

# Noctiluca S.A.

FV: 162.11

Update

Rating: N/A

**Noctiluca finished 2025 with sales of PLN 2.3m (+66.0% y-o-y), beating our estimate by 11.8%. This growth is attributable to the high-performance materials sales nearly doubling to PLN 2.1m. Operating costs amounted to PLN 7.8m (-7.7% y-o-y), which resulted in an EBITDA of PLN -3.3m (vs. our estimate of PLN -3.7m) and a net income of PLN -4.0m (vs. -4.5m). The past year represented a technological breakthrough for the Polish company because its NCEIL family of materials received initial industrial validation. In multiple cases, the use of these materials resulted in an increase of over 100% in the lifespan of OLED devices. This performance led to multiple new contracts, including two joint-development projects (JDP) with Chinese partners. The company expects to skip the JDP phase with another Chinese partner and commence mass production line testing in Q2/26E. Due to these positive developments, we decided to adjust the valuation of NCL to PLN 162.11 per share (prev. PLN 152.87). The main risk we observe is potential failure during further stages of testing the company's materials.**

**For 2026E, we expect sales to reach PLN 5.75m (prev. 4.7m), resulting in an EBITDA of PLN -1.5m (-2.1m) and a net income of PLN -2.6m (-3.2m). During 2026, NCL is expected to transition its best materials from test settings to commercial production line testing, which should eventually lead to material supply contracts. With management guidance suggesting that repeatable sales from contracts with Chinese OLED giants could start as early as H2/27E, we predict a significant increase in sales for 2028E. Our current estimates for that year include sales of PLN 25.7m, an EBITDA of PLN 12.9m (margin: 46.2%), and a net income of PLN 8.4m (margin: 30.2%).** With a cash balance of PLN 4.9m at the end of 2025 and a total financing line of PLN 11m, the company's financial position is secured for over a year. Moreover, NCL's grant offensive is yielding results because the company received positive assessments for a total grant amount exceeding PLN 7m since the latest update. This highlights the company's position at the very top of deep-tech companies in Poland.

in PLNm	2023	2024	2025	2026E	2027E	2028E
Total sales	0.73	1.41	2.35	5.75	13.83	25.66
EBITDA	-3.77	-4.35	-3.32	-1.53	4.64	12.90
EBIT	-5.17	-5.30	-3.83	-2.33	3.43	10.55
Net income / loss	-5.12	-5.47	-4.04	-2.63	2.59	8.45
EPS	-2.60	-2.78	-2.06	-1.34	1.32	4.30
DPS	0.00	0.00	0.00	0.00	0.00	0.00
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ROE	-154.78%	-3888.27%	-44.19%	-40.31%	12.29%	28.58%
Net gearing	-61.50%	994.96%	-53.81%	-42.79%	-49.73%	-37.51%
EV/Sales	263.1x	136.6x	82.3x	33.6x	14.0x	7.5x
EV/EBITDA	neg	neg	neg	neg	41.6x	15.0x
P/E	neg	neg	neg	neg	76.4x	23.5x

## Company profile

Noctiluca S.A. is a Polish deep-tech material science company. The firm develops innovative materials for the OLED industry. Noctiluca can be traded on Warsaw Stock Exchange as well as on Frankfurt Stock Exchange (symbol G0Z).

Date of publication	29 April 2026 / 10:00 am
Website	www.noctiluca.eu
Sector	Material Science
Country	Poland
ISIN	PLNCTLC00018
Reuters	NCL.WA
Bloomberg	NCL.PW

## Share information

Last price	100.80
Number of shares (m)	1.97
Market cap. (PLNm)	198.15
Market cap. (EURm)	46.62
52-weeks range	PLN 112.5 / PLN 82.2
Average volume (shares)	5,542

## Performance

4-weeks	12.75%
13-weeks	-1.66%
26-weeks	2.44%
52-weeks	2.44%
YTD	12.00%

## Shareholder structure

Synthex Technologies	10.47%
Impera Invest	7.58%
Rubicon Partners Ventures	6.33%
Mariusz Bosiak (CEO)	5.12%
Element Ventures	5.09%
Free float	65.41%

## Financial calendar

Q1/26 report	26 May, 2026
H1/26 report	10 September, 2026
Q3/26 report	26 November, 2026

## Analyst

Mateusz Pudło  
m.pudlo@eastvalueresearch.com

## Results for 2025

### Revenues and Profitability

Noctiluca completed the year of 2025, with sales growth of 66.0% to reach PLN 2.3m versus our estimate of PLN 2.1m. Sales of high-performance materials reached PLN 2.1m (+ 91.5% y-o-y), while under chemical contract research organization (cCRO) decreased to PLN 0.24m (-23.3% y-o-y). In terms of profitability, NCL beat our EBITDA estimate by 10.2% to reach -3.3m (vs. estimate of -3.7m), likewise net income was slightly better at PLN -4.0m (vs. estimate of PLN -4.5m). As reported by company, in 2025 still majority of revenue comes from smaller projects rather than industrial scale projects such as being conducted with Juhua.

Driven by a strict cost regime operating costs decreased by 7.7% to PLN 7.8m, which was below our estimate of PLN 8.0m. The primary cause of this performance was lower external services costs, which fell by PLN 0.3m. This improvement was largely due to a reduction in professional services fees including legal and consulting which decreased to PLN 1.7m from PLN 2.1m in 2024. This trend is primarily related to the normalization of expenses following the elevated costs incurred in 2024 when Noctiluca transitioned to the main market of the Warsaw Stock Exchange (WSE). In another main costs category, as the number of full-time equivalent (FTE) employees remained stable, salary costs also stayed relatively flat at PLN 2.36m compared to PLN 2.21m in 2024.

in PLNm	Q1/24	Q2/24	Q3/24	Q4/24	2024	Q1/25	Q2/25	Q3/25	Q4/25	2025
<b>Total Output</b>	<b>0.31</b>	<b>0.34</b>	<b>0.35</b>	<b>1.46</b>	<b>2.46</b>	<b>0.41</b>	<b>1.06</b>	<b>0.86</b>	<b>1.31</b>	<b>3.64</b>
<i>y-o-y change</i>	24340.3%	786.0%	26.6%	235.8%	226.1%	35.4%	214.1%	144.2%	-10.8%	48.0%
<b>EBITDA</b>	<b>-1.33</b>	<b>-1.36</b>	<b>-1.47</b>	<b>-0.18</b>	<b>-4.35</b>	<b>-1.22</b>	<b>-0.42</b>	<b>-0.96</b>	<b>-0.70</b>	<b>-3.32</b>
<i>EBITDA margin</i>	-436.6%	-403.7%	-417.7%	-12.1%	-176.8%	-295.6%	-40.1%	-111.7%	-54.0%	-91.1%
<b>EBIT</b>	<b>-1.81</b>	<b>-1.60</b>	<b>-1.59</b>	<b>-0.30</b>	<b>-5.30</b>	<b>-1.34</b>	<b>-0.54</b>	<b>-1.08</b>	<b>-0.86</b>	<b>-3.83</b>
<i>EBIT margin</i>	-592.8%	-473.8%	-451.1%	-20.3%	-215.4%	-324.2%	-51.4%	-125.4%	-66.0%	-105.2%
<b>Net income</b>	<b>-1.81</b>	<b>-1.65</b>	<b>-1.68</b>	<b>-0.33</b>	<b>-5.47</b>	<b>-1.40</b>	<b>-0.70</b>	<b>-1.07</b>	<b>-0.87</b>	<b>-4.04</b>
<i>Net margin</i>	-591.2%	-490.8%	-475.3%	-22.7%	-222.4%	-338.7%	-66.5%	-124.2%	-66.3%	-111.0%

