



# **CrayoNano**

# **Q2 2023 Results Presentation**

**23 August 2023**

**Disrupting the fast-growing market for disinfection**



## Presenters today



**Jo Uthus**

CEO



**Jens Kielland**

CFO



# Q2 Operational Update



# About CrayoNano

- Global presence with headquarters in **Norway** and subsidiary in **Taiwan**
- Pioneers in **nanotechnology**-based **semiconductor** components
- **Strong technology IP** portfolio with 260+ **patents**
- Enabling Environmental, Social and corporate Governance (**ESG**) solutions with our partners
- Our first product line of **radically efficient UV-C LEDs** are vital components for the **fast-growing** disinfection markets
- **Fab-lite** business model utilising global supply chain





# Highlights

## Private placements complete, strategy post capital raise being implemented

- Private placement completed in April, raising approx. NOK 125 million in gross proceeds
- Subsequent offering completed in June, raising a further NOK 2.7 million
- New Chief Technology Officer hired in Taiwan, bringing 25 years of industry experience
- R&D and manufacturing operation in Taiwan fully enabled

## Focus on sales funnel and market reach

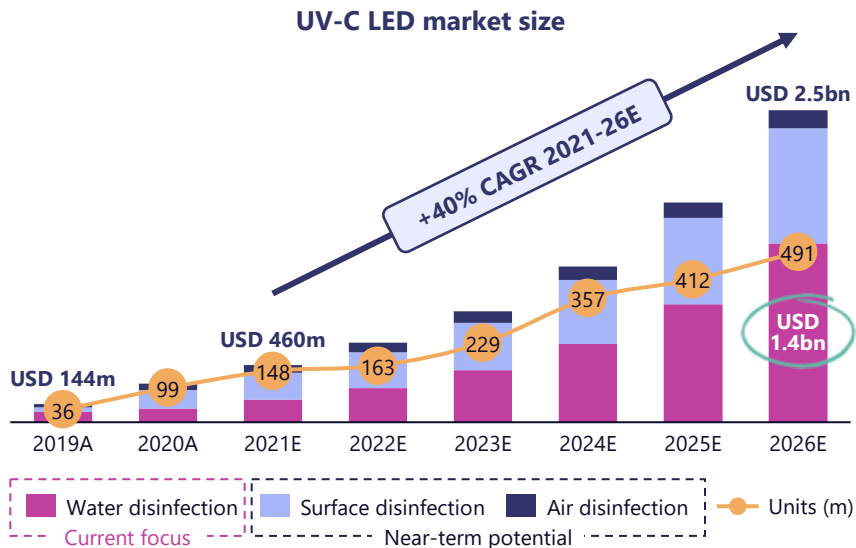
- Strong demand for the powerful CrayoLED™ UV-C LED, particularly in the water segment
- Continue to work with LEDiL, a renowned manufacturer of optical solutions
- Opening high-growth India water disinfection market through Vallalar Energy Solutions

## First commercial frame contract signed

- First commercial frame contract signed in August with AquiSense – global leader and tier-1 system integrator in UVC-LED systems for water, air, and surface disinfection



# UV-C LED market estimated growth of 40% CAGR to \$2.5bn



## Market segments



## Drivers for UV LED integration – UV disinfection

- Environmentally-friendly
- Low power consumption
- Instant start and stop
- Compactness and lightweight
- Longer lifetime
- No heat emitted

UV-C disinfection dates back to 1910, and used on a bigger scale since the mid 1950s

Note: Segment splits are management estimates based on the Yole Development Report for 2020 | Source: Yole Development Report (2021) and management estimates  
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# Key milestone reached

## Standard customer qualification and design-in process



### Typical qualification & design win timeline – 5-12 months

- 1  
Sample Testing  
~ 1 months
- 2  
Product Qualification  
3 – 9 months
- 3  
Design Win Qualification  
1 – 2 months



**August 2023**  
CrayoNano's first commercial frame contract signed with AquiSense Technologies, a global leader in UV-C LED systems design and manufacture.



