

Noctiluca S.A.

FV: 152.87

Update

Rating: N/A

In the second quarter of 2025, the company's sales have reached PLN 0.42m (+39.9% y-o-y), EBITDA reached PLN -0.42m (Q2/24: -1.36m), resulting in a lower net loss of PLN 0.7m (Q2/24: 1.65m). Although sales growth has been weaker than we expected, costs have been maintained at lower levels than in 2024, resulting in reduced losses and gradually bringing the firm closer to break-even. In 2025, the company reported positive progress in its most important joint development project (JDP) with a Chinese partner and signed four new material transfer agreements (MTAs) with companies from China and the USA. With one of them, the world's largest telecommunications device producer, the company's materials, in testing setting, improved the longevity of OLED display used in smartphones by over 100%. The innovative EIL family of materials is already being tested by seven entities, with some, as noted above, reporting very strong results. This creates a fast track toward potential new JDP contracts or even framework agreements. We have increased our valuation by PLN 25.55m, however due to dilution related to new share issue and warrants to be converted to shares by the end of next week, our price per share of NCL decreased to PLN 152.87.

For 2025E, we expect sales to reach PLN 3.15m (exp. + 122.9% y-o-y; prev. 3.87m), EBITDA of PLN -4.28m (-3.86m) and a net income of PLN -5.31m (-4.84m). In 2026E, we expect sales of PLN 7.24m (exp. +129.7% y-o-y; prev. 8.11m), EBITDA of PLN -1.20m (-0.75m) and net income of PLN -2.2m (-1.75m). As of the end of June 2025, the company had cash of PLN 2.67m but received a bit later additional PLN 6.3m from the share issue. Moreover, the company has an unused credit line of PLN 11m and has signed a letter of intent with an entity from East Asia, as part of preparations to expand and conduct a significant portion of its contracts in Asia for clients from the region.

According to the management team, for company the most likely scenario is the path of Novalad, which was eventually acquired by Samsung. Specifically, management expects to reach the break-even point by the end of 2026, achieve large-scale production by the end of 2027, and become an attractive acquisition or merger target by 2028/2029.

in PLNm	2021	2022	2023	2024	2025E	2026E
Total output	0.56	1.03	0.75	2.46	3.26	7.41
EBITDA	-2.03	-2.39	-3.77	-4.35	-4.28	-1.20
EBIT	-2.34	-2.81	-5.17	-5.30	-4.95	-2.17
Net income / loss	-2.37	-2.85	-5.12	-5.47	-5.31	-2.20
EPS	-1.61	-1.93	-3.23	-3.46	-3.36	-1.39
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	-49.09%	-144.07%	-154.78%	-3888.23%	-67.73%	-38.91%
Net gearing	-84.05%	-45.89%	-61.52%	994.96%	-81.18%	-92.73%
EV/Sales	n.a	156.62x	214.58x	65.81x	49.61x	21.83x
EV/EBITDA	n.a	neg	neg	neg	neg	neg
P/E	n.a	neg	neg	neg	neg	neg

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	3 October 2025 / 9:00 am
Website	www.noctiluca.eu
Sector	Material Science
Country	Poland
ISIN	PLNCTLC00018
Reuters	NCL.WA
Bloomberg	NCL PW

Share information

Last price	104.00
Number of shares (m)	1.58
Market cap. (PLNm)	164.48
Market cap. (EURm)	38.65
52-weeks range	PLN 115.2 / PLN 78
Average volume (shares)	2,613

Performance

4-weeks	4.00%
13-weeks	3.48%
26-weeks	-1.89%
52-weeks	26.83%
YTD	3.17%

Shareholder structure

Synthex Technologies	13.01%
Rubicon Partners Ventures	7.44%
Mariusz Bosiak (CEO)	6.32%
Polski Instytut Badań i Rozwoju	6.13%
ASI ValueTech Seed	6.13%
Free float	60.97%

Financial calendar

Q3/2025 report	27 November, 2025
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Results for Q2/2025

Revenues and Profitability

In Q2/25, Noctiluca generated PLN 1.06m (+214.1% y-o-y) in total output, while net sales amounted to PLN 0.42m (+39.9% y-o-y). The difference is mostly related to capitalized development costs in the amount of PLN 0.62m. The sales came from various sources, including from Inkbit under chemical CRO, supplier contract with Inuru, as well as completion of first orders with European partners that operate in the organic photovoltaic or document security industries. Apart from that the company realized sales under distribution contracts or through intermediaries.