Source: East Value Research GmbH, Noctiluca S.A.

in PLNm	2024	2025	2025E	2024 vs. 2025	2025 vs. 2025E
<b>Total output</b>	<b>2.46</b>	<b>3.64</b>	<b>3.46</b>	48.0%	5.2%
<b>Net sales</b>	<b>1.41</b>	<b>2.35</b>	<b>2.10</b>	66.0%	11.8%
<b>Operating costs</b>	<b>-8.41</b>	<b>-7.77</b>	<b>-7.97</b>	-7.7%	2.6%
<b>EBITDA</b>	<b>-4.35</b>	<b>-3.32</b>	<b>-3.69</b>	-23.7%	10.2%
<i>EBITDA margin</i>	-176.8%	-91.1%	-106.6%		
<b>EBIT</b>	<b>-5.30</b>	<b>-3.83</b>	<b>-4.17</b>	-27.7%	8.2%
<i>EBIT margin</i>	-215.4%	-105.2%	-120.5%		
<b>Net income/loss</b>	<b>-5.47</b>	<b>-4.04</b>	<b>-4.51</b>	-26.1%	10.4%
<i>Net margin</i>	-222.4%	-111.0%	-130.3%		

Source: East Value Research GmbH, Noctiluca S.A.

The recent year was characterized by the continuation of existing joint-development project (JDP, with one partner from China) and material transfer agreement (MTA) contracts. Additionally, Noctiluca secured a new JDP with a Chinese micro-OLED display manufacturer and signed seven new MTAs (five in China, one in the USA, and one in Japan).

The company's breakthrough NCEIL materials have now been tested by 15 different entities across various high-growth applications including smartphones, PMOLED, automotive displays, and micro-OLED for XR solutions.

### **Balance sheet and Cash flow**

The company had shareholder equity in the amount of PLN 9.1m (vs. 0.1m in 2024). The increase is due to the share issue conducted in 2025. The equity ratio is 89.8%.

Noctiluca's core assets consist of: cash of PLN 4.92m (2024: 0.47m), inventories of PLN 0.37m (0.16m), trade accounts of 1.87m (0.78m), PP&E of PLN 0.97m (0.67m), as well as in-progress development projects of PLN 2.03m that after completion will be classified as intangible assets. The growth in accounts receivables was related to sales to related entity Synthex Technologies, to which NCL sells high-performance materials, as these companies jointly conduct multiple projects for international partners

On the liabilities side, the company reported no debt, trade payables of PLN 0.61m (2024: 0.63m), tax liabilities of PLN 0.23m (0.14m), payroll liabilities of PLN 0.13m (0.12m), and short-term grant settlement of PLN 0.06m (0.27m). As Noctiluca is expected to receive multiple grants in the near future, the grant settlement amount is expected to increase significantly.

The operating cash flow was PLN -5.92m (2024: -5.49m), while supported by weaker net loss, it is lower than in the previous year, due to high increase in trade receivables by PLN 1.1m. Investing cash flow amounted to PLN -0.57m (2024: -0.05m), however important to note is the capitalization of in-progress development projects of PLN 1.09m (2024: 0.94m) that should also be regarded as CAPEX. Driven by the share issue in 2025, financial cash flow was PLN 10.94m (2024: 3.96m).

### **Liquidity & financing**

Until the financial break-even point is reached the company continues to utilize a mix of debt, equity, and grant financing.

In 2025 Noctiluca completed an equity round totaling approximately PLN 13m to expand existing engineering capacity and support commercial expansion. Furthermore, the company maintains available long-term debt financing agreements totaling PLN 11m which remained unused as of the end of December 2025.

Since the latest report the company has received positive assessments for grant projects totaling over PLN 7m. The majority of these funds fall under the SMART Path of the European Funds for a Modern Economy 2021–2027 (FENG) program. Key grants were awarded for the development and implementation of MR-TADF materials for fifth-generation OLED devices as well as innovative EIL materials.

The current debt facility and cash position should provide a liquidity runway for well over a year. However, as the corporate strategy involves expanding engineering capabilities and investing in PVD equipment we anticipate that the company will conduct one additional share issuance in 2027E.

Regarding the break-even point we expect this milestone to occur no sooner than 2027E.

## Strategy

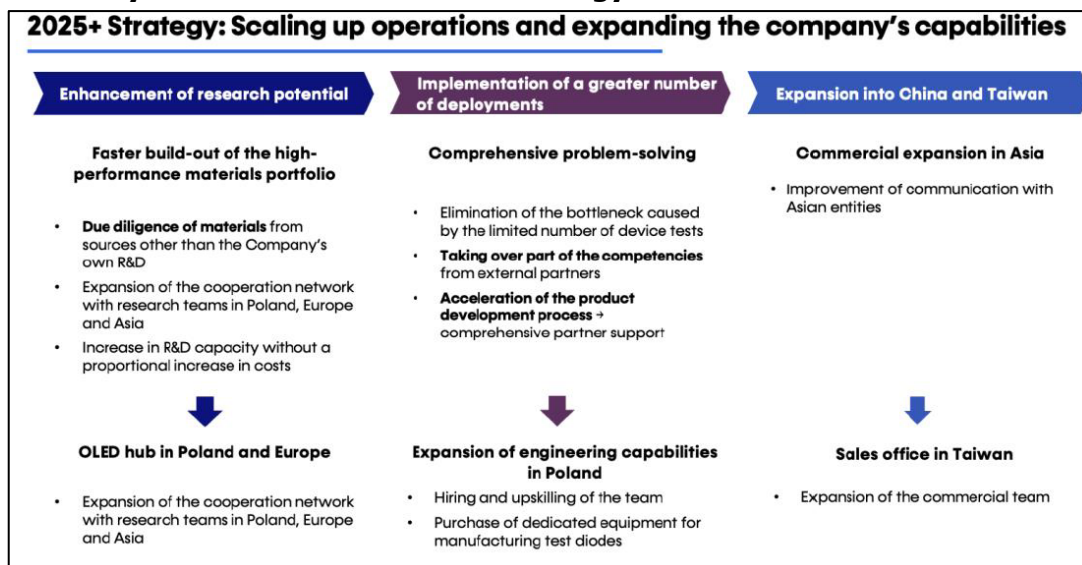
The company's strategy remains unchanged and is focused on three pillars.

