



ERIK PENSER BANK

Penser Access | Oil, Gas & Consumable Fuels | Sweden | 18 August 2023

Maha Energy

Waiting for the next step

July production at 85% of H2 2022 levels

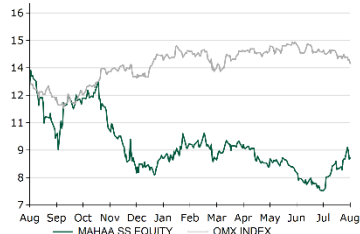
With Maha Offshore – the assets in Brazil that came with the acquisition of DBO 2.0 – contributing the vast majority, Maha produced almost 2,000 boepd of oil in Q2 and 2,175 boepd in July. For comparison, it produced an average of around 2,500 boepd in H2 2022. In other words, the new assets have already replaced a large part of the volumes lost through the divestment of Maha Brazil. We expect a further ramp-up of Offshore to a peak of 4.0–4.1 kboepd in 2027e–2028e.

Extension requested on initial phase of Block 70 in Oman

The minimum work obligations for the initial phase of the EPSA (exploration and production-sharing agreement) for Block 70 in Oman were finalised during Q2. Eight production wells were tested for the short term, with five wells producing oil at an average rate of 300 boepd per well; three had to be suspended. To improve the support for any decision regarding Block 70's declaration of commerciality (which would prompt additional further capex), Maha has asked the Omani authorities for an extension of the initial phase of the EPSA. No timeline has been disclosed for this.

Believe that further transactions are in the pipeline

After the end of the quarter, the company announced a change of management and board. The board has appointed one of DBO 2.0's founders, Kjetil Solbaekke, as CEO as the current CEO step into the chair of the board position. Maha currently has around USD 150m in cash, which is about to be deployed. Given its 50–60% debt financing, we estimate Maha's room for acquisitions is around USD 250m. Using similar multiples as for the acquisition of DBO 2.0, we believe Maha could add some USD 1bn in assets. As the current asset value is about USD 175m, this would imply a significant change in Maha's profile. We deconsolidate all assets except Illinois Basin in the US in our estimates and add the equity contribution from Maha Offshore. Based on our NPV analysis, we see a fair value of SEK 17–19 for Maha.

Change in estimates				Forecast (US\$ m)					Value and risk													
	23e	24e	25e		2022	2023e	2024e	2025e	Fair value	SEK 17,0 - 19,0												
Total revenue	-56,1%	-93,9%	-92,2%	Total revenue	12	7	4	4	Share price	SEK 9,0												
EBITDA, adj.	N.m.	3,4%	48,8%	Revenue growth	-82%	-43%	-48%	0%	Risk level	High												
EPS, adj.	-15,5%	47,1%	>100%	EBITDA, adj.	0	0	27	30	<div>Price Performance 12 months</div> 													
Upcoming events				EBIT, adj.	-3	-2	25	28														
Q3 - report	14 November 2023			EPS, adj.	-0,1	0,0	0,1	0,1														
Company facts (USDm)				EPS growth, adj.	N.m.	N.m.	N.m.	12%														
Number of shares	178m			BV/share	1,2	0,9	1,1	1,2														
Market capitalisation	147			Dividend per share	0,0	0,0	0,0	0,0	<div>Conflicts of interest</div> <table><tr><th></th><th>Yes</th><th>No</th></tr><tr><td>Liquidity provider</td><td></td><td>✓</td></tr><tr><td>Certified adviser</td><td></td><td>✓</td></tr><tr><td>Transactions 12m</td><td></td><td>✓</td></tr></table>			Yes	No	Liquidity provider		✓	Certified adviser		✓	Transactions 12m		✓
	Yes	No																				
Liquidity provider		✓																				
Certified adviser		✓																				
Transactions 12m		✓																				
Net debt	-119 603			EBIT margin	Neg.	Neg.	>100%	>100%														
EV	147			ROE, adj.	Neg.	Neg.	13,1%	12,9%														
Free float	72%			ROCE, adj.	Neg.	1,3%	12,7%	12,6%														
Daily trading volume, average	388k			EV/Sales	11,7x	20,9x	40,6x	40,8x														
Bloomberg Ticker	MAHAA SS EQUITY			EV/EBITDA	-	-	5,4x	4,8x														
Analyst				EV/EBIT	-	-	5,8x	5,2x														
				P/E, adj.	-	-	6,3x	5,6x														
				P/BV	0,7x	0,9x	0,8x	0,7x														
Markus Almerud				Net debt / EBITDA	-63,6x	603,4x	-4,1x	-3,7x														
markus.almerud@penser.se																						