Operating costs remained at very low levels, with just PLN 1.67m in Q2/25 (-19.4% y-o-y). The largest impact was a decrease of 17.5% to PLN 0.75m in third-party services that contributed to 44.7% of costs in Q2/25. Despite significant salary increases in Poland and the fact that NCL employs about half of its workers with PhDs, the company reported a 9.9% decrease in remuneration to PLN 0.53m. Consequently, negative EBITDA and net income were much lower, putting the company on a path to profitability.

in PLNm	Q1/23	Q2/23	Q3/23	Q4/23	2023	Q1/24	Q2/24	Q3/24	Q4/24	2024	Q1/25	Q2/25
Total Output	0.001	0.04	0.28	0.44	0.75	0.31	0.34	0.35	1.46	2.46	0.41	1.06
<i>y-o-y change</i>	-99.6%	-72.5%	-54.4%	-2680.2%	-27.0%	24340.3%	786.0%	26.6%	235.8%	226.1%	35.4%	214.1%
EBITDA	-1.08	-1.23	-0.76	-0.70	-3.77	-1.33	-1.36	-1.47	-0.18	-4.35	-1.22	-0.42
<i>EBITDA margin</i>	-86400.0%	-3234.2%	-272.0%	-160.8%	-499.8%	-436.6%	-403.7%	-417.7%	-12.1%	-176.8%	-295.6%	-40.1%
EBIT	-1.18	-1.57	-1.24	-1.18	-5.17	-1.81	-1.60	-1.59	-0.30	-5.30	-1.34	-0.54
<i>EBIT margin</i>	-94720.0%	-4134.2%	-442.7%	-270.5%	-685.5%	-592.8%	-473.8%	-451.1%	-20.3%	-215.4%	-324.2%	-51.4%
Net income	-1.19	-1.55	-1.22	-1.17	-5.12	-1.81	-1.65	-1.68	-0.33	-5.47	-1.40	-0.70
<i>Net margin</i>	-94880.0%	-4078.9%	-435.5%	-267.4%	-678.5%	-591.2%	-490.8%	-475.3%	-22.7%	-222.4%	-338.7%	-66.5%

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

in PLNm	Q2/2025	Q2/2024	y-o-y change
Net sales	0.42	0.30	39.9%
Total Output	1.06	0.34	214.1%
Operating costs	-1.68	-2.08	-19.4%
EBITDA	-0.42	-1.36	-68.8%
<i>EBITDA margin</i>	-40.1%	-403.7%	
EBIT	-0.54	-1.60	-65.9%
<i>EBIT margin</i>	-51.4%	-473.8%	
Net income / loss	-0.70	-1.65	-57.4%
<i>Net margin</i>	-66.5%	-490.8%	

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

The past few months, the company signed four new MTA contracts: three with Chinese entities and one with an American entity. The U.S.-based company produces OLED panels for automotive and specialty lighting applications. In China, the company partnered with a producer of micro-OLED matrices and a producer of OLED panels for automotive use. Most importantly, there is a new MTA+ contract and test sales of materials with the world's largest telecommunications device company.

Balance sheet and Cash flow

At the end of June 2025, Noctiluca had equity of PLN 5.15m (vs -0.15m in Q2/24). The amount has to increase further as at the reporting date new shares issued have not been registered as well as roughly half of the proceeds have been received after Q2/25.

At the end of H1/25, Noctiluca's largest position on the asset side except cash was capitalized costs of PLN 1.56m related to the research and development project started in 2024. These costs will be reclassified to intangible assets if the development efforts are successful. Cash increased to PLN 2.67m (Q2/24: PLN 2.55m), and c. PLN 6.3m was received after the reporting date. Other assets include fixed assets that declined to PLN 0.53m (-30.8% y-o-y), short-term receivables increased significantly to PLN 1.01m (81.3% y-o-y), likewise inventories increased to PLN 0.26m (+222.1% y-o-y).

Liabilities consisted of current liabilities of PLN 0.84m (+71.7% y-o-y) and deferred income related to government grants of PLN 0.19m (-58% y-o-y). The company has repaid its loans in full and does not have interest-bearing debt.