**1. Establishment of a European OLED Hub** - Noctiluca is positioning itself as a central European hub for OLED technology. As the company's internal discovery capabilities are currently operating at full capacity it has established a collaborative model with over 20 research teams and various universities. This strategic approach allows NCL to acquire valuable intellectual property (IP) without incurring the significant overhead costs typically associated with early-stage research. These chemical compounds can then be integrated into the company's portfolio and presented to its extensive network of global business partners.

**2. Strengthening Local Engineering and Device Physics Competencies** - The company is focused on expanding its product engineering and device physics capabilities within Poland. While Noctiluca currently utilizes world-class laboratories in South Korea for key processes the capacity for high-volume device testing remains a bottleneck. By bringing these capabilities in-house the company aims to implement a localized screening process. This will significantly shorten the verification cycle by allowing for efficient internal testing before sending only the most promising materials to Korea for advanced validation. Additionally, this expansion will enable NCL to manufacture complex final products such as ink formulations and simple technology demonstrators.

**3. Strategic Expansion in China and Taiwan** - Recognizing the shifting dynamics of the global OLED market Noctiluca is aggressively targeting China and Taiwan. These regions are currently demonstrating more rapid growth and agility than traditional markets like South Korea. To capitalize on this trend NCL has signed multiple JDP and MTA contracts in these territories and has recently launched a dedicated sales office in Taiwan to manage Asian client relationships. Looking ahead the company is (or will be) engaged in discussions with original equipment manufacturers (OEMs) regarding the mass production of materials specifically tailored for the Chinese market.

## Summary of the Noctiluca 2025+ Strategy



Source: Noctiluca S.A.

## Changes to our forecasts

### Revenues and profitability

The transition from industrial validation to large-scale mass production line validation is expected to define 2026. Following the initial verification of new materials by the industry in 2025, material qualification has intensified this year. The most advanced project is slated for mass production line testing within 2026, a phase that necessitates significantly higher material volumes.

For 2026E, we have increased our estimates and predict net sales of PLN 5.75m (exp. +144.9% y-o-y; previous estimate of PLN 4.72m), mostly due to the aforementioned high expected sale for mass production testing. Nonetheless, realization of materials sales for smaller clients or earlier stages, will still have proportionally a larger share in 2026 sales. In terms of profitability, we expect EBITDA at PLN -1.53m (-2.11m), and a net income of PLN -2.63m (-3.21m).

In 2027E we reckon that there is a small chance for a supplier contract with a top display manufacturer through one of the Chinese partners. For now, we predict that the agreement would be concluded at the earliest at the very end of 2027E while reported sales would be recognized in 2028E. During this year JDP or similar advancement phase contracts should generate significantly more sales due to intensive material testing on a mass scale. In total we predict sales of PLN 13.8m (exp. +140.6% y-o-y; previous estimate of PLN 12.4m), which results in an EBITDA of PLN 4.64m (PLN 3.93m) and a net income of PLN 2.6m (2.0m).

We forecast that 2028E will be a breakthrough year for Noctiluca with two supplier contracts expected to be signed with major OLED manufacturers from China. While reaching full capacity might not occur immediately, we predict that these contracts alone will generate PLN 10.9m in sales. Total sales are expected to reach PLN 25.7m, reflecting an 85.5% y-o-y increase with an EBITDA of PLN 12.9m and a net income of PLN 8.45m.

**Summary of financial forecast**

in PLNm	2026E		2027E		2028E	
	new	old	new	old	new	old
<b>Net sales</b>	<b>5.75</b>	<b>4.72</b>	<b>13.83</b>	<b>12.42</b>	<b>25.66</b>	
<b>EBITDA</b>	<b>-1.53</b>	<b>-2.11</b>	<b>4.64</b>	<b>3.93</b>	<b>12.90</b>	<b>Not</b>
<i>EBITDA margin</i>	<i>-20.9%</i>	<i>-44.6%</i>	<i>27.0%</i>	<i>31.6%</i>	<i>46.2%</i>	<b>included</b>
<b>EBIT</b>	<b>-3.83</b>	<b>-3.18</b>	<b>3.43</b>	<b>2.47</b>	<b>10.55</b>	<b>in</b>
<i>EBIT margin</i>	<i>-31.9%</i>	<i>-67.3%</i>	<i>20.0%</i>	<i>19.9%</i>	<i>37.7%</i>	<b>previous</b>
<b>Net income / loss</b>	<b>-2.63</b>	<b>-3.21</b>	<b>2.59</b>	<b>1.98</b>	<b>8.45</b>	<b>update</b>
<i>Net margin</i>	<i>-36.1%</i>	<i>-68.0%</i>	<i>15.1%</i>	<i>16.0%</i>	<i>30.2%</i>	

Source: East Value Research GmbH

Below and on the next page are our updated sales forecasts for 2026E, 2027E and 2028E.

**Revenue projections for 2026E**

Sales Source	Est. Annual sales per contract (in USDm)	Est. Annual sales per contract (in PLNm)	Quantity	Total in 2026E (PLNm)	Notes
Supplier contract (various partners)	0.25	0.91	0.40	0.36	Sales of proprietary high performance materials (applications: marketing, workwear, watches, automotive)
JDP contract (major)	0.80	2.90	0.50	1.45	Sales of proprietary high performance materials for largest display companies
JDP contract (minor)	0.50	1.81	0.30	0.54	Sales of proprietary high performance materials for novel and mid-market companies
MTA contract (major)	0.10	0.36	5.00	1.81	Sales of proprietary high performance materials for testing
MTA contract (minor)	0.05	0.18	4.00	0.72	
<b>Total from own material</b>				<b>4.89</b>	
Custom Synthesis (non-IP) & cCRO				0.86	Chemical CRO for various business partners, sales of non-proprietary materials
<b>Total sales</b>				<b>5.75</b>	

Source: East Value Research GmbH

**Revenue projections for 2027E**

Sales Source	Est. Annual sales per contract (in USDm)	Est. Annual sales per contract (in PLNm)	Quantity	Total in 2027E (PLNm)	Notes
Supplier contract (various partners)	0.25	0.91	1.60	1.45	Sales of proprietary high performance materials (applications: marketing, workwear, watches, automotive)
JDP contract (major)	0.80	2.90	1.50	4.34	Sales of proprietary high performance materials for largest display companies
JDP contract (minor)	0.50	1.81	1.00	1.81	Sales of proprietary high performance materials for novel and mid-market companies
MTA contract (major)	0.10	0.36	6.00	2.17	Sales of proprietary high performance materials for testing
MTA contract (minor)	0.05	0.18	6.00	1.09	
<b>Total from own material</b>				<b>10.86</b>	
Custom Synthesis (non-IP) & cCRO				2.97	Chemical CRO for various business partners, sales of non-proprietary materials
<b>Total sales</b>				<b>13.83</b>	

