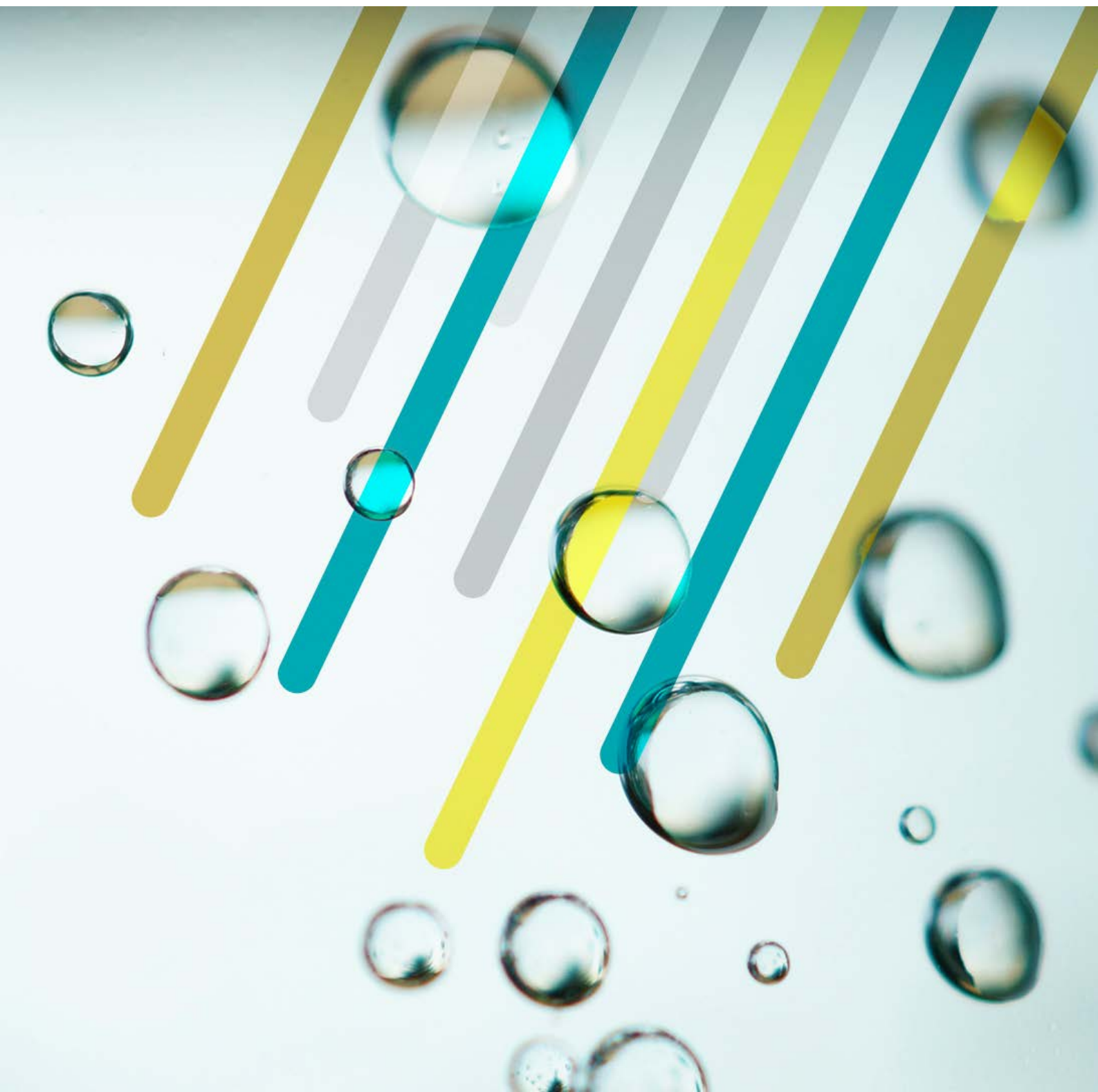




# YEAR-END REPORT

2023

Smoltek Nanotech Holding AB



# Year-end Report, Q4 2023

## ABOUT SMOLTEK

Smoltek develops process technology, concepts and applications to solve advanced materials engineering problems within several different industrial sectors.

Smoltek's pioneering carbon nanotechnology enables, for example, the manufacture of components with smaller form factors, higher performance and lower energy consumption in the semiconductor industry. Today, the company focuses on developing a disruptive capacitor technology for use in mobile phones and other advanced electronics applications.

Smoltek also sees great potential in the hydrogen industry, where the company is currently focusing on developing a nanofiber-based cell material for the anode electrode in the electrolyzer cell. The new material technology has been developed so that the hydrogen industry can scale up the production of both smaller and cheaper PEM electrolyzers.

Smoltek protects the company's unique technology platform through an extensive and growing patent portfolio consisting of around more than 110 patent assets, of which 84 are currently granted. Smoltek's share is listed on the Spotlight Stock Market under the ticker SMOL.

## CONTENT

### Market information

- 03. The year and fourth quarter in brief (the Group)
- 04. CEO, Håkan Persson comments on the period
- 05. Significant events – during and after the period
- 09. Operations and market

### Financial report

- 12. Financial outcome
- 13. Additional financial information
- 14. Consolidated income statement in summary
- 15. Consolidated balance sheet in summary
- 16. Consolidated statement of cash flows
- 17. Consolidated changes in equity
- 18. Parent company income statement
- 19. Parent company balance sheet
- 20. Parent company statement of cash flows
- 20. Parent company changes in equity
- 22. Financial calendar

*Note: This interim report is an English version of the previously published Swedish version, which has interpretive precedence.*



