

Annual Report **2022**

# Company Introduction

Established in 2012 and headquartered in Trondheim, Norway, CrayoNano is a fab-lite semiconductor company, specializing in nanomaterials-based semiconductor components. In addition to our offices in Norway, we have opened a branch and cleanroom in Hsinchu, Taiwan with its well-established technology infrastructure and semiconductor community.

CrayoNano is a semiconductor manufacturing company which develops and manufactures UV-C LEDs for the fast growing disinfection market for water, air, and surface treatments.

CrayoNano developed and launched a competitive market-entry product, designed together with key customers to primarily target the water disinfection market and to be versatile to serve other applications. CrayoLED™ enables CrayoNano to open the market with a reliable and high-quality product, building the foundation towards the development of our nanowire-based UV-C LED. CrayoLED™ is a vehicle for the future nanowire technology to be designed into various applications, build a strong customer base, develop, and strengthen our supply chain and qualify packaging and device fabrication partners.



# Highlights

---

## Q1 2022

- Established a branch in Taiwan, located in Hsinchu with its deep-rooted and respected technology infrastructure and semiconductor community
- Signed an industrialization and development agreement with SemiLEDs to jointly develop the next generation UV-C LED for disrupting the disinfection market. This partnership will add onto CrayoNano's resources and capacities in Trondheim and de-risk the supply chain dependency, ensuring a successful market entry
- Increased our patent portfolio by 180+ additional patents particularly in LED chip processing, fabrication, packaging, and manufacturing through licensing agreement with renowned LED industry player – supplementing CrayoNano's patent portfolio covering nanowire and graphene-based technologies in general and UV-C LED products specifically

## Q2 2022

- Implemented Oracle Netsuite ERP system. Oracle Netsuite is an efficient and scalable ERP platform to better manage business activities as CrayoNano is accelerating its industrialization and commercialization

## Q3 2022

- Signed an engagement letter with DNB Markets and SpareBank 1 Markets to act as advisors in a private placement process to fully finance our business plan

## Q4 2022

- Launched the CrayoLED™ H-series. CrayoLED's quality-driven design meets the high standards for reliability and performance in the fast-growing industrial and commercial disinfection and sanitation markets
- Announced new office expansion in Trondheim, Norway, to support the Company's growth and future opportunities
- Booked first commercial revenue and started to gain commercial traction on its first product series, CrayoLED™ H-series

# Organization

**Our vision at CrayoNano is to enable solutions for a more sustainable and healthier life for everyone.**

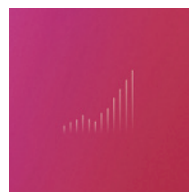
Our mission is to develop nanomaterials-based semiconductors that contribute towards solutions for global environment and health challenges.

CrayoNano is a place where technology, creativity and adventure come together to take on big challenges. We do not accept the status quo and look to make a unique contribution to make the world a better, more sustainable place for all. This has guided us on our technological path and towards important industries.



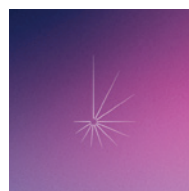
## We are pioneers

We look beyond into the unknown and the challenges ahead. We are always looking for what can be done differently, innovating in areas others are not. We are ambitious and bold



## We are solution-driven

We realize plans by working smart and effectively. We put plans to action and follow through.



## We are co-creators

We work closely with colleagues, partners and customers and expect the same of others. We are transparent, caring and communicate openly and bring a competitive edge to our customers. We deliver reliable solutions fast and on time through clear planning, open communication, collaboration, and dedicated responsibilities.

