June 6th, 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)
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Pyrum Innovations AG

Strong sales boost approaching

Rating: Speculative Buy (unchanged) | **Price:** 42.20 € | **Price target:** 77.00 € (prev.: 80.00 €)

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Current development

Basic data

Based in:	Dillingen / Saar
Sector:	Recycling
Headcount:	63
Accounting:	HGB
Ticker:	PYR:GR
ISIN:	DE000A2G8ZX8
Price:	42.20 Euro
Market segment:	Scale
Number of shares:	3.25 m
Market Cap:	137.3 m Euro
Enterprise Value:	132.3 m Euro
Free float:	approx. 38 %
Price high/low (12 M):	69.20 / 35.20 Euro
Øturnover (12 M Xetra):	32,900 Euro

Ramp-up from August/September

The construction of production lines two and three at Pyrum's headquarters in Dillingen has been delayed by several months due to various supply bottlenecks but is still progressing. Commissioning of the pyrolysis plant is expected to start at the end of June with the first so-called loop checks, followed by the ramp-up phase from August/September, during which production will be increased step by step. However, gas-fired power generation will not reach full capacity at the beginning, as this is the area where there have been the greatest problems with delivery delays. However, the installation of the first three of a total of five turbines should be completed by the end of June. This means that in the beginning, the production process will not yet run completely self-sufficiently in terms of energy.

Total output increases strongly

The figures for the last business year were very much influenced by the construction of the new production facilities, which led to an increase in total output from EUR 3.7 to 19.1 m. The driving factor here was own work capitalised, which reflects the installation work and therefore increased from EUR 2.8 to 17.8 m.

FY ends: 31.12.	2020	2021	2022	2023e	2024e	2025e
Sales (m Euro)	0.7	0.9	1.0	2.0	17.2	42.0
EBIT (m Euro)	-3.5	-8.1	-7.6	-10.0	2.8	28.7
Net profit	-3.6	-8.4	-7.8	-10.4	1.7	21.3
EpS	-1.39	-2.57	-2.40	-3.19	0.53	6.56
Dividend per share	0.00	0.00	0.00	0.00	0.00	0.00
Sales growth	290.5%	39.2%	6.5%	103.5%	762.2%	143.6%
Profit growth	-	-	-	-	-	1,131.0%
PSR	207.19	148.89	139.83	68.70	7.97	3.27
PER	-	-	-	-	79.2	6.4
PCR	-	-	-	-	42.5	5.8
EV / EBIT	-	-	-	-	47.3	4.6
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Sales, on the other hand, developed only moderately with an increase from EUR 0.9 to 1.0 m. The main reason for this was that Pyrum did not sell most of the coke it produced, but stored it instead, as the further processing into rCB pellets (rCB: recovered carbon black) can achieve much higher prices. However, the pelletising plant only started operation in the current year (see below).

Still high operating deficit

As an offsetting item to own work capitalised, the cost of materials for purchased services, raw materials, components and machinery increased from EUR 2.6 to 17.7 m and was thus the dominant cost item. With the further expansion of the team from 51 to 63 employees, personnel expenses also increased from EUR 3.5 to 4.2 m. Other operating expenses, on the other hand, fell from EUR 5.3 to 3.6 m, which was due to the absence of the costs of the IPO in Oslo (EUR 2.9 m) recorded here in the previous year. Together with the other operating income, which rose by 19 percent to EUR 1.3 m due to higher subsidies from research projects, a total EBITDA deficit of EUR -5.1 m resulted, after EUR -6.5 m in the previous year. Adjusted for the costs of the IPO and the listing costs in Frankfurt in 2022, however, the deficit increased from EUR -3.6 to -4.8 m.