In Q2/25, Noctiluca reported an operating cash flow of PLN -1.52m compared to PLN -1.39m in Q2/24. Both in Q2 of 2024 and 2025, the amount of investing cash flow was minimal. The financial cash flow was PLN 1.04m in Q2/25 versus 3.42m in Q2/24. The company recorded proceeds from the share issue in the amount of PLN 7.11m, which was offset by the debt repayment of PLN 6.7m.

Changes to our forecasts

Revenues and profitability

The innovative materials offered by the company, particularly its new EIL family of materials, have attracted significant interest from NCL's business partners. One of the key companies from China sent a team to visit Noctiluca's headquarters in Toruń (Poland), as they were impressed by the initial results. With smaller enterprises from that market, Noctiluca has observed a notably short client acquisition period as well as accelerated testing under MTA contracts. Current negotiations with such partners are already focused on pricing and volumes. With smaller partners, NCL expects to sign framework agreements for materials supply in 2026, following successful later-stage testing, with potential contract value of up to EUR 0.5m annually.

This strategic shift towards Chinese partners is driven by their increasing market share in the OLED sector. In just 10 years, China has increased its market share from 1% to about 50%. Many of the display companies from this territory have limited internal chemical teams' capabilities, resulting in high and fast level of cooperation with the Polish company.

While the company is developing as we expected, both business- and operationally, our revenue forecast for 2025 might not be within reach. For 2025E, we expect sales of PLN 3.15m (prev. 3.87m), EBITDA of PLN -4.28m (-3.86m), and net loss of PLN 5.31m (4.84m). In the year 2026, the company should generate revenues from multiple JDP contracts and framework agreements as well as from other less advanced contracts. With observations that some of the contracts might encounter delays we slightly decreased sales. In 2026E, we predict sales of PLN 7.24m (prev. 8.11m), EBITDA of PLN -1.2m (-0.75m), and net loss of PLN 2.2m (1.75m).

Below are our updated sales forecasts for 2025E and 2026E.

Revenue projections for 2025E

Sales Source	Est. Annual sales per contract (in USDm)	Est. Annual sales per contract (in PLNm)	Quantity	Total in 2025E (PLNm)	Notes
Supplier contract (Inuru)	0.25	0.91	0.30	0.27	Sales of proprietary high performance materials (applications: marketing, workwear)
JDP contract (major)	0.80	2.90	0.20	0.58	Sales of proprietary high performance materials for largest display companies
JDP contract (minor)	0.50	1.81	0.25	0.45	Sales of proprietary high performance materials for novel and mid-market companies
MTA contract (major)	0.10	0.36	2.00	0.72	Sales of proprietary high performance materials for testing
MTA contract (minor)	0.05	0.18	1.60	0.29	
Total from own material				2.32	
Custom Synthesis (non-IP) & cCRO				0.84	Chemical CRO for various business partners, sales of non-proprietary materials
Total sales				3.15	

Source: East Value Research GmbH

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	1.00	0.91	Sales of proprietary high performance materials (applications: marketing, workwear, watches, automotive)
JDP contract (major)	0.80	2.90	0.40	1.16	Sales of proprietary high performance materials for largest display companies
JDP contract (minor)	0.50	1.81	0.40	0.72	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	
Total from own material				5.32	
Custom Synthesis (non-IP) & cCRO				1.92	Chemical CRO for various business partners, sales of non-proprietary materials
Total sales				7.24	

Source: East Value Research GmbH

Summary of financial forecast

in PLNm	2025E		2026E	
	new	old	new	old
Net sales	3.15	3.87	7.24	8.11
EBITDA	-4.28	-3.86	-1.20	-0.75
<i>EBITDA margin</i>	<i>-135.9%</i>	<i>-99.8%</i>	<i>-16.6%</i>	<i>-9.3%</i>
EBIT	-4.95	-4.52	-2.17	-1.72
<i>EBIT margin</i>	<i>-156.9%</i>	<i>-116.9%</i>	<i>-29.9%</i>	<i>-21.2%</i>
Net income / loss	-5.31	-4.84	-2.20	-1.75
<i>Net margin</i>	<i>-168.4%</i>	<i>-125.0%</i>	<i>-30.3%</i>	<i>-21.6%</i>

Source: East Value Research GmbH

Commercialization process of proprietary materials by producers (9/2025)