## CrayoNano at a Glance

### Diversity



45+ employees

17 nationalities

67 % Male | 33 % Female

### Strong IP, > 300 patents



109 granted

46 pending

169 licensed

### Global Operations

*Norway & Taiwan*



300 m<sup>2</sup>  
cleanroom

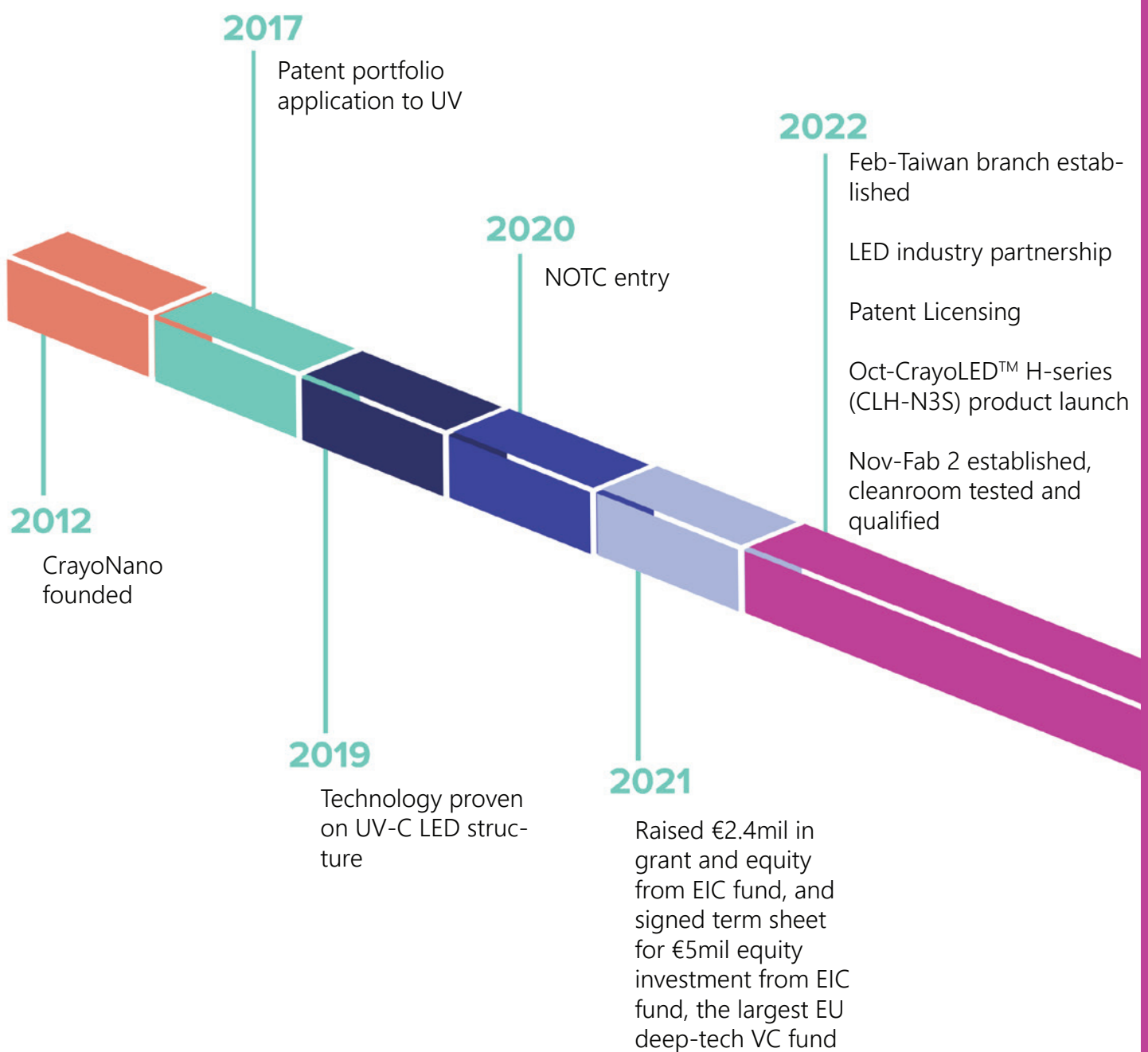


2 Sales  
offices



# Timeline of Events

---





# CrayoLED™ H-Series (CLH-N3S)

## An LED Designed to Disinfect

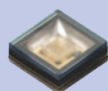
CrayoNano is a semiconductor manufacturing company which develops and manufactures UV-C LEDs for the fast growing disinfection market for water, air and surface treatments.

The company's main revenue drivers are:

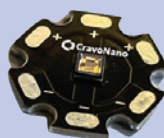
- The sale of devices, such as UV-C LED package components to direct customers and through our distribution partners.

We are a business-to-business (B2B) model, targeting system integrators, module makers, and OEMs/ODMs in the public sector, industrial, consumer, healthcare, and mobility segments.

The CrayoLED™ is optimized for the highest germicidal value at a wavelength of 275 nm. Its small footprint (3.5 mm x 3.5 mm) and strong performance (100 mW optical power at 350 mA) easily integrates into systems for residential, commercial, and industrial segments, enabling system miniaturization and longer lasting solutions.



**CLH-N3S**  
**CrayoLED™ H-Series**  
UV-C LED packaged component



**CLH-N3S** on an  
aluminum MCPCB  
Functional testing and product qualification



**CLH-N3S demobox**  
Designed for irradiance measurements (mW/cm<sup>2</sup>)

### **CLH-N3S** **CrayoLED™ H-Series**

- ✓ Small footprint
- ✓ High power density
- ✓ Quality and reliability driven
- ✓ Qualified & validated by third-party test lab
- ✓ Robust package design with industry leading lifetime of 10k hours (L70 rating)

# Positive & Broad ESG Impact

## UV-C LED technology can be deployed in portable, solar charged water sanitation devices.

At CrayoNano, we recognize the importance of the United Nations Sustainability Goals, and we are proud to contribute to them through our UV-C LED technology. UV-C LEDs are sustainable solutions which offer both direct and indirect benefits. UV-C LEDs consume significantly less energy than traditional UV lamps, thus reducing overall energy consumption. In addition, they have a much longer lifespan, resulting in less frequent replacements and reduced waste. Furthermore, our UV-C LEDs can be utilized in air and water disinfection systems, reducing the need for chemicals and other pollutants. Unlike traditional UV lamps, our LED lights do not contain toxic substances like mercury, making them environmentally safe. By using our UV-C LED technology, we are working towards a more sustainable future.