Net result slightly better

With significantly higher depreciation and amortisation (from EUR 1.6 to 2.6 m) due to the completion of plants and the first-time full-year recognition of the depreciation of patents (which were not included until the fourth quarter of 2021 following the acquisition of the company that owns them), this resulted in an adjusted EBIT of EUR -7.3 m (previous year: EUR -5.3 m). The reported EBIT, on the other hand, improved from EUR -8.2 to -7.6 m due to the special effects (IPO/listing). After deducting the slightly improved financial result, in which interest payments (EUR 0.2 m) continue to be the defining factor, and with only minimal tax payments, this resulted in a net loss of EUR -7.8 m, compared to EUR -8.4 m in the previous period.

Business figures	2021	2022	Change
Sales	0.92	0.98	*+6.5%*
Total output	3.70	19.07	*+415.2%*
EBITDA	-6.52	-5.06	-
EBIT	-8.15	-7.62	-
Net profit	-8.35	-7.81	-

In m Euro and percent; source: Company

Free cash flow clearly negative

The high deficit is reflected in the cash outflow from operating activities, which increased from EUR -3.9 to -6.9 m over the course of the year. This was even clearly exceeded by the investment cash flow, which totalled EUR -20.8 m (after EUR -10.5 m in the previous period), due to the large investments in the construction of the new production lines. Free cash flow was thus EUR -27.8 m, compared to EUR -14.4 m in the previous year. This was partly compensated by a net borrowing of almost EUR 5 m and subsidies/grants received of EUR 1.7 m, which were largely responsible for the positive financing cash flow of EUR +6.0 m (previous year: EUR +38.7 m). The remainder was at the expense of liquidity, which consequently fell from EUR 34.2 m to EUR 12.5 m during 2022.

Investments shape balance sheet

This has also changed the balance sheet picture. While liquidity accounted for 67.1 percent of the balance sheet total of EUR 51.3 m at the end of 2021, it is now only 25.5 percent (with a slightly reduced balance sheet total of EUR 49.9 m). In contrast, the share of property, plant and equipment, now the largest asset, rose from 17.7 to 57.7 percent due to investments. On the liabilities side, equity continues to dominate, declining from EUR 39.7 to 31.9 m due to the loss for the year, reducing the equity ratio from 77.4 to 64.0 percent. At the same time, financial liabilities have increased significantly and consist primarily of bank loans (EUR 4.1 m, previous year: EUR 1.6 m), convertible loans (EUR 5.0 m, previous year: EUR 2.0 m) and other loans (EUR 1.6 m, previous year: EUR 1.5 m).

Certification as a milestone

A milestone for Pyrum was the completion of the certification of the pelletising plant of production line one by tyre manufacturers. Since the rCB is a raw material that goes directly into the customers' tyre production, the company had to meet (among other things) automotive standards, which is a high hurdle. After a year-long process that included plant installation and extensive testing, Continental finally gave the go-ahead in March this year. The bicycle tyre producer Ralf Bohle ("Schwalbe" tyres) is also already being supplied. Further purchase agreements are in preparation. For the two new production lines, however, a pelletising plant was ordered that uses a different grinding technology ("jet mill") and offers additional application possibilities besides. Delivery and commissioning are scheduled for the second quarter of 2024.

Great response

Pyrum's scrap tyre recycling has met with a great response, and the company reports numerous enquiries from major car manufacturers, garage chains and waste disposal companies looking for recycling options for scrap tyres. The first actual delivery projects are also developing very positively. Last year, Pyrum and bicycle manufacturer Ralf Bohle tested the return of used tyres in boxes in 50 bicycle shops. By now, the system has been rolled out nationwide and almost 1,800 shops have already joined – this corresponds to nearly one third of the total market.