	Current Status	H2/2025	2026+	Likelihood of JDP/cCRO	Earliest possible revenue	Note
1 Inuru	Orders in progress			100%	Client acquired	Regular material supplies + tests of new materials
2 LG Display	MTA		cCRO/JDP	70%	2025	New MTA contract (Advanced testing) in 2024
3 Switzerland	NDA	Advanced tests on the production line	Implementation	80%	2025	Tests on the production line with the company's own materials in 2025
4 Juhua (TCL & Tianma)	JDP	Realization of milestones	Realization of milestones	100%	2025	Tests of NCEIL materials
5 Korea	NDA/MTA		JDP	60%	2026	
6 China	NDA	MTA+	JDP	70%	2025	
7 USA	MTA					
8 USA		Framework agreement		100%	Client acquired	Manufacturer of monochromatic OLED panels
9 Taiwan	MTA	JDP		50%	2025	
10 Poland	Framework agreement	JDP		50%	Client acquired	
11 China	MTA	Framework agreement		60%	2025	
12 China	MTA+		JDP	50%	2025	
13 China	MTA		JDP	50%	2026	

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

On the previous page, we present the progress in the commercialization of proprietary materials. Negative events (delays or reduced likelihood) are highlighted in orange, while positive events are highlighted in green. The above table includes only the most important partners, which can most significantly impact the company's not only financials but also highly increase the company's international recognition.

The contracts with Chinese partners are advancing as anticipated by management, while collaboration with Korean partners has been strategically postponed to create stronger opportunities for joint growth in the future. Management explained that the delay stems from a slight shift in strategy to focus on the expansion into the Chinese market and a small change into the entering of the Korean market that is dominated by two display companies. In this context, Noctiluca has begun collaborating with other Korean materials suppliers to offer a joint solution to indirectly gain access to the country's largest display companies.

Liquidity & financing

Thanks to the share issue conducted at the end of June 2025, the company has significantly improved financing situation and repaid its debt obligations. Until now, the company has sourced PLN 36m from investors and grants, which is significantly lower than its peers e.g. Kyulux USD >100m, Novalad EUR >36m, or Universal Display Corporation USD >680m.

Moreover, the company has signed a letter of intent with a semi-strategic investor from East Asia, who may participate in the next share issue with an investment of PLN 11–14.6m. The proceeds would be allocated to the potential expansion of engineering facilities and the establishment of a technical and commercial centre in East Asia, allowing the company to execute projects such as MTA and JDP directly at its regional factories.

In 2025, the company has already secured over PLN 1m in grants and is awaiting the results of two additional grant programs, which could bring in nearly PLN 10m. New grant applications are also in preparation, with a combined project budget of PLN 18m.

Management expects to reach break-even by the end of 2026. The move toward profitability, despite lower-than-expected sales, is supported by strict cost discipline, which resulted in lower operating expenses in H1/25 compared with H1/24. The monthly costs of the company excluding amortization have been PLN 0.56m in Q2/25 vs. PLN 0.69m in Q2/24.

Noctiluca's materials developments

The discovery of the breakthrough electron injection material NCEIL-4 led to the development of other related chemical substances for the other layers of the OLED panel. Noctiluca aims to be a provider of materials for multiple layers, which is why the company began developing proprietary ETL-related materials optimized for its EIL solution, which is to be offered as an EIL & ETL plug-and-play solution. This solution was the subject of a patent application in July 2025. Noctiluca expects that the development of such materials can reach beyond the OLED world, for examples in QDLED or in medical devices.

The company has developed next generations of the original EIL family of materials (e.g., EIL-20), which are currently being tested by seven entities and are expected to be tested by eleven entities by the end of 2025. The most promising contract is the joint development contract with Juhua, a joint venture between TCL and Tianma.

Status of the development of materials under JDP contract:

1. NCEIL for the EIL layers: 50-60% (+10 pp q-o-q)
2. NCEIL as a dopant for the ETL layer: 40-50% (+10 pp q-o-q)
3. NCEIL for the CPL layer: set to begin in the future

The aim of the development project is to qualify the NCEIL technology in an IT OLED device (monitors and laptops). Usually, the completion of such a large project takes about 2 years, that should result in a supplier contract for the material company. This indicates that under positive scenario the end of 2027 or beginning of 2028 will be a crucial moment for the history of the company. Additionally, TCL CSOT has announced the construction of an IT OLED inkjet printing (IJP) production line for about CNY 29.5bn (c. USD 4.15bn).¹ With the expected production starting in 2028 and Noctiluca being one of the pioneers in the IJP OLED materials, we think that the Polish company is one of the very few candidates to win-over a large supplier contract.