Smoltek's R&D staff at Chalmers' MC2 laboratory

## The year and fourth quarter in brief (Group)

### • JANUARY–DECEMBER

- Net sales: SEK 8,457 thousand (2,692)
- Result for the period: SEK -51,329 thousand (-46,803)
- Earnings per share, before dilution: SEK -3.33 (-4.83)
- Earnings per share, after possible dilution: SEK -3.24 (-4.61)
- Number of outstanding shares: 22,600,366 (9,282,895)
- Number of shares after possible exercise of warrants: 26,285,373 (16,931,883)
- Total equity: SEK 95,194 thousand (124,681)
- Cash and cash equivalents: SEK 28,682 thousand (71,108)
- Equity ratio: 84.1% (84.5%)
- YAGEO's CTO sees great potential in Smoltek (said in international interview)
- The technology for cell materials for electrolyzers presented at two international hydrogen conferences
- Smoltek's first two patents aimed at the green hydrogen industry have been granted during the year
- Special order machine for industrial production of carbon nanofibers in high volumes completed
- Smoltek had four new patents in semiconductor technology granted during the year, one of which was within a new patent family

### FOURTH QUARTER

- Net sales: SEK 4,169 thousand (1,690)
- Result for the period: SEK -12,839 thousand (-14,451)
- Earnings per share, before dilution: SEK -0.76 (-1.33)
- Earnings per share, after possible dilution: SEK -0.72 (-1.21)
- Smoltek Semi has developed a manufacturing process for 8-inch wafers intended to produce industrially manufactured capacitor prototypes in high volumes
- Smoltek Semi announced its intention to sign a global exclusive license and service agreement for discrete and embedded capacitors with YAGEO Group
- Smoltek has carried out targeted issues of shares and warrants, which provided a cash addition of approximately SEK 15 million after costs

### PROFIT/LOSS FOURTH QUARTER

Net sales during the period amounted to SEK 4,169 thousand (1,690). Operating loss was SEK -13.9 million (-13.1). Earnings per share before dilution were -0.76 (-1.33). Earnings per share after possible dilution were SEK -0.72 (-1.21).

### LIQUIDITY AND FINANCIAL CONDITION

The company's cash and cash equivalents at the end of the period amounted to SEK 28,682 thousand (71,108) and long-term interest-bearing liabilities amounted to SEK 682 thousand (704).

### EQUITY AND NUMBER OF SHARES

At the end of the period, the equity amounted to SEK 95,194 thousand (124,681) spread over 22,600,366 shares.

### EMPLOYEES

The number of annual employees amounted to 22 people (19).

## CEO, Håkan Persson comments on the period

Dear Shareholders,

The last quarter of the year was, just like the full year of 2023, characterized by significant progress in the work to bring our two business areas semiconductors and hydrogen closer to the market.

It is satisfying that we have performed strongly in technical development as well as in establishing verified processes for volume production of products based on our nanofiber technology. These advances create long-term value for our shareholders.

In the semiconductor business area, which is run by the subsidiary Smoltek Semi, we were in December pleased to announce our intention to enter into an exclusive license and service agreement for discrete and embedded capacitors based on our patented CNF-MIM technology with our partner YAGEO.

YAGEO is a world leader in passive electronic components, they have large manufacturing capacity and a global sales network, and through this agreement we will be able to utilize the full strength of their global structures and presence. Negotiations are ongoing, and according to the agreement Smoltek Semi will receive payment for its work during the commercialization phase, which minimizes the risk that the financing of this work becomes a bottleneck before the final products start generating royalty income.

Compared to our previous plan, to form a joint venture company with YAGEO for the commercialization and sales of our ultra-thin capacitors, we are convinced that this agreement is the fastest and most beneficial way forward for both parties.

Within the hydrogen business area, which is run by Smoltek Hydrogen, the work continues to develop a cell material for electrolyzers to radically reduce the amount of precious iridium in the electrolyzer cell. The great interest we received at the global electrochemical conference ECS, which was held in Gothenburg, has strengthened our contact network in both business development and further development of the technology.

It is clear that the interest in reduced use of iridium in the production of fossil-free hydrogen continues to increase. The latest report from the International Energy Agency,

IEA, shows that renewable energy is now growing at a faster rate than expected. This is not least due to global climate commitments, such as the agreement from the recently concluded COP28 climate meeting in Dubai.

Among other things, this agreement obliges the participants to triple the global capacity for the production of fossil-free energy by 2030. And to handle and store the enormous amounts of hydrogen that will be produced with variable solar and wind power, significant technological development of PEM electrolyzers is necessary, which is in line with what our cell material offers.

During the end of the period, we also conducted directed issues of shares and warrants, which added an initial capital injection of approximately SEK 15 million to the company. Several people from Smoltek's management and board, including myself, participated, which shows our strong belief in our technology platform and the technology applications we can produce based on it.

I would like to welcome all new shareholders to Smoltek, and at the same time highlight that existing shareholders have been compensated with warrants with an exercise period of 4–18 September 2024 based on their ownership share in the company.

With the progress achieved in 2023, we have excellent conditions to together continue to build a strong and solid Smoltek in 2024 and beyond, moving ever closer to the market and thus opening for significant revenues with good margins.



Håkan Persson, CEO of Smoltek



## Significant events – during the period

### Significant events during the fourth quarter of 2023

#### Development of 8-inch format process for manufacturing of engineering samples in high volumes

On October 4, it was announced that Smoltek Semi has developed a manufacturing process for 8-inch wafers intended to be used to produce engineering samples of CNF-MIM capacitors in high volumes.

During the development of the process chain, the company has initially manufactured capacitor prototypes without carbon nanofibers on 8-inch wafer format. The purpose of these capacitor prototypes has been to develop and validate the stability, repeatability, and overall quality in all parts of the fabrication process, which is necessary for high volume 8-inch wafer format production.

The 8-inch format process is important for primarily two reasons:

1. The first being the significant increase in the number of capacitors that Smoltek Semi can produce for development purposes, as the company can fit approximately 27,000 capacitors on one single 8-inch wafer. The sheer number makes it possible to conduct more data-driven development, and hence accelerate the development pace towards a commercial product.
2. The second reason is that the 8-inch form factor is compatible with high-volume production. Smoltek Semi is therefore confident that the 8-inch wafer format that the company now has migrated to in its development of CNF-MIM capacitors will make it possible to more effectively expedite the tech-transfer of the fabrication processes to a future high-volume production setting.