Investment case

Divestment of Maha Brazil puts cash position in line with the market cap...: Since the end of September 2022, when the Brazilian investment firm Starboard became its main owner, we have seen a transformation of Maha. A key part of this has been the announced sale of Maha Brazil (including the Tie field and Tartaruga) for USD 138m plus potential earn-outs. Adding together the cash at the end of Q2 and the proceeds from the capital raise in mid-December, Maha's cash position will be in line with its current market cap.

...decreasing the risk in the share: Maha has experienced several problems in recent years, inhibiting the market's confidence in the company, we believe. That the market cap will now largely equal the cash position decreases the risk, in our view. It is still uncertain what the proceeds from the divestment will be used for, but downside in the share should nonetheless be curbed.

DBO transaction brought in new assets at an attractive price: The combination of DBO and Maha, with DBO's assets being brought in at 0.20–0.25x NAV, implies a production profile that should hold lower risk than Tie and Tartaruga. The reserves and resources have been certified by renowned third parties and the assets are operated by 3R Offshore, a factor that decreases the execution risk, in our view.

After transforming the company, management intends to increase market communication: After announcing the DBO transaction and the sale of Maha Brazil, the new management team will, we believe, increase communication with the market, which could be a catalyst for a share.

Company profile

Maha Energy is a listed Swedish upstream oil and gas (O&G) producer. The company has begun a transformation that includes the sale of Maha Brazil and the acquisition of DBO 2.0, providing new assets in Brazil. After closing the ongoing transactions, Maha will have five assets in three countries: Peroá and Papa Terra in Brazil, LAK and Illinois in the US, and Mafrag in Oman.

- Peroá is a gas cluster located in the Espírito Santo basin, offshore Brazil, in shallow waters. Approximately 72% gas has been recovered, and the cluster has a 55 km hgas pipeline connection to the Cacimbas gas processing plant operated by Petrobras. The unmanned platform has opex of around USD 5/boe.
- Papa Terra is a heavy oil field located in deep waters in the Campos Basin, approximately 100 km off the coast of Rio de Janeiro, Brazil. The asset has six years of operations and the offtaker is under negotiation. Around 2% of the oil has been recovered so far.
- Illinois Basin is a conventional light oil field that has so far produced around 4m boe, with an estimated 10m boe to be extracted in the known field in the basin.
- LAK Ranch is a heavy oil field that has so far produced around 150,000 boe. The field is currently not producing.
- Mafrag is a shallow, undeveloped heavy oil field in Block 70, which is in the oil-rich, producing Ghaba basin in central Oman.

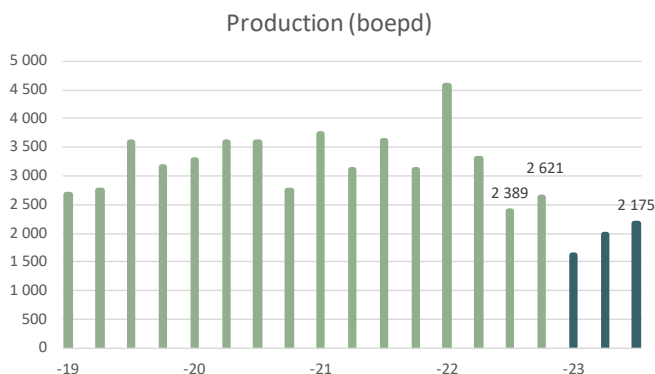
Valuation

We value Maha's assets using inputs from external sources. We value the assets using NPV analysis with a WACC of 10%. Our fair value is some USD 290m, corresponding to a fair value range of SEK 17–19 per share.

