

Research update: Q2 2022

ZAZZ ENERGY OF SWEDEN AB

Zazz Energy's primary business model is to own energy plants and sell green electricity and other valuable residual products such as heat and bio-char. This activity generates recurring revenues at a good margin.

CEO: Ari Kempainen
CoB: Jan Bardell
www.zazzenergy.com

List: Nasdaq First North
Last: 2.9 SEK
Market cap: 103 MSEK

Bloomberg: ZAZZB:SS
Refinitiv Eikon: ZAZZB.ST

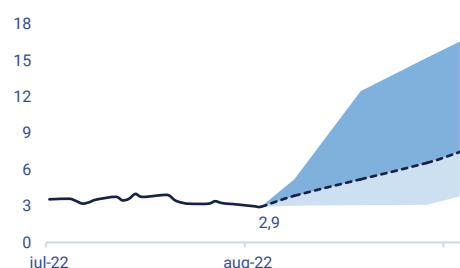
SHARE DEVELOPMENT



	12M	YTD	6M	1M
Development (%)	-	-	30	-4

Source: S&P Capital IQ

VALUATION INTERVAL



	BEAR	BAS	BULL
Share price	3.8	7.5	16.6
Up-/downside (%)	28	153	462

Source: S&P Capital IQ and Carlsquare estimates

CARLSQUARE EQUITY RESEARCH

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Exciting outlook for producer of green energy

In the first six months of 2022, Zazz Energy reported revenues of SEK 6.4 million at a gross margin of 52 per cent, above our assumption for a normalised gross margin of 40 per cent. The company intends to initiate the process of building new capacity in the current quarter, which, when in reality, is a value trigger. Also, we increase our revenue and margin assumptions. However, the fair value per share is unchanged at SEK 7.5, with a higher risk-free rate.

The first six months of the year prove the model

The Q2 2022 report exceeded our expectations in terms of gross margin. Financing costs stand out but are, for the most part, one-off transactions related to bridge loans. Financing is expensive in these markets, especially for early-stage companies like Zazz Energy. Also, it should be noted that we believe it was a correct decision for the company to pay up for short-term funding not to miss out on opportunities and lose time.

During H1 2022, Zazz Energy, through Zazz Energy S.A., has generated net sales of SEK 6.4 million at a gross margin of a high 52 per cent. The gross margin was well above our assumption for a normalised gross margin of 40 per cent on electricity produced at a bio-oil plant. Given the figures presented for the first six months, we believe the company's business model can be considered proven. A proven business with good profitability bodes well for the future and can strengthen the company's position in financing further expansion and value creation.

Higher margin assumptions with higher revenue

Interestingly, the company now expects the future bio-oil plants' annual revenue to exceed SEK 20 million, including the sale of heat. That means the expected annual heat revenue is at least SEK 5 million. Thus we have increased our assumption from previously SEK 3.5 million in our initial coverage report. As an effect, the total gross margin is increased. That as heat production does not require the additional purchase of raw materials. Also, the company informs of rising investment needs and costs in the wake of the current inflationary situation. We have adjusted the investment needs and cost assumptions for operations upwards. However, given the high gross margin in the first six months of the year, we leave the assumption for the normalised gross margin on electricity at 40 per cent unchanged. On the net, this implies a margin increase.

Low valuation relative to recurring revenues

Combining a multiple valuation with a DCF valuation, we calculate a fair value of SEK 7.5 (7.5) per share. The valuation is not up despite the upward revision in revenues and margins due to a higher risk-free rate that lowers the DCF valuation. Nevertheless, our fair value is well above the last paid price. Thus, we believe that the market underestimates the probability that the company will be able to finance and connect new capacity for which licenses have been exercised. Our valuation corresponds to EV/Sales 2023 of 5.8x and 2.1x in 2024. The reference group is trading at a median EV/Sales 2023 of 5.9x. A value trigger that must be in the near future is that the company actually does initiate the process of building new capacity.

Key figures (MSEK)*

	2021	2022E	2023E	2024E	2025E
Net sales	0	14	50	136	184
Gross profit	-1	6	25	73	101
EBITDA	-4	-5	10	46	64
EBIT	-4	-5	6	37	52
EBT	-5	-11	3	33	47
Earning per share		-0.35	0.05	0.58	0.83
Growth, net sales		NaN	265%	171%	35%
EBITDA-margin		NaN	-34%	19%	34%
EBIT-margin		NaN	-39%	11%	28%
EV/Sales		NM	7.9x	2.2x	0.8x
EV/EBITDA (curr.)		NM	NM	11.3x	2.4x
EV/EBIT (curr.)		NM	NM	19.1x	3.0x
P/E (curr.)		NM	NM	58.4x	5.1x

*Includes Zazz Energy S.A.. All estimated figures are risk-adjusted. Source: Company information and Carlsquare estimates

Follow-up and comments

During H1 2022, Zazz Energy (the Company) significantly strengthened its case. The company reported revenues of SEK 6.4 million at a gross margin of 52 per cent. Against this backdrop, the business model can be considered proven. However, in the Q2 report, the company informs of rising costs given the current inflationary environment. The positive of the inflationary situation is that the value of heat has increased. Management now expects that the sale of heat can generate revenue of at least SEK 5.0 million annually. Our previous assumption was SEK 3.5 million. The report also clarified that the company intends to start selling heat once a new plant is connected. Several projects are expected to be initiated in the current quarter.

Bolstered case with sales & high gross margin

Gross margin above expectations

The table below shows the outcome (including revenues of Zazz Energy S.A.) for the second quarter of 2022 compared to our estimates. As can be seen, in terms of net sales, the actuals exceeded our expectations by approximately 13 per cent. That is likely an effect of underestimated operating time and efficiency utilisation. A weaker SEK also has a hand in this. Furthermore, the gross margin is well above our assumption of a normalised gross margin of 40 per cent from sales of electricity produced in bio-oil plants. However, the gross margin was positively impacted during the quarter. That as costs were taken for a significant purchase of bio-oil already in the first quarter.