## Replacing current methods



### Lower energy consumption

~70 % energy savings compared to mercury UV lamps



### Lower CO<sub>2</sub> footprint

~50 % lower CO<sub>2</sub> footprint than mercury UV lamps



### No ozone generation

UV lamps with peak < 240 nm produce ozone



### Less waste

> 10 years lifespan versus 1 - 2 years for UV lamps



### No mercury

Conventional UV lamps contain 20 - 200 mg mercury



### No need for toxic chemicals, like chlorine

Chlorine is commonly used in water treatment systems



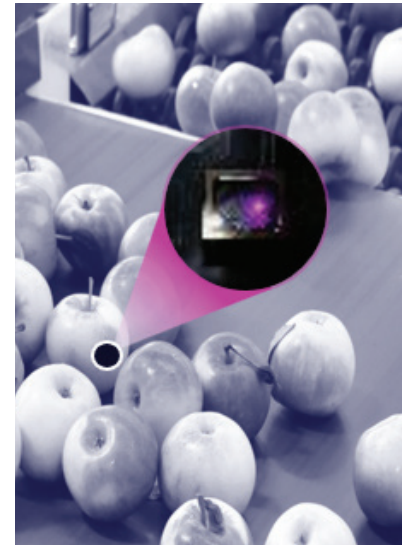
## Using UV-C LED for water disinfection



~1/3<sup>rd</sup>

of CrayoNano's 2023 target customers are in the water treatment and disinfection segment`

- Globally, there are more than 785 million people who lack access to clean drinking water.
- UV-C LED equipped on the water tap can sterilize water to improve the safety of drinking water
- UV-C LEDs are significantly smaller than their standard UV counterparts, enabling integration in small appliances
- Instant on/off function and limited heat generation make UV-C LED ideal for disinfecting water, including cold water



## Water Disinfection



Existing water treatment often uses hazardous chemicals. CrayoNano's UV-C LED is a clean, environmentally friendly alternative.

## Air Disinfection



Small, compact UV-C LEDs can help eliminate airborne pathogens and odor causing bacteria, making multi-family housing and shared workplaces safer.

## Surface Disinfection



UV-C LED technology can improve food packaging and preservation, reducing the need for expensive processes that utilize high temperatures and chemical treatments.





# Annual Statement 2022

---

## Key Business Developments

- CrayoNano booked our first commercial revenue of NOK 0.4m and started to gain commercial traction on its first product series, CrayoLED™ H-series
- The CrayoLED™ H-series was launched at the beginning of the fourth quarter. CrayoLED's quality-driven design meets the high standards for reliability and performance in the fast-growing industrial and commercial disinfection and sanitation markets
- The organizational scaling continued with an increase from 33 to 47 employees during the year. The focus has been to strengthen the organization within sales, commercial roles and operations
- The company entered into an industrialization and development agreement with SemiLEDs and established its Taiwan branch in the first quarter. In the fourth quarter CrayoNano completed the installation of its Fab 2 in Taiwan
- Continued to invest in R&D and product development to realize the product roadmap including our next product series.
- Announced in the third quarter that it had signed engagement letters with DNB Markets and SpareBank 1 Markets to act as advisors in a capital raise process to fully finance our business plan

## Financial results

In 2022 CrayoNano booked its first commercial revenue of NOK 0.4m. Total income including public project funding amounted to NOK 8.0m in the year, in line with NOK 8.3m in 2021.

Total operating expenses ended on NOK 83.9m which is up from NOK 49.2m the year before. The increase is mainly explained by accelerated onboarding of new employees, increased R&D activity and the establishment of CrayoNano's Taiwan branch including Fab 2.

Total operating result was NOK 75.9m negative, down from NOK 40.9m negative in 2021. The net result for the year amounted to a loss of NOK 59.4m compared to a loss of NOK 31.4m in 2021.

## Financial position

At the end of the year CrayoNano's total equity was NOK 109.0m. The equity ratio was 72 %, down from 81% in 2021. Cash and cash equivalents amounted to NOK 10.2m while total interest-bearing debt was NOK 8.1m.

In August 2022, the company announced that it had engaged DNB Markets and SB1M markets as advisors for a private placement process. CrayoNano has already entered into a term sheet with European Innovation Council (EIC) Fund for an investment up to EUR 5m. On 12th January 2023 the company signed a loan agreement of NOK 27.5m with major shareholders. The loan will be converted into equity in connection with, and at the same terms, as in the private placement. The expected closing of the private placement is in the beginning of 2023. Please see note 15 for more information on the current financial position and private placement process.

The company is exposed to credit risk, interest risk and exchange risk in its operations and targets to keep risk at an acceptable level. The board of directors' view that CrayoNano has the ability to continue its business in the foreseeable future and confirms that the accounts have been prepared on a going concern basis and that this assumption is appropriate at the date for the accounts. The proceeds of the private placement will be used to accelerate operations, acquire patent rights, and invest in manufacturing capacity and flexibility, reducing risks around supply chain disruption and fund the company until profitability.