Brief overview of the quarter

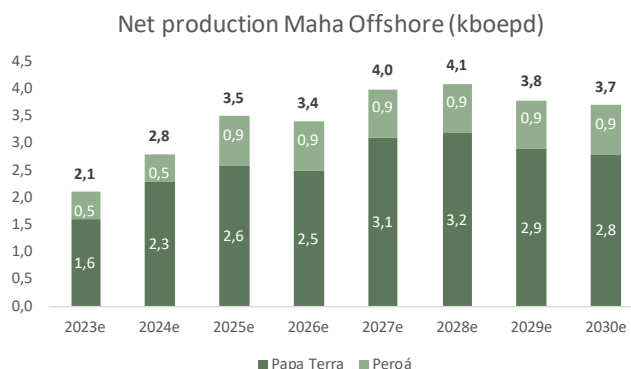
The transition of Maha continued in Q2. The transaction with DBO 2.0 closed on 23 May, and Peroá and Papa Terra – in which Maha holds 15% and 9.375% working interest – were formed into Maha Offshore. Pro forma, Maha produced almost 2,000 boepd in Q2, which increased to 2,175 boepd in July (chart 1). The production in Maha Offshore will continue to ramp up in coming years (chart 2) but we note that July's production was at 85–90% of the levels achieved in H2 2022. Peroá reached lifting costs of USD 5.8/boe, while Papa Terra saw USD 30.1/boe.

Chart 1: July production reached almost 90% of the H2 2022 average...



Source: Company, EPB

Chart 2: ...and production in Maha Offshore will continue to expand



Source: Company, EPB

The initial phase of the EPSA (exploration and production-sharing agreement) for Block 70 in Oman is approaching its conclusion (October 2023) and the minimum work obligations were finalised during Q2. Eight production wells were tested for the short term. Five of them produced oil at an average rate of 300 boepd per well, while three wells had to be suspended. The oil produced had higher viscosity than anticipated and Maha is now scaling up the chemical treatment of the oil to enhance flowability. 4,000 boe is currently stored, awaiting shipment and as soon as it is offloaded, Maha intends to restart production.

To improve the support for any decision regarding Block 70's declaration of commerciality (which would prompt additional capex), Maha has asked the Omani authorities for an extension of the initial phase of the EPSA. No timeline has been disclosed for this.

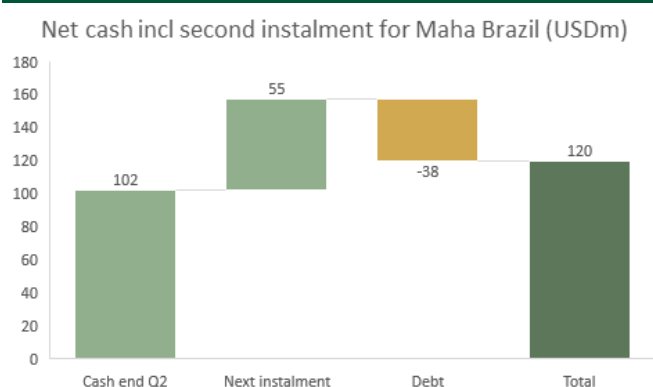
On 11 August, the company announced that the current CEO, Paulo Thiago Mendonca, is proposed to end the EGM as the chair of the board. Kjetil Solbaekke, who has more than 30 years of experience from various positions in the Norwegian oil and gas sector, including being a co-founder of DBO 2.0, will be appointed as the new CEO. The EGM is planned for 18 September.

Valuation

Including the next instalment of the payment for Maha Brazil (USD 55m), which is due during August, Maha had cash of around USD 157m at the end of the quarter (chart 3), implying net debt of USD 120m after deducting bank debt. We note the current market cap is largely in line with the cash position, while net debt represents some three-quarters of the market cap (chart 4).

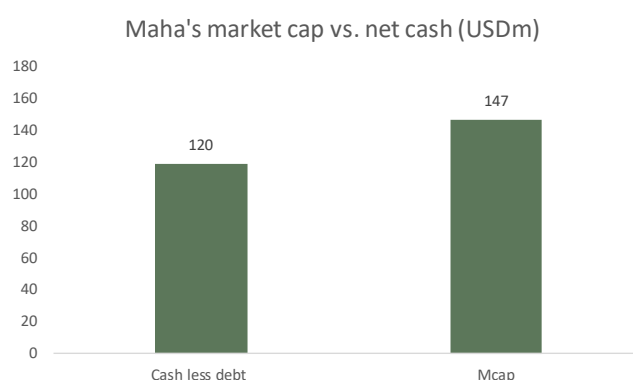
Maha will utilise the cash in new transactions to be made using a mixture of equity and debt. During the conference call, management suggested the targeted level of equity used would be 40–50% and that the cash chest for acquisitions is thus around USD 250m. The DBO transaction was made at 0.23x NAV (using 1P and 2P reserves), and assuming similar multiples for the next transaction, Maha could add around USD 1bn in NPV by deploying its cash.