The Greek operations of Zazz Energy S.A. will be consolidated into Zazz Energy of Sweden AB during the third quarter.

Actuals vs estimates, Q2 2022 (SEKm)*

	Q2, 2022P	Q2, 2022U	Q2, 2021	Avvikelse, %	Tillväxt, %
Sales	3,6	4,0	0,0	13%	NaN
Gross profit	1,4	3,3	0,0	129%	NaN
Gross profit margin	40%	81%	NaN	-	-
EBITDA	-0,6	-0,1	-0,3	75%	46%
EBITDA margin	-16%	84%	NaN	-	-
EBIT	-0,7	-0,4	-0,3	38%	-57%
EBIT-margin	-19%	81%	NaN	-	-
EBT	-0,8	-2,4	-0,3	-195%	-804%
EPS (SEK)	-0,03	-0,20	0,00	-629%	-4975%

*Includes Zazz Energy of Sweden AB and Zazz Energy S.A. Source: Company information and Carlsquare estimates

Worth taking expensive one-off funding

The company's net finances of minus SEK 2.0 million also stand out. However, it should be noted that the lion's share is one-off items relating to bridge financing solutions. In the current market climate, financing is relatively expensive, especially for early-stage companies like Zazz Energy. Paying up for short-term funding is deemed by us to be entirely appropriate. That is not to risk the opportunities and timetable for expansion.

Scaling up of connected capacity to be initiated in Q3

During the first six months of the year, Zazz Energy, through Zazz Energy S.A., has generated net sales of SEK 6.4 million. That at a gross margin of a high 52 per cent. In light of this, we believe the company's business model can be considered close to proven. A proven business with good profitability bodes well for the future and can strengthen the company's position to finance further expansion and value creation.

In the Q2 report, the company writes that the process of building new capacity will be initiated during the current quarter. The company is working to secure sites with a possibility to connect to the district heating network or near industries that can directly use the heat produced.

As shown in the initiation analysis, we have assumed that eight bio-oil plants will be connected by the end of 2023 before risk adjustment with probabilities. We find no reason to revise this assumption at this time. Furthermore, we continue to assume that the letter of intent with NAIS and RFA.M to secure financing for (ten) new bio-oil plants becomes a reality. However, it should be noted that the 3M Euribor has come in at just over 0.5 per cent. That, in turn, means that we now expect an annual interest cost of just over 2.5 per cent, up from 2.0 per cent previously.

It is essential for our assumptions that the company actually initiates the construction of new capacity shortly. The number of facilities to be built at this stage is also significant.

Inflation is a double-edged sword for Zazz Energy

In Sweden, inflation in July was 8.5 per cent annually. In the Eurozone, the corresponding figure was 8.9 per cent, in Greece, 11.5 per cent and 2.7 per cent in China. High inflation worldwide has also boosted prices for bio-oil, biomass, and plant operation. It has also increased the investment required to buy, ship and install new plants. At the same time, the value/price of heating has increased. In the Q2 report, the company states that the annual value of heat is now assumed to be SEK 5 million per year. In our initial coverage report, we assumed that the sale of heat would generate SEK 3.5 million per year. However, there are no heat purchase agreements in place (yet), meaning this may change. At the same time, we think it is becoming increasingly more apparent that the company intends to sell heat from the day a new plant is connected.

Inflation, Sweden



Source: SCB

Olja (USD/barrel)



Weekly chart. Exchange = ICE. Source: S&P Capital IQ

Natur gas (Euro/MWH)



Weekly chart. Exchange = ICE. Source: S&P Capital IQ

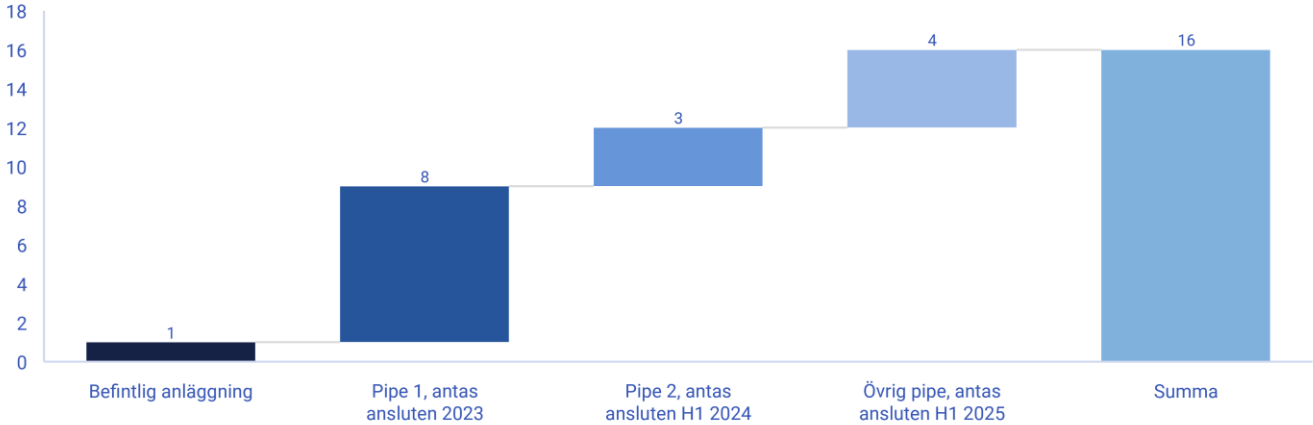
Coal (USD/ton)