*“This is the first time that we have produced capacitors in 8-inch wafer format in this type of manufacturing process. This is a big step when it comes to how we will produce capacitors going forward”,* says Louise Duker, Chief Production Officer at Smoltek Semi.



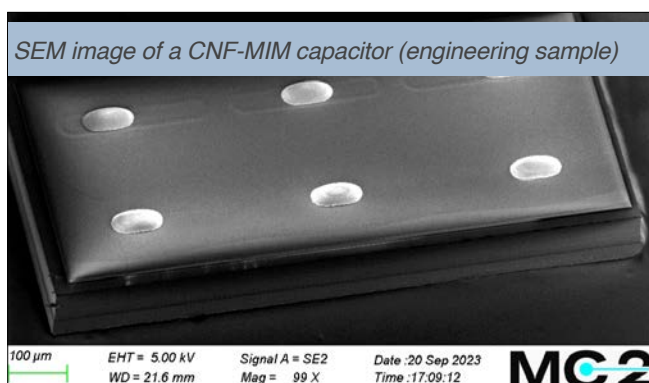
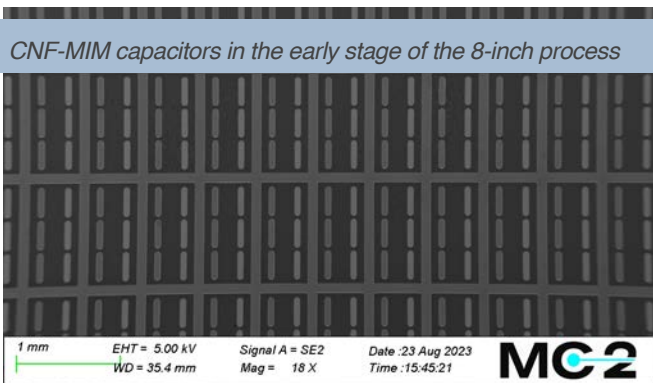
Louise Duker

#### Manufacturing of the first batch of engineering samples

Based on the successful results for the prototypes in the 8-inch process, Smoltek Semi made the decision to start manufacturing the first batch of engineering samples,

*“The first batch of engineering samples was completed at the end of the fourth quarter of 2023, and we are now using the data and knowledge we obtained to further refine the process, as well as increase the performance in order to reach the set goals required for the mobile phone industry and other advanced application areas”,* says Louise Duker.

She continues: *“We are now continuing our dialogues with Yageo, mapping out what the competitive landscape for our capacitors looks like and how they should be sold to different segments and customers depending on their specific requirements and wishes.”*



## Significant events – during the period

### Smoltek Hydrogen presented the company's cell material at international electrochemical conference

ECS, or the Electrochemical Society, is the world's largest organization in the fields of electrochemistry and solid-state science and related technology. In the beginning of October, for the first time in over 10 years, their annual event was held outside the US, attracting over 3,400 participants from all over the world to the Swedish Exhibition & Congress Centre (Svenska Mässan) in Gothenburg.

Our group company, Smoltek Hydrogen, was one of the commercially oriented companies that participated in the event, which otherwise had a clear academic focus.

Although the main focus was to establish business contacts at our exhibition stand, Smoltek Hydrogen also held a technical presentation about the company's cell material for electrolyzer cells.

Smoltek Hydrogen also took the opportunity to invite some new business contacts to Smoltek's office, in central Gothenburg, where they were given a tour of the new inhouse laboratory H2LAB, where much of the development of the Electrolyzer Cell Material (ECM\*) takes place.



Bastien Penninckx

*"The goal is to be able to produce the same amount of hydrogen with only 0.1 mg iridium/cm<sup>2</sup>, which is also a prerequisite for the electrolyzer industry to be able to scale up the production of PEM electrolyzers to a sufficient extent to produce the enormous amounts of fossil-free hydrogen that electrification and the green energy transition requires",* says Bastien Penninckx, Nanotechnology engineer at Smoltek Hydrogen.

*\* ECM: Smoltek Hydrogen's cell material for the anode side electrode in electrolyzer cells. The material has been developed primarily to reduce the amount of iridium (catalyst particles) in the electrolyzer cell.*

### Smoltek launches IR blog

On October 16, it was announced that Smoltek has launched an IR blog with the aim of strengthening communication with shareholders and investors. The IR blog will provide in-depth clarifications of the company's press-releases and other news.

*"I believe that shareholders and investors appreciate getting more detailed information about the tremendous business opportunities that we are about to realize. With the newly started IR blog, we want to show the possibilities and explain how we will take advantage of them in the next few years,"* says Smoltek's CEO Håkan Persson.

### Collaboration with DC Advisory ended

On October 23, it was announced that Smoltek and DC Advisory have entered into a termination agreement of their corporate finance engagement. Smoltek assesses that the need for the advisor's services has decreased, and that it is in the best interest of the company to carry on its work with collaboration partners and investors on its own.

### Smoltek is demanded repayment for deductions of employer contributions

On November 2, it was announced that the Swedish Tax Agency (Skatteverket) has decided not to allow deductions for research and development (R&D) in employer declarations where Smoltek made deductions for employer contributions relating to employees who actively work with tasks that qualify as research and development.

The period referred to is January 1, 2021, to March 31, 2023, and Smoltek is demanded to repay a total of SEK 1,507,516.

*"We believe that the decision is incorrect and have therefore requested a reconsideration of the decision. We do however not presently have any information on when the appeal can be reconsidered,"* says Smoltek's CFO Pia Tegborg.



Pia Tegborg

## Significant events – during the period

### **Smoltek Semi intends to sign an exclusive license and service agreement for CNF-MIM capacitors with YAGEO**

On December 6, it was announced that Smoltek Semi intends to enter into a license and service agreement with KEMET Electronics Corporation, a subsidiary of YAGEO Group. The agreement would grant YAGEO a global, exclusive right to manufacture and sell discrete and embedded capacitor products based on Smoltek's patented technology platform for ultra-thin carbon nanofiber capacitors (CNF-MIM).

