(SDAX, Renewables, PNE3 GR)



Buy EUR 26.70		Value Indicators: SotP:		Warburg ESG Risk Score: ESG Score (MSCI based): Balance Sheet Score: Market Liquidity Score:	2.5 3.0 2.5 2.0	Description: Project developer and opera renewable energy parks.	tor of
		Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2023e
		Market cap:	1,056.0	Freefloat	30.61 %	Beta:	1.4
Price	EUR 13.84	No. of shares (m):	76.3	MSIP	44.20 %	Price / Book:	4.9 x
Upside	92.9 %	EV:	1,635.0	Active ownership fund SCS	11.99 %	Equity Ratio:	21 %
		Freefloat MC:	323.2	Goldman Sachs Group	5.12 %	Net Fin. Debt / EBITDA:	19.1 x
		Ø Trad. Vol. (30d):	1.00 m	Enkraft	5.03 %	Net Debt / EBITDA:	19.1 x

International project sales enable guidance to be met

PNE has announced the successful sale of project rights for several PV projects in Romania (61.5 MWp) and Italy (114 MWp). As usual, the sale of project rights takes place at an earlier development phase, but PNE will remain responsible for the final development stages as a servicer. We expect PNE to receive a total project margin of EUR 11-13m in 2023 and further milestone payments of EUR 2-4m in the years thereafter.

Portfolio expansion remains a burden on the P&L: Although the sale of project rights bolsters the margin contribution of the development segment, expenses for capacity additions remain the key driver of the P&L. PNE has so far added 65 MW in 2023. It plans to start construction for 69.6MW in Q4 and aims to commission up to 58.9MW in the next months. The very high construction activity means the expenses recognised in the P&L are higher than our previous expectations, resulting in a lower EBITDA contribution from the development segment. Hence, we reduce our 2023 EBITDA estimate to the lower end of the guidance range (EUR 30-40m EBITDA).

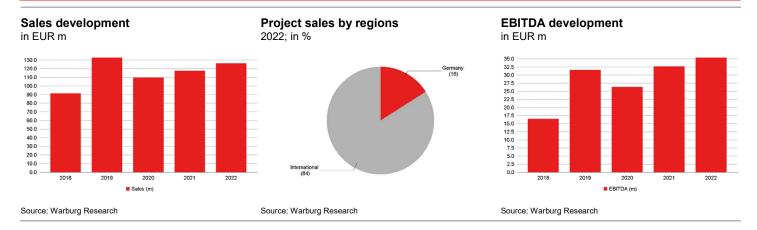
In the coming years, however, the steep growth in in-house capacities should enable PNE to generate a higher and more stable EBITDA, even if further projects are built for the in-house portfolio. In our view, the years 2022-2024 mark a transition phase for PNE's P&L due to its strategic realignment. In the medium term, the value-add of the operated assets should more than compensate for the short-term headwinds. We remain buyers of the stock and reiterate our price target and Buy recommendation.

Changes in E	Estimates:						Comment on Changes:
FY End: 31.12. in EUR m	2023e (old)	+ / -	2024e (old)	+ / -	2025e (old)	+ / -	• We have lowered our EBITDA estimate for FY 2023, reflecting higher expenses for parks under construction.
Sales EBITDA	180.1 37.9	0.0 % -14.5 %	204.0 58.2	0.0 % 0.0 %	228.4 74.7	0.0 % 0.0 %	 Including the margin contribution from the sold project rights, we now expect PNE to deliver an EBITDA close to the lower end of the guidance.