# First frame contract with Aquisense Technologies

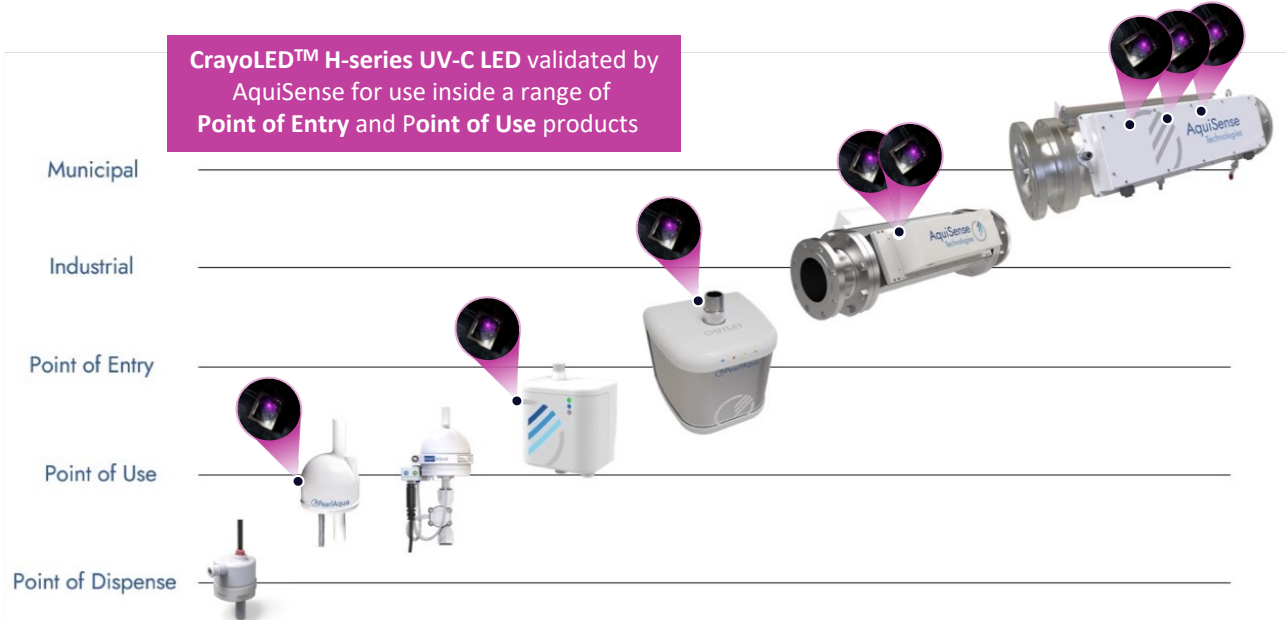
One of the largest system integrators in the water disinfection market

Water



- **CrayoLED™ H-series UV-C LED** tested and validated against Aquisense's high-quality standards for use in water disinfection systems
- Initial contract value NOK 4m
- Opportunity to increase

CrayoLED™ H-series UV-C LED validated by Aquisense for use inside a range of Point of Entry and Point of Use products