Chart 3: USD 157m in cash and USD 120m in net debt



Source: Company, EPB

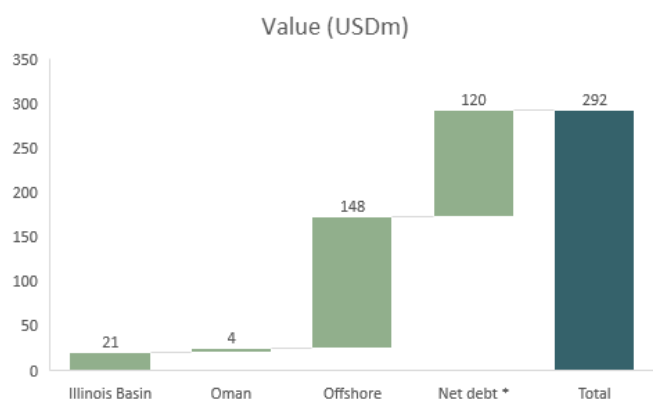
Chart 4: Net cash accounts for around three-quarters of market cap...



Source: Company, EPB

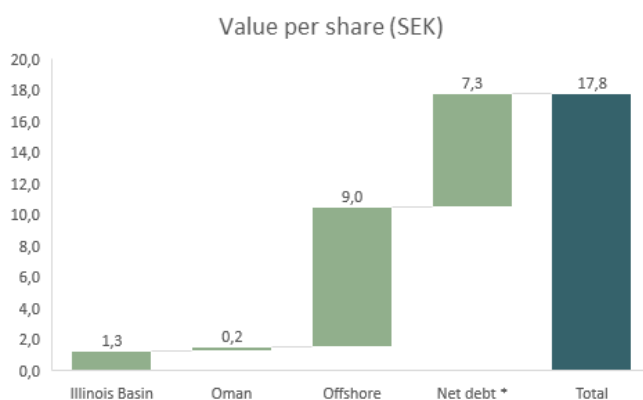
We value Maha using a sum-of-the-parts model employing external sources for the NPV calculations. The value of the assets includes 1P and 2P reserves, while we assign no value to 3P resources. Offshore accounts for some 85% of the asset value. We estimate the total equity value at almost USD 300m, of which net cash accounts for around 40%. This corresponds to SEK 18 per share.

Chart 5: ...and the accumulated asset value is USD 173m plus net cash...



Source: EPB

Chart 6: ...which corresponds to around SEK 18 per share



Source: EPB

Table 1: DCF – key assumptions and conclusions

Valuation output		WACC assumptions		Terminal value assumptions	
Sum of PV of FCF (explicit period)	105	Risk free nominal rate	2,5%	Long term growth rate	0,0%
PV of terminal value (perpetuity formula)	0	Risk premium	5,5%	Long term EBIT margin	0,0%
Enterprise value	105	Small cap premium	4,0%	Depreciation (% of sales)	2,0%
Latest net debt	-120	Extra risk premium	0,0%	Capex (% of sales)	2,0%
Minority interests & other	0	WACC	12,0%	Working cap. (% of sales)	0,0%
Equity value	224			Tax rate	26%
No. of shares outstanding (millions)	178				
Equity value per share (USD)	1,3				
USD/SEK	10,91				
Equity value per share (SEK)	14				

Source: EPB

Table 2: DCF – sensitivity

Sensitivity analysis

		Long-term growth rate							Long-term EBIT margin				
		2,0%	2,5%	3,0%	3,5%	4,0%			25,0%	27,5%	30,0%	32,5%	35,0%
WACC	10,0%	1,34	1,34	1,34	1,34	1,34	WACC	10,0%	1,34	1,34	1,34	1,34	1,34
	11,0%	1,30	1,30	1,30	1,30	1,30		11,0%	1,30	1,30	1,30	1,30	1,30
	12,0%	1,26	1,26	1,26	1,26	1,26		12,0%	1,26	1,26	1,26	1,26	1,26
	13,0%	1,22	1,22	1,22	1,22	1,22		13,0%	1,22	1,22	1,22	1,22	1,22
	14,0%	1,18	1,18	1,18	1,18	1,18		14,0%	1,18	1,18	1,18	1,18	1,18