22.5 Marchan Marchan mar	FY End: 31.12. in EUR m	CAGR (22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
22.5 - With the work working when	Sales	21.9 %	132.8	109.7	117.7	126.2	180.1	204.0	228.4
20 -	Change Sales yoy		45.3 %	-17.4 %	7.3 %	7.2 %	42.8 %	13.3 %	11.9 %
	Gross profit margin		57.5 %	68.5 %	73.0 %	79.7 %	55.5 %	64.5 %	66.8 %
17.5	EBITDA	28.2 %	31.6	26.4	32.7	35.4	32.4	58.2	74.7
	Margin		23.8 %	24.0 %	27.8 %	28.1 %	18.0 %	28.5 %	32.7 %
15 -	EBIT	32.9 %	18.9	8.2	9.3	6.2	-6.0	10.6	14.5
1 mary a	Margin		14.3 %	7.5 %	7.9 %	4.9 %	-3.4 %	5.2 %	6.4 %
12.5 - V W W	Net income	-	0.7	1.6	25.1	14.9	-17.8	-5.6	-3.4
03/23 05/23 07/23 09/23 11/23 01/2	EPS	-	0.01	0.02	0.33	0.20	-0.23	-0.07	-0.04
PNE AG — SDAX (normalised)	EPS diluted	-	0.01	0.02	0.33	0.20	-0.23	-0.07	-0.04
PIVE AG - SDAX (normalised)	DPS	0.0 %	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Rel. Performance vs SDAX:	Dividend Yield		1.3 %	0.8 %	0.5 %	0.3 %	0.3 %	0.3 %	0.3 %
	FCFPS		-0.56	-1.09	-1.17	-1.37	-2.15	0.55	0.74
1 month: 6.7 %	FCF / Market cap		-18.7 %	-20.5 %	-15.4 %	-9.5 %	-15.5 %	4.0 %	5.4 %
6 months: -6.2 %	EV / Sales		2.7 x	6.1 x	8.1 x	12.3 x	9.3 x	8.0 x	6.9 x
Year to date: n/a	EV / EBITDA		11.3 x	25.3 x	29.0 x	43.9 x	51.7 x	28.1 x	21.2 x
Trailing 12 months: -47.2 %	EV / EBIT		18.8 x	81.5 x	102.4 x	251.6 x	n.a.	154.8 x	109.0 x
ç	P/E		298.3 x	265.6 x	23.0 x	72.2 x	n.a.	n.a.	n.a.
Company events:	FCF Potential Yield	l	4.9 %	3.3 %	4.9 %	1.1 %	1.8 %	3.2 %	4.3 %
27.03.24 FY 2023	Net Debt		129.0	260.5	368.8	451.2	618.0	579.1	525.3
09.05.24 Q1	ROCE (NOPAT)		1.2 %	n.a.	14.4 %	0.6 %	n.a.	1.0 %	1.5 %
30.05.24 AGM	Guidance:	PNE 2023: EE	BITDA EUR 3	30-40m					
08.08.24 Q2									

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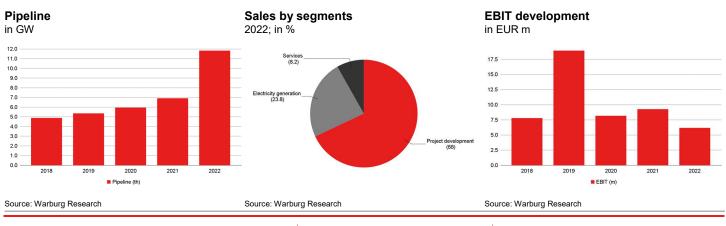


Company Background

- PNE (formerly PNE Wind) is a wind farm project developer based in Cuxhaven. It is active in both the onshore and offshore markets and as an Independent Power Producer (IPP).
- In the onshore sector PNE develops, constructs and sells wind farms to utilities and infrastructure funds. In addition, PNE remains owner of some of the projects.
- Outside of its domestic market, the PNE group is active in France, South Africa, Turkey, USA and Canada etc. In the international markets the company has over 17.6GW in development and in Germany >2.5 GW.
- In the offshore sector, the company develops and sells the development rights prior to construction. The company has sold eight offshore projects in total four of which are already in operation.
- PNE remains the owner of some of the wind farms. Currently, the company owns 348 MW of onshore wind capacity and aims to reach 1.5 GW by 2027.

Competitive Quality

- PNE's core skills lie in the development, project management, realization and financing of wind farms and their management, or sale with subsequent service.
- PNE's strengths lie in the development and sale of wind farms even in difficult market conditions, supported by its onshore and offshore track record.
- PNE has a competitive advantage in serving every step of the value chain. It also benefits from the cooperation with strong partners such as Allianz Global Investors Orstedt (DONG Energy), Brookfield and STEAG.
- PNE is well managed by a very experienced team led by CEO Markus Lesser and CFO Jörg Klowat
- In 2020, PNE decided to extend its activities by the operation of a renewable energy portfolio. The company aims to build-up a 1.5 GW portfolio by 2027.





