

# Betolar

## Company report

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✓ Inderes corporate customer

This report is a summary translation of the report "Asikaspilotteja ja innovaatioita" published on 8/28/2023 at 7:40 am EEST.

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# Customer pilots and innovations

We lower our target price for Betolar, which published its H1 report yesterday, to EUR 2.20 (was EUR 3.00) and reiterate our Reduce recommendation. The unsurprising H1 report did not change our assessment of the likelihood of a breakthrough, but the slower-than-expected commercial progress combined with a dwindling cash position keeps us cautious. With greater progress still to come, there is no incentive to take high risks, and we will wait for stronger evidence of the commercial competitiveness of the technology.

## Still waiting for net sales to start rolling in

As expected, Betolar's net sales remained low, rising to EUR 0.1 million from zero in the comparison period. The cost structure was in line with our expectations, resulting in an EBITDA of EUR -6.2 million, reflecting the investments made after the comparison period to grow the business. In line with our expectations, the company's cash position continued to shrink at a pace of just over EUR 1 million/month to EUR 18.5 million. For this year, the financial position is stable, but we estimate that the company will need equity financing in 2024. There were 13 new pilot customers in Q2, making it the busiest quarter for pilot customers in the company's stock exchange history.

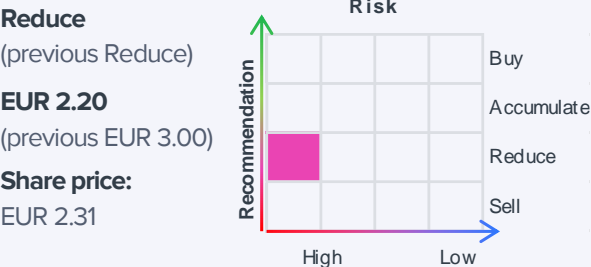
## In our view, the prospects for a commercial breakthrough did not improve, although some progress was seen

As the most significant milestone of Betolar's Q2, we consider the Betolar technology-based hollow core slabs developed in cooperation with Parma to be the company's first concrete opening outside the precast products segment (e.g. paving slabs and sewer pipes). However, the commercialization of environmentally hollow core cavity slabs is slowed down by long testing times for load-bearing structures, and we do not expect the segment to generate net sales in the short term. Betolar's short-term net sales growth relies on the precast products segment, which has limited customer-specific potential compared to the construction and mining applications the company is targeting. The company had succeeded in signing new customer contracts, particularly in India, and after H1 the company had just under 20 commercial contracts in force. The ramp-up of Geoprime production for existing customers has taken longer than expected, and there are no clear signs of a net sales ramp-up in sight. As a result, the positive informational value of new customer relationships remains limited for the time being. Commercial progress should also be reflected in net sales towards the end of the year, which would support investor confidence in the company. This would improve the company's position also in view of the financing round that is likely to take place next year.

## Valuation relies on breakthrough for the business plan in coming years

Forecasting Betolar's longer-term net sales in the light of current data is a shot in the dark, but we further lowered our baseline scenario for short- and medium-term growth after the H1 report, as our previous estimates of the launch of net sales have been overly optimistic. However, cash burn estimates did not change significantly, as the growth in the cost structure has clearly slowed down in line with the low net sales so far. Betolar's EV/S multiple for the current year is high in absolute terms and well above peers at 45x, while the scenarios in our 2024 and 2025 forecasts give a more positive picture of expectations for the stock. Overall, we still find the risks too high to rely on the potential that lies beyond the midpoint of the decade and that the current interest environment does not support early-stage growth companies like Betolar without concrete evidence (i.e. net sales) of the story progressing. Thus, we continue to take a wait-and-see stance on the stock.