Source: EPB

Income statement									
	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
Net sales	15	38	56	39	68	12	7	4	4
Total revenue	15	38	56	39	68	12	7	4	4
Gross profit	15	38	56	39	68	12	7	4	4
Other Operating Expenses	-11	-16	-20	-21	-21	-13	-7	24	27
EBITDA	3	22	36	-3	48	0	0	27	30
Items affecting comparability	0	0	0	-21	0	0	0	0	0
EBITDA, adjusted	3	22	36	18	48	0	0	27	30
Depreciation	-2	-3	-7	-6	-9	-3	-2	-2	-2
EBITA, adjusted	1	20	29	12	39	-3	-2	25	28
EBIT	1	20	29	-9	39	-3	-2	25	28
EBIT, adjusted	1	20	29	12	39	-3	-2	25	28
Net Financial Items	-4	-5	-4	-5	-10	-9	-3	-2	-2
Profit before tax	-3	15	25	-14	29	-13	-5	23	26
Profit before tax, adjusted	-3	15	25	7	29	-13	-5	23	26
Taxes	0	11	-5	3	-8	0	0	0	0
Net income	-3	26	20	-10	22	-13	-5	23	26
Net income, adjusted	-3	26	20	11	22	-13	-5	23	26
<i>Sales Growth</i>	-	>100%	46%	-30%	75%	-82%	-43%	-48%	0%
<i>Gross Margin</i>	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
<i>EBIT Margin, Adjusted</i>	6,9%	52,0%	52,5%	31,4%	57,4%	Neg.	Neg.	>100%	>100%
<i>EPS, Adjusted</i>	-0,03	0,25	0,18	0,10	0,19	-0,10	-0,03	0,13	0,15
<i>EPS Growth, Adjusted</i>	-	N.m.	-27%	-45%	89%	N.m.	N.m.	N.m.	12%

Source: Maha Energy, EPB

Cash flow statement									
	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
EBIT	1	20	29	-9	39	-3	-2	25	28
Other Cash flow Items	-2	-1	0	28	-8	58	-9	-27	-30
Cash flow from operating activities	-1	18	29	19	31	55	-11	-2	-2
Investments in Fixed Assets	-2	-13	-28	-20	-44	-48	0	0	0
Investments in intangible fixed assets	-1	-3	-1	0	-3	-15	1	0	0
Cash Flow From Investments	-3	-16	-28	-20	-47	-63	1	0	0
Free cash flow	-4	3	0	-1	-16	-8	-10	-2	-2
Acquisitions & Divestments	-33	0	0	-15	0	0	151	0	0
New share issue / repurchase	18	0	0	0	9	19	0	0	0
Change in liabilities	33	0	0	0	19	-11	-27	2	2
Other items	-3	2	3	2	8	-1	0	0	0
Cash flow from financing	15	2	3	-13	36	6	124	2	2
Cash flow	11	4	3	-14	20	-2	114	0	0
Net debt	14	11	9	34	33	27	-114	-113	-111

Source: Maha Energy, EPB

Balance sheet

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
ASSETS									
Tangible fixed assets	47	59	76	86	113	14	12	10	8
Shares in associated companies	0	0	0	0	0	0	31	58	88
Other fixed assets	18	32	30	27	22	184	31	31	31
Total fixed assets	65	91	106	112	135	198	74	99	127
Accounts receivable	2	4	5	3	6	1	0	0	0
Other current assets	4	3	3	1	1	1	0	0	0
Cash and cash equivalents	19	20	22	7	26	20	134	134	134
Total current assets	25	28	30	12	33	21	134	134	134
TOTAL ASSETS	90	119	136	124	168	218	208	233	261
EQUITY AND LIABILITIES									
Equity	48	69	88	56	91	141	166	190	216
Total equity	48	69	88	56	91	141	166	190	216
Long-term interest-bearing liabilities	33	31	31	0	44	27	0	2	4
Long-term lease liabilities	0	0	0	3	2	0	0	0	0
Other long-term liabilities	2	10	10	7	3	22	22	22	22
Total long-term liabilities	35	41	41	11	50	48	22	23	25
Short-term interest-bearing liabilities	0	0	0	36	11	20	20	20	20
Accounts payable	4	4	5	11	10	4	0	0	0
Short-term lease liabilities	0	0	0	1	1	0	0	0	0
Other current liabilities	4	5	2	10	5	6	0	0	0
Total current liabilities	8	9	7	58	27	29	20	20	20
TOTAL EQUITY AND LIABILITIES	90	119	136	124	168	218	208	233	261

