

September 26th, 2023
Research update

SMC Research

Small and Mid Cap Research

 **Platz 1**
Europe
Industrials
(2018)

 **Platz 2**
German
Software & IT
(2018)

 **Platz 1**
German
Software & IT
(2017)

Mehrfacher Gewinner
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Pyrum Innovations AG

Increasing breadth and maturity of project pipeline supports growth expectations

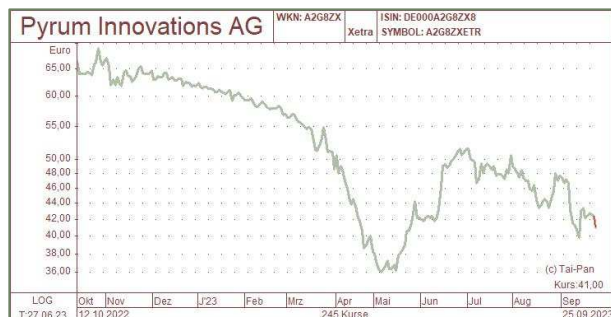
Rating: Speculative Buy (unchanged) | **Price:** 41.40 € | **Price target:** 77.00 € (unchanged)

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Current development



Basic data

Based in:	Dillingen / Saar
Sector:	Recycling
Headcount:	68
Accounting:	HGB
Ticker:	PYR:GR
ISIN:	DE000A2G8ZX8
Price:	41.40 Euro
Market segment:	Scale
Number of shares:	3.25 m
Market Cap:	134.7 m Euro
Enterprise Value:	136.2 m Euro
Free Float:	approx. 38 %
Price high/low (12 M):	69.20 / 35.20 Euro
Øturnover (12 M Xetra):	39,500 Euro

Sales still low

Pyrum's sales remained at a low level in the first half of 2023 at EUR 501,000 (previous year: EUR 485,000). One of the main reasons for this is the production of rCB pellets, which has not yet reached the desired volume, as fine adjustments are still being made to the machine by the manufacturer. In August, however, production was already free of rejects and of the necessary quality, and since then the quantity has been successively increased.

The other reason is that Pyrum's first production line is still operating well below its production maximum overall, as there is not yet sufficient capacity to process the gas produced. This will change with the full commissioning of the second and third production lines. Their construction is now so far advanced that production is expected to start in October (see below). The expansion of the plants again resulted in high own work capitalised in the six-month period, which at EUR 7.6 m was, however, already below the previous year's level (EUR 8.5 m). As a result, total output declined from EUR 9.2 m to EUR 8.2 m within one year.

FY ends: 31.12.	2020	2021	2022	2023e	2024e	2025e
Sales (m Euro)	0.7	0.9	1.0	1.6	13.8	42.0
EBIT (m Euro)	-3.5	-8.1	-7.6	-10.4	-0.8	28.5
Net profit	-3.6	-8.4	-7.8	-10.8	-2.5	20.8
EpS	-1.39	-2.57	-2.40	-3.32	-0.77	6.39
Dividend per share	0.00	0.00	0.00	0.00	0.00	0.00
Sales growth	290.5%	39.2%	6.5%	61.6%	768.8%	204.5%
Profit growth	-	-	-	-	-	-
PSR	203.26	146.07	137.18	84.87	9.77	3.21
PER	-	-	-	-	-	6.5
PCR	-	-	-	-	-	5.9
EV / EBIT	-	-	-	-	-	4.8
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Operating deficit slightly higher

The large amount of own work capitalised is reflected in a high cost of materials from the purchase of components and services, which, however, at EUR 7.4 m, was also below the previous year's figure (EUR 8.4 m). At the same time, with the expansion of the staff base and higher wages, personnel expenses increased, by 24 percent to EUR 2.5 m. Together with declining other operating income (from EUR 0.9 to 0.4 m – in the previous year there were larger subsidy payments for a project), and with other operating expenses remaining almost constant (from EUR 1.8 to 1.7 m), this was mainly responsible for the expansion of the EBITDA deficit from EUR -2.1 to -3.1 m. With declining depreciation (-12 percent to EUR 1.1 m due to the end of depreciation for the first construction phase of production line one), this resulted in EBIT of EUR -4.3 m (previous year: EUR -3.4 m). After deducting the financial result (EUR -141,000, mainly due to interest expenses) and a minor tax expense, this led to a half-year loss of EUR -4.4 m (previous year: EUR -3.5 m).