## Recommendation



## Key figures

	2022	2023e	2024e	2025e
Revenue	0.3	0.9	7.2	24.0
growth-%	2770%	200%	735%	233%
EBIT adj.	-11.5	-13.9	-13.3	-8.0
EBIT-% adj.			-185%	-33.2 %
Net Income	-11.8	-13.9	-13.6	-8.9
EPS (adj.)	-0.61	-0.71	-0.70	-0.46
P/E (adj.)	neg.	neg.	neg.	neg.
P/B	2.2	3.6	neg.	neg.
Dividend yield-%	0.0 %	0.0 %	0.0 %	0.0 %
EV/EBIT (adj.)	neg.	neg.	neg.	neg.
EV/EBITDA	neg.	neg.	neg.	neg.
EV/S	>100	44.7	7.8	3.0

Source: Inderes

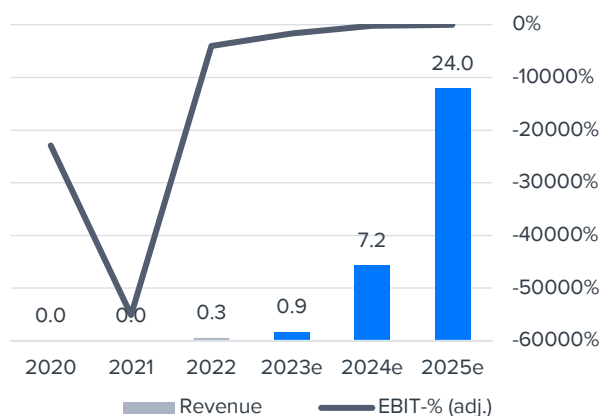
## Guidance (Unchanged)

No guidance

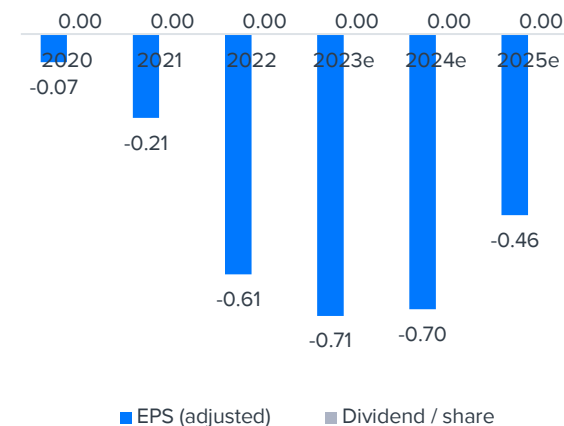
## Share price



## Revenue and EBIT-%



## EPS and dividend



## Value drivers

- Very high market potential
- Green transition is shaking up the otherwise conservative industry
- Betolar offers a competitive solution for the transition
- Inherently scalable business model



## Risk factors

- Commercialization of the business is still at an early stage
- The company will be cash negative for several more years and the business will only scale up years from now
- Betolar is likely to need additional funding
- More competitive technologies may seek to enter the market
- We estimate that business scalability requires the success of the AI project

Valuation	2023e	2024e	2025e
Share price	2.31	2.31	2.31
Number of shares, millions	19.5	19.5	19.5
Market cap	45	45	45
EV	39	56	72
P/E (adj.)	neg.	neg.	neg.
P/E	neg.	neg.	neg.
P/FCF	neg.	neg.	neg.
P/B	3.6	neg.	neg.
P/S	52.3	6.3	1.9
EV/Sales	44.7	7.8	3.0
EV/EBITDA	neg.	neg.	neg.
EV/EBIT (adj.)	neg.	neg.	neg.
Payout ratio (%)	0.0 %	0.0 %	0.0 %
Dividend yield-%	0.0 %	0.0 %	0.0 %