According to the Agreement, Smoltek Semi will receive a royalty on industry market terms based on product sales and receive fees for providing specific technical support services for the continued joint commercialization of CNF-MIM-based capacitor products.

The parties intend to finalize the terms and sign the agreement during the first quarter of 2024. The agreement will replace the need to set up a JV-entity as previously planned by the parties, enabling YAGEO to more efficiently allocate resources to the collaboration with Smoltek as appropriate, thus facilitating a faster road to market for CNF-MIM based products.

Entering into a license and service agreement with YAGEO makes perfect sense for Smoltek Semi, as it will contribute to a smooth and rapid transition into the next phase of the collaboration, with each party being able to bring full commitment and resources to the table.

*"I am proud of the exceptional work carried out by Smoltek and YAGEO during our collaboration up until this point, which has put us in a position where we are eager to double down on our efforts to bring a family of ultra-thin discrete capacitor products based on our CNF-MIM technology to the market",* says Smoltek's CEO Håkan Persson.



Håkan Persson

The press release also mentions that YAGEO could potentially make an equity-based investment in Smoltek Semi and/or Smoltek. This agreement is expected to have a positive impact on Smoltek's financial result from the first half of 2024, initially due to payments from YAGEO for services provided by Smoltek Semi related to the continued commercialization of the CNF-MIM capacitors.

Although the detailed commercial terms of the agreement are still under negotiation, the parties have agreed on the following structure and outlined terms of the agreement:

- YAGEO would support development of the CNF-MIM capacitors through payment for services and or potential investments in Smoltek.
- The Agreement shall include a royalty-bearing global exclusive license for YAGEO to commercialize CNF-MIM capacitors.
- The royalty rate shall correspond to industry market terms.
- Smoltek would, on industry market terms, provide services under the agreement for the development and technical support of the CNF-MIM capacitors.
- YAGEO would potentially make an equity-based investment in Smoltek Semi and/or Smoltek for a minority stake in either company, such terms and structure to be further discussed and negotiated. YAGEO acquiring an equity position in either Smoltek and/or Smoltek Semi is consistent with the intent of the MoU (signed in June 2022) and is in the interest of both parties given the anticipated development effort and associated cost to reach a viable commercial product.
- The Agreement is dependent on successful completion of the JDA (signed in August 2022) with respect to mutual agreement on achievement of JDA metrics and thus commercial viability of the CNF-MIM capacitors.

## Significant events – after the period

### **Smoltek raises approximately SEK 15 million through directed issues of shares and warrants**

On December 6, it was announced that the board of directors of Smoltek Nanotech Holding AB has decided to explore the conditions to conduct a directed issue of shares and warrants through an accelerated book building procedure.

On December 7, the board of directors decided to conduct a directed issue of 6,378,164 shares and 1,594,541 warrants of series TO 8 to qualified investors. The board further decided on a directed issue of 288,500 shares and 72,125 warrants of series TO 8 to two board members and senior executives of Smoltek.

The directed issues were conducted at a subscription price of SEK 2.40 per share and the warrants were issued free of charge.

The board also decided on a directed issue of 1,802,466 warrants of series TO 8 to the company, which were then transferred free of charge to existing shareholders in relation to the number of shares held as of the record date, which was set to December 18, 2023.

Through the directed issues, Smoltek received approximately SEK 16 million before transaction costs, which are estimated to amount to approximately SEK 1.1 million.

### **Notice to extraordinary general meeting**

On December 8, a notice to an extraordinary general meeting was published to approve the decision on the directed issue of shares and warrants that the board put forward in a press release, December 7, 2023.

### **Directed offset issue of shares to the technology consultant Qamcom**

On December 8, it was announced that the board, with the support of authorization from the annual general meeting on May 11, 2023, decided on a directed new share issue of 185,337 shares to Qamcom, whereby Qamcom will set off its claims on Smoltek up to and including November 30, 2023. The offset issue is conducted in accordance with Smoltek's collaboration agreement with Qamcom, where Smoltek must pay part of the costs for Qamcom's consultants through directed offset issues.

### **Significant events after the end of the period**

#### **Communiqué from extraordinary general meeting**

On January 9, a communiqué from the extraordinary general meeting was published where the board's decision regarding the directed new issue of shares and warrants in accordance with the press release from December 7, 2023, was approved.

#### **Would you like to stay up to date with the latest information from us?**

Follow us on our social channels and subscribe to our newsletter:

- [www.linkedin.com/showcase/smoltek-investor-relations](https://www.linkedin.com/showcase/smoltek-investor-relations)
- [www.linkedin.com/company/smoltek](https://www.linkedin.com/company/smoltek)
- <https://twitter.com/Smoltek>
- [www.facebook.com/smoltek](https://www.facebook.com/smoltek)
- [www.smoltek.com/insights/newsletters](https://www.smoltek.com/insights/newsletters)





## Operations and market – Smoltek’s market potential

Smoltek has developed a patent-protected technology that can make materials and components in several industrial sectors thinner, more energy efficient, more powerful as well as cheaper to produce.

Through precision manufacturing of extremely thin, conductive, carbon nanofibers in various three-dimensional structures, our technology creates films of vertical carbon nanofibers that provide a several times larger contact area, and thereby better performance, compared to a conventional flat surface.

In practice, our technology multiplies the physical surface area that can be coated with different types of materials. This creates opportunities for more efficient surface properties in several areas where today's solutions and materials limit performance and efficiency. This means that we can take maximum advantage of our position as a pioneering technology developer in the field of controlled growth of nanostructures.

Smoltek's pioneering technology platform – for precision manufacturing of carbon nanostructures – gives us very good opportunities to develop innovative solutions in a large number of application areas. However, prioritization is required – and we have currently chosen to focus on two business areas: Semiconductors and Hydrogen.

Both these areas carry enormous potential for the company, as there is a great need for new innovative solutions, and where a lot of development takes place and is required to take the end products to the next level. And this fits well with Smoltek's strengths to develop surface-efficient products with high performance.