Further plants in planning stage

One of Pyrum's main tasks is therefore the rapid expansion of capacities. In addition to the expansion of the plant at the headquarters, the company is planning to build further plants, the next of which will be in Homburg, for which a suitable plot of land has already been secured and the application for approval is currently being prepared. Further locations are to be realised with partners as so-called special purpose vehicles (SPVs), in which Pyrum intends to hold a minority stake on a permanent basis. However, the first joint venture of this kind, Revalit GmbH, had to reschedule because the intended site in Straubing was not suitable after all. Now, the approval process for a new site should be completed in the third quarter of this year. The first suitable site has also been identified for cooperation with the tank farm operator Unitank – Pyrum is planning a total of up to ten plants with this partner. Four production facilities (in Norway, Sweden, Finland and Estonia) are also the subject of cooperation with the Norwegian company Polyfuels, which is currently working on financing the projects. In addition, Pyrum reports another planned plant with Korn Recycling in Albstadt, Germany, as well as ten other possible projects at an early stage, located in the UK, Belgium, the Czech Republic, Greece and Italy.

New cost estimation

However, the calculation for a new recycling plant has changed significantly due to the market development of the last one and a half years – both in terms of the costs of realisation and in terms of the achievable revenue. The bottlenecks and the inflationary environment have led to a significant increase in the cost of construction, a substantial part of which is likely to prove permanent. The company now estimates that the investment for a plant with three lines and 20,000 tonnes of scrap tyre processing capacity per year will amount to EUR 35 m (last year, EUR 30 m had been expected). However, achievable revenue has also increased strongly, especially for steel, oil and rCB (see following figure). It is particularly important that significantly higher minimum purchase prices were agreed with customers in response to this development: For pyrolysis oil (which goes to BASF) the price was increased from EUR 150 to 400 per tonne and for rCB (for tyre manufacturers) from EUR 650 to 700 per tonne to EUR 900 to 955. These are basic prices on which there may be surcharges if energy and/or gas prices are high. In the current environment, one plant can generate an estimated revenue of EUR 11.5 m. With calculated running costs of EUR 4.7 m p.a., this results in an EBITDA of EUR 6.8 m per year, which means an amortisation period of slightly more than five years. The lifetime of the core element, the reactor, on the other hand, Pyrum estimates to be more than ten years.

Estimated plant economics – operating at 20,000 tonnes p.a. capacity

1 **Total revenues, end-products and gate fee**			**EUR ~ 11.5 m**
Gate fee	*EUR 110/ton*	*20,000 tons*	*EUR ~ 2.2 m*
Steel (+100%,2021)	*EUR 300/ton*	*4,000 tons*	*EUR ~ 1.2 m*
Oil (+60%, 2021)	*EUR 400/ton*	*4,650 tons*	*EUR ~ 1.9 m*
rCB (+31%, 2021)	*EUR 850/ton*	*7,350 tons*	*EUR ~ 6.2 m*
Heat	*used*	*9.6 GWh*	*EUR 0.0 m*
Energy	*used*	*5.6 GWh*	*EUR 0.0 m*
Direct costs			**EUR ~ 1.6 m**
2 **OPEX**			**EUR ~ 3.1 m**
3 **EBITDA**			**EUR ~ 6.8 m**
4 Investment			EUR ~ 35.0m
4/3 **Payback EBITDA basis**			**~ 5,1 years**

Source: Company

Sales slowly increasing

Since the first production line built does not have the performance of the lines that are currently under construction (among other things, there is a lack of redundant elements that are provided for in the new ones) and these will only enter the ramp-up phase in August/September, Pyrum's revenue in the current year will still be significantly below the potential level of a plant with three lines. The management expects an increase in sales to between EUR 1.8 and 2.5 m and a still negative result, also due to the continued high level of investment activities and further personnel expansion. In addition, the starting signal for the next own project and for one or two others that will be realised with partners is to be given before the end of 2023. If these plans are realised in the current year, the total output could amount to between EUR 14 and 16 m.

