22%	-72,45%	-265,95%	-390,40%	31,03%	36,29%	15,45%	14,67%	14,02%
Net financial result	-51,57%	871,37%	10,00%	3,06%	2,93%	2,78%	2,61%	2,44%	2,24%
EBT	-14,37%	-84,86%	-498,72%	-298,83%	34,42%	39,39%	16,33%	15,41%	14,64%
Income taxes	-57,22%	17,90%	-8,53%	98,83%	34,42%	39,39%	16,33%	15,41%	14,64%
Result after income taxes from continuing operations	5,73%	-104,37%	2014,47%	-210,66%	34,42%	39,39%	16,33%	15,41%	14,64%
EPS	29,17%	-104,37%	2018,27%	-210,61%	34,40%	39,38%	16,32%	15,40%	14,64%
DPS	33,33%	0,00%	-75,34%	397,73%	64,27%	26,71%	16,32%	15,40%	14,64%
Share in total sales									
Total Output	100,52%	98,83%	99,85%	100,23%	100,16%	100,17%	100,17%	100,17%	100,17%
Cost of goods sold	14,64%	17,09%	13,20%	13,32%	13,37%	13,44%	13,51%	13,58%	13,65%
Gross profit	85,87%	81,74%	86,65%	86,92%	86,79%	86,73%	86,66%	86,59%	86,53%
Other operating income	5,50%	6,32%	5,93%	5,93%	5,93%	5,93%	5,93%	5,93%	5,93%
Personnel costs	65,16%	68,07%	75,72%	65,28%	64,59%	62,89%	63,03%	63,14%	63,23%
Depreciation & Amortization	5,57%	5,41%	5,37%	4,76%	4,43%	4,12%	3,84%	3,57%	3,32%
Other operating expenses	11,99%	13,69%	15,22%	13,48%	12,55%	11,68%	10,87%	10,12%	9,42%
EBIT	8,14%	2,06%	-3,57%	9,10%	10,99%	13,80%	14,69%	15,52%	16,31%
Net financial result	0,11%	0,94%	1,08%	0,98%	0,93%	0,88%	0,83%	0,79%	0,74%
EBT	8,04%	1,12%	-4,66%	8,12%	10,06%	12,92%	13,86%	14,74%	15,57%
Income taxes	1,28%	1,39%	1,33%	2,31%	2,87%	3,68%	3,95%	4,20%	4,44%
Result after income taxes from continuing operations	6,75%	-0,27%	-5,98%	5,81%	7,19%	9,24%	9,91%	10,54%	11,14%

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

8. Balance Sheet

Balance sheet - PSI Software AG									
in EURm	2022	2023	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Assets									
Cash and cash equivalents	45,44	50,48	41,39	53,81	56,50	59,32	62,29	65,40	68,67
Inventories	8,14	4,98	4,58	5,27	5,79	6,37	7,01	7,71	8,48
Trade accounts and notes receivables	42,03	48,32	44,93	49,43	51,90	52,94	53,99	55,07	56,18
Receivables from long-term manufacturing	49,92	49,55	46,08	53,00	55,65	56,48	57,33	58,19	59,06
Income Tax receivables	2,83	4,33	4,38	4,42	4,46	4,51	4,55	4,60	4,64
Other current assets	5,88	6,14	6,56	6,63	6,70	6,76	6,83	6,90	6,97
Current assets	154,23	163,79	147,92	172,54	180,99	186,38	192,00	197,87	204,00
Property, plant and equipment	37,89	37,43	35,56	37,34	39,20	41,16	43,22	45,38	47,65
Goodwill and intangibles assets	73,19	73,11	73,84	74,58	75,33	76,08	76,84	77,61	78,39
Shares in associated companies	0,69	0,69	0,69	0,69	0,69	0,69	0,69	0,45	0,45
Deferred tax assets	6,59	8,13	8,38	8,63	8,89	9,15	9,43	9,71	10,00
Non-current assets	118,37	119,37	118,47	121,24	124,11	127,09	130,18	133,15	136,49
Total assets	272,60	283,15	266,40	293,78	305,10	313,47	322,19	331,02	340,49
Liabilities									
Trade payables	23,40	18,86	18,30	20,13	20,23	20,33	20,43	20,53	20,64
Other liabilities	23,59	32,80	31,82	32,77	32,94	33,10	33,27	33,43	33,60
Liabilities from long-term manufacturing	22,98	26,29	26,55	28,16	28,44	28,72	29,01	29,30	29,59
Financial liabilities	4,67	2,12	2,03	1,95	1,87	1,80	1,73	1,66	1,59
Lease Liabilities	6,64	6,58	6,48	6,39	6,29	6,19	6,10	6,01	5,92
Liabilities associated with discontinued assets	2,38	1,32	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Provisions	2,31	3,02	3,32	3,65	4,02	4,42	4,86	5,34	5,88
Current liabilities	85,96	90,99	88,50	93,05	93,78	94,56	95,40	96,28	97,22
Long-term bank debt	18,44	31,64	30,69	31,00	31,31	31,62	31,94	32,26	32,58
Pension provisions	44,27	43,99	42,67	43,10	43,53	43,96	44,40	44,85	45,30
Deferred tax liabilities	4,89	4,80	4,66	4,71	4,75	4,80	4,85	4,90	4,95
Long-term liabilities	67,60	80,43	78,02	78,80	79,59	80,39	81,19	82,00	82,82
Total liabilities	153,56	171,43	166,52	171,85	173,37	174,95	176,59	178,28	180,04
Shareholders equity	119,04	111,73	99,87	121,94	131,73	138,52	145,60	152,74	160,44
Total equity and liabilities	272,60	283,15	266,40	293,78	305,10	313,47	322,19	331,02	340,49