Sum of the parts

Business unit	Enterprise value (mEUR)	EV / share	% of total EV	Applied WACC
Project development	1.169,85	15,32	46,94%	Multiple based
Power generation	1.156,19	15,15	46,39%	2,80%
Services	166,14	2,18	6,67%	5,79%
Total value	2.492,19	32,65	100,00%	
- Financial liabilites	572,81			
- Pension provisions	0,00			
- Hybrid capital	0,00			
 Minority interest 	-5,59			
+ Liquid assets	121,58			
Equity value	2.035,37			
No. of shares	76,34			
Value per share	26,66			

- We value PNE based on a SotP approach
- For the project development segment we apply a multiple-based valuation approach
- The power generation and service segment are valued based on a DCF-model
- This apporach reflects the diversity of PNE's business units and differences in risk profile.
- Especially the different capital costs for each segment can be differentiated adequately.

• We value PNE on a SotP approach. For project development, we employ a multiple-based valuation approach.

• For power generation and services, we apply a separate DCF-model.

• This approach reflects the diversity of PNE's business units and differences in risk profile.

• Especially the different capital costs for each segment can be differentiated adequately.



Valuation							
	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	1.0 x	2.0 x	2.5 x	4.6 x	4.9 x	5.1 x	5.2 x
Book value per share ex intangibles	2.21	1.88	2.17	2.27	1.99	1.88	1.80
EV / Sales	2.7 x	6.1 x	8.1 x	12.3 x	9.3 x	8.0 x	6.9 x
EV / EBITDA	11.3 x	25.3 x	29.0 x	43.9 x	51.7 x	28.1 x	21.2 x
EV / EBIT	18.8 x	81.5 x	102.4 x	251.6 x	n.a.	154.8 x	109.0 x
EV / EBIT adj.*	18.8 x	81.5 x	102.4 x	251.6 x	n.a.	154.8 x	109.0 x
P / FCF	n.a.	n.a.	n.a.	n.a.	n.a.	25.1 x	18.6 x
P/E	298.3 x	265.6 x	23.0 x	72.2 x	n.a.	n.a.	n.a.
P / E adj.*	298.3 x	265.6 x	23.0 x	72.2 x	n.a.	n.a.	n.a.
Dividend Yield	1.3 %	0.8 %	0.5 %	0.3 %	0.3 %	0.3 %	0.3 %
FCF Potential Yield (on market EV)	4.9 %	3.3 %	4.9 %	1.1 %	1.8 %	3.2 %	4.3 %
*Adjustments made for: -							

Company Specific Items							
	2019	2020	2021	2022	2023e	2024e	2025e
Pipeline	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.