### Operations and business model

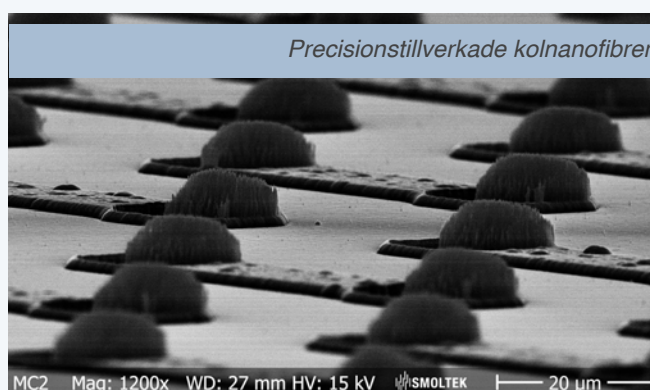
Our operations and business model are based on a broad, patent-protected technology platform to, among other things, precision-grow conductive carbon nanostructures on different types of substrates and thereby enable better performance for different applications.

Historically, our business model has been to license the company's IP and know-how for the development of process technology and application concepts. Today, however, we have broadened the company's business model to also include volume sales of products. Therefore, we are now developing unique process steps as well as complete pro-

duction processes owned by Smoltek, subcontractor chains as well as finished products. This means that we will be a more equal party with greater responsibility and control, from development to volume production. To respond to this, the company's organization is continuously being developed.

### IP strategy

We use a global patent strategy to protect our technology platform in all important markets. The strategy includes both core patents and more tailored patent protection at the application level. We have a steadily growing patent portfolio which currently consists of around 110 filed patents, in 20 different patent families, within which 84 patents are currently granted.



### Smoltek Nanotech – group structure

Smoltek was founded in December 2005 in connection with the filing of the first patent – manufacturing of nanostructures, one of the company's core patents.

In February 2018, Smoltek Nanotech Holding AB was listed on the Spotlight Stock Market in Stockholm, Sweden.

The Group's corporate structure has today developed to consist of three subsidiaries:

- Smoltek AB: holds and develops the patent portfolio
- Smoltek Semi AB: targets the semiconductor industry with a special focus on capacitors for semiconductors
- Smoltek Hydrogen AB: targets the hydrogen industry, with a special focus on developing a new electrode cell material for electrolyzers

## Operations and market – potential Smoltek Semi

Since the company was founded, Smoltek has focused on developing technology specifically for the semiconductor industry. After early development projects in various application areas, the semiconductor market showed greatest interest in our technology for extremely thin capacitors (CNF-MIM).

The potential customer base for Smoltek's capacitor technology consists of a small number of very large capacitor manufacturers, or manufacturers of semiconductor packages (advanced packaging alt. heterogeneous integration). The end application for our capacitors lies in a later stage of the semiconductor industry ecosystem and largely depends on where our capacitors are to be placed. It can be, for example, in mobile phones, in data centers or in automotive electronics.

Our group company Smoltek Semi is currently collaborating with YAGEO Group, which is one of the world's largest manufacturers of passive components (a capacitor is a passive component). We jointly conduct technology development for the commercialization of various types of ultra-thin capacitors based on our technology platform CNF-MIM. The objective is for us, together with their subsidiary Kemet Electronics, to commercialize capacitors for global sales.

### The market for capacitors

The market for our capacitor technology is in specialized electronic components used in a variety of applications, primarily in the field of semiconductors and integrated circuits. The capacitors are specially designed to offer high capacitance values in a compact form factor.

*Examples of areas of application are:*

**Consumer electronics** – Smartphones, tablets and portable devices where the capacitors are used in the application processor, which place high demands on the combination of high performance in a small form factor. With our technology for ultra-thin capacitors, we can become a leading technology supplier in this segment, as we can meet those requirements. It enables, for example, our capacitors to be placed closer to the application processor compared to competing technologies, which is very important for, like for example, mobile phone manufacturers as it increases system performance (AP/SoC – System on Chip\*).

**The automotive industry** – Our capacitors are suitable for various electrical systems in the automotive industry where

technology has become more advanced, with extensive software implementation and many complex safety systems. This means that there are strict requirements for stable voltage levels and reliable function of important components, which are challenges our capacitor technology can meet.

**The aerospace and defense industry** – Technology developments require high-performance capacitors to meet the strict specifications found in radar systems, communications equipment, and other avionics.

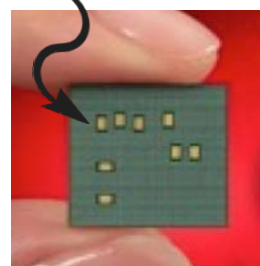
**Radio frequency (RF)** – Our technology can be used in so-called RF circuits where there are high requirements for a very small form factor. In RF, our technology can be used to control impedance (electrical resistance to alternating current) and improve the performance of wireless communication devices such as mobile phones and Wi-Fi routers.

**Industry and manufacturing** – In industrial automation and control systems, our capacitor technology can be used to ensure the high demands placed on stable and accurate voltage levels, contributing to the reliability of manufacturing processes.

In summary, our technology is driven by the increasing demand for miniaturized, high-performance electronic devices in a variety of industries. As the development of semiconductor technology continues and the need for smaller and more efficient components increases, we expect the market for our capacitor technology to expand.

Today, we focus particularly on the mobile market (consumer electronics), where the need for small form factors and high performance represents significant challenges and opportunities.

As an example, the market for landside-mounted decoupling capacitors for application processors in premium priced mobile phones is predicted to have an expected average annual growth rate of about 3.6% CAGR, increasing from about 4.5 billion decoupling capacitors in 2023 to about 5 billion decoupling capacitors in 2030. This is a sub-market that we are initially targeting in the collaboration with YAGEO.



Qualcomm Snapdragon 8 chip with 8 Landside-mounted capacitors

\* AP/SoC is a type of integrated circuit (IC) design that combines many, or all, high-level functional elements of an electronic device on a single chip, rather than using separate components mounted on a motherboard as is done in traditional electronics design.