Source: Maha Energy, EPB

Growth and margins

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
Revenue growth	-	>100%	46%	-30%	75%	-82%	-43%	-48%	0%
EBITDA growth, adjusted	-	>100%	60%	-50%	>100%	N.m.	N.m.	N.m.	11%
EBIT growth, adjusted	-	>100%	47%	-58%	>100%	N.m.	N.m.	N.m.	12%
EPS growth, adjusted	-	N.m.	-27%	-45%	89%	N.m.	N.m.	N.m.	12%
Gross margin	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
EBITDA margin	22,0%	58,8%	64,5%	Neg.	69,9%	Neg.	Neg.	>100%	>100%
EBITDA margin, adjusted	22,0%	58,8%	64,5%	46,4%	69,9%	Neg.	Neg.	>100%	>100%
EBIT margin	6,9%	52,0%	52,5%	Neg.	57,4%	Neg.	Neg.	>100%	>100%
EBIT margin, adjusted	6,9%	52,0%	52,5%	31,4%	57,4%	Neg.	Neg.	>100%	>100%
Profit margin, adjusted	Neg.	67,3%	35,4%	27,5%	31,6%	Neg.	Neg.	>100%	>100%

Source: Maha Energy, EPB

Return

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
ROE, adjusted	Neg.	44%	25%	15%	29%	Neg.	Neg.	13%	13%
ROCE, adjusted	Neg.	23%	27%	11%	32%	Neg.	1%	13%	13%
ROIC, adjusted	Neg.	28%	33%	13%	37%	Neg.	Neg.	39%	31%

Source: Maha Energy, EPB

Capital efficiency

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
Inventory / total revenue	2%	0%	1%	1%	0%	1%	-	-	-
Accounts receivable / total revenue	15%	11%	9%	8%	9%	5%	5%	5%	4%
Total short-term liabilities / total cost	68%	56%	36%	>100%	>100%	>100%	>100%	-84%	-74%
Working capital / total revenue	-9%	-2%	2%	-40%	-11%	-67%	-2%	-2%	-3%
Capital turnover rate	0,2x	0,4x	0,5x	0,4x	0,5x	0,1x	0,0x	0,0x	0,0x

Source: Maha Energy, EPB

Financial position

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
Net debt	14	11	9	34	33	27	-114	-113	-111
Equity ratio	53%	58%	65%	45%	54%	65%	80%	81%	83%
Net debt / equity	0,3x	0,2x	0,1x	0,6x	0,4x	0,2x	-0,7x	-0,6x	-0,5x
Net debt / EBITDA	4,3x	0,5x	0,2x	-11,8x	0,7x	-63,6x	603,4x	-4,1x	-3,7x

Source: Maha Energy, EPB

Per share data

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
EPS	-0,03	0,25	0,18	-0,10	0,19	-0,10	-0,03	0,13	0,15
EPS, adjusted	-0,03	0,25	0,18	0,10	0,19	-0,10	-0,03	0,13	0,15
FCF per share	-0,05	0,03	0,00	-0,01	-0,14	-0,07	-0,05	-0,01	-0,01
Dividend per share	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Book value per share	0,56	0,68	0,81	0,52	0,81	1,16	0,93	1,06	1,21
Number of shares, m	86,6	102	108	106	113	121	179	179	179
Number of shares after dilution, average	86,6	102	108	106	113	121	179	179	179