Source: Inderes

# Estimates and estimate revisions

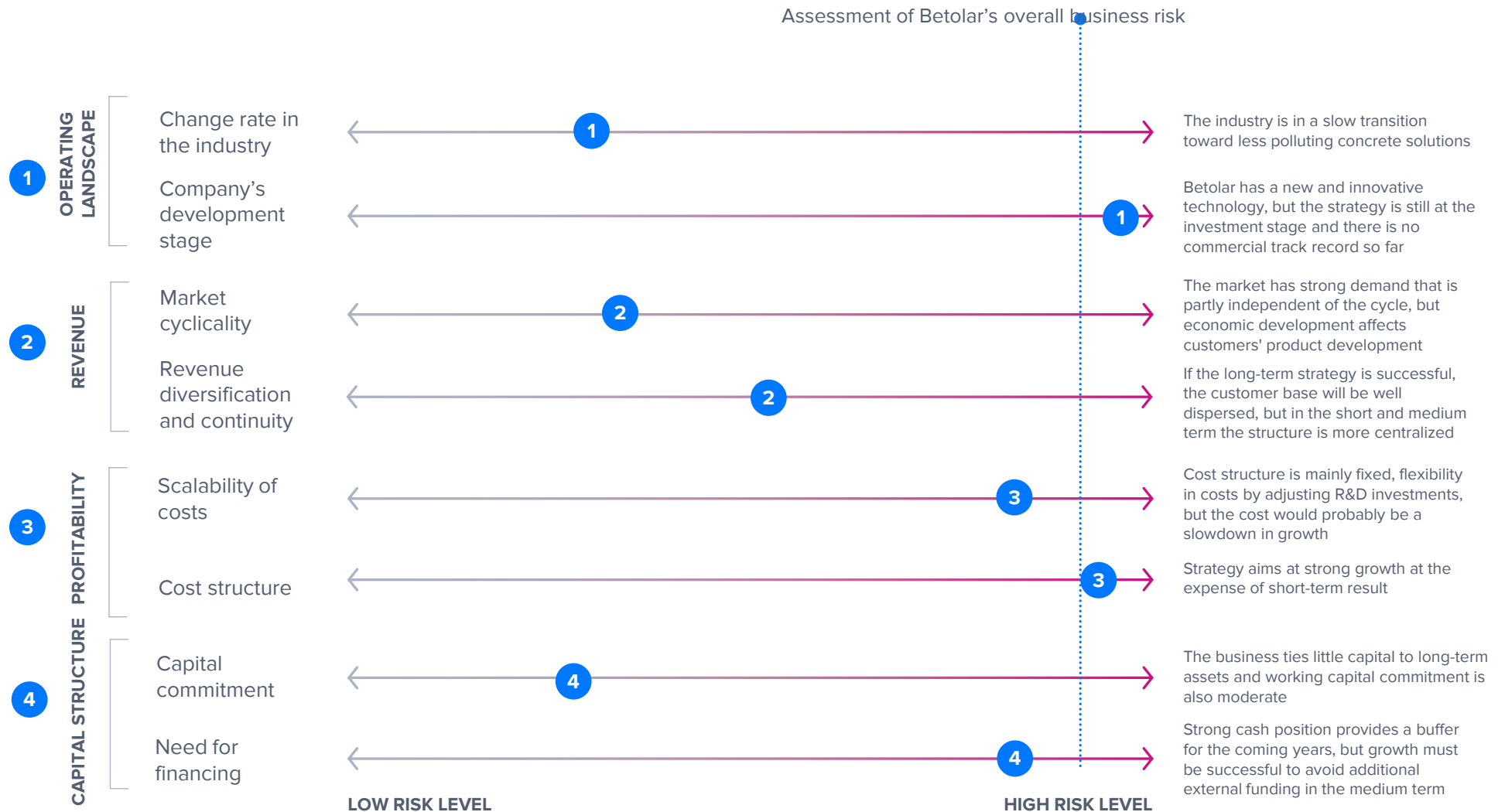
Estimates	H1'22	H1'23	H1'23e	H1'23e	Consensus		Difference (%)	2023e
MEUR / EUR	Comparison	Actualized	Inderes	Consensus	Low	High	Act. vs. inderes	Inderes
Revenue	0.0	0.1	0.3	0.0	0.0	- 0.0	-56%	0.9
EBITDA	-4.5	-6.2	-6.3					-12.1
EBIT	-5.0	-7.1	-7.4					-13.9
PTP	-5.4	-7.0	-7.5					-13.9
EPS (reported)	-0.28	-0.36	-0.39					-0.71