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

9. Financial Ratios

Fiscal year	2023	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Gross margin	82,7%	86,8%	86,7%	86,6%	86,6%	86,5%	86,4%	86,4%
EBITDA margin	7,5%	1,8%	13,9%	15,4%	17,9%	18,5%	19,1%	19,6%
EBIT margin	2,1%	-3,6%	9,1%	11,0%	13,8%	14,7%	15,5%	16,3%
Net margin	-0,3%	-6,0%	5,8%	7,2%	9,2%	9,9%	10,5%	11,1%
Return on equity (ROE)	-0,7%	-15,0%	13,6%	16,9%	22,4%	24,8%	27,2%	29,6%
Return on assets (ROA)	-0,3%	-5,8%	5,8%	7,5%	10,2%	11,6%	13,0%	14,5%
Net debt (in EURm)	27,27	34,01	22,24	20,21	18,06	15,78	13,36	10,79
Net gearing	24,4%	33,0%	17,7%	14,9%	12,6%	10,5%	8,5%	6,5%
Equity ratio	39,5%	38,7%	42,7%	44,5%	45,6%	46,7%	47,8%	48,8%
Current ratio	1,80	1,74	1,93	2,02	2,07	2,12	2,18	2,23
Quick ratio	1,15	1,09	1,23	1,28	1,32	1,36	1,40	1,44
Net interest cover	20,75	-31,31	81,91	96,69	118,72	123,48	127,57	131,03
Net debt/EBITDA	1,35	7,33	0,54	0,41	0,29	0,23	0,17	0,12
Capex/Sales	4,6%	4,9%	2,8%	2,4%	2,1%	1,9%	1,6%	1,4%
Working capital/Sales	10,4%	8,6%	10,1%	10,8%	10,4%	10,0%	9,6%	9,3%
P/E	-429,47	-20,27	18,33	13,64	9,78	8,41	7,29	6,36