Despite China's large presence in the OLED industry, its share of the OLED materials market is only about 10%. It has low capabilities in developing premium OLED materials compared to its main rival, Korea. Consequently, Noctiluca announced a new pillar in its strategy "Expansion into China and Taiwan", due to observation of the very fast-growing display market in China as well as becoming an innovation leader as we presented in the latest report.

After several years of successful cooperation, a potential acquisition of Noctiluca by an entity like TCL appears increasingly likely, as the company describes the partnership as a potential key strategic project. In addition, we expect Noctiluca to collaborate with other major OLED manufacturers, such as BOE, Tianma, and Visionox, who may also be interested in acquiring the Polish company in the future.

Market News

Chinese BOE is expected to start mass production of IT OLED using evaporation technique in 2026 from its new production factory in Chengdu.²

For Q2/2025, LG Display reported sales slowdown of 17% y-o-y to c. USD 4bn.³ However, the firm announced plans to invest almost USD 1bn in advanced OLED technologies over the next 2 years. Consequently, the firm decided to increase its production capacity in Paju for AMOLED displays.⁴⁵

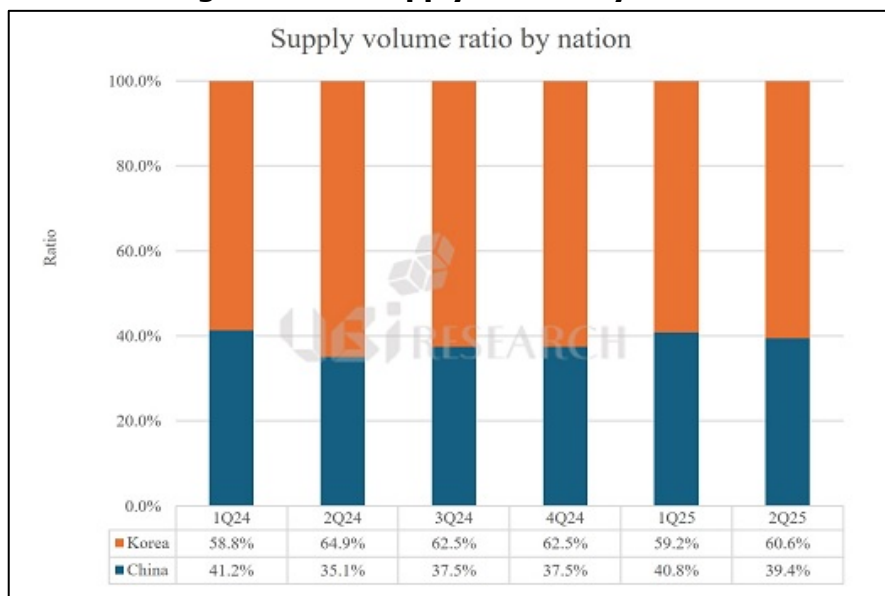
The shipments of mid-to-large OLED panels shipments have increased by 58% y-o-y in Q2/2025. Such panels are mainly used for laptops and monitors.⁶

As reported by Omdia foldable OLED panel shipments grew by 6.5% in 2024.⁷ OLED smartphones continue to increase their market share, with Omdia reporting that over 60% market share, driven by Chinese flexible OLED makers.⁸

Counterpoint reports that AMOLED materials are expected to reach USD 2.8bn by 2029 at a 7% CAGR. Additionally, if two-stack tandem OLED structure is successfully implemented the market will grow even faster. The China share is expected to grow from 33% in 2024 to 46%.⁹

UBI Research reports that the OLED emitting material market is dominated by two players China and Korea. South Korea over the past year has maintained materials purchases at about 60% to China 40%. Samsung Display, with 40% of the market share, is followed by LG Display, BOE and Tianma. Noteworthy, Chinese companies have already surpassed Korean counterparts in the smartphone OLED emitting material market.¹⁰

OLED emitting materials supply volume by nation



Source: ubiresearch.com

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.

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
Average				54.42	69.41	

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 December 2024, the company had 91 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.