## Operations and market – potential Smoltek Hydrogen

Within the hydrogen business area, which is run by the group company Smoltek Hydrogen, we develop a nanofiber-based cell material for PEM electrolyzers, the system that uses renewable electricity to split water into oxygen and hydrogen.

### Huge market for green hydrogen and electrolyzers

Hydrogen as a fossil-free raw material and energy carrier is one of the keys to the ongoing electrification and the reduction of fossil fuels in order to reach the goals of net zero emissions.

Today, large amounts of fossil hydrogen are used in several energy-intensive industrial sectors, all of which need to switch to fossil-free energy in the near future.

In 2023, 5 million tons of fossil-free hydrogen were produced (about 5% of total hydrogen production), and in 2030 the hydrogen industry aims to produce close to 40 million tons of fossil-free hydrogen\*. This means that there is a great demand for the development of new technology to get more cost-effective electrolyzers to be able to produce fossil-free hydrogen.

### Smoltek Hydrogen can reduce the iridium coating

Our proprietary cell material (ECM) is developed to reduce the iridium coating in the anode-side electrode of the electrolyzer cell and can reduce the amount of extremely expensive iridium particles in PEM electrolyzers by up to 95%, compared to today's standard materials.

Thanks to the fact that the material consists of large amounts of vertical nanofibers, a coatable surface that is

up to 30 times larger compared to today's materials is created. This means that we can coat our nanofibers with iridium particles much more effectively and thus reduce the amount of iridium in the electrolyzer.

Significantly reducing the iridium coating will lower the cost of the electrode material by tens of thousands of SEK per square meter.

We can also increase the capacity per surface in the cell by using longer fibers. With longer fibers, more iridium can be coated and thus the number of cells in the electrolyzer can be reduced.

Fewer cells provide another significant cost-saving for PEM electrolyzer manufacturers.



1. Nanofibers  
2. Corrosion protection  
3. Iridium particles

### We can match the goals of the electrolyzer industry

In 2023, Smoltek Hydrogen proved that our newly developed coating technology can produce the same amount of hydrogen with only 0.5 mg iridium/cm<sup>2</sup> compared to today's material technology, which uses about 2.5 mg iridium/cm<sup>2</sup>.

The technical progress means that we are optimistic about also succeeding in long-term tests to first reach 0.2 mg iridium/cm<sup>2</sup> in 2024 - and then approach the hydrogen industry's goal of 0.1 mg iridium/cm<sup>2</sup>. That goal is set in order to be able to scale up the production of PEM electrolyzers to produce the millions of tons of fossil-free hydrogen required in the energy transition.

Fossil-free substitute for natural gas	Raw material for fossil-free steel production	Synthetic fuels (electro fuels) for marine transports	Fuel cells in electric vehicles for better range
Solar energy shipments from desert (in pipelines)	Balancing of the electrical system for intermittent energy sources	Raw material for fossil-free cement production	Raw material for the production of fossil-free fertilizer

Industry sectors for green hydrogen production – markets for electrolyzers

\* Source: Hydrogen Council

## Financial outcome

### Turnover

Net sales during the full year amounted to SEK 8,457 thousand (2,692). And for the fourth quarter to SEK 4,169 thousand (1,690).

### Costs

The costs during the year amounted to SEK 65,567 thousand (53,076) and SEK 19,315 thousand (15,879) respectively for the fourth quarter. The higher cost picture compared to the previous year can be explained by the continued efforts towards industrialization and commercialization of the company's technology as well as a growing organization.

### Results

The group's result for 2023 was SEK -51,329 thousand (-46,803) after financial items. For the fourth quarter, the result was SEK -12,839 thousand (-14,451) after financial items.

### Cash flow and financial position

Cash flow from current operations amounted to SEK -46,432 thousand (-17,597). Cash and cash equivalents, including short-term investments, at the end of the period amounted to SEK 28,682 thousand (71,108).

### Financing

The company has chosen to invest excess liquidity in fixed income funds. Long-term interest-bearing liabilities amounted to SEK 682 thousand (704).

### Investments

Investments in intangible fixed assets in total in the group amounted to SEK 64.7 million on December 31, 2023,

distributed between the subsidiaries Smoltek AB (75%) and Smoltek Hydrogen AB (25%). The investments refer to further development of the company's own technology.

Regarding investments in tangible fixed assets, the group has invested SEK 14.3 million up to and including 31 December 2023.

In 2023, Smoltek Semi paid off the specially ordered machine for the industrial growth of carbon nanofibres and made investments in the company's in-house laboratory, SmolLAB. During the same period, Smoltek Hydrogen has invested in equipment for the in-house laboratory, H2LAB, to build and test complete electrolyser cells. Furthermore, an order has been placed for the design and construction of a prototype coating machine for the industrial growth of carbon nanostructures, where the purpose is to verify that the nanostructures can be manufactured using the selected manufacturing technology.

### Impairments

During Q4, the parent company made additions to the group companies Smoltek AB, Smoltek Semi AB and Smoltek Hydrogen AB with SEK 82.4 million. For precautionary reasons, shares have been written down by the corresponding amount.

During Q4, the parent company has also implemented an addition of SEK 1 million to the group company Smoltek Hydrogen AB.

### Key ratios

(SEK thousand)

	Full year 2023	Full year 2022
Return on equity	-53.9%	-37.5%
Return on total capital	-45.4%	-31.7%
Solidity	84.1%	84.5%
Cash liquidity	197.2%	336.8%



## Additional financial information

### The share

Since 2018, Smoltek Nanotech Holding AB has been listed on the Spotlight Stock Market under the ticker SMOL. As of December 31, 2023, the company had approx. 3,200 shareholders. The number of shares amounts to 22 600 366.

### Warrants

Outstanding warrants as of December 31, 2023:

Peter Augustsson	80,000
Gustav Brismark	50,832
Håkan Persson	62,221
Per Zellman	11,000
Edvard Kälvesten	30,000
Emma Rönmark	555
Employees	62,000
TO 8 (excl. board and managers listed above)	3,388,399
<b>Total</b>	<b>3,685,007</b>

### Intangible assets

The company's most important asset is intangible assets in the form of patents, know-how and demonstrated performance. The balance sheet item is included in discontinued costs and amounts to SEK 64.7 million. It is the Board's assessment that the fair value is higher. The comparisons we have made with other companies' intellectual property rights and development support this assumption.