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Consolidated profit & loss



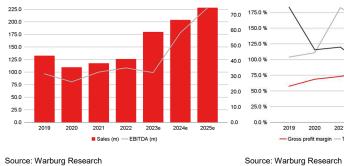
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	132.8	109.7	117.7	126.2	180.1	204.0	228.4
Change Sales yoy	45.3 %	-17.4 %	7.3 %	7.2 %	42.8 %	13.3 %	11.9 %
Increase / decrease in inventory	36.6	38.2	129.8	111.7	36.0	40.8	45.7
Own work capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sales	169.4	147.9	247.5	237.8	216.1	244.8	274.0
Material expenses	93.0	72.7	161.6	137.3	116.2	113.2	121.5
Gross profit	76.4	75.2	86.0	100.5	100.0	131.6	152.5
Gross profit margin	57.5 %	68.5 %	73.0 %	79.7 %	55.5 %	64.5 %	66.8 %
Personnel expenses	30.6	35.1	38.5	42.6	43.0	44.0	45.0
Other operating income	4.7	3.8	4.5	5.5	1.3	0.0	0.0
Other operating expenses	18.9	17.6	19.3	28.1	25.9	29.4	32.9
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	31.6	26.4	32.7	35.4	32.4	58.2	74.7
Margin	23.8 %	24.0 %	27.8 %	28.1 %	18.0 %	28.5 %	32.7 %
Depreciation of fixed assets	12.6	18.2	23.4	29.2	38.4	47.7	60.2
EBITA	19.0	8.2	9.3	6.2	-6.0	10.6	14.5
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	18.9	8.2	9.3	6.2	-6.0	10.6	14.5
Margin	14.3 %	7.5 %	7.9 %	4.9 %	-3.4 %	5.2 %	6.4 %
EBIT adj.	18.9	8.2	9.3	6.2	-6.0	10.6	14.5
Interest income	0.6	0.3	4.4	33.8	0.6	0.6	0.6
Interest expenses	12.3	11.2	10.8	16.2	17.5	18.5	19.5
Other financial income (loss)	0.1	0.1	0.1	0.3	0.1	0.1	0.1
EBT	7.3	-2.7	3.0	23.9	-22.8	-7.2	-4.3
Margin	5.5 %	-2.5 %	2.6 %	18.9 %	-12.7 %	-3.5 %	-1.9 %
Total taxes	6.0	-3.6	-21.6	9.8	-5.0	-1.6	-0.9
Net income from continuing operations	1.4	0.9	24.7	14.1	-17.8	-5.6	-3.4
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	1.4	0.9	24.7	14.1	-17.8	-5.6	-3.4
Minority interest	0.7	-0.7	-0.5	-0.8	0.0	0.0	0.0
Net income	0.7	1.6	25.1	14.9	-17.8	-5.6	-3.4
Margin	0.5 %	1.5 %	21.3 %	11.8 %	-9.9 %	-2.8 %	-1.5 %
Number of shares, average	76.3	76.3	76.3	76.3	76.3	76.3	76.3
EPS	0.01	0.02	0.33	0.20	-0.23	-0.07	-0.04
EPS adj.	0.01	0.02	0.33	0.20	-0.23	-0.07	-0.04
*Adjustments made for:							

Guidance: PNE 2023: EBITDA EUR 30-40m

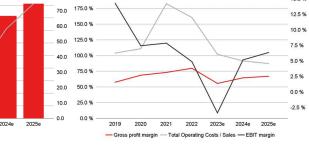
Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	103.8 %	110.8 %	182.5 %	160.5 %	102.0 %	91.5 %	87.3 %
Operating Leverage	3.2 x	3.3 x	1.8 x	-4.7 x	n.a.	n.a.	3.1 x
EBITDA / Interest expenses	2.6 x	2.4 x	3.0 x	2.2 x	1.8 x	3.1 x	3.8 x
Tax rate (EBT)	81.4 %	133.4 %	-714.8 %	40.9 %	22.0 %	22.0 %	22.0 %
Dividend Payout Ratio	224.1 %	337.8 %	12.4 %	21.7 %	n.m.	n.m.	n.m.
Sales per Employee	340,505	281,254	301,867	323,515	461,854	523,130	585,531