## Product Launch

In October 2022 CrayoNano launched the CrayoLED™ H-series, an ultraviolet-C light emitting diode (UV-C LED) semiconductor packaged component. CrayoLED's quality-driven design meets the high standards for reliability and performance in the fast-growing industrial and commercial disinfection and sanitation market.

The CrayoLED™ is optimized for disinfection at a typical peak wavelength of 275 nm. Its small package footprint (3.5 mm x 3.5 mm) and high-power performance (typical 80 mW optical power at 350 mA) easily integrates into systems for residential, commercial, and industrial segments, enabling system miniaturization and longer lasting solutions.

## Taiwan branch

During 2022 CrayoNano entered into an industrialization and development agreement with SemiLEDs and established a branch office in Taiwan. SemiLEDs is a well-known manufacturer of UV LEDs with industry proven experience and capabilities for faster ramp-up to high-volume manufacturing.

In the fourth quarter, CrayoNano completed the installation of its Fab 2 in Taiwan consisting of a cleanroom facility and an internal wafer manufacturing capacity. This marked the successful transition into a fab-lite business model where the company has a core of internal fabrication capabilities for both R&D purposes and industrial scale production.

The establishment in Taiwan is important for enhancing the access to local semiconductor expertise, reducing the time to market for CrayoNano's products, and for taking control of the value chain and IP.

## R&D activities

CrayoNano devotes considerable effort and resources to R&D activities with more than 40% of the total cost base in 2022 dedicated to R&D and product development. These efforts have contributed to the launch of CrayoNano's first product, the CrayoLED™ H-series, in October 2022.

The material part of R&D cost is related to the development of CrayoNano's technology platform which is the foundation for the company's product roadmap. R&D expenses are capitalized to the extent that they represent probable future economic benefit. Capitalized R&D amounted to NOK 9.8m in 2022, an increase from NOK 6.2m in 2021 (excluding patents and licenses), explained by accelerated R&D project activities.

Per year-end 2022 the total balance sheet value related to R&D assets including the patents, licenses and trademarks is NOK 66.1m.

## Environment, health and safety

As part of our laboratory activities, potentially hazardous materials are handled, and gases are released into the atmosphere. This activity is subject to national and international regulations for emissions and other environmental requirements.

We have established processes for safety and risk assessments, control of risk for our employees, waste management and training of employees. The company will, with the support of third parties, develop this further in 2023.

Traditional mercury based UV-C lamps contain environmental toxins, are large and have a short lifespan, which has negative environmental consequences. This is a driver for establishing regulations to replace UV-C lamps. CrayoNano develops UV-C LEDs that solve many of the negative environmental effects of traditional UV-C lamps. UV-C LED also has the potential to replace other non-UV-C based disinfection methods such as ozone, chlorine, and other chemicals. CrayoNano thus expects to represent a positive environmental imprint with its UV-C LEDs.

### **Diversity, inclusion and equality**

CrayoNano's greatest value is our employees, and we place emphasis on developing and maintaining a healthy and positive work environment. No work-related absence was registered in 2022. The company had sickness absence in 2022 of 3.8 %, of which 2.7 % was with doctors' certificate and 1.1 % self-certified. The sickness absence in 2021 was 1.5 %.

CrayoNano is committed to encouraging equality, diversity, and inclusion among our workforce, and eliminating unlawful discrimination. The aim is for our workforce to be truly representative of all sections of society and our customers, and for each employee to feel respected and able to give their best. The board of directors and the company's management are conscious of preventing discrimination on the grounds of gender, orientation, ethnicity, national origin, descent, skin color, language and religion.

The organization - in providing goods and services - is also committed against unlawful discrimination of customers or the public.

At the end of the year, the company had 47 employees, an increase from 34 at the beginning of the year. The percentage of female employees was 32% at year-end, and the organization consisted of employees from a total of 17 different nationalities. The focus in the past year has been to strengthen the organization within sales, commercial roles and operations. CrayoNano plans to further strengthen the organization in the future as it is preparing for high volume production.

Insurance has been taken out for the board members and the CEO for their possible liability to the company and third parties.

### **Outlook**

CrayoNano addresses the large and rapidly growing UV-C LED disinfection market which is estimated by external consultants (Yole Development 2021) to reach USD 2.5bn by 2026 with a CAGR above 40 % in the period 2022-26. The growth is driven by a combination of environmental aspects, an increased population density with increasing health concerns like access to safe drinking water and emerging, new applications utilizing UV-C LEDs.

With the first commercial revenue in 2022, CrayoNano is gaining commercial traction on its first product series across a large number of application areas and markets.

The company provides an asset-light, flexible and scalable business model. With the establishment of the CrayoNano Taiwan branch, CrayoNano has started its shift into a fab-lite business model with an internal production capacity to support expected customer demand in 2023 and into 2024. The next step will be to leverage external partnerships for high-volume production in 2024.

The board of directors are pleased with the major milestones achieved in 2022 and although there is always inherent uncertainty and risks, the board of directors' assessment is that the fundamentals and long-term prospects for CrayoNano are positive. CrayoNano is very well positioned to take advantage of the expected strong growth of the UV-C LED disinfection market.