Source: Maha Energy, EPB

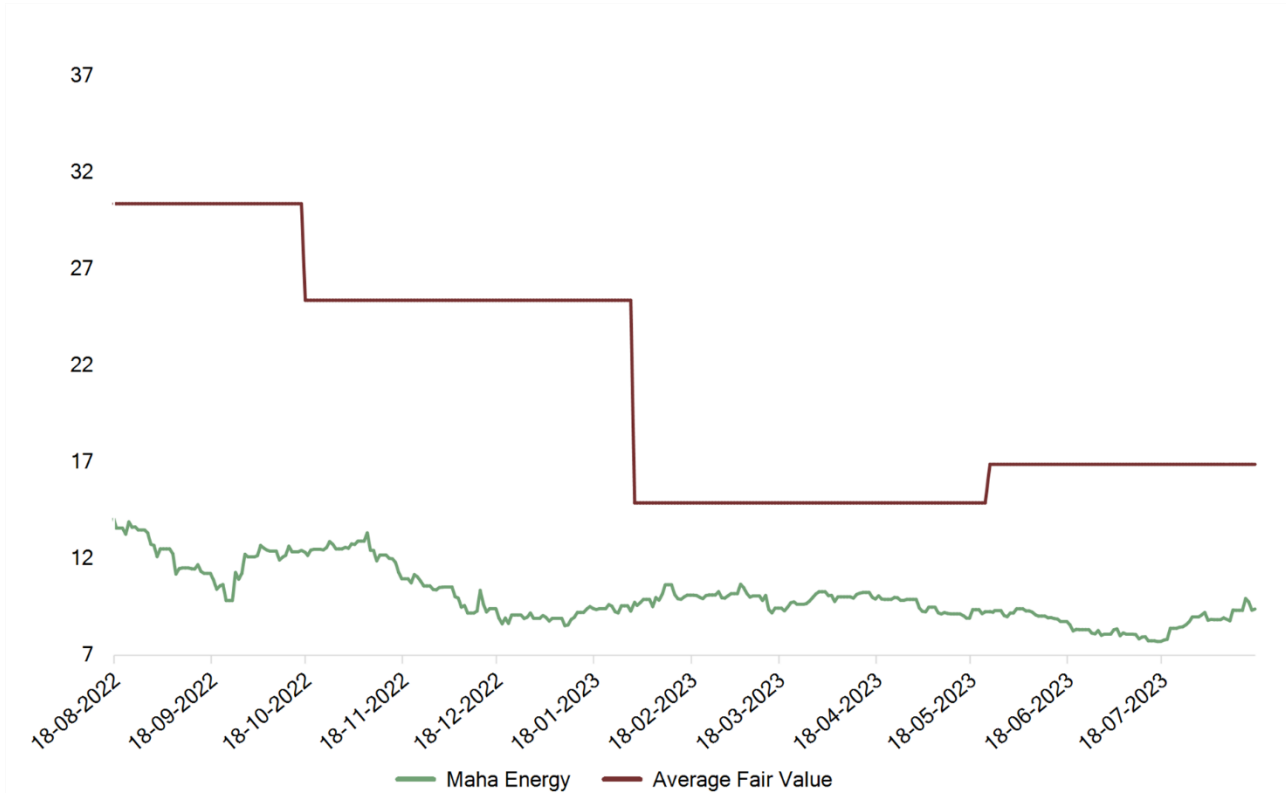
Valuation

	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e
P/E, adjusted	Neg.	5,8x	14,6x	18,0x	6,4x	Neg.	Neg.	6,3x	5,6x
P/BV	1,3x	2,2x	3,3x	3,5x	1,5x	0,7x	0,9x	0,8x	0,7x
P/FCF	Neg.	53,5x	583,7x	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
FCF-yield	Neg.	2%	0%	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.
Dividend yield	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Payout ratio, adjusted	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
EV/Sales	5,3x	4,0x	4,9x	5,6x	2,6x	11,7x	20,9x	40,6x	40,8x
EV/EBITDA, adjusted	24,1x	6,9x	7,6x	12,0x	3,8x	Neg.	Neg.	5,4x	4,8x
EV/EBIT, adjusted	76,7x	7,8x	9,3x	17,8x	4,6x	Neg.	Neg.	5,8x	5,2x
EV	77	154	272	218	180	144	147	147	147
Share price, year end	0,7	1,5	2,6	1,8	1,2	0,8	0,8	0,8	0,8

Source: Maha Energy, EPB

Share Price and Fair Value Chart

Maha Energy (MAHAA SS EQUITY)



Source: EPB, IDC

Disclosure

This publication ("the Publication") has been prepared by Erik Penser Bank AB ("the Bank") for information purposes and for general distribution, and is not intended to be advisory. The Bank is authorised to conduct banking and securities business and is regulated by Finansinspektionen (the Swedish Financial Supervisory Authority). The contents of the Publication were based on information from publicly available sources that the Bank believes to be reliable. The Bank can, however, never guarantee the accuracy or completeness of the information contained in the Publication or of any forecasts and recommendations provided.