Business figures	6M 22	6M 23	Change
Sales	0.49	0.50	+3.2%
Total output	9.20	8.16	-11.3%
EBITDA	-2.11	-3.14	-
EBIT	-3.39	-4.26	-
Net profit	-3.49	-4.41	-

In m Euro and percent; source: Company

FCF improved, but clearly negative

The low revenue does not yet cover the costs of operating the plant and the further growth initiatives, so the operating cash flow was clearly negative at EUR -2.3 m, but better than in the previous year (EUR -2.9 m). Investments also decreased (CF from EUR -11.8 m to EUR -7.4 m), so that the free cash flow improved from EUR -14.7 m to EUR -9.7 m but remains strongly negative due to the high disbursements for the plant expansion. This was partially offset by a positive financing cash flow (EUR +2.6 m), in which, among other things, a partial disbursement of a new loan from BASF (EUR 2 m) and an investment grant of EUR 1.5 m had a positive effect, but liquidity nev-

ertheless fell from EUR 12.5 m to EUR 5.4 m in the first half of the year.

Equity ratio remains comfortable

The share of the liquidity in the assets side of the balance sheet has thus fallen further, from 25.5 percent at the beginning of the year to 11.5 percent now. On the other hand, tangible assets increased further as a result of the investments, from EUR 28.8 to 35.8 m, which means that this item now accounts for 73.3 percent of the balance sheet total. On the liabilities side, in return, payables increased from EUR 14.9 m to EUR 18.2 m, mainly due to an increase in other liabilities (due to BASF loan, investment grant). Equity, on the other hand, declined from EUR 31.9 m to EUR 27.5 m due to the half-year loss. Despite a decline from 64.0 to 56.2 percent, the equity ratio remains comfortable.

Production start for new lines imminent

The construction of production lines two and three has now been largely completed, as have the necessary tests as part of the so-called "cold commissioning". Oil production is expected to start in October, after which the two plants will be successively ramped up. However, the target capacity will only be reached after several months. The new rCB pelletising plant (rCB = recovered Carbon Black) for lines two and three, which was ordered in April this year and is currently scheduled to go into operation in the second quarter of 2024, still has to be installed.

Project pipeline continues to fill

At the same time, work is already underway for the company's next own plant, which is to be built in Homburg an der Saar. The land for this has already been reserved, and the approval documents are currently being prepared. As soon as the financing is secured (see next paragraph), the ordering of plant components can begin, and construction is scheduled to start later this year. Progress has also been made in the project pipeline with third parties; most recently, another preliminary contract was signed for a plant with 20,000 tonnes of processing capacity p.a. The aim of this agreement with a recycling company is to build a

new plant in Greece that could recycle almost half of the annual Greek scrap tyre volume (about 45,000 tonnes). Pyrum is now initially tasked with preparing all the necessary planning documents, and the SPV partner is then to take care of the approval. The other partner projects are also still in the planning stage. The Revalit project, for which the contract was already signed in July 2022, continues to examine alternative sites after the initially favoured site proved unsuitable. For the first of ten plants envisaged in the MoU with the tank farm operator UNITANK, on the other hand, it was possible to identify a first plot of land for which preliminary work is currently underway to prepare the approval documents; in addition, a second project is being prepared in Hesse. A project with Suez for the UK is also at an advanced stage. A total of eleven projects have currently reached the specific planning stage (see overview below), where there is at least a basic agreement on the modalities. The high interest also results from a positive change in the general conditions: The EU has decided to ban the use of rubber granulate from used tyres for various purposes because of the material contamination (oils, etc.), which makes recycling even more urgent.

Major funding pending

For the co-financing of projects with partners and for the next own plant, Pyrum still has to raise the necessary capital first. In the third quarter, the company has already received further funds of EUR 4 m from BASF. Half of this was the final tranche of the convertible loan subject to specific milestones and the other half was the remainder of the new loan granted in the second quarter. Now a larger measure is to follow. The company is working on debt financing with a volume of EUR 25 m that could be provided by a partner from the shareholder group and is to be repayment-free in the first two years. An agreement could be reached in the near future.

Forecast for 2023 now ambitious

Since production line one cannot yet exhaust its capacity due to the bottleneck in the use of the gas and, in addition, the pellet output is only now being ramped up, sales at the lower end of the issued forecast range (EUR 1.8 m to EUR 2.5 m) are now – according to the company – an ambitious target, but still achievable. Total output, on the other hand, is still expected to reach a corridor of EUR 14 to 16 m for the entire year. There was no update on the targeted result; the annual report contained only the forecast that it will be negative again.