Trondheim, 29. 02.2023

Rune Rinnan  
Chairman of the Board

Torkjell Johan Nilsen  
Board member

Jan-Eyvin Wang  
Board member

John Raaum  
Board member

William B. Cortelyou  
Board member

Jo Uthus  
CEO

## Income Statement

<i>(Amounts in NOK)</i>	Note	2022	2021
<b>OPERATING REVENUE AND EXPENSES</b>			
<b>Operating revenue</b>			
Revenue		437 790	303 263
Other operating income	1	7 559 403	8 022 388
<b>Total operating revenue</b>		<b>7 997 193</b>	<b>8 325 650</b>
<b>Operating expenses</b>			
Raw materials and consumables		235 944	288 877
Salary and personnel cost	2	34 993 767	27 260 219
Depreciation and amortization	3	7 252 866	6 007 294
Other operating expenses	2	41 378 193	15 655 001
<b>Total operating expenses</b>		<b>83 860 770</b>	<b>49 211 391</b>
<b>OPERATING PROFIT OR LOSS</b>		<b>-75 863 577</b>	<b>-40 885 741</b>
<b>FINANCIAL INCOME AND EXPENSES</b>			
<b>Financial income</b>			
Changes in market value of fin. cur. assets	4	-309 106	559 170
Other interests		223 388	470 992
Other financial income	5	1 012 435	141 246
<b>Total financial income</b>		<b>926 717</b>	<b>1 171 407</b>
<b>Financial expenses</b>			
Changes in market value of fin. cur. assets	4	203 339	46 724
Other interests		511 533	1 047 583
Other financial expense	6	844 876	292 273
<b>Total financial expenses</b>		<b>1 559 748</b>	<b>1 386 581</b>
<b>NET FINANCIAL INCOME AND EXPENSES</b>		<b>-633 031</b>	<b>-215 173</b>
<b>ORDINARY RESULT BEFORE TAXES</b>		<b>-76 496 608</b>	<b>-41 100 914</b>
Tax on ordinary result	7,8,9	-17 145 411	-9 736 866
<b>TO MAJORITY INTERESTS</b>		<b>-59 351 197</b>	<b>-31 364 048</b>
<b>APPLICATION AND ALLOCATION</b>			
To/from other equity	10	-59 351 197	-31 364 048
<b>TOTAL APPLICATION AND ALLOC.</b>		<b>-59 351 197</b>	<b>-31 364 048</b>

## Statement of Financial Position

<i>(Amounts in NOK)</i>	Note	31.12.2022	31.12.2021
<b>ASSETS</b>			
<b>FIXED ASSETS</b>			
<b>Intangible assets</b>			
Research and development	1,3	32 894 179	25 188 142
Concessions, patents, licenses, trademarks	3	33 235 770	33 392 696
Deferred tax asset	7,8,9	43 054 443	25 909 032
<b>Total intangible assets</b>		<b>109 184 392</b>	<b>84 489 869</b>
<b>Tangible assets</b>			
Machinery and plant	3	11 235 836	12 805 505
Fixtures and fittings, tools, office machinery etc.	3	1 499 206	1 236 846
<b>Total tangible assets</b>		<b>12 735 042</b>	<b>14 042 350</b>
<b>Financial fixed assets</b>			
Other long-term receivables	2	1 058 805	2 060 685
<b>Total financial fixed assets</b>		<b>1 058 805</b>	<b>2 060 685</b>
<b>TOTAL FIXED ASSETS</b>		<b>122 978 239</b>	<b>100 592 905</b>
<b>CURRENT ASSETS</b>			
Inventories	11	2 087 333	0
<b>Receivables</b>			
Trade receivables		346 393	6 752
Other short-term receivables	12	16 549 287	7 199 239
<b>Total receivables</b>		<b>16 895 681</b>	<b>7 205 991</b>
<b>Investments</b>			
Quoted bonds	4	0	50 512 446
<b>Total investments</b>		<b>0</b>	<b>50 512 446</b>
Bank deposits, cash in hand, etc.	13	10 238 126	49 579 585
<b>TOTAL CURRENT ASSETS</b>		<b>29 221 140</b>	<b>107 298 021</b>
<b>TOTAL ASSETS</b>		<b>152 199 379</b>	<b>207 890 926</b>