Loan financing sought

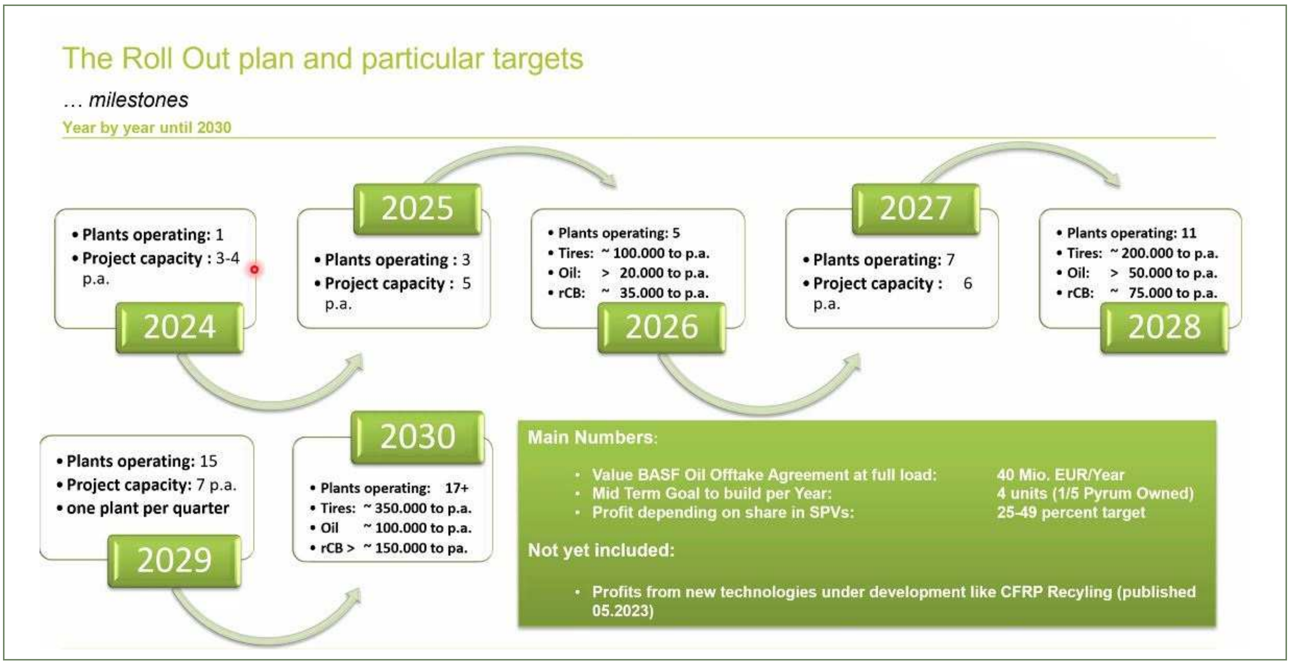
The management's focus is currently particularly on financing this expansion. As of the balance sheet date, there was still a purchase commitment for plant components for the two new production lines in the amount of EUR 10 m (of which EUR 4 m long-term). According to the company, the financial resources are therefore sufficient for the completion of the facilities and the running costs in the current financial year. Substantial external financing is still required for the other planned own plants. According to the earnings call, no capital increase is currently planned for this purpose; instead, debt capital is to be used. Various options are currently being considered in this regard. Support continues to come from the partner BASF. A further EUR 3 m from the existing framework agreement with the chemical group for a convertible loan were already called up last year, so that the volume drawn amounted to EUR 5 m at the end of the year. A final third tranche of EUR 2 m is due when the new lines are finally put into operation. In addition, a loan agreement was concluded with BASF in May of this year, which envisages the provision of EUR 4 m, divided into four tranches to be disbursed from May to August.

Ambitious roll-out plan

Provided that sufficient funds are raised, the plant capacities are to be greatly expanded over the next few years (see figure on the next page): By the end of 2025, three plants are to be in operation, by 2028 more than ten and by the end of the decade more than 17. This would correspond to a cumulative annual production capacity of about 100 thousand tonnes of pyrolysis oil and 160 thousand tonnes of rCB, which at the minimum price would generate a revenue of EUR 40 m (oil) or EUR 100 m (rCB) per year. Pyrum intends to own about one in five of these plants, with the remainder to be realised in SPVs, with the company holding a minority stake of between 25 and 49 percent.