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: Kyulux's new CEO is Mr. Jungkil Lee, who has expertise in the execution of business strategies and global expansion. The Polish company has started cooperating with professors from Taiwan, China and UK. Notable with prof. Shun-Wei Liu from Ming Chi University of Technology with a h-index of 42. We believe that cooperation with world's leading in organic chemistry scientists will have a huge effect on the discovery capabilities of the core Polish and Korean teams. Consequently, we have increased the valuation of this factor by 10pp.

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 construction of a market-ready OLED display using the company's materials is planned for 2025E with its Swiss partner.

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: The Polish company operates far beyond display materials, which remain Kyulux's primary focus. In 2025, it fulfilled orders for a client applying OLED technology in non-electronic uses and in organic photovoltaics. Additionally, the company offers solutions for various layers of the OLED panel not only emissive materials. Given the increasing value proposition, we have increased the valuation in this factor by 15 pp.

Commercialization

Kyulux: The Japanese company was the first in the world to start commercial shipping of TADF materials in 2020. The firm expects to achieve full-scale mass production from 2025E.

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 addition, NCL signed a separate new agreement with Inuru to jointly commercialize a compound for use in OLED devices.

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: Both companies appear to be progressing slowly in a process that typically takes years to complete. With no updates from the Japanese firm, large-scale commercialization in 2025 is at risk. Based on the latest communications, Noctiluca now expects industrial scale commercialization to take place by the end of 2027 in an optimistic scenario. We have maintained our evaluation in this part.

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 Kikkei 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 10 patent applications (including one granted). NCL has developed over 1,200 chemical compounds, out of which c. 30% are patented. At the end of 2024, the company had about 10 patented families of chemical compounds. In the coming years, it plans to patent an average of 10 families of chemical compounds in order to close the gap with its competitors.

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: In Q2/2025, the Polish company has applied for two patents, one is for TADF emitters and the second is for materials used in the EIL and ETL layers of an OLED device. Kyulux over the years has built an impressive portfolio of patents with as reported by IPqwer.com 223 patents applications / in-force. We have maintained our evaluation in this part.

Factor Valuation

Factor	Weight	% of Kyulux
Team	20%	35%
Products	20%	75%
Commercialization	10%	20%
Intellectual property	50%	20%
Weighted Average		34%

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 34% of Kyulux potential, which results in a valuation of USD 93.5m.

Valuation Summary

Type	Value	Weight
Market Leader Valuation	93.50	50%
Funding Valuation	70.00	50%
Fair Value (in USDm)	81.75	100%
PLN-USD	3.62	
Fair Value (in PLNm)	296.02	
No of shares	1.91*	
Fair Value per share (in PLN)	152.87	

Source: East Value Research GmbH

Based on our methodology, which weighs both methods equally by 50%, we derive a fair equity value for Noctiluca of USD 81.75m (PLN 296.02m), which results in per share valuation of PLN 152.87. We have increased the value of Noctiluca by PLN 25.55m, but due to dilution effects that are described below the price per share is lower than in previous report.

*The number of shares in table above includes the unregistered shares from the latest share issue in the number of 149,000 shares as well as shares to be undertaken under the employee incentive program, regarding 235,520 shares, which are subject lock-up and reverse vesting clauses over the period of 4 years. We assumed the utilization at 87.5%.