Weekly chart. Exchange = ICE. Source: S&P Capital IQ

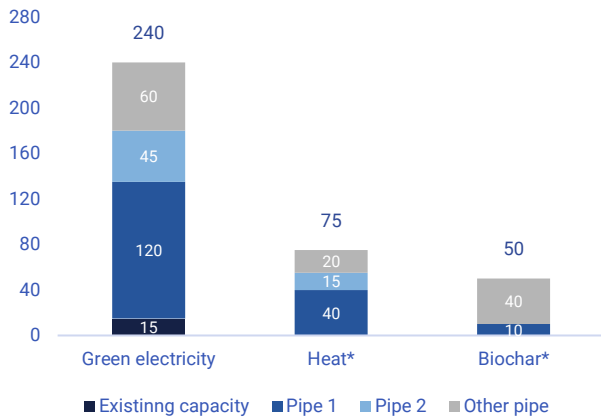
Equity story in six charts

Rapid scale-up of connected capacity (MW) in 15-licence cards



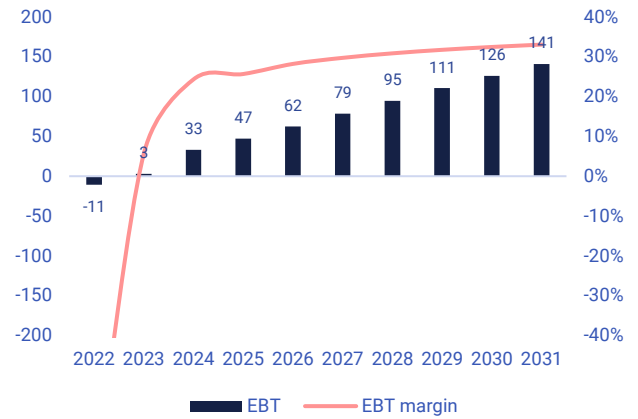
Source: Company information and Carlsquare estimates

Revenue potential of SEK 240+53+50 million, 2025



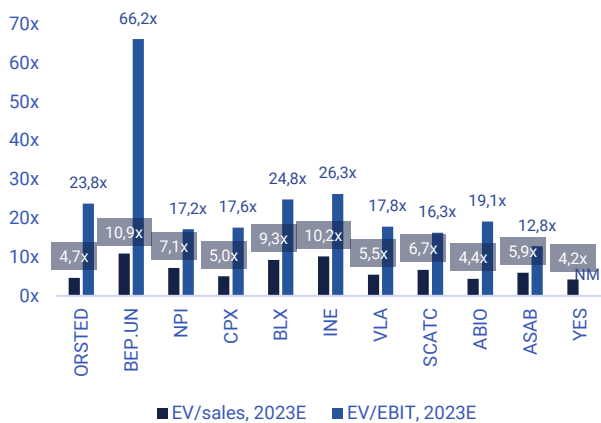
Refers to revenue on an annual basis. *Agreement not in place. SEKm. Source: Company information and Carlsquare estimates

Good profit potential with advantageous financing



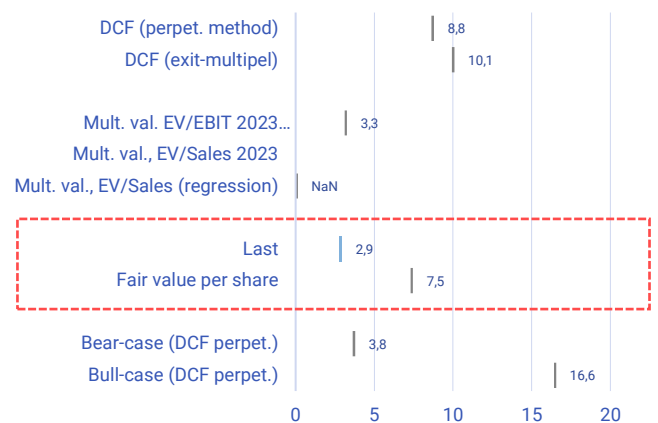
EBT = Earnings before taxes, after net finances. Source: Company information and Carlsquare estimates

High valuation multiples for Intelligence providers



Median EV/Sales 2023 = 5.9x. Median EV/EBIT NTM = 18.5x. Source: S&P Capital IQ

Fair value within a range



SEK per share. Source: Carlsquare estimates

Investment case, estimates and valuation

Zazz Energy's current plant, utilising eight (out of a total of 15) licenses, could generate annual revenues of SEK 175 million from the sale of green electricity and heat as early as the end of 2023. The potential sale of biochar could increase the annual revenue potential to SEK 185 million. A fair value per share of SEK 7.5 (7.5) is calculated in a probability-adjusted scenario. Thus, we believe that the market currently underestimates the probability that the company will succeed in financing and expanding the capacity for which licences have been used.

Growth and margin expansion create upside

Zazz Energy owns facilities for producing and selling green electricity and other bioproducts such as heat and biochar. The company currently owns one 1MW bio-oil plant in Greece, which, through a 20-year PPA, generates annual revenues of around SEK 15 million. A rapid scale-up of capacity is in the cards.

The buyer of the electricity produced is the state-owned energy company Hedno.

- **Favourable market conditions with upside.** The EU and its member states have come a long way in enabling the energy transition to green energy sources. At the same time, the IEA estimates that the connected capacity in Europe for electricity produced from bioenergy needs to increase by 8.1 GW by 2026. The company is thus in a market that is expected to grow.
- **Fast scaling up of connected capacity in the cards.** The total pipeline includes licences for ten 1MW of bio-oil plants plus five 1MW of biomass plants. The company has entered a letter of intent to finance the ten bio-oil plants. News that the company is placing actual orders for the construction of new capacity is a clear value driver for the stock. In our scenario, we expect the company to have 9 MW connected to the grid by the end of 2023 before risk adjustment. Such a scenario generates revenues from the sale of electricity and heat of SEK 175 million annually before risk adjustment. The buyer of the power purchase agreements is the state-owned energy company Hedno. No contracts for selling heat are yet in place. Including the sale of biochar, annual revenues could increase significantly to SEK 185 million yearly.
- **Good margin potential.** For green electricity produced at the company's bio-oil plants, we have assumed a normalised gross margin (after the cost of purchasing bio-oil) of 40 per cent. For biomass plants, the assumption is slightly lower at 35 per cent. Secured revenue streams for 20 years through power purchase agreements and known raw materials costs for ten years through contracts create high predictability in revenue flow and profitability. In 2022, we assume a total gross margin of 45 per cent, rising to 60 per cent in 2031 as the share of the revenue from heat and biochar sales increases. The EBITDA margin rises from 19 per cent in 2023 to 40 per cent in 2031. Our margin assumptions are well below the median values for the reference group, which in 2021 were 71 per cent and 62 per cent, respectively.
- **The market is discounting a low probability of Zazz Energy succeeding.** Today, Zazz Energy trades at EV/Sales 2023 of 2.2x. Green energy producers trade at the EV/Sales 5.9x expected sales in 2023. As an approach to value Zazz Energy, we have assumed a scenario in which the risk-adjusted connected capacity increases from today's 1 MW to 6.1 MW by end-2023 and 19.4 MW by end-2031. Our base case fair value of 7.5 per share (7.5) corresponds to an EV/Sales multiple in 2023 of 5.8x and 2.1x in 2024.