Source: Inderes

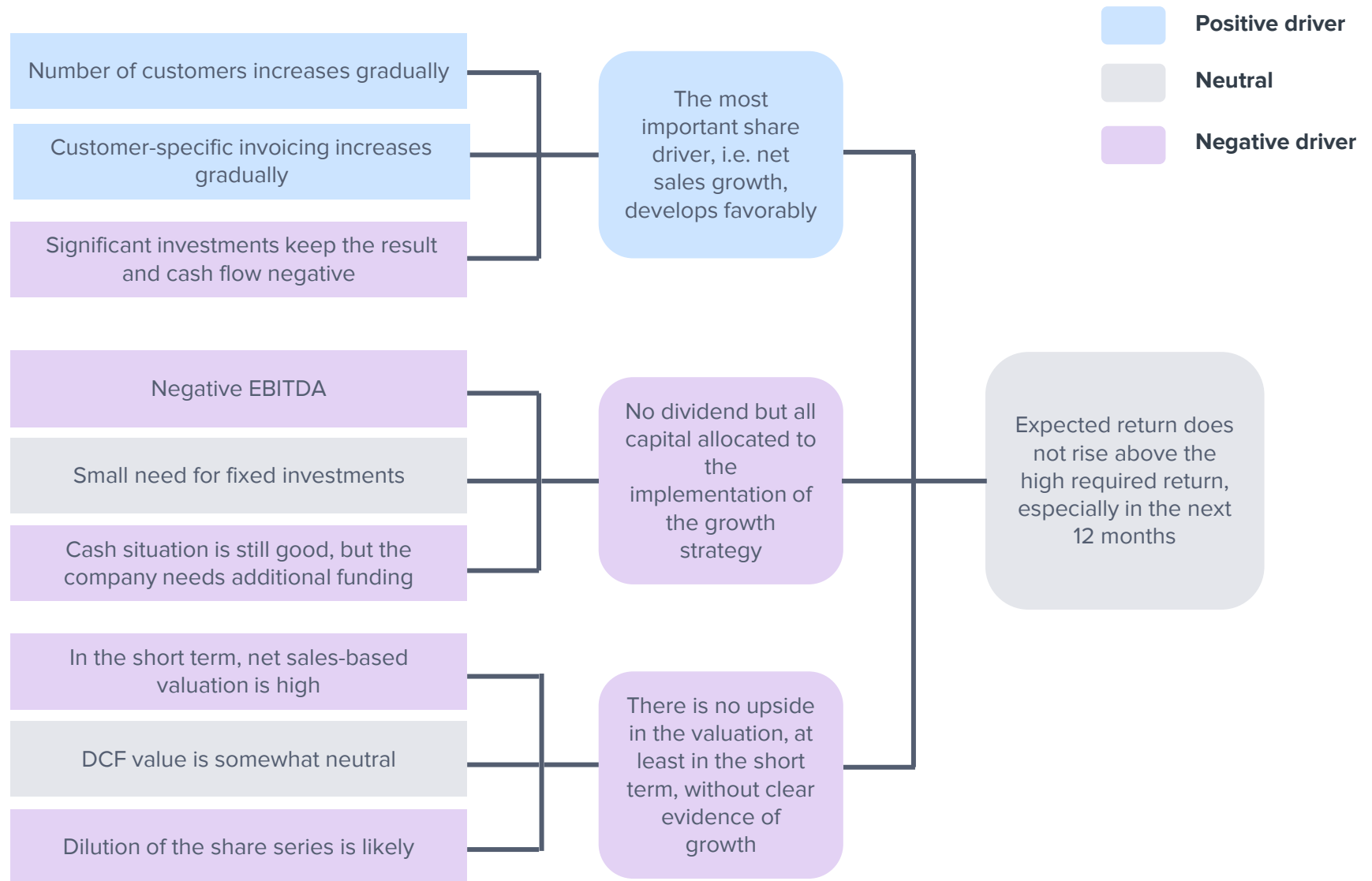
Estimate revisions	2023e	2023e	Change	2024e	2024e	Change	2025e	2025e	Change
MEUR / EUR	Old	New	%	Old	New	%	Old	New	%
Revenue	3.3	0.9	-74%	18.0	7.2	-60%	37.5	24.0	-36%
EBITDA	-11.7	-12.1	3%	-11.2	-11.0	-2%	-5.6	-5.1	-9%
EBIT (exc. NRIs)	-14.0	-13.9	0%	-13.4	-13.3	-1%	-8.4	-8.0	-5%
EBIT	-14.0	-13.9	0%	-13.4	-13.3	-1%	-8.4	-8.0	-5%
PTP	-14.3	-13.9	-3%	-13.7	-13.6	-1%	-9.3	-8.9	-4%
EPS (excl. NRIs)	-0.73	-0.71	-3%	-0.70	-0.70	-1%	-0.48	-0.46	-4%
DPS	0.00	0.00		0.00	0.00		0.00	0.00	