CFRP recycling as an additional option

Not yet included in the expansion plans are possible plants for the recycling of carbon fibre reinforced plastics (CFRP). These are used in various areas (including vehicle manufacturing, construction, electronics and electrical industry) and are not yet fully recyclable. But that is exactly what Pyrum has now succeeded in doing with an automated, semi-industrial plant after almost four years of development. The plant can process 1 kilogram of CFRP per hour and represents the basis for the possible construction of an industrial plant.



Expansion plan; source: Company

Adjustment of the expansion path

The company has not yet communicated any concrete plans for building up the CFRP business, so it is not included in our model. Our estimates are therefore based on the roll-out of the scrap tyre recycling plant. The pace of project development to date has been slower than hoped, which is mainly due to the difficult environment with supply bottlenecks and in some cases significant price increases for components, as well as to the difficulty in securing financing for a new plant concept. As part of a cautious approach, we have therefore shifted our assumed expansion path for the realisation of new plants slightly. We now expect the contribution to sales from the next own plant only from 2026 on (previously: from mid-2025), after which a new own production facility will continue to be added every year. With regard to the joint ventures, we now expect two companies to be established this year (i.e., another one in addition to Revalit – we had previously assumed two) and still three more in each of the next two years. And finally, we have also postponed by one year the sale of the plant concept to markets outside the EU we had assumed, and expect it now to start only in 2026, with revenue from the sale of components from 2027 (from then on, one plant per year is to be realised). The table on the next page shows the capacity expansion resulting from these assumptions and the associated development of revenue.

Acceleration probable

We thus assume that in 2030, Pyrum will have six own plants and 14 SPVs. This puts us slightly above the company's minimum target (17+), and the rate of own plants (company: one in five) is also higher. In our view, this is possible, as we expect a strong acceleration as soon as the first plants for third parties have been realised and have proven their high profitability in operation. Then the financing of new projects should be much easier. In addition, the construction and commissioning of plants should accelerate as experience grows. Already, the company has made progress that will facilitate the process in the future. For example, the new production lines two and three were redesigned due to a HAZOP analysis (hazard and risk analysis), which met higher safety standards and improved the serial production capability of the solution. In addition, Pyrum has created a virtual twin of the plant in cooperation with its new partner Siemens, on which the operation of a plant (and possible malfunctions) can now be trained even before realisation, which facilitates and accelerates familiarisation. Fi-

Revenue model (m Euro)	2023	2024	2025	2026	2027	2028	2029	2030
Revenue plant Dillingen	2.0	10,3	10,3	10,3	10,3	10,3	10,3	10,3
Further own plants (total number)				*1*	*2*	*3*	*4*	*5*
Revenue further plants				11,5	23,0	34,4	45,9	57,4
SPVs (total number)	*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
Plants without SPV (total number)				*1*	*2*	*3*	*4*	*5*
Revenue plants without SPV					6,9	6,9	6,9	6,9
Total revenue	**2.0**	**17,2**	**42,0**	**47,5**	**56,4**	**61,6**	**73,4**	**85,1**

Estimates SMC-Research

nally, following the problems with the bottlenecks, Pyrum has now established a network of alternative suppliers for critical components (esp. turbines) that can be called upon if necessary.

New estimates for sales...

Against this background, we consider the expansion path we have revised to be achievable. It will result in strongly increasing revenue in the coming years, which will come from the company's own operation of plants as well as from the sale of components to SPVs and (prospectively) also to customers outside Europe (without the foundation of SPVs and the participation of Pyrum). In the current year, revenue will still be low; we have reduced our sales estimate from the previous EUR 3.4 m to EUR 2.0 m because of the later commissioning of the new production lines. For 2024, however, we expect an increase to EUR 17.2 m. This estimate is higher than our previous one (EUR 15.5 m), as we have adjusted the sales prices to the new calculation of the company and thus raised them. As before, we have assumed initial revenue (EUR 6.9 m) from the sale of components to an SPV for next year. This revenue will increase strongly in 2025 (to EUR 31.0 m, previously: EUR 38 m – one SPV less) and, together with the revenue from the company's own plant, will result in sales of EUR 42.0 m (previously: EUR 52.2 m). We now see target sales in 2030, resulting from the adjusted expansion path, at EUR 85.1 m (previously: EUR 78.8 m). The effects of the delays in capacity expansion are more than compensated for by the additional revenue from higher product prices.