Sales, EBITDA in EUR m



Operating Performance in %



Performance per Share



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Consolidated balance sheet



400.0 %

350.0 %

300.0 %

250.0 %

200.0 %

150.0 %

100.0 %

50.0 %

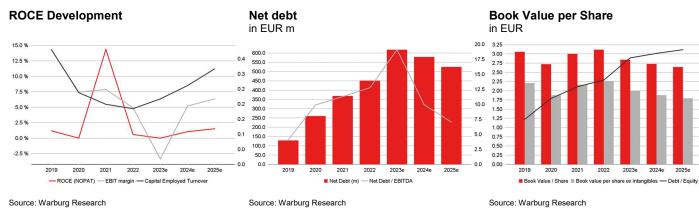
0.0 %

2025e

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	64.7	64.3	64.0	64.9	64.9	64.9	64.9
thereof other intangible assets	1.4	1.0	0.7	0.5	0.5	0.5	0.5
thereof Goodwill	63.3	63.3	63.3	64.4	64.4	64.4	64.4
Property, plant and equipment	174.1	176.3	273.5	353.8	499.7	452.1	391.9
Financial assets	2.0	1.9	2.6	14.2	14.2	14.2	14.2
Other long-term assets	39.4	39.1	64.7	87.3	87.3	87.3	87.3
Fixed assets	280.2	281.7	404.8	520.2	666.1	618.5	558.3
Inventories	101.4	174.0	163.7	147.4	147.4	147.4	147.4
Accounts receivable	41.5	40.2	29.5	38.2	38.2	38.2	38.2
Liquid assets	111.9	111.6	149.6	121.6	57.6	96.6	150.3
Other short-term assets	32.6	56.3	79.4	93.0	93.0	93.0	93.0
Current assets	287.4	382.1	422.2	400.1	336.1	375.1	428.9
Total Assets	567.6	663.8	827.0	920.3	1,002.3	993.6	987.2
Liabilities and shareholders' equity							
Subscribed capital	76.6	76.6	76.6	76.6	76.6	76.6	76.6
Capital reserve	83.0	83.0	83.0	83.0	83.0	83.0	83.0
Retained earnings	75.3	51.5	73.4	81.9	61.1	52.4	46.0
Other equity components	-1.5	-3.4	-3.8	-3.8	-3.7	-3.7	-3.7
Shareholders' equity	233.3	207.6	229.2	237.7	216.9	208.3	201.8
Minority interest	-13.3	-7.1	-7.4	-5.6	-5.6	-5.6	-5.6
Total equity	220.0	200.6	221.8	232.1	211.4	202.7	196.3
Provisions	10.2	5.3	7.5	10.4	10.4	10.4	10.4
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	240.9	372.1	518.4	572.8	675.6	675.6	675.6
Short-term financial liabilities	10.4	22.7	21.3	35.4	35.4	35.4	35.4
Accounts payable	35.3	31.4	34.4	44.6	44.6	44.6	44.6
Other liabilities	61.2	54.4	45.0	60.3	60.3	60.3	60.3
Liabilities	347.6	463.2	605.2	688.2	791.0	791.0	791.0
Total liabilities and shareholders' equity	567.6	663.8	827.0	920.3	1,002.3	993.6	987.2

Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	0.5 x	0.3 x	0.3 x	0.3 x	0.3 x	0.3 x	0.4 x
Capital Employed Turnover	0.4 x	0.2 x	0.2 x	0.2 x	0.2 x	0.3 x	0.3 x
ROA	0.3 %	0.6 %	6.2 %	2.9 %	-2.7 %	-0.9 %	-0.6 %
Return on Capital							
ROCE (NOPAT)	1.2 %	n.a.	14.4 %	0.6 %	n.a.	1.0 %	1.5 %
ROE	0.3 %	0.7 %	11.5 %	6.4 %	-7.8 %	-2.7 %	-1.6 %
Adj. ROE	0.3 %	0.7 %	11.5 %	6.4 %	-7.8 %	-2.7 %	-1.6 %
Balance sheet quality							
Net Debt	129.0	260.5	368.8	451.2	618.0	579.1	525.3
Net Financial Debt	129.0	260.5	368.8	451.2	618.0	579.1	525.3
Net Gearing	58.6 %	129.9 %	166.3 %	194.4 %	292.4 %	285.7 %	267.7 %
Net Fin. Debt / EBITDA	408.4 %	987.7 %	1128.5 %	1274.7 %	1909.3 %	994.4 %	703.6 %
Book Value / Share	3.1	2.7	3.0	3.1	2.8	2.7	2.6
Book value per share ex intangibles	2.2	1.9	2.2	2.3	2.0	1.9	1.8



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Consolidated cash flow statement