News that the company is initiating the construction of new capacity is a trigger for the value of the stock.

In the first six months of the year, the gross margin on electricity sales produced by the existing bio-oil plant was 52% - well above our assumption of a normalised 40%.

Motiverat värde på 7,5 kronor för de kommande 6-12 månaderna.

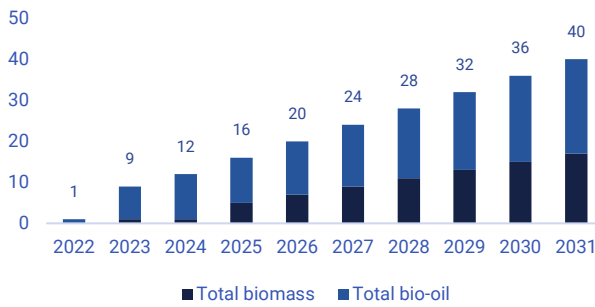
Assumptions and risk-adjusted estimates

Scaling of connected capacity

We leave our assumptions on the development of connected capacity and risk adjustments unchanged, 2022-2031. That means that the company's installed and connected capacity will grow to 19.4 MW by 2023.

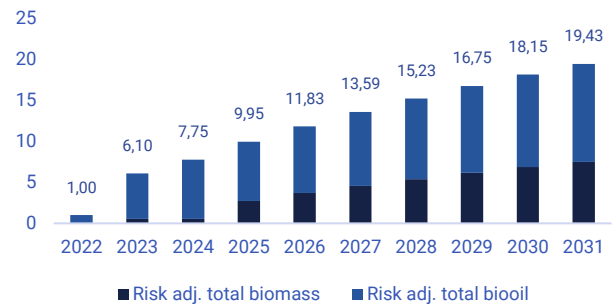
We have risk-adjusted connected capacity and hence revenues and costs with probabilities to reflect uncertainties such as timing and funding.

Connected capacity (MW), before risk-adjustments



Source: Company information and Carlsquare estimates

Connected capacity (MW), after risk-adjustments



Source: Company information and Carlsquare estimates

Important that new construction projects are initiated

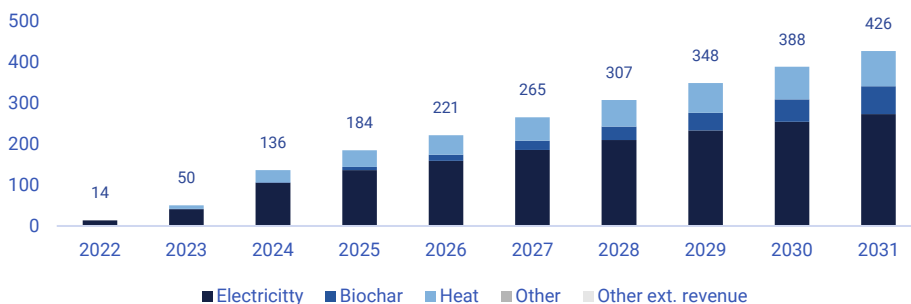
As mentioned earlier, the company intends to initiate several projects to increase the connected capacity during the current quarter. Before risk adjustment, we assume that 9.0 MW of plants will be connected by the end of 2023. After risk adjustment, the corresponding figure is 6.1 MW. We need to see that projects are initiated this quarter to keep the schedule. The initiation of new projects is a value-driving trigger as it reduces risk and uncertainty regarding timing and financing.

The number of plants for which construction is initiated is also paramount.

Higher revenue contribution from heating

In 2022, we expect SEK 14 (13) million in net sales. Based on communications in the quarterly report, we have also increased the annual sales value of heat to SEK 5.0 million, from the previous SEK 3.5 million. We have also adjusted our assumption around the share of value-added production capacity sold to 100 per cent over the entire forecast period. That, together with operating and efficiency utilisation rates that we have raised to 98 per cent (previously 95 per cent), gives a risk-adjusted revenue assumption of SEK 50 million in 2023 and SEK 426 million in 2031, up from previously SEK 45 million and SEK 394 million respectively.

Net sales (SEKm), after risk-adjustments



Source: Company information and Carlsquare estimates

Increased margins with higher heating revenues

Improved total gross margin

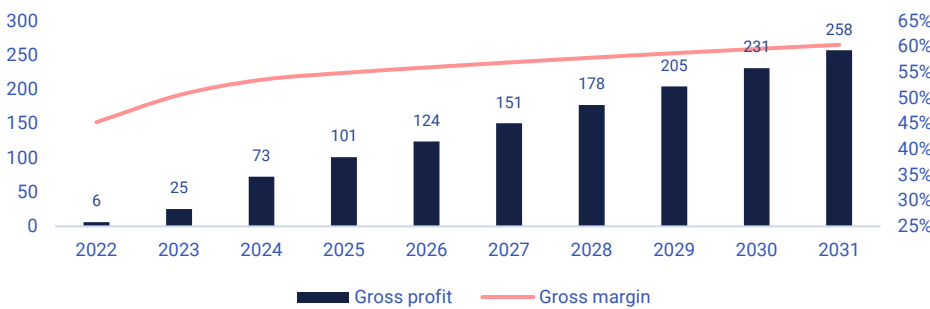
The company mentions in the report that it sees rising costs for bio-oil and biomass. As raw material purchase agreements with guaranteed purchase prices for ten years are not yet in place for the upcoming plants, the company's profitability outlook is negatively affected by this.