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

10. Cashflow Statement

Cashflow statement - PSI Software AG								
	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Consolidated Income before Income Taxes	4.072,00	-12.030,50	23.916,35	32.146,88	44.808,72	52.124,76	60.154,68	68.963,56
Adjustment of Annual Result for Non-Cash Transactions								
Amortization of Intangible Assets	4.074,00	3.834,00	3.892,70	3.931,63	3.970,94	4.010,65	4.050,76	4.091,27
Depreciation of Property, Plant, and Equipment	3.451,00	3.201,00	3.241,00	3.273,41	3.306,14	3.339,21	3.372,60	3.406,32
Depreciation of Right of Use	7.073,00	6.833,10	6.883,10	6.951,93	7.021,45	7.091,66	7.162,58	7.234,21
Income from Equity Investments in Associated Companies	-268,00	-294,80	-327,23	-363,22	-403,18	-447,53	-496,76	-551,40
Interest Income	-664,00	-730,40	-803,44	-883,78	-972,16	-1.069,38	-1.176,32	-1.293,95
Interest Expenses	3.477,00	3.824,70	4.015,94	4.216,73	4.427,57	4.648,95	4.881,39	5.125,46
Other Non-Cash Income/Expenses	-1.056,00	2.000,00	2.000,00	-2.000,00	-2.000,00	-2.000,00	-2.000,00	-2.000,00
	20.159,00	6.637,10	42.818,42	47.273,58	60.159,48	67.698,32	75.948,95	84.975,48
Changes in Inventories	2.881,00	398,16	-486,83	-1.526,57	-3.137,16	-1.637,15	-1.700,86	-1.770,95
Changes in Trade Receivables and Long-Term Contract Assets	-5.397,00	6.850,69	-7.405,80	-5.921,11	-4.872,64	-2.905,92	-2.739,80	-2.774,29
Changes in Other Current Assets	-1.409,00	-429,45	-65,64	-166,30	-266,96	-267,63	-168,31	-168,99
Changes in Provisions	-2.345,00	-2.462,25	-1.885,36	-2.179,63	-2.488,61	-2.813,04	-3.153,69	-3.511,38
Changes in Trade Payables	-4.133,00	-565,92	2.229,81	100,64	101,14	101,65	102,16	102,67
Changes in Other Long-Term and Short-Term Liabilities	13.433,00	-984,03	1.554,51	163,86	164,68	165,50	166,33	167,16
	23.189,00	9.444,30	36.759,11	37.744,47	49.659,93	60.341,73	68.454,77	77.019,69
Paid Income Taxes	-6.410,00	-6.230,50	-6.452,03	-6.734,73	-10.770,21	-14.415,10	-17.611,23	-21.291,78
Cash Flow from Operating Activities	16.779,00	3.213,80	30.307,08	31.009,74	38.889,72	45.926,63	50.843,54	55.727,91
2. Cash Flow from Investing Activities								
Payments for Investments in Intangible Assets	-4.607,00	-3.685,60	-5.528,40	-6.181,24	-9.417,49	-12.210,77	-13.511,19	-15.362,31
Payments for Investments in Property, Plant, and Equipment	-3.049,00	-2.774,59	-3.606,97	-4.317,99	-7.181,59	-9.917,91	-11.609,70	-12.770,67
Proceeds from Disposal of Held-for-Sale Assets	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Proceeds from Distributions of Associated Companies	163,00	165	166	168	170	171	173	175
Interest Received	573,00	200,00	300,00	200,00	200,00	200,00	200,00	200,00
Cash Flow from Investing Activities	-6.920,00	-6.095,56	-8.669,09	-10.131,29	-16.229,46	-21.757,36	-24.747,87	-27.758,23
3. Cash Flow from Financing Activities								
Payments for the Acquisition of Treasury Shares	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Dividends Paid to Shareholders of the Parent Company	-6.195,00	0,00	-6.380,85	-7.018,94	-7.720,83	-8.492,91	-9.342,20	-10.276,42
Payments for the Repayment of Lease Liabilities	-6.807,00	-6.102,79	-6.407,93	-6.828,33	-7.669,74	-8.153,23	-8.960,89	-9.614,12
Interest Paid on Lease Liabilities	-539,00	-522,83	-548,97	-603,87	-664,26	-730,68	-803,75	-884,12
Interest Paid	-931,00	-400,00	-640,00	-872,00	-915,60	-961,38	-1.009,45	-1.059,92
Proceeds/Repayments from Borrowings	9.509,00	686,88	4.621,61	-3.000,00	-3.000,00	-3.000,00	-3.000,00	-3.000,00
Cash Flow from Financing Activities	-4.963,00	-6.338,74	-9.356,14	-18.323,13	-19.970,43	-21.338,20	-23.116,29	-24.834,58
4. Cash and Cash Equivalents at the End of the Period								
Cash Change in Cash and Cash Equivalents - Continuing Operations	4.896,00	-9.220,50	12.281,85	2.555,32	2.689,83	2.831,07	2.979,38	3.135,10
Exchange Rate Changes in Cash and Cash Equivalents	135,00	135,00	135,00	135,00	135,00	135,00	135,00	135,00
Cash and Cash Equivalents at the Beginning of the Period	45.444,00	50.475,00	41.389,50	53.806,35	56.496,67	59.321,50	62.287,58	65.401,95
Cash and Cash Equivalents at the End of the Period	50.475,00	41.389,50	53.806,35	56.496,67	59.321,50	62.287,58	65.401,95	68.672,05
Thereof Cash and Cash Equivalents - Discontinued Operations	0	0	0	0	0	0	0	0
	50.475,00	41.389,50	53.806,35	56.496,67	59.321,50	62.287,57	65.401,95	68.672,05