Source: East Value Research GmbH

**Revenue projections for 2028E**

Sales Source	Est. Annual sales per contract (in USDm)	Est. Annual sales per contract (in PLNm)	Quantity	Total in 2028E (PLNm)	Notes
Supplier contract (with Chinese partners)	5.00	18.10	0.60	10.86	Mass production of materials used in innovative OLED devices
Supplier contract (smaller partners)	0.25	0.91	1.80	1.63	Sales of proprietary high performance materials (applications: marketing, workwear, watches, automotive)
JDP contract (major)	0.80	2.90	1.60	4.63	Sales of proprietary high performance materials for largest display companies
JDP contract (minor)	0.50	1.81	1.20	2.17	Sales of proprietary high performance materials for novel and mid-market companies
MTA contract (major)	0.10	0.36	7.00	2.53	Sales of proprietary high performance materials for testing
MTA contract (minor)	0.05	0.18	7.00	1.27	
<b>Total from own material</b>				<b>23.10</b>	
Custom Synthesis (non-IP) & cCRO				2.57	Chemical CRO for various business partners, sales of non-proprietary materials
<b>Total sales</b>				<b>25.66</b>	

Source: East Value Research GmbH

## Commercialization process of proprietary materials by producers (12/2025)

	Country	2025	2026+	Likelihood of JDP/cCRO	Earliest possible revenue	Note
1	China	Realization of milestones	Completion of milestones	100%	2026	Qualification of materials for the use in OLED IT devices
2	China	MTA+	Framework agreement	100%	<b>Acquired</b>	Trial sales in 2025 and mass production line tests set to begin in Q2/26E
3	China	MTA+	JDP	70%	2026	Manufacturer of OLED panels for automotive industry
4	USA	MTA	JDP	60%	2026	Manufacturer of OLED panels for automotive and specialized lighting industry
5	China	MTA+	JDP	55%	2026	Leading display manufacturer
6	China	MTA+	JDP	70%	2026	Manufacturer of flat-panel displays
7	South Korea		cCRO/JDP	60%	2026	Leading OLED display manufacturer
8	South Korea		JDP	60%	2026	Leading OLED display manufacturer
9	Taiwan		Framework agreement	70%	2026	Leading OEM manufacturer

Source: East Value Research GmbH, Noctiluca S.A.

The overview provided above details the commercialization status of the major OLED companies currently collaborating with Noctiluca. It is important to highlight the strategic focus on development with Chinese partners which are the top two entities described in this report. In contrast, development with the two primary South Korean partners has progressed more slowly over the past year. According to management expectations each material supply contract with these key partners could potentially be worth USD 5m. Furthermore, the company is executing its strategy to reach financial break-even points by diversifying its revenue streams through both large-scale contracts and smaller partnerships. Notable developments in 2025 included signing a framework agreement with a European manufacturer of document security systems and completing the first order for a client in the organic PV industry. Additionally, Noctiluca signed a JDP and an MTA with Chinese manufacturers that specialize in advanced micro-OLED panels and matrices.

## Noctiluca's materials developments

The Polish company has pioneered a new Electron Injection Layer (EIL) that addresses the OLED industry's long-standing challenge: the limited longevity of blue pixels. While competitors like Cynora and beeOLED primarily focus on developing more efficient blue emitters Noctiluca's approach centres on the transport layers. This strategy offers a unique alternative to the traditional materials perspective of fixing the emitter itself.

In laboratory settings these EIL materials have demonstrated a 15-fold improvement in blue OLED lifetime. Throughout 2025 the flagship material NCEIL-4 was tested across 15 facilities confirming its breakthrough performance in real world applications. A notable success occurred with a PMOLED manufacturer in Taiwan where the integration of NCEIL-4 extended device lifetime by approximately 130% which has paved the way for a potential JDP contract.

Below, we describe in detail the latest advancements with two key partners that test NCEIL.

With Juhua (China), the company signed its first major JDP agreement at the end of 2024. The objective of this partnership is to qualify NCEIL materials for a new OLED product for the use in IT segment (e.g. monitors, laptops). According to the schedule, the final devices should reach end-customers in about three years after the start of the JDP (indicating beginning of 2028E).

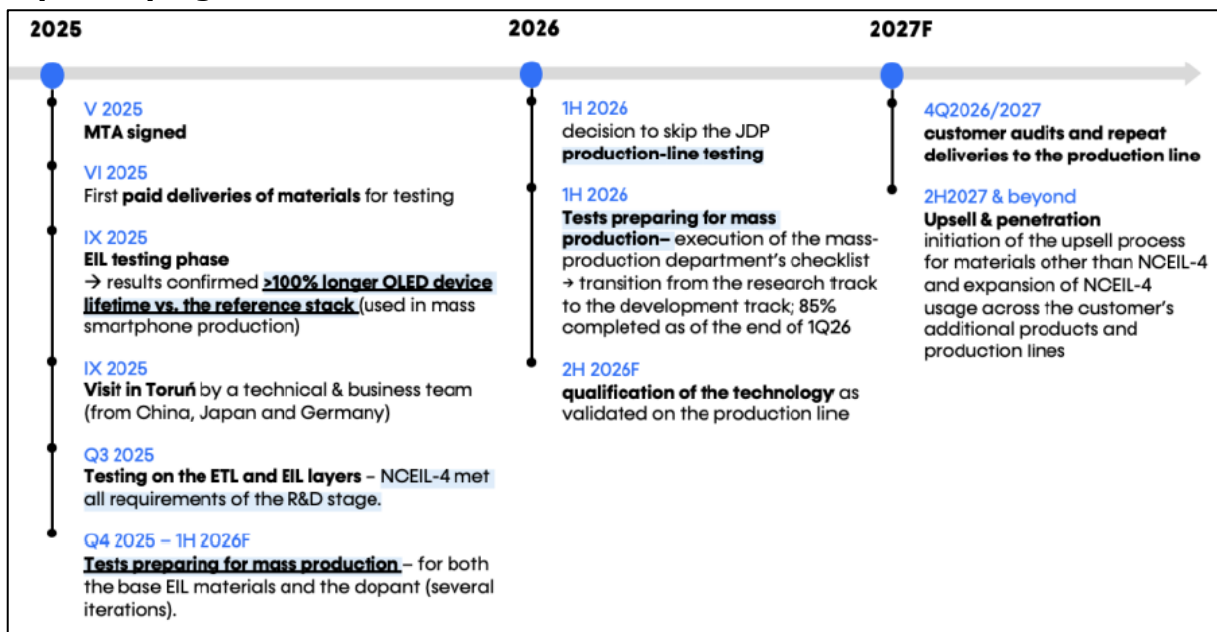
Status of the development of materials under JDP contract:

1. NCEIL for the EIL layers: 65-70% (+10 pp q-o-q)
2. NCEIL as a dopant for the ETL layer: 65% (+10 pp q-o-q)
3. NCEIL for the CPL layer: set to begin in the future

The qualification process exhibits a similar tempo of progression to previous quarters. The next steps after qualification include scaling the final product and conducting other activities necessary for mass production.