The total gross margin rises with more/higher revenue streams without the need to buy more raw materials.

At the same time, the gross margin of 52 per cent for the first six months of the year was well above our assumption for the normalised gross margin on electricity of 40 per cent for bio-oil plants (35 per cent for biomass plants). Therefore, we leave normalised gross margin assumptions unchanged for electricity production.

However, with a higher revenue contribution from the sale of heat without the need for additional purchases of bio-oil (or biomass), the total normalised gross margin in 2023 rises to 50.6 per cent from the previous 46.7 per cent. In 2031, the gross margin is now 60.4 per cent, up from the previously assumed 58 per cent.

Gross profit (SEKm) and total gross margin (%), after risk-adjustment

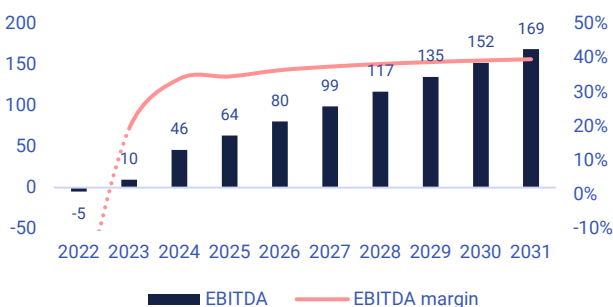


Source: Company information and Carlsquare estimates

Rising operating costs but improved operating margin

Also, we expect the company's installation, operation, and service costs to increase slightly from the initial coverage report. However, net of increased revenues, costs and total gross margin, our EBITDA margin assumption increase to 19.2 per cent for 2023 and 39.5 per cent in 2031, up from 15 per cent and 37 per cent, respectively, previously.

EBITDA (SEKm) and EBITDA margin (%), after risk-adj.



Source: Company information and Carlsquare estimates

EBT (SEKm) and margin (%), after risk-adjustment



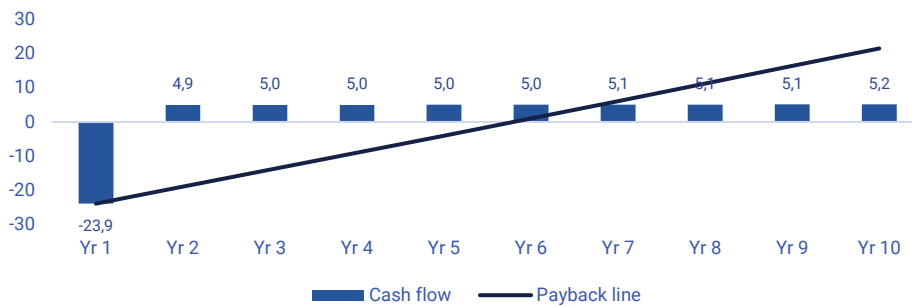
Source: Company information and Carlsquare estimates

Euribor has risen to just over 0.5 per cent. As a result, we anticipate a higher interest cost of more than 2.5 per cent for the large loan to finance investments in

facilities. We have also increased the assumed investment that must be made to build and install a 1MW plant to SEK 27.0 million from the previous figure of SEK 25 million. The upward revision corresponds to the average annual inflation rate in July 2022 for Sweden, the Eurozone, China and Greece of 7.9 per cent.

The investment requirement's upward revision can be seen as slightly aggressive. However, net of increased revenues from heat and increased cost assumptions for operations and interest, it is estimated that a bio-oil plant's payback period under new assumptions is between 5.5-6.0 years. Under the assumptions of the initiation analysis, the payback period is estimated at 6.5-7.0 years.

Estimated payback period for a bio-oil plant, before risk-adjustments



Source: Company information and Carlsquare estimates

Fair value within a range

Low valuation, given growth potential and reference group

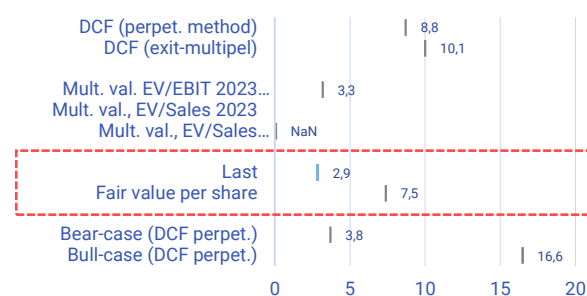
We have combined a DCF model with a multiple valuation model to calculate a fair value per share. Our DCF valuation results in a value per share of SEK 8.8-10.1. Our multiple valuation with EV/Sales 2023 results in a value per share of SEK 6.1. Combining the lowest value in the DCF model with the multiple valuation in an average, we calculate a justified value per share of SEK 7.5 (7.5) after full funding and dilution for the next 6-12 months. Despite increased revenue and margin assumptions, the fair value remains unchanged. That is due to a lower DCF valuation caused by a higher risk-free interest rate.

Fair value per share (SEK), base case

Multiple val. EV/Sales 2023	6.1
DCF valuation	8.8
Fair value per share	7.5
Potential up-/down side	153%
Shares outstanding, fully financed and diluted	50.3
Shareholder value	375
Cash	6
Debt	-11
PV cash from equity financing	91
EV	290

Source: Carlsquare estimates

Fair value within a range (SEK)



Source: Carlsquare estimates

Implied valuation multiples, base case

	2022P	2023P	2024P	2025P
EV/Sales	21.2x	5.8x	2.1x	1.6x
EV/EBITDA	NM	30.1x	6.3x	4.6x
EV/EBIT	NM	50.9x	7.9x	5.6x
Median ref.group, EV/Sales	8.0x	5.9x		
Median ref.group, EV/EBIT	23.8x	18.5x		
Curr., ZAZZ B, EV/Sales	7.9x	2.2x		
Curr., ZAZZ B, EV/EBIT	NM	19.1x		

Source: Carlsquare estimates

As shown in the table above, our valuation corresponds to an EV/Sales in 2022 of 21.2x and 2023 of 5.8x. Our peer group of predominantly green energy producers trades at a median EV/Sales in 2022 of 8.0x and 2023 of 5.9x.