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE

11. FY23 quarter comparison to previous quarters

Financial Results & Margins								
in EURm	1Q/22	Q2/22	Q3/22	Q4/22	Q1/23	Q2/23	Q3/23	Q4/23
Net sales	57,98	58,47	63,23	68,28	58,23	61,04	65,19	85,40
EBITDA	6,97	7,02	9,52	10,49	7,71	-5,67	6,26	11,86
EBIT (Operating Profit)	4,48	3,70	6,13	5,88	4,01	-9,37	2,65	8,30
Net income	2,57	1,88	3,53	1,72	3,28	-12,02	1,61	7,40
EBITDA margin	12,0%	12,0%	15,1%	15,4%	13,2%	-9,3%	9,6%	13,9%
EBIT margin	7,7%	6,3%	9,7%	8,6%	6,9%	-15,4%	4,1%	9,7%
Net margin	4,4%	3,2%	5,6%	2,5%	5,6%	-19,7%	2,5%	8,7%

Source: Dr. Kalliwoda Research GmbH © 2024 & PSI Software SE



12. Dr. Kalliwoda’s Sustainability Rating : Max. 5 Trees



Picture taken from company website

PSI Software SE

Company name: PSI Software SE (PSAN.DE)

Headquartered: Berlin, Deutschland

Market capitalisation: € 329.64 million (as of July 24th 2024)

Kalliwoda Sustainability Ranking: A

PSI Software SE (PSAN) has achieved an A grade in the Dr. Kalliwoda Sustainability Ranking in pursuing the United Nations Sustainable Development Goals. This grade implies that the company is very sustainable. Most significant contributions have been noticed in eight out of seventeen categories. Moreover, the company has received negative points in none of the categories.



Pictures taken from un.org



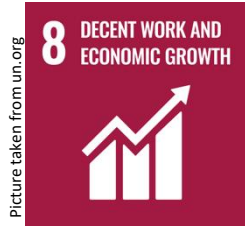
Picture taken from un.org

PSI’s products contribute indirectly to the reduction of harmful emissions. One the one hand, that happens through a better integration of renewable energy into the energy supply mix and on the other hand through the development of solutions for the expansion of e-mobility, like the integration of charging infrastructure into municipal power grids and depots. There exist programmes for health promotion and health protection, as well as a certified occupational health and safety management system for PSI’s employees.



Picture taken from un.org

The grid control systems, which are developed and produced by PSI are continuously being expanded to include functions for the intelligent management of the feed-in of renewable resources. The company is committed to developing the intelligent energy supply infrastructure of the future, including products for smart microgrids and charging infrastructures. Through its gas management systems, PSI supports the integration of higher proportions of hydrogen into the existing gas grid in order to be able to store surplus wind power as “green hydrogen”.



Picture taken from un.org

PSI adheres to the legally guaranteed principles of freedoms of association, the prohibition of discrimination and employee diversity and participation. PSI has no activities in countries with sensitive human rights situations. As employees are of particular importance for the further development of the

company, PSI determines the Employee Commitment Index to measure its own performance.

Additionally, by using industrial artificial intelligence, the company's products improve the efficiency of production and logistics processes.



Picture taken from un.org

PSI commits to resilient infrastructures by offering products whose solutions ensure the even and gentle use of the infrastructure and contribute to the avoidance of failures through the use of industrial artificial intelligence methods. In the field of emission-free local public transport, PSI software takes into account and optimises all important

influencing factors, such as charging infrastructure on the route, the number of passengers, the

outside temperature, etc. Generally speaking, PSI software products ensure increased efficiency and the responsible use of energy, raw materials and manpower.