## Statement of Financial Position

<i>(Amounts in NOK)</i>	Note	31.12.2022	31.12.2021
<b>EQUITY AND LIABILITIES</b>			
<b>EQUITY</b>			
<b>Paid-in equity</b>			
Share capital	10,14,15	568 030	568 030
Share premium reserve	10	105 786 164	234 361 535
Other paid-in equity	10	2 596 250	2 596 250
<b>Total paid-in equity</b>		<b>108 950 444</b>	<b>237 525 815</b>
<b>Retained earnings</b>			
Uncovered loss	10	0	-69 224 174
<b>Total retained earnings</b>		<b>0</b>	<b>-69 224 174</b>
<b>TOTAL EQUITY</b>		<b>108 950 444</b>	<b>168 301 641</b>
<b>LIABILITIES</b>			
<b>NON-CURRENT LIABILITIES</b>			
<b>Other non-currents liabilities</b>			
Liabilities to financial institutions	16	8 073 321	10 593 329
<b>Total other non-currents liabilities</b>		<b>8 073 321</b>	<b>10 593 329</b>
<b>TOTAL NON-CURRENT LIABILITIES</b>		<b>8 073 321</b>	<b>10 593 329</b>
<b>CURRENT LIABILITIES</b>			
Accounts payable		9 239 233	3 518 008
Public duties payable		2 277 098	1 581 052
Other currents liabilities	17	23 659 284	23 896 896
<b>TOTAL CURRENT LIABILITIES</b>		<b>35 175 614</b>	<b>28 995 956</b>
<b>TOTAL LIABILITIES</b>		<b>43 248 936</b>	<b>39 589 286</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>152 199 379</b>	<b>207 890 926</b>

Trondheim,

Board of directors of CrayoNano AS

Chairman  
Leif Rune Rinnan

Board member  
Torkjell Johan Nilsen

Board member  
Jan Eyvin Wang

Board member  
William B. Cortelyou

Board member  
John Raaum

CEO  
Jo Uthus

## Cash Flow Statement

<i>(Amounts in NOK)</i>	<b>Note</b>	<b>31.12.2022</b>	<b>31.12.2021</b>
<b>Cash flow from operating activities</b>			
Profit before tax		-76 496 608	-41 100 914
Depreciation		7 252 866	6 007 294
Gain/loss from investment in bonds		200 997	-512 446
Changes in inventories		-2 087 333	0
Changes in trade receivables		-339 641	3 911
Changes in accounts payable		5 721 224	591 508
Changes in other balance sheet items		-8 891 616	17 491 285
<b>Net cash flow from operating activities</b>		<b>-74 640 111</b>	<b>-17 519 362</b>
<b>Cash flow from investing activities</b>			
Purchase(-) / proceeds(+) of fixed assets		-13 494 669	-28 265 642
Purchase(-) / proceeds(+) of bonds		50 311 449	-50 000 000
Purchase(-) / proceeds(+) other investments		1 001 880	
<b>Net cash flow from investing activities</b>		<b>37 818 660</b>	<b>-78 265 642</b>
<b>Cash flow from financing activities</b>			
Repayment of long-term debt		2 520 008	11 455 935
Proceeds from new equity		0	25 237 629
<b>Net cash flow from financing activities</b>		<b>-2 520 008</b>	<b>13 781 695</b>
<b>Net change in cash and cash equivalents</b>		<b>-39 341 459</b>	<b>-82 003 309</b>
Cash and cash equivalents at 01.01.		49 579 585	131 582 895
Cash and cash equivalents at 31.12.		10 238 126	49 579 586

## Notes 2022

### Accounting principles

The annual accounts have been prepared in accordance with the Norwegian Accounting Act (Regnskapsloven) and NRS 8 – Good Accounting Practice for Small Enterprises (God regnskapsskikk for små foretak).

### Revenue recognition

Revenue from the sale of goods and services is accounted for at the time of transaction.

### Assessment and classification of assets and liabilities

Assets intended for long-term ownership or use are classified as fixed assets. Fixed assets are valued at acquisition cost. Fixed assets are capitalized and depreciated over the economic lifetime of the asset. In case of impairment, not expected to be temporary, the fixed asset is written down to its recoverable amount. Recoverable amount is the highest of fair value less costs of disposal and value in use. Value in use is the present value of future cash flows associated with the asset. The write-down is reversed when the basis for the write-down no longer exists.

Current assets and current liabilities generally include items due for payment within one year after the balance sheet date, as well as items related to the product cycle. Current assets are valued at the lowest of acquisition cost and estimated fair value.

### R&D

50% of R&D expenses are capitalized to the extent that they represent probable future economic benefit associated with the development of an identifiable intangible asset and the expenses can be measured reliably. R&D is netted so that both costs and associated income are included in the balance sheet. This applies to all the company's EU projects and tax incentive scheme SkatteFUNN.

### Short-term receivables

Short-term receivables are valued at nominal value. To the extent deemed necessary, provisions has been set aside as allowance to cover possible losses.

### Taxes

The tax expense in the income statement includes both the taxes payable for the period and changes in deferred taxes. Deferred tax is calculated at 22% on the basis of the temporary differences that exist between accounting and tax values, as well as tax losses carried forward at the end of the accounting year. Tax-increasing and tax-reducing temporary differences that reverse or may reverse during the same period are settled and netted.



## Notes 2022

### Note 1 - Patents, licenses etc.

The company has capitalized costs for its own patents and immaterial rights related to product development on semiconductor/graphene hybrid devices for energy applications.

Costs for R&D are partially capitalized in the balance sheet to the extent they are considered to represent a lasting value and are depreciated over 15 years. Grants associated with R&D costs are netted against capitalized costs. The company has earned a public grant of Kr 18 010 256,- during the year. Kr 8 399 313,- of these are capitalized in the balance sheet.