### Outlook

The company continues to have a positive view of the market outlook for each business area – semiconductors and hydrogen.

The group company Smoltek Semi, together with YAGEO Group, has a clear plan to industrialize and commercialize Smoltek's CNF-MIM capacitor technology and is building relationships and deepening interactions with potential customers for the first capacitor product.

The group company Smoltek Hydrogen has a large contact network of partners and other leading actors for testing and prototype manufacturing of Smoltek's cell material – ECM, for electrolyzers for green hydrogen production.

At the same time, the company continues the purposeful work of developing the patent portfolio, which currently contains 100 patent assets within 20 patent families, of which 84 patents are currently granted.

### Accounting principles

For the interim report, Smoltek applies the accounting principles of the Swedish Annual Accounts Act and the Swedish Accounting Standards Board (BFN) general rules. The accounting policies are unchanged from those of the preceding year.

### Annual report, annual general meeting and dividend

The annual report for 2023 will be published on 26 March 2024 and will then be available on the company's IR website. On request by email to [info@smoltek.com](mailto:info@smoltek.com), a printed version of the annual report can be sent by post.

The general meeting for the 2023 financial year will be held in Gothenburg on May 14, 2024. Notice of the meeting will be published in Post-och Inrikes Tidningar and Dagens Industri four weeks before the meeting.

### Going concern – Affirmation by the board

The board and the CEO assure that this interim report gives a true and fair view of Smoltek Nanotech Holding AB's operations, financial position and performance.

The management and board work continuously to secure the company's financing and will make decisions about such activities on every occasion based on the best possible conditions from both a market and commercial perspective. This applies especially in negotiations with intended partners, which has now been brought up to date in the ongoing negotiation with YAGEO.

*Gothenburg, 2023-02-22*

The Board of Directors of Smoltek Nanotech Holding AB  
 Per Zellman, chairman of the board  
 Gustav Brismark, board member  
 Edvard Kälvesten, board member  
 Marie Landfors, board member  
 Emma Rönmark, board member  
 Håkan Persson, CEO

### Risks and uncertainties

Smoltek Nanotech Holding AB's earnings and financial position are affected by various risk factors that must be taken into account when assessing the company and its future potential. Information about these risks can be found in the annual report of 2022.

## Consolidated income statement in summary

Smoltek Nanotech Holding AB incl. subsidiary

(SEK thousand)

	Oct-Dec 2023	Oct-Dec 2022	Full year 2023	Full year 2022
Net sales	4,169	1,690	8,457	2,692
Activated own-account work	944	1,115	4,256	4,987
Other operating income	300	0	481	23
Operating costs	-19,315	-15,879	-65,567	-53,076
<b>Operating profit / loss</b>	<b>-13,902</b>	<b>-13,074</b>	<b>-52,373</b>	<b>-45,374</b>
Profit / loss from financial items	1,063	-1,377	1,044	-1,429
<b>Profit / loss for the period</b>	<b>-12,839</b>	<b>-14,451</b>	<b>-51,329</b>	<b>-46,803</b>
<b>Earnings per share after tax</b>	<b>-0,76</b>	<b>-1.33</b>	<b>-3,33</b>	<b>-4.83</b>

## Consolidated balance sheet in summary

*Smoltek Nanotech Holding AB incl. subsidiary*

(SEK thousand)

	2023-12-31	2022-12-31
<i>Assets</i>		
Intangible fixed assets	64,749	64,608
Tangible fixed assets	14,335	8,431
Current receivables	5,385	3,339
Other short-term investments	10,802	22,755
Cash and cash equivalents	17,880	48,353
<b>Total assets</b>	<b>113,151</b>	<b>147,486</b>
<i>Equity and liabilities</i>		
Equity	95,194	124,681
Long-term liabilities	682	704
Current liabilities	17,274	22,101
<b>Total equity and liabilities</b>	<b>113,151</b>	<b>147,486</b>
<b>Equity/assets ratio</b>	<b>84.1%</b>	<b>84.5%</b>

## Consolidated statement of cash flows

Smoltek Nanotech Holding AB incl. subsidiary

(SEK thousand)

	Full year 2023	Full year 2022
<b>Operating activities</b>		
Operating profit / loss	-52,373	-45,374
Items not affecting cash flow	12,012	13,354
Profit / loss from financial items	-3	-1,429
<b>Cash flow from operating activities before changes in working capital</b>	<b>-40,364</b>	<b>-33,450</b>
<b>Changes in working capital</b>		
Change in receivables	-2,046	526
Changes in current liabilities	-4,022	15,326
<b>Cash flow from operating activities</b>	<b>-46,432</b>	<b>-17,597</b>
<b>Investment activities</b>		
Intangible assets	-10,979	-12,362
Tangible assets	-7,078	-4,902
Sale short-term investments	13,000	16,438
<b>Cash flow from investment activities</b>	<b>-5,057</b>	<b>-826</b>
<b>Financing activities</b>		
New issue of warrants	0	577
Issue of shares	22,546	44,729
Issue costs	-1,509	-9,822
Change in long-term liabilities	-21	-54
<b>Cash flow from financing activities</b>	<b>21,015</b>	<b>35,430</b>
Change in cash and cash equivalents	-30,473	17,006
Cash opening balance	48,353	31,347
<b>Cash closing balance</b>	<b>17,880</b>	<b>48,353</b>



## Consolidated changes in equity

Smoltek Nanotech Holding AB incl. subsidiary

(SEK thousand)

	Share capital	Other contributed capital	Other equity including net loss for the period	Total equity
<b>Opening balance 2021-01-01</b>	<b>1,106</b>	<b>191,793</b>	<b>-56,898</b>	<b>136,001</b>
Issue of warrants		577		577
Issue of shares (rights issue)	575	43,418		43,993
Issue of shares (compensation issue guarantor)	10	727		737
Issue costs		-4,220		-4,220
Profit / loss for the period			-46,803	-46,803
<b>Closing balance 2022-12-31</b>	<b>1,690</b>	<b>226,693</b>	<b>-103,701</b>	<b>124,681</b>
Issuance of shares (use of TO 7)	242	6,996		7,238
Issue of shares (directed issue 1*)	760	14,548		15,308
Receipt issue (not reg. share capital)	22	783		805
Issue costs		-1,509		-1,509
Profit / loss for the period			-51,329	-51,329
<b>Closing balance 2023-12-31</b>	<b>2,714</b>	<b>247,511</b>	<b>-155,031</b>	<b>95,194</b>

\* Directed Issue 1 includes a total of 6,378,164 shares and 1,594,541 warrants of series TO 8. The right to subscribe in the issue was given only to a limited number of investors, selected in the bookbuilding process carried out by the company's financial advisors.