Pyrum roll out plan for the next years...

... many projects are far advanced or have already been started

Pyrum's roadmap

	Project Nr.	Country	Partner/Site	General Terms agreed	Contract / Pre-Contract signed	Building site secured	20% Capital secured	Authorisation in process	Operative Company created
SPV	1		Deutschland Bayern	✓	✓		✓	✓	✓
SPV	2		Deutschland Bade-Württemberg	✓		✓	✓		
SPV	3		Deutschland Hessen	✓					
100 %	4		Deutschland Homburg	✓	✓	✓	✓	✓	
SPV	5		Deutschland Emleben	✓		✓	✓		
SPV	6		Deutschland Bremen			✓	✓		
SPV	7		UK SUEZ UK		✓		✓	✓	
SPV	8		Ireland Waterford	✓					
SPV	9		Greece Athen „Pyro Lysi SA“		✓	✓	✓	✓	✓
SPV	10		Belgien Antwerpen	✓	✓				✓
SPV	11		Czech Republic Prag		✓	✓	✓		✓

Project pipeline (SPV = Special Purpose Vehicle with partners); source: Company

Estimates for 2023 slightly reduced

Hitherto, we had assumed that this year's revenue would reach EUR 2.0 m. Due to the slow ramp-up of the pelletising plant, this seems difficult to achieve, which is why we now expect EUR 1.6 m here (see revenue model below). In combination with an update of cost estimates – with slightly higher personnel costs, reduced other operating income and slightly lower other operating expenses and depreciation – we now expect an EBIT of EUR -10.4 m (previously: EUR -9.0 m).

Project pipeline as strong support

We have also reduced the revenue estimate for 2024 from EUR 17.2 m to EUR 13.8 m, taking into account the slightly delayed start-up time for the new production lines and a possible longer start-up phase for the pelletising machine still to be installed for the additional output. According to information provided by the management in the earnings call, extensive experience has already been gained on a rented plant with the technology that will be used for pelletisation next year, but we are nevertheless opting for a cautious calculation. As a result, we now see EBIT next year at EUR -0.8 m (previously: EUR +2.8 m). However, we have not adjusted the company's basic expansion path with the assumed realisation of numerous own plants as well as plants within the framework of SPVs with partners. We see the recent progress in the project pipeline as a strong support for our assumptions for the next years (high revenue increases and very significant margin improvements). At the end of the detailed forecast period, we continue to expect sales of

around EUR 85 m and an EBIT margin of around 60 percent. The very high margin results from the fact that we have only taken into account the net proceeds from plant sales to SPVs for simplification purposes – and cost of materials is not included either. In fact, the revenue and the costs could be significantly higher (but by an identical, i.e., not valuation-relevant amount). In addition, for modelling reasons, we have included in EBIT the investment income from the SPVs that will in fact be included in the financial result. The table at the top of the next page shows the development of the key cash flow figures in the detailed forecast period to 2030, following our model update. Further details on the estimated development of the balance sheet, income statement and cash flow can also be found in the Annex.

Frame parameters unchanged

Subsequently, we continue to calculate the terminal value with a fifteen percent discount to the target margin of 2030 and a “perpetual” cash flow growth of 1 percent p.a. The discount rate (WACC) also remains unchanged at 7.2 percent. For this, we have assumed a cost of equity according to CAPM of 10.0 percent (with: safe interest rate of 2.5 percent, market risk premium of 5.8 percent and beta factor of 1.3), as well as a target capital structure of 45 percent debt, an interest rate on borrowed capital of 5.5 percent and a tax rate for the tax shield of 33 percent.

Price target remains EUR 77.00

The fair value we have determined is now EUR 250.6 m or EUR 77.02 per share, from which we derive an

Revenue model (m Euro)	2023	2024	2025	2026	2027	2028	2029	2030
Revenue plant Dillingen	1.6	6.9	10.3	10.3	10.3	10.3	10.3	10.3
<i>Further own plants (total number)</i>				1	2	3	4	5
Revenue further plants				11.5	23.0	34.4	45.9	57.4
<i>SPVs (total number)</i>	2	5	8	10	11	12	13	14
Revenue sale of plants SPVs		6.9	31.1	24.2	13.8	6.9	6.9	6.9
Other revenue SPVs (maintenance etc.)			0.6	1.5	2.4	3.0	3.3	3.6
<i>Plants without SPV (total number)</i>				1	2	3	4	5
Revenue plants without SPV					6.9	6.9	6.9	6.9
Total revenue	1.6	13.8	42.0	47.5	56.4	61.6	73.4	85.1
<i>Estimates SMC-Research</i>								