Notably Noctiluca and the world’s largest telecommunications equipment manufacturer from China have agreed to skip the JDP stage and proceed directly to production line testing. Currently the material has completed 85% of the industrial line qualification checklist which is a higher completion rate than the Juhua project. Plans are in place to begin mass production line testing at the end of Q2/26E followed by validation of the OLED device on the production line in H2/26. Management predicts that potential recurring material sales resulting from this partnership could begin as early as 2027E.

### Expected progression timeline



Source: Noctiluca S.A.

## Market News

According to UBI, the OLED emitting materials market grew to USD 2.27bn (+7.2% y-o-y). It is the first year when the share of Chinese companies (e.g. BOE, CSOT) exceeded 50%. Associated with this is a large increase in sales of local OLED material producers. <sup>1</sup>

Counterpoint reports that AMOLED material market is driven by demand for materials for TVs (QD-OLED, WOLED). The research analysts highlight, that demand for IT OLED is increasing, including both host and dopant materials. Overall, they expect this material market to grow at a CAGR of 38% by 2029E. <sup>2</sup>

Tianma has signed a new material supply and license agreement with UDC (leader in OLED materials). UDC has signed a similar agreement with LG Display. <sup>34</sup>

Korean OLED materials maker Solus Advanced Materials started mass production at a new production site in Iksan. The company reports that this new factory will accelerate the development process of new OLED materials. <sup>5</sup>

Chinese Jilin OLED Material Tech has established plans to raise c. USD 43m, to build a new OLED material production plant, through a new stock offering. <sup>6</sup>

## Valuation

The valuation is based on a comparison of Noctiluca with other companies developing innovative materials for the OLED industry. We have valued Noctiluca using a comparable companies' methodology, which has been divided into two categories: Valuation based on funding rounds of peers – Cynora, Credoxys, beeOLED (50%) and valuation based on a qualitative comparison to the market leader – Kyulux (50%).

We have refrained from using income-based valuation methods, given the challenge of forecasting the anticipated economic benefits generated by the company in the future. The TADF technology is gradually advancing, but due to several uncertain factors with many beyond Noctiluca's direct control we have decided to use variation of comparable companies' valuation. The value of Noctiluca is closely tied to how it is valued by OLED panel manufacturers.

<sup>1</sup> <https://www.oled-info.com/ubi-oled-material-sales-reach-227-billion-2025-china-takes-lead-largest>

<sup>2</sup> <https://counterpointresearch.com/en/insights/Global-AMOLED-Revenues-Stabilize-in-2025>

<sup>3</sup> <https://www.oled-info.com/tianma-signs-long-term-phosphorescence-oled-material-supply-and-license>

<sup>4</sup> <https://www.oled-info.com/universal-display-and-lg-display-extend-their-long-term-ip-and-material>

<sup>5</sup> <https://www.oled-info.com/solus-advanced-materials-starts-mass-production-its-new-oled-material>

<sup>6</sup> <https://www.oled-info.com/jilin-oled-material-tech-raise-43-million-build-new-psi-oled-production>

## Valuation based on funding rounds of peers

Date	Company name	Total Raised (in USDm)	Stake %	Pre-money valuation (in USDm)	Post-money valuation (in USDm)	Notes
2011	Cynora	4.28	52%	3.97	8.25	Series A
2017	Cynora	29.83	24%	95.66	125.49	Series B
2019	Cynora	25	15%	142.85	167.85	Series C
02/2022	CREDOXYS	1.38	16%	7.19	8.57	Seed round
08/2023	beeOLED	14.43	39%	22.44	36.87	Series A
11/2023	CREDOXYS	Undisclosed	18%	n.a	n.a	Pre-Series A
07/2025	CREDOXYS	Undisclosed	10%	n.a	n.a	Pre-Series A
<b>Average</b>				<b>54.42</b>	<b>69.41</b>	

Source: German national court registry, company's websites, CapitalIQ, East Value Research GmbH

To use this valuation method, we have utilized German national court registry, and public announcements. Details are provided above.

First, we have examined past M&A transactions in the OLED materials industry. Due to the innovative technology Noctiluca is developing there is just one past transaction that closely resembles what Noctiluca is doing: The acquisition of Cynora by Samsung for USD 300m in 2022, whereby some industry experts suggest that the price for Cynora's IP was USD 100-200m.

In 2016, Cynora started a Joint Development Project (JDP) with LG Display and in 2018 had a next-generation blue OLED emitter with EQE 20% (today's standard >30%) and expected commercialization plans in 2020. In 2019, Cynora was valued at USD 167.85m and the company hired a new CEO to help with the commercialization of its next-gen blue emitter but in the end failed to do so. In 2020, it indeed introduced its first commercial product - a blue emitter - but from older generation. As due to rising operational costs - in 2021, it generated a net loss of EUR 19.2m with over 100 employees - Cynora was seeking different ways to become solvent, the close cooperation with Samsung turned out to be a lifesaver for its investors. In 2022, Samsung acquired the research company for about USD 300m, but effectively was seeking only its IP, as the company was liquidated shortly afterwards.

When it comes to funding a technology material company, it is important to distinguish investments made by financial investors (mostly VCs), and strategic investors (OLED manufacturers). Strategic investors such as LG or Samsung might value companies much more because of synergies and the possibility to fully utilize the potential of the material company's developed projects.

New start-ups have also joined the race to create a next generation deep-blue OLED emitter and other innovative materials for the OLED industry. CREDOXYS that was established in 2021 in Dresden completed its first funding round in that year, receiving funds from the German government, among others. In 2023, the company completed its pre-series A round with various VC funds for an undisclosed amount. beeOLED, which is also based in Dresden and was founded in 2020, has recently raised USD 14.4m resulting in a post-money valuation of USD 36.9m. As of now, beeOLED solely focuses on developing a next-generation deep-blue emitter. In an interview, its CEO stated that the company's emitters would be tested by business partners in 2024 and there were still 3-4 years until its emitters would be fully commercialized.

For comparison: Noctiluca's own emitters have been tested by leading display manufacturers at least since 2022.