Of the earned public grants, 3 103 077,- is related to Skattefunn. This has been entered as a cost reduction, respectively kr 690 060,- towards a reduction of wage costs and NOK kr 2 413 017 19,- towards a reduction of other costs.

### Note 2 – Payroll Costs and No of Employees

The company had on average 37,5 FTE during 2022. The company has 43,5 FTE as of 31.12.22.

(Amounts in NOK)

	<b>2022</b>	<b>2021</b>
Salary	30 301 347	14 477 307
National Insurance Contributions	3 667 631	2 013 763
Pension Costs	379 871	195 143
Other Payroll Related Benefits	2 483 073	2 133 957
R&D/SkatteFunn	-9 571 702	-6 698 326
<b>Total</b>	<b>34 993 767</b>	<b>27 260 219</b>

### Loans and securities given to leaders or shareholders

The company has previously sold their stock position in the company to the CEO and a former CEO. They paid 10% in advance and the last 90% is accounted as a receivable in the balance.

- Jo Uthus has a loan of kr 1 058 805,- that is due 07.05.2023.

## Notes 2022

## Note 3 – Depreciation on Fixed Assets

(Amounts in NOK)

	Research and development	Concessions, patents, licenses, trade marks	Machinery and plant	Fixtures and fittings, tools, office machinery etc	Total
Acquisition cost as of. 1/1	31 956 098	37 484 761	15 805 705	2 147 714	87 394 278
+ Acquisition	9 836 444	2 331 469	812 127	514 629	13 494 669
- Disposal	0	0	0	0	0
Acquisition cost as of 31/12	41 792 541	39 816 230	16 617 832	2 662 343	100 888 947
Acc. Dep./write-down as of 1/1	6 767 956	4 092 065	0	910 869	11 770 890
+ Ordinary depreciation	2 130 406	2 488 395	2 445 189	252 269	7 316 259
+ Dep. on write up	0	0	0	0	0
- Reversed depreciations	0	0	0	0	0
+ Extraordinary write-down	0	0	0	0	0
Acc. Dep./write-down as of 31/12	8 898 363	6 580 459	2 445 189	1 163 137	19 087 148
Capitalized value as of 31/12	32 894 179	33 235 771	11 235 836	1 499 206	78 864 991
Percentage rate for ordinary depreciations	7-7	7-7	10-14	10-33	

## Note 4 – Quoted bonds

(Amounts in NOK)

Quoted bonds	Historical cost	Booked value	Unrealized change in value
Quoted bonds	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
Unrealized change in value pr. 1.1.			512 446
<b>Profit and loss effect</b>			<b>-512 446</b>

Quoted bonds are valued at real value according to rskl. § 5-8.

## Note 5 – Other finance income

(Amounts in NOK)

Other finance income:	Amount
Agio	429 190
Profit from sale of Quoted bonds	583 245
<b>Total</b>	<b>1 012 435</b>

## Notes 2022

### Note 6 – Other finance costs

(Amounts in NOK)

<b>Other finance costs:</b>	<b>Amount</b>
Disagio	573 079
Loss from sale of Quoted bonds	271 797
<b>Total</b>	<b>844 876</b>

### Note 7 - Tax

(Amounts in NOK)

#### Reconciliation of tax expense against profit before tax

	<b>Tax calculation basis</b>	<b>Tax</b>
Tax in Income Statement		-17 145 411
Profit before tax	-76 496 608	-16 829 254
<b>Difference</b>		<b>-316 157</b>
 <b><u>Consisting of</u></b>		
Permanent differences	-2 538 249	-558 415
Not capitalized US / USF last year	-6 155 774	-1 354 270
Not capitalized US / USF this year	7 256 943	1 596 527
<b>Total</b>		<b>-316 157</b>

## Notes 2022

## Note 8 – Tax

*(Amounts in NOK)***Tax base and change in deferred tax and tax asset**

Profit before tax	-76 496 608
+/- Changes in diff. not incl. in deferred tax/tax benefit	1 101 169
+/- Permanent differences	-2 538 249
<b>= Tax base</b>	<b>-77 933 687</b>
+/- Changes i diff. Incl. in basis for deferred tax/tax asset	859 571
+/- Change in deficit, credit deduction etc to be carried forward	77 074 116
<b>= Basis for tax payable</b>	<b>0</b>
<b>= Taxable income (basis for tax payable in the balance sheet)</b>	<b>0</b>

**Distribution of tax expense**

Tax payable (basis for tax payable in profit x rate)	0
+/- Change in deferred tax/tax benefit	-17 145 411
<b>= Tax cost (basis for this year's tax cost x rate)</b>	<b>-17 145 411</b>
<b>= Tax cost in the income statement</b>	<b>-17 145 411</b>

**Tax payable in the balance sheet**

Tax payable in the tax cost	0
<b>= Tax payable in the balance sheet</b>	<b>0</b>

## Note 9 - Deferred tax Asset

*(Amounts in NOK)***Deferred tax / deferred tax asset**

	<b>2022</b>	<b>2021</b>
+ Fixed asset including goodwill	7 207 436	7 917 537
- Unearned income	7 256 943	6 155 773
+ Differences not included in calculation of SF/USF*	7 256 943	6 155 773
- Other provisions for liabilities	5 201 720	5 052 250
- Tax carry-forward of losses that are offset	199 144 836	120 633 615
<b>= Basis Deferred Tax Asset</b>	<b>197 139 145</b>	<b>117 768 327</b>
<b>Deferred Tax Asset</b>	<b>43 370 612</b>	<b>25 909 032</b>

\* Consists in its entirety of the capitalized share of Skattefunn retained in the balance sheet as of the balance sheet date.