## Parent company income statement

*Smoltek Nanotech Holding AB*

(SEK thousand)

	<b>Oct-Dec 2023</b>	<b>Oct-Dec 2022</b>	<b>Full year 2023</b>	<b>Full year 2022</b>
Net sales	2,096	1,474	8,760	5 090
Other operating income	603	443	2,896	1,265
Operating expenses	-6,358	-5,930	-24,988	-21,024
<b>Operating profit / loss</b>	<b>-3,658</b>	<b>-4,013</b>	<b>-13,331</b>	<b>-14,669</b>
Profit / loss from financial items	-80,008	-1,181	-77,945	-695
<b>Profit / loss for the period</b>	<b>-83,666</b>	<b>5,194</b>	<b>-91,276</b>	<b>-15,364</b>

## Parent company balance sheet

Smoltek Nanotech Holding AB

(SEK thousand)

	2023-12-31	2022-12-31
<i>Assets</i>		
Shares in group companies	69,940	80,314
Long-term receivables at group companies	26,168	49,847
Current receivables from Group companies	2,955	2,382
Other current receivables	1,526	918
Other short-term investments	10,802	22,755
Cash and cash equivalents	8,612	31,336
<b>Total assets</b>	<b>120,003</b>	<b>187,552</b>
<i>Equity and liabilities</i>		
Equity	113,767	183,201
Current liabilities	6,236	4,351
<b>Total equity and liabilities</b>	<b>120,003</b>	<b>187,552</b>
<b>Equity/assets ratio</b>	<b>94.8%</b>	<b>97.7%</b>

## Parent company statement of cash flows

Smoltek Nanotech Holding AB

(SEK thousand)

	Full year 2023	Full year 2022
<b>Operating activities</b>		
Operating profit / loss	-13,331	-14,669
Profit / loss from financial items	62	-367
<b>Cash flow from operating activities before changes in working capital</b>	<b>-13,269</b>	<b>-15,036</b>
<b>Changes in working capital</b>		
Current receivables group	-573	8,693
Changes in receivables	-608	0
Changes in current liabilities	2,690	1,743
<b>Cash flow from operating activities</b>	<b>-11,761</b>	<b>-21,986</b>
<b>Investment activities</b>		
Changes in receivables from group companies	-45,000	-19 000
Sale short-term investments	13,000	16,438
<b>Cash flow from investment activities</b>	<b>-32,000</b>	<b>-2,562</b>
<b>Financing activities</b>		
New issue of warrants	0	577
Issue of shares	22,546	44,729
Issue costs	-1,509	-9,822
<b>Cash flow from financing activities</b>	<b>21,037</b>	<b>35,484</b>
Change in cash and cash equivalents	-22,724	10,935
Opening balance	31,336	20,401
<b>Closing balance</b>	<b>8,612</b>	<b>31,336</b>



## Parent company changes in equity

Smoltek Nanotech Holding AB

(SEK thousand)

	Restricted equity	Unrestricted equity incl. net loss for the period	Total equity
<b>Opening balance 2022-01-01</b>	<b>1,106</b>	<b>161,975</b>	<b>163,081</b>
Issue of warrants		577	577
Issue of shares (rights issue)	575	43,418	43,993
Issue of shares (compensation issue guarantor)	10	727	737
Issue costs		-4,220	-4,220
Profit / loss for the period		-15,364	-15,364
<b>Closing balance 2022-12-31</b>	<b>1,691</b>	<b>181,511</b>	<b>183,201</b>
Issuance of shares (exercising warrants TO 7)	242	6,996	7,238
Issue of shares (directed issue 1*)	760	14,548	15,308
Receipt issue (not reg. share capital)	22	783	805
Issue costs		-1,509	-1,509
The result of the period		-91,276	-91,276
<b>Closing balance 2023-12-31</b>	<b>2,714</b>	<b>111,053</b>	<b>113,766</b>

\* Directed Issue 1 includes a total of 6,378,164 shares and 1,594,541 warrants of series TO 8. The right to subscribe in the issue was given only to a limited number of investors, selected in the bookbuilding process carried out by the company's financial advisors.

## Finacial calendar

Annual report for 2023 will be published on 2024-03-06

Interim report Q1 2024 will be published on 2024-05-02

Interim report Q2 2024 will be published on 2024-08-29

Interim report Q3 2024 will be published on 2024-11-05

### Audit report

This Interim report has not been subject to review by the company's auditors.

**Smoltek Nanotech Holding AB** is listed on Spotlight Stock Market since 2018-02-26 under the ticker SMOL.

### For further information:

Håkan Persson, CEO Smoltek Nanotech Holding AB (publ)

E-Mail: [hakan.persson@smoltek.com](mailto:hakan.persson@smoltek.com)

Telephone: +46 317 01 03 05

Website: [www.smoltek.com/investors](http://www.smoltek.com/investors)

Göteborg 2024-02-22

The Board





## **Smoltek Nanotech Holding AB**

Otterhällegatan 1, 411 18 Göteborg  
+46 317 01 03 05 | [info@smoltek.com](mailto:info@smoltek.com)  
[www.smoltek.com](http://www.smoltek.com)

Corporate id: 559020-2262