Profit and loss statement

in PLNm	2021	2022	2023	2024	2025E	2026E
Total output	0.56	1.03	0.75	2.46	3.26	7.41
of which: Net sales	0.01	0.20	0.73	1.41	3.15	7.24
CoGS	-2.76	-3.53	-4.70	-6.34	-6.47	-7.41
Gross profit	-2.19	-2.50	-3.95	-3.88	-3.21	0.00
Other operating income	0.34	0.41	1.04	0.69	0.39	0.58
Administrative expenses	-0.17	-0.29	-0.84	-1.12	-1.43	-1.72
Other operating expenses	0.00	-0.01	-0.03	-0.04	-0.05	-0.06
EBITDA	-2.03	-2.39	-3.77	-4.35	-4.28	-1.20
Depreciation & amortization	-0.31	-0.42	-1.40	-0.95	-0.66	-0.96
EBIT	-2.34	-2.81	-5.17	-5.30	-4.95	-2.17
Net financial results	-0.03	-0.04	0.05	-0.19	-0.36	-0.03
EBT	-2.37	-2.85	-5.12	-5.49	-5.31	-2.20
Income taxes	0.00	0.00	0.00	0.02	0.00	0.00
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
Net income / loss	-2.37	-2.85	-5.12	-5.47	-5.31	-2.20
EPS	-1.61	-1.93	-3.23	-3.46	-3.36	-1.39
DPS	0.00	0.00	0.00	0.00	0.00	0.00
Share in total sales						
Total output	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
CoGS	-489.17 %	-341.73 %	-623.31 %	-257.99 %	-198.30 %	-100.01 %
Gross profit	-389.17 %	-241.73 %	-523.31 %	-157.99 %	-98.30 %	-0.01 %
Other operating income	60.40 %	39.61 %	137.91 %	28.19 %	12.08 %	7.80 %
Administrative expenses	-30.39 %	-28.17 %	-111.08 %	-45.42 %	-43.78 %	-23.20 %
Other operating expenses	-0.12 %	-1.15 %	-3.33 %	-1.54 %	-1.38 %	-0.81 %
EBITDA	-359.28 %	-231.43 %	-499.81 %	-176.76 %	-131.38 %	-16.21 %
Depreciation & amortization	-55.51 %	-40.71 %	-185.67 %	-38.62 %	-20.33 %	-13.01 %
EBIT	-414.79 %	-272.14 %	-685.48 %	-215.38 %	-151.70 %	-29.22 %
Net financial results	-5.57 %	-4.12 %	6.98 %	-7.76 %	-11.09 %	-0.40 %
EBT	-420.36 %	-276.26 %	-678.50 %	-223.14 %	-162.80 %	-29.63 %
Income taxes	0.00 %	0.00 %	0.00 %	0.71 %	0.00 %	0.00 %
Minority interests	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Net income / loss	-420.36 %	-276.26 %	-678.50 %	-222.42 %	-162.80 %	-29.63 %

Balance sheet

in PLNm	2021	2022	2023	2024	2025E	2026E
Cash and cash equivalents	4.08	0.91	2.03	0.47	6.36	5.23
Inventories	0.00	0.00	0.00	0.16	0.28	0.45
Trade accounts and notes receivables	0.10	0.16	0.78	0.78	0.63	0.90
Other current assets	0.03	0.00	0.02	0.02	0.00	0.00
Current assets	4.20	1.07	2.84	1.41	7.27	6.58
Property, plant and equipment	0.87	0.71	0.90	0.67	1.19	2.12
Intangible assets	0.79	0.59	0.85	0.19	1.09	0.50
Deferred tax assets	0.00	0.00	0.00	0.02	0.02	0.02
R&D-related capitalized costs	0.56	1.42	0.00	0.94	0.00	0.00
Non-current assets	2.22	2.72	1.75	1.82	2.30	2.64
Total assets	6.42	3.79	4.59	3.23	9.57	9.22
Trade payables	0.15	0.19	0.25	0.63	0.92	1.43
Short-term financial debt	0.01	0.00	0.00	0.00	0.00	0.00
Other liabilities	0.29	0.34	0.70	0.53	0.45	0.89
Provisions	0.00	0.00	0.00	0.00	0.00	0.00
Current liabilities	0.45	0.53	0.95	1.16	1.37	2.32
Long-term financial debt	0.00	0.00	0.00	1.87	0.00	0.00
Other long-term liabilities	1.13	1.28	0.33	0.06	0.37	1.26
Provisions	0.00	0.00	0.00	0.001	0.00	0.00
Deferred tax liabilities	0.00	0.00	0.00	0.00	0.00	0.00
Long-term liabilities	1.13	1.28	0.33	1.93	0.37	1.26
Total liabilities	1.59	1.81	1.28	3.09	1.73	3.58
Shareholders equity	4.83	1.98	3.31	0.14	7.84	5.64
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
Total liabilities and equity	6.42	3.79	4.59	3.23	9.57	9.22

Cash Flow Statement

in PLNm	2021	2022	2023	2024	2025E	2026E
Net income / loss	-2.37	-2.85	-5.12	-5.47	-5.31	-2.20
Depreciation & amortization	0.31	0.42	1.40	0.95	0.66	0.96
Change of working capital	-0.81	-0.67	-1.17	-1.16	0.55	1.40
Others	-0.03	0.04	-0.05	0.19	0.36	0.03
Net operating cash flow	-2.89	-3.06	-4.94	-5.49	-3.74	0.20
Cash flow from investing	-0.08	-0.05	-0.35	-0.05	-1.18	-1.30
Free cash flow	-2.96	-3.12	-5.28	-5.54	-4.91	-1.10
Cash flow from financing	3.70	-0.05	6.42	3.96	10.81	-0.03
Change of cash	0.73	-3.16	1.12	-1.57	5.90	-1.13
Cash at the beginning of the period	3.34	4.08	0.91	2.03	0.47	6.36
Cash at the end of the period	4.08	0.91	2.03	0.47	6.36	5.23