As an aspect of preparing the Publication, the analysed company ("the Company") has verified the factual content of the Publication. The Company is, however, never able to influence the parts of the Publication that present conclusions or valuations.

Views provided in the Publication represent the analyst's own views at the time the Publication was prepared and these views may change. The Bank provides no assurance that future events will be consistent with the views expressed in the Publication. The information provided in the Publication should not be construed as advice or solicitation to execute transactions. Nor is the information directed at the individual recipient's knowledge about and experience with investments or the recipient's financial situation or investment objectives. The Publication thus does not constitute investment advice and should not be construed as such. This means that investment decisions based on the Publication are always made independently by the investor and the Bank thus disclaims any and all liability for any loss or direct or indirect injury arising from the use of this Publication. Investments in financial instruments are associated with financial risk, as they may both increase or decrease in value. Past performance of an investment is not a guaran-tee of future performance.

Fair value and risk

The fair value reflects the value of the share on the date the research was published within a range of approximately 5-10%. The Bank uses several different valuation models to value financial instruments including but not limited to discounted cash flow models, multiple valuation and sum-of-the-parts estimates.

The stated fair value in the research report should not be interpreted as a target price. It is a theoretical value that the shares in this report could be valued at if all our assumptions are correct, and that no unknown negative factors materialize. Even if our assumptions for P&L, balance sheet and cash flow are correct, it is possible that the share price is not valued according to our assumptions, as share prices often are priced at a premium or at a discount to a theoretical value.

The valuation method and approach used to determine fair value are specified in the analysis and may vary from one company to the next. Material assumptions used in the valuation are based on market data available at any given time and upon a scenario for a company's future performance that we believe to be reasonable. The valuation method should be read together with the risk classification. Regarding risk classification: The share is classified according to a High/Medium/Low scale, based on several known metrics that are relevant to the Company. A general guideline for a "low risk" classification is that the Company has positive cash flow and that no individual factor affects revenues by more than 20%. A corresponding general description of "high risk" is that the Company has not achieved positive cash flow or that an individual factor affects revenues by more than 50%.

For more detailed information about valuation models, click [here](#).

General

The Publication shall not be duplicated or distributed without the Bank's consent. The Publication shall not be distributed or made available to any natural or legal person in the United States of America (except as provided in Rule 15a – 16, Securities Exchange Act of 1934), Canada or any other country in which distribution and availability of the contents of the Publication are restricted by law.

The Bank's Research Department is governed by organisational and administrative rules established to deter and prevent conflicts of interest and to assure the objectivity and independence of analysts. In order to deter conflicts of interest, the Bank has taken actions including preventing unauthorised spread of information, also known as "Chinese Walls". The Research Department is thus physically segregated from the Corporate Finance Department, which is also not allowed to participate in producing a publication or to express views regarding a publication. The Bank also has internal rules designed to manage any conflicts of interest among the analyst, the Company and the Bank.

It may, however, occur from time to time that the Bank performs services for a company that is mentioned in a Publication. The Bank may, for example, act as an adviser to or issuing institution for the Company or as a liquidity provider for a security issued by the Company. This is disclosed in the Publication if applicable. The Bank, its owners, directors, or employees may own shares in the analysed company. The Bank has, however, established internal restrictions concerning employee trading in financial instruments that are the subject of analysis and has designed internal rules for employees' personal transactions that apply to analysts. All employees of the Bank are required to report all holdings of securities and all transactions. The analyst that prepared the Publication and other contributors who have knowledge of the conclusions of the analysis are not allowed to trade on their own account in the relevant financial instrument or related financial instruments.

The Bank pays salary to the analyst which may also consist of a share in the Bank's profits but is never dependent upon the financial performance of another department.

The research presented in the Publication has been performed in accordance with the terms and conditions of the "Penser Access" service that the Bank provides to the Company. [Click here](#) for more information about the service.

Unless otherwise expressly stated in the Publication, the analysis will be updated quarterly and whenever the Bank's Research Department finds it necessary due to, for example, material changes in market conditions or events related to the analysed company or financial instrument.

The Bank is remunerated by the Company for the Penser Access service.

Erik Penser Bank (publ.)
Apelbergsgatan 27 Box 7405 103 91 STOCKHOLM
Tel: +46 8 463 80 00 Fax: +46 8 678 80 33 www.penser.se