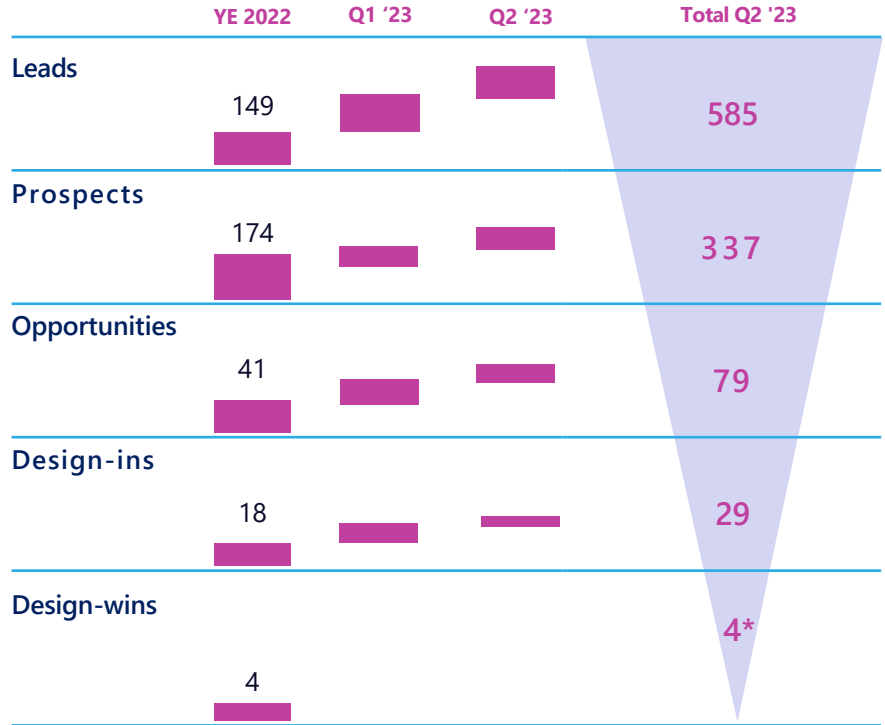






# Strong customer demand continues

Strong growth in interest from customers in water segment particularly



- Strong interest in Q2 from customers
- Conversion of interest (leads) to opportunities shows real demand
- Managing customer expectations of qualification phase (6-12 months)
- Continued ramp up of sales and sales support activities to convert higher interest
- Aquisense frame contract signed in Q3

\*Aquisense frame contract was signed in Q3.



# Building a network of business enablers



## Continue working with Laser Components

*Sven Schreiber, CSO at LASER COMPONENTS Germany - "This is exactly the kind of cutting-edge technology that our customers expect in our portfolio. CrayoNano's trust is proof that our long-standing commitment to UV LED technology is paying off."*



## New distributor agreement with Vallalar Energy Solutions

Vallalar Energy Solutions (VES) is a UV-C lighting consulting firm established in April 2022, based in Chennai, Tamilnadu State, India. With 18 years of experience in OEM/Industrial/KAM sales and marketing with leading corporate companies, VES specializes in providing UV-C lighting solutions to major OEMs in the air and water segments, as well as major dealers across India.



## Commercial frame contract signed with AquiSense

AquiSense Technologies is the global leader in UV-C LED systems design and manufacture. They work with leading LED manufacturers to evaluate their devices and then design efficient disinfection products.



## Partner with LEDiL to reduce design-in time and offer integrated high-quality optics solutions

LEDiL is an industry leading optics supplier to the world's largest lighting manufacturers. An extensive product range, innovative solutions, close cooperation with leading LED manufacturers and customer-oriented service have enabled LEDiL to become the market leader in its field.



# Taiwan: the next step in scaling to high-volume manufacturing

Norway



As part of our planned scaling of CrayoNano, we have moved forward with our pivot to Taiwan to focus on high-volume manufacturing:

- Newly hired Chief Technology Officer based in Taiwan – Ryan Chuo
- Increased investment in Taiwan R&D capabilities to scale to high-volume manufacturing, according to plan
- Divested Lab function in Trondheim, Norway