Picture taken from un.org

The company contributes to sustainable cities and communities by offering public transport solutions for efficient local transport networks and depots, with a strong focus on depot management, as the charging infrastructure for electric buses is integrated and controlled

there. In the logistics and transport sector, PSI has developed new solutions for the

dynamic control and operation of optimised logistic networks. The company's traffic flow optimisation programme takes into account collective and ecological goals in addition to individual mobility goals of road users and strategic goals for road operators.



Picture taken from un.org

PSI's production line for the manufacturing industry supports new types of production methods, characterised by flexible, decentralised manufacturing methods and enables the sustainable productions of smaller quantities of innovative products. Moreover, the company's software solutions help to save transport costs and emissions, thus contributing to sustainable consumption.



Picture taken from un.org

As mentioned beforehand, the company's software solutions contribute to the careful and sustainable use of energy, raw materials and labour in the energy industry and the production sector. In addition to that, PSI has been participating in the Carbon Disclosure Project (CDP) since 2011 and has

significantly improved its score since then. The company uses green IT equipment, exclusively

buys electricity generated through hydropower and conducted an energy audit in accordance with DIN EN 16247-1 recently.

Picture taken from un.org



In order to achieve business and sustainability goals, PSI relies on strong partnerships, especially on an international level. Potential business partners have to implement and meet the company's demands for quality and performance. They have to comply with legal standards on dignified

work, the protection of natural resources, fair business practices and the protection of intellectual property.

Dr. Kalliwoda SDG Rating (KSR) - PSI Software AG									Pts.	MAX
1	No Poverty	-3	-2	-1	0	1	2	3	2	3
2	Zero Hunger	-3	-2	-1	0	1	2	3	1	3
3	Good Health and Well-Being	-3	-2	-1	0	1	2	3	3	3
4	Quality Education	-3	-2	-1	0	1	2	3	2	3
5	Gender Equality	-3	-2	-1	0	1	2	3	2	3
6	Clean Water and Sanitation	-3	-2	-1	0	1	2	3	2	3
7	Affordable and Clean Energy	-3	-2	-1	0	1	2	3	3	3
8	Decent Work and Economic Growth	-3	-2	-1	0	1	2	3	3	3
9	Industry, Innovation and Infrastructure	-3	-2	-1	0	1	2	3	3	3
10	Reduced Inequalities	-3	-2	-1	0	1	2	3	2	3
11	Sustainable Cities and Communities	-3	-2	-1	0	1	2	3	3	3
12	Responsible Consumption and Production	-3	-2	-1	0	1	2	3	3	3
13	Climate Action	-3	-2	-1	0	1	2	3	3	3
14	Life Below Water	-3	-2	-1	0	1	2	3	1	3
15	Life on Land	-3	-2	-1	0	1	2	3	2	3
16	Peace, Justice and Strong Institutions	-3	-2	-1	0	1	2	3	1	3
17	Partnerships for the Goals	-3	-2	-1	0	1	2	3	3	3
Summe									39	51
									76,5%	

DR. KALLIWODA SDG RATING	< 0%	0%-25%	26%-50%	51%-75%	76%-100%
	E	D	C	B	A

A	Very sustainable
B	Promotes the transition to sustainability
C	On the way to sustainability
D	Less sustainable, but less negative impact
E	Not sustainable

3	The company has increased the goal
2	
1	
0	The company does not reduce nor increase the goal
-1	
-2	
-3	The company has severe negative impacts on the goal