...and the costs

We have also updated our cost estimates in response to the information in the annual report. We now expect an EBIT loss of EUR -10.0 m in 2023 (previously: EUR -7.7 m), followed by an operating surplus of EUR 2.8 m in 2024 (previously: EUR 2.0 m) thanks to the jump in sales. We now see the target EBIT in 2030 at EUR 51.4 m (previously: EUR 47.6 m). Overall, the free cash flow deficit at the beginning of the detailed forecast period is now higher than previously estimated, but the surplus at the end is also higher (due to higher product prices). 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 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.

m Euro	12 2023	12 2024	12 2025	12 2026	12 2027	12 2028	12 2029	12 2030
Sales	2.0	17.2	42.0	47.5	56.4	61.6	73.4	85.1
Sales growth		762.2%	143.6%	13.1%	18.8%	9.2%	19.1%	16.1%
EBIT margin	-501.2%	16.2%	68.4%	63.2%	63.0%	59.4%	59.8%	60.3%
EBIT	**-10.0**	**2.8**	**28.7**	**30.0**	**35.5**	**36.6**	**43.9**	**51.4**
Tax rate	0.0%	5.0%	20.0%	33.0%	33.0%	33.0%	33.0%	33.0%
Adjusted tax payments	0.0	0.1	5.7	9.9	11.7	12.1	14.5	16.9
NOPAT	**-10.0**	**2.7**	**23.0**	**20.1**	**23.8**	**24.5**	**29.4**	**34.4**
+ Depreciation & Amortisation	2.9	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	-7.0	6.3	29.9	29.9	35.9	39.4	47.2	55.1
- Increase Net Working Capital	-0.3	-1.2	-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	**-19.2**	**-20.7**	**-9.6**	**-5.5**	**3.2**	**7.2**	**14.7**	**22.3**

SMC estimation model

New price target: EUR 77.00

Due to the model adjustments, the fair value we determined is now EUR 251 m or EUR 77.11 per share, from which we derive EUR 77.00 as a new price target (a sensitivity analysis for price target determination can be found in the Annex). The slight reduction compared to our last estimate (EUR 80.00) results in particular from the delays in business development taken into account. 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 relatively limited and, in addition, the marketing of the plant to third parties is still in its early stages.

Conclusion

Pyrum has been confronted with difficult general conditions over the past year and a half, which have resulted in material shortages and significant price increases for plant components. The construction of production lines two and three at the main plant in Dillingen has become more expensive and delayed as a result but is now nearing completion. The start of initial projects with third parties was also made more difficult but is on the right track.

All in all, we believe the company is on the verge of a strong expansion push. The critical factor is still the financing of new plants, both at Pyrum itself and with potential customers. We consider these initial obstacles to be surmountable, not least thanks to the energetic support of the strong partner BASF.

Once the first plants for customers have been realised and have proved their high profitability in operation, further expansion should become much easier.

The adjustment of our model results in a slightly reduced price target of EUR 77.00 (previously: EUR 80.00), which nevertheless offers considerable upside potential compared to the recently significantly lower price. We therefore reiterate our “Speculative Buy” rating.

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 (including BlackCycle with Michelin).
- 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 a liquidity of around EUR 13 m and an equity ratio of 64 percent (31 December), the company is currently solidly financed.

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, only one joint venture for plant operation has been established with partners; especially financing issues have led to a delay in the implementation of the first customer projects.
- Small team, dependent on key people.