Source: Inderes

## Risk profile of the business model



# TSR drivers 2022-2025e



# Investment profile

- 1.** Innovative materials technology that is in the early stages of commercialization
- 2.** Own IPR and a versatile recipe for many different side streams
- 3.** A scalable and continuous business model if AI development succeeds
- 4.** Large potential target market
- 5.** Strong growth orientation and strategic objectives years away

## Potential



- Regulation and consumer demands drive concrete manufacturers to switch to lower emission alternatives
- Geopolymer concrete has the same properties as traditional concrete
- Betolar's concept is easy to implement for the customer, as no major investment in equipment is required
- The business model has potential for high scalability and the target market is large
- Protected proprietary IPR gives a company a technological edge

## Risks



- The hot sector may be over-invested, which could lead to a significant increase in competition in the coming years
- Features of a competing method win over Betolar's technology
- Failure to time growth investments or weaker-than-expected demand forces the company to raise additional external financing on unfavorable terms
- Weakening economy and high inflation slow down the green trend in construction

# Valuation table

Valuation	2020	2021	2022	2023e	2024e	2025e	2026e
Share price	5.74	6.30	3.05	2.31	2.31	2.31	2.31
Number of shares, millions	19.4	19.4	19.5	19.5	19.5	19.5	19.5
Market cap	112	122	60	45	45	45	45
EV	111	86	36	39	56	72	84
P/E (adj.)	neg.	neg.	neg.	neg.	neg.	neg.	neg.
P/E	neg.	neg.	neg.	neg.	neg.	neg.	neg.
P/FCF	neg.	neg.	neg.	neg.	neg.	neg.	neg.
P/B	79.0	3.2	2.2	3.6	neg.	neg.	neg.
P/S	>100	>100	>100	52.3	6.3	1.9	1.1
EV/Sales	>100	>100	>100	44.7	7.8	3.0	2.0
EV/EBITDA	neg.	neg.	neg.	neg.	neg.	neg.	>100
EV/EBIT (adj.)	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Payout ratio (%)	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Dividend yield-%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %

Source: Inderes



# Peer group valuation

Peer group valuation	Market cap	EV	LV:n kasvu		EV/S		P/B
Company	MEUR	MEUR	2023e	2024e	2023e	2024e	2023e
Bioretec	47	38		33%	9.5	30.5	2.2
Spinnova	212	136	191%		12.4	1.9	21.0
Aiforia	126	104	25%	60%	25.9	4.1	3.1
Renewcell	257	342	131%	2230%	10.6	3.1	4.1
Hoffman Green cement	131	125		46%	35.7	1.8	1.7
<b>Betolar (Inderes)</b>	<b>45</b>	<b>39</b>	<b>200%</b>	<b>735%</b>	<b>44.7</b>	<b>7.8</b>	<b>3.6</b>
<b>Average</b>			<b>116%</b>	<b>592%</b>	<b>18.8</b>	<b>8.3</b>	<b>6.4</b>
<b>Median</b>			<b>131%</b>	<b>53%</b>	<b>12.4</b>	<b>3.1</b>	<b>3.1</b>
<b>Diff-% to median</b>			<b>53%</b>	<b>1287%</b>	<b>262%</b>	<b>154%</b>	<b>14%</b>