DCF valuation, base case

DCF valuation		Discount rate		Assumptions	
PV(UFCF)	-63	Risk free rate	1.8%	CAGR. 2021-2031	46.5%
PV(TV)	420	Market risk premium	6.7%	EBITDA-margin. 2031	39.5%
Enterprise value	357	Size premium	4.1%	EBIT-margin. 2031	33.8%
Net debt	-5.8	Beta	1.2x	Tax rate	20.6%
Shareholder value	351	Req. return on equity	14.7%		
PV(equity financing proceeds)	91			Implied multiples	
Shareholder value, after financing	442	Stax adjust. interest on debt	2.4%	EV/Sales. 2022	26.1x
Current shares outstanding	35	Leverage	20.0%	EV/Sales. 2023	7.1x
New shares	15	WACC	12.2%	EV/EBITDA. 2022	NM
Shares outstanding after financing and dilution	50			EV/EBITDA 2023	37.1x
Value per share (before financing and dilution)	10	Company spec. premium	0.0%	EV/EBIT 2022	NM
Value per share (after financing and dilution)	8.8	Discount rate	12.2%	EV/EBIT. 2023	62.7x

Source: Carlsquare estimates

Below on the left is a sensitivity analysis with the variables, discount rate and assumed growth rate for the terminal value.

Sensitivity analysis (SEK/share), base case

	2,0%	3,0%	4,0%	5,0%
10,3%	11,7	13,3	15,5	18,5
11,3%	9,5	10,7	12,3	14,3
12,3%	7,9	8,8	9,9	11,3
13,3%	6,6	7,3	8,1	9,1
14,3%	5,5	6,0	6,7	7,4

Discount rate on Y-axis and growth perpetuity on X-axis.
Source: Carlsquare estimates

Sensitivity analysis with an exit-multiple (SEK/share)

	12,0x (35%)	13,9x (25%)	15,8x (15%)	17,6x (5%)
10,3%	9,6	10,9	12,3	13,7
11,3%	9,2	10,5	11,8	13,1
12,3%	8,8	10,1	11,4	12,7
13,3%	8,4	9,7	10,9	12,2
14,3%	8,1	9,3	10,5	11,7

Discount rate on Y-axis and growth perpetuity on X-axis.
(XX%) = applied rebate on the reference group's median value for EV/EBIT.
Source: Carlsquare estimates

On the right is a second sensitivity analysis of the valuation based on a DCF model with an exit multiple as the method to calculate the perpetual value - an alternative to perpetual capitalisation. For this method, we took the median EBIT multiple of the reference group, discounted the multiple by 25 per cent and applied it to the assumed EBIT result in 2026. This value is then discounted to its present value and represents the perpetuity value in the DCF model. As can be seen, this model yields a motive-rated value per share of SEK 10.1.

Below is the multiple valuation. As shown, we have applied a discount of 25 per cent due to uncertainty in our estimates, differences in size and profitability. With expected sales in 2023 of SEK 50.1 million, the multiple valuation gives a value per share of SEK 6.1 after full funding and dilution.

Multiple valuation, base case

	HQ	Mcap (SEKm)	CAGR, 2020-2023	μEBIT-marg., 2021-2023	EV/sales, 2023
Ørsted A/S	DK	447 749	1%	34%	4.7x
Brookfield Renewable Partners L.P.	BM	191 648	12%	49%	10.9x
Northland Power Inc.	CA	88 025	10%	59%	7.1x
Capital Power Corporation	CA	49 414	8%	58%	5.0x
Boralex Inc.	CA	41 861	15%	79%	9.3x
Innergex Renewable Energy Inc.	CA	32 918	14%	73%	10.2x
Voltaia SA	FR	21 687	6%	50%	5.5x
Scatec ASA	NO	17 066	21%	63%	6.7x
Albioma	FR	17 198	8%	37%	4.4x
Advanced Soltech Sweden AB (publ)	SE	777	28%	75%	5.9x
CHAR Technologies Ltd.	CA	238	155%	-51%	4.2x
Median		32 918	12%	58%	5.9x
Average		82 598	25%	48%	6.7x
Discount		25%			
Applied EV/Sales multiple		4.5x			
Exp. sales 2023 (SEKm)		50.1			
Enterprise value		223.1			
Net debt		-5.8			
PV(Cash from equity financing)		90.9			
Shareholder value, after financing		308.2			
Shares outstanding after financing and dilution		50.3			
Value per share (SEK, after financing and dilution)		6.1			

Source: S&P Capital IQ and Carlsquare estimates

Valuation range

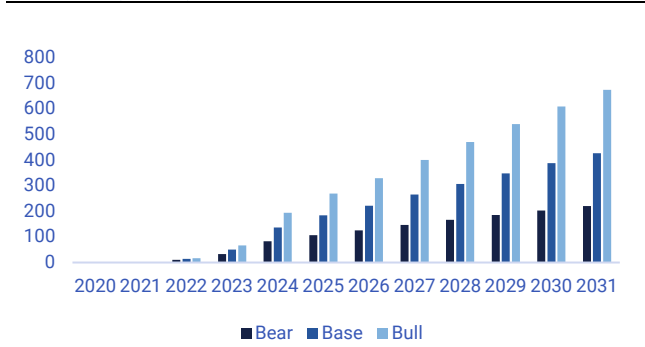
In the Bull and Bear scenarios, we have used our DCF (perpetual capitalisation) model but developed alternative growth and profitability curves. In the Bull

scenario, we model with an average annual growth rate of 50.4 per cent (46.5 per cent in the Base scenario). The EBITDA margin is assumed to increase to 44.7 per cent (39.5 per cent in the Base scenario). After full funding and dilution, a value per share of DKK 16.6 is calculated.

For the Bear scenario, we model an average annual growth rate of 40.6 per cent. The EBITDA margin is assumed to increase to 37.6 per cent in 2031. After full funding and dilution, the more pessimistic scenario yields a value per share of SEK 3.8.