We believe that all the high-performance materials (including deep blue emitters) from the above-mentioned companies are at a similar technological level to Noctiluca. As beeOLED is further away from commercializing its emitters, Noctiluca should currently be valued more. Cynora was valued at c. USD 96m a year after starting its JDP with LG Display. NCL postponed its cooperation with LG to 2026 but is in a JDP with a Chinese company Juhua. What differentiates Noctiluca from its competitors and is positive in our view, is the diversification of its business partners. Additionally, the aforementioned three German companies solely focus on developing a particular material (2 of them focus only on the deep-blue next-gen OLED emitter), while Noctiluca is developing materials for various layers of the OLED stack. Other than that, Noctiluca develops business relationships not only with the market leaders, but also with smaller players, helping them not only with R&D, but also with the development of their products. Having analyzed the development phases of Noctiluca's competitors excluding the market leader, we have valued Noctiluca at an equity value of USD 70m.

### **Valuation based on a comparison to the market leader**

In addition, we have analyzed how Noctiluca compares with the leader in next-generation OLED materials, Kyulux. Our valuation is based on four key factors: team (20% weight), products (20%), commercialization process (10%), and intellectual property (50%).

Although Noctiluca has successfully expanded into markets other than display, its relative valuation is based on a comparison with Kyulux, which specializes in emitters for displays. This fact explains why we focus on analyzing NCL's progress in relation to the display industry.

## Team

*Kyulux:* In its management, Kyulux has a highly experienced team specializing in OLED development/materials. Additionally, its founder Mr. Adachi is the inventor of an OLED TADF device with multiple patents and innovative materials discovered and is widely regarded as the top researcher in OLED technology. Kyulux has a R&D centre in Boston, close to the Massachusetts Institute of Technology, and thus has access to the best technical graduates in the world. As of the end of September 2025, the company had 85 employees.

*Noctiluca:* The Torun-based company has a relatively young team, but its management consists of experienced scientists and VC managers, who facilitate the commercialization of its materials. In addition, NCL has very experienced and renowned advisors, including Prof. Kwon, a former chief researcher at Samsung SDI and dr Kim, ex Quality Control lead at LG Chem. Additionally, by working with the world's leading research centres, NCL's team is able to gain valuable know-how and practical experience. The company's strategy of being a European OLED hub resulted until now in cooperation with over 10 institutions from Europe and Asia. As per latest information available, the company had 26 employees at the end of November 2025.

*Comment:* Comparing workforces enables us to assess the potential of future endeavors on both the research and commercialization side. Kyulux has a much larger and more experienced team and much more research resources. Even though the academic contributions of Kyulux' team are significantly greater, NCL has managed to establish partnerships with researchers from world's leading research centres such as: Karlsruhe Institute of Technology, ITRI, and Fraunhofer IAP, to bridge the research gap. Nevertheless, both companies differ quite significantly in this regard.

*Update:* We do not observe any significant changes with respect to research team and other key divisions of both companies. Consequently, we have maintained our evaluation for this metric.

## Products

*Kyulux:* The Japanese company is a pioneer in TADF technology and has one of the best emitter systems currently available. In November 2024, the firm has entered an alliance agreement with Nippon Soda (Japan) to establish a mass production system for OLED materials. The main focus of the company is the commercialization of its own hyperfluorescence emitter systems (4th generation emitting materials).

*Noctiluca:* NCL's management is of the opinion that its emitters are as good as those of its competitors or even better. The company wants to be the supplier of materials for the entire emission layer, which will consist of two hosts, a sensiliser (TADF) and an MR-TADF emitter. In contrast to Kyulux, the company works in both PVD - which is the current market standard for big displays - and IJP technology. The company's portfolio of the products expands much more than emitters, with breakthrough EIL material serving as a main example.

*Comment:* Regarding technological advancement of materials, we do not observe significant differences when it comes to the next-gen products offered by both companies. Kyulux has struggled with developing an efficient deep-blue emitter, while Noctiluca, despite a later start, has closed the technological gap to Kyulux quite quickly. The key difference is that Kyulux is partly owned by Samsung and LG, and its organic materials are much closer to being used in the end devices of these companies, thus covering the majority of the OLED materials market, especially in the largest submarkets (smartphones, TVs). However, the large dependence on the Korean giants also has disadvantages as it excludes other players from using Kyulux' technology.

*Update:* Due to the lack of public information about Kyulux and whether the Japanese company is expanding its portfolio, we have assumed that its focus is primarily on developing materials for emissive layers in the OLED industry. Noctiluca's approach is broader, as its materials are more flexible and could potentially be used in various layers of OLED devices. As we have not observed any major changes, we have maintained our estimation of this factor.

### **Commercialization**

*Kyulux:* The Japanese company was the first in the world to start commercial shipping of TADF materials in 2020. The firm expected to achieve full-scale mass production in 2025, however, according to the available source, this objective was not met. In February 2026, the company signed a license agreement with SK Materials JNC (South Korea), with which the timeline foresees, mass production and supply by 2027E.

*Noctiluca:* NCL reported the first commercial sales of its own red and green emitters in 2023. In Q3/2024, Inuru launched a limited-edition Coca-Cola bottle in Brazil, which is likely using NCL's emitters. In 2025, NCL's key materials have been tested with largest OLED panel manufacturers. For 2026E, the company plans to enter industrial scale mass production line testing and in 2027E, the management hints that supply material sales are possible.

*Comment:* The company under research has several MTA contracts with the world's largest display companies and is expected to convert several of these contracts into JDPs. On the other hand, Kyulux already established its base of business partners many years ago. The display market leaders LG and Samsung even invested in Kyulux in 2016. Currently, the Japanese company is leading the race for commercialization of the highly demanded deep-blue next-gen OLED emitter, however, is dependent on the two Korean giants.

*Update:* Considering the likely delays on the Japanese partner's side alongside the consistent advancements in Noctiluca's commercialization process and the clear path toward mass production in 2027E or 2028E, we have increased this factor to 55%.

### **Intellectual property**

*Kyulux:* The firm has a unique IP portfolio thanks to being a spin-off from Kyushu University and having close ties with it. In 2023, the company appeared in Nikkei Business's Top 40 patent value growth ranking. As of the end of 2024, the company had about 185 patented families of chemical compounds.

*Noctiluca:* The Polish company currently has 13 patent applications and one patent family protected in 22 countries. NCL has developed over 1,200 chemical compounds, out of which 30% are patented. Currently, the company has over 10 patented families of materials.

*Comment:* We would like to emphasize that comparing the number of patents is a wrong approach, as one patent might carry the majority of the company's total IP value, while others might be without practical use in the industry and as a consequence worthless from the market perspective. For valuation more important is the number of commercialized patent families.