Source: Refinitiv / Inderes

# Income statement

Income statement	2020	2021	H1'22	H2'22	2022	H1'23	H2'23e	2023e	2024e	2025e	2026e
<b>Revenue</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	<b>0.3</b>	<b>0.1</b>	<b>0.7</b>	<b>0.9</b>	<b>7.2</b>	<b>24.0</b>	<b>42.0</b>
Group	0.0	0.0	0.0	0.3	0.3	0.1	0.7	0.9	7.2	24.0	42.0
<b>EBITDA</b>	<b>-1.1</b>	<b>-4.8</b>	<b>-4.5</b>	<b>-5.5</b>	<b>-10.0</b>	<b>-6.2</b>	<b>-5.9</b>	<b>-12.1</b>	<b>-11.0</b>	<b>-5.1</b>	<b>0.6</b>
Depreciation	-0.3	-0.7	-0.5	-1.1	-1.5	-0.9	-1.0	-1.9	-2.3	-2.9	-4.3
<b>EBIT (excl. NRI)</b>	<b>-1.4</b>	<b>-5.5</b>	<b>-5.0</b>	<b>-6.5</b>	<b>-11.5</b>	<b>-7.1</b>	<b>-6.9</b>	<b>-13.9</b>	<b>-13.3</b>	<b>-8.0</b>	<b>-3.7</b>
<b>EBIT</b>	<b>-1.4</b>	<b>-5.5</b>	<b>-5.0</b>	<b>-6.5</b>	<b>-11.5</b>	<b>-7.1</b>	<b>-6.9</b>	<b>-13.9</b>	<b>-13.3</b>	<b>-8.0</b>	<b>-3.7</b>
Group	-1.4	-5.5	-5.0	-6.5	-11.5	-7.1	-6.9	-13.9	-13.3	-8.0	-3.7
Net financial items	0.0	-0.1	-0.5	0.1	-0.4	0.0	0.0	0.0	-0.3	-1.0	-1.4
<b>PTP</b>	<b>-1.4</b>	<b>-5.6</b>	<b>-5.4</b>	<b>-6.4</b>	<b>-11.9</b>	<b>-7.1</b>	<b>-6.9</b>	<b>-13.9</b>	<b>-13.6</b>	<b>-8.9</b>	<b>-5.2</b>
Taxes	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net earnings</b>	<b>-1.4</b>	<b>-4.1</b>	<b>-5.4</b>	<b>-6.4</b>	<b>-11.8</b>	<b>-7.0</b>	<b>-6.9</b>	<b>-13.9</b>	<b>-13.6</b>	<b>-8.9</b>	<b>-5.2</b>
<b>EPS (adj.)</b>	<b>-0.07</b>	<b>-0.21</b>	<b>-0.28</b>	<b>-0.33</b>	<b>-0.61</b>	<b>-0.36</b>	<b>-0.35</b>	<b>-0.71</b>	<b>-0.70</b>	<b>-0.46</b>	<b>-0.27</b>
<b>EPS (rep.)</b>	<b>-0.07</b>	<b>-0.21</b>	<b>-0.28</b>	<b>-0.33</b>	<b>-0.61</b>	<b>-0.36</b>	<b>-0.35</b>	<b>-0.71</b>	<b>-0.70</b>	<b>-0.46</b>	<b>-0.27</b>

Source: Inderes

# Balance sheet

Assets	2021	2022	2023e	2024e	2025e
<b>Non-current assets</b>	<b>4.1</b>	<b>4.7</b>	<b>6.7</b>	<b>10.3</b>	<b>15.4</b>
Goodwill	0.0	0.0	0.0	0.0	0.0
Intangible assets	1.8	3.7	5.1	7.1	9.9
Tangible assets	0.3	0.8	1.4	3.0	5.3
Associated companies	0.0	0.2	0.2	0.2	0.2
Other investments	0.0	0.0	0.0	0.0	0.0
Other non-current assets	0.0	0.0	0.0	0.0	0.0
Deferred tax assets	1.9	0.0	0.0	0.0	0.0
<b>Current assets</b>	<b>38.0</b>	<b>27.3</b>	<b>14.7</b>	<b>2.9</b>	<b>7.3</b>
Inventories	0.0	0.0	0.0	0.4	1.2
Other current assets	0.6	0.5	0.6	0.6	0.6
Receivables	0.0	0.1	0.1	0.5	1.9
Cash and equivalents	37.4	26.6	14.0	1.4	3.6
<b>Balance sheet total</b>	<b>42.0</b>	<b>31.9</b>	<b>21.4</b>	<b>13.2</b>	<b>22.7</b>

Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
<b>Equity</b>	<b>38.4</b>	<b>26.6</b>	<b>12.7</b>	<b>-0.9</b>	<b>-9.8</b>
Share capital	0.1	0.1	0.1	0.1	0.1
Retained earnings	-9.6	-18.6	-32.5	-46.1	-55.0
Hybrid bonds	0.0	0.0	0.0	0.0	0.0
Revaluation reserve	0.0	0.0	0.0	0.0	0.0
Other equity	48.0	45.1	45.1	45.1	45.1
Minorities	0.0	0.0	0.0	0.0	0.0
<b>Non-current liabilities</b>	<b>0.4</b>	<b>2.8</b>	<b>4.0</b>	<b>7.6</b>	<b>19.9</b>
Deferred tax liabilities	0.0	0.0	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	0.0
Long term debt	0.4	2.8	4.0	7.6	19.9
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	0.0	0.0	0.0	0.0	0.0
<b>Current liabilities</b>	<b>1.4</b>	<b>2.6</b>	<b>4.7</b>	<b>6.6</b>	<b>12.7</b>
Short term debt	0.0	0.2	3.5	5.0	10.3
Payables	0.8	0.9	0.0	0.4	1.2
Other current liabilities	0.6	1.5	1.2	1.2	1.2
<b>Balance sheet total</b>	<b>40.2</b>	<b>31.9</b>	<b>21.4</b>	<b>13.2</b>	<b>22.7</b>

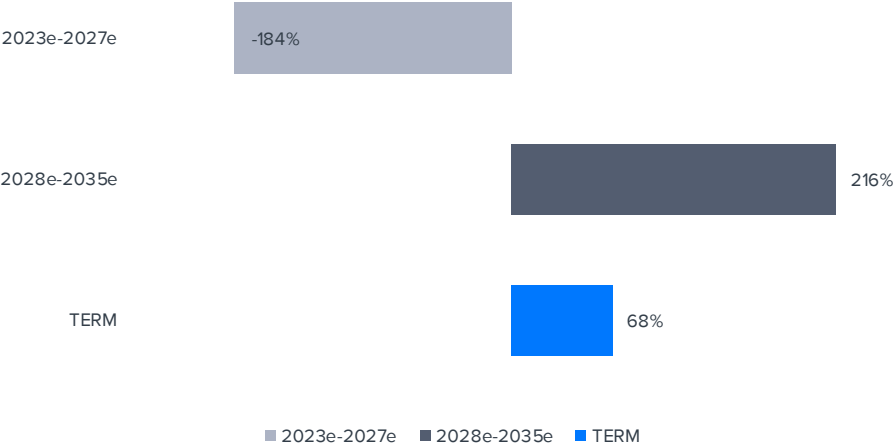
# DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e
Revenue growth-%	2770%	200%	735%	233%	75%	79%	47%	36%	50%	52%	29%	3%
EBIT-%	-4013%	-1617%	-185%	-33%	-9%	1%	9%	12%	17%	22%	24%	25%
EBIT (operating profit)	-11.5	-13.9	-13.3	-8.0	-3.7	0.4	10.2	18.5	39.3	76.2	104.7	113.3
+ Depreciation	1.5	1.9	2.3	2.9	4.3	5.9	7.3	8.7	9.8	11.1	12.7	14.6
- Paid taxes	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-3.8	-15.1	-21.0	-22.9
- Tax, financial expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.1	0.0
+ Tax, financial income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
- Change in working capital	1.0	-1.2	-0.5	-1.4	-1.7	-3.2	-2.8	-3.2	-5.9	-9.0	-7.6	-1.1
Operating cash flow	-7.1	-13.2	-11.5	-6.5	-1.1	3.1	14.7	24.0	39.2	63.1	88.9	104
+ Change in other long-term liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Gross CAPEX	-3.9	-3.9	-5.9	-8.0	-10.1	-11.0	-12.4	-12.9	-14.4	-16.9	-19.2	-19.3
Free operating cash flow	-11.0	-17.1	-17.4	-14.5	-11.2	-7.9	2.3	11.0	24.8	46.2	69.7	84.9
+/- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FCFF	-11.0	-17.1	-17.4	-14.5	-11.2	-7.9	2.3	11.0	24.8	46.2	69.7	0.0
Discounted FCFF		-16.2	-13.9	-9.8	-6.4	-3.8	1.0	3.8	7.3	11.5	14.7	15.1
Sum of FCFF present value		27.3	43.4	57.3	67.1	73.6	77.4	76.4	72.6	65.3	53.8	39.1
Enterprise value DCF		27.3										
- Interest bearing debt		-3.0										
+ Cash and cash equivalents		26.6										
-Minorities		0.0										
-Dividend/capital return		0.0										
Equity value DCF		50.9										
Equity value DCF per share		2.6										