m Euro	12 2023	12 2024	12 2025	12 2026	12 2027	12 2028	12 2029	12 2030
Sales	1.6	13.8	42.0	47.5	56.4	61.6	73.4	85.1
Sales growth		768.8%	204.5%	13.1%	18.8%	9.2%	19.1%	16.1%
EBIT margin	-657.1%	-6.0%	68.0%	62.7%	62.6%	59.0%	59.4%	60.0%
EBIT	-10.4	-0.8	28.5	29.8	35.3	36.3	43.6	51.1
Tax rate	0.0%	5.0%	20.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Adjusted tax payments	0.0	0.0	5.7	9.8	11.6	12.0	14.4	16.8
NOPAT	-10.4	-0.8	22.8	20.0	23.6	24.3	29.2	34.2
+ Depreciation & Amortisation	2.2	3.5	6.7	9.5	11.7	14.5	17.3	20.1
+ Increase long-term accruals	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5
+ Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross operating cash flows	-8.0	2.9	29.8	29.7	35.7	39.2	47.0	54.8
- Increase Net Working Capital	-0.2	-1.0	-2.5	-1.4	-1.7	-1.2	-1.5	-1.7
- Investments in fixed assets	-12.0	-25.8	-37.0	-34.0	-31.0	-31.0	-31.0	-31.0
Free cash flow	-20.2	-23.9	-9.8	-5.7	3.0	7.0	14.5	22.1

SMC estimation model

unchanged price target of EUR 77.00 (a sensitivity analysis for determining the price target can be found in the Annex). The moderate reduction in our estimates for 2023 and 2024 was compensated by the discounting effect since our last analysis, which is very pronounced in this model due to very high assumed revenue increases. On a scale of 1 (very low) to 6 (very

high), we continue to rate the forecast risk of our estimates as clearly above average at five points, since the data on the operation of the industrial plant in its final design is still limited and, in addition, the marketing of the plant to third parties is still in its early stages.

Conclusion

Pyrum is about to commission the second and third production lines, which is a great success for the company. Despite very difficult general conditions with supply bottlenecks in various areas and partly massive material price increases, the plant was built in a total of 21 months with a construction time delay of only three months compared to the plan. This is now the blueprint for further plants.

The project pipeline is very well filled, with eleven new plants now in the planning stage. The start of construction for the next own production facility in Bad Homburg could take place this year. Numerous projects with partners are also making progress. Most recently, for example, a preliminary contract was signed for a plant in Greece, which is already generating consulting revenue for Pyrum.

In the first half of the year, however, revenue was still low, which is also due to the fact that the pelletising plant has not yet reached its target volume – but this will change in the coming months. Overall, we expect strongly rising sales, even though we have reduced our

estimates for 2023 and 2024 due to the delays in rCB pellet production and a still somewhat delayed commissioning of the new lines (which also means that the loss will be somewhat higher).

The most important task area in the short term is the financing of the expansion. Above all, a larger capital acquisition is necessary for the next own plant. Here, the company is on the home stretch, a debt capital measure with a volume of EUR 25 m could soon be completed.

All in all, Pyrum is on the right track. The strong sales growth we expect for the next few years, combined with strongly rising margins, offers high share price potential. Our price target remains unchanged at EUR 77.00 and continues to justify a “Speculative Buy” rating. The dampening effect of the slightly reduced estimates for 2023 and 2024 was offset by the discounting effect (since our last analysis), which is very pronounced due to the estimated massive future increases at Pyrum.

Annex I: SWOT analysis

Strengths

- Patent-protected, innovative solution for scrap tyre recycling and the production of high-quality raw materials (pyrolysis oil, carbon black).
- The plant has been in regular operation since 2020; capacities are currently being tripled.
- Strong focus on R&D with participation in numerous important research projects.
- Strong partners: BASF and Continental are shareholders and close cooperation partners. The chemical group also supports the expansion financially.
- The founders run the company.
- With an equity ratio of 56 percent (30.06.), the balance sheet structure remains very sound.