There are transactions in the OLED market between companies concerning solely IP. Noctiluca has a significantly lower number of patents than its competitors. NCL's management explained us that it is not a priority for them, but after observing the OLED transaction market we have concluded that patents are what carries value and therefore are important for valuing developers of OLED emitters. The effective value of a patent and the potential it provides for entering a joint development project is determined by the industry player. NCL's IP strategy is to carry out as many joint projects as possible with commercial partners in order to obtain joint IP, rather than filing a large number of patents. Because of this approach, NCL delays the filling of patents, but is able to save a lot of money and is closer to the final commercialization of its innovations. Moreover, its competitors do not get access to its R&D results too early.

*Update:* Both companies have just slightly improved their number of patents (including application). Consequently, we have maintained our estimation on this element.

### Factor Valuation

Factor	Weight	% of Kyulux
Team	20%	35%
Products	20%	75%
Commercialization	10%	55%
Intellectual property	50%	20%
Weighted Average		38%

Source: East Value Research GmbH

In summary, we have increased our valuation in the "Market Leader Valuation" part. As per Noctiluca reports Kyulux is currently valued at c. USD 275m. We have concluded that Noctiluca currently represents about 38% of Kyulux potential, which results in a valuation of USD 103.1m.

**Valuation Summary**

<b>Type</b>	<b>Value</b>	<b>Weight</b>
Market Leader Valuation	103.13	50%
Funding Valuation	70.00	50%
<b>Fair Value (in USDm)</b>	<b>86.56</b>	<b>100%</b>
USD-PLN	3.62	
<b>Fair Value (in PLNm)</b>	<b>313.36</b>	
N. of shares	1.93	
<b>Fair Value per share (in PLN)</b>	<b>162.11</b>	

Source: East Value Research GmbH

The number of shares in table above includes shares that have been undertaken under the employee incentive program, which are subject to a lock-up and reverse vesting clauses over the period of 4 years. We assumed the utilization at 86.1%.

Based on our methodology, which weighs both methods equally by 50%, we derive a fair equity value for Noctiluca of USD 86.6m (PLN 313.4m), which results in per share valuation of PLN 162.11.

## Profit and loss statement

in PLNm	2023	2024	2025	2026E	2027E	2028E
<b>Total output</b>	<b>0.75</b>	<b>2.46</b>	<b>3.64</b>	<b>7.29</b>	<b>17.17</b>	<b>27.95</b>
<b>of which: Net sales</b>	<b>0.73</b>	<b>1.41</b>	<b>2.35</b>	<b>5.75</b>	<b>13.83</b>	<b>25.66</b>
CoGS	-4.70	-6.34	-6.04	-7.40	-10.40	-12.77
<b>Gross profit</b>	<b>-3.95</b>	<b>-3.88</b>	<b>-2.40</b>	<b>-0.11</b>	<b>6.77</b>	<b>15.18</b>
Other operating income	1.04	0.69	0.34	0.17	0.10	0.44
Administrative expenses	-0.84	-1.12	-1.21	-1.52	-2.10	-2.59
Other operating expenses	-0.03	-0.04	-0.04	-0.06	-0.13	-0.13
<b>EBITDA</b>	<b>-3.77</b>	<b>-4.35</b>	<b>-3.32</b>	<b>-1.53</b>	<b>4.64</b>	<b>12.90</b>
Depreciation & amortization	-1.40	-0.95	-0.51	-0.80	-1.21	-2.35
<b>EBIT</b>	<b>-5.17</b>	<b>-5.30</b>	<b>-3.83</b>	<b>-2.33</b>	<b>3.43</b>	<b>10.55</b>
Net financial results	0.05	-0.19	-0.19	-0.30	-0.23	-0.12
<b>EBT</b>	<b>-5.12</b>	<b>-5.49</b>	<b>-4.02</b>	<b>-2.63</b>	<b>3.20</b>	<b>10.43</b>
Income taxes	0.00	0.02	-0.02	0.00	-0.61	-1.98
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
<b>Net income / loss</b>	<b>-5.12</b>	<b>-5.47</b>	<b>-4.04</b>	<b>-2.63</b>	<b>2.59</b>	<b>8.45</b>
EPS	-2.60	-2.78	-2.06	-1.34	1.32	4.30
DPS	0.00	0.00	0.00	0.00	0.00	0.00
<b>Share in total sales</b>						
Total sales	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
CoGS	-640.04 %	-448.46 %	-257.12 %	-128.65 %	-75.20 %	-49.75 %
Gross profit	-537.35 %	-274.63 %	-102.09 %	-1.94 %	48.92 %	59.17 %
Other operating income	141.61 %	49.00 %	14.52 %	2.87 %	0.76 %	1.71 %
Administrative expenses	-114.06 %	-78.95 %	-51.74 %	-26.41 %	-15.20 %	-10.10 %
Other operating expenses	-3.41 %	-2.67 %	-1.88 %	-1.04 %	-0.90 %	-0.50 %
EBITDA	-513.23 %	-307.25 %	-141.20 %	-26.52 %	33.57 %	50.27 %
Depreciation & amortization	-190.65 %	-67.14 %	-21.88 %	-13.94 %	-8.75 %	-9.17 %
EBIT	-703.88 %	-374.39 %	-163.08 %	-40.47 %	24.82 %	41.10 %
Net financial results	7.16 %	-13.48 %	-8.28 %	-5.22 %	-1.66 %	-0.47 %
EBT	-696.71 %	-387.87 %	-171.36 %	-45.69 %	23.15 %	40.63 %
Income taxes	0.00 %	1.24 %	-0.75 %	0.00 %	-4.40 %	-7.72 %
Minority interests	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Net income / loss	-696.71 %	-386.63 %	-172.11 %	-45.69 %	18.75 %	32.91 %