WACC	
Tax-% (WACC)	20.0 %
Target debt ratio (D/(D+E))	10.0 %
Cost of debt	5.0 %
Equity Beta	3.20
Market risk premium	4.75%
Liquidity premium	2.00%
Risk free interest rate	2.5 %
Cost of equity	19.7 %
Weighted average cost of capital (WACC)	18.1 %

Source: Inderes

Cash flow distribution



# Summary

Income statement	2020	2021	2022	2023e	2024e	Per share data	2020	2021	2022	2023e	2024e
Revenue	0.0	0.0	0.3	0.9	7.2	EPS (reported)	-0.07	-0.21	-0.61	-0.71	-0.70
EBITDA	-1.1	-4.8	-10.0	-12.1	-11.0	EPS (adj.)	-0.07	-0.21	-0.61	-0.71	-0.70
EBIT	-1.4	-5.5	-11.5	-13.9	-13.3	OCF / share	-0.05	-0.24	-0.36	-0.68	-0.59
PTP	-1.4	-5.6	-11.9	-13.9	-13.6	FCF / share	-0.09	-0.34	-0.56	-0.88	-0.89
Net Income	-1.4	-4.1	-11.8	-13.9	-13.6	Book value / share	0.07	1.98	1.36	0.65	-0.05
Extraordinary items	0.0	0.0	0.0	0.0	0.0	Dividend / share	0.00	0.00	0.00	0.00	0.00
Balance sheet	2020	2021	2022	2023e	2024e	Growth and profitability	2020	2021	2022	2023e	2024e
Balance sheet total	1.8	42.0	31.9	21.4	13.2	Revenue growth-%	-14%	67%	2770%	200%	735%
Equity capital	1.4	38.4	26.6	12.7	-0.9	EBITDA growth-%	127%	354%	109%	21%	-9%
Goodwill	0.0	0.0	0.0	0.0	0.0	EBIT (adj.) growth-%	130%	302%	109%	21%	-5%
Net debt	-0.6	-37.0	-23.6	-6.5	11.2	EPS (adj.) growth-%		198%	186%	17%	-2%
Cash flow	2020	2021	2022	2023e	2024e	EBITDA-%					-152.5 %
EBITDA	-1.1	-4.8	-10.0	-12.1	-11.0	EBIT (adj.)-%					-184.6 %
Change in working capital	0.1	0.6	1.0	-1.2	-0.5	EBIT-%					-184.6 %
Operating cash flow	-1.0	-4.7	-7.1	-13.2	-11.5	ROE-%	-148.6 %	-20.7 %	-36.4 %	-70.8 %	-230.2 %
CAPEX	-0.7	-1.9	-3.9	-3.9	-5.9	ROI-%	-147.2 %	-27.4 %	-33.7 %	-55.6 %	-82.6 %
Free cash flow	-1.7	-6.6	-11.0	-17.1	-17.4	Equity ratio	77.8 %	91.4 %	83.2 %	59.3 %	-6.7 %
Valuation multiples	2020	2021	2022	2023e	2024e	Gearing	-45.6 %	-96.3 %	-88.8 %	-51.4 %	
EV/S	>100	>100	>100	44.7	7.8						
EV/EBITDA (adj.)	neg.	neg.	neg.	neg.	neg.						
EV/EBIT (adj.)	neg.	neg.	neg.	neg.	neg.						
P/E (adj.)	neg.	neg.	neg.	neg.	neg.						
P/B	79.0	3.2	2.2	3.6	neg.						
Dividend-%	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %						

Source: Inderes

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Sell	The 12-month risk-adjusted expected shareholder return of the share is very weak

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## Recommendation history (>12 mo)

Date	Recommendation	Target	Share price
11/3/2022	Reduce	3.00 €	2.86 €
1/16/2023	Reduce	3.00 €	3.07 €
2/15/2023	Reduce	3.00 €	2.98 €
8/25/2023	Reduce	2.20 €	2.31 €



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