## Notes 2022

### Note 10 - Reconciliation of Equity

(Amounts in NOK)

	Share capital	Share Premium fund	Other paid-in Equity	Uncovered Loss	Total Equity
Pr 1.1.	568 030	234 361 535	2 596 250	-69 224 174	168 301 641
-To the result			0	-59 351 197	-59 351 197
+From the result	0	-128 575 371	0	128 575 371	0
<b>=Pr 31.12.</b>	<b>568 030</b>	<b>105 786 164</b>	<b>2 596 250</b>	<b>0</b>	<b>108 950 444</b>

Uncovered loss is posted against the share premium.

### Note 11 - Inventory

Type	2022	2021
Merchandise	2 087 333	0
<b>Total</b>	<b>2 087 333</b>	<b>0</b>
<b>Valuation method</b>		
Acquisition cost	<b>2 087 333</b>	<b>0</b>
<b>Total</b>	<b>2 087 333</b>	<b>0</b>

### Note 12 – Short-term receivables

The company has booked a receivable for Skattefunn of kr 3 103 077,-

The company has booked receivables for other taxable public grants of kr 4 511 323,-.

None of the receivables are due more than 1 year after the balance sheet date.

## Notes 2022

### Note 13 - Bank deposits, cash, etc.

Total bank deposits were kr 10 238 126 as of 31.12.2022 and kr 49 579 585 as of 31.12.2021. Restricted bank deposits consist of tax deposits of kr 2 433 729 as of 31.12.2022 and kr 2 040 019 as of 31.12.2021.

### Note 14 - Share Capital

The company has a share capital of NOK 568 029,82 divided into 28.401.491 shares, each with a par value of NOK 0,02. The Company does not own any of their own shares.

There are 969 shareholders in total.

### Note 15 - Events after the balance sheet date

On 12<sup>th</sup> January 2023, CrayoNano signed a loan agreement of NOK 27.5m with the company's three largest shareholders. The company announced in August 2022 that DNB Markets and Sparebank 1 Markets have been engaged as advisers and facilitators in a private placement process. The loan will be converted to equity in connection with, and on the same terms, as the private placement.

CrayoNano has already entered into a term sheet with the European Innovation Council (EIC) Fund for an investment of up to EUR 5m. Together with the loan from the three largest shareholders, this will form a foundation for the private placement which is now in its final phase and is expected to be completed by the end of the first quarter of 2023.

The new equity will be used to accelerate operations, acquire patent rights and invest in production capacity and flexibility, reduce the risk around supply chain disruptions and fully finance the company's business plan until profitability.

Although there will always be uncertainty and risk to a directed issue process, it is related to the board's assessment that with the foundation that is in place with the loan agreement from the three largest players, a signed term sheet from the EIC Fund and the fact that the process is expected to be completed within a short time, it is appropriate to assume that the company has the ability to continue its operations for the foreseeable future.

## Notes 2022

### Note 16 – Debt to credit institutions

The company has a debt to a credit institution of kr 3 499 996,- with a 5-year term. The down payment has started. The loan will be repaid by April 2026.

The loan has a balance of kr 2 499 988,- as of 31.12.22.

The company has a risk loan from Innovasjon Norge with a total granted amount of kr 7 093 333,- with a 5-year term. The down payment has started. The loan will be repaid by June 2026. The loan is issued with security in the company's operating assets.

The loan has a balance of kr 5 573 333,- as of 31.12.22.

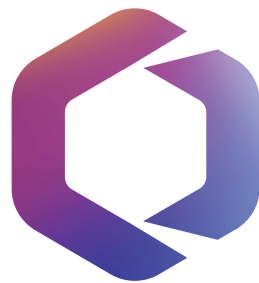
### Note 17 - Other short-term liabilities

Other short-term liabilities consists mainly of short-term commitments to the company's employees. Accrued vacation pay, and other Commitments.

*(Amounts in NOK)*

	2022	2021
<b>Liabilities due more than 5 years from balance sheet date</b>		
<b>Total</b>	<b>0</b>	<b>0</b>

There is a provision of kr 13 080 000,- in the accounts as of 31.12.21. Due to a commitment with a preponderance of probabilities will be fulfilled.



# CrayoNano

Sluppenvegen 6 | 7037 Trondheim | Norway  
+47 72 90 98 60  
[www.crayonano.com](http://www.crayonano.com)  
[investor@crayonano.com](mailto:investor@crayonano.com)