13. Contacts

Primary Research Fair Value Analysis International Roadshows		Dr. Kalliwoda Research GmbH, Steinstraße 24, D-64839 Münster, office Frankfurt Arndtstr. 47, 60325 Frankfurt
Head: Dr. Norbert Kalliwoda E-Mail: nk@kalliwoda.com	CEFA-Analyst; University of Frankfurt/Main; PhD in Economics; Dipl.- Kfm., Dipl.-Hdl.	<u>Sectors:</u> IT, Software, Electricals & Electronics, Mechanical Engineering, Logistics, Laser, Technology, Raw Materials
Lukas Ankelmann E-Mail: la@kalliwoda.com	Junior-Analyst; University Nuremberg	<u>Sectors:</u> Technology, New Media, Food & Beverage
Noah Barnekow E-Mail: nb@kalliwoda.com	Frankfurt School of Finance & Management	<u>Sectors:</u> Aviation, Automotive, Technology, Sustainability Approach
Michael John E-Mail: mj@kalliwoda.com	Dipl.-Ing. (Aachen)	<u>Sectors:</u> Software, Commodities
Martin Kostovski E-Mail: mko@kalliwoda.com	Analyst (Frankfurt School of Finance and Management., BSc. focus on Bank. & Finan.)	<u>Sectors:</u> Renewable Energy/Technology
Sebastian Krawczyk E-Mail: sk@kalliwoda.com	Bachelor Management, Quant. Meth. in Economics & Inf. Systems, Warsaw School/Mannheim, CFA Can.	<u>Sectors:</u> Quantitative Methods, Automotive, Technology
Dr. Heinz Müller E-Mail: hm@kalliwoda.com	Dr. agr, Dipl.-agr. (Agrarökonomie)	<u>Sectors:</u> Agrochemicals, Consumer Chemicals, Chemicals
Vittoria Lou D. Mawis E-Mail: cl@kalliwoda.com	Architect; University Barcelona	<u>Sectors:</u> Assistant Office & Real Estate Research
Dr. Christoph Piechaczek E-Mail: cp@kalliwoda.com	Dipl.-Biologist; Technical University Darmstadt; Univ. Witten-Herdecke.	<u>Sectors:</u> Biotech & Healthcare; Medical Technology Pharmaceutical
Victor Lelong E-Mail: vl@kalliwoda.com	Junior Analyst (MSc In Management, emlyon business school)	<u>Sectors:</u> biotech, technology, real estate
Nele Rave E-Mail: nr@kalliwoda.com	Lawyer; Native Speaker, German School London,	Legal adviser
Hellmut Schaarschmidt; E-Mail: hs@kalliwoda.com	Dipl.-Geophysicists; University of Frankfurt/Main.	<u>Sectors:</u> Oil, Regenerative Energies, Specialities Chemicals, Utilities
Dr. Erik Schneider E-Mail: es@kalliwoda.com	Dipl.-Biologist; Technical University Darmstadt; Univ. Hamburg.	<u>Sectors:</u> Biotech & Healthcare; Medical Technology Pharmaceutical
Giuseppe Inserra E-Mail: gi@kalliwoda.com	Junior-Analyst (Universita' degli Studi di Catania, Economics)	<u>Sectors:</u> Gaming Entertainment, Fintech, Financial Markets, Commodities, Real Estate
Ugurcan Alp E-Mail: ua@kalliwoda.com	Analyst (MSc, Finance and Investment, Berlin School of Business&Innovation)	<u>Sectors:</u> Software, Technology, Capital Goods, Renewables
Also, view the Sales and Earnings Estimates: DR. KALLIWODA RESEARCH on Terminals of Bloomberg, Thomson Reuters, vwd group and Factset	Analyst of this research: Dr. Norbert Kalliwoda, CEFA	

14. Disclaimer: Material information, disclosures and disclaimers

A. Material information

Investment in financial instruments and securities (e.g. shares, bonds) is generally associated with 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 affect 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:

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

For the sustainability ranking DR. KALLIWODA RESEARCH GmbH uses the 17 United Nations Sustainable Development Goals, where each goal is classified as follows:

-1	The company negatively contributes to the goal.
0	The company does not contribute to the goal at all.
1	The company positively contributes to the goal.
2	The company profoundly contributes to the goal.
3	The company significantly contributes to the goal.

From adding up the given numbers, it is being set in a ratio to the maximum points (e.g. 51). The following model shows the note procurement:

A =5 Trees	100% - 76%	The company exceptionally contributes to the goal.
------------	------------	--

B = 4 Trees	75% - 51%	The company promotes the transition to sustainability.
C = 3 Trees	50% - 26%	The company is on the way to sustainability.
D = 2 Trees	25% - 0%	The company minimizes its negative impact.
E = 1 Tree	< 0%	The company is not sustainable.

Date of first publication of this document: 6th of November 2024.

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:

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.

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.

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.

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.

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.

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 willful 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 not 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.

© 2024 DR. KALLIWODA RESEARCH GmbH, Arndtstraße 47, D-60325 Frankfurt am Main. All rights reserved.