Taiwan





# Q2 Financial Update



# Q2 2023 Financial results

## Profit and loss

NOK millions

	Q2-23	Q2-22	YTD-23	YTD-22
Sales revenue	0.0	0.0	0.2	0.0
Other revenue	0.8	2.0	2.6	5.0
<b>Revenue</b>	<b>0.9</b>	<b>2.0</b>	<b>2.8</b>	<b>5.0</b>
COGS	0.0	0.0	0.1	0.0
Payroll and related costs	6.9	9.1	20.0	18.6
Other operating costs	8.1	9.1	18.3	15.9
<b>EBITDA</b>	<b>-14.2</b>	<b>-16.2</b>	<b>-35.6</b>	<b>-29.4</b>
Depreciation & amortization	2.0	1.6	4.2	3.5
<b>EBIT</b>	<b>-16.3</b>	<b>-17.8</b>	<b>-39.9</b>	<b>-32.9</b>
Net financial items	-0.2	-0.5	-0.8	-0.7
<b>Net profit before tax</b>	<b>-16.1</b>	<b>-18.2</b>	<b>-40.7</b>	<b>-33.6</b>

## Comments

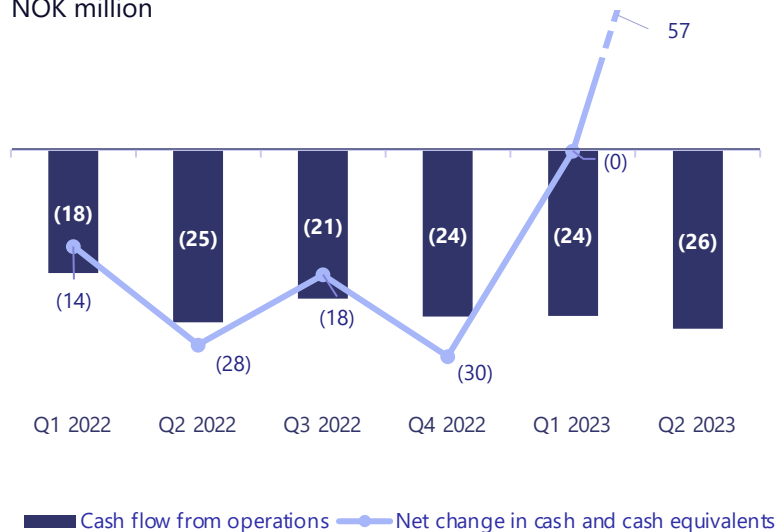
- Sales revenue of NOK 32k in the quarter from sample shipments to prospective customers
- Total operating cost decreased to NOK 15.0m, a reduction of NOK 8.3m (36%) compared with the previous quarter, and NOK 3.2m (18%) below the same quarter last year
- EBITDA of NOK -14.2m, an improvement of NOK 7.3m compared with the previous quarter, and NOK 2.0m compared to the same period last year



# Investing for growth while controlling costs

## Quarterly cash flow development

NOK million



## Comments

- Cash flow from operations of NOK -25.8m in the quarter, a slightly higher cash burn than the first quarter and broadly in line year-on-year
  - Continued to build strategic inventory which increased by NOK 2.8m in the quarter
- Net cash up NOK 57.1m quarter-on-quarter as we completed the private placement, offset by negative cash flow from operations
- Cash balance at end-Q2 of NOK 67.2m



# Secured credit facility for working capital financing

- CrayoNano secured a credit facility of NOK 12m with SpareBank 1 SMN in July 2023
- The new facility is established for the purpose of financing CrayoNano's working capital needs
- Current inventory value at NOK 8m, receivables expected to increase as we start our sales generation
- Strong support from our banking partner, the new facility is supported by a guarantee from Eksfin, and can be increased as we further scale our commercial operations





# Strong financial position to support commercial activities

## Equity

- Completed private placement of approx. NOK 125m in Apr'23
- Subsequent offering of NOK 2.7m to existing shareholders who didn't participate in the private placement in Jun'23
- Board stated intention to pursue listing on Euronext growth within 12 months after private placement

## Credit

- Established credit facility of NOK 12m with SpareBank 1 SMN for working capital financing in Jul'23
- Facility can be increased based on scale-up of commercial activities

## Soft funding

- Strong access to public funding has been important to finance R&D activities in the company
- EIC funding completed this year, ongoing funding with Norwegian Research council (NRS)
- Continue to pursue options for R&D financing through public funding sources