## Balance sheet

in PLNm	2023	2024	2025	2026E	2027E	2028E
Cash and cash equivalents	2.03	0.47	4.92	5.79	10.50	11.09
Inventories	0.00	0.16	0.37	0.66	1.49	2.53
Trade accounts and notes receivables	0.78	0.78	1.87	2.70	5.92	9.93
Other current assets	0.02	0.02	0.01	0.02	0.02	0.03
<b>Current assets</b>	<b>2.84</b>	<b>1.41</b>	<b>7.18</b>	<b>9.16</b>	<b>17.94</b>	<b>23.58</b>
Property, plant and equipment	0.90	0.67	0.97	1.54	4.65	7.32
Intangible assets	0.85	0.19	0.00	1.51	0.98	2.46
Deferred tax assets	0.00	0.02	0.00	0.00	0.00	0.00
In-progress development projects	0.00	0.94	2.03	1.25	3.75	2.50
<b>Non-current assets</b>	<b>1.75</b>	<b>1.82</b>	<b>3.00</b>	<b>4.30</b>	<b>9.39</b>	<b>12.28</b>
<b>Total assets</b>	<b>4.59</b>	<b>3.23</b>	<b>10.18</b>	<b>13.46</b>	<b>27.32</b>	<b>35.86</b>
Trade payables	0.25	0.63	0.61	1.17	1.62	1.95
Short-term financial debt	0.00	0.00	0.00	0.00	0.00	0.00
Other liabilities	0.70	0.53	0.42	0.79	1.38	1.91
Provisions	0.00	0.00	0.00	0.00	0.00	0.00
<b>Current liabilities</b>	<b>0.95</b>	<b>1.16</b>	<b>1.03</b>	<b>1.96</b>	<b>3.00</b>	<b>3.86</b>
Long-term financial debt	0.00	1.87	0.00	3.00	0.00	0.00
Other long-term liabilities	0.33	0.06	0.00	1.98	3.21	2.44
Provisions	0.00	0.00	0.00	0.00	0.00	0.00
Deferred tax liabilities	0.00	0.00	0.00	0.00	0.00	0.00
<b>Long-term liabilities</b>	<b>0.33</b>	<b>1.93</b>	<b>0.00</b>	<b>4.98</b>	<b>3.21</b>	<b>2.44</b>
<b>Total liabilities</b>	<b>1.28</b>	<b>3.09</b>	<b>1.03</b>	<b>6.94</b>	<b>6.21</b>	<b>6.30</b>
<b>Shareholders equity</b>	<b>3.31</b>	<b>0.14</b>	<b>9.14</b>	<b>6.52</b>	<b>21.11</b>	<b>29.56</b>
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total liabilities and equity</b>	<b>4.59</b>	<b>3.23</b>	<b>10.18</b>	<b>13.46</b>	<b>27.32</b>	<b>35.86</b>

## Cash Flow Statement

in PLNm	2023	2024	2025	2026E	2027E	2028E
Net income / loss	-5.12	-5.47	-4.04	-2.63	2.59	8.45
Depreciation & amortization	1.40	0.95	0.51	0.80	1.21	2.35
Change of working capital	-0.54	0.41	-1.23	-0.23	-3.35	-4.52
Others	-0.68	-1.38	-1.16	1.07	-0.71	-1.57
<b>Net operating cash flow</b>	<b>-4.94</b>	<b>-5.49</b>	<b>-5.92</b>	<b>-0.98</b>	<b>-0.26</b>	<b>4.71</b>
<b>Cash flow from investing</b>	<b>-0.35</b>	<b>-0.05</b>	<b>-0.57</b>	<b>-0.85</b>	<b>-3.80</b>	<b>-4.00</b>
Free cash flow	-5.28	-5.54	-6.49	-1.83	-4.06	0.71
<b>Cash flow from financing</b>	<b>6.42</b>	<b>3.96</b>	<b>10.94</b>	<b>2.70</b>	<b>8.77</b>	<b>-0.12</b>
Change of cash	1.12	-1.57	4.45	0.87	4.71	0.59
Cash at the beginning of the period	0.91	2.03	0.47	4.92	5.79	10.50
Cash at the end of the period	2.03	0.47	4.92	5.79	10.50	11.09

## Financial ratios

Fiscal year	2023	2024	2025	2026E	2027E	2028E
<b>Profitability and balance sheet quality</b>						
Gross margin	-523.31%	-157.99%	-65.86%	-1.53%	39.41%	54.32%
EBITDA margin	-499.81%	-176.76%	-91.08%	-20.93%	27.05%	46.16%
EBIT margin	-685.48%	-215.38%	-105.20%	-31.94%	19.99%	37.74%
Net margin	-678.50%	-222.42%	-111.02%	-36.05%	15.11%	30.22%
Return on equity (ROE)	-154.78%	-3888.27%	-44.19%	-40.31%	12.29%	28.58%
Return on assets (ROA)	-111.49%	-169.27%	-39.71%	-19.52%	9.50%	23.55%
Return on capital employed (ROCE)	-121.56%	-226.44%	-41.60%	-20.06%	11.23%	26.07%
Economic Value Added (in PLNm)	-5.66	-5.57	-3.83	-2.33	2.78	8.54
Net debt (in PLNm)	-2.03	1.40	-4.92	-2.79	-10.50	-11.09
Net gearing	-61.50%	994.96%	-53.81%	-42.79%	-49.73%	-37.51%
Equity ratio	72.03%	4.35%	89.84%	48.42%	77.26%	82.42%
Current ratio	8.43	1.58	7.38	4.93	6.99	7.62
Quick ratio	8.35	1.39	6.99	4.57	6.40	6.79
Net interest cover	98.26	-27.77	-19.70	-7.76	14.93	87.89
Net debt/EBITDA	0.54	-0.32	1.48	1.83	-2.26	-0.86
Tangible BVPS	1.25	0.93	4.65	2.55	10.24	13.78
Capex/Sales	57.47%	2.30%	17.19%	14.78%	27.47%	15.59%
Operating working capital/Sales	331.61%	21.17%	170.50%	127.05%	111.12%	79.82%
Cash Conversion Cycle (in days)	352	73	150	146	152	158
<b>Trading multiples</b>						
EV/Sales	263.1x	136.6x	82.3x	33.6x	14.0x	7.5x
EV/EBITDA	-51.3x	-44.5x	-58.3x	-126.7x	41.6x	15.0x
EV/EBIT	-37.4x	-36.5x	-50.5x	-83.0x	56.3x	18.3x
P/Tangible BVPS	80.7x	108.9x	21.7x	39.6x	9.8x	7.3x
P/E	-38.7x	-36.2x	-49.0x	-75.4x	76.4x	23.5x
P/FCF	-37.5x	-35.8x	-30.5x	-108.2x	-48.8x	280.4x

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*Sources of information:*

The main sources of information for the preparation of this analysis are publications by the issuer and publicly available information from domestic and foreign media that East Value Research considers to be reliable. In addition, discussions were held with members of the management or the investor relations department of the company concerned in order to prepare the analysis. All prices of financial instruments quoted in this financial analysis are closing prices on the date stated in the analysis (or the previous day), unless another date is expressly stated. This publication is updated on occasions which East Value Research believes may be price-relevant. Reference is made in advance to the discontinuation of regular commentary on events in connection with the issuer (coverage).

*Key principles and benchmarks of the value judgements contained in the document:*

The valuations on which East Value Research's investment judgements are based are generally recognized and widely used methods of fundamental analysis, such as the DCF model, peer group comparisons, dividend discount model and, where appropriate, a sum-of-the-parts model.

*Meaning of the investment judgement:*

Buy: Based on our analysis, we expect the stock to appreciate and generate a total return of at least 10% over the next twelve months

Add: Based on our analysis, we expect the stock to appreciate and generate a total return between 0%- 10% over the next twelve months

Reduce: Based on our analysis, we expect the stock to cause a negative return between 0% and -10% over the next twelve months

Sell: Based on our analysis, we expect the stock to cause a negative return exceeding -10% over the next twelve months

*The respective supervisory authority is:*

Bundesanstalt für Finanzdienstleistungsaufsicht  
Graurheindorfer Straße 108  
53117 Bonn