Opportunities

- The strong expansion of the company's own plant in Dillingen will ensure increasing revenue with high margins. Together with partners, numerous other plants are also planned, and the project pipeline is being continuously expanded.
- The sale of plants to third parties provides revenue leverage.
- Due to the great need for efficient scrap tyre recycling, the demand could increase strongly after first successful projects.
- The market environment in the commodities sector is currently comfortable. Especially the demand for carbon black is high, as so far 50 percent of the volume comes from Russia.
- Policy makers are pushing for the development of a circular economy in the tyre industry. By banning the use of scrap tyre granulate for various purposes, the EU is increasing the pressure for recycling. In some countries, thermal recycling is already prohibited as well.

Weaknesses

- Relatively short period of operation of the plant in the final design.
- Revenue has been low so far, so the company is still operating at a loss.
- The delays in setting up the second and third production line and in projects with third parties require further capital in order to realise the further expansion as planned.
- So far, no construction of a plant for third parties has been started.
- Small team, dependent on key people.

Threats

- Due to price increases for plant components, the necessary investment sum has increased significantly (but the potential revenue has increased as well).
- The company is currently working on a major debt financing for further expansion. Failure would require alternative capital measures.
- Bank financing of new plants is a challenging task due to the still limited database and is also becoming more expensive due to interest rate developments.
- A significant drop in raw material prices, for example in the event of a recession, could reduce revenue (however, a minimum price for pyrolysis oil has been agreed with BASF).
- With advances in recycling, the raw material “used tyres” could become a scarce resource.
- Alternative recycling technologies could prove more efficient.

Annex II: Balance sheet and P&L estimation

Balance sheet estimation

m Euro	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
ASSETS									
I. Total non-current	35.3	45.1	67.4	97.8	122.3	141.6	158.1	171.8	182.7
1. Intangible assets	6.5	5.8	5.1	4.4	3.7	3.0	2.3	1.6	0.9
2. Tangible assets	28.8	36.3	50.3	72.3	91.6	108.6	122.8	134.2	142.7
II. Total current assets	14.5	25.2	15.8	18.9	21.0	28.2	38.5	44.9	56.9
LIABILITIES									
I. Equity	31.9	21.1	18.6	39.4	57.3	78.8	100.9	116.8	135.3
II. Accruals	3.1	3.3	3.5	3.8	4.1	4.5	4.9	5.3	5.9
III. Liabilities									
1. Long-term liabilities	10.4	41.4	55.2	64.1	70.0	72.9	75.9	78.9	81.8
2. Short-term liabilities	4.5	4.6	6.0	9.5	12.0	13.7	15.0	15.7	16.6
TOTAL	49.9	70.4	83.3	116.7	143.4	169.9	196.6	216.8	239.6

P&L estimation

m Euro	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Sales	1.0	1.6	13.8	42.0	47.5	56.4	61.6	73.4	85.1
Total output	19.1	14.7	27.2	64.4	69.9	78.8	84.0	95.8	107.5
Gross profit	1.4	-0.3	11.9	44.9	48.7	56.1	59.7	69.8	80.0
EBITDA	-5.0	-8.2	2.6	34.4	37.1	43.3	45.7	54.8	64.0
EBIT	-7.6	-10.4	-0.8	28.5	29.8	35.3	36.3	43.6	51.1
EBT	-7.8	-10.8	-2.6	26.1	26.9	32.1	33.1	40.4	47.8
EAT (before minorities)	-7.8	-10.8	-2.5	20.8	18.0	21.5	22.1	27.0	32.0
EAT	-7.8	-10.8	-2.5	20.8	18.0	21.5	22.1	27.0	32.0
EPS	-2.40	-3.32	-0.77	6.39	5.52	6.59	6.79	8.30	9.82

Annex III: Cash flows estimation and key figures

Cash flows estimation

m Euro	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
CF operating	-6.9	-9.0	-1.6	22.7	23.4	28.6	32.4	39.8	47.2
CF from investments	-20.8	-12.0	-25.8	-37.0	-34.0	-31.0	-31.0	-31.0	-31.0
CF financing	6.0	31.4	15.8	11.5	8.9	6.2	6.4	-4.5	-6.8
Liquidity beginning of year	34.2	12.5	23.1	11.5	8.7	7.0	10.9	18.6	22.9
Liquidity end of year	12.5	23.1	11.5	8.7	7.0	10.9	18.6	22.9	32.3

Key figures

percent	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Sales growth	6.5%	61.6%	768.8%	204.5%	13.1%	18.8%	9.2%	19.1%	16.1%
EBITDA margin	-512.3%	-518.5%	19.0%	82.0%	78.2%	76.7%	74.3%	74.8%	75.2%
EBIT margin	-772.4%	-657.1%	-6.0%	68.0%	62.7%	62.6%	59.0%	59.4%	60.0%
EBT margin	-792.0%	-679.5%	-18.9%	62.1%	56.7%	57.0%	53.8%	55.1%	56.2%
Net margin (after minorities)	-795.2%	-681.4%	-18.2%	49.5%	37.8%	38.0%	35.9%	36.8%	37.5%