**Strong financial position to scale commercial activities and accelerate revenue generation**





## Q2 Key Takeaways

## Q2 key takeaways

### Ongoing commercial engagement

First commercial frame contract agreed with market leader AquiSense  
Strong interest in the quarter from customers in the water market segment  
Continue to bring additional partners towards design wins

### Operational readiness and supply chain

Post capital raise business plan being implemented by transitioning R&D operations from Norway to Taiwan  
New Chief Technology Officer hire in Taiwan  
New strategic partnership agreed to support growth in India

### Funding our growth

Continued assessment of long-term capital needs for successful growth  
Built strategic inventory to support expected demand in the months to come  
Agreed asset backed lending facility covering part of working capital requirements



# Appendix



# Profit and loss

(unaudited)

<i>(Figures in NOK thousands)</i>	<b>Q2 2023</b>	<b>Q2 2022</b>	<b>FY 2022</b>
Sales revenue	32	0	438
Other revenue and public grants	828	2 065	7 559
<b>Total revenues</b>	<b>859</b>	<b>2 065</b>	<b>7 997</b>
Cost of goods sold	31	0	236
Payroll and related costs	6 920	9 076	34 993
Other operating costs	8 098	9 149	41 378
<b>EBITDA</b>	<b>-14 190</b>	<b>-16 161</b>	<b>-68 611</b>
Depreciation	2 129	1 594	7 253
<b>EBIT</b>	<b>-16 319</b>	<b>-17 755</b>	<b>-75 864</b>
Net financial items	234	-485	- 633
<b>Net profit before tax</b>	<b>-16 085</b>	<b>-18 240</b>	<b>-76 497</b>
Tax expense	-2 997	-4 386	-17 145
<b>Net profit (loss)</b>	<b>-13 088</b>	<b>-13 854</b>	<b>-59 351</b>
# shares in 1000	37 524	28 401	28 401
Earnings pr share (NOK)	-0.35	-0.49	-2.09

Note: P&L presented is net of capitalized R&D



# Balance sheet

(unaudited)

(Figures in NOK thousands)

	Q2 2023	Q2 2022	FY2022
<b>Assets</b>			
Development, patents and licenses	66 754	61 202	66 129
Deferred tax assets	51 501	33 681	43 054
Tangible fixed assets	11 867	12 896	12 735
Financial fixed assets	1059	1 059	1 059
<b>Total non-current assets</b>	<b>131 181</b>	<b>108 838</b>	<b>122 977</b>

## Current assets

Inventory	7 936	0	2 087
Trade and other receivables	14 135	12 862	16 896
Cash and cash equivalents	67 233	58 047	10 238
<b>Total current assets</b>	<b>89 305</b>	<b>70 908</b>	<b>29 221</b>
<b>Total assets</b>	<b>220 486</b>	<b>179 747</b>	<b>152 199</b>

## Equity and liabilities

### Equity

Share capital	750	568	568
Share premium account	233 326	234 399	105 786
Additional paid-in capital	2 596	2 596	2 596
Other equity	-14 946	0	
Retained earnings	-32 252	-95 081	0
<b>Total equity</b>	<b>189 475</b>	<b>142 483</b>	<b>108 950</b>

### Liabilities

Convertible loans	0	0	0
Liabilities to finance institutions	6 053	9 080	8 073
Trade payables	3 054	3 709	9 239
Government charges	1 253	2 666	2 277
Other liabilities	20 650	21 809	23 659
<b>Total liabilities</b>	<b>31 011</b>	<b>37 264</b>	<b>43 249</b>
<b>Total equity and liabilities</b>	<b>220 486</b>	<b>179 747</b>	<b>152 199</b>

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CrayoNano AS

Sluppenvegen 6, Trondheim, Norway

+47 72 92 98 60

[investor@crayonano.com](mailto:investor@crayonano.com)