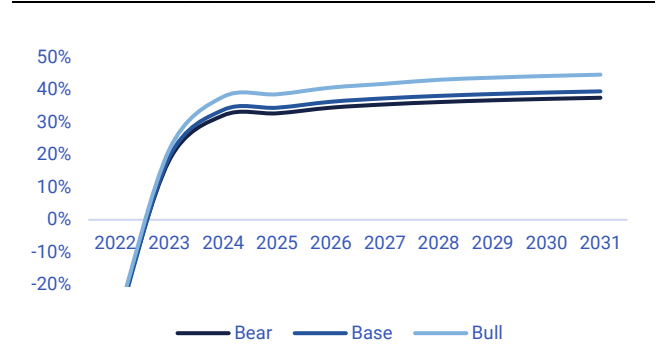
The assumed development of net sales and EBITDA margin is shown below.

Net sales (SEKm), three scenarios



Source: Company information and Carlsquare estimates

EBITDA margin (%), three scenarios



Source: Company information and Carlsquare estimates

Risks and challenges

Funding

The Company's upcoming plants, defined as Pipeline 1, Pipeline 2 and Other Pipeline, are not fully funded. A Letter of Intent (LOI) is in place with RFA.M HOLDING INVESTMENT CONSULTING Ltd. (FRA.M), according to the company. However, until the money is in the company's account, financing is an imminent uncertainty, threatening the rapid scale-up. Terms of financing are not assured. Further scaling up of connected capacity beyond the existing pipelines is also dependent on financing that is not secured. The balance sheet may need to be strengthened over time.

Deliveries and rising costs of facilities

In China, there is still near-zero tolerance for Covid diagnostics. That means that restrictions are still in place in large parts of the country. Chinese ports remain largely closed while there is a shortage of containers. In other words, there is a risk that the company will not get its biomass plant or bio-oil plants delivered to install and connect the plant in line with the company's expectations.

Currently, we estimate that an investment of SEK 27 million will be needed to add a 1MW bio-oil or biomass plant. This investment may be higher than expected as the price of raw materials and plant inputs rises. Shipping costs have also gone up significantly.

Person/relationship dependence

In order to scale up operations in Greece, we assess that the company has a high dependency on its close partners, Petros Kapetanakis and NAIS. However, the two

are the company's fourth and third largest owners, respectively, indicating that they are long-term.

Other uncertainties

Although the company has demonstrated proof-of-concept through its existing facility, there are several uncertainties. Even if the company secures financing for construction, installation and optimisation work may be delayed, pushing revenues further into the future.

We model increasing revenues from both heat and biochar. Currently, there are no pre-sales agreements for this. Concerning the sale of biochar, investments will be required to adapt the facilities in terms of, for example, storage. Exactly how this will be done is not yet clear.

Metrics and financials

Key metrics

	2020	2021	2022	2023	2024	2025	2026
Per share							
EPS	-0.66	-0.33	-0.72	-0.41	-0.14	0.20	0.59
DPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BVPS	-0.3	0.4	-0.3	0.3	0.2	0.5	1.1
Valuation (curr.)							
P/E	NM	NM	NM	NM	NM	0.0x	0.0x
P/B	NM	5.7x	NM	5.2x	7.1x	3.3x	1.4x
EV/Sales	2.6x	2.2x	1.9x	1.6x	1.1x	0.8x	0.6x
EV/EBITDA	NM	NM	NM	NM	17.5x	4.1x	2.2x
EV/EBIT	NM	NM	NM	NM	NM	5.5x	2.5x
Other							
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF yield	-21.4%	-10.2%	-19.8%	-31.9%	20.9%	32.1%	73.7%

Source: Company information and Carlsquare

Income statement (MSEK), quarterly

	Q1, 22	Q2, 22	Q3, 22E	Q4, 22E	Q1, 23E	Q2, 23E	Q3, 23E	Q4, 23E
Sales	2.4	4.0	3.7	3.7	4.2	7.3	14.5	24.1
Gross profit	0.1	3.3	1.5	1.5	1.7	3.5	7.4	12.7
EBITDA	-3.0	-0.1	-0.8	-0.8	-1.1	0.2	3.1	7.4
EBIT	-3.1	-0.4	-0.9	-0.9	-1.4	-0.3	1.9	5.5
EBT	-3.9	-2.4	-2.1	-2.1	-2.1	-1.1	1.2	4.8
Net profit/loss	-3.9	-2.4	-2.1	-2.1	-2.1	-1.1	1.2	4.8
EPS	-0.15	-0.08	-0.06	-0.06	-0.05	-0.03	0.03	0.10
Growth								
Sales	Q1, 22	Q2, 22	Q3, 22E	Q4, 22E	Q1, 23E	Q2, 23E	Q3, 23E	Q4, 23E
Sales					74.9%	81.5%	295.1%	555.1%
Gross profit					1979.0%	6.3%	406.4%	763.9%
EBITDA					64.0%	254.7%	506.0%	1060.6%
EBIT					55.7%	21.5%	318.9%	730.7%
EBT					45.3%	55.5%	156.6%	328.0%
Net profit/loss					45.3%	55.5%	156.6%	328.0%
Margins								
Gross margin	Q1, 22	Q2, 22	Q3, 22E	Q4, 22E	Q1, 23E	Q2, 23E	Q3, 23E	Q4, 23E
Gross margin	4%	81%	40%	40%	42%	47%	51%	53%
EBITDA margin	-123%	-4%	-21%	-21%	-25%	3%	21%	31%
EBIT margin	-131%	-10%	-24%	-24%	-33%	-4%	13%	23%
EBT margin	-162%	-59%	-57%	-57%	-51%	-14%	8%	20%
Profit margin	-162%	-59%	-57%	-57%	-51%	-14%	8%	20%

Source: Company information and Carlsquare

Income statement (SEKm)