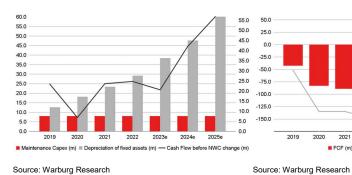


In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	1.4	0.9	24.7	14.1	-17.8	-5.6	-3.4
Depreciation of fixed assets	12.6	18.2	23.4	29.2	38.4	47.7	60.2
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase/decrease in long-term provisions	0.2	-3.8	2.2	3.1	0.0	0.0	0.0
Other non-cash income and expenses	9.2	-8.5	-26.7	-21.7	0.0	0.0	0.0
Cash Flow before NWC change	23.4	6.8	23.6	24.7	20.6	42.0	56.8
Increase / decrease in inventory	16.0	-118.3	-85.4	-39.2	0.0	0.0	0.0
Increase / decrease in accounts receivable	-28.4	6.3	41.5	20.2	0.0	0.0	0.0
Increase / decrease in accounts payable	20.3	36.7	44.1	-15.0	0.0	0.0	0.0
Increase / decrease in other working capital positions	4.1	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	12.0	-75.3	0.2	-33.9	0.0	0.0	0.0
Net cash provided by operating activities [1]	35.4	-68.5	23.8	-9.1	20.6	42.0	56.8
Investments in intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	-78.0	-14.5	-112.8	-95.6	-184.3	0.0	0.0
Payments for acquisitions	0.0	0.0	0.0	-2.0	0.0	0.0	0.0
Financial investments	0.1	0.0	0.1	0.5	0.0	0.0	0.0
Income from asset disposals	0.2	0.1	31.0	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	-77.9	-14.4	-82.0	-98.1	-184.3	0.0	0.0
Change in financial liabilities	41.0	-24.5	115.0	85.3	102.8	0.0	0.0
Dividends paid	-3.0	-3.1	-3.1	-6.1	-3.1	-3.1	-3.1
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	2.3	-0.6	0.0	0.0	0.0	0.0	0.0
Net cash provided by financing activities [3]	40.2	-28.1	112.0	79.2	99.8	-3.1	-3.1
Change in liquid funds [1]+[2]+[3]	-2.2	-111.1	53.8	-28.0	-64.0	39.0	53.8
Effects of exchange-rate changes on cash	-14.9	-0.2	-15.8	-0.2	0.0	0.0	0.0
Cash and cash equivalent at end of period	112.0	0.6	149.6	121.4	57.6	96.6	150.3

Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	-42.5	-83.0	-89.1	-104.8	-163.8	42.0	56.8
Free Cash Flow / Sales	-32.0 %	-75.7 %	-75.6 %	-83.1 %	-90.9 %	20.6 %	24.9 %
Free Cash Flow Potential	17.6	22.0	46.3	17.6	29.4	51.8	67.6
Free Cash Flow / Net Profit	-6017.3 %	-5122.0 %	-354.4 %	-703.1 %	918.8 %	-744.6 %	-1694.8 %
Interest Received / Avg. Cash	0.5 %	0.2 %	3.4 %	24.9 %	0.7 %	0.8 %	0.5 %
Interest Paid / Avg. Debt	6.1 %	3.6 %	2.4 %	3.0 %	2.8 %	2.7 %	2.9 %
Management of Funds							
Investment ratio	58.7 %	13.2 %	95.8 %	75.8 %	102.3 %	0.0 %	0.0 %
Maint. Capex / Sales	6.0 %	7.3 %	6.8 %	6.3 %	4.4 %	3.9 %	3.5 %
Capex / Dep	616.4 %	79.8 %	481.9 %	327.3 %	479.8 %	0.0 %	0.0 %
Avg. Working Capital / Sales	84.0 %	132.4 %	145.1 %	118.8 %	78.3 %	69.1 %	61.7 %
Trade Debtors / Trade Creditors	117.6 %	128.1 %	85.7 %	85.6 %	85.6 %	85.6 %	85.6 %
Inventory Turnover	0.9 x	0.4 x	1.0 x	0.9 x	0.8 x	0.8 x	0.8 ×
Receivables collection period (days)	114	134	91	110	77	68	61
Payables payment period (days)	139	157	78	118	140	144	134
Cash conversion cycle (Days)	374	850	384	384	400	400	370

CAPEX and Cash Flow in EUR m

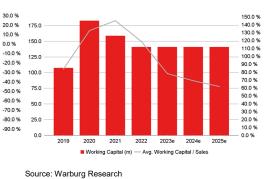




2021

FCF (m) - Free Cash Flow / Sales

Working Capital



COMMENT

Published 02.01.2024

2022 2023e 2024e 2025e

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"_"	Rating suspended:	The available information currently does not permit an evaluation of the company.	

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Rating	Number of stocks	% of Universe
Buy	152	72
Hold	47	22
Sell	6	3
Rating suspended	7	3
Total	212	100

WARBURG RESEARCH GMBH - ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	46	82
Hold	7	13
Sell	0	0
Rating suspended	3	5
Total	56	100

PRICE AND RATING HISTORY PNE AG AS OF 02.01.2024



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