Financial ratios

Fiscal year	2021	2022	2023	2024	2025E	2026E
Profitability and balance sheet quality						
Gross margin	-389.17%	-241.73%	-523.31%	-157.99%	-98.30%	-0.01%
EBITDA margin	-359.28%	-231.43%	-499.81%	-176.76%	-131.38%	-16.21%
EBIT margin	-414.79%	-272.14%	-685.48%	-215.38%	-151.70%	-29.22%
Net margin	-420.36%	-276.26%	-678.50%	-222.42%	-162.80%	-29.63%
Return on equity (ROE)	-49.09%	-144.07%	-154.78%	-3888.23%	-67.73%	-38.91%
Return on assets (ROA)	-36.96%	-75.34%	-111.48%	-169.27%	-55.46%	-23.81%
Return on capital employed (ROCE)	-37.58%	-79.52%	-121.55%	-226.44%	-59.11%	-29.50%
Economic Value Added (in PLNm)	-3.07	-3.22	-5.66	-5.57	-5.92	-3.02
Net debt (in PLNm)	-4.06	-0.91	-2.03	1.40	-6.36	-5.23
Net gearing	-84.05%	-45.89%	-61.52%	994.96%	-81.18%	-92.73%
Equity ratio	75.30%	52.29%	72.03%	4.35%	81.88%	61.19%
Current ratio	22.28	4.24	8.43	1.58	6.04	3.50
Quick ratio	22.12	4.24	8.36	1.39	5.81	3.26
Net interest cover	-74.57	-66.12	98.26	-27.77	-13.68	-72.19
Net debt/EBITDA	2.00	0.38	0.54	-0.32	1.49	4.35
Tangible BVPS	2.56	0.88	1.55	1.15	4.27	3.25
Capex/Sales	13.30%	19.60%	57.47%	2.30%	36.10%	17.54%
Working capital/Sales	711.80%	79.34%	331.67%	21.17%	186.05%	63.47%
Cash Conversion Cycle (in days)	38	30	352	73	18	-26
Trading multiples						
EV/Sales	n.a	156.62	214.58	65.81	49.61	21.83
EV/EBITDA	n.a	-67.67	-42.93	-37.23	-37.76	-134.65
EV/EBIT	n.a	-57.55	-31.30	-30.55	-32.70	-74.71
P/Tangible BVPS	n.a	118.0x	66.9x	90.4x	24.4x	32.0x
P/E	n.a	-53.8x	-32.1x	-30.1x	-31.0x	-74.9x
P/FCF	n.a	-52.8x	-31.1x	-29.7x	-33.5x	-149.4x

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The respective supervisory authority is:

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¹ <https://www.oled-info.com/tcl-csot-build-4-billion-86-gen-inkjet-printing-it-oled-production-line>

² <https://www.oled-info.com/boe-light-its-b16-86-gen-flexible-it-oled-line-december-mass-production>

³ <https://www.oled-info.com/lq-display-announces-its-q2-2025-financial-results-sees-stronger-sales-second>

⁴ <https://www.oled-info.com/lq-display-expand-production-capacity-its-6-gen-production-line-paju-demand>

⁵ <https://www.oled-info.com/reports-detail-lq-displays-925-million-oled-investment-plan>

⁶ <https://www.oled-info.com/ubi-samsungs-mid-large-oled-shipments-grow-58-q2-2025-compared-previous-quarter>

⁷ <https://www.oled-info.com/omdia-expects-foldable-oled-shipments-grow-1246-million-2032>

⁸ <https://www.oled-info.com/omdia-oled-smartphone-display-penetration-exceed-60-2025>

⁹ <https://display.counterpointresearch.com/press-release/signs-of-change-in-global-oled-evaporation-material-market-as-chinese-companies-forge-ahead>

¹⁰ https://ubiresearch.com/en/press-release/?mode=view&board_pid=196