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. After two LOIs, more JVs could be established soon.
- 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. A ban on thermal recycling in other EU countries or on exports of used tyres is another potential driver of market development.

Threats

- Due to price increases for plant components, the necessary investment sum has increased significantly (but the potential revenue has increased as well).
- The acquisition of capital for further expansion could fail. The expansion goals could then be missed.
- 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	44.4	66.8	97.1	121.7	140.9	157.4	171.1	182.0
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	35.6	49.7	71.7	90.9	107.9	122.1	133.5	142.1
II. Total current assets	14.5	10.3	13.5	17.1	19.7	27.4	38.1	44.9	57.1
LIABILITIES									
I. Equity	31.9	21.5	23.3	44.6	63.0	85.0	107.6	123.8	142.6
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	25.4	46.8	55.6	61.5	64.4	67.3	70.2	73.2
2. Short-term liabilities	4.5	4.6	6.7	10.3	12.8	14.6	15.9	16.7	17.6
TOTAL	**49.9**	**54.8**	**80.3**	**114.3**	**141.4**	**168.4**	**195.6**	**216.1**	**239.2**

P&L estimation

m Euro	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Sales	1.0	2.0	17.2	42.0	47.5	56.4	61.6	73.4	85.1
Total output	19.1	15.1	30.7	64.4	69.9	78.8	84.0	95.8	107.5
Gross profit	1.4	0.1	15.4	44.9	48.7	56.1	59.7	69.8	80.0
EBITDA	-5.0	-7.2	6.2	34.6	37.3	43.5	46.0	55.1	64.3
EBIT	-7.6	-10.0	2.8	28.7	30.0	35.5	36.6	43.9	51.4
EBT	-7.8	-10.4	1.8	26.7	27.5	32.8	33.7	41.1	48.5
EAT (before minorities)	-7.8	-10.4	1.7	21.3	18.4	21.9	22.6	27.5	32.5
EAT	-7.8	-10.4	1.7	21.3	18.4	21.9	22.6	27.5	32.5
EPS	-2.40	-3.19	0.53	6.56	5.67	6.75	6.95	8.47	9.99

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	-7.9	3.2	23.7	24.3	29.5	33.3	40.7	48.2
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	15.4	23.0	11.1	8.5	5.8	6.0	-5.2	-7.5
Liquidity beginning of year	34.2	12.5	8.1	8.6	6.3	5.1	9.4	17.7	22.2
Liquidity end of year	12.5	8.1	8.6	6.3	5.1	9.4	17.7	22.2	31.9

Key figures

percent	2022 act.	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e
Sales growth	6.5%	103.5%	762.2%	143.6%	13.1%	18.8%	9.2%	19.1%	16.1%
EBITDA margin	-512.3%	-358.6%	36.2%	82.5%	78.7%	77.1%	74.7%	75.2%	75.6%
EBIT margin	-772.4%	-501.2%	16.2%	68.4%	63.2%	63.0%	59.4%	59.8%	60.3%
EBT margin	-792.0%	-519.0%	10.6%	63.5%	58.0%	58.1%	54.8%	56.1%	57.0%
Net margin (after minorities)	-795.2%	-519.0%	10.1%	50.8%	38.8%	38.9%	36.7%	37.6%	38.2%

Annex IV: Sensitivity analysis

	Perpetual cash flows growth				
WACC	2.0%	1.5%	1.0%	0.5%	0.0%
6.2%	123.25	108.75	97.04	87.40	79.31
6.7%	104.27	92.98	83.67	75.88	69.24
7.2%	89.08	80.10	**77.11**	66.18	60.67
7.7%	76.67	69.41	63.24	57.93	53.30
8.2%	66.38	60.42	55.29	50.83	46.91

Disclaimer

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

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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 06.06.2023 at 7:20 and published on 06.06.2023 at 8:15.

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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
05.04.2023	Speculative Buy	80.00 Euro	1), 3)
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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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