	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net sales	0	14	50	136	184	221	265	307	348	388	426
Total Sales	0	14	50	136	184	221	265	307	348	388	426
COGS	-1	-7	-25	-63	-83	-97	-114	-129	-144	-157	-169
Gross profit	-1	6	25	73	101	124	151	178	205	231	258
Other operating expenses	-4	-11	-16	-27	-38	-43	-52	-61	-70	-79	-89
EBITDA	-4	-5	10	46	64	80	99	117	135	152	169
Dep. and amort.	0	-1	-4	-9	-12	-14	-16	-19	-21	-23	-24
EBIT	-4	-5	6	37	52	66	83	98	114	129	144
Net finances	0	-5	-3	-4	-4	-4	-4	-4	-4	-3	-3
EBT	-5	-11	3	33	47	62	79	95	111	126	141
Tax	0	0	0	-4	-6	-7	-9	-11	-13	-15	-17
Net profit/loss	-5	-11	3	29	42	55	69	83	97	111	124
EPS	-0.06	-0.35	0.05	0.58	0.83	1.09	1.38	1.66	1.93	2.21	2.47
Shares, EoP	26.1	41.0	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
Shares, avg.	13.1	33.6	45.7	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
Growth	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net sales		NaN	265%	171%	35%	20%	20%	16%	13%	11%	10%
Gross profit		1230%	308%	187%	39%	22%	22%	18%	15%	13%	11%
EBITDA		-6%	305%	377%	38%	27%	23%	18%	15%	13%	11%
EBIT		-21%	206%	547%	40%	29%	24%	19%	16%	13%	11%
EBT		-131%	127%	1080%	43%	32%	26%	20%	17%	14%	12%
Net profit/loss		-131%	127%	940%	43%	32%	26%	20%	17%	14%	12%
EPS		-513%	114%	1048%	43%	32%	26%	20%	17%	14%	12%
Margins	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Gross profit	NaN	45%	51%	54%	55%	56%	57%	58%	59%	60%	60%
EBITDA margin	NaN	-34%	19%	34%	34%	36%	37%	38%	39%	39%	40%
EBIT margin	NaN	-39%	11%	27%	28%	30%	31%	32%	33%	33%	34%
EBT margin	NaN	-77%	6%	24%	26%	28%	30%	31%	32%	32%	33%
Profit margin	NaN	-77%	6%	21%	23%	25%	26%	27%	28%	29%	29%

Source: Company information and Carlsquare

Balance sheet (SEKm)

	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Tot. intangible assets	12	31	45	58	72	85	99	112	126	139	153
Tot. tangible assets	0	8	145	180	222	259	290	315	336	351	361
Tot. other fixed assets	0	5	5	5	5	5	5	5	5	5	5
Total fixed assets	12	45	195	243	299	349	394	433	467	495	519
Inventories	0	0	0	0	1	2	2	3	5	6	7
Other receivables	1	2	12	19	25	30	35	40	45	50	55
Cash	8	143	9	21	17	4	8	31	72	130	205
Total current assets	8	145	21	39	43	35	46	75	122	186	267
Total assets	20	189	215	283	342	384	440	508	588	681	786
Total equity	12	57	97	127	168	217	280	355	443	543	656
Other long-term liabilities	0	121	113	148	164	154	144	135	125	116	106
Tot. long-term liabilities	0	121	113	148	164	154	144	135	125	116	106
Accounts payable	0	1	5	7	10	12	14	16	18	20	22
Other liabilities	8	11	0	0	0	1	1	1	1	1	1
Accrued expenses and prepaid income	0	0	0	0	0	1	1	1	1	1	1
Tot. short-term debt	8	11	5	8	11	13	15	18	20	22	24
Total debt	8	133	118	156	174	167	160	152	145	138	130
Tot. equity and debt	20	189	215	283	342	384	440	508	588	681	786
Liquidity	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Current ratio	1.0	12.6	3.9	4.8	4.0	2.7	3.0	4.2	6.1	8.4	11.1
Cash ratio	0.9	12.5	1.7	2.5	1.6	0.3	0.6	1.8	3.6	5.9	8.5
Leverage	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net debt(-)/Net cash(+)	8	10	-109	-135	-157	-162	-151	-120	-72	-6	76
Net debt/EBITDA	NM	NM	-11.3x	-2.9x	-2.5x	-2.0x	-1.5x	-1.0x	-0.5x	0.0x	NM
Net debt/Equity	NM	NM	1.1x	1.1x	0.9x	0.7x	0.5x	0.3x	0.2x	0.0x	NM
Equity/Total Assets	58%	30%	45%	45%	49%	57%	64%	70%	75%	80%	83%
Efficiency	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
ROA	-22.8%	-5.6%	1.3%	10.3%	12.2%	14.3%	15.8%	16.4%	16.6%	16.3%	15.8%
ROE	-39.6%	-18.6%	2.9%	23.0%	24.9%	25.3%	24.8%	23.5%	22.0%	20.4%	18.9%
ROIC	-110.4%	-14.9%	2.8%	14.1%	16.0%	17.6%	19.3%	20.9%	22.4%	23.8%	25.2%

Source: Company information and Carlsquare

Cash flow (SEKm)

	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
CF operating activities	-9	7	38	50	64	79	94	109	123	137
Delta operating capital	-2	-6	-4	-4	-3	-4	-4	-4	-4	-4
CF operating activities	-12	1	35	45	60	75	90	105	119	133
CF investing activities	-36	-154	-58	-67	-64	-61	-58	-55	-51	-48
CF financing activities	184	19	35	19	-10	-10	-10	-10	-10	-10
Cash flow	135	-134	12	-3	-13	5	23	41	58	75
Exchange differences	0	0	0	0	0	0	0	0	0	0
Cash, BoP	0	0	0	0	0	0	0	0	0	0
Cash, EoP	143	9	21	17	4	8	31	72	130	205
Key ratios	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
CF operating activities/Net sales	NaN	7%	69%	33%	33%	34%	34%	34%	34%	34%
CF operating activities/Total assets	-61%	1%	16%	16%	18%	20%	21%	21%	20%	20%

Source: Company information and Carlsquare

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