Annex IV: Sensitivity analysis

WACC	Perpetual cash flows growth				
	2.0%	1.5%	1.0%	0.5%	0.0%
6.2%	118.69	103.98	92.11	82.32	74.13
6.7%	99.63	88.16	78.70	70.78	64.05
7.2%	84.36	75.22	77.02	61.06	55.46
7.7%	71.88	64.48	58.19	52.78	48.07
8.2%	61.51	55.43	50.20	45.65	41.65

Disclaimer

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Charts

The charts were made with Tai-Pan (www.lp-software.de).

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9) At the time of the publication of the report, the issuer holds holdings exceeding 5 % of its total issued share capital in the sc-consult GmbH

10) sc-consult GmbH has included the company's shares in a virtual portfolio managed by sc-consult GmbH

Following conflicts of interests occurred in this report: 1), 3), 4)

Within the framework of compliance regulations, sc-consult GmbH has established structures and processes for the identification and disclosure of conflicts of interests. The responsible compliance representative is currently managing director Dipl.-Kfm. Holger Steffen (e-mail: holger.steffen@sc-consult.com).

II) Preparation and updating

The present financial analysis was prepared by: Dipl.-Kfm. Holger Steffen

Participants in the preparation of the present financial analysis: -

The present analysis was finished on 26.09.2023 at 7:10 and published on 26.09.2023 um 8:15.

For the preparation of its financial analyses, the sc-consult GmbH uses a five-tier rating scheme with regard to price expectation in the next twelve months. Additionally, estimation risk is quantified on a scale from 1 (low) to 6 (high). The ratings are as follows:

Strong Buy	We expect an increase in price for the analysed financial instrument by at least 10 percent. We assess the estimation risk as below average (1 to 2 points).
Buy	We expect an increase in price for the analysed financial instrument by at least 10 percent. We assess the estimation risk as average (3 to 4 points).
Speculative Buy	We expect an increase in price for the analysed financial instrument by at least 10 percent. We assess the estimation risk as above average (5 to 6 points).
Hold	We expect that the price of the analysed financial instrument will remain stable (between -10 and +10 percent). The forecast risk (1 to 6 points) has no further impact on the

	rating. The rating “hold” is also used in cases where we perceive a price potential of more than 10 percent, but explicitly mentioned temporary factors prevent a short-term realisation of the price potential.
Sell	We expect that the price of the analysed financial instrument will drop by at least 10 percent. The forecast risk (1 to 6 points) has no further impact on the rating.

The expected change in price refers to the current share price of the analysed company. This price and any other share prices used in this analysis are XETRA closing prices as of the last trading day before publication. If the share is not traded on XETRA, the closing price of another public stock exchange is used with a separate note to that effect.

The price targets published within the assessment are calculated with common methods of financial mathematics, especially with the DCF (discounted cash flow) method, the sum of the parts valuation and a peer group analysis. The valuation methods are affected by economic framework conditions, especially by the development of the interest rates.

The rating resulting from these methods reflects current expectations and can change anytime subject to company-specific or economic changes.

More detailed explanations of the models used by SMC Research can be found at:

<http://www.smc-research.com/impressum/modellerlaeuterungen>

An overview of the recommendations prepared and distributed by SMC Research in the last 12 months can be found at: <http://www.smc-research.com/publikationsuebersicht>

In the past 24 months, sc-consult GmbH has published the following financial analyses for the company:

Date	Investment recomm.	Target price	Conflict of interests
27.06.2023	Speculative Buy	77.00 Euro	1), 3)
06.06.2023	Speculative Buy	77.00 Euro	1), 3)
05.04.2023	Speculative Buy	80.00 Euro	1), 3)
03.02.2023	Speculative Buy	80.00 Euro	1), 3)
05.10.2022	Speculative Buy	86.00 Euro	1), 3)
03.08.2022	Speculative Buy	86.00 Euro	1), 3)
27.06.2022	Speculative Buy	88.00 Euro	1), 3), 4)

In the course of the next twelve months, sc-consult GmbH will presumably prepare the following financial analyses for the company: one update and three comments.

The publishing dates for the financial analyses are not yet fixed at the present moment.

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